October 15, 2015

Ventura County Board of Supervisors
800 S. Victoria Ave., Hall of Administration
Ventura, CA 93009-1740

RE: Appeal of CRC Oil & Gas Project (PL13-0150) in Santa Paula Canyon
October 20, 2015

Dear Chair Long and Members of the Board:

Thank you for considering our appeal of a proposal by California Resources Corporation ("CRC") to drill 19 new oil and gas wells and to continue operating 17 existing oil and gas wells and related facilities for another thirty years. The wells are located along a popular recreation trail leading into the Los Padres National Forest along Santa Paula Creek in Ventura County.

APPELLANTS

Los Padres ForestWatch ("ForestWatch") is an independent nonprofit organization that works to protect the Los Padres National Forest and other public lands along California's Central Coast. Our members and on-line supporters – which number more than 2,000 residents in Ventura County and more than 4,000 throughout the Central Coast – are concerned about the environmental impacts of oil drilling on wildlife habitat, water quality, scenic views, and outdoor recreation in and around the Los Padres National Forest. Our goal is to ensure that any existing and proposed oil drilling operations near the Los Padres National Forest are conducted responsibly and in a way that reduces or avoids environmental impacts to the fullest extent possible.

Center for Biological Diversity ("the Center") is a non-profit conservation organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has more than 900,000 members and on-line advocates throughout California and the United States, including many members who reside in Ventura County. The Center has worked for many years to protect imperiled plants and wildlife, open space, air and water quality, and overall quality of life for people along the Central Coast. The Center has actively participated in many oil and gas issues in and around the Los Padres National Forest.

STANDING TO APPEAL

We have participated in this project at every public opportunity. ForestWatch initially submitted written comments at the Planning Director hearing on January 8, 2015, urging the preparation of a full Environmental Impact Report ("EIR"). On February 17, 2015, the Planning Director approved the project without preparing an EIR, instead relying on a nine-page addendum to an EIR prepared in 1978. This EIR Addendum does not comply with the California Environmental Quality Act ("CEQA"), which requires preparation of a Subsequent or Supplemental EIR (instead of a mere addendum) to incorporate new information that has developed over the last 37 years since the original environmental document was prepared for this site.

ForestWatch appealed the Planning Director's failure to prepare a Subsequent or Supplemental EIR to the Planning Commission. On June 11, 2015, the Planning Commission denied our appeal and approved the project without any changes. ForestWatch has joined with our conservation partners at the Center to file this appeal to your Board on June 22, 2015.

OUR REQUEST

Most oil and gas operations in Ventura County operate under antiquated permits that were approved in the 1950s and 1960s without any environmental review, without any limits on the number of wells, and without any expiration date. This project is different – it's not an antiquated permit, though it is in dire need of an update to address changed circumstances and new information that has surfaced in the three decades since this permit was initially reviewed. We urge your Board to take this crucial opportunity to make meaningful changes to an existing facility, in order to better protect the very things that make Santa Paula Canyon one of the County's most important natural treasures.

At your hearing on October 20, 2015, we respectfully urge your Board to:

- Decline to certify the 9-page EIR Addendum, and direct the Division to prepare a Supplemental or Subsequent EIR;
- Direct the Division to conduct a compliance review for the existing permit and abate any violations before proceeding with any future permit application; and
- Uphold our appeal, and refund our $2,000 in appeal fees.

WHAT'S AT STAKE

A Supplemental or Subsequent EIR will provide the County and the public with an opportunity to fully evaluate the impacts of existing and proposed oil development in this remote mountainous terrain adjacent to the Los Padres National Forest, and is particularly appropriate in light of the following characteristics of Santa Paula Canyon:

- Santa Paula Canyon is one of the most environmentally sensitive areas in Ventura County, providing habitat for several rare and imperiled wildlife including endangered southern

steelhead and endangered California condors;

- A pair of condors has established a nest less than two miles from the project site. It is the first time this nest site has been used since the 1960s, and the young condor is just days away from flying from its nest for the first time.

- The area serves as one of the most popular gateways to trails, backcountry camps, swimming holes, and waterfalls in the Los Padres National Forest;

- The site is part of the original Chumash village of *Sisa*, the largest of the inland village sites and considered by archaeologists to be of the "highest significance" in understanding the entire Chumash economic sphere and social network;

- Surrounding land uses – including an avocado ranch and a quaint college campus – are incompatible with intensive oil development;

- The operation has a long history of significant permit violations, which have placed these sensitive natural and cultural resources at great risk; and

- Various oil wells, pipelines, storage tanks, access roads, and other oil production facilities have been authorized in this area since 1971 in piecemeal fashion with no or little environmental review.

As additional background information for your Board to consider, the existing permit for this facility states that "[d]rilling of all approved wells must be completed in a timely manner ending within (3) years of the issuance of CUP-3344 MOD #8 and #9. The Planning Director is authorized to administratively extend the drilling phase two (2) additional years." CUP-3344 MOD #8 and #9 were issued in 1985, so all wells needed to be drilled by 1990 at the absolute latest. Now, a quarter-century later, after its permit has already expired, the applicant wishes to extend the allowable drilling period for new wells another 30 years.

This would extend the significant impacts of drilling long into the future and well beyond anything envisioned by previous Planning Commissions, Boards of Supervisors, environmental documents, neighboring land uses, and the interested public. Given the extensive history of permit violations at this location, some of which continue to this day, the County should focus on bringing the existing wells into compliance rather than considering the approval of new wells.

REASONS FOR APPEAL

Our appeal points are outlined below. Thank you for your thoughtful consideration in protecting the biological and recreational resources of Santa Paula Creek.

1. NEW INFORMATION REQUIRES PREPARATION OF A SUPPLEMENTAL OR SUBSEQUENT EIR TO COMPLY WITH CEQA

The Division has never prepared a comprehensive Environmental Impact Report ("EIR") for this facility throughout its forty-year life span. Instead, the Division prepared a 32-page EIR in 1978, a 7-page Mitigated Negative Declaration in 1982, and a 1985 Focused EIR limited to evaluating the impacts of re-routing access roads to the drill sites to avoid the adjacent college campus.

Under CEQA, the County can prepare an EIR Addendum only in a very narrow set of circumstances. If any of the following conditions apply – and we argue below that they do – then your Board cannot legally certify the EIR Addendum and must direct the Division to prepare a Subsequent EIR:

(1) Substantial changes are proposed in the project which will require major revisions of the EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in severity of previously identified significant effects;

(2) Substantial changes occur with respect to the circumstances under which the project is being undertaken which will require major revisions of the EIR or Negative Declaration due to involvement of new significant environmental effects or a substantial increase in severity of previously identified significant effects; or

(3) New information of substantial importance which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified or the Negative Declaration was adopted, shows the following:

(A) The project will have one or more significant effects not discussed in the previous EIR or Negative Declaration.

(B) Significant effects previously examined will be substantially more severe than previously shown in the previous EIR.

(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponent declines to adopt the mitigation measure or alternative; or

(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponent declines to adopt the mitigation measure or alternative.

CEQA Guidelines §§ 15162, 15164(a). The County has the burden of demonstrating that none of these conditions apply, based on substantial evidence in light of the whole record. *Id. See also* Ventura Foothill Neighbors v. County of Ventura (2014) 232 Cal.App.4th 429 ("Increase in height of county medical building from 75 feet to 90 feet was a substantial change such that a supplemental EIR, rather than an EIR addendum, was required.")

The Division's 9-page EIR Addendum falls far short of this burden. The previous environmental documents did not evaluate several potentially significant impacts that exist today. Several impacts mentioned in the previous environmental documents have substantially increased in severity, due in

part to the applicant's failure to undertake previously-approved mitigation measures. These precisely fit two criteria outlined in the CEQA Guidelines that warrant preparation of a Subsequent EIR. These new and heightened impacts are highlighted in detail below:

a. Impacts to Outdoor Recreation & Trails Were Not Adequately Evaluated in the Previous EIRs

A formally-designated national forest trail known as the East Fork Trail or the Santa Paula Canyon Trail (Forest Trail 21W11) cuts directly through the middle of this oil and gas operation. This trail has existed since the early 1900s, long before any oil wells were drilled at this site, and today serves as one of the most popular gateways into the Los Padres National Forest.

The public trail begins on the Thomas Aquinas College campus, and transitions from pavement to dirt road to trail as it passes directly adjacent to several oil wells, pipelines, tanks, and other facilities. It is "by far the most heavily traveled in the Ojai Ranger District" (Carey, C.R. 2012. *Hiking & Backpacking Santa Barbara & Ventura*) and the U.S. Forest Service estimates that up to 100,000 people use the trail annually. The trail leads to several popular waterfalls, swimming holes, and backcountry campsites before entering the Sespe Wilderness Area. The trail is described as follows:

> The Santa Paula Canyon Trail in the Topatopa Mountains is among the most beautiful and popular hikes in the Ojai area. The trail begins by walking through picturesque Saint Thomas Aquinas College into Santa Paula Canyon. The hike follows Santa Paula Creek up a shady, forested canyon past a number of deep bedrock pools and cascades surrounded by rugged mountain views. The trail leads to The Punchbowl, a scenic, narrow gorge with waterfalls and pools between Big Cone Camp and Cross Camp.

Stone, R. 2011. *Day Hikes Around Ventura County.*

The trail passes immediately adjacent to Drill Site #1 and Drill Site #7. While a chain link fence surrounds both drill sites, neither fence is properly screened and the facilities on each drill site are readily visible from the trail. Odors emanate from the Drill Sites and are frequently encountered by trail users along this segment of trail. It is no wonder that the late Fred Volz, author of Ojai's seminal hiking guide *Ojai Hikes*, noted this about the trail:

> The trail begins on a fire road leading past an old farmhouse (off limits) and runs down to the river through a noisy, stinking oil field, which we hope will not spill your spirits.

Volz, F. 1988. *Ojai Hikes* at 39. Most other accounts of this trail – both online and in print – similarly note the intrusive presence of the oil facilities. These accounts are attached as **Exhibit 1**.

The applicant is proposing to drill an additional two wells at Drill Site #1 (the current site of 5 active oil wells plus several storage tanks and other facilities), and an additional 5 wells at the most sensitive and remote site, Drill Site #7 (which currently contains two active wells and one idle well). Additional drilling at Drill Site #7 in particular would further degrade the visual landscape along this popular trail by tripling the number of active wells at Drill Site #7. These wells – like the existing wells – would be fully visible from the trail, setting the tone for the entire hike. The increase in industrial development along the trail

would also exacerbate the graffiti and trash problems that currently afflict the canyon. Additionally, an increase in the number of wells would bring an increase in noise and odors, negatively detracting from the recreation experience.

While the applicant has proposed drilling a certain number of wells at each drill site, the permit conditions approved by the Planning Director and Planning Commission have no restriction on the location or number of wells that can be drilled within sight, sound, and smell of the trail. The Division addressed this issue in its Response to Comments to the Planning Director hearing, stating:

> The project description has been clarified by the applicant such that no more than 5 new wells would be installed on Drillsite #7. There is no specific number of the other proposed 14 new wells to be installed on each of the other three drillsites.

While the Division states that the applicant has "clarified" the project description to allow no more than five new wells at Drill Site #7, no such requirement is actually included in the permit conditions. Thus, even if the applicant does abide by its self-imposed limit of 5 new wells at Drill Site #7, the remaining 14 new wells could be placed on Drill Site #1, the other drill site in plain view of the trail. Thus, all 19 wells could be drilled within eyeshot of the trail, causing significant impacts to the recreation experience through the introduction of industrial development, noise, sounds, and smell.

The California Division of Oil, Gas & Geothermal Resources ("DOGGR") recently completed a statewide Programmatic EIR. The document focuses primarily on the impacts of fracking and other well stimulation activities, but accurately describes the types of recreational impacts that can occur with conventional drilling as well. Those impacts most relevant to this project include:

- "Visual intrusions to scenic resources within designated recreation areas;
- Decreased air quality due to dust or odors;
- Hazards and hazardous materials could result in environmental contamination or introduce public health issues within designated recreation areas;
- The preclusion of permitted recreation areas due to well stimulation activities;
- Increased noise audible to recreation users;
- Vibrations from drilling or stimulation treatments that would be felt by recreation users;
- Risk of upset issues and resultant effects on public health; or
- Traffic as a result of construction-related truck trips may limit, restrict, or delay access to recreation areas."

DOGGR 2015 at 10.20-10 (attached as **Exhibit 3**). DOGGR proposes several mitigation measures to reduce these impacts to less than significant levels, such as restricting the timing of drilling to avoid peak recreation periods and providing advance public notice when drilling is scheduled to occur so that recreationists can avoid the area. Similarly, the County should consider these impacts and mitigation

measures – which have not been considered in previous environmental documents for this facility – in a Subsequent EIR.

The 1978 EIR found that the drilling operation would have significant adverse visual impacts for hikers if landscaping was not included that would completely camouflage the oil production sites from recreational users of Santa Paula Canyon. The applicant is not currently in compliance with the mitigation measure, resulting in an existing significant visual impact. The doubling of oil wells on the site, without any enforcement of the mitigation measure requiring the site to be completely camouflaged, will result in both significant individual and cumulative visual impacts as found by the 1978 EIR. Thus, the County cannot rely on an EIR Addendum to analyze the project's impacts.

The previous environmental documents do not address the impacts to recreation from an influx of truck and other traffic associated with the drilling process. Kern County recently conducted a county-wide assessment of oil drilling impacts, concluding that the drilling of a new oil well typically generates 30 trips per day over a period of 30 to 90 days. *See* Kern County 2015 (attached as **Exhibit 2**). These vehicle trips would all occur along the same route that hikers use to access the trail, posing a significant public safety hazard and nuisance that would interfere with the recreation experience for an extended period of time.

On a related matter, it is important to note that a previous CEQA document for this facility requires the hiking trail to be separated from the access road to Drill Site #7. Specifically, the 1982 MND for the installation of Drill Site #7 requires the following to mitigate identified public safety impacts:

> That the permittee shall reroute the Santa Paula Creek trail so that it completely avoids Drill Site Nos. 1 and 7 and the access road to proposed Drill Site No 7. The cost of construction and maintenance for the rerouted trail shall be borne by the permittee. The location and design shall be approved by both the U.S. Forest Service and the surface owner prior to construction. All required trail improvements shall be completed by November 1, 1982.

Thus, the applicant's longstanding failure to implement this mitigation measure – coupled with an increase in truck and other vehicle traffic along the access route to Drill Site #7 – will cause a significant recreational and public safety impact that must be appropriately evaluated and mitigated in a Subsequent EIR.

In addition to posing a significant impact, the new and existing wells would not comply with Resources Policy 1.7.2-1 of the General Plan, which states that "discretionary development which would significantly degrade visual resources or significantly alter or obscure public views of visual resources shall be prohibited unless no feasible mitigation measures are available and the decision-making body determines there are overriding considerations." It is also inconsistent with Ventura County Non-Coastal Zoning Ordinance §8111-1.2.1.1, which requires the Planning Director to make a finding that the proposed land use is compatible with surrounding development and land uses; would not be obnoxious or harmful or impair the utility of neighboring uses; would not be detrimental to the public interest, health, safety, convenience, or welfare; and is compatible with existing and potential land uses in the

general area. These inconsistencies with County policies and ordinances would also represent a new impact that was not previously evaluated, necessitating preparation of a Subsequent EIR.

Given the overwhelming dominance of the oil operation along this trail, it is difficult to comprehend how the Division could have concluded in its staff report for the Planning Director hearing that "[t]he drilling pads are surrounded by hills and are not visible from any public viewing location," and "The oil and gas production facilities will be located in a region that is surrounded by hills and screened from view from any public location…. The existing character of the area will not be substantially altered with implementation of the proposed project." Planning Director Staff Report at 7, 13. Two of the drill sites are immediately adjacent to the trail and are completely visible therefrom, significantly detracting from the recreational experience of outdoor enthusiasts along one of the most popular trails in Ventura County.

In addition to failing to comply with the trail rerouting requirement of the 1982 MND, the applicant is also not in conformance with previously-approved mitigation measures relating to screening and cleanliness. Specifically (and as described in more detail in Section 4 of this appeal below), the facility fails to comply with the following permit conditions:

- Condition 31 ("all permanent facilities, structures, and aboveground pipelines shall be colored so as to mask the facilities from the surrounding environment and uses in the area."
- Condition 32 (the permit area "shall be maintained in a neat and orderly manner so as not to create any hazardous or unsightly conditions.")
- Condition 49 (requiring that Drill Sites 1 and 7 "shall be completely enclosed by two (2) inch mesh chain link fence of a non-rusting material, constructed to a height of not less than six (6) feet and containing no openings except those required for ingress and egress.")
- Condition 49 (requiring the gates to be kept locked "except when oil field personnel are present on the drill site." On our visit to these drill sites on January 5, 2015, the gate to Drill Site 7 was wide opened and unlocked, with absolutely no oil field personnel present.
- Condition 51 (requiring each drill site to "be landscaped so as to fully screen production equipment (including permanent storage tanks) and cut and fill slopes from view of…the Santa Paula Canyon hiking trail."

In the days leading up to the Commission hearing, the applicant installed thousands of feet of green screening along the chain link fence at Drill Sites #1 and #7, in lieu of landscaping. While we appreciate the applicant's last-minute attempt to screen the drill sites, the screening does not meet the letter or the intent of previous mitigation measures requiring complete screening with landscaping. On the contrary, this newly-installed screening creates a "tunnel" effect for hikers walking along the trail at Drill Site #7, and has already become a magnet for graffiti. The screening was not evaluated in any previous environmental document, and its new impacts must be evaluated in a Subsequent EIR.

Graffiti observed along hiking trail at Drill Sites #1 (top) and #7 (bottom) on September 29, 2015.

The presence of graffiti on these newly-installed screens should come as no surprise. In fact, two Commissioners warned the applicant about this very matter during the June hearing:

> COMMISSIONER RODRIGUEZ: "One final comment regarding the fencing that occurred, that is in place now. You've cleaned up a lot of graffiti…but seeing that screening, that's going to be your next problem. So I'm not sure if that necessarily in the long term is the appropriate solution."
>
> …
>
> COMMISSIONER AIDUKAS: "The thing that concerns me about the screening of the area is that I see that as a target for taggers. And anything the operator can do to lessen that, the less ugly it will be."

The list of ongoing permit violations at this site is extensive, and is outlined in detail in our complaint in **Exhibit 4**. We urge the Board to push the pause button on this application to allow your Division and the applicant time to rectify these serious violations. These mitigation measures were imposed by your Board and the Commission as part of a thoughtful process aimed at reducing or eliminating significant

environmental impacts. The Division's failure to enforce – and the applicants refusal to implement – these measures has allowed significant impacts to accrue over the course of more than three decades, and these impacts continue to this day. The new project would compound the existing unmitigated impacts, and increase the significance of these adverse impacts.

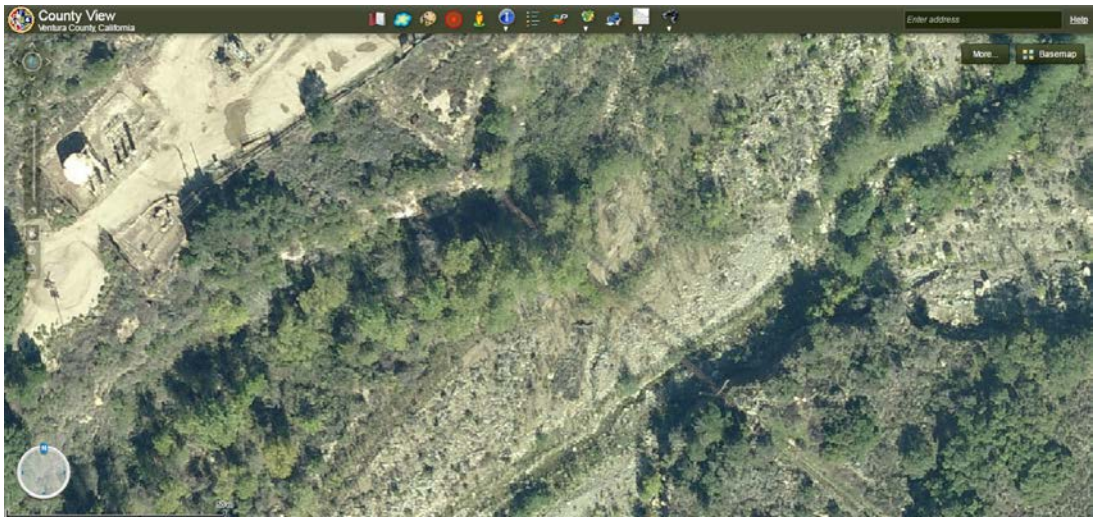
Your Board may wish to pursue two options to address this matter: (1) allow the violations to continue, evaluating the new visual and recreation impacts caused by such non-compliance in a Subsequent EIR, or (2) direct the Division to conduct a compliance review and abate any violations before proceeding with project approval. We urge you to pursue the latter option.

b. The Risks from Oil Spills Have Increased Since the Previous Analysis

The main pipeline servicing this facility is suspended mid-air across Santa Paula Creek for approximately 200 feet. *See* **Figure 1**. If this pipeline were to rupture from corrosion, or suffer damage from high floodwaters or falling trees, the ensuing oil spill would be catastrophic, significantly harming aquatic wildlife and polluting water quality for downstream users.

Recognizing this risk, the 1978 EIR requires the applicant to "install automatic safety vales on the shipping line so that the maximum amount of oil that could be spilled into Santa Paula Creek, in the event of pipeline breakage, would be 45 barrels (1,890 gallons). In addition, a properly designed suspension bridge would reduce the likelihood of pipeline breakage from flooding."

Figure 1: Pipeline Suspended Across Santa Paula Creek



County imagery from 2011 shows the pipeline suspended 200 feet across the creekbed. It lacks a "properly designed suspension bridge" and automatic shut-off valves required by the 1978 EIR authorizing its construction.

The 1978 EIR, however, did not evaluate the impacts associated with a spill of this magnitude, nor did it

evaluate the "worst case scenario" of a spill much larger than that. The County must prepare a Subsequent EIR to evaluate an oil spill of this magnitude, and consider whether modern technology such as a SCADA (supervisory control and data acquisition) remote system can feasibly reduce the scope of a spill or eliminate that risk entirely.

In addition, the suspension bridge envisioned by the 1978 EIR mitigation measure was never constructed. Nor has the applicant installed an "automatic shut-off valve" on this pipeline as required by the 1978 EIR. During the Planning Commission hearing, and in response to one of our appeal points, the applicant was asked if automatic shut-off valves were installed on the pipeline:

> COMMISSIONER AIDUKAS: "With regard to that pipeline overcrossing the creek, are there shut-off valves?"
>
> BARRY CARTER (CRC): "There are shut-off valves on both sides. They are not automatic shut-off valves but there are shut-off valves on both sides."

See Video Archive, 6/11/15 Planning Commission Hearing, at 4:03:22. The Commission did not further discuss or otherwise address this troubling revelation.

The 1978 EIR – prepared 37 years ago – recognized the critical importance of installing *automatic* shut-off valves that could be instantly triggered in the event of a spill. If a spill in the pipeline occurs – either from corrosion or from physical damage during a flood – an automatic shut-off valve would instantaneously detect such a spill and immediately stop the flow of oil across the creek, limiting the amount of pollution. On the other hand, a non-automatic shut-off valve would need to be manually activated, allowing oil and other pollutants to spill into the creek for possibly hours before a worker is able to arrive on scene.

Inexplicably, the Division has stricken the long-standing requirements for a suspension bridge and automatic shut-off valves from the terms and conditions of the new permit, placing Santa Paula Creek at grave risk of an oil spill and triggering the requirement to prepare a Supplemental EIR based on changed circumstances.

The 1978 EIR found that potential oil spills would result in an unavoidable adverse impact. In order to approve an additional project that may increase the likelihood of such spills, the County would need to prepare an EIR and a new statement of overriding considerations. The statement of overriding considerations from the 1978 EIR cannot be used to override these new impacts, particularly because the finding that there is no feasible mitigation to substantially lessen or eliminate the risk from oil spills can no longer be made due to technology advances in the intervening 37 years. (CEQA Guidelines § 15162(3)(C) [a Subsequent EIR must be prepared when mitigation measures previously found to be infeasible are now feasible and could substantially reduce one or more significant effects of the project.])

Finally, the applicant has installed three above-ground flowlines along the access road/hiking trail to Drill Site #7. These flowlines transport oil from each of the wells on Drill Site #7 to the tank farm at Drill

Site #1. A ditch runs below the flowlines and parallel to the road, punctuated with large concrete drainage features that empty into Santa Paula Creek. These drainages have no berms or other devices to prevent an oil spill from entering Santa Paula Creek. The placement of additional wells on Drill Pad #7 will require additional flow lines along this route, contributing to an increased risk in the frequency and volume of oil spills.

Three flow lines transport crude oil from Drill Site #7 to the pipeline suspended across Santa Paula Creek. If one of these flow lines ruptures, there is no automatic shut-off valve, and no measures to guard against oil spilling into the storm drain and into Santa Paula Creek.

This new information – the pipeline constructed without the requisite suspension bridge, three pipelines instead of one, the impacts of a predicted spill of 45 barrels (1,890 gallons), an evaluation of a "worst-case scenario" spill, and a potential spill from the flow lines into the drainage features along the access road – must all be included in a Subsequent EIR.

During the Planning Commission hearing, Division staff argued that DOGGR, not the County, has jurisdiction over pipelines. This argument is inconsistent with how the County has treated pipelines under this CUP for the better part of three decades. Since preparing the first CEQA document in 1978, the County has required the applicant to construct several pipelines. The applicant has requested several permit modifications to construct new pipelines. And as the land use authority for Ventura County, the Division has consistently identified the routes and design of pipelines for this and other facilities, including directly mandating that a pipeline be constructed with shut-off valves and a suspension bridge. The Division's decision to remove these requirements from the permit entirely is reckless, and places Santa Paula Creek at a significant risk of an oil spill of a much higher magnitude than previously evaluated.

None of the previous environmental documents – or the proposed EIR Addendum – adequately evaluates and mitigates the potentially significant impacts of oil spills on Santa Paula Creek.

c. Activity of California Condors Near the Project Site Has Increased Dramatically Since the Previous Analysis

The only prior evaluation of the project's impacts to condors occurred in 1977, in conjunction with a permit modification. At the time, the permitee was only authorized to drill wells at Drill Site #1, and had asked for permission to modify the permit to add Drill Sites #2-6. Drill Site #7 along Santa Paula Creek had not yet been proposed. The Final EIR prepared by the County in 1978 states only this, with respect to condors:

> The location of the drill sites in the canyon bottom and on the ridge to the northeast are factors which tend to reduce the impact of the project on nesting and roosting Condors in the area. It should be noted, however, that any activity beyond the proposed sites could have severe adverse impacts on this endangered species.

The County's Staff Conservationist expresses the situation in 1977 as even more dire, stating in a memo from the Public Works Department that "any activity beyond the proposed sites would have severe adverse impacts on this extremely endangered bird, *and this project comes very close to being adverse*." The excerpts from this EIR and memo are attached to our appeal as **Exhibit 4**.

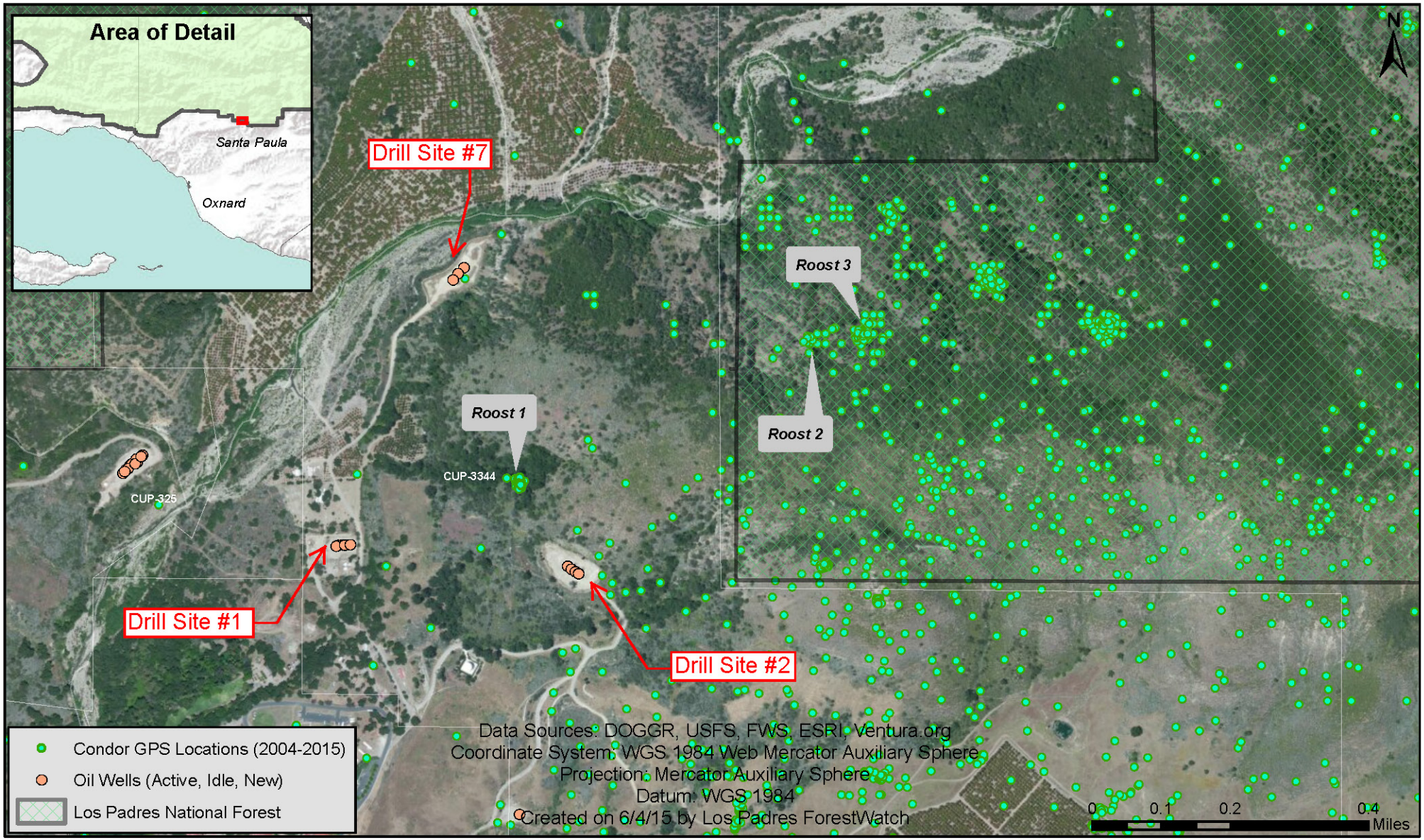
Despite warnings in the 1978 EIR that "any activity" beyond Drill Sites #1-6 could have "severe adverse impacts" to condors, Drill Site #7 was proposed in 1982 and is located 1/3 of a mile *closer* to the condor nest site. Surprisingly, the 1982 MND for Drill Site #7 is silent with respect to condors. The County must evaluate the impacts of drilling additional wells at Drill Site #7 in a Subsequent EIR.

A Subsequent EIR is also warranted given the extensive changes that have occurred with the California Condor Recovery Program since the 1978 EIR was prepared. Condors were completely removed from the wild in the 1980s, and a program to reintroduce them from captivity was launched a few years later. Condors are now using this area much differently – and much more frequently – than they did in 1977, and the impacts from oil development facilities are now much better understood.

The nearest condor nest is less than two miles from the facility, and the nest is now being used for the first time since condors were reintroduced to the wild more than thirty years ago. Condor 262 and 449 are known as the Punch Bowl pair, due to the nest's proximity to the Punch Bowl, a waterfall and swimming hole further upstream in Santa Paula Creek. Their chick hatched in June, and the young chick – now four months old – is preparing to take its first flight from the nest. This is the first nest in the history of the California Condor Reintroduction Program where two parents hatched from eggs laid in the wild reared a chick that was also hatched in the wild, heralding a second generation of completely wild condors.

This condor pair has attempted to roost in the vicinity of the drill sites. Data from the U.S. Fish & Wildlife Service ("FWS") indicates three active condor roosting sites within 0.5 miles of Drill Sites #2 and #7. *See* **Figure 2 (Condor Activity Near CUP 3344)**. In addition, this data confirms the statement in the 1978 EIR that a condor nest exists 1.75 miles from the drill site. This FWS data shows that condors are actively recolonizing the Santa Paula Creek area, and are becoming increasingly active there.

Condor Activity Near CUP 3344



Roost 1 Data:

37 GPS points, approx. 0.13 miles from nearest oil well

Bird ID: 262
37 points
arrived 17:45 PST on 02-02-2014
departed 09:23 PST on 02-05-2014

Roost 2 Data:

17 GPS points, approx. 0.47 miles from nearest oil well

Bird ID: 262
9 points
arrived 07:33 PST on 12-18-2013
departed 12:04 PST on 12-18-2013
arrived 17:06 PST on 06-01-2014
departed 17:07 PST on 06-01-2014

Bird ID: 449
4 points
arrived 02:00 PST on 04-20-2012
departed 16:00 PST on 04-20-2012
arrived 14:00 PST on 12-18-2013
departed 19:00 PST on 12-18-2013

Roost 3 Data:

88 GPS points, approx. 0.52 miles from nearest oil well

Bird ID: 262
79 points
arrived 22:00 PST on 04-19-2012
departed 16:00 PST on 04-20-2012
arrived 19:20 PST on 02-05-2014
departed 08:59 PST on 02-06-2014
arrived 16:07 PST on 04-16-2014
departed 07:01 PST on 04-17-2014
arrived 17:08 PST on 06-01-2014
departed 17:10 PST on 06-01-2014

Bird ID: 449
7 points
arrived 22:00 PST on 04-19-2012
departed 12:00 PST on 04-20-2012
arrived 01:00 PST on 03-17-2013
departed 15:00 PST on 03-17-2013

Bird ID: 412
1 point at 21:00 PST on 11-11-2007

Bird ID: 328
1 point at 21:00 PST on 09-08-2008

According to condor telemetry data from FWS[1], recent condor roosting activity in the area includes:

- February 2014 – Condor #262 lands in a grove of oak trees 0.13 mile from the nearest oil well on Drill Site #2. He remained roosting at this site for more than 63 hours before leaving, and has not returned since.

- April 2012 to June 2014 – On several occasions, condors have roosted in a grove of conifers less than one-half mile from the nearest oil well. These include fourteen hours in April 2012, four hours in December 2013, another five hours in December 2013, and an hour in June 2014.

- A third roost site is located 0.52 miles from the nearest oil well. Condors 262 and 449 have frequently roosted at this site, including one overnight roost in 2012, a fourteen-hour roost in 2013, two overnight roosts in 2014, and a two-minute stop in 2014. Two other roost sites are located within one mile of the oil pads.

In 2013, the FWS provided the Division with a summary of the potential impacts posed to endangered California condors from oil development, along with a series of 23 recommended minimization and avoidance measures to protect the California condor. This FWS letter is attached as **Exhibit 5**. These potential impacts and mitigation measures were not evaluated as part of any previous environmental document for this project, and must be analyzed in a Subsequent EIR.

The first of these FWS recommendations is that no oil and gas facilities shall be developed within 1.5 miles of nest sites or within 0.5 miles of active roost sites. This mitigation measure was not evaluated as part of any previous environmental documents for this operation, and this new information must be evaluated and considered as part of a Subsequent EIR. The Subsequent EIR must evaluate the presence of condors within the 0.5-mile roosting buffer. Consistent with the FWS mitigation measures, the Division must prohibit any new drilling activity or facilities within these buffers.

---

[1] Many condors in the wild are outfitted with satellite telemetry devices that transmit an individual bird's precise location. The U.S. Fish & Wildlife Service's California Condor Recovery Program collects, verifies, and maintains this data. Through a Freedom of Information Act request, we obtained all condor telemetry data from 2004 to present. The U.S. Geological Survey's Fort Collins Science Center now assists the FWS in maintaining this data and making it publicly available through its online ScienceBase database. New data is updated on a quarterly basis. The data includes a unique identification number for each condor, location data, date, time, speed of travel, height, and other information. According to USGS, "The purpose of these data is to provide users with known locations of California condors and to inform management and research decisions. These data should be used only illustrate where condors are known to have visited, and not to illustrate where condors do not exist."

Condor telemetry data can be used to determine, with strong accuracy, the locations of condor roosting and nesting locations. See Cogan, C.B. et al. 2012. "Analysis of California Condor (Gymnogyps californianus) Activity Using Satellite Telemetry Data." *The Open Ornithology Journal* 5: 82-83. Using a software application called ArcGIS, we combined the data with aerial imagery and oil well location data maintained by the California Division of Oil Gas and Geothermal Resources to create the attached map. We also used ArcGIS to analyze the data and identify areas where condors had a speed of zero over an extended period of time, indicating a perch or roost site.

Allowing new oil drilling within these buffer zones may significantly impair condor behavior. Condors are extremely sensitive to noise disturbances, and habituation to human activity such as oil development can lead to other undesirable behaviors that can ultimately result in a condor being captured and placed in temporary or permanent captivity. Young condors tend to be particularly curious in nature, making them more susceptible to these impacts than adults.

We appreciate the Division's efforts to implement many of the condor protection measures recommended by FWS. However, the Division continues to propose alternate language that does not satisfy the letter or intent of the FWS recommendations, including the requirement to underground power lines (proposed Condition 34(a)), the requirement to post microtrash signage (proposed Condition 34(g)), and notification and access (proposed Condition 34(s)). The Division also omits several recommended measures, including number 19 (fire prevention) and number 21 (prohibiting direct contact with condors). And we continue to have concerns about the language allowing the Planning Director to modify any condor protection measure after simply "consulting with" FWS. The measures should only be modified with the *written approval* of FWS, and only after the County undertakes the usual permit modification process, including public notice and hearing. These mitigation measures also violates CEQA requirement that mitigation measures be fully enforceable since they can be weakened without further discretionary approval and environmental review. (CEQA Guidelines §15126.4(a)(2).)

The Division's EIR Addendum lists some (but not all) of the FWS condor protection measures, and does not contain any further analysis of the efficacy of the County's version of these protection measures, nor of the County's omission of certain measures. These impacts and mitigation measures must be evaluated in a Subsequent EIR, as they have never been part of any CEQA analysis for this project.

d. The Previous Analysis Fails to Evaluate Impacts to Endangered Southern Steelhead

Santa Paula Creek historically supported healthy steelhead runs. While their numbers are now greatly diminished throughout the region, Santa Paula Creek continues to provide "the most productive habitat" for steelhead in the Santa Clara River watershed, and has greater potential to contribute to the recovery of steelhead than other Santa Clara River tributaries. The protection of habitat in upper Santa Paula Creek is seen as a top priority for revitalizing the Santa Clara River steelhead population. *See* Stoecker, M. and E. Kelley. 2005. Santa Clara River Steelhead Trout: Assessment and Recovery Opportunities, relevant excerpts of which are attached as **Exhibit 6**.

Southern steelhead were classified as an endangered species in 1998, several years after the previous EIRs were prepared. In 2005, the National Marine Fisheries Service ("NOAA Fisheries") issued its final rule designating critical habitat for several steelhead populations in California. 70 Fed. Reg. 52488 (September 2, 2005). Pertinent to this project, the final rule designates Santa Paula Creek as critical habitat for southern steelhead, an endangered species. A recovery plan for southern steelhead was finalized in 2012, and NOAA Fisheries and its partners – including Los Padres ForestWatch – are in the process of implementing that recovery plan to restore wild steelhead populations throughout the region.

The classification as an endangered species, the designation of critical habitat, and the approval and implementation of a recovery plan is all new information that was not evaluated in any of the previously-prepared environmental documents for this project. Steelhead are vulnerable to spills of oil and other hazardous materials associated with drilling operations. In 2005, the U.S. Forest Service ("USFS") evaluated the impacts of oil drilling to steelhead and aquatic habitat throughout key oil drilling areas in the Los Padres National Forest, including in the Santa Paula Creek watershed, and concluded the following:

> Accidental spillage of petroleum products or other toxic materials can directly kill fish. Eggs may be smothered or killed, and adults killed…. Oil and gas exploration and development requires the use of a variety of chemicals and fluids, such as hydraulic fluid, diesel and gasoline, and drilling mud. Accidental release of oil and associated petroleum from trucks, pipelines, storage areas, and the well itself are all potential sources of pollution. If these products were discharged into the local aquifer, at locations where they could become part of storm water runoff, or flow directly into stream channels, then impacts to aquatic habitats would occur. These impacts could include acute toxicity to individual fish, suffocation of aquatic benthic invertebrates as a result of being covered by oil, direct toxicity to food web organisms due to concentrations of volatile organic compounds within and immediately adjacent to the water column, chronic toxicity to fish and food web organisms due to contamination of the adjacent aquifer, and loss of riparian vegetation through acute or chronic toxicity.

USFS at 4-53 (attached as **Exhibit 7**). In addition, excessive sedimentation may eliminate spawning areas and increase stream turbidity to harmful levels.

The Forest Service – citing to policies of the U.S. Bureau of Land Management, the federal agency in charge of oil drilling on federal lands – concludes that a 200-meter (656-foot) setback "is a sufficient distance to avoid all streams and riparian habitats" to protect steelhead. The County's imposition of a 100-foot setback amounts to only 15% of this standard requirement. *Id*.

Without adequate measures in place to protect steelhead, designated critical habitat, and species recovery objectives, new significant impacts could occur that must be evaluated in a Subsequent EIR.

e. The Prior Analysis Fails to Evaluate New Air Pollution Standards & Greenhouse Gas Emissions

Ventura County is in state non-attainment for the 1-hour ozone standard, is in state and federal non-attainment for the 8-hour ozone standard, and is in state non-attainment for the PM10 and PM2.5 particulate matter standards. These ambient air quality standards have been revised significantly since the previous environmental documents were prepared for this facility. Such non-attainment levels – and the facility's contribution to them – constitute a significant impact that should be analyzed in any subsequent EIR.

In addition, California has enacted new greenhouse gas (GHG) emissions requirements, and any subsequent EIR must evaluate the GHG emissions of this facility. As of 2007, lead agencies must evaluate GHG emissions as part of the CEQA process, as follows:

- Lead agencies must analyze the greenhouse gas emissions of proposed projects, and must reach a conclusion regarding the significance of those emissions. (See CEQA Guidelines § 15064.4.)

- When a project's greenhouse gas emissions may be significant, lead agencies must consider a range of potential mitigation measures to reduce those emissions. (See CEQA Guidelines § 15126.4(c).)

The previous environmental documents prepared for this project do not contain any analysis of GHG emissions, nor do they propose any mitigation measures. In 2013 (the most recent year for which data is available), the EPA concluded that oil and gas production was the second-highest source of GHG emissions. The Division must evaluate emissions for carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O) in a Subsequent EIR.

Additionally, even without considering greenhouse gas impacts, the 1978 EIR found nitrogen oxide (NOx) impacts would be significant and unavoidable during the drilling phase of the project. Drilling would occur with this project as well and thus would likewise result in significant NOx emissions. A Subsequent EIR must evaluate these impacts and whether they can be mitigated to a less than significant level using new technology.

f. Nearly Every Well on the Ferndale Lease Has Been Fracked, and the Prior Analyses Fail to Evaluate the Risks of Fracking the New Wells

The permit as approved by the Planning Commission states, "Hydraulic fracturing or acid well stimulation techniques subject to the draft regulations for the implementation of Senate Bill 4 are not authorized by this permit. Any such well stimulation activity requires the granting of a modification of this permit by the County of Ventura."

However, it is important to evaluate the impacts of fracking and other well stimulation techniques now instead of piecemealing the analysis to some point in the future. Existing wells at this facility have been fracked repeatedly in the past, suggesting that fracking is reasonably foreseeable and a necessary method of extracting oil and gas from this reservoir. According to records maintained by the California Division of Oil, Gas & Geothermal Resources ("DOGGR"), 16 of the 17 wells drilled on these pads have been fracked at least once, and some as many as five times, for a grand total of 42 fracking and other well stimulation operations since the first well was drilled here in 1972. See **Figure 3** below for a summary of the fracking operations at this facility, and the corresponding DOGGR well records are attached as **Exhibit 8**.

Figure 3: Fracking and Other Well Stimulation Treatments at Ferndale Lease

Well Name	Drill Site	Well Status	Year First Drilled	Years When Well Stimulation Treatments Occurred	**Total Number of Well Stimulation** Treatments
Barker-Ferndale 1	1	Active	1972	1975, 1975, 1977, 1977	**4**
Barker-Ferndale 2	1	Plugged	1975	1975, 1975, 1975	**3**
Barker-Ferndale 3	1	Active	1975	1975, 1978, 2011 (acid)	**3**
Barker-Ferndale 4	1	Active	1976	1976, 1977, 1978, 1990	**4**
Barker-Ferndale 5	1	Plugged	1976	1976, 1976, 1989	**3**
Barker-Ferndale 6	1	Plugged	1977	1977, 1977	**2**
Ferndale 8	3	Plugged	1980	None reported	**0**
Valex-Ferndale 107	1	Active	1981	2012	**1**
Valex-Ferndale 209	2	Plugged	1981	1982	**1**
Valex-Ferndale 110	1	Active	1982	1982, 1982	**2**
Valex-Ferndale 211	2	Active	1982	1982, 1982, 1982, 1983	**4**
Valex-Ferndale 214	2	Active	1982	1982	**1**
Valex-Ferndale 215	2	Active	1982	1983, 1983	**2**
Valex-Ferndale 313	3	Plugged	1984	1985, 1985	**2**
Ferndale 712	7	Idle	1989	1990, 1990	**2**
Ferndale 716	7	Active	1990	1990, 1990, 1990, 1990, 1990	**5**
Ferndale 717	7	Active	1990	1990, 1990, 1990	**3**
TOTAL					**42**

Source: California Division of Oil, Gas & Geothermal Resources

Further evidencing the fact that fracking is an inevitable component of the project, the applicant has expressed clear intent to conduct fracking. In its application, CRC (previously Vintage Production) admits: "Vintage will not use 'well stimulation treatments' such as hydraulic fracturing, acid fracturing, and acid matrix stimulation per the definitions of the Wells Stimulation Treatments regulations proposed in Senate Bill 4 (Pavley) for the existing wells or those to be drilled within CUP 3344, unless and until regulations addressing potential environmental impacts from these processes are adopted and in place." (emphasis added).

The County must evaluate the impacts of reasonably foreseeable fracking at the facility in a Subsequent EIR.

2. THE COUNTY PREDETERMINED THE LEVEL OF ENVIRONMENTAL REVIEW

CRC submitted its application on October 10, 2013. Just one week later, in a memo to other County agencies dated October 18, 2013, the Division describes the project, requests the various agencies to review the project for application completeness and potential environmental impacts, and states, "This project does not qualify for a Categorical Exemption from the California Environmental Quality Act (CEQA). However, an EIR was approved with the original permit. Therefore an addendum to the original EIR will be prepared." This memo is attached to our appeal as **Exhibit 9**.

The Division prematurely determined that the appropriate level of environmental review for this project would be an EIR Addendum, before conducting the requisite Initial Study and prior to receiving input from other County departments. (CEQA Guidelines § 15063(a).)

3. THE COUNTY CANNOT PREPARE AN ADDENDUM FOR MULTIPLE EIRS AND MNDS

The County previously prepared two EIRs for this oil and gas operation. Initially, in 1978, the Planning Commission certified an EIR that evaluated the environmental impacts of 30 additional oil wells at Drill Sites 2-6. Then, in 1985, the Board of Supervisors certified a Focused EIR that evaluated several alternative access routes to the facility. This 1985 EIR was limited to the issue of access routes, and did not evaluate any impacts from oil drilling or production.

In addition to these two EIRs, the County prepared a MND in 1983 to evaluate the installation of Drill Site #7 and the drilling of several wells at that site. The impacts of well pad construction and oil drilling at this site were not evaluated in the 1978 EIR, or in the 1985 Focused EIR.

Oddly enough, the staff reports for the Planning Commission and your Board only referenced the 1978 and 1985 EIRs, while ignoring the 1982 MND. Specifically, in the section titled "California Environmental Quality Act (CEQA) Compliance" on page 6 of the Commission's staff report, and on pages 7-8 of the Board's staff report, the Division omits the MND from the chart of previous CEQA documents prepared for this facility.

This continues the folly that the Division first created in its staff report for the Planning Director hearing. That staff report did not even refer to the 1978 EIR, and completely mischaracterized the nature and scope of the 1985 Focused EIR, claiming that the focused EIR "evaluated the impacts of additional grading to expand two drill pads and create a new drill pad, relocate the previously permitted oil wells, drilling additional oil and gas wells, and access to the oil facilities." But the 1985 Focused EIR does no such thing. It clearly states on page 1 that "the objective of this focused EIR is a comparative analysis of all reasonably feasible alternative access roads that may be available to serve oil related traffic associated with Argo Petroleum's revised drilling program for its Ferndale Ranch lease" and emphasizes that it does "not address the actual drilling and production of oil and gas," (emphasis included in original). The Division continues to erroneously characterize the scope of the 1985 Focused EIR in the Board's staff report as well, despite us bringing this error to the Division's attention in both of our previous appeals.

If the County wants to prepare an EIR Addendum to satisfy the requirements of CEQA, then for starters, the Division must correctly identify the original environmental document, which in this case presents a challenge since this oil drilling operation was evaluated in stages, starting with the 1978 EIR, continuing with the 1983 MND, and finishing with the 1985 Focused EIR. The EIR Addendum prepared by County staff only expressly updates the two EIRs, while ignoring the 1983 MND for Drill Site #7.

This comedy of errors has arisen only because the Division is attempting to inappropriately prepare an EIR Addendum to a project, the impacts of which have never been evaluated in a single environmental document. To which environmental document will the EIR Addendum be attached? (See CEQA Guidelines §15164(c) ("An addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration.") There is no easy answer to this question because CEQA did not envision a lead agency relying on an EIR Addendum in such circumstances.

Your Board cannot certify the EIR Addendum because it fails to expressly update one of the three environmental documents previously prepared for this project. The County simply lacks authority to prepare an EIR Addendum for a project with three disjunct environmental documents, all of which were prepared more than thirty years ago and all of which analyze different components of this project. Instead, CEQA requires the Division to prepare a Subsequent EIR.

4. THE PERMIT IMPROPERLY DEFERS ANALYSIS OF IMPACTS AND MITIGATION MEASURES

Several of the proposed conditions of approval for the project improperly defer analysis of potentially significant impacts and constitute improperly deferred mitigation measures. The conditions defer development of a dust control plan until after project approval (Condition 24), defer analysis of lighting impacts and development of a lighting plan until after project approval (Condition 25), defer preparation of surveys for migratory birds and sensitive species until after project approval (Conditions 35 and 36), and defer development of a landscaping plan until after project approval (Condition 70). This deferral of analysis and development of mitigation measures violates CEQA. (*Endangered Habitats League v County*

of Orange (2005) 131 Cal. App. 4th 777, 793-94; Guidelines Section 15126.4(a)(1)(B).) CEQA requires all mitigation measures for a project to be formulated during the environmental review process so their efficacy can be analyzed in the environmental review document. (*San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 669-670.)

5. SIGNIFICANT ONGOING VIOLATIONS OF THE EXISTING PERMIT SHOULD BE ABATED BEFORE CONSIDERING PERMIT RENEWAL

The Ventura County Non-Coastal Zoning Ordinance ("Zoning Ordinance") requires that an application for a permit or permit modification be nullified if violations exist on the subject parcel. Specifically, Section 8111-2.2(g) of the Ventura County Non-Coastal Zoning Ordinance ("Zoning Ordinance") states:

> Nullification of Applications When Violations Are Discovered - Where a violation is discovered on a lot where an application request has been accepted or is being processed after being deemed complete, said application shall become null and void and returned to the applicant.

In addition, Section 8111-2.7 of the Zoning Ordinance states that permits "shall be null and void" if "[t]he application request which was submitted was not in full, true, and correct form." These nullification requirements are mandatory and without discretion; the County shall nullify the application or permit where violations occur or where incorrect or incomplete information has been presented in the application.

This facility has an extensive history of permit violations, many of which continue to this very day. The original permitee and its successors, including CRC, have failed to comply with numerous conditions that have been on the books for nearly three decades. In addition, CRC's own application for this permit modification is incomplete, mischaracterizes several permit conditions, and contains misleading statements. The Division should not have deemed the application complete when it did, placing your Board in the unsettling situation of considering a proposal with significant ongoing violations.

Your Board must send the project back to the drawing board so that planning staff – and the public – can appropriately consider a project with a full and complete application, and one that is unburdened by ongoing violations. Frankly, the focus of this hearing should be on how to remedy the ongoing violations of this site, rather than discussing whether to double the number of existing wells and extend the entire project for thirty years.

In a letter dated February 11, 2015 to Planning Director Kim Prillhart, we outlined in detail a series of ongoing violations at this facility. The letter also requested that the Division nullify the permit application, citing the Zoning Ordinance sections highlighted above. Our letter is attached to this appeal as **Exhibit 10**.

The Division responded to our request on February 27, 2015, ten days after approving the project and one day after we filed our appeal to the Planning Commission. The Division responded as follows:

> Given that Los Padres Forest Watch has appealed the February 17, 2015 decision of the Planning Director on the PL 13-0150 application, your letter and a staff response to the issues raised therein will be included in the staff report provided to the Planning Commission at the de novo hearing on the proposed project.

A copy of the Division's response to our nullification request is attached as **Exhibit 11**. It is unclear why the Division did not immediately investigate the allegations set forth in our letter, as it typically does when receiving complaints for permit non-compliance.

Instead, the Division chose to defer the resolution of these complaints to the Commission, and now, to your Board. In a memo dated May 26, 2015 and attached to the Commission's staff report, the Division provided a brief response to our complaints. The memo tacitly acknowledges that the applicant is in non-compliance with several permit conditions, yet postpones any resolution of the violations until after the Commission's (and now, your Board's) hearing. This memo is attached to our appeal as **Exhibit 12**.

The Division's failure to appropriately investigate our complaint is in keeping with the Division's long-standing practice of turning a blind eye to this facility. In fact, the Division even admits in its May 26, 2015 memo that "there is no record of a formal compliance review being conducted by the County since 2003." This is in complete violation of Condition 4 of the existing CUP, which states:

> That two (2) years and five (5) years after the approval of CUP-3344 MOD #8 and #9 and every fifth year thereafter, the permit shall be reviewed by the Planning Director at the permittee's expense. The permittee shall initiate the review by filing an application for said review and paying the deposit fee then applicable…. The purpose of the review is to ascertain whether the permit, as conditioned, has remained consistent with its findings for approval and if there are grounds for the filing of an application for modification or revocation of the permit.

The referenced permit modifications were approved in 1982. Based on this timeline, the Division should have performed compliance reviews on this facility in 1984, 1989, 1994, 1999, 2004, 2009, and 2014. It is simply unacceptable to overlook seven compliance reviews over the course of 33 years. The current applicant's acquisition of this facility in 2008 would have been an excellent opportunity for the County to conduct a compliance review, but it failed to do so then, too – even though the applicant had signed and submitted a Reimbursement Agreement for Permit Condition Compliance Review in 2008 in connection with the facility transfer.

Even while agreeing that the County and applicant are delinquent on condition compliance reviews for this facility, the Division postpones any future condition compliance review until *after* your Board approves the permit. Specifically, the Division's May 26, 2015 memo concludes: "Given the current discretionary action under consideration by the County, the next compliance review will occur *after* the final action by the County on the requested modified CUP," (emphasis added). It is wholly inappropriate to further postpone a compliance review, particularly in light of the seriousness of the allegations outlined in our complaint, the extensive history of permit violations at this facility, and the sensitive resources at stake.

The County's failure to conduct condition compliance review also violates CEQA, which requires the County to adopt and enforce a mitigation monitoring or reporting program to ensure mitigation measures are implemented. (CEQA Guidelines § 15097.)

Adding insult to injury, the vast majority of the permit conditions currently in non-compliance are not being carried over into the new permit. Instead, the Division has merely stricken them from the permit. So any future compliance review will not include most of the ongoing violations, because those associated permit conditions will no longer be in the permit. These violations should be resolved now, during the current process of modifying the permit, rather than at some time in the future.

The Division's May 2015 memo acknowledges that several violations of the current permit exist, and have existed for several years if not decades. Instead of attempting to resolve these violations, the Division merely sweeps them under the rug, assuring us that they will look into it at some undefined time in the future, after the permit modification has already been issued, and after several critical conditions in the existing permit have been removed from the new permit. This does not instill any confidence amongst the public that the Division will conduct timely investigations of complaints, and upends the enforcement and nullification procedures outlined in the Zoning Ordinance as approved by your Board. We ask you to reaffirm the County's commitment to permit compliance by directing Division staff to appropriately respond to the complaint and to take enforcement action as necessary to abate such violations, prior to taking any other action on the applicant's permit.

6. APPELLANTS ARE ENTITLED TO A REFUND OF APPEAL FEES

ForestWatch and the Center have submitted a total of $2,000 in appeal fees on this matter – $1,000 in appeal fees to file our appeal to the Planning Commission, and another $1,000 to file this instant appeal with your Board. Consistent with the Planning Division Fee Schedule, we respectfully request that your Board grant us a full refund of these appeal fees.

The Planning Division Fee Schedule approved by your Board states:

> If any appeal is fully upheld, all fees paid by the appellant shall be refunded. If the appeal is upheld in part, the decision-making body hearing the appeal shall determine at the time the decision is rendered what portion of the appeal charges should be refunded to the appellant.

Therefore, if your Board decides to nullify the applications, to refer certain matters back to the Division, to deny the project outright, or to take any other action that modifies the Division's action or upholds our appeal in part or in full, we are entitled to a refund. Likewise, if Division staff makes any changes to the project in response to our appeal, we are entitled to a refund.

7. CONCLUSION

Based on the issues outlined above, we strongly urge your Board to find that the EIR Addendum does not comply with CEQA, and to direct the Division to prepare a Subsequent EIR for this permit

modification. Substantial changes to the project, along with new and more severe environmental impacts that have not been previously evaluated, clearly warrant preparation of a Subsequent EIR pursuant to the CEQA Guidelines.

In addition, we request that you nullify the permit application and direct the Division to work with the applicant to process a full, complete, and accurate application. We also urge you to direct the Division to respond to our complaints regarding ongoing permit violations, and to work with the applicant to resolve such violations prior to processing any permit application.

Thank you for considering our comments. We appreciate your efforts to protect the recreational and environmental values of Santa Paula Canyon.

Sincerely,

Jeff Kuyper
Executive Director
Los Padres ForestWatch
PO Box 831
Santa Barbara CA 93102

Ileene Anderson
Biologist & Public Lands Desert Director
Center for Biological Diversity
8033 Sunset Blvd., #447
Los Angeles, CA 90046

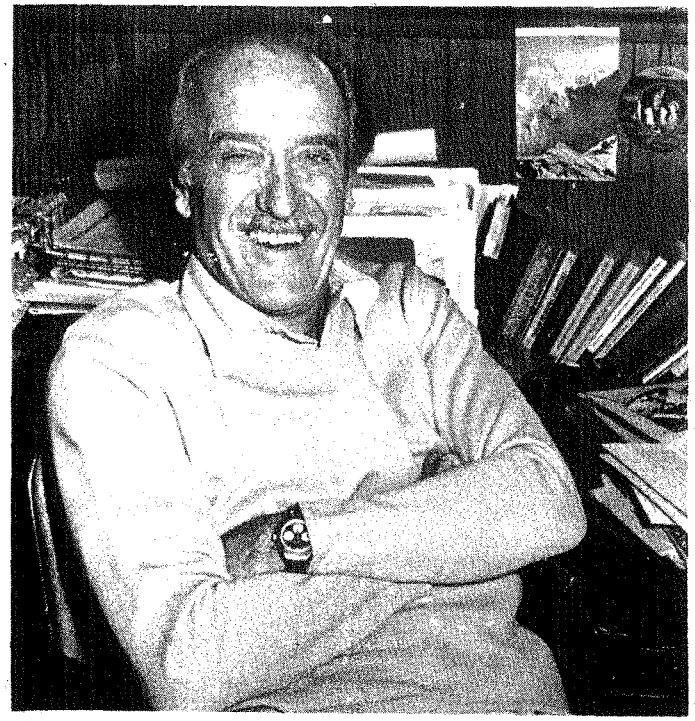
LIST OF EXHIBITS

Exhibit 1 Excerpts Regarding Recreational Values of Santa Paula Creek Trail
Exhibit 2 Estimate of Drilling-Related Traffic (Excerpt from Kern Co. 2015. Draft Environmental Impact Report for Revisions to the Kern County Zoning Ordinance, page 4.16-43.)
Exhibit 3 Excerpt from DOGGR 2015. Final Environmental Impact Report: Analysis of Oil and Gas Well Stimulation Treatments in California, Volume II, page 10.20-10.
Exhibit 4 Excerpts from 1977 and 1978 Analysis Regarding Impacts to Condors
Exhibit 5 Letter from U.S. Fish & Wildlife Service to Planning Director Prillhart dated July 18, 2013 Regarding California Condor Protection Measures
Exhibit 6 Excerpts from Santa Clara River Steelhead Trout: Assessment and Recovery Opportunities
Exhibit 7 Excerpt from U.S. Forest Service 2015. Final Environmental Impact Statement for Oil & Gas Leasing in the Los Padres National Forest, page 4-53.
Exhibit 8 DOGGR Well Records for Fracking Activity (provided on a CD to Planning Division staff on 10/15/15)
Exhibit 9 Distribution Memo from Planning Division Dated October 18, 2013
Exhibit 10 Letter from LPFW to Planning Director Prillhart Regarding Nullification Request
Exhibit 11 Initial Response from Planning Division Regarding Nullification Request
Exhibit 12 Memo from Planning Division Regarding Nullification Request

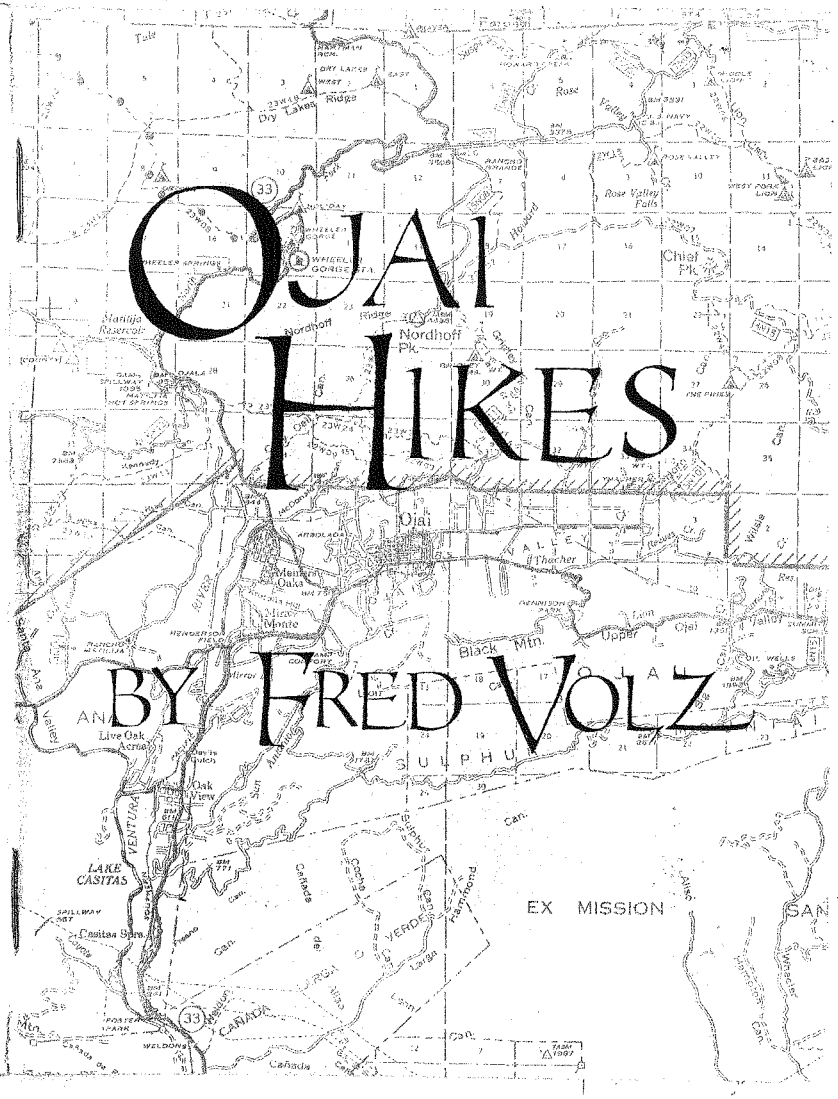
EXHIBIT 1

Excerpts from Hiking Guides
Featuring the Santa Paula Canyon Trail

Appeal of CRC Oil & Gas Project
Ventura County Board of Supervisors Hearing
October 20, 2015
Item #39



FRED VOLZ - *editor and publisher Ojai Valley News for 25 years and veteran backpacker. He was trip biographer on the 1973 Mt. Everest expedition, and has written extensively about backpacking in Alaska's remote Gates of the Arctic Brooks range, the Katmai and Mt. McKinley National Parks, as well as the national parks of Tanzania. He was formerly a foreign correspondent for the Associated Press in the Far East.*



Let's chart the first part of this 3,000' elevation switchback trudge to Nordhoff Peak, undoubtedly this book's hardest climb. Starting above the water tank on North Foothill (refer to Entrance 1) and heading up the hill at the marked sign, the trail switchbacks unrelentingly up the mountain from elevation 1,200. A tip: save this hike for a cool winter day because a warm sun angling straight down on the mountain makes for a sweaty 3 hours.

After passing the saddle where the Cozy Dell Trail wanders down to the left, you'll soon note that the steep trail is bearing up a broad canyon that is narrowing to a V. At the tip of that V watch for a trail dipping perhaps 50 ft. into the canyon to a lovely series of pools (listen, at this point you can hear water down there.) We like to take a dip here and with tired kids along this can be a destination in itself. We remember stretching out in the lowest pool and lifting our head and looking 2,000 ft. out over Ojai Valley. A place for one of those better moments in life.

From the V notch the trail snakes on broad switchbacks to the peak. There used to be a fire tower with a lady ranger enjoying unsurpassed views of everything to Catalina Island. She stayed up there all summer and had a telephone with a 646 number, so we always called home and reported in.

From here you can walk down a road to Hwy. 33 and the Wheeler's ranger station as an alternative to retracing your steps. But first enjoy the view.

Santa Paula Canyon

...*See Entrance 5*

Unfortunately, this became one of the most popular weekend hikes in southern California after frequent articles lauding its beautiful pools and waterfalls in L.A. newspapers. Don't expect this to be some lonely trail except in its far upper reaches. You may find Boy Scouts camping at two sites up the way, teens skinny-dipping in its pools, and Sierra Club types roaming the canyons on the way to far corners. However, this is a fine all-day journey for the walking family, especially in the cool days of winter. The forest service closes Santa Paula Canyon during fire season in summer until the first fall rains. Check with them before entry.

The trail begins on a fire road leading past an old farmhouse (off limits) and runs down to the river through a noisy, stinking oil field, which we hope will not spill your spirits. Once this was all owned and developed by the notorious Teapot Dome scandalist of the

Harding administration, Edward Doheney (his 30 room mansion is near the highway behind iron gates.)

The Santa Paula riverbed along here was ravaged by previous floods, but its upper reaches have been left fairly intact by flood waters that ran 15 ft. deep below. The main trail winds across and along the boulder-strewn riverbed for a mile or so. [Keep looking left for a faint trail which runs towards Echo Canyon, visible about a mile away. There's a fine waterfall during wet season and you can climb, carefully, to its lip. This could be a destination for a picnic.] The main trail continues for a bit then re-crosses the stream and switchbacks sharply up to a shady plateau with an idyllic campground.

At the far end of the campground descend and follow the stream to the left along the cliffside (tricky in places) to a considerable waterfall plunging into a deep pool. Great place for a swim.

Retrace your steps to the main trail and climb to the top of the falls. Along here another old trail branches to the east up a canyon towards Santa Paula Peak. The trail runs out in about 1/2 mile but the determined hiker can find good trout fishing in the pools beyond.

At the top of the falls get ready to exclaim at a magnificent series of falls, pools and chutes during the next half mile. In late spring when algae coats the shallow slides, children can zip down in perfect safety (with dad

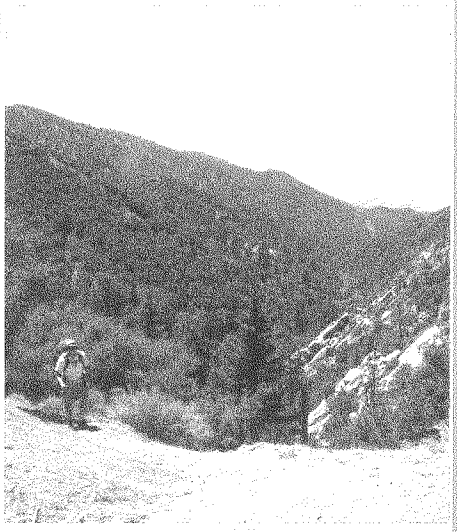
and mom, of course) into shallow pools--in their underwear, if they're modestly inclined.

Now for wild country up the trail to another plateau. At the last campsite turn right up a canyon. The trail tends to disappear and it's slippery going up the cliff to the left of a beautiful 50 foot waterfall which comes out of heavy brush beyond the lip of the falls. Skip this if you need something more challenging.

The real beauty of this great canyon begins at the waterfalls just beyond the second campground. The trail which used to run up the hill to the left of the falls may be almost impossible to find; the forest service discouraged hikers by letting it become heavily overgrown. But intrepid hikers can most always find ways and their reward will be considerable. Above the falls (you are probably 4 hours from your car) lies the real back country of marvelous campsites, pristine pools, high sandstone ridges, tall pine and oak groves -- all with nobody there. Backpack country! The trail, what there is of it, leads higher and higher to the very top reaches of the Topa Ridge and 6,700 foot Hines Peak. There and back is 3 or 4 testing days. We don't recommend doing this route in any less. This is IT for well conditioned, experienced backpackers. Snow in winter, splendid in spring.

HIKING & BACKPACKING

SANTA BARBARA & VENTURA



A complete guide to the trails of the southern Los Padres National Forest

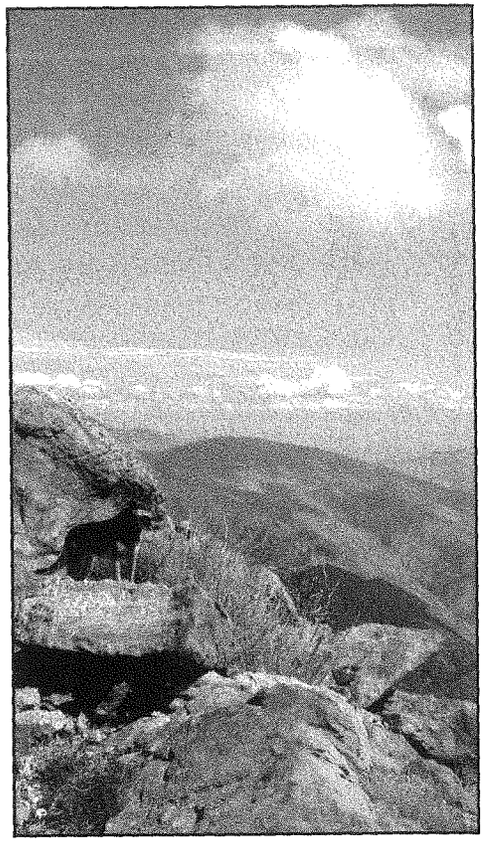
Craig R. Carey

WILDERNESS PRESS

Trip Description

To start, follow the Red Reef Trail (*Route 88*) to the **saddle (6,020', 309046E 3820460N)** between Timber and Santa Paula Creeks. Approach the peak from the northwest.

From the saddle, climb along the thin use trail southeastward up the shale-and-talus edge, punctuated only by the occasional gnarled tree, until reaching the slightly more-stable rock of the peak's northern flank. The going here can be slow, with loose rock and scree. Keep your hands free, as numerous sections are steep enough to warrant scrambling on all fours.



Follow the route upward (it is often marked by cairns) to a **gap (0.35 mile from saddle, 6,565', 309327E 3820803N)** on the western edge of the peak. Head left (east) here for another 0.1 mile through the burn area to the benchmark and trail register atop **Hines Peak (0.45 mile, 6,704', 309466E 3820751N)**.

Farther eastward along the ridge, one can catch glimpses of the old Topatopa Peak Trail that skirted the southern flanks of the Hines long ago and led some 6 miles eastward to Topatopa Peak and the fire lookout tower that once stood there. The route fell into disuse when Topatopa Peak was included in the Sespe Condor Sanctuary as part of the sanctuary's 1954 expansion.

Route 62

LAST CHANCE TRAIL (21W09), SANTA PAULA CANYON, and TOPATOPA BLUFF

LENGTH AND TYPE:	7-mile out-and-back to Big Cone Camp; 3.6-mile one-way to East Fork junction; 7.4-mile out-and-back to Graffiti Falls; 11.8-mile out-and-back to Jackson Hole Camp; 6.1-mile one-way to Jackson Falls; 17-mile out-and-back to Last Chance Camp; 10.5-mile one-way to Last Chance Connector junction; 12.7-mile one-way to Topatopa Bluff; 13.5-mile one-way to Nordhoff Ridge Road

RATING:	Moderate to Big Cone; strenuous to Nordhoff Ridge Road
TRAIL CONDITION:	Well maintained (former service road) to passable (washed-out route requiring rock-hopping and scrambling)
MAP(S):	USGS *Santa Paula Peak* and *Topatopa Mountains*; Harrison's *Sespe Wilderness*
CAMP(S):	Big Cone, Cross, Jackson Hole, Last Chance, and Topatopa Lodge (abandoned)
HIGHLIGHTS:	Riparian trekking; some of the best swimming holes in Ventura County; conifer stands; unique geology

TO REACH THE TRAILHEAD(S): Use the Santa Paula Canyon (Thomas Aquinas/Ferndale) Trailhead to access this route as described south to north; use the Topatopa Bluff Trailhead for the upper terminus.

TRIP SUMMARY: This route ascends Santa Paula Canyon from the trailhead near Thomas Aquinas College, past the East Fork, and along the Last Chance (main) fork through riparian, oak woodland, and conifer-clad scenery and some extremely popular cliff-jumping and swimming spots. The lower stretch is by far the most heavily traveled in the Ojai Ranger District but is seldom followed all the way to its true northern terminus along the western edge of Topatopa Bluff. Litter and graffiti can be a problem along the lower trail, despite the efforts of local volunteers.

Trip Description

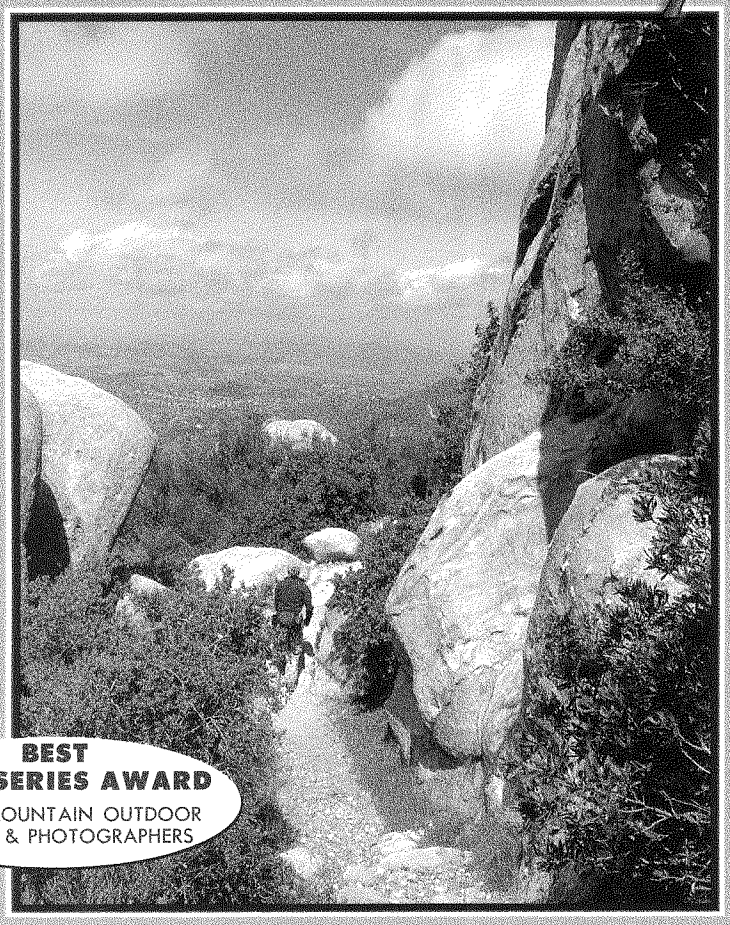
From the **parking area (975', 307824E 3811547N)**, walk east along the shoulder of CA 150 to the entrance of the Thomas Aquinas College grounds. Follow the well-marked road around the eastern edge of the college grounds for about a mile (respect the college's property and stay on the road) and through the Ferndale and Rancho Recuerdo properties, following signage throughout until the sealed road ends just before a pair of fenced-off **pump jacks (1.2 miles, 1,100', 308556E 3812697N)**. (Dogs must stay leashed through these stretches of privately held property.) Circumnavigate this fenced-off area on the creek side, and thereafter the old road (formerly 4N03) will lead you along the left (south) banks of Santa Paula Creek (the other side of the creek here is privately held).

Floods in 2005 scoured much of this stretch of the canyon, and portions of the trail were lost to the torrents. As a result, a bit of route-finding and rock-hopping is involved at points, but overall if you simply head up-canyon, you'll be fine. The US Forest Service has done a competent job of remarking the route as it currently stands, with a handful of Carsonite signs indicating the prescribed route.

You'll hike in both cobble-strewn creek bed and oak- and alder-shaded glens, where there is also a fair amount of poison oak (so be diligent in your route-finding, especially in

DAY HIKES AROUND

Ventura County



BEST
BOOK SERIES AWARD
ROCKY MOUNTAIN OUTDOOR
WRITERS & PHOTOGRAPHERS

116 GREAT HIKES

Robert Stone

3rd EDITION

32. Santa Paula Canyon

Hiking distance: 6—8 miles round trip
Hiking time: 3—4 hours
Elevation gain: 750—900 feet
Maps: U.S.G.S. Santa Paula Peak
Sespe Wilderness Trail Map

Summary of hike: The Santa Paula Canyon Trail in the Topatopa Mountains is among the most beautiful and popular hikes in the Ojai area. The trail begins by walking through picturesque Saint Thomas Aquinas College into Santa Paula Canyon. The hike follows Santa Paula Creek up a shady, forested canyon past a number of deep bedrock pools and cascades surrounded by rugged mountain views. The trail leads to The Punchbowl, a scenic, narrow gorge with waterfalls and pools between Big Cone Camp and Cross Camp.

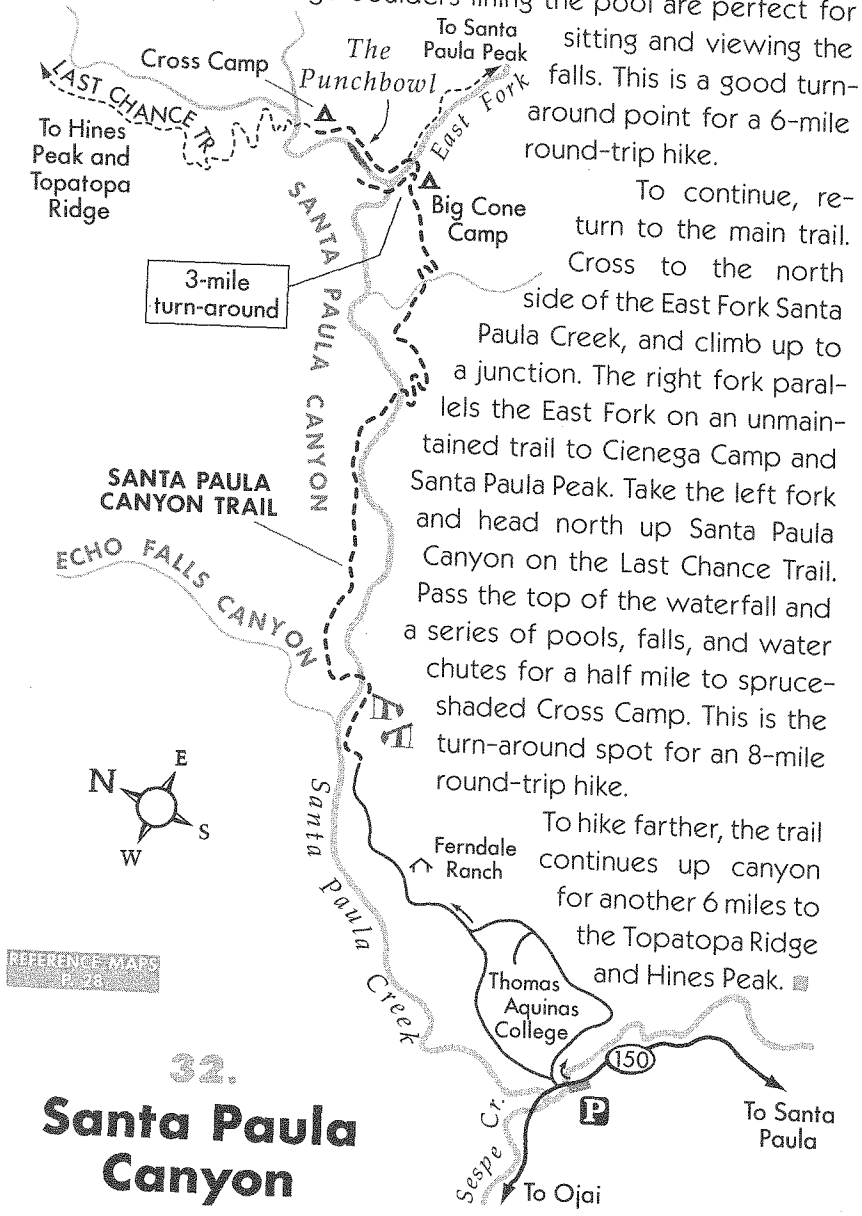
Driving directions: OJAI. From downtown Ojai, drive 11 miles east on Highway 150 towards Santa Paula. Park in the trailhead parking area on the right side of the road, just east of the bridge over Santa Paula Creek. The parking area is across from Thomas Aquinas College.

SANTA PAULA. From Santa Paula, drive 5.7 miles northwest on Highway 150 towards Ojai to the trailhead parking area on the left. The parking area is across from Thomas Aquinas College.

Hiking directions: From the trailhead parking lot, hike 500 feet up and across the road, entering Thomas Aquinas College. Stay on the paved road, heading north towards the far end of the campus. Near the top, take the road veering off to the right. Walk through the gate and past Ferndale Ranch. The road ends in front of two rusty oil rigs. Curve around to the left, then enter forested Santa Paula Canyon along the creek. Cross to the north side of the creek, and head up-canyon under sycamore and alder trees to a fire road at 1.2 miles. Continue up the fire road. Recross the creek at two miles, and begin switchbacking up the mountain. The trail levels off before dropping down into Big Cone Camp, located on a shaded terrace above Santa Paula Creek. At the far end of the grassy flat, the narrow path descends to Santa Paula Creek in a sandstone gorge. Detour to the left, leaving the main trail, and head 30 yards downstream to a side canyon on the right. A 25-foot waterfall and pool are twenty yards up this canyon. Large boulders lining the pool are perfect for sitting and viewing the falls. This is a good turn-around point for a 6-mile round-trip hike.

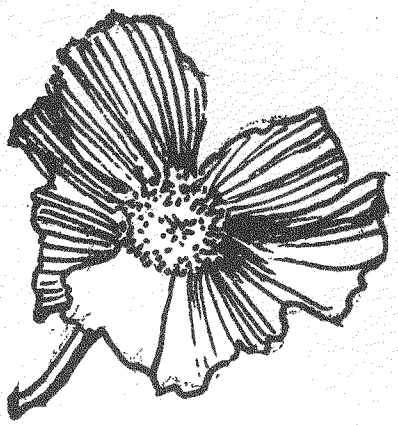
To continue, return to the main trail. Cross to the north side of the East Fork Santa Paula Creek, and climb up to a junction. The right fork parallels the East Fork on an unmaintained trail to Cienega Camp and Santa Paula Peak. Take the left fork and head north up Santa Paula Canyon on the Last Chance Trail. Pass the top of the waterfall and a series of pools, falls, and water chutes for a half mile to spruce-shaded Cross Camp. This is the turn-around spot for an 8-mile round-trip hike.

To hike farther, the trail continues up canyon for another 6 miles to the Topatopa Ridge and Hines Peak. ■



Roam

Ojai's Hip Little Hiking Guide

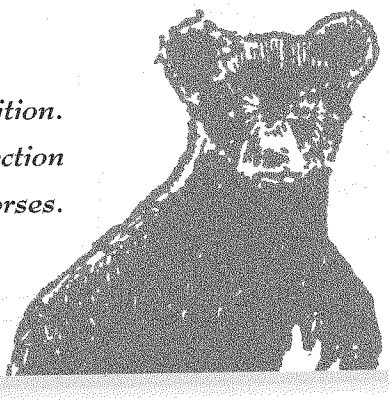


Gael Belden
with Dawn Belden
and Amanda Belden

foreward by
Rick Ridgeway

Fold-out map included

Updated 2011 edition.
Includes a new section
on Bikes, Climbs and Horses.



becomes private property, but the road left will take you upwards to Ladybug, White Ledge, and on. At the second gate, the trail continues another 100 yards then takes off going north (left) to White Ledge Camp and Nordhoff Road. There is a wilderness barrier here. Hines Peak is right in front of you, and there you can go left down to Ladybug Camp toward the Sespe, or, at the barrier, you can hike a worn-out path up to the Bluffs for the view of a lifetime.

11

SANTA PAULA CANYON (21W09)

Length: 2 1/2 miles to Big Cone Camp and Punchbowls
Easy to moderate

Santa Paula Canyon is a much used and well-loved hiking road and trail that ends at a handsome ravine where rock pools spill over onto one another. If you don't want to hike that far (about 1 1/2 hours each way), there are nice areas along the way to sit with a snack or a journal. It is especially busy on the weekends, so the best time to go might be early on a weekday.

DIRECTIONS. Travel on Hwy 150 past the Summit Café in the Upper Valley and follow the road downhill as it winds around toward Santa Paula. From the hamburger stand at the Summit to where you'll stop is about 3 miles on the left. Park there at the turnout just before the bridge at Santa Paula Creek (at the Ferndale Ranch gate). Walk across the bridge and go through the Thomas

Aquinas College gate. Continue to walk on the paved road through the campus (there will be well maintained trail signs all along the way). As the road leaves the school you will walk by houses, dogs, fruit trees and a private ranch. Stay on the road. When you come to a fenced-in oil derricks, bear left on narrow trail until you get to the stream. In the spring and summer watch out for poison oak!

THE HIKE. Go past oil rigs and then keep left past chain-link enclosure. The trailhead really starts now, where the streambed borders on the left. Cross stream and keep walking until you see a fenced in avocado orchard. Trail will be on the right, bordering the stream, which is also on your right. It changes after heavy rains, so it may be different each year. The way you can tell if you're on the right track is to know that the trail is an obvious trail when you find it. The stream is always on your right side. There is shade amidst the broadleaf trees and the sound of water. At the final stream crossing, before the trail turns into a wide road that climbs right, you might want to rest. The next bit is a winding ascent up a side of a mountain. It will take about 25 minutes to get to Big Cone from the base where you start up the road. At the summit will be Big Cone Camp with five fire pits and campsites. There is a narrow trail/path at the far end of the camp, which descends into a canyon gorge. There you will find the punchbowls—waterfalls and deep pools and big rocks for sitting. I am always happy to see pine trees in the middle of an oak forest, and I imagine you will, as well, when you arrive at the gorge and the camp.

EXHIBIT 2

Traffic Estimates for Conventional Oil Drilling

Appeal of CRC Oil & Gas Project
Ventura County Board of Supervisors Hearing
October 20, 2015
Item #39

Draft Environmental Impact Report

SCH# 2013081079

Volume 1
Chapters 1 through 11

REVISIONS to the KERN COUNTY ZONING ORDINANCE – 2015 (C)
Focused on Oil and Gas Local Permitting

Kern County
Planning and Community Development Department
Bakersfield, California

July 2015

Chapter 1
Executive Summary

1.1 Introduction

The proposed Project consists of an Amendment to Chapter 19.98 (Oil & Gas Production) of the Kern County Zoning Ordinance and related sections of the Kern County Zoning Ordinance to include updated procedures, development standards, and conditions for future oil and gas exploration, development, and production activities in unincorporated Kern County. Representatives of the oil and gas industry associations—specifically the California Independent Petroleum Association (CIPA), the Independent Oil Producers Agency (IOPA), and the Western States Petroleum Association (WSPA) (collectively, "Project Applicant")—requested an amendment to Chapter 19.98 (Oil and Gas Production) and related chapters of the Kern County Zoning Ordinance to include additional provisions for local permitting of oil and gas activities. Under Chapter 19.112, amendments to the text of the Zoning Title of the Kern County Zoning Ordinance can only be initiated by the Kern County Board of Supervisors. The request was considered in a public hearing before the Board of Supervisors on January 22, 2013, and the Board directed Planning and Community Development Staff to proceed with processing the requested amendments. This revision of the Zoning Ordinance for local permitting also requires that other relevant references in the Zoning Ordinance be reviewed and revised for consistency. The Amended Zoning Ordinance, together with the implementation of future oil and gas activities expected to be undertaken pursuant to the Amended Zoning Ordinance, is the "Project" considered in this EIR (hereafter referred to as the "Project").

This Draft Environmental Impact Report (EIR) has been prepared by Kern County as the Lead Agency under the California Environmental Quality Act (CEQA). The EIR provides information about the environmental setting and impacts of the Project and alternatives. It informs the public about the Project and its impacts and provides information to meet the needs of local, state, and federal permitting agencies that are required to consider the Project. The EIR will be used by Kern County to determine whether to approve the proposed amendment to Chapter 19.98 and related chapters of the Kern County Zoning Ordinance.

This Executive Summary summarizes the requirements of the CEQA Statute and Guidelines, provides an overview of the Project and alternatives, identifies the purpose of the Draft EIR, outlines the potential impacts of the Project and the recommended mitigation measures, and discloses areas of controversy and issues to be resolved.

a quantitative analysis of traffic generated by residents of housing or employees at operating facilities, but does not include quantitative analysis of short-term traffic generated during construction of the housing or facilities. By contrast, the quantitative analysis in the Traffic Study for this EIR includes traffic generated both by construction activities during the well development phase, and by operational activities during the production phase. The Traffic Study assumed that well development included all activities needed to bring an oil or gas well into production, including:

- Exploration and land preparation;
- Well drilling, completion, and stimulation; and
- Construction/installation of support infrastructure (e.g., collection and distribution pipelines, electric systems, etc.) and ancillary facilities (e.g., separators, storage tanks, etc.).

The Traffic Study assumed the development phase for a single oil or gas well would generally occur over a period of 30 to 90 days.

The Traffic Study assumed that well production would include routine daily operations and inspections, regular well maintenance and reworks, and plugging and abandonment when a well no longer fulfills its intended purpose.

Trip Generation

Traffic engineers and planners typically use trip generation rates, equations, and data contained in the Institute of Transportation Engineers (ITE) Trip Generation Manual to estimate traffic volumes generated by conventional land uses (e.g., commercial, residential, industrial, recreational, etc.). However, the ITE Manual does not contain similar trip generation information for oil and gas development and production. Therefore, for the purposes of this study, a multi-tiered approach was used to estimate daily volumes of oil and gas traffic within the Project Area. This approach involved the use of three data sources: (1) oilfield vehicle counts; (2) oil and gas employment figures; and (3) AADT volumes, which are detailed in Appendix W.

The Traffic Study (Appendix W) found that each new well would generate 30 trips/day over a period of 30 to 90 days during the well development phase.

During the production phase, which (includes daily operation, well reworks/maintenance, and plug/abandonment) each well would generate 0.17 trips/day, based on oil/gas records, field observations, and other studies.

Future oil and gas traffic volumes were estimated by applying the development and production rates detailed above to the annual well count projections provided by the Applicant (Appendix W). The Project's annual future oil and gas trip generation for the years 2015 through 2035 are summarized in Table 4.16-11.

EXHIBIT 3

Recreation Impacts of Conventional Oil Drilling and Well Stimulation

Appeal of CRC Oil & Gas Project
Ventura County Board of Supervisors Hearing
October 20, 2015
Item #39

FINAL
Environmental Impact Report

Analysis of Oil and Gas Well Stimulation Treatments in California

State Clearinghouse No. 2013112046

Volume II of III
Revised Draft Environmental Impact Report
Executive Summary through Chapter 10

Prepared for:

California Department of Conservation

Prepared by:

Aspen Environmental Group

June 2015

California Aqueducts (CDWR, 2003). Municipal parks are located throughout Study Region 6, with major concentrations in the southern part of the region within the Counties of Alameda, Contra Costa, San Joaquin, Solano, and Sacramento. The majority of existing oil and gas fields in Study Region 6 are also located throughout the Central Valley. As shown in Figure 10.20-3, several municipal parks are located where there are existing oil and gas fields.

Monterey Formation

The small portion of the northern boundary of the Monterey Formation is located within the southeastern boundary of Study Region 6. Currently, there is not a high concentration of existing oil and gas fields in this area of the Monterey Formation. Although, there are two fields just north of the Monterey Formation boundary.

No federal or regional recreation areas are within the boundaries of the Monterey Formation. However, the Caswell Memorial State Park is within the boundaries of the Monterey Formation.

10.20.4 Impact Methodology and Significance Criteria

The first significance criterion below was derived from the State CEQA Guidelines (Appendix G, Environmental Checklist Form, Sections IX and XIV), and the second criterion is a result of the scoping comments received regarding impact to recreational resources.

For purposes of this EIR, impacts to recreational resources are considered significant if a project would:

- *Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; and*
- *Directly or indirectly disrupt the recreation experience in designated recreation areas.*

The following criterion, which also is derived from Appendix G to the State CEQA Guidelines, is not discussed further in the analysis below:

- *Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse effect on the environment.*

This criterion is not relevant because well stimulation treatments do not include nor require the construction or expansion of recreational facilities and would not induce population growth that would result in additional demand for these facilities. As discussed in Chapter 7 (Description of the Project), the life cycle of an oil and gas well includes pre-drilling and site preparation activities, drilling and well completion operations, testing and production, then well plugging and abandonment. Well stimulation treatments may be used during the well completion phase, or within weeks or months after a well is put into production. At no time during the life cycle of an oil or gas well, with or without well stimulation treatments, are construction or expansion of recreation facilities a part of the process. Therefore, well stimulation treatments do not include nor require the construction or expansion of recreational facilities, and there would be no impact under this this criterion.

10.20.5 Impact Analysis and Mitigation Measures

Overall, the types of potential impacts related to recreational resources are the same for each study region; therefore, the analysis provided below applies to all study regions. Although it is noted that the number of well stimulation activities occurring in any given study region would vary, the significance of

these impacts would not change because the physical activities associated with each well stimulation treatment would not change appreciably.

Impact REC-1 ~~Increase the use of recreation areas or facilities, resulting~~ Result in the physical deterioration of recreational resources

It is unlikely that the well stimulation treatments would increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. This type of impact would typically occur when a project induces population growth, such as a new housing development or a large business that would require new employees. As discussed in EIR Section 7.4.1, during a standard hydraulic fracturing operation, there are approximately eight to 15 employees on each shift and usually no more than one shift is needed per day. Additional personnel from the owner/operator may be on site to observe and run ancillary equipment, as necessary. In addition, as discussed in EIR Section 10.18 (Population and Housing), well stimulation treatments would likely result in some minor growth from new employment; however, any in-migration from new workers would be nominal compared to the existing population within any given study region. Similarly, the increased use of existing recreational areas or facilities as a result of new employment in response to well stimulation treatments would be nominal when considering the numerous recreation opportunities within each study region. As such, Impact REC-1 would be less than significant (Class III).

Impact REC-2 Cause disruptions in designated recreation areas

Recreation areas can be considered sensitive receptors as they tend to be areas where children are present, and depending on the available facilities, they can be used for intense physical activities. In addition, recreation users often value the recreation experience based on the quality of the surrounding area (i.e., lack of industrial activities, natural spaces, low noise levels, high scenic quality, etc.). However, depending on the particular circumstances facing particular proposed projects, recreation resources are not always considered sensitive land uses because recreation activities are typically temporary, and potential impacts do not necessarily create sustained impacts to particular groups or over a long period of time. Therefore, defining recreation areas as sensitive receptors in an EIR can and sometimes is done on a case-by-case basis in project-level environmental documents, depending on circumstances. Here, however, because this EIR is programmatic in character and thus is dealing with multiple potential circumstances, DOGGR is conservatively treating recreation areas as sensitive receptors. Therefore, under Impact REC-2, disruptions to recreation areas would result in impacts to sensitive receptors.

As shown in Figures 10.20-1 through 10.20-3, there are existing oil and gas fields within or adjacent to established recreation areas throughout the State, including offshore oil and gas operations. Well stimulation treatments and their resultant nuisances may cause disruptions to some of the recreation areas described above EIR Section 10.20.3 (Affected Environment), which would diminish the recreation experience. Potential types of nuisance impacts to recreational resources may include the following:

- Visual intrusions to scenic resources within designated recreation areas;
- Decreased air quality due to dust or odors;
- Degradation of marine water quality could disrupt marine-based recreation activities;
- Coastal well stimulation treatments may disrupt recreational fishing;
- Hazards and hazardous materials could result in environmental contamination or introduce public health issues within designated recreation areas;
- The preclusion of permitted recreation areas due to well stimulation activities;

- Increased noise audible to recreation users;
- Vibrations from drilling or stimulation treatments that would be felt by recreation users;
- Risk of upset issues and resultant effects on public health; or
- Traffic as a result of construction-related truck trips may limit, restrict, or delay access to recreation areas.

Each of these potential disruptions are discussed in detail in EIR Sections 10.1 (Aesthetics), 10.3 (Air Quality), 10.6 (Coastal Processes and Marine Water Quality), 10.7 (Commercial and Recreational Fishing), 10.13 (Hazards and Hazardous Materials), 10.15 (Surface Water Resources), 10.16 (Land Use and Planning), 10.17 (Noise and Vibration), 10.21 (Risk of Upset/Public and Worker Safety), and 10.22 (Transportation and Traffic).

In addition to the traffic-related mitigation measures recommended in EIR Section 10.22 to mitigate any recreation access impediments and/or disruptions, Mitigation Measures REC-2a and REC-2b specifically address coordination and notification requirements that would provide the community with advanced notice of potential disruptions to affected recreation areas. These notification measures are intended to help ensure the public can have sufficient warning in order to make other arrangements for their recreation activities in order to avoid potential disruptions to recreation areas and activities. With implementation of these measures, Impact REC-2 would be less than significant (Class II).

MM REC-2a **Coordinate Well Stimulation Treatment Schedule with Managing Officer(s) for Affected Recreation Areas.** As part of the application for a well stimulation treatment permit, DOGGR shall require that the applicant submit information regarding regarding the existence of any recreational areas within 1,500 feet of the proposed well stimulation treatment activities. Where such recreation areas have been identified, the information submitted by the applicant shall further address how the applicant developed the treatment schedule in ~~coordination~~ consultation with the authorized officer(s) or the agencies of all such recreational areas within 1,500 feet of well stimulation treatment activities. Through ~~coordination~~ consultation efforts with the agencies that manage recreational resources which would be affected by well stimulation treatments, and subject to the discretion of the authorized officer(s) responsible for management of the affected resource(s), the applicant shall ensure the following occurs unless otherwise instructed by the affected agencies:

- Well stimulation treatment activities are scheduled to avoid heavy recreational use periods (including major holidays) to the maximum extent feasible, with the understanding that such efforts may not always be feasible;
- Staging areas for project-related equipment, materials, and vehicles are located in areas with least possible effect on recreational activities and opportunities; and
- Timetables for the required period of usage of each staging area are developed and adhered to in coordination with all affected resource agencies.

In approving a well stimulation treatment permit, DOGGR shall impose conditions of approval requiring the applicant to protect recreational resources pursuant to the strategies listed above. Such conditions shall require that the applicant to document the coordination and provide this documentation to DOGGR no less than ~~30~~60 days prior to well stimulation activities.

Where an agency other than DOGGR (e.g., a local government or another State agency) is the CEQA Lead Agency for a proposed project including well stimulation treatment while DOGGR is acting as a Responsible Agency, DOGGR shall encourage the Lead Agency to include in the draft environmental document circulated for public review the above-described information and any proposed mitigation measure(s) and condition(s) of approval necessary to achieve the requirements described above. Such suggestions from DOGGR can be communicated to the Lead Agency through the following means: informal consultation on a pending Negative Declaration or Mitigated Negative Declaration; comments on a publicly circulated Negative Declaration or Mitigated Negative Declaration; comments on a Notice of Preparation; comments on a Draft or Final EIR; or comments on a draft or final document prepared by a State Lead Agency as the "functional equivalent" of a Negative Declaration, Mitigated Negative Declaration, or Draft or Final EIR pursuant to a certification granted under PRC Section 21080.5.

When acting as a Responsible Agency in the issuance of well stimulation treatment permits, DOGGR shall impose as conditions of approval any proposed mitigation measure(s) or condition(s) of approval recommended to DOGGR by the Lead Agency that meet or are substantially consistent with the requirements described above, though DOGGR may modify the proposed language in order to better achieve the requirements. Alternatively, where the Lead Agency has already imposed mitigation measure(s) or condition(s) of approval that meet or are substantially consistent with the requirements described above, DOGGR need not impose duplicative condition(s) of approval in the well stimulation treatment permit, and may conclude that the Lead Agency's adopted measure(s) or condition(s) are sufficiently effective and protective. When warranted by circumstances, DOGGR shall also include condition(s) of approval requiring compliance with the requirements even where DOGGR determines that approval of a particular well stimulation treatment permit is exempt from CEQA.

MM REC-2b **Provide Noticing of Closures and Identify Alternative Recreation Areas.** DOGGR shall require, as part of the application for a well stimulation, that the applicant accomplish the following in coordination with the authorized recreation officer(s) or the agencies of all recreational areas <u>located within 1,500 feet of the proposed</u> ~~affected by~~ well stimulation treatment activities:

- Identify recreational areas (i.e., trails, parks, day-use areas) that would be closed during well stimulation treatment activities; and
- To the extent feasible, identify alternative recreational areas for each resource that would be made unavailable to the public due to project construction or maintenance activities.

In approving a well stimulation treatment permit, DOGGR shall adopt a condition requiring the posting of public notice including the <u>anticipated construction or maintenance activity schedule, the</u> timeframe of the closure<u>,</u> and identify alternative recreational areas at all recreational areas to be closed due to well stimulation treatment activities. <u>To adequately inform the public and affected parties, the applicant shall implement multiple types of public noticing, including but not limited to, mailings, email blasts, website postings, or signage.</u>

DOGGR shall require that the applicant document these coordination efforts to identify and provide noticing of alternative recreational areas and submit this documentation to

the DOGGR no less than ~~30~~60 days prior to well stimulation activities that would occur within one-half mile of recreation areas that would be affected by such activities.

Where an agency other than DOGGR (e.g., a local government or another State agency) is the CEQA Lead Agency for a proposed project including well stimulation treatment while DOGGR is acting as a Responsible Agency, DOGGR shall encourage the Lead Agency to include in the draft environmental document circulated for public review the above-described information and any proposed mitigation measure(s) and condition(s) of approval necessary to achieve the requirements described above. Such suggestions from DOGGR can be communicated to the Lead Agency through the following means: informal consultation on a pending Negative Declaration or Mitigated Negative Declaration; comments on a publicly circulated Negative Declaration or Mitigated Negative Declaration; comments on a Notice of Preparation; comments on a Draft or Final EIR; or comments on a draft or final document prepared by a State Lead Agency as the "functional equivalent" of a Negative Declaration, Mitigated Negative Declaration, or Draft or Final EIR pursuant to a certification granted under PRC Section 21080.5.

When acting as a Responsible Agency in the issuance of well stimulation treatment permits, DOGGR shall impose as conditions of approval any proposed mitigation measure(s) or condition(s) of approval recommended to DOGGR by the Lead Agency that meet or are substantially consistent with the requirements described above, though DOGGR may modify the proposed language in order to better achieve the requirements. Alternatively, where the Lead Agency has already imposed mitigation measure(s) or condition(s) of approval that meet or are substantially consistent with the requirements described above, DOGGR need not impose duplicative condition(s) of approval in the well stimulation treatment permit, and may conclude that the Lead Agency's adopted measure(s) or condition(s) are sufficiently effective and protective. When warranted by circumstances, DOGGR shall also include condition(s) of approval requiring compliance with the requirements even where DOGGR determines that approval of a particular well stimulation treatment permit is exempt from CEQA.

Monterey Formation. In the event that well stimulation treatments occur outside of existing oil and gas fields they would be expected to occur within the Monterey Formation and its plays. Therefore, the impact analysis above for Impacts REC-1 and REC-2 would be the same for well stimulation treatments within existing oil and gas fields. Impacts would be less than significant (Class III) or mitigable to a level of less than significant (Class II).

10.20.6 Impact Significance Summary

Table 10.20-2 provides a summary of the potential impacts of well stimulation treatments on recreational resources.

Table 10.20-2. Summary of Impacts and Mitigation Measures – Recreation

Impact REC-1. ~~Well stimulation treatment activities would increase the usage of recreation areas or facilities which would r~~Result in the physical deterioration of recreational resources	
Impact Significance	Class III
Mitigation Measure(s)	None required
Impact REC-2. ~~Well stimulation treatment activities would c~~Cause disruptions in designated recreation areas	
Impact Significance	Class II
Mitigation Measure(s)	REC-2a: Coordinate Well Stimulation Treatment Schedule with Managing Officer(s) for Affected Recreation Areas REC-2b: Provide Noticing of Closures and Identify Alternative Recreation Areas

EXHIBIT 4

Previous Analysis of Impacts to California Condors at the Project Site (1977-1978)

Appeal of CRC Oil & Gas Project
Ventura County Board of Supervisors Hearing
October 20, 2015
Item #39

VENTURA COUNTY ENVIRONMENTAL RESOURCE AGENCY

FINAL

ENVIRONMENTAL IMPACT REPORT

FOR

MODIFICATION OF CONDITIONAL USE PERMIT NO. CUP-3344
ARGO PETROLEUM CORPORATION
FERNDALE RANCH

THIS REPORT HAS BEEN PREPARED PURSUANT TO DIVISION 13 OF THE PUBLIC RESOURCE CODE.

APPROVED BY:

M. L. Koester

M. L. KOESTER, DIRECTOR
ENVIRONMENTAL RESOURCE AGENCY

DATE: 6/21/78

3. Mitigation Measures

The only potentially significant noise impacts to the College are from the three to four trucks per day required during the drilling operations. This noise impact could be reduced by limiting the truck traffic to daytime hours.

The applicant's intent to construct a shipping line will eliminate adverse truck noise impacts during the production phase of the project.

H. FLORA AND FAUNA

1. Setting

Most of the Ferndale Ranch is covered with vegetation indigenous to the foothills of California. This includes areas of grassland, chaparral, and woodlands. Grassland and light chaparral associations make up the majority of the vegetation on the property. Grassland vegetation is found both on the gently sloping alluvial plain and the steeper rocky slopes. The chaparral is found mostly on the steeper slopes. Oaks, sycamores, and a few other species are scattered in the grassland and chaparral areas. The grassland and chaparral vegetation has been modified to some extent by the grazing of cattle. The chaparral and grassland vegetation which covers most of the property is highly flammable. Consequently there is a risk of fire, especially during dry, windy summer and fall months. Mixed woodland and riparian vegetation is found mainly along Santa Paula Creek and other major drainage areas.

Although current land use has restricted resident wildlife diversity, the project site still provides a valuable foraging zone for several transitory animals from adjacent habitats. The abundant herbaceous vegetation is likely to be utilized by mule deer, coyote, grey fox, longtailed weasel, skunk, raccoon, and several other species. Surrounding undeveloped areas are known to be inhabited by these animals as well as a full range of wildlife species, including the mountain lion. Nearby riparian habitats of Sisar and Santa Paula Creeks add to the overall diversity of this area by providing important habitat resources such as complex aquatic and terrestrial food webs, perennial water supplies and diversified cover for nesting and breeding. Together these support a variety of resident invertebrates, fish, reptile, mammal, and bird species. Coastal sage scrub, chapparal, grassland, and southern oak woodland associated with hillside and mountainous terrain further contribute to this resource base and, combined with the relative isolation of these areas, provide extensive habitat for wildlife.

According to the U.S. Forest Service, the northeast corner of the Ferndale Ranch property abuts a critical Condor habitat. The Public Works Agency indicates that the nearest known nesting site of the California Condor is approximately 1.75 miles northeast of the project site.

2. Impact

The proposal would result in a temporary displacement of some species during the drilling phase and a permanent displacement of a number of individuals that currently use the site as habitats. The animals most affected would be large animals such as mule deer and coyote.

The location of the drill sites in the canyon bottom and on the ridge to the northeast are factors which tend to reduce the impact of the project on nesting and roosting Condors in the area. It should be noted, however, that any activity beyond the proposed sites could have severe adverse impacts on this endangered species.

The effects of an oil spill or line breakage into Santa Paula Creek could have an adverse effect on this unique riparian habitat, particularly resident and anadromous fish, as well as other aquatic wildlife species. However, the applicant will install shutoff valves in the line on both sides of Santa Paula Creek which would confine the amount of oil spilled in the event of line breakage to 45 barrels (1,890 gallons).

PUBLIC WORKS AGENCY

MEMORANDUM

TO: Road Administration
Attn: D. A. Betlach

DATE: February 14, 1977

FROM: Flood Control - Flora and Fauna

REF. NO:

SUBJECT: Data Request for CUP 3344 Modification, ARGO Petroleum Company, Ferndale Ranch

The following evaluations of issues are general in nature with the exception of the section on the California Condor which is based on knowledge of Condor activity in the immediate area of the proposed project.

1. How would the proposal affect wildlife in the area?

   (a) There would be a temporary displacement of some species during the drilling phase and permanent displacement of a small number of individuals that currently use the sites as habitat. Additionally, the pumping operations would have a permanent, although slight, inhibiting influence on some animals in the immediate area.

   The animals most affected would be the larger mammals such as Mule Deer and Coyote.

2. What would be the combined effect of the proposal and the Thomas Aquinas College?

   (a) The effects of each project differ mainly in degree of human activity in the immediate area and in species affected with the Thomas Aquinas College having the most pronounced effect on the greatest number of species and individuals. The drilling proposals though less permanent and less inhibiting, are in a more remote section of the Ferndale Ranch and would affect animals that are less tolerant of human activity.

   The combination of both proposals would have an effect that would be greater than either alone because a larger number of animals would be displaced and a greater number of species would be affected.

3. If the oil drilling activity in the area continues to increase, would there be a point at which the habitat would be adversely affected?

   (a) Yes. That point was reached when the first oil well was drilled. Each additional well adds to the deterioration of habitat. At what point the habitat becomes adversely affected as to no longer being suitable habitat for wildlife is a question of specific species requirements.

Wildlife habitat is a general term covering many species which have only general needs and tolerances in common. In general as human activity increases, more and more species tolerance levels will be exceeded and these species will either be eliminated from the area or forced to compete for a niche elsewhere, putting a strain on the carrying capacity of the new area.

California Condor

The nearest known California nesting site is approximately 1-3/4 miles northeast of the project site. This is out of the critical Condor habitat as published in the Federal Register.

The location of the site in the canyon bottom and the ridge to the northeast are factors that tend to reduce the impact of the project on nesting and roosting birds in the area.

It should be stated that any activity beyond the proposed sites would have severe adverse impacts on this extremely endangered bird, and this project comes very close to being adverse.

B. Lockard
Staff Conservationist

By _____
R. Foulk
Conservationist

RF:jmk

EXHIBIT 5

U.S. Fish & Wildlife Service's Condor Protection Measures for Oil & Gas Facilities in Ventura County

Appeal of CRC Oil & Gas Project
Ventura County Board of Supervisors Hearing
October 20, 2015
Item #39

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93003

IN REPLY REFER TO:
08EVEN00-2013-CPA-0148

July 18, 2013

Kim L. Prillhart, Planning Director
Planning Division
County of Ventura
800 S. Victoria Avenue
Ventura, California 93009-1740

Subject: Measures to Protect the California Condor at Oil and Gas Exploration, Development, and Production Facilities in Ventura County

Dear Ms. Prillhart:

The U.S. Fish and Wildlife Service (Service) recognizes the vital role that local jurisdictions play in the conservation of endangered and threatened species. You are often the first to become aware of proposed development projects or other changes in land use that could affect undeveloped areas, and typically implement environmental review processes that require disclosure of important information on the presence of sensitive species. The Service appreciates this function and we are writing to provide you with information that we recommend considering during project review. Specifically, we have become aware that you are reviewing the impacts of proposed oil and gas facilities on biological resources. To assist in that process, we are enclosing a list of measures for you to consider incorporating into your review process, which will help protect the California condor (*Gymnogyps californianus*) from the potential adverse effects of oil and gas projects.

The Service's responsibilities include administering the Endangered Species Act of 1973, as amended (Act), including sections 7, 9, and 10. Section 9 of the Act and its implementing regulations prohibit the taking of any federally listed endangered or threatened wildlife species. Section 3(18) of the Act defines take to mean to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Service regulations (50 CFR 17.3) define harm to include significant habitat modification or degradation which actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering. Harassment is defined by the Service as an intentional or negligent action that creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. The Act provides for civil and criminal penalties for the unlawful taking of listed species.

Exemptions to the prohibitions against take may be obtained through coordination with the Service through interagency consultation for projects with Federal involvement pursuant to section 7 or through the issuance of an incidental take permit under section 10(a)(1)(B) of the Act. If the subject project is to be funded, authorized, or carried out by a Federal agency and may affect a listed species, the Federal agency must consult with the Service, pursuant to section 7(a)(2) of the Act. If a proposed project does not involve a Federal agency but may result in the take of a listed animal species, the project proponent should apply for an incidental take permit, pursuant to section 10(a)(1)(B) of the Act. Once a project proponent determines if the proposed project will have a lead Federal agency, we can provide more detailed information regarding section 7 interagency consultation or the 10(a)(1)(B) permitting process.

California condor

The California condor was federally listed as endangered on March 11, 1967 (32 Federal Register (FR) 4001), and State listed as endangered on June 27, 1971. Critical habitat for the California condor was designated on September 24, 1976 (41 FR 187), and consists of nine critical habitat units scattered throughout the species' range in California totaling approximately 570,400 acres; 180,302 acres of critical habitat are within Ventura County. An experimental population of California condors was established in Arizona in 1996 under section 10(j) of the Act.

The California condor is a member of the family Cathartidae or New World vultures, a family of seven species, including the closely related Andean condor (*Vultur gryphus*) and the sympatric (occurring in the same area) turkey vulture (*Cathartes aura*). California condors are among the largest flying birds in the world. Adults weigh approximately 22 pounds and have a wing span up to 9.5 feet. They are generally black, with prominent white underwing linings as adults. California condors have naked skin on the head and neck that ranges from gray to shades of yellow, red, and orange. California condors nest in various types of rock formations including crevices, overhung ledges, and potholes, and, more rarely, in cavities in giant sequoia trees (*Sequoia giganteus*) (Snyder et al. 1986) and giant coast redwoods with cavities or broken out tops.

California condors are opportunistic scavengers, feeding only on the carcasses of dead animals. Typical foraging behavior includes long-distance reconnaissance flights, lengthy circling flights over a carcass, and hours of waiting at a roost or on the ground near a carcass. Currently, newly released California condors are provided with stillborn calf carcasses as supplemental food to help juvenile birds acclimate to the wild and for trapping and release purposes. Most California condor foraging occurs in open terrain of foothill grassland and oak savannah habitats.

California condors use topography and associated thermal weather patterns for flight. This is best illustrated by historical observations indicating that almost all flights by California condors, whether covering long distances or not, followed routes over the foothills and mountains bordering the southern San Joaquin Valley. California condors are highly dependent on topography as it dictates prevailing wind patterns (Service 1984). The species is totally

dependent on favorable wind conditions to move throughout its range, and long periods of inclement weather will keep birds immobile.

The California condor declined over the past century to such a low level that only 22 individuals existed in 1982. The last free-flying California condors were captured by 1987 and brought into a captive breeding program. Following several years of increasingly successful captive breeding, captive-produced California condors were first released back to the wild in southern California in early 1992.

Currently, the most serious sources of human-related mortality are lead poisoning, shooting, collision with power lines, and the ingestion of small pieces of garbage (micro-trash) which, in combination with hair and other natural items, become compacted in the birds' digestive tract and can lead to death. Two California condors have been shot and killed since 1999.

Eleven of the California condors released since 1992 were killed in collisions with power lines. At least two deaths from collisions with manmade objects, including power lines, were known historically (Koford 1953). Because of deaths from contact with power lines, condors started undergoing power line aversion training in 1995 before their release. As problem power lines are identified in the field, the Service works with power companies to eliminate or reduce the risk.

As of June 2013, there were 435 California condors, 237 of which comprise the wild population; the remaining birds are in captivity. Of the wild population, there are 134 condors in California, including 66 free-flying birds and 6 chicks in the Southern California flock (Service 2013).

The Sespe Wilderness in the Los Padres National Forest provides important habitat for the California condor. Condors historically roosted, foraged, and nested in the area. In recognition of the area's value to the California condor, the Sespe Condor Sanctuary was established in 1951. In 1974, the Service purchased 2,471 surface acres adjacent to the Sespe Condor Sanctuary and established the Hopper Mountain National Wildlife Refuge near the city of Piru. California condors were once released and fed at the Hopper National Wildlife Refuge. California condors occur throughout the Los Padres National Forest in Ventura County and, because condors are so mobile, any individual may fly over oil and gas projects in Ventura County at any given time during daylight hours.

In 2006, condor releases from Hopper Mountain National Wildlife Refuge were discontinued and a new release site and associated supplemental feeding site were established at Bitter Creek National Wildlife Refuge. However, there was a transition period of approximately 1 year, during which supplemental feeding was still conducted at Hopper Mountain National Wildlife Refuge until such time that all of the free-flying condors utilized Bitter Creek National Wildlife Refuge, including the recently released juveniles dependent on supplemental food at that time.

During 2007, condors landed on four well pads that were the source of most of the micro-trash that condors in southern California were finding (U.S. Forest Service 2010). In the recent past,

young condors had frequented oilfield areas (M. Hall, former Refuge Manager, Hopper Mountain National Wildlife Refuge, pers. comm. 2006 *in* Service 2009). This behavior was not observed during 2005 and 2006, but a few months into 2007, condors began to frequent oilfield areas again, including four well pads identified as the main locations where condors continued to land (J. Grantham, former California Condor Recovery Coordinator, and R. Posey, former Service Supervisory Wildlife Biologist, pers. comm. 2007 *in* Service 2009). Up to the present, condors continue to investigate and land at oil and gas facilities, where they may be at risk of exposure to micro-trash and the other threats described above.

Oil and gas development

To assist us with the conservation of the California condor, we recommend that the Ventura County Planning Department require project proponents to implement the enclosed avoidance and minimization measures at oil and gas facilities within the range of the species. We understand that each oil and gas project is unique, and every measure will not be applicable to all projects. We would appreciate being involved early in the design/planning stages of projects that could impact the California condor; through early involvement we would be able to provide recommendations on the applicability of the measures to specific projects and locations. While implementing the enclosed measures may, in certain circumstances, ensure that impacts to condors are minimized or avoided, incorporating the measures into a project should not be construed as take avoidance or authorization without separate explicit coordination with and input from the Service.

As you know, Ventura County is a focal point of the California condor's ongoing recovery given its central location in the species' current range in California, and as the geographic base of operations for the Service's California condor recovery program. With your cooperation, we can help ensure that oil and gas exploration, development, and production activities in Ventura County are compatible with conservation of the California condor. We appreciate the County's assistance in maintaining the progress and momentum of recovery efforts for this species. If you have any questions regarding the California condor or other federally listed species in Ventura County, please contact Colleen Dragueskuof my staff at (805) 644-1766, extension 221.

Sincerely,

Roger P. Root
Assistant Field Supervisor

Enclosure

REFERENCES CITED

Janssen, D.L., J.E. Oosterhuis, J.L. Allen, M.P. Anderson, D.G. Kelts, and S.N. Wiemeyer. 1986. Lead poisoning in free ranging California condors. Journal of the American Veterinary Medicine Association 189:1115-1117.

Koford, C.B. 1953. The California condor. National Audubon Society Research Report 4:1-154.

Snyder, N.F.R., R.R. Ramey, and F.C. Sibley. 1986. Nest-site biology of the California condor. California condor 88:228-241

[Service] U.S. Fish and Wildlife Service. 1984. California condor recovery plan. U.S. Fish and Wildlife Service, Portland, Oregon.

[Service] U.S. Fish and Wildlife Service. 2009. Biological opinion for the proposed leasing of two drilling sites on well pads in the Sespe Oil Field, Ventura County, California. Ventura Fish and Wildlife Office, Ventura, California.

[Service] U.S. Fish and Wildlife Service. 2013. California condor recovery program: population size and distribution. Prepared by California Condor Recovery Program, Ventura, California. June 30, 2013. Overview page.

U.S. Forest Service. 2010. Re-initiation of and additional information for the biological assessment on the proposal to lease oil and gas resources within the boundaries of the Los Padres National Forest. June 1, 2010. Prepared for U.S. Fish and Wildlife Service by Kevin Cooper, Los Padres Forest Biologist, Los Padres National Forest. Goleta, California. 41 pp.

Wiemeyer, S.N. J.M. Scott, M.P. Anderson, P.H. Bloom, and C.J. Stafford. 1988. Environmental contaminants in California condors. Journal of Wildlife Management 52:238-247.

***Recommended Minimization and Avoidance Measures to Protect the California Condor at Oil and Gas Facilities in Ventura County**

1. Oil and gas facilities will not be developed within 1.5 miles of active and historic nest sites and reintroduction sites, or within 0.5 mile of an active roost site.

2. If new power transmission and distribution lines are necessary, they will be placed underground to avoid potential for collision by California condors. Where undergrounding of power lines is not possible, location and design of such lines will be developed in collaboration with the U.S. Fish and Wildlife Service.

3. All existing power lines, poles, and guy wires within flyways used frequently by California condors will be retrofitted with raptor guards, flight diverters, and other anti-perching or anti-collision devices to minimize the potential for collision or electrocution of condors.

4. Landing deterrents, such as Daddi Long Legs or porcupine wire, will be attached to the walking beams on pumping units.

5. All surface structures, which are identified by the U.S. Fish and Wildlife Service or qualified biologists as a risk to California condors, will be modified (e.g., to include installation of raptor guards, anti-perching devices, etc.) or relocated to reduce or eliminate the risk.

6. All construction debris and other trash including micro-trash (e.g., small items as screws, nuts, washers, nails, coins, rags, small electrical components, small pieces of plastic, glass, or wire, and anything that is colorful or shiny) will be covered or otherwise removed from a project site at the end of each day or prior to periods when workers are not present at the site.

7. Wells pads will be inspected closely for micro-trash on a daily basis.

8. Informational signs describing the threat that micro-trash poses to condors, and the cleanup or avoidance measures being implemented, will be posted at the site.

9. All food items and associated trash will be placed in covered containers to preclude access or use by California condors. This will include small bits of trash and debris, such as aluminum can pull tabs, electrical connectors, broken glass, and pieces of rubber, plastic, and metal.

10. All equipment and work-related materials (including loose wires, open containers, rags, hoses, or other supplies or materials) will be contained in closed containers either in the work area or placed inside vehicles.

11. All hoses or cords that must be placed on the ground due to drilling operations that are outside of the primary work area (immediate vicinity of the drilling rig) will be covered to prevent California condor access. Covering will take the form of burying or covering with heavy mats, planks, or grating that will preclude access by California condors.

12. Poly chemical lines will be replaced with stainless steel lines to preclude condors from obtaining and ingesting pieces of poly line.

13. Ethylene glycol based anti-freeze or other ethylene glycol based liquid substances will be avoided, and propylene glycol based antifreeze will be encouraged. Equipment or vehicles that use ethylene glycol based anti-freeze or other ethylene glycol based liquid substances will be inspected daily for leaks. While at the site, areas below vehicles and equipment using ethylene glycol based substances will be checked for leaks and puddles. Standing fluid (e.g., a puddle of anti-freeze) will be remediated (e.g., cleaned-up, absorbed, or covered) without unnecessary delay. Vehicles using ethylene glycol based substances will be inspected before and after field use for obvious leaks and puddles. Leaks will be repaired before the vehicle is allowed back onsite. No changing of antifreeze of any type will be allowed onsite.

14. No open drilling mud, water, oil or other liquid storage or retention structures will be allowed. All such structures will be required to have netting or other covering that precludes entry or other use by condors or other listed avian species.

15. No dogs or other potential predatory domesticated animals will be allowed to run free at worksites.

16. No flaring sites for natural gas or other flammable gases or substances will be allowed without prior review by the U.S. Fish and Wildlife Service.

17. Prior to conducting work on-site, employees and contractors will be made aware of the California condor, and how to avoid impacts to them. Special emphasis will be placed on keeping the well pad site free of micro-trash and other hazards.

18. All construction equipment, staging areas, materials, and personnel will be restricted to previously disturbed areas to the extent possible.

19. The potential for human-caused wildfires will be minimized by use of shields, mats, or other fire-prevention methods when grinding or welding. Fire response equipment, including water, extinguishers, and shovels will be available for fire suppression.

20. Firearms will be prohibited.

21. No feeding of wildlife will be permitted.

22. If any California condor is observed on or near (perched or on the ground within approximately 1,000 feet of) an oil and gas facility, the U.S. Fish and Wildlife Service will be notified immediately and allowed to access the facility. Additionally, if the U.S. Fish and Wildlife Service has data to indicate that any California condor is in the vicinity, the U.S. Fish and Wildlife Service will be allowed access to the facility to confirm the presence of the bird(s). Measures to deter the birds from using the oil and gas facility may be deployed after review by the U.S. Fish and Wildlife Service.

23. Direct contact with California condors will be avoided.

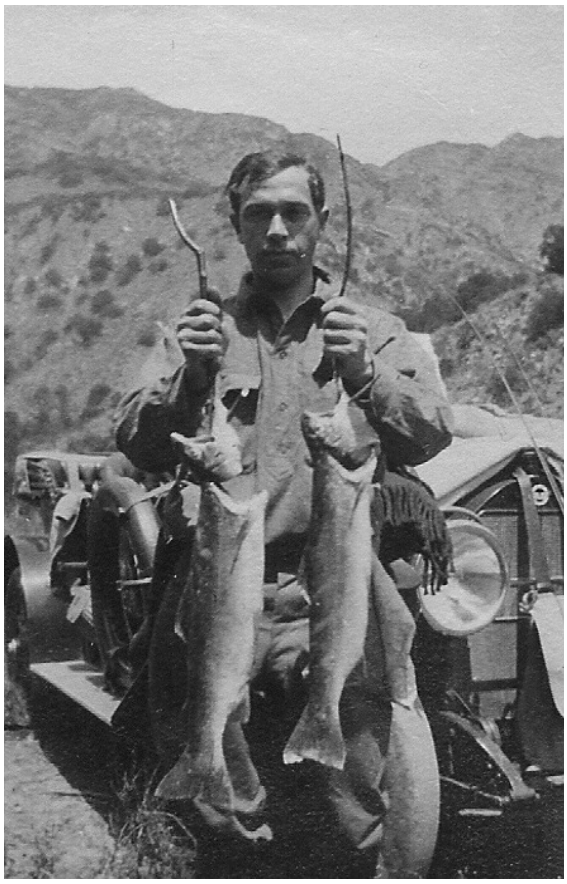
*Implementation of these measures does not constitute authorization from the U.S. Fish and Wildlife Service (Service) to take federally listed species in any manner. Section 9 of the Endangered Species Act of 1973, as amended (Act), and its implementing regulations prohibit the taking of any federally listed endangered or threatened species. Section 3(19) of the Act defines take to mean to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Service regulations (50 CFR 17.3) define harm to include significant habitat modification or degradation which actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering. Harassment is defined by the Service as an intentional or negligent action that creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. The Act provides for civil and criminal penalties for the unlawful taking of listed species.

EXHIBIT 6

Excerpts from Steelhead Assessment of Santa Paula Creek

Appeal of CRC Oil & Gas Project
Ventura County Board of Supervisors Hearing
October 20, 2015
Item #39

Santa Clara River Steelhead Trout: Assessment and Recovery Opportunities



December 2005

Prepared By:

Matt Stoecker

STOECKER ECOLOGICAL™
NATURAL RESOURCE ASSESSMENT AND RESTORATION SERVICES

and

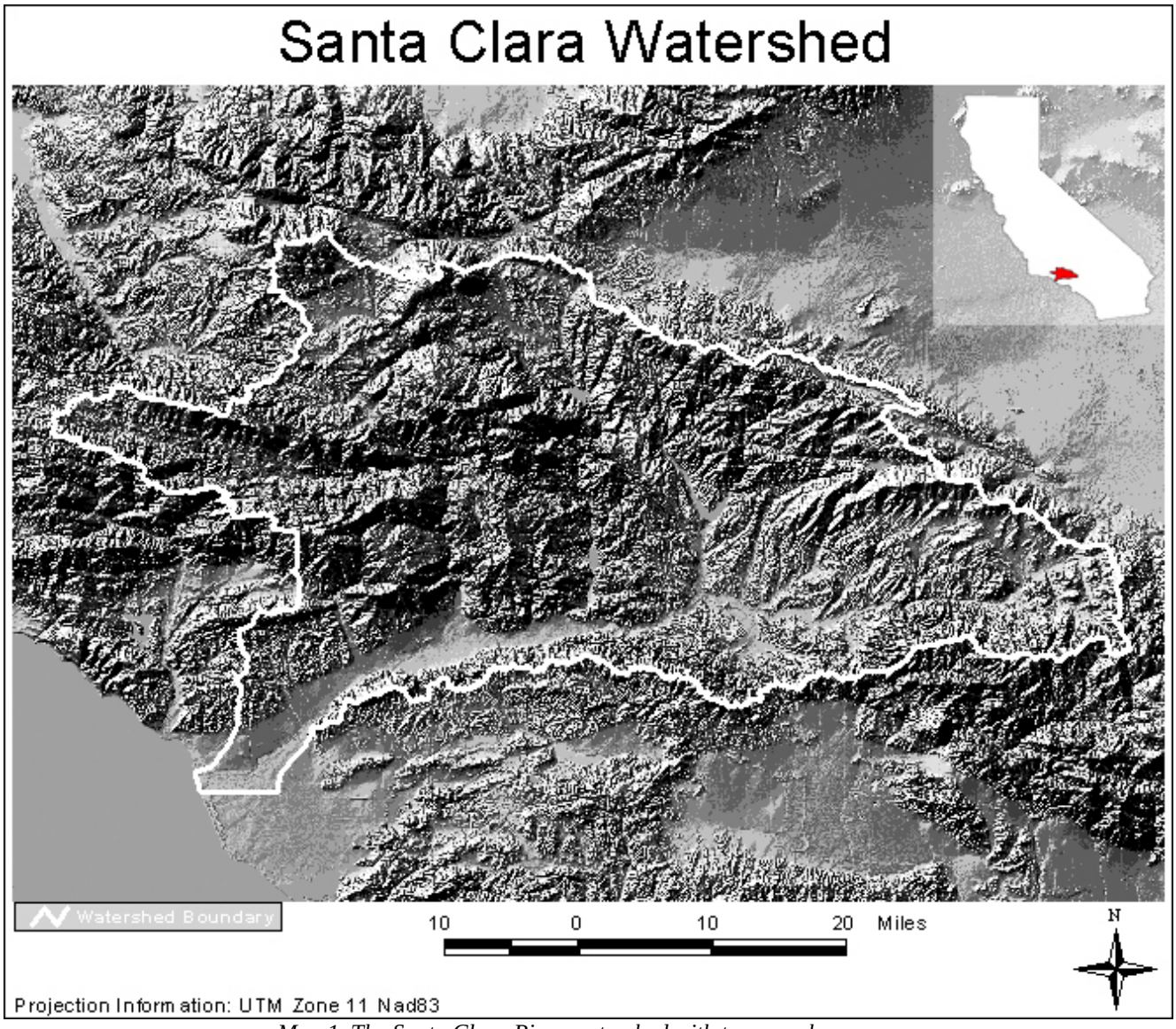
Elise Kelley, Ph.D.

University of California, Santa Barbara

Prepared For:
The Santa Clara River Trustee Council and The Nature Conservancy

Executive Summary

The Santa Clara River watershed is located primarily in Los Angeles and Ventura Counties in California (Map 1). The watershed is large for southern California, at 1600 square miles. The purpose of this project was to analyze the habitat conditions, population status and barriers to migration for *Oncorhynchus mykiss* (steelhead trout) in the lower Santa Clara River watershed from the Piru Creek tributary downstream including significant drainages.



Map 1. The Santa Clara River watershed with topography.

Historic documentation of an important recreational steelhead fishery occurs for the Santa Clara River into the mid 1900's. Construction of dams and other migration barriers on the mainstem, Santa Paula Creek, Sespe Creek, Piru Creek, and other tributaries during the mid 1900's appear to be correlated with the demise of the steelhead run as habitat availability decreased and surface flows became highly manipulated (Capelli 1983, Moore 1980a, Outland 1971). Adult steelhead have continued to attempt to migrate up the Santa Clara River into recent times with an adult trapped at the Vern Freeman Dam in 2001. A wild, self-sustainable rainbow

trout population still exists in the headwaters of the Santa Paula, Sespe, Hopper, and Piru Creek tributaries and is producing out-migrating steelhead smolts bound for the Pacific.

Surface water diversions and groundwater pumping on the Santa Clara River reduce the river's flows, and cause barriers to migration in the forms of diversion dams, grade control structures, road crossings, and channelization projects impacting access to the river's critical spawning and rearing habitat in the tributaries. Exotic predator fish such as green sunfish and bullhead catfish observed in Sespe Creek, and other exotic gamefish in Piru Creek and other watershed reservoirs, compete with and prey upon the native steelhead and rainbow trout population.

This study commenced with a compilation and synthesis of all prior surveys for steelhead that were conducted on the Santa Clara River, and were available in either the Mark H. Capelli Southern California Steelhead Watershed Archive at the University of California, Santa Barbara (UCSB), or the U. S. Forest Service office in Santa Maria. The findings from this synthesis are located in Table C.

The tributaries that occur within the geographic boundaries of this study include: Santa Paula Creek, Sespe Creek, Pole Creek, Hopper Creek, and Piru Creek. The largest of these tributaries are Sespe and Piru Creeks. There were 702 habitat units surveyed in the Santa Clara River watershed for this study, and 129 natural and anthropogenic fish migration barriers identified. Some of the projects key findings were:

1. **Santa Paula Creek**
   a. Santa Paula Creek contained the most productive habitat in the study area for salmonids. However, the quantity of habitat is limited when compared to the amount of habitat in the Sespe Creek drainage.
   b. Santa Paula Creek appears to have greater potential to contribute to the recovery of the Southern California ESU (Evolutionarily Significant Unit) than the Hopper Creek and lesser Pole Creek tributaries.
   c. Sisar Creek accounts for 84% of the trout observed in the Santa Paula Creek drainage.
   d. Severe barriers to steelhead passage are located on Santa Paula and Sisar Creeks.
2. **Sespe Creek**
   a. Sespe Creek supports a much higher abundance of trout than Santa Paula Creek, despite the occurrence of an exotic predatory fish population. Sespe Creek also had higher numbers of larger fish than Santa Paula Creek.
   b. No individual reaches in Sespe Creek tributaries that had habitat quality scores below 5.5 had trout observed in them, and trout did not start occurring in larger numbers and with regularity until scores reached 7.0.
   c. Severe barriers to steelhead passage exist on tributaries to Sespe Creek.
3. **Pole Creek**
   a. Pole Creek had both the lowest quality estimated habitat scores and the least habitat available of all Santa Clara River mainstem tributaries measured, but could likely support a small population of *O. mykiss* with adequate fish passage in the lower reaches.
4. **Hopper Creek**
   a. Hopper Creek contains a limited amount of high quality salmonid habitat and an existing *O. mykiss* population that may contribute to the anadromous steelhead population.
   b. Severe barriers to steelhead passage occur on Hopper Creek.
5. **Piru Creek**
   a. Barriers on Piru Creek rated very highly but access would need to be developed around Santa Felicia Dam for the barriers on Piru's mainstem upstream of Santa Felicia Dam to warrant fish passage improvements.

6. **Mainstem Santa Clara**
   a. The most significant barrier to steelhead passage within the lower watershed is the Vern Freeman Diversion Dam on the mainstem of the Santa Clara River.
7. No tributaries rated low in habitat quality and high in trout abundance.
8. The average habitat quality scores and rankings for each major tributary are in Table A1. The total amount of habitat by tributary and habitat type is in Table A2.

Table A1. Average Habitat Quality Scores, in order of highest to lowest

	Habitat Quality
Santa Paula	6.45
Sespe	5.59
Piru	5.47
Hopper	5.21
Santa Clara Mainstem	4.75
Pole	3.75

The higher overall habitat quality on Santa Paula Creek may be due to almost all of the available habitat observed in the Santa Paula Creek drainage being of relatively high quality compared to Sespe Creek which contained a high amount of high quality habitat in its tributaries and portions of its mainstem, but also many dry tributaries and dry reaches in the middle and upper mainstem that reduced the overall habitat score for the drainage.

The overall high trout productivity of Sespe Creek can be accounted for by the high productivity of its tributaries, which accounted for 98% of the observed trout occurrence in the Sespe Creek drainage. Piedras Blancas Creek was observed to be the most productive followed by Howard/Rose Valley, Bear, Trout, and West Fork Sespe Creeks.

It should be noted that this study was conducted after several recent fires in the Sespe watershed, and following a five year below average rainfall period that could have differentially affected observations within watershed tributaries (e.g., the prolonged low flows in Sespe Creek created conditions favorable to the proliferation of exotic species such as bullheads which prey upon juvenile trout, a species not found in Santa Paula Creek.). There can be considerable inter-annual, decadal variability between reaches within the watershed.

Based on the findings of this study we recommend the following be priorities for revitalization of the steelhead run on the Santa Clara River.

Habitat and Population Priorities

1. Due to *O. mykiss* occurrence, abundance and habitat quality the following tributaries should receive the highest level of protection and where necessary rehabilitation:
   a. In the Sespe Creek Drainage: Piedras Blancas Creek, Howard Creek/RoseValley, W.F. Sespe Creek, Bear Creek, Lion Creek, Timber Creek.
   b. In the Santa Paula Creek drainage: Sisar Creek, and upper Santa Paula Creek.
   c. Upper Hopper Creek.
2. Protection of the highly productive mainstem reaches on Santa Paula and Sespe Creeks .

Fish Passage Priorities

1. Improved fish passage at the Vern Freeman Diversion Dam that is effective over a wider range of flows and utilizes by-pass flows more effectively to allow unimpeded upstream and downstream migration independent of water diversion operations, maintenance, debris blockage, or fish ladder damage. This dam is the most significant steelhead migration barrier within the lower Santa Clara River watershed.

2. Removal or modification of gray and red barriers in the Santa Paula, Sespe, and Hopper Creek drainages.
3. Identification and implementation of dedicated fish passage flows for the mainstem of the Santa Clara River and those reaches on Santa Paula Creek, Sespe Creek, and Piru Creek downstream of Harvey Diversion Dam, Fillmore Irrigation Diversion, and Santa Felicia Dam respectively.
4. Other high priorities are associated with many of the complex, instream migration barriers described and include; stream channel restoration, riparian restoration, removal of reservoirs harboring exotic and hatchery fish species, and elimination or reduction of erosion, pollution, and hazardous features.

Providing improved fish passage within the main tributaries of the lower Santa Clara River is a high priority to ensure that steelhead have adequate access between the critical headwater habitats and the ocean. This report outlines the specific, prioritized barriers in detail within the priority tributaries and habitat areas.

EXHIBIT 7

Impacts to Steelhead from Oil Drilling and Spills

Appeal of CRC Oil & Gas Project
Ventura County Board of Supervisors Hearing
October 20, 2015
Item #39

FINAL ENVIRONMENTAL IMPACT STATEMENT

Oil and Gas Leasing
Los Padres National Forest

Kern, Los Angeles, Monterey, Santa Barbara, Ventura, and San Luis Obispo Counties, California

Lead Agency:

USDA Forest Service
Los Padres National Forest

Responsible Official:

Gloria D. Brown
Forest Supervisor
Los Padres National Forest
6755 Hollister Avenue, Suite 150
Goleta, CA 93117

For Further Information Contact:

Al Hess
Oil and Gas Resource Specialist
1190 East Ojai Avenue
Ojai, CA 93023
(805) 646-4348, x 311

ABSTRACT

This Final Environmental Impact Statement (FEIS) documents the analysis of the potential effects of implementing each of eight alternative leasing scenarios for management of the Federal oil and gas estate on lands administered by Los Padres National Forest in Kern, Los Angeles, Monterey, Santa Barbara, Ventura, and San Luis Obispo Counties, California. The FEIS documents the existing condition of the environmental resources in and around areas being considered for leasing and the potential impacts to those resources as a result of implementing the alternatives. The alternatives considered in detail are: (1) No Action -No New Leasing; (2) Emphasize Oil & Gas Development; (3) Meet Forest Plan Direction; (4) Emphasize Surface Resources; (4a) Alternative 4 With Roadless Area Emphasis; (5) Combination of Alternatives 3 & 4; (5a) Alternative 5 With Roadless Area Emphasis; and the New Preferred Alternative, a combination of alternatives 1 and 5a.

comparison of assessment data at this level of analysis is quite broad and based on professional judgment of biologists familiar with the species and its habitat requirements.

4.4.4 Impact Assessment for Fishery Resources and Aquatic Wildlife

Effects to both anadromous and fresh-water resident fish species are, for the most part, identical. Therefore, while review and permitting of effects to anadromous fish is the responsibility of NOAA Fisheries and that of fresh-water resident species the responsibility of USFWS, the general assessment of impacts will consider them together. The following discussion will also apply to potential effects to aquatic wildlife other than fish.

4.4.4.1 Direct Impacts

Accidental spillage of petroleum products or other toxic materials can directly kill fish. Eggs may be smothered or killed, and adults killed. The BLM Standard Lease Terms give the government authority to move proposed activities up to 200 meters (656 feet). This is a sufficient distance to avoid all streams and riparian habitats when locating oil and gas activities. However, new access roads may need to cross streams and trucking of oil and other toxic materials may be on routes that cross or parallel rivers and streams. Rivers and streams are by definition in drainages. Any spills could flow into these drainages.

4.4.4.2 Indirect Impacts

Indirect impacts to fisheries can result from pollution, barriers to migration and indirect habitat loss.

4.4.4.2.1 Pollution

Oil and gas exploration and development requires the use of a variety of chemicals and fluids, such as hydraulic fluid, diesel and gasoline, and drilling mud. Accidental release of oil and associated petroleum from trucks, pipelines, storage areas, and the well itself are all potential sources of pollution. If these products were discharged into the local aquifer, at locations where they could become part of storm water runoff, or flow directly into stream channels, then impacts to aquatic habitats would occur. These impacts could include acute toxicity to individual fish, suffocation of aquatic benthic invertebrates as a result of being covered by oil, direct toxicity to food web organisms due to concentrations of volatile organic compounds within and immediately adjacent to the water column, chronic toxicity to fish and food web organisms due to contamination of the adjacent aquifer, and loss of riparian vegetation through acute or chronic toxicity. See Section 4.5.8.3 for a discussion of the laws, regulations and oil field practices that will be applied at the project level to eliminate or mitigate the effects of possible hazardous materials spills to fish and aquatic resources.

EXHIBIT 8

Complete Well Records for All Wells at Ferndale Facility Showing Extensive History of Fracking

(NOTE: Files too large to email. Hand-delivered to Clerk of the Board on October 15, 2015.)

Appeal of CRC Oil & Gas Project
Ventura County Board of Supervisors Hearing
October 20, 2015
Item #39

PROPERTY/WELL TRANSFER OR ACQUISTION

Seneca Resources Corporation (S2630)

to

Vintage Production California LLC (V1370)

Effective April 25, 2008

OPERATOR Argo Pet
LSE & NO Banks Foundation 1
MAP 2-03

	(1)	(8)	( )	( )	( )	( )
INTENTION	Reperforate & Squeeze	alter Csg				
NOTICE DATED	2-14-77	5-5-78				
P-REPORT NUMBER	277-113	278-129				
CHECKED BY/DATE						
MAP LETTER DATED	N/C	N/C				
SYMBOL						

	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED
NOTICE	3-24-78		5-8-78									
HISTORY	11-1-77		6-29-78									
SUMMARY	-		-									
IES/ELECTRIC LOG	5-14-81											
DIRECTIONAL SURV												
CORE/SWS DESCRIP												
OTHER CBL/Cement Bond Log, Mudlog, Comp. Card, Dipmeter	5-1-78											
RECORDS COMPLETE	MD 3/28/78		✓									

ENGINEERING CHECK

T-REPORTS	
OPERATOR'S NAME	
WELL DESIGNATION	
LOC & ELEV	
SIGNATURE	
SURFACE INSPECTION	
FINAL LETTER OK	

CLERICAL CHECK

POSTED TO 121 _____ 170 MAILED _____ FINAL LETTER MAILED _____

RELEASED BOND _____

REMARKS: Records needed: Directional Survey & Log Rerun #5 & Core Record, Directional Survey, Dipmeter, Mudlog, E log & Density on Rerun #6 & 7 All other Records in MD 3/28/78 all received

We have DS thru RD #6

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF PROPERTY AND WELL TRANSFER

Field or county	District
Ojai	2
Former owner	**Date**
Argo Petroleum Corp.	Sept. 10, 1987

Name and location of well(s)

Sec. 16, T. 4N., R. 21W., SBB&M

"Barker-Ferndale" 1	(111-20423)	"Valex-Ferndale" 211	(111-21178)
"Barker-Ferndale" 2	(111-20604)	"Valex-Ferndale" 214	(111-21180)
"Barker-Ferndale" 3	(111-20609)	"Valex-Ferndale" 215	(111-21206)
"Barker-Ferndale" 4	(111-20685)	"Valex-Ferndale" 313	(111-21314)
"Barker-Ferndale" 5	(111-20702)	"Ferndale" 8	(111-20732)
"Barker-Ferndale" 6	(111-20730)		
"Valex-Ferndale" 107	(111-21066)		
"Valex-Ferndale" 110	(111-21163)		
"Valex-Ferndale" 209	(111-21105)		

Description of the land upon which the well(s) is (are) located

Date of transfer, sale, assignment, conveyance, or exchange	New owner / Address	Type of organization / Telephone No.
7-17-87	Seneca Resources Cprporatipn 511 16th St. Mall, Ste 300 Denver, CO 80202	Corp. (303) 825-7401

Reported by
Seneca Resources Corp.

Confirmed by
Argo Petroleum Corp.

New operator new status (status abbreviation)	Request designation of agent
PA	
Old operator new status (status abbreviation)	**Remarks**
PA	

Deputy Supervisor: Patrick J. Kinnear

Signature: Patrick J. Kinnear

OPERATOR STATUS ABBREVIATIONS

PA – Producing Active
NPA – No Potential, Active
PI – Potential Inactive
NPI – No Potential, Inactive
Ab – Abandoned or No More Wells

FORM AND RECORD CHECK LIST

Form or record	Initials	Date	Form or record	Initials	Date
Form OGD121			Map and book		
Form ODG148			Notice to be cancelled		
New well cards			Bond status		
Well records			EDP files		
Electric logs					
Production reports					

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
JUN 29 1978
SANTA PAULA, CALIFORNIA

History of Oil or Gas Well

111-20423

OPERATOR Argo Petroleum Corporation FIELD Silverthread

Well No. FERNDALE #1 R/D #6, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date June 5, 19 78 Signed C. Stanley

940 East Santa Clara
Ventura, California 93001 (805) 648-2514 Title Exec. Vice-President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
	RECOMPLETION
1978 3-7	MIRU T & T. Pump stuck. Backed off and pulled rods. Removed production tree. Installed BOE.
3-8	Unable to backscuttle thru pump w/3% KLC water. Could not bleed csg down. Archer Reed shot holes in tbg at 4029'.
3-9	Unable to kill well. Changed over to 73# brine water. Killed well. POH w/tbg, 6 jts sanded up. RIH w/Baker ret tool.
3-10	Could not get tool into 4½" liner top at 4610'. POH. RIH w/5½" magnet. Rec metal shavings. RIH w/4" tapered mill. Milled 4" at top of 4½" liner. POH. RIH w/ret tool. Worked thru top of liner. Tagged fill at 4850'.
3-11	CO fill to 4985'. Unable to go deeper. POH. RIH w/STC. CO fill to 5045'. Losing some fluid to formation.
3-12	CO to BP at 5208'. POH w/o attempting to pull BP. RIH w/3.8" OD tapered mill. CO to 4683', then encountered bad spots at 4715' and 4961'. Bad liner f/4985' - 5015' (5' above bottom perf at 5020').
3-13	Milled 3' in 4 hrs to 5018'. POH. Mill worn on sides, tip OK. RIH w/ 3.063" OD STC to 5175'. Pulled above liner.
3-14	RIH to top of fill at 5175'. POH. Rigged up Dia-Log. Ran casing caliper f/4610'-5175'. Indicated liner bad f/4610'-5175'. Laid down rods.
3-15	RIH w/STC + 36 jts 2 3/8" + 93 jts 2 7/8" tbg and landed at 4034'. Removed BOE. Installed production tree. Releaed rig. Suspended operations to redrill ABF #4.
5-18	MIRU CPS. Rigged up pump and tank.
5-19	Killed well w/75# Ken-X. Removed production tree. Installed BOE. POH w/tbg. Started in hole w/swage. Found bad sub, sent to machine shop. Shut down.

SUBMIT IN DUPLICATE

20799-705 1-74 8M ② OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR Argo Petroleum Corporation FIELD Silverthread

Well No. FERNDALE #1 R/D #6, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date June 5, 1978 Signed C. Bacon

940 East Santa Clara
Ventura, California 93001 (805) 648-2514 Title Exec. Vice-President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1978	
5-20	RIH w/3 3/4" casing swage + BS + jars on 6-2 7/8" DC's. Ran to liner top, cond mud. Ran in liner. Found tight spot 5021-5023'. Worked thru, free to tight spot at 5052'. Fell thru to 5088'. Worked to 5142' without difficulty. Circ and washed to 5149'. Rec sand and shale. POH. RIH w/3 7/8" OD swage to 4517'.
5-21	Cond mud to kill gas. Swaged thru tight spots at 5021' and 5052'. Circ hole clean to 5142'. POH. RIH w/Baker ret tool. CO fill from 5142' to BP at 5208'. Engaged and released bridge plug. Worked BP up thru tight spots at 5088', 5052' and 5021'. Pulled BP above liner top.
5-22	POH and laid down BP. RIH w/ret tool + BS + jars to 5240'. CO fill to BP at 5400'. POH w/BP. RIH w/STC on 2 3/8" and 2 7/8" tbg to 2062'. Ran Archer Reed and tagged fill at 6333' (bottom perf at 6440'). POH w/2 7/8" tbg and added 900' of 2 3/8" tbg. RIH to 2021'. Well flowing. Closed well in. Shut down.
5-23	Bled well down. RIH w/STC to liner top. Circ out gas cut mud. RIH to 6333'. CO fill to 6400'. POH. Rigged up power swivel, CO hard fill 6400' to 6442'. POH.
5-24	RIH w/2 7/8" non-upset tbg inner liner wire wrapped at intervals. Hung liner w/Brown 7" liner hanger at 4447' and tail at 6373'. Was unable to work liner down to 6440' as per plan. Wire-wrapped intervals as follows: 4779-89', 4819-63', 4894-4926', 5170-5235', 4703-67', 5798-5841', 5872-93', 5939-6004', 6141-6259' and 6351-73', tapered bull plug at 6373'. POH w/Brown setting tool. RIH w/2 7/8" tbg and landed at 4412'. T/L shoe at 4380'. Tore out BOE. Installed production tree. Ran pump and rods.
5-25	Unseated pump. Disp Ken-X w/lease crude. Re-seated pump. Press test tbg at 600 psi. OK. One production @ 2:30PM. Moved out CPS.
5-26	Prod 243 bbls, cut 52%, TP = 390, CP = SI
5-27	Prod 215 bbls, cut 80%, TP = 330, CP = 160
5-28	Prod 229 bbls, cut 56%, TP = 360, CP = 360

JDC 6/5/78

OG 103

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 278-129

REPORT ON PROPOSED OPERATIONS

Santa Paula, , California

May 9, 1978

Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, CA. 90024

Your proposal to alter casing well "Barker-Ferndale" 1
(Name and number)
, A.P.I. No. 111-20423, Section 16, T. 4N, R. 21W,
S.B. B. & M., Ojai field, Ventura County,
dated 5-5-78, received 5-8-78, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Hole fluid of sufficient quality and quantity shall be maintained in the hole to control any subsurface condition, and a reserve supply shall be on hand for emergencies.
2. Blowout prevention equipment of at least DOG Class II with a hydraulic actuating system, shall be installed and maintained in operating condition at all times.

NOTE: A COPY OF THIS APPROVAL SHALL BE AVAILABLE AT THE WELL SITE DURING THE PROPOSED OPERATIONS.

Blanket Bond
MD:b

M. G. MEFFERD
State Oil and Gas Supervisor

By John L. Hardoin
Deputy Supervisor

John L. Hardoin

OG111 (11-76—GSR1—30M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS
RECEIVED
MAY 8 1978
SANTA PAULA, CALIFORNIA

DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	OGD114	OGD121
BB	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well No. ARGO BARKER FERNDALE #1 R/D #6, API No. 111-20423, Sec. 16, T. 4N, R. 21W, S.B. B. & M., Slvthd Field, Ventura County.

The present condition of the well is as follows:

1. Total depth. 6532'.

2. Complete casing record, including plugs and perforations:
   CASING: 10 3/4", 32.75#, H-40 cmt @869'.
   7", 23#, K-55 cmt @ 4770'.
   LINER: 4½", 11.6#, K-55 cmt @ 6527', top @ 4610'.
   PERFS: 6440-6208' (28 - 3/8" jet holes)
   6070-5778' (25 - 3/8" jet holes)
   5318-5263' (12 - 3/8" jet holes)
   5020-4894' (27 - 3/8" jet holes)
   TUBING: 36 jts 2 3/8" EUE, 8R, J-55 & 93 jts 2 7/8" EUE, 8R, J-55 hung open ended at 4023'.

3. Present producing zone name Miocene Zone in which well is to be recompleted Miocene

4. Present zone pressure 3020+ New zone pressure No New Zone

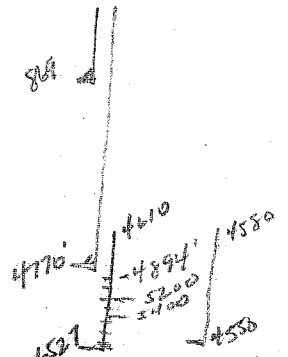
5. Last produced 2/21/78 (Date) | 68 (Oil, B/D) | 87 (Water, B/D) | 20 (Gas, Mcf/D)

   or

6. Last injected --------- (Date) | ---------- (Water, B/D) | -------- (Gas, Mcf) | --------- (Surface pressure, psig.)

The proposed work is as follows:

1. MIRU a production rig.
2. Swage out bad pipe.
3. Pull Bridge plugs @ 5208' & 5400'.
4. Land liner @ 6470' w/linger hanger set at 4580'+.
5. Land tubing at 4550'+.
6. Run pump and rods and place well on production.



It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 940 East Santa Clara (Street)
Ventura, California 93001 (City) (State) (Zip)
Telephone Number (805) 648-2514

ARGO PETROLEUM CORPORATION (Name of Operator)
By [signature] (Name) 5/5/78 (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

OG107 (8-75—GSRI—15M)

SUBMIT IN DUPLICATE

20798-705 1-74 BM ⓒ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
NOV - 7 1977
SANTA PAULA, CALIFORNIA

History of Oil or Gas Well

OPERATOR Argo Petroleum Corporation FIELD Silverthread

Well No. ARGO-BARKER-FERNDALE #1 R/D #6, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date October 24, 1977 Signed C. Boseler

940 East Santa Clara
Ventura, CA. 93001 (805) 648-2514 Title Exec. Vice-President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1977	
5-25	MIRU CPS. Installed and tested BOE. Unseated packer. Could not circ. Pulled pkr above 4½" liner top, changed over to 74# brine water.
5-26	POH w/pkr. RIH and set Baker type "C" bridge plug at 5400'. Changed over to filtered lease crude. Dresser Atlas, using a 3½" csg gun, perf'd w/4 - 0.43" jumbo jets at each of the following intervals: 5317', 5299', 5284', (Total 12 holes). RIH w/STC to 4500'.
5-27	Dowell sand frac'd the interval 5317'-5284'.
5-28	Otis ran feeler, tagged sand at 5270'. Changed over to 74# brine water. CO from 5273'-5390'. Pulled up and landed tbg at 4500'. Tore out BOE, installed production tree.
5-29	Well began flowing. Moved out CPS.
5-30 thru 6-7	Flowing load oil.
6-8	93 bbls gross, cut 56.0%, TP = 350, CP = 0.
6-21	Well dead. Moved in CPS. Swabbed to 3500'.
6-22	Swabbed at 3500'. Began flowing.
6-23	Well dead. Ran pump and rods. WO pumping unit.
6-30	Installed pumping unit.
7-1	Put well on production.
7-2	Prod 70 bbls gross, cut 98.0%
7-3	Prod 48 bbls gross, cut 85.0%.
7-4	Prod 44 bbls gross, cut 60.0%.
8-26	Prod 34 bbls gross, cut 60.0%.

RECOMPLETION

OG 103

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
NOV - 7 1977
SANTA PAULA, CALIFORNIA

History of Oil or Gas Well

OPERATOR Argo Petroleum Corporation FIELD Silverthread

Well No. ARGO-BARKER-FERNDALE #1 R/D #6, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date October 24, 1977 Signed C. Boseula

940 East Santa Clara
Ventura, CA. 93001 (805) 648-2514 Title Exec. Vice-President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1977	
8-28	MIRU CPS. Pulled rods and pump. Killed well w/180 bbl brine water. Removed production tree. Installed and tested BOE.
8-29	McCullough perf'd w/3-3/8" jet holes at each of the following intervals: 4894', 4930', 4946', 4957', 4966' (15 holes) and 4-3/8" jets at: 5000', 5014', 5020' (12 holes) (Total 27 holes). RIH and set Baker Model "C" 4½" BP at 5208'. Changed over to filtered lease crude. POH. RIH w/STC and landed 2 7/8" tbg at 4497'. Installed frac head.
8-30	Dowell sand frac'd the intervals: 5020'-4894'. Shut well in.
8-31	CP = 1250. Changed over to 74# brine water. Removed frac head. Landed tbg on donut. Removed BOE. Installed production tree. Changed over to lease crude. Well flowing.
9-1 thru 9-6	Flowing load oil.
9-7	151 gross, cut 7.0%, TP = 530, CP = 1220.

OG 103

FORM 103 SUBMIT IN DUPLICATE 62802-705 5-72 20M ② OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR Argo Petroleum Corporation FIELD Silverthread

ARGO-BARKER
Well No. FERNDALE #1 R/D #6, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date May 6, 1975 Signed C. Dasenbrock

940 East Santa Clara
Ventura, California 93001 (805) 648-2514 Title Executive Vice Pres
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1974 12-13	Moved in and rigged up Atlantic Oil Company Rig #4. Killed well. Installed Archer Reed pressure valve.
12-14	Archer Reed set tubing plug at 30'. Removed tubing head. Picked up and installed BOPE. BOPE OK'd by DOG. Archer Reed pulled tubing plug.
12-15	Circulated. POH. RIH with Baker full bore cementer & tester on 2 7/8" tubing. Set pkr. @ 4682'. Pressure tested tubing at 5000psi (OK). Opened tool. Broke circulation. Closed tool. Broke down formation at 8 cu. ft. per min. at 3000# using lease water. Dowell cementers mixed and pumped in 50 sx. class "G" neat cmt. followed by 50 cu. ft. water. Closed tool. Displaced cmt. with total of 196 cu. ft. lease water to final squeeze pressure 4400psi. Cmt. in place at 4:15PM. (Held 1500 psi on csg. while squeeze) Start mix at 3:30PM. Bled off pressure and released tool at 5:00PM. WOC.
12-16	Picked up kelly & swivel. Waited on dyna-drill. Drilled rat hole.
12-17	Drilled 6¼" hole from 4835' to 5004'. Estimated top of cmt. at 4835'. Circulated and conditioned mud. Cleaned out cmt. Pipe stuck at 5004'. Worked on stuck pipe. Milling out 7" csg. from 4770' to 4797'.
12-18	Milled to 4801'. POH RIH and opened 7¼" hole to 11" hole from 4770' to 4810'. Circulated and POH. Circulated and conditioned mud to 80#. Hung OE 3½" drill pipe at 5000'. Circulated out gas cut mud. Dowell cmtrs. mixed and pumped in 100 cu. ft. class "G" cmt. treated with 20% sand + 3% CaCl2 + 3% salt equalized cmt. with 170 cu. ft. mud. CIP at 12:20PM. Estimated top of cmt at 4600'. 20 cu. ft. water ahead and 5 cu. ft. water behind. WOC. RIH with 6 1/8" bit & scraper, found cmt. at 4715'.
12-19	Drilled cmt. from 4715' to 4752'. Pressure tested to 700psi. OK'd by DOG. Drld. cmt to 4810'. POH.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
MAY 8 1975
SANTA PAULA, CALIFORNIA

WELL SUMMARY REPORT

SUBMIT IN DUPLICATE

ARGO-BARKER

Operator Argo Petroleum Corporation, Well No. FERNDALE #1 R/D #6, API No. 111-20423,

Sec. 16, T. 4N, R. 21W, S.B. B. & M., Silverthread Field, Ventura County.

Location 1068.66' S & 2870' E from NW corner of Section 16
(Give surface location from property or section corner, or street center line and/or lambert coordinates)

. Elevation of ground above sea level 1060' feet.

All depth measurements taken from top of KB which is 12 feet above ground.
(Derrick Floor, Rotary Table or Kelly Bushing)

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Date 5/6/75 Signed

B. L. Graham (Engineer or Geologist) Title Executive Vice Pres.

Commenced drilling 12/13/74

Completed drilling 01/09/75

Total depth (1st hole) 5312' (2nd) 4330' (3rd) 6639' (4th) 7264' (5th) 6345' (6th) 5641' ~~5461'~~ (7th) 6532'

Present effective depth Baffle 6527'

Junk

GEOLOGICAL MARKERS	DEPTH

Formation and age at total depth Miocene

Commenced producing 02/01/75 (Date) Flowing/~~gas lift/pumping~~ (Cross out unnecessary words) Name of producing zone Miocene

	Clean Oil bbl. per day	Gravity Clean Oil	Per Cent Water including emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressure
Initial production	82	30.2	3.6	24	150#	450#
Production after 30 days	63	30.2	0.2	48	210#	1420#

CASING RECORD (Present Hole)

Size of Casing (A. P. I.)	Depth of Shoe	Top of Casing	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Numbers of Sacks or Cubic Feet of Cement	Depth of Cementing if through perforations
10 3/4"	869'	0	32.75	H-40	New	12¼"	555 sx.	
7"	4770'	0	20&23	K-55 ST&C	New	9 7/8"	360 sx.	
4½"	6527'	4610'	11.6	K-55 ST&C	New	6¼"	210 sx.	

PERFORATED CASING

(Size, top, bottom, perforated intervals, size and spacing of perforation and method.)

2 JHPF (0.38"d) @ 6440', 6432', 6422', 6413', 6405', 6315', 6305', 6295', 6270', 6260', 6250', 6227', 6217', 6207', Total of 28 holes. 3 JHPF (0.38"d) @ 6070', 6027', 6012', 2JHPF @ 5960', 5950', 5940', 5932', 5912', #JHPF @ 5869', 5778', Total of 25 holes

Was the well directionally drilled? yes If yes, show coordinates at total depth N23W, N7W Drift 33°

Electrical log depths 6532'-4770' Other surveys Dip, Bond, Mud, Density, E-Logs

FORM 100 (REV. 1-73) ATTACH ONE COPY OF EACH LOG AND SURVEY 10338-705 1-73 10M ② OSP

FORM 103 SUBMIT IN DUPLICATE 62602-705 5-72 20M ⓐ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR Argo Petroleum Corp. FIELD Silverthread

ARGO-BARKER
Well No. FERNDALE #1 R/D #6, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date May 6, 19 75 Signed O. Barker

940 East Santa Clara
Ventura, California 93001 (805) 648-2514 Title Executive Vice Pres.
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1974	
12-20	RIH Hung 3½" OEDP at 4810'. Dowell cmtrs. mixed and pumped in 115 cu. ft. class "G" cmt with 3% CaCl. Equalized cmt with 170 cu. ft. mud. Estimated top at 4275'. POH with plugged DP. CIP at 1:00AM. WOC. RIH. Cleaned out cmt from 4327' to 4775'. Circulated and conditioned mud. POH Picked up dyna-drill.
12-21	RIH Rigged up electronic eye. Drlg with dyna-drill. POH RIH Circulated out gas cut mud. Drilled to 4907'. Pipe stuck. Pulled electronic eye. Worked on stuck pipe. Circulated and built mud wt. to 87#. Conditioned mud. POH Laid down dyna-drill.
12-22	RIH to 4715'. Circulated and conditioned mud. to 88#. Drld. 6¼" hole from 4907' to 5179'. POH.
12-23	Picked up dyna-drill. RIH Rigged up electronic eye. Worked on stuck pipe. Spot with 40 bbls. oil.
12-24	Worked pipe loose. Circulated. Pulled up into csg. Circulated gas cut mud. POH Laid down DD. Picked up drlg. assy. RIH Top of fill at 4937'. Reamed to 5179'. Drld to 5285'. POH RIH with DD.
12-25	Cleaned out fill from 5225' to 5285'. Circulated and conditioned mud. Rigged up electronic eye. Dyna-drill to 5402'. Reamed from 5184' to 5240'. Circulated and conditioned mud. POH Laid down DD. Picked up drlg. assy. RIH.
12-26	RIH and cleaned out fill from 5070' to 5402'. Drilled to 5407'. POH Rigged up DD. DD to 5428'.
12-27	DD to 5589'.
12-28	DD to 5650'. POH Laid down DD Picked up drlg. assy. RIH Reamed from 5407' to 5650'. Drld to 5755'.
12-29	Drld to 5986'.

FORM 103 SUBMIT IN DUPLICATE 62802-705 5-72 20M ⓢ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR Argo Petroleum Corp. FIELD Silverthread

ARGO - BARKER
Well No. FERNDALE #1 R/D #6, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date May 6, 19 75 Signed C. Dasenbrock

940 East Santa Clara
Ventura, California 93001 (805) 648-2514 Title Executive Vice Pres
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1974	
12-30	Drld to 6068'. Reamed from 5956' to 6068'. Drld to 6235'.
12-31	Drld to 6532'. Circulated and conditioned mud. for loggers.
1975	
01-01	POH Rigged up Welex and ran logs. Rigged down Welex. Circulated and conditioned mud. POH Ran 48 jts. 4½" 11.60# ST&C K-55 csg. Baker Flexflo shoe & 22 BW centralizers fluted Burns hanger set at 4610'. and shoe at 6527'. Halliburton cmtd with 210 sx. class "G" cmt 0.17 Halad 9 preceeded with 50 cu. ft. mud. Displaced and bumped plug w/375 cu. ft. mud (356 CaCl) Pulled cups out of liner and reversed out 30 cu. ft. cmt. CIP at 11:30PM.
01-02	WOC Circulated and conditioned mud. Shoe at 6533'. Circulated and POH RIH with 2 3/8" tbg. Circulated. Run to shoe. POH.
01-03	Set pkr. at 4553'. with tail at 4571'. Opened tool at 4:35AM. Strong blow for 1 hr. Gas to surface in 5 min. Pulled tool loose at 5:35AM and pulled and recovered 3619' salt water and drlg fluid. Waited on Baker pkg. RIH set pkr. at 4519'. Rigged up Dowell cmtrs. Dowell tried to break down formation. POH RIH 2 runs with pkr.
01-04	RIH and conditioned mud. POH Laid down 2 3/8" tbg. Rigged up Welex and ran Cmt. Bond Log. RIH set pkr at 4686' tail at 4705'. Light blow for 5 min. Faint for 1 hr. POH.
01-05	Rigged up Welex. Shot 4 - ½" holes at 5269'. Rigged dwon Welex. RIH with Baker squeeze tool and set pkr. at 5154'. Broke down formation with 2000# psi, 20 cu. ft. per min. Mixed and pumped in 100 sx. class "G" cmt. Final psi 1000#. Hold psi for 30 min. Bled off OK. Shot holes at 5006'. Ran in and squeezed at 5895'.
01-06	WOC RIH set pkr at 4553' tail at 4571'. Drld out cmt from 4856' to 5160' with 3 7/8" hole.

FORM 103 SUBMIT IN DUPLICATE 62802-705 5-72 20M ③ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR Argo Petroleum Corporation FIELD Silverthread

ARGO-BARKER
Well No. FERNDALE #1 R/D #6, Sec. 16, T. 4N, R. 21W S.B. B. & M.

Date May 5, 19 75 Signed

940 East Santa Clara
Ventura, California 93001 (805) 648-2514 Title Executive Vice Pres.
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1975	
01-07	Drld out cmt from 5160' to 5276'. Stopped at 6525'. Circulated pressure 2500# in 15 min. down to 1800# Measured out. Waited on Welex. Rigged up Welex and ran Cmt. Bond Log. Tore out loggers. Laid down tubing.
01-08	RIH with Lynes tester on dry 3½" DP. Set pkr. at 4590' with tail at 4609'. Open test at 1:30AM. Light blow for 20 min. and dead remainder of test. Closed test at 2:30AM. POH Recovered 20' Fl. Rise (hole fluid) charts indicated dry WSO test. Rigged down tester. RIH Laid down 3½" DP Picked up 67 jts 2 3/8" tbg. RIH with 2½" tbg. Changed over from mud to oil. POH
01-09	Pulled and laid down 2 3/8" tbg. Tore down rig. Rigged up Welex. Welex perforated 2 JHPF (0.38"d) in the following intervals: 6440'-6441' 2 holes; 6432'-6433' 2 holes; 6422'-6423' 2 holes; 6413'-6414' 2 holes; 6405'-6406' 2 holes; 6315'-6316' 2 holes; 6305'-6306' 2 holes; 6295'-6296' 2 holes; 6270'-6271' 2 holes 6260'-6261' 2 holes; 6250'-6251' 2 holes; 6227'-6228' 2 holes; 6217'-6218' 2 holes; 6207'-6208' 2 holes Total of 28 holes
01-10 thru 01-23	Tear out drilling rig and place same on stanby. Well place on flowing production, recovering circulating oil.
01-24	Moved in and rigged up production hoist. Changed well over with 195 bbls. lease water. Well gasing and flowing back through tbg. and csg. Shut down.
01-25	Rigged up BOPE Ran in with sandline, tagged fill at 6527'. RIH with Baker full bore. Well kept flowing, continued killing well.

FORM 103 SUBMIT IN DUPLICATE 62802-705 5-72 20M ② OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR Argo Petroleum Corporation FIELD Silverthread

ARGO-BARKER
Well No. FERNDALE #1 R/D #6, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date May 6, 19 75 Signed C. Bacon

940 East Santa Clara
Ventura, California 93001 (805) 648-2514 Title Executive Vice Pres
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date

1975

01-26 Continued testing in hole. Picked up 3" tbg. POH Picked up 4 jts. 2½" tbg RIH to 5283'. Set F.B. Rigged up Dowell to sand frac, Dowell sand fraced as follows:

GALS	BBLS	SAND LB/GAL	LBS SAND	CUM SAND	ATR
5,000	120	0	0	0	120
5,000	120	1	5,000	5,000	245
5,000	120	2	10,000	15,000	375
10,000	240	3	30,000	45,000	645
10,000	240	4	40,000	85,000	925
	58	Flush			983
	898 Total				

ISIP = 2800psi Frac Gradient = 0.87 Total of 898 bbls. of calcium chloride water used Total of 85,000 lbs of 20/40 sand used. Pumped through tubing at a rate of 24BPM and average press of 6100psi. ISIP = 3500psi, SIP after 15 min = 3200psi.

01-27 Bled well down. Released full bore. Changed well over to Brinadd POH Laid down 3½" Butt & 8rd tbg. Changed rams in Shaffer. Picked up and RIH with 2 3/8" tbg.

01-28 RIH with 2 7/8" tbg. Conditioned mud. Tagged fill at 6222'. Cleaned out same to 6527'. Circulated hole clean. Laid down 15 jt. 2½" tbg. Landed tbg. at 6088'. Tore out BOP and installed tree. Changed from Brinadd to lease oil.

01-29 Rigged down and moved off location. Tubing Detail:

KB	16.00'
Donut	1.00
2 7/8" sub	2.68
133 jts 2 7/8"	4069.48'
Pump shoe	0.85'
1 jt. 2 7/8"	31.07
63 jts. 2 3/8"	1967.96
	6089.04'

Well returned to flowing production.

FORM 103 SUBMIT IN DUPLICATE 62802-705 5-72 20M ② OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR Argo Petroleum Corporation FIELD Silverthread

ARGO-BARKER
Well No. FERNDALE #1 R/D #6, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date May 6, 1975 Signed C. Dowell

940 East Santa Clara
Ventura, California 93001 (805) 648-2514 Title Executive Vice Pres.
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date

1975

01-30 thru 01-31 Recovering circulating fluid.

02-01 thru 03-20 Well flowed at an average producing rate of 63BOPD, 30.2° API, 0.2% cut, 48MCF/day, TP 210, CP 1420

03-21 MIRU production hoist. Killed well and circulated with 570 bbls. of 86# Calcium Chloride water. Installed BOPE POH and measured tbg. Shut down.

02-22 Rigged up McCullough and perforated 4½" csg with 0.38"d jets as follows:

6070' - 3 holes	5940'- 2 holes
6027' - 3 holes	5932' - 2 holes
6012' - 3 holes	5912' - 2 holes
5960' - 2 holes	5869' - 3 holes
5950' - 2 holes	5778' - 3 holes

Total of 25 holes.

RIH with Baker 4½" BP and set at 6148'. Well stopped flowing. POH Shut down.

03-23 Changed 2½" BOP rams to 3½". Installed Guiberson stripper. Measured and picked up 3½" tbg. RIH with Baker 4½" full bore. Set at 5405'. Rigged up Dowell and fraced through tubing as follows:

GALS WATER	BBLS	SAND LB/GAL	LBS SAND	CUM SAND	ATR
5,000	120	0	0	0	120
5,000	120	2	10,000	10,000	245
3,200	78	4	12,800	22,800	330
8,400	200	Stop sand - increase gel			540
2,300	55	4	9,200	32,000	600
3,200	80	6	19,200	51,200	695
1,100	27	8	8,800	60,000	740
1,800	42	Flush			42
	722				782

FORM 103 SUBMIT IN DUPLICATE 62802-705 5-72 20M ② OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR Argo Petroleum Corporation FIELD Silverthread

ARGO BARKER
Well No. FERNDALE #1 R/D #6, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date May 6, 19 75 Signed C. Donald

940 East Santa Clara
Ventura, California 93001 (805) 648-2514 Title Executive Vice. Pres.
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1975	
03-23 cont	ISIP = 7500psi Frac Gradient = 0.94 Pumped at an average rate of 18BPM and 6800psi Total calcium Chloride water used = 722bbls. Total 20/40 sand used = 60,000 lbs. Well screened out 9 bbls short of flush. ISIP = 7500psi SIP after 15 min = 5200psi
03-24	200# on tbg. Hooked up and ran line to Baker tanks, opened and flowed well to same. Shut down.
03-25	Standby. Well on production test.
03-26	Laid tbg. down out of derrick. Laid down mast. Moved out production hoist.

FORM 100

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

WELL SUMMARY REPORT

SUBMIT IN DUPLICATE

Operator Lawrence Barker, Jr. Well No. "Barker-Ferndale" 1

Sec. 16, T. 4 N., R. 21 W., S. B. B. & M. Ojai Field Ventura County.

Location 200' North and 230' East from the SE Cor. of NE/4 NW/4 of Sec. 16
(Give location from property or section corner, or street center lines)

Elevation of ground above sea level 1060 feet.

All depth measurements taken from top of KB which is 12 feet above ground.
(Derrick Floor, Rotary Table or Kelly Bushing)

In compliance with Sec. 3215, of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Date February 14, 1973 Signed W. S. Barker

Donald F. Todd (Engineer or Geologist) H. C. Patterson (Superintendent) Title Engineer (President, Secretary or Agent)

Commenced drilling August 4, 1972

Completed drilling October 16, 1972

Total depth Plugged depth See

Junk History

GEOLOGICAL MARKERS | DEPTH

Geologic age at total depth: Miocene

Commenced producing 2/2/73 (Date) Flowing/~~gas lift/pumping~~ (Cross out unnecessary words) Name of producing zone

	Clean Oil bbl. per day	Gravity Clean Oil	Per Cent Water including emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressure
Initial production	65 (17-1/2 hrs)	28	2.0	68	120	PKR
Production after 7 days	24	28	0.1	19	190	PKR

CASING RECORD (Present Hole)

Size of Casing (A. P. I.)	Depth of Shoe	Top of Casing	Weight of Casing	New or Second Hand	Seamless or Lapweld	Grade of Casing	Size of Hole Drilled	Number of Sacks of Cement	Depth of Cementing if through perforation
10-3/4	0	869	3].75	N	S	H	15	*	
*	405 sacks premixed with 8% gel followed by 150 sacks neat Class G.								
7	5452	0	20,23,26	N	S	K	9-7/8"	**	
**	50 sacks of Class G premixed with 50 cu ft Litepoz and 4% gel followed by 310 sacks neat Class G treated w/16% salt.								

PERFORATED CASING
(Size, top, bottom, perforated intervals, size and spacing of perforation and method.)

4932'-4956' 4 holes/ft Production

4998'-5012' 4 holes/ft Production

Was the well directionally drilled? Yes Electrical Log Depths See history. (Attach Copy of Log)

Δ OSP

Well History

Lawrence Barker, Jr.
Well No.: "Barker-Ferndale" 1

Sec. 16, T. 4 N., R. 21 W., S. B. B. & M.
Ojai Field, Ventura Co., Calif.

August, 1972

3 — R. B. Montgomery Drilling, Inc. moved in and rigged up Rig No. 8.

4 — Spudded in at 5:00 A.M. with 12-1/4" bit and drilled ahead.

350' — Boulders, sand and clay.

Survey at

70'	1°-0'
228'	0°-30'
289'	0°-30'

5 — 913' — Clay.

Survey at

440'	1°-0'
595'	1°-30'
755'	1°-30'

Ran Schlumberger Dipmeter.

Opened 12-1/4" hole to 15" from 43'-472'.

6 — Opened 12-1/4" hole to 15" from 472'-913'.

Ran 21 jts of 10-3/4" 32.75# H casing equipped with Baker guide shoe and insert valve on top of shoe joint. Cemented around shoe at 869' with 405 sacks of Class G premixed with 8% gel, followed by 150 sacks of Class G cement treated with 3% $CaCl_2$. Bumped plug with 500 psi. Cement in place at 9:35 A.M. Had good cement returns at surface.

Landed casing and installed casing head.

Installed and tested BOP equipment. Witnessed and approved by Division of Oil and Gas.

7 — Drilled out shoe with 9-7/8" bit and drilled ahead.

1,013' — Clay.

Ran DynaDril and drilled ahead.

1,171' — Clay.

8 — 1,418' — Clay.

Laid down DynaDril and drilled ahead with conventional drilling set up.

1,527' — Clay.

Well History

Lawrence Barker, Jr.
Well No.: "Barker-Ferndale" 1

Sec. 16, T. 4 N., R. 21 W., S. B. B. & M.
Ojai Field, Ventura Co., Calif.

August, 1972

9	1,838'	Clay.
		Resumed drilling with DynaDril.
	2,009'	Clay.
10		Laid down DynaDril and drilled ahead with conventional drilling set up.
	2,683'	Sand and clay.
11	3,151'	Shale.
12	3,647'	Clay and shale.
13	4,173'	Clay and shale.
14	4,373'	Clay and shale.
		Ran Welex Dipmeter.
15		Drilled ahead with 9-7/8" bit.
	4,982'	Clay and shale.
16	5,312'	Clay and shale.
		Ran Welex Induction-electrical log and Dipmeter.

REDRILL NO. 1

17		Hung drill pipe at 1,186' and pumped in and equalized 74 sacks of Class G cement premixed with 20% Sand and treated with 3% $CaCl_2$. Cement in place at 1:30 A.M.
		Located top of plug at 1,069' at 7:00 A.M.
		Cleaned out cement to 1,107' at 9:00 P.M.
		Ran DynaDril and drilled ahead.
	1,112'	Clay and cement.
18	1,352'	Clay and sand.
		Laid down DynaDril and drilled ahead with conventional drilling set up.

August, 1972

18 (contd)		
	1,714'	Clay and sand.
19	2,420'	Clay and sand.
20	3,061'	Shale.
21	3,362'	Shale and chert.
22	3,632'	Shale.
23	3,772'	Shale.
24	3,984'	Shale.
25	4,205'	Shale.
26	4,330'	Shale.

Ran Schlumberger Dual Induction Laterolog and Dipmeter.

REDRILL NO. 2

27 — Hung drill pipe at 2,028' and pumped in and equalized 74 sacks of Class G cement premixed with 20% Sand and treated with 3/4% CFR-2. Cement in place at 7:45 A.M.

Located top of plug at 1,916' at 4:00 P.M.

28 — Cleaned out cement to 1,936' at 12:00 midnight. Standing cemented.

Cleaned out cement to 1,978' at 6:00 A.M.

Ran DynaDril and drilled ahead.

	2,046'	Clay and sand.

Laid down DynaDril and drilled ahead with conventional drilling set up.

	2,181'	Clay and sand.
29	2,895'	Clay and shale.
30	3,247'	Clay and sand.
31	3,670'	Clay and shale.

Well History

Lawrence Barker, Jr.
Well No.: "Barker-Ferndale" 1

Sec. 16, T. 4 N., R. 21 W., S. B. B. & M.
Ojai Field, Ventura Co., Calif.

September, 1972

1	3,957'	Shale.
2	4,199'	Shale.
3	4,640'	Shale.
4	5,172'	Clay and shale.
5	5,608'	Clay and shale.
6	6,202'	Clay and shale.
7	6,639'	Clay and shale.
		Ran Welex Induction-electrical log.
8		Ran Welex Dipmeter.

REDRILL NO. 3

Hung drill pipe at 1,371' and pumped in and equalized 90 sacks of Class G cement premixed with 20% Sand and treated with 1/2% TIC and 2% $CaCl_2$. Cement in place at 10:20 A.M.

Located top of plug at 1,305' at 5:00 P.M.

Magnetic inspected collars and tools.

9		Cleaned out cement to 1,320' at 11:00 A.M.
		Ran DynaDril and drilled ahead.
	1,479'	Clay.
10	1,536'	Clay.
		Laid down DynaDril and drilled ahead with conventional drilling set up.
	2,253'	Clay.
11	3,097'	Clay.
12	3,651'	Clay.
13	4,239'	Clay.

Well History

Lawrence Barker, Jr.
Well No.: "Barker-Ferndale" 1

Sec. 16, T. 4 N., R. 21 W., S. B. B. & M.
Ojai Field, Ventura Co., Calif.

September, 1972

14	4,939'	Clay and sand.
15	5,515'	Shale.
16	5,799'	Shale.
17	6,053'	Shale.
18	6,301'	Shale.
19	6,568'	Shale.
20	6,806'	Shale.
21	7,056'	Shale.
22	7,264'	Shale.

Ran Welex Induction-electrical log and Dipmeter.

23 REDRILL NO. 4

Hung drill pipe at 5,360' and pumped in and equalized 160 sacks of Class G cement. Cement in place at 4:45 A.M.

Located top of plug at 5,017'.

Hung drill pipe at 4,235' and pumped in and equalized 125 sacks of Class G cement premixed with 20% Sand and treated with 3/4% CFR-2. Cement in place at 11:30 A.M.

Located top of plug at 3,975' at 12:00 midnight.

24 Cleaned out cement to 3,998'.

Ran DynaDril and drilled ahead.

	4,123'	Clay.
25	4,284'	Clay.
26	4,294'	Clay.

Laid down DynaDril and drilled ahead with conventional drilling set up.

	4,855'	Clay and shale.

Well History

Lawrence Barker, Jr.
Well No.: "Barker-Ferndale" 1

Sec. 16, T. 4 N., R. 21 W., S. B. B. & M.
Ojai Field, Ventura Co., Calif.

September, 1972

27 5,070' Clay and shale.

Circulated and conditioned mud.

28 Drill Stem Test No. 1 Ran Johnston tester with no cushion and set packers at 4,984' and 4,991' with tail to 5,070'. Opened tool for initial flow at 3:30 A.M. Closed for Initial Shut In Pressure at 3:29 A.M. Opened for flow on 1/2" bottom bean and 1" surface bean at 4:00 A.M. Gas to surface immediately. Maximum rate 179 Mcf decreasing to 114 Mcf after 1 hour and 15 min. No fluid to surface. Closed for Final Shut In Pressure at 5:20 A.M. Pulled loose at 6:20 A.M. Recovered a rise of 100' of clean 32.6° gravity oil, 90' of oily mud and 3,174' of very gassy, slightly oily mud.

Pressures:

	5058' Inside	5064' Outside
IHP	3333	3352
IF	1568	502
FF	1144	336
ISIP	1732*	**
IF	989	**
FF	754	**
FSIP	1285*	**
FHP	3209	3250

* Not stabilized.
** Clock stopped.

Cleaned out to 5,070' and conditioned mud.

Drilled ahead with 9-7/8" bit.

5,093' Clay.

Ran DynaDril and drilled ahead.

5,118 Clay.

29 5,348' Clay and shale.

Laid down DynaDril and drilled ahead with conventional drilling set up.

30 5,850' Clay and shale.

October, 1972

2 Sidewall samples (contd)

Depth	Rec.	Description
5,004-1/2'	1/2"	Dolomite, brown. Microcrystalline. Trace gassy odor. Fair yellow fluorescence. Dull gold cut.

Sample description by Donald F. Todd.

REDRILL NO. 5

Hung drill pipe at 5,110' and pumped in and equalized 160 sacks of Class G cement. Cement in place at 8:15 P.M.

3 Located top of plug at 4,736' at 3:00 A.M. Location and hardness of top of plug witnessed and approved by Division of Oil and Gas.

Hung drill pipe at 1,185' and pumped in and equalized 125 sacks of Class G premixed with 20% sand and treated with 3/4% CFR-2 and 2% $CaCl_2$. Cement in place at 4:15 A.M.

Located top of plug at 1,148' at 10:00 A.M.

Hung drill pipe at 1,146' and pumped in and equalized 125 sacks of Class G premixed with 20% sand and treated with 3/4% CFR-2 and 2% $CaCl_2$. Cement in place at 1:00 P.M.

Located top of cement at 1,032' at 7:00 P.M.

4 Cleaned out cement to 1,066' at 7:00 A.M.

Ran in with DynaDril and drilled ahead.

1,153' Clay.

Laid down DynaDril and drilled ahead with conventional drilling set up.

1,618' Clay.

5 2,842' Clay.

6 3,193 Clay.

7 3,758' Clay and shale.

Well History

Lawrence Barker, Jr.
Well No.: "Barker-Ferndale" 1

Sec. 16, T. 4 N., R. 21 W., S. B. B. & M.
Ojai Field, Ventura Co., Calif.

October, 1972

15 Sidewall samples (contd)

Depth	Description
5,262'	Sandstone, very fine to fine grained. Light brown with interbeds of brown silty shale. Sample has distinctively less odor than above. Holds fair acid bead. Trace of odor. Fair dull gold fluorescence.
5,254'	Sandstone, very fine to fine grained. Light brown. Kaolinitic. Poor permeability. Holds fair acid bead. Good gassy odor. Fair dull gold fluorescence. Milky cut.
5,245'	Sandstone, very fine to fine grained. Light brown. Holds good acid bead. Good odor. Fair dull gold fluorescence. Milky cut.
5,236'	Sandstone, very fine to fine grained. Light brown with streaks of darker brown from more oil. Does not hold acid bead. Good gassy odor. Good dull gold fluorescence. Fair milky cut.
5,226'	Sandstone, very fine grained with some fine. Light brown sub angular to sub round. Clay filled. Friable. Odor masked by mud. Good dull gold fluorescence.
5,214'	Sandstone, very fine grained with some fine grained. Light brown. Sub angular to sub rounded. Good porosity, fair permeability. Holds fair acid bead. Good gassy odor. Good dull gold fluorescence. Fair milky cut.
5,205'	Sandstone, light brown tan. Very fine to medium grained, sub round. Friable in acid. Good porosity, poor permeability. Holds weak acid bead. Gassy odor. Even dull gold fluorescence. Milky cut.
5,010'	Sandstone, very fine to fine grained with some trace of medium grained. Sub rounded. Argillaceous, friable. Falls apart in acid. Good porosity, poor permeability. Few carbonaceous lamanie. Light brown to tan. Fair odor. Dull gold fluorescence.
5,000'	Sandstone, very fine to fine grained with some medium grained. Sub rounded, argillaceous, friable. Falls apart in acid. Good porosity, poor permeability. Fair odor. Dull gold fluorescence. Milky cut.

Well History

Lawrence Barker, Jr.
Well No.: "Barker-Ferndale" 1

Sec. 16, T. 4 N., R. 21 W., S. B. B. & M.
Ojai Field, Ventura Co., Calif.

October, 1972

15 Sidewall samples (contd)

Depth	Description
4,957'	Sandstone, very fine grained. Brown. Slightly calcareous. Good odor. Weak dull gold fluorescence. Slight, streaming cut. Probable oil sand.
4,946'	Sandstone, very fine grained to fine grained. Good porosity and permeability. Brown. Holds fair acid bead. Oily odor. Very dull gold fluorescence. Fair to good cut.
4,935'	Sandstone, very fine to medium grained to large grained. Sub rounded. Medium brown. Slightly calcareous, kaolinitic. Trace of odor. Slight dull gold fluorescence. Fair cut.
4,804'	Shale, brown and variegated grey and brown. Petroliferous. Fractured. Good odor. Dull gold fluorescence. Fair cut.
4,752'	Shale, brown to grey. Trace slickensides. Variable stain. Good odor. Dull gold fluorescence. Fair cut.
4,722'	Siltstone, medium to light brown. Argillaceous. Highly fractured. May be permeable. Oily odor. Dull gold fluorescence. Trace cut.
4,674'	Shale, silty and sandy. Odor, fluorescence and cut masked by mud.
4,650'	Shale, silty and sandy. Fractured.
4,627'	Shale, silty and sandy. Dull gold fluorescence.
4,619'	Shale, dark brown. Highly fractured. Silty in part. Pale dull gold fluorescence.
4,607'	Shale, slightly silty and sandy. Highly fractured. Heavy oily odor. Pale, dull orange to gold fluorescence. Excellent cut.

Sample description by Donald F. Todd.

WELL HISTORY

Lawrence Barker, Jr.
Well No.: "Barker-Ferndale" 1

Sec. 16, T. 4 N., R. 21 W., S. B. B. & M.
Ojai Field, Ventura Co., Calif.

October, 1972

16 Ran drill pipe to 5,631' and conditioned mud.

Laid down drill pipe.

Ran 131 jts (or 5,454.39' incl shoe) of 7" 20#, 23# and 26# K casing equipped with a Baker guide shoe and insert fill-up valve 86' above shoe. Cemented around shoe at 5,452' with 50 sacks of Class G premixed with 50 cu ft of Litepoz and 4% gel and treated with 3/4% TIC, followed by 310 sacks of Class G premixed with 16% salt. Used bottom rubber plug and displaced top rubber plug with 1208 cu ft of mud (9 cu ft over displacement). Bumped plug with 1500 psi. Bled off and check held. Closed in at surface. Cement in place at 1:15 P.M.

Bottom 500' of casing equipped with Antelope solidifiers on 10'± spacing.

Reciprocated and circulated casing 45 minutes prior to cementing.

Casing details:

Shoe		1.20
2 jts 26#		84.95
Insert		--
17 jts 26#		708.95
44 jts 23#		1,632.86
67 jts 20#		2,984.73
1 jt 26#		41.70
		5,454.39
	Up	2.39
	Shoe @	5,452.00
		86.00
	Insert @	5,366.00

Landed casing and installed tubing spool. Tested secondary seal with 3000 psi.

Closed in at surface.

Moved out drilling rig.

WELL HISTORY

Lawrence Barker, Jr.
Well No.: "Barker-Ferndale" 1

Sec. 16, T. 4 N., R. 21 W., S. B. B. & M.
Ojai Field, Ventura Co., Calif.

January, 1973

29 California Production Service moved in and rigged up.

Installed BOP equipment.

Ran 2-7/8" tubing to 5,358'. Changed mud in hole to 63 lb/cu ft potassium chloride water.

30 Welex ran combination Cement Bond log and Neutron Correlation log. Neutron log correlated 5' deep to Induction log.

Ran used 2-7/8" tubing and landed as follows:

Item	Length	Depth
Original KB to tubing spool	14.50	14.50
154 jts 2-7/8" EUE 8rd tubing	4,788.63	4,803.13
API top lock pump shoe	.57	4,803.70
1 jt 2-7/8" EUE 8rd tubing	30.97	4,834.67
Baker Model R Double grip packer	7.90	4,842.57
1 jt 2-7/8" EUE 8rd tubing	31.82	4,874.39
2-7/8" EUE 8rd collar	.44	4,874.83

Installed Xmas tree.

Welex ran through tubing with 2-1/8" ceramic jet gun and located bottom of tubing at 4,876'. Shot 4 holes per foot in the following intervals (IES measurements): 4,932'-4,956' and 4,998'-5,012'.

Well flowing wash water to sump at low rate after perforating.

Shut well in.

31 Shut in tubing pressure 760 psi.

Opened well on 12/64" bean and pressure bled off immediately. Well flowing oil to sump at low rate. Oil changed to water.

Swabbed well. Swabbed wash water and then muddy oil.

Shut well in.

WELL HISTORY

Lawrence Barker, Jr.
Well No.: "Barker-Ferndale" 1

Sec. 16, T. 4 N., R. 21 W., S. B. B. & M.
Ojai Field, Ventura Co., Calif.

February, 1973

1 Shut in tubing pressure 1400 psi.

Opened well on 12/64" bean. Well blew gas for 10 minutes. Pressure declined to 500 psi and well started flowing 28° gravity oil. Rate declined from 10 Bbls/hr to 5 Bbls/hr in 3 hours. Tubing pressure averaged 400 psi.

Shut well in and moved out rig.

2 Installed temporary test facilities.

Well on production at 11:30 A.M.

Well produced at following rates:

Date	Bbls/D	Gas	Tbg. Press.	Bean
2/3	65 (17-1/2 hrs.)	68	120	12/64
2/4	52	73	60-120	12/64
2/5	43	40	100	12/64

5 Shut well in for bottom hole pressure survey.

6 Shut in.

7 Shut in.

8 Shut in. Pulled pressure bombs at 6:00 P.M. Shut well in.

9 Opened well on 8/64" bean. Well produced at following rates:

Date	Bbls/D	Gas	Tbg. Press.	Bean
2/10	50	50	195	8/64
2/11	35	35	190	8/64
2/12	30	30	190	8/64
2/13	24	19	190	8/64

111-20423

DIRECTIONAL DRILLING, INC.

SURVEY DATA SHEET

SHEET NO. 1

JOB NO. B 531

COMPANY Argo Petroleum Corporation (L. Barker Jr.) ADDRESS Denver

WELL "Barker" Ferndale #1 FIELD Silverthread COUNTY Ventura STATE California

MEASURED DEPTH	COURSE LENGTH	DEVIATION ANGLE	VERTICAL DEPTH COURSE	VERTICAL DEPTH TOTAL	COURSE DEVIATION	DIRECTION OF DEVIATION	COURSE LATITUDE NORTH	COURSE LATITUDE SOUTH	COURSE DEPARTURE EAST	COURSE DEPARTURE WEST	TOTAL LATITUDE NORTH	TOTAL LATITUDE SOUTH	TOTAL DEPARTURE EAST	TOTAL DEPARTURE WEST
102	102	2 00	101 94	101 94	3 56	S 85 E		31	3 55			31	3 55	
202	100	2 00	99 94	201 88	3 49	S 82 E		49	3 46			80	7 01	
406	204	2 00	203 88	405 76	7 12	S 52 E		4 38	5 61			5 18	12 62	
602	196	3 00	195 73	601 49	10 25	S 34 E		8 50	5 63			13 68	18 35	
802	200	2 00	199 88	801 37	6 98	S 32 E		5 92	3 70			19 60	22 05	
1013	211	1 30	210 94	1012 31	5 53	S 34 E		4 58	3 09			24 18	25 14	
				PLUG BACK TO REDRILL #5 - PROJECT TO 1066										
1066	53	1 30	52 98	1065 29	1 39	S 30 E		1 20	70			25 38	25 84	
1179	113	1 30	112 97	1178 26	2 96	N 56 E	1 66		2 45			23 72	28 29	
1274	95	45	94 99	1273 25	1 24	N 36 E	1 00		73			22 72	29 02	
1461	187	30	187 00	1460 25	1 63	N 26 E	1 47		71			21 25	29 73	
1774	313	1 00	312 94	1773 19	5 48	S 74 E		1 51	5 27			22 76	35 00	
2084	310	1 30	309 91	2083 10	8 12	S 44 E		5 84	5 64			28 60	40 64	
2395	311	1 30	310 91	2394 01	8 15	S 60 E		4 08	7 06			32 68	47 70	
2738	343	1 45	342 83	2736 84	10 46	S 25 E		9 48	4 42			42 16	52 12	
3058	320	2 30	319 68	3056 52	13 95	S 33 E		11 70	7 60			53 86	59 72	
3198	140	2 15	139 89	3196 41	5 50	S 12 E		5 38	1 14			59 24	60 86	
3515	317	2 45	316 62	3513 03	15 22	S 4 E		15 18	1 06			74 42	61 92	
3969	454	4 30	452 59	3965 52	35 64	S 15 E		34 42	9 22			108 84	71 14	

TYPE OF SURVEY: CALCULATED BY CHECKED BY

DIRECTIONAL DRILLING, INC.

SURVEY DATA SHEET

SHEET NO. 2

JOB NO. B 531

COMPANY L. Barker Jr. (Cont) ADDRESS

WELL FIELD COUNTY STATE

MEASURED DEPTH	COURSE LENGTH	DEVIATION ANGLE	VERTICAL DEPTH COURSE	VERTICAL DEPTH TOTAL	COURSE DEVIATION	DIRECTION OF DEVIATION	COURSE LATITUDE NORTH	COURSE LATITUDE SOUTH	COURSE DEPARTURE EAST	COURSE DEPARTURE WEST	TOTAL LATITUDE NORTH	TOTAL LATITUDE SOUTH	TOTAL DEPARTURE EAST	TOTAL DEPARTURE WEST
4051	82	1 15	81 98	4047 60	1 79	S 03 E		1 79	09			110 63	71 23	
4145	94	3 00	93 87	4141 47	4 92	N 34 W	4 08			2 75		106 55	68 48	
4206	61	5 45	60 70	4202 17	6 11	N 38 W	4 81			3 76		101 74	64 72	
4269	63	8 00	62 39	4264 56	8 77	N 31 W	7 52			4 52		94 22	60 20	
4357	88	10 45	86 46	4351 02	16 41	N 30 W	14 21			8 21		80 01	51 99	
4419	62	12 45	60 47	4411 49	13 68	N 32 W	11 60			7 25		68 41	44 74	
4483	64	15 30	61 67	4473 16	17 10	N 31 W	14 66			8 81		53 75	35 93	
4574	91	19 00	86 04	4559 20	29 63	N 28 W	26 16			13 91		27 59	22 02	
4669	95	23 45	86 95	4646 15	38 26	N 23 W	35 22			14 95	7 63		7 07	
4763	94	29 15	82 02	4728 17	45 93	N 22 W	42 59			17 21	50 22			10 14
4883	120	33 00	100 64	4828 81	65 35	N 23 W	60 15			25 53	110 37			35 67
5008	125	34 45	102 70	4931 51	71 25	N 23 W	65 59			27 84	175 96			63 5.
5167	159	36 45	127 41	5058 92	95 13	N 23 W	87 57			37 17	263 53			100 68
5430	263	38 15	206 53	5265 45	162 82	N 22 W	150 97			60 99	414 50			161 67
5538	108	38 30	84 52	5349 97	67 23	N 21 W	62 77			24 10	477 27			185 77
5617	79	39 00	61 39	5411 36	49 71	N 21 W	46 41			17 82	523 68			203 59
			Closure:	561.72' N	21° 15' W									

TYPE OF SURVEY: CALCULATED BY CHECKED BY

DIRECTIONAL DRILLING, INC.

SURVEY DATA SHEET

SHEET NO. 3

JOB NO. B 531

COMPANY L. Barker Jr. ADDRESS

WELL Ferndale #1 FIELD Silverthread COUNTY Ventura STATE Calif.

MEASURED DEPTH	COURSE LENGTH	DEVIATION ANGLE	VERTICAL DEPTH COURSE	VERTICAL DEPTH TOTAL	COURSE DEVIATION	DIRECTION OF DEVIATION	COURSE LATITUDE NORTH	COURSE LATITUDE SOUTH	COURSE DEPARTURE EAST	COURSE DEPARTURE WEST	TOTAL LATITUDE NORTH	TOTAL LATITUDE SOUTH	TOTAL DEPARTURE EAST	TOTAL DEPARTURE WEST
102	102	2 00	101 94	101 94	3 56	S 85 E		31	3 55			31	3 55	
202	100	2 00	99 94	201 88	3 49	S 82 E		49	3 46			80	7 01	
406	204	2 00	203 88	405 76	7 12	S 52 E		4 38	5 61			5 18	12 62	
602	196	3 00	195 73	601 49	10 25	S 34 E		8 50	5 63			13 68	18 35	
802	200	2 00	199 88	801 37	6 98	S 32 E		5 92	3 70			19 60	22 05	
1013	211	1 30	210 94	1012 31	5 53	S 34 E		4 58	3 09			24 18	25 14	
1100	87	1 30	86 97	1099 28	2 28	S 28 E		2 01	1 07			26 19	26 21	
1165	65	2 30	64 94	1164 22	2 83	S 40 W		2 17		1 62		28 36	24 39	
1227	62	5 15	61 74	1225 96	5 67	S 45 W		4 01		4 01		32 37	20 38	
1289	62	7 15	61 50	1287 46	7 82	S 48 W		5 23		5 81		37 60	14 57	
1351	62	9 15	61 19	1348 65	9 96	S 47 W		6 79		7 28		44 39	7 29	
1432	81	11 15	79 44	1428 09	15 80	S 50 W		10 16		12 10		54 55		4 8.
1494	62	13 30	60 29	1488 38	14 47	S 54 W		8 51		11 71		63 06		16 52
1525	31	14 30	30 01	1518 39	7 76	S 55 W		4 45		6 36		67 51		22 88
1583	58	15 30	55 89	1574 28	15 50	S 57 W		8 44		13 00		75 95		35 88
1646	63	16 00	60 56	1634 84	17 36	S 58 W		9 20		14 72		85 15		50 60
1706	60	16 30	57 53	1692 37	17 04	S 60 W		8 52		14 76		93 67		65 36
1768	62	17 00	59 29	1751 66	18 13	S 61 W		8 79		15 86		102 46		81 22
1830	62	17 30	59 13	1810 79	18 64	S 62 W		8 75		16 46		111 21		97 68

TYPE OF SURVEY: CALCULATED BY CHECKED BY

DIRECTIONAL DRILLING, INC.

SURVEY DATA SHEET

SHEET NO. 4

JOB NO. B 531

COMPANY L. Barker Jr. ADDRESS

WELL Ferndale #1 FIELD Silverthread COUNTY Ventura STATE California

MEASURED DEPTH	COURSE LENGTH	DEVIATION ANGLE	VERTICAL DEPTH COURSE	VERTICAL DEPTH TOTAL	COURSE DEVIATION	DIRECTION OF DEVIATION	COURSE LATITUDE NORTH	COURSE LATITUDE SOUTH	COURSE DEPARTURE EAST	COURSE DEPARTURE WEST	TOTAL LATITUDE NORTH	TOTAL LATITUDE SOUTH	TOTAL DEPARTURE EAST	TOTAL DEPARTURE WEST
1874	44	18 30	41 73	1852 52	13 96	S 57 W		7 60		11 71		118 81		109 39
1937	63	19 15	59 48	1912 00	20 77	S 50 W		13 35		15 91		132 16		125 30
2016	79	19 45	74 35	1986 35	26 69	S 45 W		18 87		18 87		151 03		144 17
2080	64	20 00	60 14	2046 49	21 89	S 44 W		15 75		15 21		166 78		159 38
2172	92	21 30	85 60	2132 09	33 73	S 45 W		23 85		23 85		190 63		183 23
2265	93	23 15	85 45	2217 54	36 71	S 45 W		25 96		25 96		216 59		209 19
2390	125	26 00	112 35	2329 89	54 80	S 49 W		35 95		41 36		252 54		250 55
2483	93	27 15	82 68	2412 57	42 58	S 51 W		26 80		33 09		279 34		283 64
2577	94	29 15	82 02	2494 59	45 93	S 52 W		28 28		36 19		307 62		319 83
2683	106	30 15	91 56	2586 15	53 40	S 52 W		32 88		42 08		340 50		361 91
2837	154	31 45	130 96	2717 11	81 03	S 50 W		52 09		62 07		392 59		423 98
2994	157	32 30	132 41	2849 52	64 36	S 49 W		55 35		63 67		447 94		487 65
3151	157	33 00	131 68	2981 20	65 50	S 49 W		56 10		64 53		504 04		552 18
3334	183	32 45	153 90	3135 10	99 00	S 48 W		66 24		73 57		570 28		625 75
3450	116	32 45	97 56	3232 66	62 76	S 47 W		42 80		45 90		613 08		671 65
3647	197	33 00	165 22	3397 88	107 29	S 45 W		75 86		75 86		688 94		747 51
3834	187	33 00	156 84	3554 72	101 84	S 45 W		72 01		72 01		760 95		819 52
4017	183	31 30	156 03	3710 75	95 62	S 45 W		67 61		67 61		828 56		887 13
4173	156	30 15	134 75	3845 50	78 59	S 45 W		55 57		55 57		884 13		942 70

TYPE OF SURVEY: CALCULATED BY CHECKED BY

DIRECTIONAL DRILLING, INC.

SURVEY DATA SHEET

SHEET NO. 5

JOB NO. B 531

COMPANY L. Barker Jr. ADDRESS

WELL Ferndale #1 FIELD Silverthread COUNTY Ventura STATE Calif.

MEASURED DEPTH	COURSE LENGTH	DEVIATION ANGLE	VERTICAL DEPTH COURSE	VERTICAL DEPTH TOTAL	COURSE DEVIATION	DIRECTION OF DEVIATION	COURSE LATITUDE NORTH	COURSE LATITUDE SOUTH	COURSE DEPARTURE EAST	COURSE DEPARTURE WEST	TOTAL LATITUDE NORTH	TOTAL LATITUDE SOUTH	TOTAL DEPARTURE EAST	TOTAL DEPARTURE WEST
4361	188	27 45	166 38	4011 88	87 53	S 45 W		61 89		61 89		946 02		1004 59
4484	123	27 30	109 10	4120 98	56 79	S 45 W		40 16		40 16		986 18		1044 75
4671	187	26 00	168 08	4289 06	81 98	S 45 W		57 97		57 97		1044 15		1102 72
4827	156	25 00	141 38	4430 44	65 93	S 44 W		47 42		45 80		1091 57		1148 5_
5044	217	23 00	199 75	4630 19	84 78	S 42 W		63 00		56 73		1154 57		1205 25
5312	268	22 30	247 61	4877 80	102 56	S 40 W		78 56		65 93		1233 13		1271 18
			Closure: 1791.48'		S 45° 12' W									
			Plug Back and Redrill #1											
1100	87	1 30	86 97	1099 28	2 28	S 28 E		2 01	1 07			26 19	26 21	
1107	7	1 30	7 00	1106 28	18	S 28 E		16	08			26 35	26 29	
1123	16	2 45	15 98	1122 26	77	S 19 E		73	25			27 08	26 54	
1186	63	5 15	62 74	1185 00	5 76	S 15 E		5 56	1 49			32 64	28 03	
1249	63	8 15	62 35	1247 35	9 04	S 15 E		8 73	2 34			41 37	30 37	
1312	63	11 45	61 68	1309 03	12 83	S 13 E		12 50	2 89			53 97	33 26	
1367	55	13 15	53 54	1362 57	12 61	S 13 E		12 29	2 84			66 16	36 10	
1430	63	14 45	60 92	1423 49	16 04	S 10 E		15 80	2 78			81 96	38 88	
1526	96	15 15	92 16	1515 65	26 86	S 08 E		26 60	3 74			108 56	42 62	
1620	94	17 45	89 53	1605 18	28 66	S 06 E		28 50	2 99			137 06	45 61	
1714	94	19 15	88 75	1693 93	30 99	S 03 E		30 95	1 62			168 01	47 23	

TYPE OF SURVEY: CALCULATED BY CHECKED BY

DIRECTIONAL DRILLING, INC.

SURVEY DATA SHEET

SHEET NO. 6

JOB NO. B 531

COMPANY L. Barker Jr. ADDRESS

WELL Ferndale #1 FIELD Silverthread COUNTY Ventura STATE Calif.

MEASURED DEPTH	COURSE LENGTH	DEVIATION ANGLE	VERTICAL DEPTH COURSE	VERTICAL DEPTH TOTAL	COURSE DEVIATION	DIRECTION OF DEVIATION	COURSE LATITUDE NORTH	COURSE LATITUDE SOUTH	COURSE DEPARTURE EAST	COURSE DEPARTURE WEST	TOTAL LATITUDE NORTH	TOTAL LATITUDE SOUTH	TOTAL DEPARTURE EAST	TOTAL DEPARTURE WEST
1808	94	21 00	87 76	1781 69	33 69	S 02 E		33 67	1 18			201 68	48 41	
1900	92	23 00	84 69	1866 38	35 94	S 01 E		35 93	63			237 61	49 04	
1994	94	24 45	85 36	1951 74	39 36	S 01 E		39 35	69			276 96	49 73	
2056	62	25 45	55 84	2007 58	26 93	S 01 W		26 92		47		303 88	49 26	
2182	126	29 30	109 67	2117 25	62 04	S 04 W		61 89		4 33		365 77	44 93	
2304	122	34 15	100 85	2218 10	68 66	S 05 W		68 40		5 99		434 17	38 94	
2667	63	36 00	50 97	2269 07	37 03	S 06 W		36 83		3 87		471 00	35 07	
2466	99	38 00	78 01	2347 08	60 95	S 07 W		60 49		7 43		531 49	27 64	
2615	149	38 15	117 01	2464 09	92 25	S 07 W		91 56		11 25		623 05	16 39	
2768	153	39 00	118 90	2582 99	96 28	S 08 W		95 35		13 40		718 40	2 99	
2798	30	39 00	23 31	2606 30	18 88	S 08 W		18 70		2 63		737 10	36	
2994	196	41 30	146 80	2753 10	129 87	S 07 W		128 90		15 83		866 00		15 4
3149	155	41 45	115 65	2868 75	103 21	S 07 W		102 44		12 58		968 44		28 05
3211	62	41 30	46 44	2915 19	41 08	S 07 W		40 77		5 01		1009 21		33 06
3350	139	43 30	100 83	3016 02	95 69	S 05 W		95 33		8 34		1104 54		41 40
3426	76	44 45	53 98	3070 00	53 50	S 04 W		53 37		3 73		1157 91		45 13
3553	127	44 30	90 59	3160 59	89 01	S 03 W		88 89		4 66		1246 80		49 79
3642	89	46 45	60 98	3221 57	64 83	S 03 W		64 74		3 39		1311 54		53 18
3688	46	47 15	31 22	3252 79	33 78	S 03 W		33 73		1 77		1345 27		54 95

TYPE OF SURVEY: CALCULATED BY CHECKED BY

DIRECTIONAL DRILLING, INC.

SURVEY DATA SHEET

SHEET NO. 7

JOB NO. B 531

COMPANY L. Barker Jr. ADDRESS

WELL Ferndale #1 FIELD Silverthread COUNTY Ventura STATE Calif.

MEASURED DEPTH	COURSE LENGTH	DEVIATION ANGLE	VERTICAL DEPTH COURSE	VERTICAL DEPTH TOTAL	COURSE DEVIATION	DIRECTION OF DEVIATION	COURSE LATITUDE NORTH	COURSE LATITUDE SOUTH	COURSE DEPARTURE EAST	COURSE DEPARTURE WEST	TOTAL LATITUDE NORTH	TOTAL LATITUDE SOUTH	TOTAL DEPARTURE EAST	TOTAL DEPARTURE WEST
3771	83	47 30	56 07	3308 86	61 20	S 01 W		61 19		1 07		1406 46		56 02
3792	21	47 30	14 19	3323 05	15 48	SOUTH		15 48				1421 94		56 02
3894	102	47 30	68 91	3391 96	75 20	SOUTH		75 20				1497 14		56 02
3987	93	45 45	64 90	3456 86	66 62	SOUTH		66 62				1563 76		56 02
4080	93	44 15	66 62	3523 48	64 90	SOUTH		64 90				1628 66		56 02
4205	125	43 15	91 05	3614 53	85 65	S 02 E		85 60	2 99			1714 26		53 03
4330	125	48 45	94 70	3709 23	81 60	S 02 E		81 55	2 85			1795 81		50 18
			Closure: 1797.28' S 01° 36'W											
			Plug Back and Redrill #2											
1900	92	23 00	84 69	1866 38	35 94	S 01 E		35 93	63			237 61	49 04	
			Project to 1977											
1977	77	24 30	70 07	1936 45	31 93	S 01 E		31 92	66			269 53	49 60	
2058	81	20 15	75 99	2012 44	28 03	S 02 E		28 01	98			297 54	50 58	
2120	62	20 00	58 26	2070 70	21 20	S 02 E		21 19	74			318 73	51 32	
2214	94	20 00	88 33	2159 03	32 15	SOUTH		32 15				350 88	51 32	
2307	93	19 45	87 53	2246 56	31 42	S 01 E		31 41	55			382 29	51 87	
2401	94	20 00	88 33	2334 89	32 15	SOUTH		32 15				414 44	51 87	
2556	155	20 15	145 42	2480 31	53 65	SOUTH		53 65				468 09	51 87	
2711	155	20 15	145 42	2625 73	53 65	S 01 E		53 64	94			521 73	52 81	

TYPE OF SURVEY: CALCULATED BY CHECKED BY

DIRECTIONAL DRILLING, INC.

SURVEY DATA SHEET

SHEET NO. 8

JOB NO. B531

COMPANY L. Barker Jr. ADDRESS

WELL Ferndale #1 FIELD Silverthread COUNTY Ventura STATE Calif.

MEASURED DEPTH	COURSE LENGTH	DEVIATION ANGLE	VERTICAL DEPTH COURSE	VERTICAL DEPTH TOTAL	COURSE DEVIATION	DIRECTION OF DEVIATION	COURSE LATITUDE NORTH	COURSE LATITUDE SOUTH	COURSE DEPARTURE EAST	COURSE DEPARTURE WEST	TOTAL LATITUDE NORTH	TOTAL LATITUDE SOUTH	TOTAL DEPARTURE EAST	TOTAL DEPARTURE WEST
2793	82	19 45	77 18	2702 91	27 71	SOUTH		27 71				549 44	52 81	
2957	164	19 45	154 36	2857 27	55 42	SOUTH		55 42				604 86	52 81	
3113	156	18 45	147 72	3004 99	50 14	S 01 W		50 13		88		554 99	51 93	
3247	134	19 00	126 70	3131 69	43 63	S 01 W		43 62		75		698 61	51 17	
3404	157	20 30	147 06	3278 75	54 98	S 01 W		54 97		96		753 58	50 21	
3559	155	21 30	144 21	3422 96	56 81	SOUTH		56 81				810 39	50 21	
3676	117	22 00	108 48	3531 44	43 83	SOUTH		43 83				854 22	50 21	
3714	38	22 00	35 23	3566 67	14 23	SOUTH		14 23				868 45	50 21	
3855	141	23 45	129 06	3695 73	56 78	S 01 E		56 77	99			925 22	51 20	
3957	102	23 00	92 44	3788 17	43 11	S 01 E		43 10	75			968 32	51 95	
4120	163	26 15	146 19	3934 36	71 09	S 02 E		72 05	2 52			1040 37	54 47	
4266	146	25 45	131 50	4065 86	63 42	S 01 E		63 41	1 11			1103 78	55 58	
4420	154	24 00	140 68	4206 54	62 63	S 01 E		62 62	1 10			1166 40	56 68	
4705	285	24 00	260 35	4466 89	115 91	SOUTH		115 91				1282 31	56 68	
5046	341	25 30	307 79	4774 68	146 80	SOUTH		146 80				1429 11	56 68	
5265	219	26 00	196 84	4971 52	96 01	SOUTH		96 01				1525 12	56 68	
5514	249	28 00	219 84	5191 36	116 91	S 01 W		116 89		2 05		1642 01	54 63	
5733	219	28 15	192 92	5384 28	103 65	S 01 W		103 63		1 81		1745 64	52 82	
6045	312	30 00	270 19	5654 47	156 00	SOUTH		156 00				1901 64	52 82	

TYPE OF SURVEY: CALCULATED BY CHECKED BY

DIRECTIONAL DRILLING, INC.

SURVEY DATA SHEET

SHEET NO. 9

JOB NO. B 531

COMPANY L. Barker Jr. ADDRESS

WELL Ferndale #1 FIELD Silverthread COUNTY Ventura STATE Calif.

MEASURED DEPTH	COURSE LENGTH	DEVIATION ANGLE	VERTICAL DEPTH COURSE	VERTICAL DEPTH TOTAL	COURSE DEVIATION	DIRECTION OF DEVIATION	COURSE LATITUDE NORTH	COURSE LATITUDE SOUTH	COURSE DEPARTURE EAST	COURSE DEPARTURE WEST	TOTAL LATITUDE NORTH	TOTAL LATITUDE SOUTH	TOTAL DEPARTURE EAST	TOTAL DEPARTURE WEST
6359	314	32 00	266 27	5920 74	166 39	S 01 E		166 36	2 91			2068 00	55 73	
6639	280	33 45	232 82	6153 56	155 57	S 02 E		155 48	5 43			2223 48	61 16	
			Closure: 2213.54'		S 01° 35' E									
			Plug Back and Redrill #3											
1312	63	11 45	61 68	1309 03	12 83	S 13 E		12 50	2 89			53 87	33 26	
			Plug Back to 1318' - Project to 1318'											
1318	6	11 45	5 87	1314 90	1 22	S 13 E		1 19	27			55 06	33 53	
1374	56	8 45	55 55	1370 25	8 52	S 09 E		8 42	1 33			63 48	34 86	
1437	63	7 30	62 46	1432 71	8 22	S 01 E		8 22	14			71 70	35 00	
1529	92	4 15	91 75	1524 46	6 82	S 02 W		6 82		24		78 52	34 76	
1624	95	4 15	94 74	1619 20	7 04	S 04 E		7 02	49			85 54	35 25	
1780	156	4 15	155 58	1774 78	11 56	S 01 W		11 56		20		97 10	35 05	
1998	218	4 45	217 26	1992 04	18 05	S 04 E		18 01	1 26			115 11	36 31	
2246	248	4 30	247 23	2239 27	19 47	S 14 E		18 89	4 71			134 00	41 02	
2464	218	5 30	217 00	2456 27	20 88	S 12 E		20 42	4 34			154 42	45 36	
2687	223	6 15	221 68	2677 95	24 28	S 14 E		23 56	5 87			177 98	51 23	
2992	305	7 30	302 38	2980 33	39 80	S 13 E		38 78	8 96			216 76	60 19	
3255	263	7 30	260 74	3241 07	34 32	S 18 E		32 64	10 60			249 40	70 79	
3497	242	8 30	239 54	3480 41	35 77	S 18 E		34 02	11 05			283 42	81 84	

TYPE OF SURVEY: CALCULATED BY CHECKED BY

DIRECTIONAL DRILLING, INC.

SURVEY DATA SHEET

SHEET NO. 10

JOB NO. B 531

COMPANY L. Barker Jr. ADDRESS

WELL Ferndale #1 FIELD Silverthread COUNTY Ventura STATE Calif.

MEASURED DEPTH	COURSE LENGTH	DEVIATION ANGLE	VERTICAL DEPTH COURSE	VERTICAL DEPTH TOTAL	COURSE DEVIATION	DIRECTION OF DEVIATION	COURSE LATITUDE NORTH	COURSE LATITUDE SOUTH	COURSE DEPARTURE EAST	COURSE DEPARTURE WEST	TOTAL LATITUDE NORTH	TOTAL LATITUDE SOUTH	TOTAL DEPARTURE EAST	TOTAL DEPARTURE WEST
3651	154	8 00	152 51	3632 92	21 44	S 12 E		20 97	4 46			304 39	86 30	
3897	246	8 45	243 15	3876 07	37 42	S 08 E		37 06	5 21			341 45	91 51	
4239	342	9 15	337 55	4213 62	54 96	S 06 E		54 66	5 74			396 11	97 25	
4676	437	10 30	429 70	4643 32	79 62	S 02 E		79 57	2 78			475 68	100 03	
4939	263	11 00	258 16	4901 48	50 18	S 04 E		50 06	3 50			525 74	103 53	
5266	327	12 00	319 84	5221 32	67 98	S 01 E		67 97	1 19			593 71	104 72	
6053	787	14 00	763 63	5984 95	190 38	S 01 W		190 34		3 33		784 05	101 39	
6502	449	14 45	434 18	6419 13	114 32	S 04 W		114 05		7 98		898 10	93 41	
6664	162	17 00	154 92	6574 05	47 37	S 09 W		46 79		7 41		944 89	86 00	
6952	288	25 00	261 01	6835 06	121 71	S 13 W		118 59		27 38		1063 48	58 62	
7155	203	29 45	176 24	7011 30	100 73	S 15 W		97 30		26 07		1160 78	32 55	
7264	109	32 00	92 43	7103 73	57 76	S 18 W		54 94		17 85		1215 72	14 70	
			Closure: 1232.19'		S 0° 41' E									
			Plug Back and Redrill #4											
3897	246	8 45	243 15	3876 07	37 42	S 08 E		37 06	5 21			341 45	91 51	
			Project to 3998'											
3998	101	9 00	99 76	3975 83	15 80	S 07 E		15 68	1 93			357 13	93 44	
4051	53	8 45	52 39	4028 22	8 06	S 08 W		7 98		1 12		365 11	92 32	

TYPE OF SURVEY: CALCULATED BY CHECKED BY

DIRECTIONAL DRILLING, INC.

SURVEY DATA SHEET

SHEET NO. 11

JOB NO. B 531

COMPANY L. Barker Jr. ADDRESS

WELL Ferndale #1 FIELD Silverthread COUNTY Ventura STATE Calif.

MEASURED DEPTH	COURSE LENGTH	DEVIATION ANGLE	VERTICAL DEPTH COURSE	VERTICAL DEPTH TOTAL	COURSE DEVIATION	DIRECTION OF DEVIATION	COURSE LATITUDE NORTH	COURSE LATITUDE SOUTH	COURSE DEPARTURE EAST	COURSE DEPARTURE WEST	TOTAL LATITUDE NORTH	TOTAL LATITUDE SOUTH	TOTAL DEPARTURE EAST	TOTAL DEPARTURE WEST
4114	63	6 30	62 60	4090 92	7 13	S 21 W		6 66		2 56		371 77	89 76	
4176	62	4 30	61 81	4152 63	4 87	S 48 W		3 26		3 62		375 03	86 14	
4238	62	2 00	61 96	4214 59	2 15	S 47 W		1 47		1 58		376 50	84 56	
4294	56	1 30	55 98	4270 57	1 47	SOUTH		1 47				377 97	84 56	
4388	94	1 30	93 97	4364 54	2 46	S 67 E		96	2 26			378 93	86 92	
4575	187	1 30	186 94	4551 48	4 90	S 23 E		4 51	1 91			383 44	88 73	
4970	395	1 30	394 88	4946 36	10 35	S 23 E		9 53	4 04			392 97	92 77	
5093	123	3 00	122 88	5069 19	6 43	S 14 E		6 24	1 56			399 21	94 33	
5141	48	2 45	47 94	5117 13	2 30	S 16 W		2 21		63		401 42	93 70	
5203	62	2 00	61 96	5179 09	2 16	N 85 W	19			2 15		401 23	91 55	
5265	62	4 30	61 81	5240 90	4 87	N 59 W	2 51			4 17		398 72	87 38	
5353	88	7 30	87 24	5328 14	11 48	N 59 W	5 91			9 84		392 81	77 54	
5416	63	10 30	62 04	5390 19	10 94	N 57 W	6 07			9 18		386 74	68 36	
5510	94	13 15	91 50	5481 68	21 54	N 53 W	12 96			17 20		373 78	51 16	
5604	94	17 15	89 77	5571 45	27 87	N 47 W	19 01			20 38		354 77	30 78	
5697	93	23 15	85 45	5656 90	36 71	N 42 W	27 28			24 56		327 49	6 22	
5850	153	25 00	138 66	5795 56	64 66	N 42 W	48 05			43 26		279 44		37 04
6100	250	25 00	226 58	6022 14	105 65	N 44 W	75 99			73 40		203 45		110 44
6325	225	25 00	203 92	6226 06	95 09	N 45 W	67 24			67 24		136 21		177 68

TYPE OF SURVEY: CALCULATED BY CHECKED BY

DIRECTIONAL DRILLING, INC.

SURVEY DATA SHEET

SHEET NO. 12

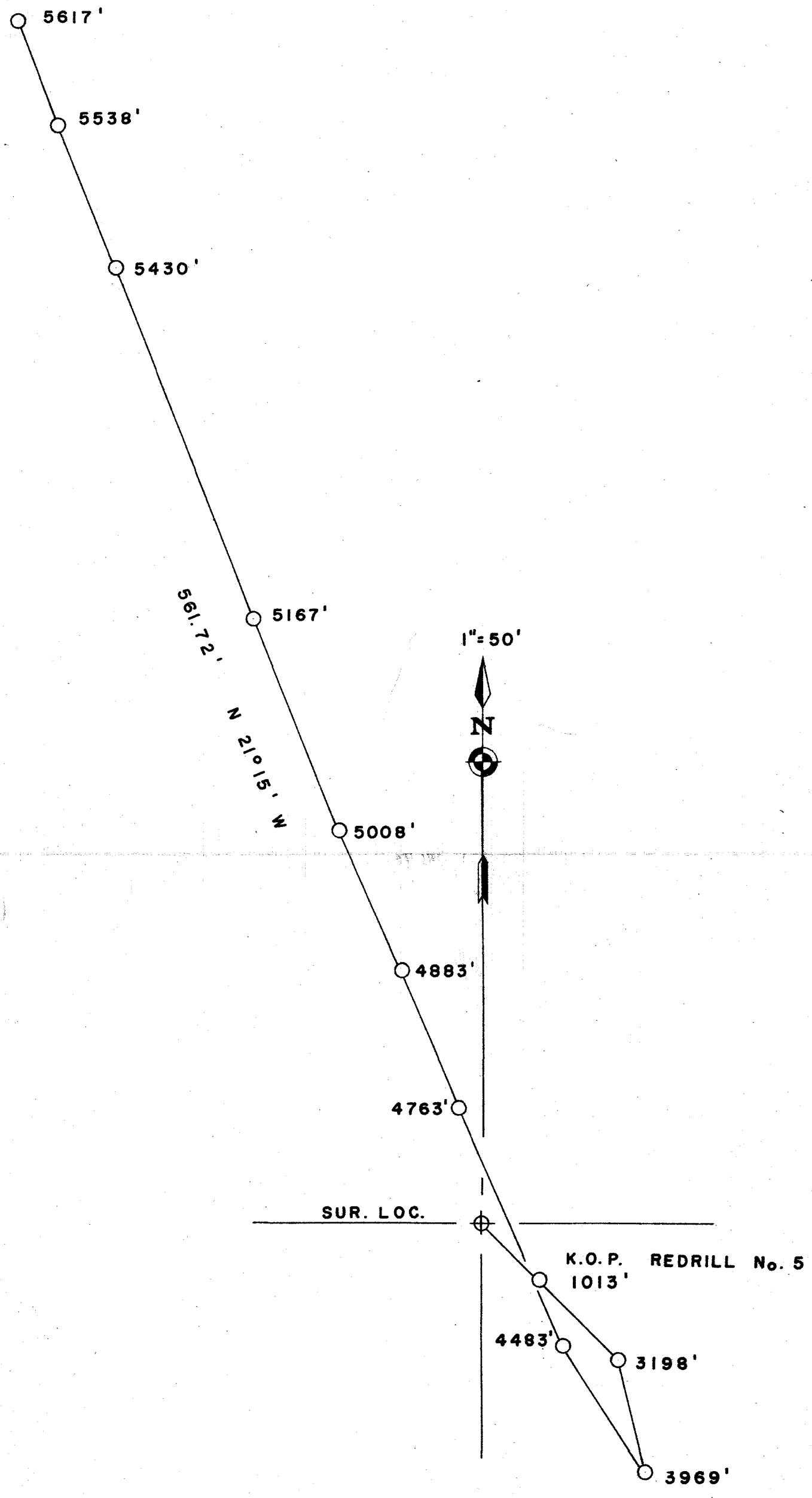
JOB NO. B 531

COMPANY L. Barker Jr. ADDRESS

WELL Ferndale #1 FIELD Silverthread COUNTY Ventura STATE Calif.

MEASURED DEPTH	COURSE LENGTH	DEVIATION ANGLE	VERTICAL DEPTH COURSE	VERTICAL DEPTH TOTAL	COURSE DEVIATION	DIRECTION OF DEVIATION	COURSE LATITUDE NORTH	COURSE LATITUDE SOUTH	COURSE DEPARTURE EAST	COURSE DEPARTURE WEST	TOTAL LATITUDE NORTH	TOTAL LATITUDE SOUTH	TOTAL DEPARTURE EAST	TOTAL DEPARTURE WEST
			Closure: 223.91'		S 52° 31' W									
			Plub Back to 1066 to Redrill #5											

TYPE OF SURVEY: CALCULATED BY CHECKED BY


5617'
5538'
5430'
561.72'
N 21° 15' W
5167'
5008'
4883'
4763'
1"=50'
N
SUR. LOC.
K.O.P. REDRILL No. 5
1013'
4483'
3198'
3969'

WIRE LINE SERVICE
205 Baldwin Ave. Ventura, Calif. 93030
VENTURA 642-7061
LONG BEACH 591-0921

111-20423

SUB-SURFACE DATA

Company Larence Barker Jr. Field Santa Paula Date 2-9-73 Run No.
Well Barker Ferndale #1 Zone Elev. 12
Purpose Gradient after 72 hr shut Status
Total Depth Effect. Depth
Casing Size Depth Liner Size Top Bottom
Perforations 4935-5012
Tubing 2 7/8 to 4875

DIVISION OF OIL AND GAS
RECEIVED
FEB 26 1973
SANTA PAULA, CALIFORNIA

Company Larence Barker Jr.
Well Barker Ferndale #1

Date		Date	
Arrive	A P	Arrive	A P
Leave	A P	Leave	A P
Inst. No.	10429-N	Size	0-3100
Inst. No.		Size	
Clock No.	11335	Hrs.	3
Clock No.		Hrs.	
Stylus Marked	4:40 PM		A P
Pressure On	4:45 PM		A P
Depth	5012	Zero	THF
At Depth Date		Time	A P
Off Depth Date		Time	A P
Shut In Date		Time	A P
Start Press Tbg.	1065	Csg.	#
Final Press Tbg.	1065	Csg.	#
Pick-up		Temp.	145 F

OBSERVATIONS

Stabilization Period - Hrs.	
Gross Oil Rate - B/D	
Net Oil Rate - B/D	
Formation Gas MCF/D	
Formation Gas - Oil Ratio CFT/BBL	
Circulated Gas MCF/D	
Oil Dry Gravity - °A.P.I.	
Casinghead Pressure - PSIG	
Tubinghead Pressure - PSIG	
Casing Fluid Level - Ft.	

TIME	DEPTH	SCALE	PSI or °F	TIME	DEPTH	SCALE	PSI or °F
4:45/4:50	0	.679	1068	/	500		
4:58/5:01	500	.693	1090	/	500	.044	22
5:03/5:06	1000	.735	1157	/	500	.134	67
5:08/5:11	1500	.850	1340	/	500	.365	183
5:13/5:16	2000	.965	1522	/	500	.364	182
5:17/5:20	2500	1.075	1697	/	500	.350	175
5:22/5:25	3000	1.186	1873	/	500	.352	176
5:26/5:29	3500	1.296	2048	/	500	.350	175
5:32/5:35	4000	1.402	2218	/	500	.340	170
5:37/5:40	4500	1.509	2389	/	500	.342	171
5:42/5:45	5012	1.604	2542	/	512	.299	153
/				/			
/				/			
/				/			
/				/			
/				/			
/				/			
/				/			
/				/			
/				/			
/				/			
/				/			
/				/			
/				/			
/				/			
/				/			
/				/			
/				/			

COMMENTS Pump Shoe @ 4804

By

WIRE LINE SERVICE

111-20423 205 Baldwin Ave. Ventura, Calif. 93030

VENTURA 642-7061
LONG BEACH 591-0921

SUB-SURFACE DATA

Company W. S. McBurnie Field Date 2-5-73 Run No.
Well Barker-Ferndale Jr. #1 Zone Elev. 12'
Purpose Gradient while Flowing approx 40 b/d Status Flowing
Total Depth 6358 Effect. Depth
Casing Size Depth Liner Size Top Bottom
Perforations 4932—5012
Tubing End of tubing 4875 2 7/8" Gradient Ry/Ex.

Company W. S. McBurnie
Well Barker Ferndale Jr. #1

Date		Date	
Arrive	A P	Arrive	A P
Leave	A P	Leave	A P
Inst.	No. 10429-N Size 1¼		
	No. Size		
Clock	No. 11335 Hrs. 3		
	No. Hrs.		
Stylus Marked	1025		A P
Pressure On	1030		A P
Depth	5012 Zero THF		
At Depth	Date Time		A P
Off Depth	Date Time		A P
Shut In	Date Time		A P
Start Press	Tbg. Csg.		#
Final Press	Tbg. Csg.		#
Pick-up	Temp. 145		F

OBSERVATIONS

Stabilization Period - Hrs.	
Gross Oil Rate - B/D	
Net Oil Rate - B/D	
Formation Gas MCF/D	
Formation Gas - Oil Ratio CFT/BBL	
Circulated Gas MCF/D	
Oil Dry Gravity - °A.P.I.	
Casinghead Pressure - PSIG	
Tubinghead Pressure - PSIG	
Casing Fluid Level - Ft.	

There are no water gradients in the hole. There are 5 oil gradients in the hole.
The well is flowing oil & gas both and is overloading all fluids from above 5012'

TIME	DEPTH	SCALE	PSI or °F	TIME	DEPTH	SCALE	PSI or °F
1035/1045	0	.032	50	/	.1		
1047/1050	212	.058	91	/	.194		
1053/1056	412	.088	138	/	.235		
1057/1100	612	.120	188	/	.25		
1102/1105	812	.140	219	/	.155		
1107/1110	1012	.149	233	/	.070		
1111/1114	1212	.157	245	/	.060		
1116/1119	1412	.164	256	/	.055		
1121/1124	1612	.164	256	/	0		
1125/1128	1812	.167	261	/	.025		
1130/1133	2012	.170	266	/	.025		
1134/1137	2212	.176	275	/	.045		
1138/1141	2412	.183	286	/	.055		
1142/1145	2612	.193	302	/	.080		
1147/1150	2812	.207	323	/	.105		
1152/1155	3012	.217	339	/	.060		
1156/1159	3212	.226	353	/	.070		
1201/1204	3412	.228	356	/			
1206/1209	3612	.234	366	/			
1211/1214	3812	.241	377	/			
1216/1219	4012	.250	391	/			
1221/1224	4212	.265	414	/			
1226/1229	4412	.277	433	/		Gradient	
1231/1234	4612	.295	461	/			
1236/1239	4812	.314	491	/		.092	
1241/1244	5012	.341	533	/	.21		
/				/			
/				/			
/				/			

COMMENTS Pump Shoe @ 4804 Tagged Bottom @ 5129' 3 hr clock 1½ minute stops

By Bill Wallis

SEALAND DIRECTIONAL DRILLING CO.

RD #6

COMPANY ARCO PETROLEUM CORP. Page # 1 RD.

WELL Arco Barker Ferndale # 1 LOCATION Upper Ojai DATE 12 / 74

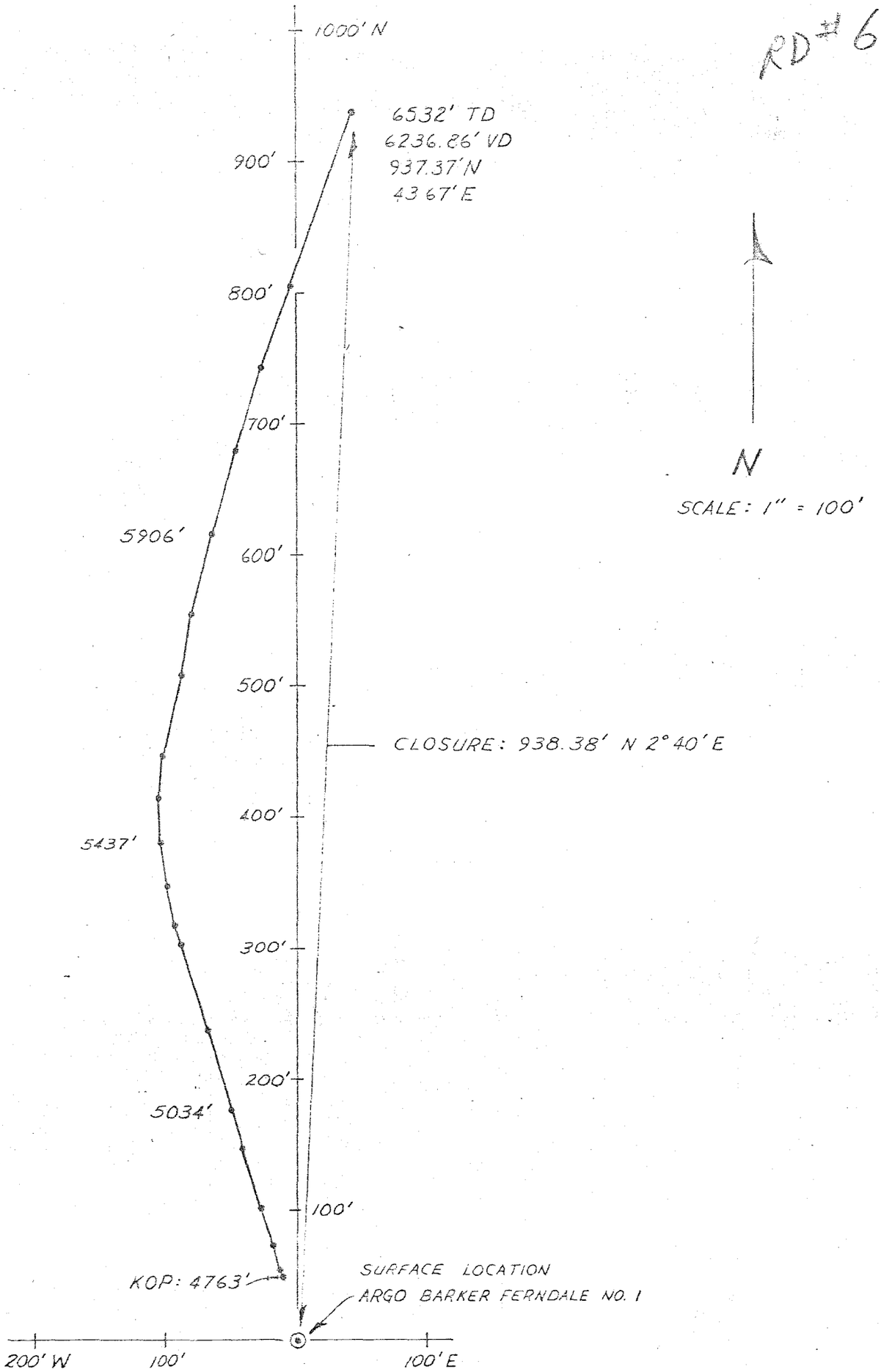
	Measured Depth	Drift Angle	Vertical Depth	Drift Feet	Drift Direction	COORDINATES North	South	East	West	REMARKS
Kop.	4763 00	29°15'	4728 17		N 22°W	50 22			10 14	
1	4775 00	30°30'	4738 51	6 09	N 22°W	55 87			12 42	
2	4810 00	29°45'	4768 90	17 37	N 17°W	72 48			17 50	
3	4872 00	29°00'	4823 13	30 06	N 17°W	101 23			26 29	
4	4972 00	29°30'	4910 17	49 24	N 17°W	148 32			40 69	
5	5034 00	30°00'	4963 86	31 00	N 17°W	177 97			49 75	
6	5159 00	30°30'	5071 56	63 44	N 17°W	238 64			68 30	
7	5285 00	32°30'	5177 83	67 70	N 18°W	303 02			89 22	
8	5314 00	32°15'	5202 36	15 47	N 15°W	317 96			93 22	
9	5375 00	31°30'	5254 37	31 87	N 11°W	349 24	31.28 W		99 30	6.08 W
10	5437 00	31°30'	5307 23	32 39	N 07°W	381 39			103 25	
11	5500 00	32°00'	5360 66	33 38	N 03°W	414 72			105 00	
12	5564 00	31°30'	5415 23	33 44	N 05°E	448 03			102 09	
13	5688 00	30°30'	5502 07	62 93	N 13°E	509 35			87 93	
14	5780 00	30°15'	5601 54	46 35	N 10° E	555 00			79 88	
15	5906 00	30°45'	5709 83	64 42	N 14°E	617 51			64 30	
16	6027 00	32°30'	5811 88	65 01	N 15°E	680 30			47 47	
17	6150 00	32°00'	5916 19	65 18	N 18°E	742 29			27 33	
18	6274 00	32°45'	6020 48	67 08	N 20°E	805 32			4 39	
19	6532 00	33°00'	6236 86	140 52	N 20°E	937 37		43 67		

DIVISION OF OIL AND GAS
RECEIVED
SEP - 8 1977
SANTA PAULA, CALIFORNIA

Closure:
938.38' N 2°40' E

19.39
@N 23W

RD # 6



ARGO PETROLEUM CORP.

ARGO BARKER FERNDALE NO. 1

SEALAND DIRECTIONAL DRILLING COMPANY

OPERATOR ARCO PETROLEUM
LSE & NO Barker Ferndale 1
MAP 202

	(1)	(2)	(3)	(4)	(5)	(6)
INTENTION	DRILL	SUPP TO (1)	REDRILL SUPP TO (1)	DEEPEN	SUPP TO (4)	REWORK
NOTICE DATED	6-29-72	7-26-72	10-2-72	12-12-74	12-18-74	3-21-75
P-REPORT NUMBER	272-193	272-217	272-281	274-464	274-464	275-106
CHECKED BY/DATE						
MAP LETTER DATED	7-8-72		N	N/C	N/C	N/C
SYMBOL	⊙	⊙	⊙	⊙	⊙	⊙

	(1) REC'D	(1) NEED	(2) REC'D	(2) NEED	(3) REC'D	(3) NEED	(4) REC'D	(4) NEED	(5) REC'D	(5) NEED	(6) REC'D	(6) NEED
NOTICE	6-30-72		7-26-72		10-10-72		12-16-74		12-20-74		3-24-75	
HISTORY			→		2-26-73		→		5-8-75		5-8-75	
SUMMARY	→		→		2-26-73		→		5-8-75		5-8-75	
IES/ELECTRIC LOG	→		→		X	OK						✓
DIRECTIONAL SURV	→		→		2-26-73						9-8-77	✓
CORE/SWS DESCRIP	→		→		2-26-73							✓
OTHER					WSO 2-22-73						MHA BOND DENSITY	X X
RECORDS COMPLETE	①		①		①						MHA 5/28/75	

ENGINEERING CHECK

T-REPORTS _____
OPERATOR'S NAME _____
WELL DESIGNATION _____
LOC & ELEV _____
SIGNATURE _____
SURFACE INSPECTION _____
FINAL LETTER OK _____

CLERICAL CHECK

POSTED TO 121 9-27-72
170 MAILED _____
FINAL LETTER MAILED _____
RELEASED BOND 7-23-73

REMARKS: * IES OF R/D #3 9-27-72. Orig Hole, 1ST R/D 2ND R/D, 3RD R/D, 4TH R/D & 5TH R/D ALL RECEIVED 2-26-73

JH/Cahill 9/6/77 requested Hist. & pg & pl 3/21/75 - Received on 5/8/75

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Report on Operations

No. T 277-175

Mr. Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, CA 90024

Santa Paula Calif.
August 2, 1977

DEAR SIR:

Operations at well No. "Barker-Ferndale" 1, API No. 111-20423, Sec. 16, T. 4N, R. 21W, S.B., B & M. Ojai Field, in Ventura County, were witnessed on July 21, 1977. Mr. Ms. Toni M. Galloway, representative of the supervisor was present from 0600 to 0800. There were also present Mr. Earl Waite, pumper

Present condition of well: 10 3/4" cem. 869'; 7" cem. 4770'; 4 1/2" cem. 4610-6510', perf. 5778', WSO, perf. 5778-6440'(at intv). T.D. 6639' (3rd redrill).

The operations were performed for the purpose of demonstrating a water shut-off on the 4 1/2" casing by means of a production test.

DECISION:

THE 4 1/2" SHUT-OFF AT 5778' IS APPROVED.

M. G. MEFFERD
Acting JOHN F. MATTHEWS, Jr.
State Oil and Gas Supervisor

By John L Hendricks Deputy

OG109 (2-75—OSP—20M)

30986-705 2-75 20M ① ◇ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 277-113

Mr. Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, Calif. 90024

Santa Paula, Calif.
March 29, 1977

DEAR SIR: (111-20423)

Your perforate and sand frac proposal to Well No. "Barker-Ferndale" 1, Section 16, T. 4N, R. 21W, S.B. B. & M., Ojai Field, Ventura County, dated 2/14/77, received 3/24/77, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT THE BLOWOUT PREVENTION AND AUXILIARY EQUIPMENT USED DURING FRACING OPERATIONS SHALL HAVE A WORKING PRESSURE OF 5000 PSI.

Blanket Bond
MD:B

M. G. MEFFERD (acting)
JOHN F. MATTHEWS, Jr., State Oil and Gas Supervisor

By John L. Hardison, Deputy

25476-705 7-74 50M ①D OSP
OG 111

DIVISION OF OIL AND GAS
RECEIVED
MAR 2 1977
SANTA PAULA, CALIFORNIA

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
BB	✓	✓

DIVISION OF OIL AND GAS)

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well No. ABF #1 "Barber-Ferndale" 1, API No. 111-20423, Sec. 16, T. 4N, R. 21W, S.B. B. & M., Silverthread Field, Ventura County.

The present condition of the well is as follows:

1. Total depth. 6532'.

2. Complete casing record, including plugs and perforations:

PLUG: 6527'

CASING: 7", 20# & 23#, K-55 cmt @ 4770'.
4½", 11.6#, K-55 cmt @ 6527', top @ 4610'.

PERFS: 6440, 6432, 6422, 6413, 6405, 6315, 6295, 6270, 6260, 6250, 6227, 6217, 6207, 6070, 6027, 6012, 5960, 5950, 5940, 5932, 5912, w/2 .38" JHPF 5869, 5778 w/3 .38" JHPF 5269, 5006 w/4 ½" JHPF squeezed

3. Present producing zone name Upper Miocene Zone in which well is to be recompleted Upper Miocene

4. Present zone pressure 1700 New zone pressure 1700

5. Last produced Current (Date) | 30 (Oil, B/D) | 1 (Water, B/D) | 24 (Gas, Mcf/D)

or

6. Last injected _____ (Date) | _____ (Water, B/D) | _____ (Gas, Mcf) | _____ (Surface pressure, psig.)

The proposed work is as follows:

1. Place temporary bridge plug @ 5400'.
2. Perforate selected intervals 5317-4894'.
3. Sand frac for completion.
4. Return well to production from interval 5317-4894'.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 940 East Santa Clara (Street)
Ventura, CA. 93001 (City) (State) (Zip)
Telephone Number (805) 648-2514

ARGO PETROLEUM CORPORATION (Name of Operator)
By C. Rosado (Name) 2/14/77 (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

FORM 107 (REV. 1-73)

10340-705 1-73 15M ② OSP

Unapproved Copy BXW 10-6-75

Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] OTHER — SINGLE ZONE [X] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: William K. Barker

3. ADDRESS OF OPERATOR: 1901 Avenue of the Stars, Suite 675, Los Angeles, CA. 90067

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 950 S. & 2750' E. from NW corner Sec. 22, T. 4N. R. 19W.
At proposed prod. zone: 990 S & 3630' E. from NW corner Sec. 22, T. 4 N. R. 19 W.

5. LEASE DESIGNATION AND SERIAL NO.: R 4847

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: none

7. UNIT AGREEMENT NAME: none

8. FARM OR LEASE NAME: U. S.

9. WELL NO.: 1

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 22, T. 4 N. R. 19W.

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 3-1/2 miles west of Piru, California

12. COUNTY OR PARISH: Ventura

13. STATE: Calif.

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 370'

16. NO. OF ACRES IN LEASE: 120

17. NO. OF ACRES ASSIGNED TO THIS WELL: 20

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: 1900'

19. PROPOSED DEPTH: 3000

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 2050 Ground

22. APPROX. DATE WORK WILL START*: November 25, 1975

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4	9-5/8	36#	500	to surface
7-7/8	5-1/2	15.5#	3000	500' above shoe

1. Build 2000' of road and location; construct cellar and set 20' of 12" conductor
2. Drill 12-1/4" hole to 500' and set 500' of 9-5/8" surface pipe; cement to surface
3. Directional drill to 3000' as directed above to approximately 3000'
4. Run E-logs
5. Set approximately 3000' of 5-1/2" casing with cement 100' above top of oil zone
6. Gun perforate (2) 3/8" holes at 10' intervals and fract in stages with 20# oil and sand fract as recommended
7. Run 2-1/2" tubing and rods
8. Place on production test.

DIVISION OF OIL AND GAS
RECEIVED
OCT 30 1975
SANTA PAULA, CALIFORNIA

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED _____ TITLE Operator DATE 9-29-75

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY D. F. Russell TITLE District Engineer DATE October 28, 1975

CONDITIONS OF APPROVAL, IF ANY:

SEE ATTACHED CONDITIONS AND REQUIREMENTS

cc: DOG, Santa Paula
District Geologist, L.A.
BLM, Sacramento/ thru L.A
Don Sperling, Ventura, CA

*See Instructions On Reverse Side

GEOLOGICAL SURVEY
RECEIVED
OCT 6 1975
BAKERSFIELD

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 275-106

Mr. Dr. Norris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, California 90024

Santa Paula, Calif.
March 26, 1975

DEAR SIR:

Your proposal to alter casing Well No. "Barker-Ferndale" 1 (111-20423),
Section 16, T. 4N., R. 21W., S.B. B. & M., Ojai Field, Ventura County,
dated 3/21/75, received 3/24/75, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment of at least 4000 psi working rating shall be installed on the tubing and equipment of 2000 psi working pressure installed on the 3 1/2" to 7" annular space. This equipment shall be maintained in working condition during the fracturing operations.
2. THIS DIVISION SHALL BE NOTIFIED TO WITNESS:
   a. The installed blowout prevention equipment prior to fracturing operations.
   b. A production test within 30 days after the frac oil has been recovered.

NOTE: A COPY OF THIS APPROVAL SHALL BE POSTED AT THE WELL SITE PRIOR TO COMMENCING OPERATIONS.

Blanket Bond
ALL:b

JOHN F. MATTHEWS, JR., State Oil and Gas Supervisor

By [signature], Deputy

25476-705 7-74 50M ①D OSP
OG 111

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS RECEIVED
MAR 24 1975
SANTA PAULA, CALIFORNIA

DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

Chevron Corp

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
Bb	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well No. ARGO-BARKER FERNDALE #1 R/D 6, API No. 111-20423, Sec. 16, T. 4N, R. 21W, S.B. B. & M., Silverthread Field, Ventura County.

The present condition of the well is as follows:

1. Total depth. 6527'

2. Complete casing record, including plugs and perforations:

   7", 20# & 23#, K-55 cemented at 4780'.

   4½", 11.6#, K-55 cemented at 6527', top liner at 4610'.

   PERFS: 2 JHPF at each of following intervals: 6207', 6217', 6227', 6250', 6260', 6270', 6295', 6305', 6315', 6405', 6413', 6422', 6432', 6440' (Tot. of 28 holes) Also 5006', & 5269' squeezed with 100 sx. and pressure tested to 2500 psi.

3. Present producing zone name Miocene Zone in which well is to be recompleted Miocene

4. Present zone pressure 2500 psi New zone pressure 2500 psi

5. Last produced 3/16/75 (Date) | 59 (Oil, B/D) | -0- (Water, B/D) | 31 (Gas, Mcf/D)

   or

6. Last injected --- (Date) | --- (Water, B/D) | --- (Gas, Mcf) | --- (Surface pressure, psig.)

The proposed work is as follows:

1. Set retainer at 6150'.
2. Perforate total of 25 holes in intervals: 6070',6027', 6012', 5960', 5950', 5940', 5932', 5869', 5778'.
3. Set full bore packer at 5400'.
4. Frac down 3½" tubing with water.
5. Clean out to retainer at 6150'.
6. Place well on production and test.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 940 East Santa Clara (Street)
Ventura, California 93001 (City) (State) (Zip)
Telephone Number (805) 648-2514

ARGO PETROLEUM CORPORATION (Name of Operator)
By Harry Hull (Name) 3/21/75 (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

10940-705 1-73 15M ⓖ OSP

FORM 109

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Report on Operations

No. T 275-58

Mr. Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, California 90024

Santa Paula, Calif.
February 6, 1975

DEAR SIR:

Operations at well No. "Barker-Ferndale" 1, API No. 111-20423, Sec. 16, T. 4N, R. 21W, S.B., B & M. Ojai Field, in Ventura County, were witnessed on Jan. 6, 1975. Mr. L. Bright, representative of the supervisor was present from 1230 to 1430. There were also present Mr. J. Johns, foreman

Present condition of well: 10 3/4" cem. 869', 7" cem. 5452', milled section 4770-4810', 4 1/2" cem. 4610-6527', c.p. 5006' and 5269'. T.D. (1st hole) 5312'. T.D.(2nd hole) 4730'. T.D. (3rd hole) 6639'. T.D. (4th hole) 7264'. T.D. (5th hole) 6345'. T.D.(6th hole) 6461'. T.D. (present hole) 6532'.

The operations were performed for the purpose of demonstrating that no fluid has access to the well from between the 7" and 4 1/2" casings.

DECISION:

THE OPERATIONS AS REPORTED AND WITNESSED ARE APPROVED AS INDICATING THAT NO FLUID HAS ACCESS TO THE WELL FROM BETWEEN THE 7" AND 4 1/2" CASINGS.

b
cc: Harry Hull

3-3-75 Bob Berry -
Many oily locations
Drilling mud - bulk on ground
Called Harry Hull 3/3/75
3/3/75 Hull crews working today (1600 hrs)

JOHN F. MATTHEWS, JR.
State Oil and Gas Supervisor

By [signature] Deputy

FORM 109 (REV. 1-73)

10342-705 1-73 22M © OSP

FORM 109

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Report on Operations

No. T 275-28

Mr. Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, California 90024

Santa Paula, Calif.
January 14, 1975

DEAR SIR:

Operations at well No. "Barker-Ferndale" 1, API No. 111-20423, Sec. 16, T. 4N, R. 21W, S.B. B & M. Ojai Field, in Ventura County, were witnessed on Dec. 14, 1974. Mr. P. R. Wylie, representative of the supervisor was present from 1130 to 1230. There were also present Mr. B. Davis, foreman

Present condition of well: No change to the casing record since Report No. T273-163.

The operations were performed for the purpose of inspecting and testing the blowout prevention equipment and installation.

DECISION:

THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

b
cc: Harry Hull

JOHN F. MATTHEWS, JR.
State Oil and Gas Supervisor

By [signature] Deputy

FORM 109 (REV. 1-73)

10942-705 1-73 22M ② OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 274-464

MX Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, California 90024

Santa Paula, Calif.
December 20, 1974

DEAR SIR:

Your supplementary proposal to deepen (111-20423) Well No. "Barker-Ferndale" 1, Section 16, T. 4N, R. 21W, S.B.B. & M., Ojai Field, Ventura County, dated 12/18/74, received 12/20/74, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT IN ALL OTHER RESPECTS THE WELL SHALL BE DRILLED IN ACCORDANCE WITH THE PROVISIONS SET FORTH IN OUR REPORT NO. 274-460 DATED DECEMBER 18, 1974.

Harry Hull / DOGR 1/2/75

Window 4770 - 4810
4½" csm. 4610 - 6527 (blank)
Will make Lap test. - Dir to witness
Will sand pack - OK to take prod test for WSO

Blanket Bond
ALL:B
cc: Harry Hull

JOHN F. MATTHEWS, JR., State Oil and Gas Supervisor

By LOC Rutgers, Deputy

25476-705 7-74 50M ①D OSP
OG 111

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DEC 20 1974

SUPPLEMENTARY NOTICE

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
bb	✓	✓

DIVISION OF OIL AND GAS

Ventura, Calif.

A notice to you dated December 12, 19 74, stating the intention to

deepen (Drill, rework, abandon), Well No. ~~ARGO~~-BARKER-FERNDALE #1, API No. _____,

Sec. 16, T. 4N, R. 21W, S.B. B. & M., Silverthread Field,

Ventura County, should be amended because of changed conditions.

The present condition of the well is as follows:

Total depth Previously submitted

Complete casing record including plugs and perforations: Previously submitted

We now propose

Plug back to 4850'±, mill a window in the 7" casing from 4770'-4810' and drill ahead to an estimated total depth of 6200'.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 940 East Santa Clara (Street)

Ventura, California 93001 (City) (State) (Zip)

Telephone Number (805) 648-2514

BLANKET BOND

ARGO PETROLEUM CORPORATION (Name of Operator)

By Ralph Hall 12/18/74 (Name) (Date)

Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 274-460

Mr. Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, California 90024

Santa Paula, Calif.
December 18, 1974

DEAR SIR:

Your proposal to deepening Well No. (111-20423) "Barker-Ferndale" 1, Section 16, T. 4N, R. 21W, S.B.B. & M., Ojai Field, Ventura County, dated 12/12/74, received 12/16/74, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. The drilling fluid used shall be of a quality and in sufficient quantity to control all subsurface conditions in order to prevent blowouts. NO CONTAMINANTS OR TOXIC MATERIAL SHALL BE USED IN ANY DRILLING FLUID THAT IS TO BE PLACED IN AN UNLINED SUMP.
2. Blowout prevention equipment, at least of the Division of Oil and Gas Class III rating, shall be installed and maintained in operating condition at all times.
3. Blowout-prevention practice drills shall be conducted at least weekly for each crew and recorded in the log book.
4. THIS DIVISION SHALL BE CONSULTED BEFORE running any additional casing, or placing any plugs in the hole. Additional requirements may be specified at that time.
5. THIS DIVISION SHALL BE NOTIFIED TO WITNESS A PRESSURE TEST OF THE BLOWOUT PREVENTION EQUIPMENT BEFORE DRILLING OUT OF THE SHOE OF THE 7" CASING.

NOTE: A COPY OF THIS APPROVAL SHALL BE POSTED AT THE WELL SITE PRIOR TO COMMENCING OPERATIONS.

Blanket Bond
ALL:b

cc: Harry Hull

JOHN F. MATTHEWS, JR., State Oil and Gas Supervisor

By [signature], Deputy

25476-705 7-74 50M (1)D OSP
OG 111

FORM 107

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS
RECEIVED
DEC 16 1974
SANTA PAULA, CALIFORNIA

DIVISION OF OIL AND GAS

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given before work begins; one copy only

Ventura Calif. December 12 1974

DIVISION OF OIL AND GAS

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of deepening, ~~redrilling, plugging or altering casing in~~ Well No. ~~Barge~~ - Barker-Ferndale #1 ~~R/D #5~~

(Cross out unnecessary words)

, Sec. 16, T. 4N, R. 21 W, SB B. & M.

Silverthread Field, Ventura County.

The present condition of the well is as follows:

1. Total depth. R/D # 5 5641

2. Complete casing record, including plugs:

10 3/4" cmt. 869 Barker-Ferndale Total Depth 5312' Plug 1069
R/D #1 Total Depth 4330' Plug 1978
R/D #2 Total Depth 6639' Plug 1320
R/D #3 Total Depth 7264' Plug 3998
R/D #4 Total Depth 6345' Plug 1066
R/D #5 Total Depth 5461'
7" csg. cmt. 5452
perfs. 4932-56 & 4998-5012
Now Shut-In

3. Last produced. No production in 1974 (Date) (Oil, B/D) (Water, B/D) (Gas Mcf/D)

The proposed work is as follows:

Deepen well approximately 500 ft.

MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121
			B.B	✓	✓

940 E. Santa Clara St.
Ventura, Calif (Address)
648-2514
(Telephone No.)

ARGO PETROLEUM CORPORATION
(Name of Operator)
By Harry Hull

24226-705 8-68 15M OSP

April 3, 1973

Mr. Jack E. Grisham
Grisham, Winston, Vandenberg,
Nott & Conway
10th Floor, Jergins Trust Building
120 East Ocean Blvd
Long Beach, California 90802

Dear Mr. Grisham:

In reply to your letter of April 2nd the "Barker-Ferndale" 1 well is approximately 5500 feet deep. The Public Resources Code does not permit us to release production information on any operator's well without his written consent. However, the Scouting Service (Munger Oil-O-Gram, 3/30/73) reports the well as flowing 16 to 20 barrels per day of 28-degree gravity clean oil.

As of this date we have no application on file for the drilling of another well on this property, nor do we know of the operators plans concerning the property.

Sincerely,

D. E. Ritzius
Deputy Supervisor
a

FORM 109

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Report on Operations

No. T 273-163

Mr. Lawrence Barker, Jr.
1 Maritime Plaza
Alcoa Building, Suite 2145
San Francisco, California 94111

Santa Paula Calif.
March 20, 1973

DEAR SIR:

Operations at well No. "Barker-Ferndale" 1, API No. (111-20423), Sec. 16, T. 4N, R. 21W, S.B. B & M. Ojai Field, in Ventura County, were witnessed on Feb. 27, 1973. Mr. Larry Enright, engineer representative of the supervisor was present from 0800 to 0900. There were also present Glen Anlauf, contract operator

Present condition of well: 10 3/4" cem. 869'; 7" cem. 5452', perf. 4932-4956' and 4998-5012'. T.D. (present hole) 5641'. T.D. (1st hole) 5342', T.D. (2nd hole) 4330' T.D. (3rd hole) 6689', T.D. (4th hole) 7264', T.D. (5th hole) 6345'.

The operations were performed for the purpose of testing the 7" shut-off by means of a production test.

DECISION:

THE 7" SHUT-OFF AT 4932' IS APPROVED.

a

cc: W. S McBurnie

JOHN F. MATTHEWS, JR.
State Oil and Gas Supervisor

By [signature] Deputy

10342-705 1-73 22M ② OSP

FORM 109

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Report on Operations

No. T 272-288

Mr. Lawrence Barker, Jr.
1 Maritime Plaza
Alcoa Building, Suite 2145
San Francisco, California 94111

Santa Paula Calif.
October 10, 1972

DEAR SIR: (111-20423)

Operations at well No. "Barker-Ferndale" 1, Sec. 16, T. 4N, R. 21W, S.B. B & M. Ojai Field, in Ventura County, were witnessed on Oct. 3, 1972. Mr. P R Wygle, engineer, representative of the supervisor was present from 0300 to 0500. There were also present R. Collins, contract drilling foreman

Present condition of well: 10 3/4" cem. 910'. T.D. (pres hole) 6345'. Plugged with cem. 5110-4736'. T.D. (1st hole) 5342'. T.D. (2nd hole) 4330'. T.D. (3rd hole) 6689'. T.D. (4th hole) 7264'.

The operations were performed for the purpose of witnessing the location and hardness of a cement plug placed from 5110' to 4736' in the process of redrilling.

Mr. _____ reported:

THE LOCATION AND HARDNESS OF THE CEMENT PLUG AT 4736' ARE APPROVED.

a
cc: W. S. McBurnie

JOHN F. MATTHEWS, JR.
State Oil and Gas Supervisor

By L. O. Pitzinger Deputy

59471-705 1-72 20M ② OSP

FORM 111

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 272-281

Mr. Lawrence Barker, Jr.
1 Maritime Plaza
Alcoa Building, Suite 2145
San Francisco, California 94111

Santa Paula Calif.
October 10, 1972

DEAR SIR:

Your Supplementary proposal to drill (111-20423) Well No. "Barker-Ferndale" 1, Section 16 T 4N R. 24W S.B. B. & M., Ojai Field, Ventura County, dated 10/2/72, received 10/10/72, has been examined in conjunction with records filed in this office.

NOTE: 10 3/4" cem. 910'; T.D. (orig hole) 5342'; T.D (2nd R/D) 6689'.

THE PROPOSAL IS APPROVED PROVIDED THAT in all other respects the well shall be redrilled in accordance with the provisions set forth in our Report No. P272-217, dated August 1, 1972.

Bond No. 1859709
Dated: 6/19/72
ALL:a
cc: W. S. McBurnie

JOHN F. MATTHEWS, JR., State Oil and Gas Supervisor

By D. G. Pietzsch, Deputy

87625-705 11-71 35M ⓑ OSP

FORM 123

DIVISION OF OIL AND GAS
RECEIVED
OCT 10 1972
SANTA PAULA, CALIFORNIA

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Supplementary Notice

Bakersfield Calif. October 2 19 72

DIVISION OF OIL AND GAS

Santa Paula Calif.

A notice to you dated July 26, 19 72, stating the intention to

drill (Drill, deepen, redrill, abandon) well No. Barker - Ferndale No. 1,

Sec. 16, T. 4 N., R. 21 W., S. B. B & M Ojai Field,

Ventura County, should be amended because of changed conditions.

The present condition of the well is as follows:

Total depth Orig. hole 5312', 1st R/D 4330', 2nd R/D 6,639', 3rd R/D 7264', 4th R/D 6345'.

Complete casing record including plugs.

(1) 10-3/4" 32.75# H casing cemented at 869'.

(2) Orig. Hole 9-7/8" hole drilled to 5312'. Plugged with cement 1186'-1107'.
1st Redrill 9-7/8" hole drilled 1107' to 4330'. Plugged w/cement 2028'-1978'.
2nd Redrill 9-7/8" hole drilled 1978' to 6639'. Plugged w/cement 1371'-1320'.
3rd Redrill 9-7/8" hole drilled 1320' to 7264'. Plugged w/cement 5360'-5017', 4285'-3998'.
4th Redrill 9-7/8" hole drilled 3998'-6345'. Plugged w/cement 5110'-4736, 1200'-1054'.

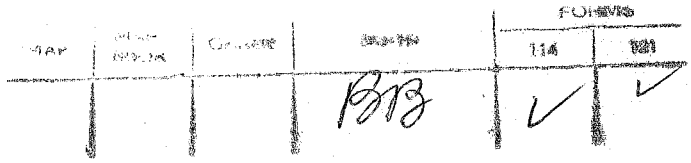
We now propose

(1) Redrill 9-7/8" hole from 1054' to about 6000'.

(2) Cement 7" casing at a point to be determined.

(3) Test W.S.O. Your Division to witness and approve.

(4) Gun perforate for production.



2145 Alcoa Bldg., 1 Maritime Plaza
San Francisco, Calif. 94111
(Address)

(415) 986-7545
(Telephone No.)

LAWRENCE BARKER, JR.
(Name of Operator)

By W. S. Barker

ADDRESS ONE COPY OF NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

22915-705 5-64 6M ② OSP

FORM 109

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Report on Operations

No. T 272-197

Mr. Lawrence Barker, Jr.
1 Maritime Plaza
Alcoa Building, Suite 2145
San Francisco, California 94111

Santa Paula Calif.
August 9, 1972

DEAR SIR:

Operations at well No. (111-20423) "Barker-Ferndale" 1, Sec. 16, T. 4N, R. 21W, S B. B & M. Ojai Field, in Ventura County, were witnessed on Aug. 7, 1972. Mr. A. L. Lorshbough, engineer, representative of the supervisor was present from 0400 to 0600. There were also present E. Collins, foreman

Present condition of well: 10 3/4" cem. 910'. T.D. 910'.

The operations were performed for the purpose of inspecting and testing the blowout prevention equipment and installation.

Mr. reported:

THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

a

cc: W. S. McBurnie

JOHN F. MATTHEWS, JR.
State Oil and Gas Supervisor

By [signature] Deputy

59471-705 1-72 20M ② OSP

FORM 111

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 272-217

Mr. Lawrence Barker, Jr.
1 Maritime Plaza
Alcoa Building, Suite 2145
San Francisco, California 94111

Santa Paula Calif.
August 1, 1972

DEAR SIR:

Your supplementary proposal to drill (111-20423) Well No. "Barker-Ferndale" 1, Section 16, T. 4N, R. 21W, S.B. B. & M., Ojai Field, Ventura County, dated 7/26/72, received 7/27/72, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. At least 900' of surface casing shall be cemented in the hole using sufficient cement to fill back of the casing from the shoe to the surface.
2. Drilling fluid of proper weight and consistency shall be used to keep the well under control at all times; and a reserve supply of this material shall be kept on hand to meet any emergency.
3. Blowout prevention equipment, at least of the Division of Oil and Gas Class III rating, shall be installed and maintained in operating condition at all times.
4. A directional survey shall be filed with this Division, if one is made.
5. This Division shall be consulted before placing any plugs or sidetracking any hole.
6. THIS DIVISION SHALL BE NOTIFIED TO WITNESS:
   a. A pressure test of the blowout prevention equipment before drilling out of the shoe of the surface casing.
   b. A test of water shut-off above the zone to be produced.

Bond No. 1859709
Dated 6/19/72
DER:a
cc: W. S. McBurnie

JOHN F. MATTHEWS, JR., State Oil and Gas Supervisor

By [signature], Deputy

57625-705 11-71 35M ② OSP

FORM 105

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
JUL 27 1972
SANTA BARBARA, CALIFORNIA

Notice of Intention to Drill New Well

This notice and surety bond must be filed before drilling begins

Bakersfield, Calif. July 26, 1972

DIVISION OF OIL AND GAS

Supplementary

In compliance with Section 3203, Division III, Article 4, Public Resources Code, notice is hereby given that it is our intention to commence drilling well No. Barker - Ferndale No. 1, Sec. 16, T. 4 N., R. 21 W., S. B. B. & M., Ojai Field, Ventura County.

Legal description of mineral-right lease, consisting of _____ acres, is as follows: _____ (Attach map or plat to scale)

See map previously furnished.

Do mineral and surface leases coincide? Yes X No _____ If answer is no, attach legal description of both surface and mineral leases, and map or plat to scale.

Location of Well: 200 feet North (Direction) along ~~property~~ section line and 230 feet East (Direction)

at right angles to said line from the SE Cor of NE/4 NW/4 corner of ~~property~~ section 16

4N-21W, S. B. B. & M.

Mt. Lea. 1120's, 230'E fr. N¼ cor.

Elevation of ground above sea level 1060 feet _____ datum.

All depth measurements taken from top of KB (Derrick Floor, Rotary Table or Kelly Bushing) which is To be furnished. feet above ground.

PROPOSED CASING PROGRAM

SIZE OF CASING INCHES A.P.I.	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS
10-3/4	32.75	H	0	600	600
7"	23	K	0	6000	6000

Intended zone(s) of completion: Lower Mohnian Sands (Name) Various (Depth, top and bottom) Estimated total depth 6000

Note Please send copies of T & P reports to: W. S. McBurnie
1628 F Street
Bakersfield, Calif. 93301

MAP Bond 1859709 6/19/72

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address Alcoa Building, Suite 2145
1 Maritime Plaza
San Francisco, Calif. 94111

LAWRENCE BARKER, JR. (Name of Operator)

By W S McBurnie

Telephone Number (415) 986-7545

Type of Organization Individual (Corporation, Partnership, Individual, etc.)

△ OSP

WILLIAM S. McBURNIE
PETROLEUM ENGINEER
1628 F STREET
BAKERSFIELD, CALIFORNIA 93301
(805) 325-1641

DIVISION OF OIL AND GAS
RECEIVED
JUL 27 1972
SANTA PAULA, CALIFORNIA

July 26, 1972

Division of Oil and Gas
P. O. Box 67
Santa Paula, California 93060

Re: Lawrence Barker, Jr.
Well Barker - Ferndale No. 1
Sec. 16-4N-21W, S.B.B.& M.
Ventura Co., Calif.

Gentlemen:

Herewith is a revised "Notice of Intention to Drill New Well pertaining to the subject well. This notice supercedes the one dated June 29, 1972 which was previously filed.

The coordinates of the location have been changed as well as the proposed total depth. In view of the lesser total depth, we now propose to set surface casing at 600' rather than at 1000'.

Very truly yours,

W. S. McBurnie

WSMcB:hb

cc: Mr. Lawrence Barker, Jr.
Mr. Lee Molesworth

FORM 111

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 272-195

Mr. Lawrence Barker, Jr.
1 Maritime Plaza
Alcoa Building, Suite 2145
San Francisco, Calif 94111

Santa Paula, Calif.
July 6, 1972

DEAR SIR:

Your proposal to drill Well No. (111-20423) Harbor-Ferndale 1, Section 16, T. 4N, R. 21W, S.B. B. & M., Ojai Field, Ventura County, dated 6/29/72, received 6/30/72, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Sufficient cement shall be pumped back of the 10 3/4" casing to fill from the shoe to the surface.
2. Drilling fluid of proper weight and consistency shall be used to keep the well under control at all times; and a reserve supply of this material shall be kept on hand to meet any emergency.
3. Blowout prevention equipment, at least of the Division of Oil and Gas Class III rating, shall be installed and maintained in operating condition at all times. A copy describing Class III equipment is enclosed.
4. A directional survey shall be filed with this Division, if one is made.
5. This Division shall be consulted before placing any plugs or sidetracking any hole.
6. THIS DIVISION SHALL BE NOTIFIED TO WITNESS:
   a. A pressure test of the blowout prevention equipment before drilling out of the shoe of the 10 3/4" casing.
   b. A test of the 7" water shut-off above the zone to be produced.

Mr McBurnie/jf 7/25/72
The location has been changed
1. A new notice will be filed.
New well will be south of the fault
Well is going to be directionally drilled - South
Have a problem about kick-off point; to get far enough South,
Proposed to reduce surface csg. to 600', I allowed

Bond No. 1859709
Dated 6/19/72
DER:a
cc: W. S. McBurnie

JOHN F. MATTHEWS, JR., State Oil and Gas Supervisor

By D C Pitzer, Deputy

57625-705 11-71 35M ⓐ OSP

FORM 105

20423

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS
RECEIVED
JUN 30 1972
SANTA PAULA, CALIFORNIA

DIVISION OF OIL AND GAS

Notice of Intention to Drill New Well

This notice and surety bond must be filed before drilling begins

Bakersfield Calif. June 29 19 72

E

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division III, Article 4, Public Resources Code, notice is hereby given that it is our intention to commence drilling well No. Barker - Ferndale No. 1, Sec. 16, T. 4 N., R. 21 W., S. B. B. & M., Field, Ventura County.

Legal description of mineral-right lease, consisting of acres, is as follows: (Attach map or plat to scale)

See map.

Do mineral and surface leases coincide? Yes X No If answer is no, attach legal description of both surface and mineral leases, and map or plat to scale.

Location of Well: 330 feet East (Direction) along ~~property~~ section line and 550 feet North (Direction)

at right angles to said line from the SE Cor of NE/4 NW/4* ~~property~~ corner of section 16

4N-21W, S. B. B. & M. Alternate Loc. Fr. N¼ cor 770'S, 330'E

* Concrete survey marker.

Elevation of ground above sea level 1080 feet datum.

All depth measurements taken from top of KB (Derrick Floor, Rotary Table or Kelly Bushing) which is To be furnished. feet above ground.

PROPOSED CASING PROGRAM

SIZE OF CASING INCHES A.P.I.	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS
10-3/4	32.75	H-40	0	1000	1000
7	23	K & N	0	8000	8000

Intended zone(s) of completion: Various (Name) (Depth top and bottom) No 1859709 Dated 6/19/72 Estimated total depth 8000'

Note Please send copies of T & P reports to: W. S. McBurnie
1628 F Street
Bakersfield, Calif. 93301

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address Alcoa Building, Suite 2145
1 Maritime Plaza
San Francisco, Calif. 94111

LAWRENCE BARKER, JR.
(Name of Operator)

By W. S. McBurnie

Telephone Number (415) 986-7545

Type of Organization Individual
(Corporation, Partnership, Individual, etc.)

△ OSP

WILLIAM S. McBURNIE
PETROLEUM ENGINEER
1831 TRUXTUN AVENUE
BAKERSFIELD, CALIFORNIA 93301
(805) 325-1641

DIVISION OF OIL AND GAS
RECEIVED
JUL 7 1972
SANTA PAULA, CALIFORNIA

July 6, 1972

Mr. Raymond M. Hertel
California Regional Water Quality Control Board
Los Angeles Region
107 S. Broadway, Suite 9026
Los Angeles, California 90012

Re: Lawrence Barker, Jr.
Well Barker - Ferndale No. 1
Sec. 18-4N-21W, S. B. B. & M.
Ventura Co., Calif.
Application No. 3344
File B II a - I 72P

Dear Sir:

We propose to dispose of waste drilling fluids from the subject prospect well in the following manner:

(1) With the approval of the landowner, uncontaminated and unpolluted rotary mud may be spread on and worked into the surface of the ground in such a manner that it will not drain into waters of the State.

(2) Waste drilling mud not disposed of in the above manner and mud which exceeds your stated limits for chemical constituents will be hauled, by vacuum truck, from the drill site and disposed of in an approved dump.

When oil production is established and other wastes such as salt water develop, a plan for their disposal will be submitted for the approval of your Board and the approval of the Division of Oil and Gas.

Very truly yours,

W. S. McBurnie

WSMcB:hb

cc: Mr. Lawrence Barker, Jr.

Division of Oil and Gas
Santa Paula, Calif.

17 | 16

N

SCALE 1" = 300'

PROPERTY LINE

SE cor. - NW/4-NW/4
Section 16

1320'

PAULA

SANTA

CREEK

CREEK BA

"Co
SE
Se

"GRAFE"

"NESBITT"

PONDS

F E R

SISAR

CREEK

PAULA - OJAI ROAD

SANTA

PORTION OF

SECTION 16

T 4 N - R 21 W

VENTURA COUNTY, CALIFORNIA

SCALE 1" = 300'

LAWRENCE BARKER, JR.
No. 1 MARITIME PLAZA, Suite 2145
SAN FRANCISCO, CALIF. 94111

DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
1000 S. Hill Rd, Suite 116 Ventura, CA 93003-4458
Phone:(805) 654-4761 Fax:(805) 654-4765

REPORT OF WELL ABANDONMENT

Ventura, California
October 07, 2014

Denny Brown
Vintage Production California LLC (V1370)
9600 Ming Avenue, Suite 300
Bakersfield, CA 93311

Your report of abandonment of well **"Barker-Ferndale" 2**, A.P.I. No. **111-20604**, Section **16**, T. **04N**, R. **21W**, **SB** B.&M., **Ojai** field, **Ventura** County, dated **9/11/2014**, received **9/12/2014**, has been examined in conjunction with records filed in this office. We have determined that all of the requirements of this Division have been fulfilled relative to plugging and abandonment of the well, removal of well equipment and junk, and filing of well records.

NOTE:
1. Surface plugging completed on 7/1/2014.

2. Site inspection made and approved on 7/1/2014.

Blanket Bond

Steven Bohlen
State Oil and Gas Supervisor

By _____
Bruce Hesson
District Deputy

tkc

OG159

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

CHECK LIST-RECORDS RECEIVED AND WELL STATUS

Operator: **Vintage Production California LLC** WELL DESIGNATION **"Barker-Ferndale" 2**

API No. **11120604** SE **16** T: **4N** R.: **21W** , **SB** B. and M.

County: **Ventura** FIELD: **Ojai**

Type of Notice: **Abandonment** **Date** **10/8/2013** **Report Number:** **P213-0367**

RECORDS RECEIVED (ATTACH PAGES IF REQUIRED)

	Date	OK	NEED	Remarks
Well Summary (OG100)				
History (OG103)	9-12-14			
E-Log				
Mud Log				
Dipmeter				
Directional				
Core and/or SWS				

NEW STATUS

DATE: _____

NOTICE OF **RECORDS DUE**

DATE: _____

DATE: _____

DATE: _____

DATE: _____

WELL STATUS INQUIRY

DATE: _____

DATE: _____

Well Stat

Change Required: Yes

Change Done: TKC 10-7-14

ABANDONMENTS/REABANDONMENTS/DRILLS/REDRILLS

CalWims Abandonment Form: _____ SURFACE INSPECTION NEEDED _____ COMPLETED 7-01-2014 *Date and Inspector*

FINAL LETTER NEEDED Yes COMPLETED 10-7-14 *(Date)* Calwims DRILL/REDRILL Form _____

ENGINEER'S CHECK LIST

T-REPORT(S) _____ OPERATOR'S NAME _____ WELL DESIGNATION _____ SIGNATURE _____

Calwims Location _____ Calwims ELEVATION: _____ CONFIDENTIAL RELEASE DATE: _____ PERMIT REQUIREMENTS MET _____

CLERICAL CHECK LIST

LOCATION CHANGE (OG165) _____ ELEVATION CHANGE (OG165) _____ RELEASE OF BOND (OG150) _____

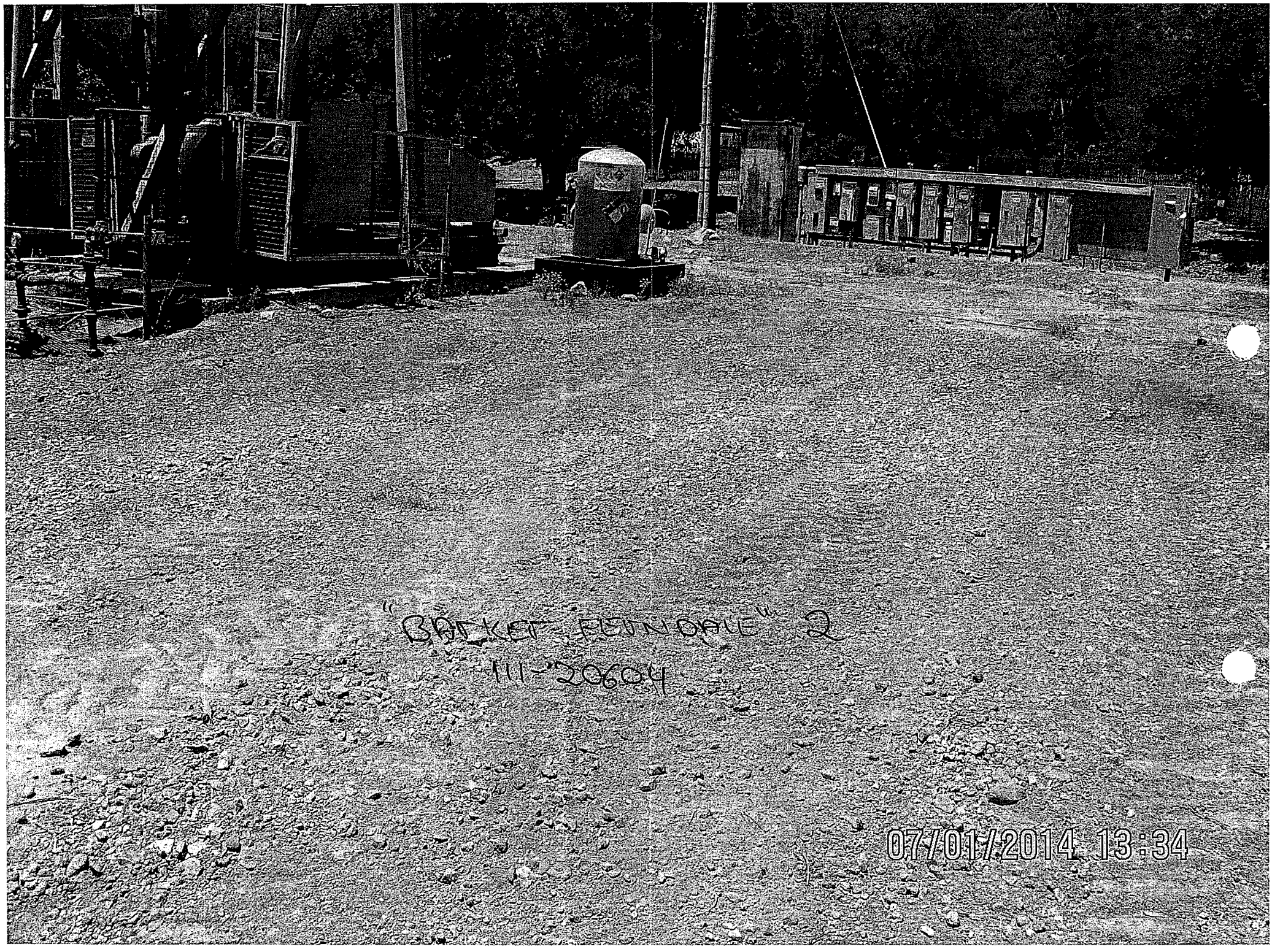
REMARKS

RECORDS SCANNED: _____ (Date)

RECORDS APPROVED: 9-22-14 BH (Date and Engineer)

Modified OGD2

AOR Deliverable _____


"BASKET - FEUNDALE" 2
111-20604
07/01/2014 13:34

SUBMIT IN DUPLICATE
RESOURCES AGENCY OF CALIFORNIA
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES

Rec'd 09-12-14 DOGGR D2 Ventura

HISTORY OF OIL OR GAS WELL

Operator: Vintage Production California LLC **Field:** OJAI **County:** VENTURA
Well: Barker-Ferndale 2 **Sec:** 16 **T:** 4N **R:** 21W **M.D.B. & M.**

API#: 04-111-20604 **Name:** Deborah Young for Denny Brown (Person submitting report) **Title:** Agent (President, Secretary, or Agent)

Signature: [signature] **Date** 09/11/2014

9600 Ming Ave. , Suite 300 , Bakersfield, CA. 93311 (Address) (661) 869-8000 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items such as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, and initial production data.

Well Abandonment

Work Type	Primary Reason	Secondary Reason	Start Date	End Date
ABANDONMENT	PLUG & ABANDON		04/29/2014	07/01/2014

4/28/2014 @06:00 **04/29/2014** @06:00

Shut down for the night.

Discussed planned operations and filled out required permits.

Drop rig mat and rig up hoist.

Shut down for the night.

4/29/2014 @06:00 **04/30/2014** @06:00

Shut down for the night.

Discussed planned operations and filled out required permits.

Lay down polish rod and jewelry. 1 1/2 x 30.

Tubing pressure = 25 psi.
Casing pressure = 200 psi.
Function test BOPE = Good.

POOH with 50 7/8 slick N-97 and 49 2 - per N-97 7/8 Rods L/D 1 = 1 1/2 pump.

Lunch

Rig up MMI mud pump turn well over with lease water 2.0 BPM @ 200 PSI. Well is dead. R/O mud pump.

N/D tree.N/U BOP and function test. DOGGR waived. R/U work floor unload all tubing equipment.

Tubing Pressure = - 0 psi.
Casing Pressure = 0 psi.
Accumulator Pre-Charge Pressure = 1100 psi.
Initial Accumulator Pressure = 3000 psi.
Manifold Pressure = 1500 psi.
Annular Pressure = No Annular Preventer Installed.
Time to close pipe rams = 3 sec.
Time to open pipe rams = 2 sec.
Time to close Annular BOP = No Annular Preventer Installed.
Final Accumulator Pressure = 2650 psi.
Function Test BOPE = Good

Start POOH w/ 2 7/8 EUE 8rd. J-55 tubing lying down. Laid down a total of 30 joints. Secure well.

Shut down for the night.

4/30/2014 @06:00 **05/01/2014** @06:00

Shut down for the night.

Discussed planned operations and filled out required permits.

HISTORY OF OIL OR GAS WELL

Operator: Vintage Production California LLC **Field:** OJAI **County:** VENTURA
Well: Barker-Ferndale 2 **Sec:** 16 **T:** 4N **R:** 21W **M.D.B. & M.**

Tubing Pressure = - 0 psi.
Casing Pressure = 0 psi.
Accumulator Pre-Charge Pressure = 1100 psi.
Initial Accumulator Pressure = 3000 psi.
Manifold Pressure = 1500 psi.
Annular Pressure = No Annular Preventer Installed.
Time to close pipe rams = 3 sec.
Time to open pipe rams = 2 sec.
Time to close Annular BOP = No Annular Preventer Installed.
Final Accumulator Pressure = 2650 psi.
Function Test BOPE = Good

Cont POOH w/ tbg L/D 50 joints of 2 7/8 8rd.

R/D work floor. N/D BOP. N/U Tree. Cleanup tools.

Drop guy wires RDMO.

Lunch

Move rig from Ferndale 2 to Ojai fee 129.

Shut down for the night.

6/12/2014 @06:00 **06/13/2014** @06:00

Shut down for the night.

Lunch

Discussed planned operations and filled out required permits.

Rig up MMI CTU and equipment.

Tubing pressure = 25 psi.
Casing pressure = 30 psi.
Function test BOPE = Good.

RIH W/ MMI CTU and tag well @ 3387. Tight spot in casing records indicate rig attempted to swedge out in 1977. Opened up to 3 1/4 from 3356 to 3389. POOH and cut double 45 in 1 1/2 coil RIH and tag well @ 3387. POOH with coil and secure well. MMI wireline shot perf vfrom 595 to 600 feet. 4 1/2 shot per foot.

Crew travel back to Bakersfield from Ferndale 2.

Shut down for the night.

6/15/2014 @06:00 **06/16/2014** @06:00

Shut down for the night.

Discussed planned operations and filled out required permits.

Tubing pressure = 0 psi.
Casing pressure = 0 psi.
Function test BOPE = Good.

RIH W/ MMI CTU with Weatherford knuckle joint and wash nozzle tag well @ 3387. Not able to get past this spot. POOH W/ coil and secure well.

Shut down for the night.

6/24/2014 @06:00 **06/25/2014** @06:00

Shut down for night

Crew traveled to location

Discussed JSA's, LOTO & job operations. Made out all paperwork.

MIRU. Spotted CTU & cement equipment.

Tubing pressure= 0 psi
Casing pressure= 0 psi
Function Test BOPE= Good

Installed Weatherford 1.5" internal connector and wash nozzle on coil. Pressure test to 3000 psi. RIH & washed casing 3250'-3300'. POOH.

Installed Weatherford inflatable packer.

RIH set packer @ 3300'. Injection rate of .5 BPM @ 900 psi. Pumped 5 bbls for injection rate. Contacted D.O.G.G.R to witness injection rate. David Ortiz gave approval to pump cmt. Mixed and pumped 445 cubic feet class "G" w/ 35% Silica Flour. Pressure locked up 1400 psi. 400 cubic feet squeezed below packer. Unset packer with 6000# tension. Displaced other 45 cubic feet out of coil with 8 bbls. TTOC 3096'. POOH Weatherford Inflatable packer was left in hole. Washed up equipment. Secured well.

Rigged down CTU.

HISTORY OF OIL OR GAS WELL

Operator: Vintage Production California LLC **Field:** OJAI **County:** VENTURA
Well: Barker-Ferndale 2 **Sec:** 16 **T:** 4N **R:** 21W **M.D.B. & M.**

Crew traveled to base

Shut down for night.

6/25/2014 @06:00 **06/26/2014 @06:00**

Shut down for night

Crew traveled to location

Discussed JSA's, LOTO & job operations. Made out all paperwork.

Serviced rig. Found leaking hydraulic hose on CTU reel.

Tubing pressure= 0 psi
Casing pressure= 0 psi
Function Test BOPE= Good

MMI Coil Tubing Unit had hydraulic hose leak. Repaired hose

R.I.H with 1.5" coil tagged @ 3181' . D.O.G.G.R Mark Davis witnessed tag. Approved to continue to Mud up.

Pumped 10 bbls fresh water ahead . 101 bbls 10 ppg mud . Displaced coil with 8 bbls fresh water. Top of mud @ 600'.

POOH to 600'.

Mixed and pumped 250 CuFt Class "G" with 35% Silica flour. Displaced coil with 8 bbls fresh water . Cement to surface . P.O.O.H. Squeezed to 300 psi. washed up equipment .

Secured well & location.

Moved CTU equipment to next location

Crew traveled to base

Shut down for night.

6/26/2014 @06:00 **06/27/2014 @06:00**

Shut down for night

Hydraulic line broke on backhole. Unable to finish work. Part will be ready on Monday 6/30/14

Shut down for night

6/29/2014 @06:00 **06/30/2014 @06:00**

SDFN

Excavated wellhead and cut off same. Topped off cement.

SDFN

6/30/2014 @06:00 **07/01/2014 @06:00**

SDFN

Welded on top plate and back filled. P&A completed. DOGGR Kris Gusifson witnessed.

New Holes

Wellbore No.	Hole Size (in)	Top MD (ft)	Btm MD (ft)	Start Date	End Date

New Casing/Liner Strings

Size	Assembly Name	Installed	Wellbore No	Top MD (ft)	Btm MD (ft)

HISTORY OF OIL OR GAS WELL

Operator: Vintage Production California LLC **Field:** OJAI **County:** VENTURA
Well: Barker Ferndale 2 **Sec:** 16 **T:** 4N **R:** 21W **M.D.B. & M.**

New Perforated Intervals

Date Shot	Wellbore No.	Top MD (ft)	Btm MD (ft)	Length (ft)	SPF	Phasing (°)
06/13/2014	00	595	600	5	4	90.00

Status of this particular flowline is unknown. However it is standard practice to remove flow lines from well location back to production header. The lines are cut, drained, flushed and removed. Surface restoration was verified by DOGGR representative Kris Gustafson.

DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
1000 S. Hill Rd, Suite 116 Ventura, CA 93003-4458
Phone:(805) 654-4761 Fax:(805) 654-4765

No. T214-0269

REPORT ON OPERATIONS

Denny Brown
Vintage Production California LLC (V1370)
9600 Ming Avenue, Suite 300
Bakersfield, CA 93311

Ventura, California
July 11, 2014

Your operations at well **"Barker-Ferndale" 2**, A.P.I. No. **111-20604**, Sec. **16**, T. **04N**, R. **21W**, **SB** B. & M., **Ojai** field, in **Ventura** County, were witnessed on **7/1/2014**. **Clifford R. Knight**, a representative of the supervisor.

The operations were performed for the purpose of **plugging and abandonment**.

DECISION:

APPROVED

Steven Bohlen
State Oil and Gas Supervisor

By _____
Bruce Hesson
District Deputy

CRK/tkc
OG109

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES T-214-0269

CEMENTING/PLUGGING MEMO 1,1

Operator VINTAGE PROD. CALIF. LLC Well No. "BARLET-FERNDALE" 2
API No. 111-20604 Sec. 16 T. 4N R. 21W, SB B&M
Field OSPI, County VENTURA. On 7-1-14,
(Mr.) ~~Ms.~~ C. Knight representative of the supervisor, was present from 0930 to 0945.

There were also present GARY

Casing record of well:

The operations were performed for the purpose of:

PLUG & ABANDON

☒ The plugging/cementing operations as witnessed and reported are approved.

☐ The location and hardness of the cement plug @ _____ ' are approved.

Hole size: _____ " fr. _____ ' to _____ ', _____ " to _____ ' & _____ " to _____ '

Casing				Cemented			Top of Fill		Squeezed Away	Final Pressure	Perforations
Size	Wt.	Top	Bottom	Date	MO-Depth	Volume	Annulus	Casing			
											595'-600'
									400CF	1400	PACKER @ 3300'

Casing/tubing recovered: _____ " Shot/cut at _____ ', _____ ', _____ ', Pulled fr. _____ ';
_____ " Shot/cut at _____ ', _____ ', _____ ', Pulled fr. _____ '.

Junk (in hole): BAD CASING BELOW 3347'

Hole fluid (bailed to) at _____ '. Witnessed by _____

Mudding	Date	bbls	Displaced	Poured	Fill	Engineer
10 PPG	6-26-14	101	3180'	—	600'±	MO

C/O 3347

Cement Plugs		Placing	Placing Witnessed		Top Witnessed			
Date	Sx/cf	MO & Depth	Time	Engineer	Depth	Wt/Sample	Date & Time	Engineer
6-25-14	45	3300'	—	RPTD	3180'	ATW	12:00 6-26-14	MO
6-26-14	240	600'	15:30	MO	SURFACE	VISUAL	6-26-14	MO
7-1-14	1±	Poured from surface	-	RPTD	Surface	visual	7-1-14	CK/KG

Hesson, Bruce@DOC

From: Spencer_Payne@oxy.com
Sent: Friday, June 20, 2014 11:28 AM
To: Hesson, Bruce@DOC
Cc: Geoff_Kimler@oxy.com; Jeffrey_Martin@oxy.com; Deborah_Young@oxy.com
Subject: Ferndale 2 Variance Request
Attachments: Ferndale 2 Well History_062014.pdf

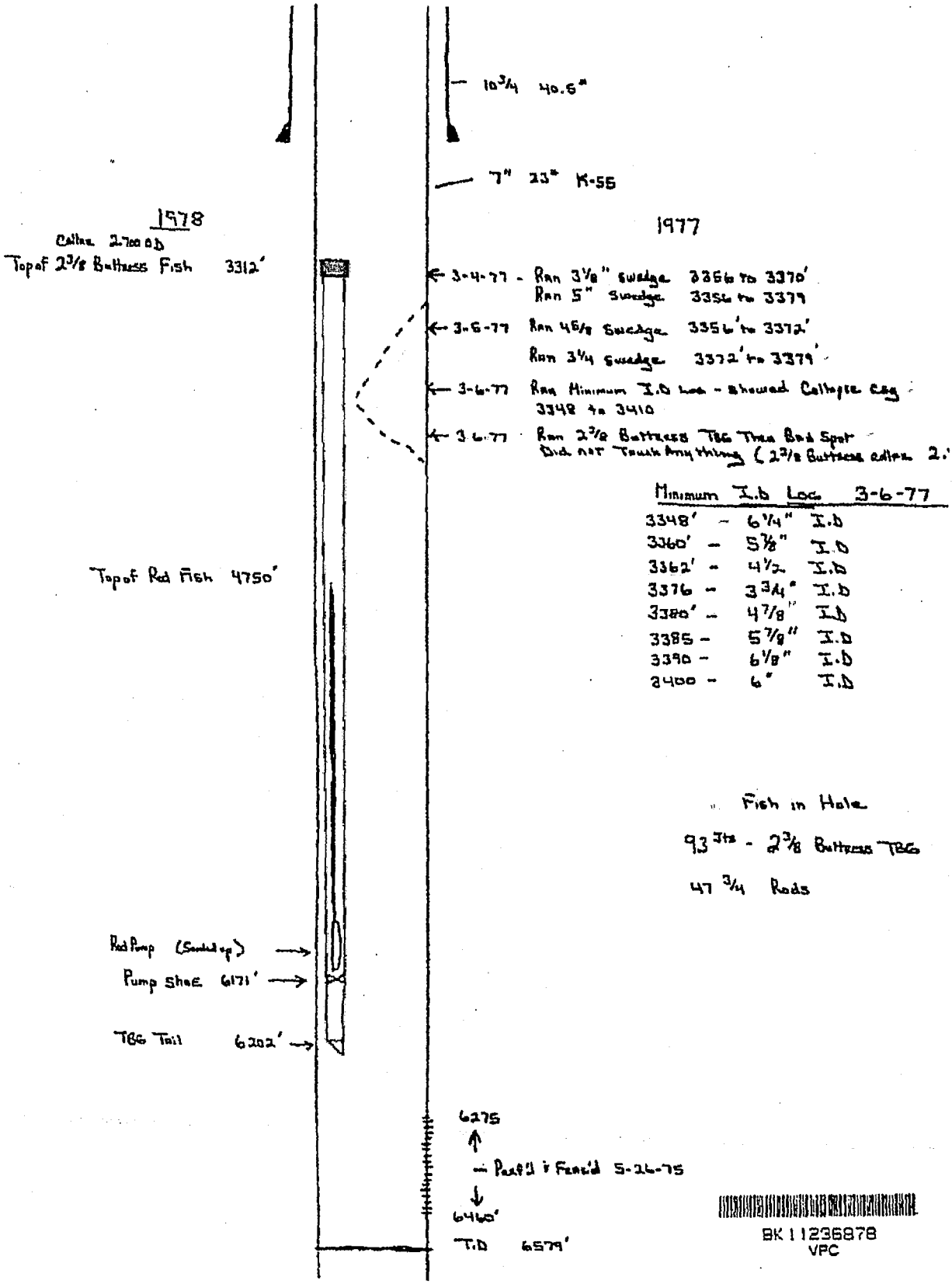
Hello Bruce,

On the Ferndale 2, we have not been able to get any deeper than 3387' with 1.5" coil tubing. Contact at this depth was metal-to-metal. Previous history of this well:
In March of 1977, the 7" casing was swaged open to a I.D. of 3-1/8" – Dialog casing caliper indicated casing was collapsed to 3-1/8" from 3348'-3410'. Arco was able to run 2-3/8" tubing through this area and return the well to production (RTP'd on 3/12/77) – tubing tail set @ 6202'. In November of 1978, the well failed due to a stuck rod pump. Crew was unable to unseat pump and backed off rods. They made up a 1-13/16" grapple and ran in hole to attempt pulling the remaining rods. At a depth of 3960' the tool bottomed out. At this point they rigged up Dialog and ran a 1.0" free point tool. The free point indicated the tubing was free above 3398'. Tubing was backed off at 3312'. The next day (11/23/78), crew made up an overshot, bumper-sub, hydraulic jars, drill collars, and accelerator. Fishing assembly was ran in hole and fish latched with overshot. The jars were set off @ 65,000 lbs 3 times before the overshot came loose – no movement of fish. Fishing assembly was pulled and a smaller O.D. overshot made up and ran. The fish was again latched. Crew again began jarring of the fish. The jarring process went on for a period of 20 minutes before the overshot came free – again, fish did not move. Arco at this point terminated the fishing operation due to the time and expense exhausted with no progress achieved. Arco's management decided to shoot a fluid level – fluid level was located @ 1500' from surface. Arco decided to return the well to production, setting pump depth above the collapsed casing (note reflects that tubing was landed @ 3285'). Arco Oil and Gas clearly demonstrated a diligent effort to remove the fish (daily activity reports and wellbore schematic are attached). VPC proposes abandoning the well from this depth on in the following manner:
1) Makeup and run an inflatable packer ADAP.
2) Set packer and establish injection. 2A) If unable to establish injection, inflatable would be pulled. Coil tubing would run in hole ADAP and pump cement from ADAP-2387' – revert to original program.
3) Pump calculated volume plus 50% excess.
4) Retrieve packer.
At this point the abandonment would revert back to the original program. Please call me with any questions.
Thank you,

Spencer Payne
Well Servicing Superintendent
9600 Ming Ave Suite 300
Bakersfield, Ca 93311
Phone: (661) 869-8406
Mobile: (661) 979-0914
Fax: (661) 869-8498
spencer_payne@oxy.com

Ferndale # 2

3-5-77



Minimum I.D Log 3-6-77

3348'	- 6 1/4"	I.D
3360'	- 5 7/8"	I.D
3362'	- 4 1/2	I.D
3376	- 3 3/4"	I.D
3380'	- 4 7/8"	I.D
3385	- 5 7/8"	I.D
3390	- 6 1/8"	I.D
3400	- 6"	I.D

Fish in Hole

93 Jts - 2 3/8 Buttress TBG

47 3/4 Rods

BK 11236878
VPC

Baker Ferndale #2

1977

ARGO BARKER FERNDALE #2:

3/2: MIRU. Atlantic Rig #4. Drilled rat hole. Bled well off. Filled hole with brine water. POH with tbg @ present.
Cost today: Not available

3/3: Laid down tbg (40-jts of 2 3/8"). Removed head and installed BOE & tested. Picked up 2 7/8" DP. RIH to 3356'. Well started flowing. Changed over to brine water. Attempted to kill well.
Cost to date: $11,685

3/4: 3356' '0', 3 day.
Circ & kill well with 74# brine wtr. POH & ran 3 1/8 Midway Swedge thru bad csg from 3356' to 3370'. POH & ran 5" swedge from 3356' to 3361'. Could not swedge any deeper. POH & ran 5" imp. block to 3356'. POH;imp block showed 7" csg parted @ 3356', RIH with 4 5/8" swedge. Stopped @ 3356'. Now trying to swedge thru 7" @ 3356'.
Cost today: $4,900 Cum Cost: $16,585

3/5: Swage csg @ 3356'. No Go. POH. Ran 6" I.B. Stopped @ 3254'. POH. Egg shaped to 5 1/2". RIH with 4 5/8" swage with 6" stop 18; above swage...swage 7" csg from 3356' to 3372'. POH. Ran 3 1/4" swage from 3372' to 3389'. POH. Will run 2 3/8" tbg stringer below D.P. to check csg.
Cost today: $5,650 Cum Cost: $22,235

3/6: PU 6 jts. of 2 3/8" Butt. tbg. RIH on btm 2 7/8" DP to 3556'. Did not touch anything. POH. Laid down DP & tools. RIgged Dialog. Ran 3 1/8" minimum I.D. Caliper log. Checked Csg 3,500 to 3300'. Showed csg collapsed 3348'-3410'. Not parted. Removed BOE. Installed tbg head. Tested 3500 psi. PU 110 jts of 2 3/8" Butt tbg 3920'; pump shoe on top first jt. Landed on donut. Now cleaning tanks.
Cost today: $5,235 Cum Cost: $27,470

3/7: Laid down Kelley & cleaned; circ. tanks. SD. @ 4:00 PM 3/6/77.
Cost today: $2,029 Cum Cost: $29,499

3/8: Released rig at 12:00 Noon 3/7/77. Prep to move rig off.

3/10: MIRU CPS rig. Installed BOE. PU 2 7/8" tbg. Well started to flow @ 5337'. Rigged pump and tank. Circ, out gas. RIH. Found fill @ 6132'. C.O. to 6216'. Pulled to 6098'. SD.
Cum Cost: $34,904

3/11: RIH to 6216'. Circ & clean out sd to 6579'. Pulled up and laid down excess tbg. Landed tbg with tail @ 6232'; shoe @ 6200'. Removed BOE. Installed production tree. Changed over with 290 bbls lease crude. PU pump & rods. Pumped stopped @ 5,000'. POH with pump & rods. SD. Will pull tbg.
Cost today: $2,334 Cum Cost: $37,238

3/12: Clean shaker tank. Installed BOE & Changed over to 72# brine water. Pulled 2 7/8" tbg. RIH drifting tbg.with 1.0 broach; found 169th Jt. bad. Ran on in hole & landed tbg @ 6232'. Shoe @ 6200'. Remove BOE & installed production tree. Ran pump & rods. Pressured tbg with 400 psi. Hung well on. & MOVED OUT.
Cost today: $3,105 Cum Cost: $40,343

3/14: 34 bg., 100.0% cut, Trace of sand. 80/-, 18/64" choke.

1977 (11 days)

ABF #2:

11/20: MIRU CPS. Work stuck pump. Could not pull loose. Backed off rods. Rec. 43 doubles. 2580'. Installed BOE. Rigged to pull tbg. Tbg stuck & pulled 75,000#. Could not work free. SD.
Cost today: $1,533

11/21: RIH w/rods. Screw into fish; backed off. POH. Recovered 30 doubles. PU 1" rods. RIH w/overshot (1 9/16"). Hooked fish & backed off. Recovered 18 rods (fish). RIH. Hooked onto fish; backed off. Recovered 16 rods (fish). PU 7/8" rods to run in 2 3/8" tbg. RIH. Hooked onto fish. Backed off. Recovered 64 rods. SD.
Cost today: $1,957 Cum Cost: $3,490 (Top of fish 4750')

11/22: RIH w/1 13/16" socket on 7/8" & 1" rods. Stopped @ 3960'. Pulled out. Rigged Dia-log. Ran 1" free point tools. Top 3398'. Tbg free above. Backed off 2 3/8" tbg @ 3312'. Shut job down. Will run fishing tools this AM & jarred on tbg.
Cost today: $2,751 Cum Cost: $6,241

11/23: Measured tbg out of hole. Left collar up on fish. Btm jt split 5'. Made up Midway. 5 3/4 X 2 3/4" overshot w/BS & jars on 2-4 3/8" drill collars & accelerator- RIH. Latched onto fish & jarred 3 times @ 65,000#. Tool slipped off. POH. Changed grapple to 2 5/8". RIH. Latched onto fish. Jarred onto fish. 20-min. Tool pulled off. Fish did not move. Landed tbg on donut. SD. FL @ 1500'.
Cost today: $3,712 Cum Cost: $9,953

11/24-25: Pulled tbg & laid down fishing tools. Laid down 16 jts of 2 3/8" butt. tubg out of mast. Ran 2 7/8" tbg & landed 3285'. Removed BOE. Laid down 1" & 7/8" rods. PU pump & ran 3/4" rods. Changed 102 3/4 rod boxes. Spaced out; pressured tbg to 300#. SD @ 12:30 AM.
Cost today: $2,335 Cum Cost: $12,288

11/26: 51 bg., 16.0%, 90/90, 18/64".

11/27: 33 50.0 90/90

11/28: 25 bg., 60.0%, 60/60, 18/64". On production ? hrs. Down during the night.

1978

47 Rods In Hole

BK1123697I
VPC

----------SILVERTHREAD

SF #2:

6/05: Unlanded tbg. Found fish @ 3299'. POH w/tbg to rod fish. Pulled remaining rods & pump. POH w/tbg. RIH w/tbg & hydrotested same to 5,000 psi. Blew up 1 joint & found 1 split joint. Landed tbg on donut w/tail to 3279'. Removed BOE; installed production tree. Laid down worn rods. PU exchange pump. RIH w/pump & rods.
CC: $5,401

6/09: 59 bg., 35 bn., 40.0%.
6/10: 56 31 45.0%

6/19: 48 bg., 24 bn., follow-up test.

7/08: 43 bg., 17 bn., 60.0%
7/09: 42 13 70.0

7/18: 42 bg., 13 bn.,
7/19: 41 10 75.0%
7/20: 44 9 80.0

1979 workover

...TURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
1000 S. Hill Rd, Suite 116 Ventura, CA 93003 - 4458

PERMIT TO CONDUCT WELL OPERATIONS

No. P 213-0367

Old	New
520	520
FIELD CODE	
12	12
AREA CODE	
10	10
POOL CODE	

Ventura, California
October 21, 2013

Alan E. White, Agent
Vintage Production California LLC (V1370)
9600 Ming Avenue, Suite 300
Bakersfield, CA 93311

Your proposal to **Abandon** well **"Barker-Ferndale" 2**, A.P.I. No. **111-20604**, Section **16**, T. **04N**, R. **21W**, **SB** B. & M., **Ojai** field, **Silverthread** area, **Miocene** pool, **Ventura** County, dated **10/8/2013**, received **10/8/2013** has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED:

1. Blowout prevention equipment, as defined by this Division's publication No. MO7, shall be installed and maintained in operating condition and meet the following minimum requirements: **Class II 2M**
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. A diligent effort shall be made to clean out to 6,579'
4. **The well shall be perforated at the base of freshwater from 595'-600'.**
5. All portions of the well not plugged with cement are filled with inert mud fluid having a minimum density of 72lbs.,cu. ft (9.6 Lbs/gal) and a minimum gel shear strength of 25lbs./100 sq. ft.
6. Well site restoration shall be completed within 60 days following the completion of plugging.
7. This office shall be contacted by phone prior to making any program changes and no changes are made without Division approval.
8. **THIS DIVISION SHALL BE NOTIFIED TO:**
   a. Inspect the installed blowout prevention equipment prior to commencing abandonment operations.
   b. Witness the location and hardness of the cement plug at 4,100'.
   c. Witness the mudding operations.
   d. Witness the placing of the cement plug from 600' to surface.
   e. Witness the location and hardness of cement at surface, including all annular spaces after the wellhead has been cut off. If necessary, fill the annulus with cement from 30' to surface.
   f. Inspect the restored well site.

Blanket Bond Dated: 4/23/2003

Tim Kustic
State Oil and Gas Supervisor

Engineer Bruce Hesson
Office (805) 654-4761

By _____
Bruce Hesson, *District Deputy*

BH/bh

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended. Issuance of this permit does not affect the Operator's responsibility to comply with other applicable state, federal, and local laws, regulations, and ordinances.

NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

Rec'd 10-08-13 DOGGR D2 Ventura

FOR DIVISION USE ONLY		
	Forms	
Bond	[redacted]	OGD121
	CASH WIMS	1151

520/12/10

NOTICE OF INTENTION TO ABANDON / RE-ABANDON WELL

Detailed instructions can be found at: www.conservation.ca.gov/dog

Mocca

P213-0367

In compliance with Section 3229, Division 3, Public Resources Code, notice is hereby given that it is our intention to abandon ☒ / re-abandon ☐ well Barker-Ferndale 2 , API No. 04-111-20604 ,
(Check one)

Sec. 16 , T. 4N , R. 21W , SB B.&M., Ojai Field, Ventura County.

The complete casing record of the well (present hole), including plugs and perforations, is as follows: (Attach wellbore schematics diagram also.)

10 3/4", 40.5#, K55 Surface Csg cmt'd @ 906'.
7", 23#, K55# Prod Csg Cemented @ 6620'. TOC @ 4110' - CBL. ✓
Perforations: 6274'-6460'
6274', WSO

The total depth is: 7246 feet. The effective depth is: 6579 ✓ feet.

Present completion zone(s): _____ (Name) . Present zone pressure: 500 psi.

Oil or gas shows: _____ (Name and depth) feet. Depth to base of fresh water: ± 600' ✓ feet.

Top of uppermost hydrocarbon zone (which may be behind unperforated casing): ± 4200 (Depth of interval) feet.

Is this a critical well as defined in the California Code of Regulations, Title 14, Section 1720(a) (see next page)? Yes☐ No☒

The proposed work is as follows: (A complete program is preferred and may be attached.)

Pull tubing.
Clean out to 6460'. ✓ 6579'
Place cement plug from 6460' up to 4100'.
Place abandonment mud from 4100' to 600'. Perforate casing with 4, 1/2" jhpf from 595'to 600'.
Place surface cement plug from 600' to surface. Fill annulus to 30' with cement.
Restore site.

The Division must be notified immediately of changes to the proposed operations. Failure to provide a true and accurate representation of the well and proposed operations may cause rescission of the permit.

Name of Operator			
Vintage Production California LLC			
Address: 9600 Ming Ave. Suite 300		City/State: Bakersfield, Ca.	Zip Code: 93311
Name of Person Filing Notice: Deborah Young for Denny Brown	Telephone Number: 661-869-8178	Signature: [signature]	Date: 10/08/2013
Individual to contact for technical questions: Geoff Kimler	Telephone Number: 661-869-8029	E-Mail Address: geoff_kimler@oxy.com	

This notice must be filed, and approval given, before plugging and abandonment operations begin. If operations have not commenced within one year of the Division's receipt of the notice, this notice will be considered cancelled.

CRITICAL WELL DEFINITION

As defined in the California Code of Regulations, Title 14, Section 1720 (a), "Critical well" means a well within:

(1) 300 feet of the following:
  (A) Any building intended for human occupancy that is not necessary to the operation of the well; or
  (B) Any airport runway.
(2) 100 feet of the following:
  (A) Any dedicated public street, highway or the nearest rail of an operating railway that is in general use;
  (B) Any navigable body of water or watercourse perennially covered by water;
  (C) Any public recreational facility such as a golf course, amusement park, picnic ground, campground or any other area of periodic high-density population; or
  (D) Any officially recognized wildlife preserve.

This form may be printed from the DOGGR website at www.conservation.ca.gov/dog/

Rec'd 10-08-13 DOGGR D2 Ventura

VINTAGE PRODUCTION CALIFORNIA, LLC

Ojai Field
Ventura Country, California
Ferndale 2 - P&A Program
August 31, 2013

Ferndale 2
P&A Program

Well Data:
API #: 04-111-20604
Location: Sec. 16-T4N-R21W SB B&M
Commenced Drilling: 04/26/75
Completed Drilling: 05/20/75
Ground Level: 1061'
Kelly Bushing: 1073'
All measurements are from KB; 12'
BFW @ ± 600 **Top of Hydrocarbon @** ± 4225'
TD @ 6604' **ED @** 6273'

Casing: 10 ¾", 40.5#, K55 Surface Csg, Cmt'd @ 906'.
7", 23#, K55 Prod casing, Cmt'd @ 6620'. TOC at 4110' (CBL)

Perforations: Perf'd: 6274'-6460'
6274' - WSO

Plugs: Float Collar @ 6579'.

Tubing Detail: 3049', 2 7/8", June 1990.

Proposed Program:

Note: Contact the DOGGR representative to witness all procedural steps required to be witnessed (i.e.; clean-out depth, cement plug placement and hardness, perforating, mudding operations, surface plug and site restoration). All cement slurries and abandonment mud will conform to DOGGR specifications.

1. Make lease inspection and determine if tubing and packers are present. If necessary, MIRU a production hoist. Bleed well off. Circulate and kill well as necessary.

2. MIRU pulling unit. Install a back pressure valve. Remove tree and install a DOGGR Class II (2M) BOP. Pull and lay done tubing. **Do not initiate any downhole work until DOGGR has inspected BOPE.**

3. MIRU coil tubing unit.

VINTAGE PRODUCTION CALIFORNIA, LLC

Ojai Field
Ventura Country, California
Ferndale 2 - P&A Program
August 31, 2013

4. RIH with open-ended tubing and make diligent effort to clean out to 6460', or deeper. **Notify DOGGR to witness clean-out depth.**
   Possible 7" pipe restricted to 3 ¼" from 3356' to 3389'. Attempted to swedge out in 1977.
5. Rig up cementers. Lay a Cement Plug (Class G Cmt + 35% Silica Flour + additives) from 6460' up to 4125", (Calculated Volume + 50% excess:559 cft.).
6. RIH and tag plug at or above 4100', re-cement if necessary. **Notify DOGGR to witness tag.**
7. Spot abandonment Mud from top of plug @ 4100' up to 600'. Abandonment mud shall conform to DOGGR permit specifications – 76 lb/cft with a minimum gel strength of 26 lbs./100 sq ft. (Calculated Volume: 139 bbls). **Notify DOGGR to witness mud operation.**
8. Rig up wire line and Perforate 4-1/2" holes from 595' to 600'. **Notify DOGGR to witness.**
9. RIH with open ended tubing. Rig up cementers. Lay a Cement Plug (Class G Cmt + 35% Silica Flour + additives) from 600' to surface, (Calculated Volume + 10% excess: 201 cft.). **Notify DOGGR to witness.**
10. Fill all un-cemented annuli to a depth of at least 30' to 5' with cement. Dig outside the conductor casing 5' below ground level. Cut casings off 5' below ground level. Weld on a steel top plate with well identification, well name and API #. Remove cellars and pads. **Notify DOGGR to witness surface abandonment.**
11. Restore surface location to original grade with in 60 days. **DOGGR to inspect and approve.**

Rec'd 10-08-13 DOGGR D2 Ventura

VINTAGE PRODUCTION CALIFORNIA, LLC

Ojai Field
Ventura Country, California
Ferndale 2 - P&A Program
August 31, 2013

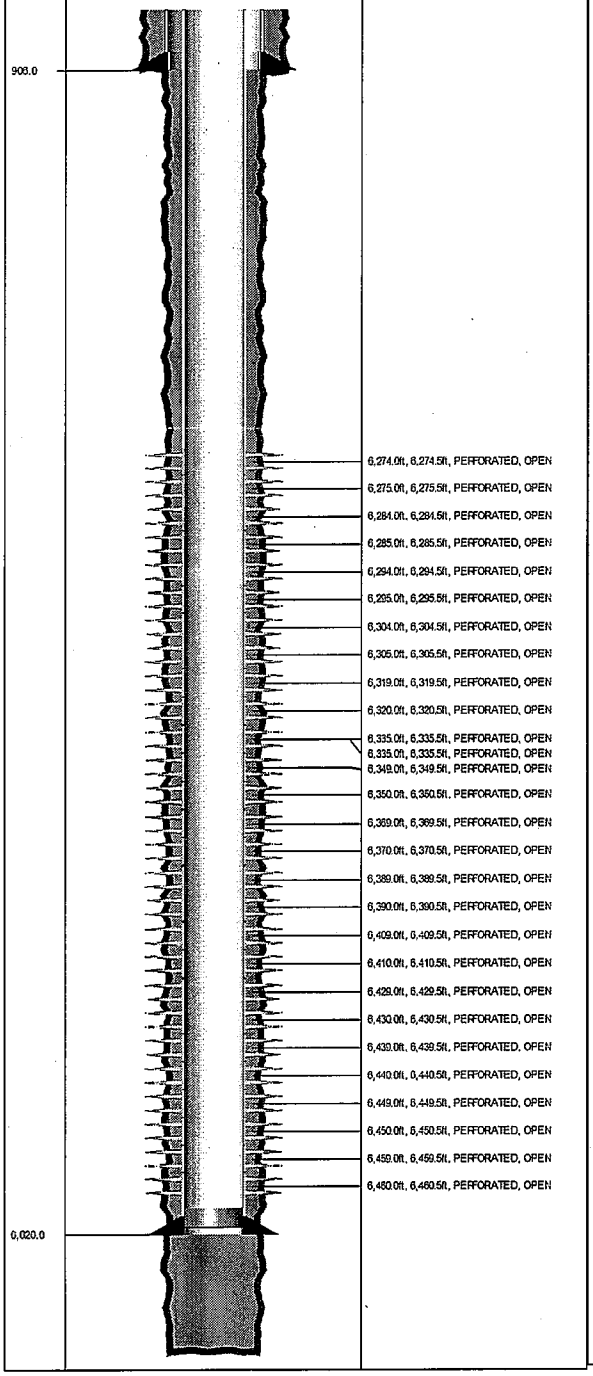
VINTAGE PETROLEUM LLC - CALIFORNIA

FERNDALE 2

Event: HISTORY
Event End: 5/28/1980 00:00
Sec Reason:

Water Depth: 1,061.0ft
Datum: Original KB @ 1,073.00ft (default)
API No.: 0411120604

Wellbore: ORIGINAL HOLE
PBMD: 6,579.01
Btm TMD: 7,246.01
Spud Date: 4/26/1975 00:00
BH Coord X: 1,673,667.55usft
BH Coord Y: 341,413.77usft



PLUG BACK Report Date: 5/20/1975 00:00

Component	Top MD (ft)	Btm MD (ft)
CEMENT	6,579.0	6,583.0

SURFACE CASING Report Date: 4/20/1975 00:00

Item	OD (in)	Grade	Wt. (ppf)	Top MD (ft)	Btm MD (ft)
CASING JOINT(S)	10.750	K-55	40.50	12.0	908.0

PRODUCTION CASING Report Date: 5/20/1975 00:00

Item	OD (in)	Grade	Wt. (ppf)	Top MD (ft)	Btm MD (ft)
CASING JOINT(S)	7.000	K-55	23.00	12.0	3,356.0
Casing	3.884	K-55	23.00	3,356.0	3,389.0
Casing	7.000	K-55	23.00	3,389.0	6,020.0

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

WELL STATUS INQUIRY

Ventura, Calif.

Date: September 5, 2012

To: Alan E. White, Agent
Vintage Production California LLC
9600 Ming Ave., Suite 300
Bakersfield CA 93311

In a notice dated 09/17/11, you propose to plug and abandon
Well "Barker-Ferndale" 2 API number 111-20604
Field Ojai, County Ventura, Sec. 16, T. 4N, R. 21W, SB B.&M.

Please indicate below the conditions or intentions regarding this proposed work, and return completed form to this office within 10 days.

Tim Kustic
State Oil and Gas Supervisor

MD/ms

By _____
Deputy Supervisor

☐ PROPOSED WORK HAS BEEN DONE. (If you check this box, please file the required well records in duplicate for this work. Records are due within 60 days after completion or suspension of proposed work.)

☐ PROPOSED WORK IS IN PROGRESS AND SHOULD BE COMPLETED ABOUT _____ *(date)*

☐ PROPOSED WORK HAS NOT BEEN DONE, BUT WE STILL INTEND TO DO THE WORK.* IF YOU CHECK THIS BOX, YOU MUST CHECK ONE OF THE TWO BOXES BELOW:

- ☐ THERE ARE NO PROGRAM CHANGES. PLEASE CONSIDER THIS FORM AS A SUPPLEMENTARY NOTICE. (The Division may approve a one-year extension of the original notice and permit, with or without issuing a permit in response to your submitted Supplementary Notice.)
- ☐ OUR PROGRAM HAS CHANGED. A SUPPLEMENTARY NOTICE (Form OG123) IS ATTACHED. (A new permit will be issued by the Division in response to your submitted Supplementary Notice.)

☐ WE DO NOT INTEND TO DO THE PROPOSED WORK. Please cancel our notice dated _____

☐ OTHER: _____

Name	Telephone Number:	Signature	Date
Individual to contact for technical questions:	Telephone Number:	E-Mail Address:	

* If operations have not commenced or if you do not return this form to the Division within one year of receipt of the notice, the notice will be considered canceled.

OGD3 (12/08)

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

CHECK LIST-RECORDS RECEIVED AND WELL STATUS

OPERATOR **Vintage Prod California LLC** WELL DESIGNATION: **"Barker-Ferndale" 2**

API No. **11120604** SEC **16** , T. **4N** , R. **21W** , **SB** B. and M.

COUNTY: **Ventura** FIELD **Ojai**

Type of Notice: **Abandonment** **Date:** **9/17/2011** **Report Number:** **P211-325**

RECORDS RECEIVED (ATTACH PAGES IF REQUIRED)

	Date	OK	NEED	Remarks
Well Summary (OG100)				
History (OG103)				
E-Log				
Mud Log				
Dipmeter				
Directional				
Core and/or SWS				

NEW STATUS

DATE: _____

NOTICE OF RECORDS DUE

DATE: _____

DATE: _____

DATE: _____

DATE: _____

WELL STATUS INQUIRY

DATE: 9/5/12

DATE: _____

Well Stat

Change Required: Yes

Change Done: _____

ABANDONMENTS/REABANDONMENTS/DRILLS/REDRILLS

ABANDONMENT DATABASE : _____ SURFACE INSPECTION NEEDED _____ COMPLETED _____
Date and Inspector

FINAL LETTER NEEDED _____ COMPLETED _____ DRILL/REDRILL DATABASE _____
(Date)

ENGINEER'S CHECK LIST

T-REPORT(S) _____ OPERATOR'S NAME _____ WELL DESIGNATION _____ SIGNATURE _____

LOCATION _____ ELEVATION: _____ CONFIDENTIAL RELEASE DATE: _____ PERMIT REQUIREMENTS MET _____

CLERICAL CHECK LIST

LOCATION CHANGE (OG165) _____ ELEVATION CHANGE (OG165) _____ RELEASE OF BOND (OG150) _____

REMARKS

RECORDS SCANNED: _____
(Date)

RECORDS APPROVED: _____
(Date and Engineer)

Modified OGD2

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

CHECK LIST-RECORDS RECEIVED AND WELL STATUS

OPERATOR **Vintage Prod California LLC** WELL DESIGNATION: **"Barker-Ferndale" 2**

API No. **11120604** SEC **16** , T. **4N** , R. **21W** , **SB** B. and M.

COUNTY: **Ventura** FIELD **Ojai**

Type of Notice: **Abandonment** **Date:** **9/17/2011** **Report Number:** **P211-325**

RECORDS RECEIVED (ATTACH PAGES IF REQUIRED)

	Date	OK	NEED	Remarks
Well Summary (OG100)				
History (OG103)				
E-Log				
Mud Log				
Dipmeter				
Directional				
Core and/or SWS				

NEW STATUS

DATE: _____

NOTICE OF RECORDS DUE

DATE: _____

DATE: _____

DATE: _____

DATE: _____

WELL STATUS INQUIRY

DATE: _____

DATE: _____

Well Stat

Change Required: Yes

Change Done: _____

ABANDONMENTS/REABANDONMENTS/DRILLS/REDRILLS

ABANDONMENT DATABASE : _____ SURFACE INSPECTION NEEDED _____ COMPLETED _____
Date and Inspector

FINAL LETTER NEEDED _____ COMPLETED _____ DRILL/REDRILL DATABASE _____
(Date)

ENGINEER'S CHECK LIST

T-REPORT(S) _____ OPERATOR'S NAME _____ WELL DESIGNATION _____ SIGNATURE _____

LOCATION _____ ELEVATION: _____ CONFIDENTIAL RELEASE DATE: _____ PERMIT REQUIREMENTS MET _____

CLERICAL CHECK LIST

LOCATION CHANGE (OG165) _____ ELEVATION CHANGE (OG165) _____ RELEASE OF BOND (OG150) _____

REMARKS

RECORDS SCANNED: _____
(Date)

RECORDS APPROVED: _____
(Date and Engineer)

Modified OGD2

NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES

No. P **211-325**

520 --- (Old) Field Code (New)
12 -- (Old) Area Code (New)
10 -- (Old) Pool Code (New)

PERMIT TO CONDUCT WELL OPERATIONS

William J. Hill, Agent
Vintage Production California LLC
9600 Ming Ave., Suite 300
Bakersfield CA 93311

Ventura, California
September 29, 2011

Your proposal to **plug and abandon** well **"Barker-Ferndale" 2**, A.P.I. No. **111-20604**, Section **16**, T.4**N**, R. **21W**, **S.B.** B. & M., **Ojai** Field, **Silverthread** Area, **Miocene** Pool, **Ventura** County, dated **09/17/11**, received **09/19/11** has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment, as defined by this Division's publication No. MO7, shall be installed and maintained in operating condition and meet the following minimum requirements: Class II 2M
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. A diligent effort shall be made to clean out to 6,460'
4. All portions of the well not plugged with cement are filled with inert mud fluid having a minimum density of 72lbs.,cu. ft (9.6 Lbs/gal) and a minimum gel shear strength of 25lbs./100 sq. ft..
5. This office shall be contacted by phone prior to making any program changes and no changes are made without Division approval..
6. Wellsite restoration shall be completed within 60 days after completion of plugging operations.
7. **THIS DIVISION SHALL BE NOTIFIED TO:**
   - **a.** Inspect the installed blowout prevention equipment prior to commencing downhole operations.
   - b. Witness the location and hardness of the cement plug at 4125'.
   - c. Witness the mudding operations.
   - d. Witness the cement squeeze through the perforations at 600'.
   - d. Witness the placing of the cement to surface.
   - e. Witness the placing of the cement in all annuli after the wellhead has been cut off.
   - f. To inspect the restored well site.

Engineer: Steve Fields

Phone: (805) 654-4761

Elena M. Miller
State Oil and Gas Supervisor

By
Bruce H. Hesson, District Deputy

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work is completed or the operations have been suspended. Issuance of this permit does not preclude the recipient from the obligation of being in compliance with all applicable Federal, State and Local laws, regulations and ordinances.

OG 111

520
12-5T
W-1V

NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

FOR DIVISION USE ONLY		
Bond	Forms OG0114	OG0121
1000 000	111 ✓	115 ✓

NOTICE OF INTENTION TO ABANDON / RE-ABANDON WELL

Detailed instructions can be found at: www.conservation.ca.gov/dog

P211-325

In compliance with Section 3229, Division 3, Public Resources Code, notice is hereby given that it is our intention to abandon ☒ / re-abandon ☐ (Check one) well "Barker-Ferndale" #2, API No. 04-111-20604,

Sec. 16, T. 4N, R. 21W, SB B.&M., Ojai Field, Ventura County.

The complete casing record of the well (present hole), including plugs and perforations, is as follows: (Attach wellbore schematics diagram also.)

10 3/4", 40.5#, K55 Csg cmt'd @ 906', (Cmt. to Surf.).
7", 23#, K55 Csg cmt'd @ 6620', (TOC @ 4110' - CBL).
WSO @ 6274' approved by DOG.
7" Perf'd in Intervals: 6274-6460'.

The total depth is: 7246' feet. The effective depth is: 6579' feet.

Present completion zone(s): Mohnian (Name). Present zone pressure: ± 500' psi.

Oil or gas shows: _____ (Name and depth) feet. Depth to base of fresh water: 600' feet.

Top of uppermost hydrocarbon zone (which may be behind unperforated casing): 4225' (Depth of interval) feet.

Is this a critical well as defined in the California Code of Regulations, Title 14, Section 1720(a) (see next page)? Yes☐ No☒

The proposed work is as follows: (A complete program is preferred and may be attached.)

See attached program.

RECEIVED
SEP 19 2011
Div. of Oil, Gas & Geothermal Resources
Ventura

The Division must be notified immediately of changes to the proposed operations. Failure to provide a true and accurate representation of the well and proposed operations may cause rescission of the permit.

Name of Operator			
Vintage Production California LLC			
Address: 9600 Ming Ave. Suite 300		City/State: Bakersfield, Ca.	Zip Code: 93311
Name of Person Filing Notice: Spencer Payne	Telephone Number: 661-869-8406	Signature: Spencer Payne	Date: 09/17/11
Individual to contact for technical questions: Spencer Payne	Telephone Number: 661-869-8406	E-Mail Address: Spencer_Payne@oxy.com	

This notice must be filed, and approval given, before plugging and abandonment operations begin. If operations have not commenced within one year of the Division's receipt of the notice, this notice will be considered cancelled.

CRITICAL WELL DEFINITION

As defined in the California Code of Regulations, Title 14, Section 1720 (a), "Critical well" means a well within:

(1) 300 feet of the following:
  (A) Any building intended for human occupancy that is not necessary to the operation of the well; or
  (B) Any airport runway.
(2) 100 feet of the following:
  (A) Any dedicated public street, highway or the nearest rail of an operating railway that is in general use;
  (B) Any navigable body of water or watercourse perennially covered by water;
  (C) Any public recreational facility such as a golf course, amusement park, picnic ground, campground or any other area of periodic high-density population; or
  (D) Any officially recognized wildlife preserve.

This form may be printed from the DOGGR website at www.conservation.ca.gov/dog/

RECEIVED

SEP 19 2011

Div. of Oil, Gas & Geothermal Resources
Ventura

VINTAGE PRODUCTION CALIFORNIA, LLC.
9600 Ming Ave. Suite 300
Bakersfield, CA. 93311

WELL INFORMATION

Well No: "Barker-Ferndale" #2
API No.: 04-111-20604
FIELD: Ojai
LOCATION: Sec. 16 - T4N - R21W SB B&M

DATE: 9/8/11
Commenced Drilling: 4/26/75
Completed Drilling: 5/21/75
Ground Level: 1061'
Kelly Bushing: 1073'
All measurements from KB
BFW @ 600'
Top Hydrocarbon @ 4225'

PRESENT WELLBORE CONFIGURATION:

CASINGS: 10 3/4", 40.5#, K55 Csg cmt'd @ 906', (Cmt. to Surf.).
7", 23#, K55 Csg cmt'd @ 6620', (TOC @ 4110' - CBL).

PERFORATIONS: WSO @ 6274' approved by DOG.
7" Perf'd in Intervals: 6274-6460'.

PLUGS: None

TUBING DETAIL: Unknown

PROPOSED PROGRAM

Note: Contact the DOGGR representative to witness all procedural steps required to be witnessed (ie; clean-out depth, cement plug placement and hardness, perforating, mudding operations, surface plug and site restoration). All cement slurries and abandonment mud will conform to DOGGR specifications.

1. Make lease inspection and determine if tubing and rods are present. If necessary, MIRU a production hoist. Bleed well off. Circulate and kill well as necessary. Pull and lay down rods and pump. Install a back pressure valve. Remove tree and install a DOGGR Class II (2M) BOP. Pull and lay down tubing. **Do not initiate any downhole work until DOGGR has inspected BOPE.**

2. RIH with open-ended tubing and make diligent effort to clean out to 6460'. **Notify DOGGR to witness clean-out depth.**

3. Rig up cementers. Lay a cement (Class G Cmt + 35% Silica Flour + additives) plug from 6460' - 4125' (Calculated Volume + 50% excess of perf'd interval: 559 cft.). WOC. Estimated BHST @ 6460' 175 F.

4. RIH and tag plug at or above 4125', re-cement if necessary. **Notify DOGGR to witness tag.**

5. Spot abandonment mud from top of plug to 600'. Abandonment mud shall conform to DOGGR permit specifications - 76 lb/cft with a minimum gel strength of 26 lbs./ 100 sq ft. (Calculated Volume: 139 bbls). **Notify DOGGR to witness mud.**

6. Rig up wireline Punch 4-1/2" holes @ 600'. **Notify DOGGR to witness.**

7. RIH with open-ended tubing. Rig up cementers. Lay a cement (Class G Cmt + 35% Silica Flour + additives) plug of sufficient volume to leave cement in casings from 600' to surface and squeeze 100' in uncemented annulus. (Calculated Volume + 25% excess: 201 cft.) WOC.

8. Fill all uncemented annuli to a depth of at least 30' to 5' with cement. Dig outside the conductor casing 5' below ground level. Cut casings off 5' below ground level. Weld on a steel top plate with well identification. **Notify DOGGR to witness surface abandonment.**

9. Restore surface location to original grade.

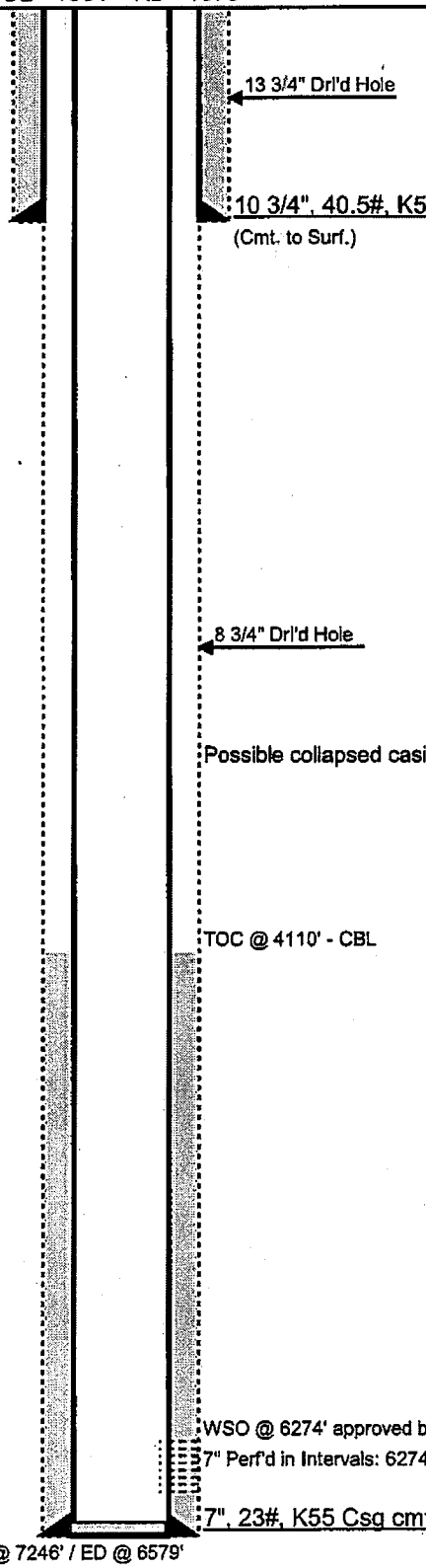
RECEIVED
SEP 19 2011
Div. of Oil, Gas & Geothermal Resources
Ventura

Vintage Production California LLC
Well No: "Barker-Ferndale" #2
Field: Ojai
1077' S & 2880' E from NW Corner of Section
Sec. 16 - T4N - R21W SB B&M
Present Wellbore Configuration

Drawing Date: 9/8/11
Commenced Drilling: 4/26/75
Completed Drilling: 5/21/75

All measurements are from KB
GL - 1061' - KB - 1073'
API No. 04-111-20604

BFW @ 600'
Top Hydrocarbon @ 4225'



TD @ 7246' / ED @ 6579'

Drawing not to scale
Prepared by: *Bud Frederick*

RECEIVED
SEP 19 2011
Div. of Oil, Gas & Geothermal Resources
Ventura

PROPERTY/WELL TRANSFER OR ACQUISTION

Seneca Resources Corporation (S2630)

to

Vintage Production California LLC (V1370)

Effective April 25, 2008

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF PROPERTY AND WELL TRANSFER

Field or county	District
Ojai	2
Former owner	**Date**
Argo Petroleum Corp.	Sept. 10, 1987

Name and location of well(s)

Sec. 16, T. 4N., R. 21W., SBB&M

"Barker-Ferndale" 1	(111-20423)	"Valex-Ferndale" 211	(111-21178)
"Barker-Ferndale" 2	(111-20604)	"Valex-Ferndale" 214	(111-21180)
"Barker-Ferndale" 3	(111-20609)	"Valex-Ferndale" 215	(111-21206)
"Barker-Ferndale" 4	(111-20685)	"Valex-Ferndale" 313	(111-21314)
"Barker-Ferndale" 5	(111-20702)	"Ferndale" 8	(111-20732)
"Barker-Ferndale" 6	(111-20730)		
"Valex-Ferndale" 107	(111-21066)		
"Valex-Ferndale" 110	(111-21163)		
"Valex-Ferndale" 209	(111-21105)		

Description of the land upon which the well(s) is (are) located

Date of transfer, sale, assignment, conveyance, or exchange	New owner	Type of organization
7-17-87	Seneca Resources Cprporatipn	Corp.
	Address: 511 16th St. Mall, Ste 300, Denver, CO 80202	Telephone No.: (303) 825-7401

Reported by
Seneca Resources Corp.

Confirmed by
Argo Petroleum Corp.

New operator new status (status abbreviation)	Request designation of agent
PA	
Old operator new status (status abbreviation)	**Remarks**
PA	

Deputy Supervisor	Signature
Patrick J. Kinnear	Patrick J. Kinnear

OPERATOR STATUS ABBREVIATIONS

PA – Producing Active
NPA – No Potential, Active
PI – Potential Inactive
NPI – No Potential, Inactive
Ab – Abandoned or No More Wells

FORM AND RECORD CHECK LIST

Form or record	Initials	Date	Form or record	Initials	Date
Form OGD121			Map and book		
Form ODG148			Notice to be cancelled		
New well cards			Bond status		
Well records			EDP files		
Electric logs					
Production reports					

OPERATOR ARCO
LSE & NO "Barker-Ferndale" 2
MAP 202

	(1)	(2)	( )	( )	( )	( )
INTENTION	DRILL	PLUG & REDRILL				
NOTICE DATED	4-16-75	12-29-75				
P-REPORT NUMBER	275-134	275-448				
CHECKED BY/DATE						
MAP LETTER DATED	4-26-75 loc	3-27-76				
SYMBOL	●	●				

	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED
NOTICE	4-17-75		12-29-75									
HISTORY			5-5-77 3-19-76									
SUMMARY			5-5-77 3-19-76									
~~HES~~ IIL/ELECTRIC LOG			3-19-76									
DIRECTIONAL SURV	4-5-76		4-5-76									
CORE/SWS DESCRIP	digitalog 1-13-81 1-13-81											
OTHER	Comp Dip FDL 3-19-76 CBL 3-19-76 2-TIL 9-8-77 CNL 3-19-77 Mud Log 3-19-77											
RECORDS COMPLETE												

ENGINEERING CHECK

T-REPORTS	
OPERATOR'S NAME	
WELL DESIGNATION	
LOC & ELEV	
SIGNATURE	
SURFACE INSPECTION	
FINAL LETTER OK	

CLERICAL CHECK

POSTED TO 121 _____ 170 MAILED _____ FINAL LETTER MAILED _____

RELEASED BOND _____

REMARKS: PRODUCTION TEST NEEDED - Prod Test 2-3-77

Review of Records for Calculated Dip. to Com File

"Barker-Ferndale Lease Sec 16, 4N-21S, Ojai

Baker-Ferndale "1 : Orig TD 5312' Run Dipmeter & IES. 8-15-72

RD#1 TD 4330' " " 8-27-72

RD#2 TD 6639' no Logs reported 9-8-72

RD#3 TD 7264'

RD#4 TD 6345' 9-26-72

Well was completed Feb-1973

RD#5 TD 5641 10-15-72

RD#6 6532' Dip, Mud Calc Dip - Received 5/1/78 12-75

Prior to statute that Required All surveys

"Barker-Ferndale" 2 TD 7246' (No RDs) Dip Run 904'-4988' Dipmeter correlation Curves Filed 3/12/76

" " 3 TD 6330, Fish 6023', Int 4000-6009 " " " " 7/1/75

4 TD 1st 6992 823-6991 " " " " 9/21/76

TD RD 7492, fr 4462', 4461-7481 " " " " 4/14/78

5 TD 6604' 784-6584 " " " " 10/30/76

6 TD 6505' 4500-6500 " " " " 2/24/77

12/22/80

avk

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

20798-705 1-74 9M ⓓ OSP

DIVISION OF OIL AND GAS
RECEIVED
MAY - 5 1977
SANTA PAULA, CALIFORNIA

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread
ARGO BARKER
Well No. FERNDALE #2, Sec. 16, T. 4N, R. 21W, S.B.B. & M.

Date April 28, 1977 Signed C. Boerlage

940 East Santa Clara
Ventura, Ca. 93001 (805) 648-2514 Title Executive Vice President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

RE-COMPLETION

Date 1977	
Mar. 1	MIRU Atlantic rig #4. Re-drilled rat hole.
2	Pulled and laid down 2 3/8" tbg. Installed BOE and flanged up. Tested O.K. RIH with 2 7/8" D. P. to 3356'.
3	Well started to flow. Changed over to 74# brine water. POH RIH with 3 1/4" swage thru bad csg. f/3356'-3370'. POH. RIH with 5" swage F/3356'-3361', could not go deeper. POH.
4	RIH with 5" impression block to 3356'. POH. Imp. block indicated 7" csg. parted at 3356'. RIH with 4 5/8" swage, stopped at 3356'. Could not get deeper. POH. RIH with 6" I.B. POH. I.B. egg-shaped to 5 1/2". RIH with 4 5/8" swage. Swaged f/3356'-3372'. POH.
5	RIH with 3 1/4" swage to 3372'. Swaged f/3372'-3389'. POH. RIH with 6 jts. 2 3/8" buttress tbg. below 2 7/8" D.P. to 3556'. POH. Rigged up Dia-Log with 3 1/8" minimum caliper. Checked csg. f/3500'-3300'. Survey indicated csg. collapsed 3348'-3410' (not parted). Removed B.O.E. Installed tbg. head and tested at 3500 PSI. OK.
6	RIH with 110 jts., 2 3/8" buttress tbg. to 3420', pump shoe at 3390'. Landed on donut and flanged up.
7	Released rig at 12:00 noon.
8	Moving out rig.
9	MIRU C.P.S. prod. hoist. RIH W/tbg., tagged fill at 6132', C.O. to 6216'. P.U. to 6098'. Shut down.
10	RIH to 6216', C.O. sand to 6579'. P.U. and landed tbg. w/tail at 6232', shoe at 6200'. Tore out BOE, installed prod. tree. Changed over with 240 bbl. lease crude. RIH w/pump and rods, stopped at 5000'. POH w/rods and pump.
11	Installed BOE. Changed over to 72# brine water. Pulled 2 7/8" tbg. RIH w/broach. Replaced 169th jt. (bad). RIH and landed tbg. at 6232', shoe at 6200'. Tore out BOE, installed prod. tree. Ran pump and rods, tested tbg. OK. Spaced well, CPS moved out.
12	Put well on prod. pumping thru 18/64" bean.
13	Prod. 34 bbl. cut 100% (load water)

OG 103

SUBMIT IN DUPLICATE

20798-705 1-74 8M ② OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

Well No. ARGO BARKER FERNDATE #2, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date April 28, 1977 Signed

940 East Santa Clara
Ventura, Ca. 93001 (805) 648-2514 Title Executive Vice President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1977	
Mar. 23	MIRU C.P.S. prod. hoist. Pulled rods and pump. Found seat washed out in pump. Rigged up Otis. Made feeler run, tagged fill at 6410'. Removed prod. tree. Installed BOE and tested OK.
24	Changed over to 74# brine water. POH w/tbg. Removed bottom lock shoe, installed top lock shoe. RIH and landed tbg on donut.
25	Measured and POH w/2 7/8" tbg. RIH, and tagged fill at 6467'. C.O. to 6572'. P.U. and landed tbg. at 6190'. Ran pump and rods. Changed over with 240 bbl. lease crude. Spaced well. C.P.S. moved out.
26	Put well on prod. Cut 34%. Mo gauge.
THRU 27	Pumping load oil.
Apr. 6	
7	42 gross, cut 46%, TP 120, 18/64" bean
10	51 gross, cut 22%, TP 120, 18/64" bean

JGC 4/28/77

BB

OG 103

dup P&A

111-20604

SCHLUMBERGER DIGITAL DIPMETER — 4 ARM HDT-C GPPS PROGRAM — LA05195

ARGO PETROLEUM CORPORATION
BARKER FERNDALE NO. 2
16-4N-21W KB 1073 GL 1061
ALL AZIMUTH READINGS ARE TRUE
RUN NO. 1 4X4X70 DEGREES

OJAI FIELD
VENTURA COUNTY, CALIFORNIA
MAGNETIC DECLINATION N 16 E
DATE LOGGED 5-19-75

DIVISION OF OIL AND GAS
RECEIVED
JAN 13 1981
SANTA PAULA, CALIFORNIA

NOTE - CLOSURE AND LIKENESS QUALITIES ARE GREATER THAN 4

DEPTH	(--FORMATION--) DIP	AZM	CLOSURE BRG	QUAL	(--BORE HOLE--) DEV	AZM	BRG	(SONDE) AZ1	RBR	D1-3	D2-4	LIKENESS QUAL		APP DIP
4708	74.5	173	S 7 E	44	10.6	99	S 81 E	340	240	8.6	9.4	47	1	77.6
4712	68.5	348	N 12 W	100	10.3	99	S 81 E	334	234	8.6	9.4	57	4	65.1
4768	61.9	106	S 74 E	74	10.2	99	S 81 E	326	227	8.6	9.7	51	2	72.1
4772	80.7	269	S 89 W	100	10.1	100	S 80 E	318	218	8.6	9.9	52	3	70.8
4776	73.1	307	N 53 W	100	10.0	101	S 79 E	325	223	8.7	10.3	51	2	64.1
4788	83.6	278	N 82 W	100	10.4	102	S 78 E	335	233	8.6	10.4	50	2	73.3
4800	65.0	110	S 70 E	100	10.4	103	S 77 E	342	238	8.7	10.2	47	2	75.3
4816	49.2	151	S 29 E	72	10.1	105	S 75 E	354	249	9.4	10.0	42	1	56.6
4852	62.5	100	S 80 E	47	9.5	105	S 75 E	230	125	10.4	9.3	44	1	72.0
4856	73.3	353	N 7 W	100	9.8	107	S 73 E	224	117	10.4	9.4	59	2	69.6
4864	83.5	285	N 75 W	100	9.7	109	S 71 E	240	132	11.2	10.9	56	1	73.8
4880	32.3	71	N 71 E	100	10.3	115	S 65 E	249	135	9.1	10.2	53	3	40.3
4884	66.3	187	S 7 W	100	10.5	114	S 66 E	237	123	9.1	10.5	44	3	69.8
4888	56.4	52	N 52 E	100	10.2	113	S 67 E	224	111	9.2	10.0	48	4	61.8
4892	78.5	17	N 17 E	100	10.1	113	S 67 E	221	108	9.4	10.0	56	1	77.6
4900	63.8	359	N 1 W	100	10.0	112	S 68 E	219	107	9.6	11.1	69	3	60.3
4916	61.4	170	S 10 E	79	9.9	112	S 68 E	225	114	9.2	11.6	72	2	67.0
4932	84.9	336	N 24 W	100	10.0	110	S 70 E	215	105	9.5	12.4	62	2	78.0
4936	74.8	209	S 29 W	100	10.1	110	S 70 E	207	97	9.3	11.8	71	1	73.5
4940	51.6	319	N 41 W	100	10.0	109	S 71 E	198	89	9.2	12.0	87	1	43.2
4948	71.7	325	N 35 W	100	9.9	108	S 72 E	199	90	9.5	11.5	59	1	63.9
4952	80.7	239	S 59 W	100	9.9	108	S 72 E	193	85	9.6	11.1	42	4	74.4
4956	74.1	251	S 71 W	53	9.8	108	S 72 E	192	83	9.3	11.2	75	3	66.4
4964	72.5	208	S 28 W	100	9.4	109	S 71 E	172	63	9.3	11.7	78	4	71.2
4972	78.0	272	N 88 W	56	9.5	108	S 72 E	168	60	9.2	11.8	65	2	68.9
4980	49.9	4	N 4 E	100	9.6	107	S 73 E	157	50	9.2	11.4	58	1	48.4
4992	73.0	149	S 31 E	100	9.3	108	S 72 E	159	50	9.2	11.7	47	1	80.1
5000	88.8	271	N 89 W	100	9.8	110	S 70 E	163	52	9.2	11.5	44	2	79.6
5008	70.7	318	N 42 W	100	9.6	113	S 67 E	164	51	9.6	11.0	62	4	62.1
5016	67.3	204	S 24 W	100	9.9	112	S 68 E	158	46	9.9	11.0	43	3	67.2
5020	79.7	260	S 80 W	100	9.5	112	S 68 E	151	39	10.0	10.7	75	2	71.6
5040	64.2	269	S 89 W	100	9.6	113	S 67 E	161	48	9.5	9.6	89	2	55.5
5044	66.2	31	N 31 E	68	9.5	114	S 66 E	145	30	9.3	9.5	55	2	67.8
5052	32.0	243	S 63 W	75	9.5	114	S 66 E	136	22	9.5	10.1	59	3	27.0
5056	46.0	9	N 9 E	100	9.5	114	S 66 E	131	17	9.8	10.4	68	2	44.2
5060	75.9	226	S 46 W	100	9.5	116	S 64 E	124	7	9.4	11.0	60	4	72.9
5064	61.0	139	S 41 E	100	9.4	118	S 62 E	117	359	9.1	11.1	68	4	69.8
5068	78.8	324	N 36 W	100	9.4	119	S 61 E	110	351	9.1	11.6	59	3	70.4
5084	34.6	176	S 4 E	50	9.7	122	S 58 E	90	328	9.2	10.7	46	2	41.0
5096	78.0	347	N 13 W	100	9.7	128	S 52 E	83	316	9.6	11.6	80	4	70.5
5112	65.0	188	S 8 W	100	10.0	130	S 50 E	80	311	10.0	11.4	59	3	70.5
5120	79.3	328	N 32 W	100	10.1	131	S 49 E	77	306	9.1	11.6	73	2	69.6
5132	34.2	147	S 33 E	100	10.4	133	S 47 E	100	327	9.4	11.9	65	2	44.3
5140	22.2	84	N 84 E	100	10.5	135	S 45 E	100	326	9.2	12.0	68	3	29.9
5144	72.6	307	N 53 W	100	10.6	136	S 44 E	102	327	10.1	11.9	40	4	62.1
5172	56.3	236	S 56 W	100	11.3	144	S 36 E	149	5	8.4	10.9	43	1	56.6
5180	81.0	346	N 14 W	100	11.2	145	S 35 E	156	10	8.9	11.7	56	1	70.5

5184	88.5	163	S	17	E	59	11.3	146	S	34	E	164	17	9.5	11.6	59	1	80.8
5188	84.1	352	N	8	W	100	11.2	147	S	33	E	168	20	9.2	10.8	97	3	74.0
5196	71.7	96	S	84	E	100	11.0	149	S	31	E	160	11	9.1	12.0	43	2	78.5
5200	18.0	127	S	53	E	51	10.9	150	S	30	E	157	7	9.2	11.8	49	1	28.4
5224	81.8	340	N	20	W	100	10.9	151	S	29	E	133	342	9.2	11.8	60	2	70.9
5228	61.6	182	S	2	W	100	10.9	154	S	26	E	132	339	9.3	12.0	46	2	71.3
5232	77.2	32	N	32	E	100	11.0	154	S	26	E	128	334	9.3	12.2	53	3	71.5
5236	82.2	332	N	28	W	100	11.1	156	S	24	E	127	331	9.5	12.7	59	2	71.1
5244	53.4	172	S	8	E	100	11.3	159	S	21	E	129	330	8.7	11.7	42	3	64.4
5248	82.9	336	N	24	W	100	11.3	159	S	21	E	147	348	8.6	11.0	48	3	71.7
5256	84.7	346	N	14	W	100	12.1	158	S	22	E	163	5	9.1	10.2	58	3	72.7
5264	69.7	254	S	74	W	88	11.9	164	S	16	E	160	356	9.6	10.5	54	4	70.2
5272	68.0	243	S	63	W	100	11.8	167	S	13	E	154	347	9.2	10.9	68	1	71.2
5284	81.2	345	N	15	W	100	12.1	168	S	12	E	124	316	9.5	10.6	90	3	69.1
5292	48.0	164	S	16	E	100	12.2	169	S	11	E	121	312	9.1	10.4	81	2	60.2
5296	83.1	338	N	22	W	100	12.4	169	S	11	E	112	303	9.1	10.9	77	2	70.9
5300	41.2	134	S	46	E	100	12.4	170	S	10	E	112	303	9.0	11.0	77	2	51.6
5308	78.5	342	N	18	W	100	12.7	172	S	8	E	109	298	9.1	11.0	56	1	66.1
5316	84.6	333	N	27	W	100	13.3	172	S	8	E	88	276	9.2	10.7	64	1	72.1
5320	79.1	341	N	19	W	100	13.6	173	S	7	E	96	284	9.3	10.6	53	2	65.8
5324	81.4	336	N	24	W	100	13.8	173	S	7	E	95	283	9.2	10.8	77	1	68.2
5328	79.8	343	N	17	W	100	14.1	173	S	7	E	94	282	9.2	10.6	62	1	66.0
5332	67.9	113	S	67	E	100	14.0	174	S	6	E	93	280	9.5	11.2	56	1	75.3
5336	81.9	351	N	9	W	100	13.9	174	S	6	E	92	278	9.4	11.1	75	2	68.0
5340	80.3	346	N	14	W	100	14.1	174	S	6	E	97	283	9.4	11.0	66	2	66.4
5344	81.0	343	N	17	W	56	14.6	175	S	5	E	95	281	9.2	11.4	49	2	66.7
5348	59.9	107	S	73	E	95	14.5	175	S	5	E	93	278	9.5	11.5	40	2	66.3
5352	83.6	62	N	62	E	88	14.6	174	S	6	E	91	277	9.7	11.6	67	1	78.4
5356	80.5	338	N	22	W	100	15.0	174	S	6	E	88	275	9.3	10.8	95	4	66.1
5364	78.4	354	N	6	W	56	14.7	175	S	5	E	96	282	9.3	10.8	43	4	63.6
5368	73.2	79	N	79	E	60	15.4	175	S	5	E	95	281	9.6	10.8	49	3	72.4
5372	50.9	238	S	58	W	47	15.3	175	S	5	E	74	258	9.9	11.0	57	2	58.8
5380	80.9	351	N	9	W	73	15.1	175	S	5	E	36	220	10.2	10.0	75	2	65.8
5384	87.1	338	N	22	W	100	15.6	175	S	5	E	29	213	10.2	10.5	63	2	72.1
5392	71.0	338	N	22	W	100	14.9	175	S	5	E	3	188	9.2	9.8	85	4	56.8
5396	84.7	344	N	16	W	100	15.4	174	S	6	E	2	187	9.4	10.6	79	3	69.6
5400	78.0	328	N	32	W	100	15.3	175	S	5	E	346	171	9.4	10.0	75	3	64.6
5412	59.4	339	N	21	W	100	15.7	175	S	5	E	330	156	10.2	9.4	88	1	44.4
5424	74.6	347	N	13	W	100	15.9	177	S	3	E	316	141	9.6	9.8	44	1	58.9
5428	75.5	349	N	11	W	84	15.8	175	S	5	E	319	145	9.7	10.1	78	3	59.9
5436	75.4	347	N	13	W	88	16.2	175	S	5	E	308	134	9.3	9.8	78	3	59.5
5448	73.6	351	N	9	W	100	16.2	176	S	4	E	282	107	9.4	10.1	74	2	57.5
5452	76.0	359	N	1	W	100	16.2	175	S	5	E	286	112	9.4	10.2	64	3	59.8
5456	72.2	348	N	12	W	100	16.2	173	S	7	E	280	108	9.5	9.8	75	2	56.1
5460	70.2	356	N	4	W	100	16.0	173	S	7	E	260	87	9.5	9.5	65	1	54.2
5464	68.0	346	N	14	W	100	16.1	173	S	7	E	256	83	9.3	9.8	77	4	52.1
5468	67.6	346	N	14	W	100	16.3	172	S	8	E	255	83	9.4	9.9	71	2	51.5
5476	70.3	343	N	17	W	100	16.5	170	S	10	E	253	82	9.0	10.3	68	2	53.9
5480	66.1	349	N	11	W	100	16.9	170	S	10	E	256	85	9.1	10.4	83	2	49.2
5484	66.8	342	N	18	W	100	16.6	170	S	10	E	252	82	9.1	10.0	93	2	50.3
5488	76.2	349	N	11	W	100	17.0	170	S	10	E	254	84	9.2	9.7	82	1	59.2
5500	70.3	353	N	7	W	100	17.4	171	S	9	E	275	104	9.6	10.5	76	4	52.9
5504	84.2	31	N	31	E	100	17.7	172	S	8	E	277	106	9.2	11.4	61	2	70.7
5508	85.9	30	N	30	E	100	17.7	172	S	8	E	277	106	9.1	11.6	60	1	72.1
5512	75.0	347	N	13	W	100	17.7	172	S	8	E	278	106	8.9	11.6	88	2	57.4
5516	76.1	350	N	10	W	100	18.1	171	S	9	E	276	106	8.9	10.5	78	1	58.0
5520	86.8	29	N	29	E	100	18.7	172	S	8	E	278	107	9.0	10.6	85	4	71.8
5524	77.6	360	NORTH			100	19.0	173	S	7	E	279	107	9.0	10.6	59	4	58.7
5528	77.1	355	N	5	W	100	19.3	173	S	7	E	280	107	9.0	10.4	78	2	57.8
5532	70.4	354	N	6	W	100	19.5	173	S	7	E	279	107	9.0	10.1	63	3	50.9

5536	72.5	352	N	8	W	100	20.1	173	S	7	E	278	106	9.3	10.7	98	2	52.5
5540	73.7	350	N	10	W	100	20.1	174	S	6	E	275	102	9.2	10.5	90	2	53.6
5544	61.2	350	N	10	W	100	20.6	174	S	6	E	269	96	8.8	9.9	63	2	40.6
5548	66.2	349	N	11	W	86	20.9	174	S	6	E	263	88	8.8	10.3	87	2	45.5
5552	76.6	353	N	7	W	100	21.0	175	S	5	E	259	84	9.0	10.9	73	2	55.5
5560	72.4	352	N	8	W	100	21.3	175	S	5	E	266	91	8.9	10.9	77	4	51.1
5564	76.4	354	N	6	W	100	21.3	175	S	5	E	272	97	8.8	10.7	80	4	55.2
5568	72.2	353	N	7	W	100	21.1	175	S	5	E	273	99	9.0	10.7	78	4	51.2
5572	68.8	353	N	7	W	100	21.2	175	S	5	E	265	90	8.9	10.2	73	4	47.6
5576	74.6	356	N	4	W	100	21.1	176	S	4	E	259	83	9.0	9.9	70	4	53.4
5580	53.7	257	S	77	W	100	21.2	175	S	5	E	260	84	9.0	9.5	48	3	59.1
5584	75.1	353	N	7	W	100	20.7	175	S	5	E	257	82	9.0	9.4	61	2	54.4
5592	80.6	354	N	6	W	73	20.9	175	S	5	E	262	86	9.1	9.7	67	3	59.7
5596	54.1	73	N	73	E	100	20.8	175	S	5	E	258	83	8.9	9.6	40	3	52.7
5600	69.1	356	N	4	W	100	21.1	176	S	4	E	264	89	9.0	9.5	95	4	48.1
5604	72.7	360		NORTH		100	21.2	176	S	4	E	270	94	8.8	9.3	85	2	51.6
5608	72.3	355	N	5	W	100	21.2	176	S	4	E	275	99	8.8	9.3	77	2	51.1
5612	83.2	355	N	5	W	100	21.2	176	S	4	E	272	97	8.9	9.4	78	4	62.0
5616	69.5	354	N	6	W	44	21.1	176	S	4	E	268	92	8.8	9.4	58	3	48.4
5620	72.6	355	N	5	W	100	21.1	176	S	4	E	269	93	8.6	9.3	79	2	51.5
5624	73.0	357	N	3	W	100	21.0	176	S	4	E	272	96	8.7	9.3	66	3	52.0
5628	69.1	357	N	3	W	100	20.9	176	S	4	E	271	95	8.9	9.5	79	2	48.2
5632	70.7	356	N	4	W	100	20.9	176	S	4	E	270	94	8.8	9.6	76	4	49.8
5636	67.5	354	N	6	W	100	21.0	175	S	5	E	266	91	8.7	9.5	87	4	46.5
5640	71.8	353	N	7	W	100	21.0	176	S	4	E	265	89	8.7	9.4	71	2	50.8
5644	73.0	353	N	7	W	100	21.1	176	S	4	E	269	93	8.7	9.4	85	2	52.0
5652	80.4	1	N	1	E	100	21.3	175	S	5	E	273	99	8.9	9.3	88	4	59.1
5656	35.5	340	N	20	W	61	21.4	175	S	5	E	273	98	8.6	9.2	94	2	15.8
5660	71.7	352	N	8	W	100	21.4	175	S	5	E	271	96	8.6	9.3	69	2	50.4
5664	72.2	353	N	7	W	100	21.4	175	S	5	E	268	93	8.7	9.4	84	2	50.9
5668	72.0	353	N	7	W	100	21.5	175	S	5	E	266	91	8.6	9.3	90	2	50.5
5672	71.3	353	N	7	W	100	21.6	175	S	5	E	263	87	8.7	9.3	67	1	49.7
5676	72.2	353	N	7	W	100	21.7	176	S	4	E	262	86	8.6	9.3	87	2	50.6
5680	73.1	350	N	10	W	84	21.8	175	S	5	E	264	88	8.7	9.5	74	4	51.4
5684	70.8	353	N	7	W	100	21.8	175	S	5	E	264	88	8.7	9.7	57	3	49.0
5688	71.7	353	N	7	W	100	22.0	175	S	5	E	263	87	8.7	9.9	81	4	49.7
5692	71.1	354	N	6	W	100	22.1	175	S	5	E	264	88	8.8	9.8	88	2	49.1
5700	69.1	349	N	11	W	100	22.4	175	S	5	E	265	91	8.8	10.0	49	3	46.8
5704	67.8	350	N	10	W	100	22.4	175	S	5	E	263	87	8.9	9.7	64	4	45.5
5708	67.2	350	N	10	W	100	22.6	175	S	5	E	265	90	8.8	9.8	68	2	44.7
5712	65.4	348	N	12	W	100	22.8	175	S	5	E	267	91	8.8	9.6	74	4	42.8
5716	83.5	174	S	6	E	100	22.9	175	S	5	E	265	91	8.8	9.5	63	4	73.6
5720	64.7	352	N	8	W	100	23.3	175	S	5	E	263	89	8.8	9.7	59	4	41.5
5724	66.0	354	N	6	W	100	23.5	175	S	5	E	267	93	8.8	9.6	74	2	42.5
5732	66.5	354	N	6	W	100	24.1	175	S	5	E	268	94	8.7	9.6	84	4	42.4
5736	65.6	351	N	9	W	100	24.3	174	S	6	E	265	91	8.7	9.7	69	2	41.3
5740	65.6	352	N	8	W	100	24.7	175	S	5	E	269	95	8.8	9.6	84	2	40.9
5744	67.6	349	N	11	W	100	24.8	174	S	6	E	267	93	8.8	9.5	71	2	42.9
5748	66.5	349	N	11	W	100	25.3	175	S	5	E	269	94	8.8	9.5	77	2	41.4
5752	73.2	360		NORTH		100	25.5	175	S	5	E	264	89	8.8	9.5	87	2	47.8
5756	70.2	350	N	10	W	100	25.8	174	S	6	E	266	92	8.8	9.6	93	3	44.4
5760	75.2	351	N	9	W	100	26.0	175	S	5	E	265	91	8.8	9.5	91	2	49.2
5764	68.7	354	N	6	W	100	26.2	175	S	5	E	265	90	8.7	9.3	72	1	42.4
5768	68.0	352	N	8	W	100	26.3	175	S	5	E	265	90	8.7	9.5	57	1	41.7
5772	63.5	356	N	4	W	100	26.4	175	S	5	E	268	93	8.7	9.6	58	1	37.1
5776	65.8	351	N	9	W	100	26.6	174	S	6	E	272	99	8.8	9.4	65	3	39.3
5780	71.8	354	N	6	W	100	26.6	175	S	5	E	270	96	8.8	9.4	86	2	45.2
5784	63.4	353	N	7	W	100	26.6	174	S	6	E	267	93	8.8	9.4	82	4	36.8
5788	65.1	357	N	3	W	100	26.8	175	S	5	E	272	97	8.8	9.4	93	2	38.3
5792	63.2	349	N	11	W	100	26.9	175	S	5	E	272	98	8.8	9.4	94	2	36.5

5796	65.4	352	N	8	W	100	26.9	175	S	5	E	267	93	8.8	9.6	89	2	38.6
5800	67.3	353	N	7	W	100	26.9	175	S	5	E	273	100	8.8	9.5	81	2	40.3
5804	59.0	355	N	5	W	100	27.0	175	S	5	E	273	98	8.8	9.4	92	4	32.1
5808	69.4	356	N	4	W	63	27.1	174	S	6	E	270	96	8.8	9.4	55	3	42.3
5812	66.9	355	N	5	W	100	27.1	175	S	5	E	272	98	8.8	9.4	74	2	39.7
5816	67.6	351	N	9	W	82	27.3	174	S	6	E	270	96	8.8	9.4	70	2	40.4
5820	56.2	353	N	7	W	100	27.4	175	S	5	E	269	94	8.9	9.4	84	4	28.8
5824	79.0	356	N	4	W	100	27.3	175	S	5	E	267	92	8.7	9.6	78	2	51.7
5828	73.1	356	N	4	W	100	27.7	175	S	5	E	269	94	8.7	9.5	82	2	45.4
5832	64.2	356	N	4	W	100	27.4	174	S	6	E	269	96	8.7	9.4	60	1	36.9
5836	66.2	357	N	3	W	100	27.5	175	S	5	E	269	95	8.7	9.3	83	1	38.7
5840	74.7	359	N	1	W	100	27.5	175	S	5	E	271	96	8.8	9.5	82	2	47.3
5844	66.3	358	N	2	W	100	27.7	175	S	5	E	271	97	8.8	9.4	84	2	38.7
5848	63.5	2	N	2	E	100	27.9	175	S	5	E	277	104	8.8	9.4	70	1	35.8
5852	64.2	360	NORTH			100	27.9	175	S	5	E	279	106	8.8	9.3	73	1	36.4
5856	61.4	1	N	1	E	100	27.9	176	S	4	E	280	106	8.8	9.0	65	2	33.7
5860	87.8	20	N	20	E	42	28.0	175	S	5	E	272	98	8.8	9.4	65	3	62.7
5864	65.0	360	NORTH			66	28.1	176	S	4	E	269	94	8.7	9.5	64	4	37.0
5868	69.3	1	N	1	E	100	28.1	175	S	5	E	271	96	8.8	9.3	77	2	41.4
5872	65.9	357	N	3	W	100	28.3	176	S	4	E	270	95	8.8	9.1	68	1	37.6
5876	85.8	176	S	4	E	100	28.3	175	S	5	E	267	91	8.7	9.6	71	2	65.9
5880	73.3	359	N	1	W	100	28.4	175	S	5	E	272	98	8.7	9.4	71	2	44.9
5884	68.8	360	NORTH			100	28.5	175	S	5	E	268	94	8.7	9.5	73	2	40.5
5888	64.3	360	NORTH			100	28.6	175	S	5	E	270	96	8.7	9.4	76	4	35.9
5892	67.2	360	NORTH			100	28.4	175	S	5	E	270	95	8.7	9.4	68	2	38.9
5896	65.0	358	N	2	W	100	28.7	175	S	5	E	271	97	8.7	9.4	65	3	36.4
5900	63.9	360	NORTH			100	28.8	176	S	4	E	272	97	8.7	9.3	71	2	35.2
5904	55.3	2	N	2	E	100	29.3	175	S	5	E	275	101	8.8	9.3	76	2	26.4
5908	60.9	359	N	1	W	100	28.8	176	S	4	E	277	103	8.8	9.1	61	3	32.2
5912	59.1	354	N	6	W	51	29.1	175	S	5	E	276	102	8.8	9.3	59	3	30.0
5916	51.9	352	N	8	W	100	29.3	175	S	5	E	275	101	8.8	9.2	70	2	22.7
5920	60.3	356	N	4	W	100	29.3	175	S	5	E	274	101	8.7	9.1	76	1	31.0
5924	69.7	1	N	1	E	100	29.6	175	S	5	E	270	96	8.8	9.2	63	1	40.3
5928	66.5	359	N	1	W	100	29.6	175	S	5	E	273	99	8.8	9.1	75	3	37.0
5932	64.0	354	N	6	W	100	30.1	175	S	5	E	275	102	8.8	9.2	68	3	33.9
5936	68.7	360	NORTH			100	29.9	175	S	5	E	276	102	8.8	9.2	77	1	38.9
5940	68.5	355	N	5	W	100	29.8	175	S	5	E	275	101	8.8	9.1	86	4	38.7
5944	70.5	357	N	3	W	100	30.2	175	S	5	E	272	99	8.7	8.9	91	3	40.4
5948	70.2	7	N	7	E	100	30.2	175	S	5	E	264	89	8.6	8.5	96	2	40.9
5952	67.9	10	N	10	E	100	30.3	176	S	4	E	266	90	8.6	8.4	80	3	38.8
5956	63.1	360	NORTH			100	30.7	175	S	5	E	273	98	8.7	8.6	80	4	32.6
5960	70.1	358	N	2	W	100	30.5	176	S	4	E	273	98	8.7	8.7	84	2	39.7
5980	62.3	358	N	2	W	100	31.0	176	S	4	E	266	90	8.6	8.6	91	1	31.4
5984	85.0	155	S	25	E	74	31.2	176	S	4	E	271	96	8.7	8.9	50	2	66.0
5996	75.1	12	N	12	E	100	31.8	176	S	4	E	264	88	8.6	8.4	81	3	45.0
6004	71.7	2	N	2	E	100	31.7	175	S	5	E	265	90	8.7	8.9	82	2	40.3
6008	67.0	10	N	10	E	100	32.0	176	S	4	E	273	99	8.6	8.6	72	2	36.4
6012	60.2	5	N	5	E	100	32.2	176	S	4	E	274	99	8.6	8.4	89	1	28.7
6016	54.1	10	N	10	E	100	32.3	176	S	4	E	268	92	8.7	8.6	77	4	23.9
6020	57.1	7	N	7	E	100	32.4	175	S	5	E	270	96	8.7	8.5	66	3	25.9
6024	50.4	1	N	1	E	100	32.4	176	S	4	E	272	97	8.7	8.5	85	4	18.3
6028	54.6	8	N	8	E	100	32.8	176	S	4	E	269	94	8.7	8.5	73	1	23.5
6032	62.0	16	N	16	E	100	32.8	176	S	4	E	270	95	8.7	8.4	78	3	32.4
6036	57.3	15	N	15	E	100	32.8	176	S	4	E	272	98	8.7	8.6	78	2	27.9
6040	68.0	12	N	12	E	100	32.8	177	S	3	E	274	99	8.7	8.9	62	1	36.9
6044	62.9	17	N	17	E	84	32.9	176	S	4	E	276	102	8.7	8.8	67	3	33.7
6048	65.7	17	N	17	E	100	33.2	176	S	4	E	273	99	8.6	8.7	82	4	36.1
6056	73.1	26	N	26	E	46	33.3	177	S	3	E	272	96	8.6	8.3	67	1	45.5
6060	63.0	32	N	32	E	100	33.7	176	S	4	E	278	104	8.6	8.4	52	2	38.9
6064	61.5	32	N	32	E	100	33.3	175	S	5	E	272	98	8.7	8.4	76	3	38.4

6068	79.7	35	N	35	E	49	33.6	176	S	4	E	265	88	8.8	8.5	58	4	54.9
6072	55.0	21	N	21	E	100	33.7	176	S	4	E	263	86	8.6	8.7	80	1	27.3
6076	56.8	22	N	22	E	100	33.8	175	S	5	E	263	87	8.6	8.9	66	4	29.3
6084	80.3	27	N	27	E	100	33.8	175	S	5	E	264	89	8.6	8.8	74	3	52.8
6088	71.0	27	N	27	E	100	34.1	176	S	4	E	269	94	8.6	8.7	87	1	43.7
6092	54.7	22	N	22	E	100	33.9	175	S	5	E	274	100	8.6	8.6	54	4	27.5
6096	50.2	21	N	21	E	100	34.2	176	S	4	E	279	105	8.7	8.6	83	1	22.8
6100	44.8	22	N	22	E	100	34.5	175	S	5	E	281	108	8.7	8.5	58	1	19.7
6104	49.5	25	N	25	E	100	34.3	176	S	4	E	273	99	8.6	8.5	80	4	24.2
6108	53.1	28	N	28	E	100	34.0	176	S	4	E	266	91	8.6	8.5	93	3	28.9
6112	47.9	25	N	25	E	100	34.3	175	S	5	E	272	98	8.7	8.9	71	2	23.3
6116	53.5	21	N	21	E	100	34.7	176	S	4	E	273	99	8.6	8.9	87	1	25.4
6120	44.5	18	N	18	E	100	34.5	175	S	5	E	277	105	8.6	8.8	83	2	17.7
6124	41.3	29	N	29	E	100	35.4	175	S	5	E	281	110	8.6	8.9	65	2	21.7
6128	50.0	29	N	29	E	100	34.2	175	S	5	E	278	105	8.7	8.6	88	3	27.1
6136	50.4	12	N	12	E	100	34.5	175	S	5	E	274	102	8.6	8.5	91	1	19.7
6140	46.5	20	N	20	E	100	34.5	175	S	5	E	270	95	8.6	8.4	75	1	20.0
6144	49.2	20	N	20	E	96	34.5	175	S	5	E	271	98	8.6	8.4	65	3	22.1
6152	52.5	19	N	19	E	100	34.3	175	S	5	E	273	100	8.6	8.3	69	1	24.3
6156	64.1	10	N	10	E	100	34.5	175	S	5	E	264	89	8.6	8.4	65	2	31.4
6160	57.4	18	N	18	E	100	34.7	176	S	4	E	263	86	8.6	8.4	87	2	27.5
6164	63.0	24	N	24	E	100	34.8	176	S	4	E	261	84	8.6	8.4	90	4	34.8
6168	57.1	18	N	18	E	100	34.6	177	S	3	E	262	84	8.6	8.3	82	1	26.9
6180	51.6	27	N	27	E	100	34.7	176	S	4	E	263	85	8.6	8.4	89	1	26.4
6184	48.1	224	S	44	W	100	34.8	178	S	2	E	263	84	8.6	8.3	51	2	75.2
6188	49.3	89	N	89	E	71	35.1	177	S	3	E	263	85	8.6	8.4	46	2	58.5
6196	52.6	33	N	33	E	100	35.5	177	S	3	E	261	83	8.6	8.5	76	2	30.1
6200	49.8	33	N	33	E	100	35.3	177	S	3	E	262	84	8.6	8.4	72	2	28.1
6208	70.4	13	N	13	E	100	34.9	177	S	3	E	263	85	8.6	8.3	61	2	37.5
6212	52.9	16	N	16	E	100	34.6	176	S	4	E	262	84	8.6	8.3	93	2	22.8
6216	89.0	44	N	44	E	100	34.8	175	S	5	E	259	83	8.6	8.3	70	3	67.2
6220	50.1	22	N	22	E	100	34.9	176	S	4	E	262	85	8.6	8.4	79	1	22.6
6224	48.7	26	N	26	E	100	35.1	177	S	3	E	265	88	8.6	8.4	88	4	23.4
6228	47.0	21	N	21	E	100	35.4	176	S	4	E	266	90	8.6	8.4	76	2	20.0
6232	48.3	20	N	20	E	100	35.2	176	S	4	E	265	89	8.6	8.4	78	2	20.7
6236	44.6	24	N	24	E	100	35.4	175	S	5	E	265	90	8.6	8.4	59	4	20.2
6240	42.9	26	N	26	E	100	35.1	175	S	5	E	263	88	8.6	8.3	78	1	20.9
6244	52.7	21	N	21	E	85	35.0	175	S	5	E	264	88	8.6	8.3	74	2	24.6
6248	51.1	30	N	30	E	100	35.0	176	S	4	E	267	92	8.5	8.3	53	1	27.8
6252	34.2	50	N	50	E	100	35.7	177	S	3	E	278	103	8.6	8.3	92	2	29.7
6256	26.9	97	S	83	E	100	35.7	176	S	4	E	280	107	8.6	8.3	73	4	47.7
6260	42.9	351	N	9	W	100	35.3	175	S	5	E	281	109	8.6	8.3	57	2	8.1
6264	43.6	35	N	35	E	100	35.7	176	S	4	E	284	112	8.6	8.3	65	3	25.5
6268	40.5	60	N	60	E	100	35.8	176	S	4	E	283	110	8.5	8.3	82	2	38.5
6272	56.0	42	N	42	E	100	35.5	176	S	4	E	283	111	8.5	8.2	67	4	37.6
6276	56.9	336	N	24	W	100	36.0	176	S	4	E	282	110	8.5	8.3	79	3	25.0
6280	40.0	49	N	49	E	100	36.0	176	S	4	E	282	109	8.5	8.3	68	4	32.1
6284	71.6	53	N	53	E	100	35.6	176	S	4	E	279	106	8.5	8.2	56	1	56.3
6292	50.9	48	N	48	E	100	36.0	175	S	5	E	271	98	8.4	8.3	48	1	38.4
6296	53.2	58	N	58	E	100	36.5	175	S	5	E	267	93	8.4	8.2	43	1	45.9
6300	44.3	64	N	64	E	57	35.8	175	S	5	E	269	95	8.4	8.2	87	1	43.3
6304	39.5	86	N	86	E	100	35.7	176	S	4	E	273	100	8.5	8.2	72	1	51.3
6308	56.7	63	N	63	E	98	36.3	175	S	5	E	278	106	8.5	8.2	69	4	51.0
6312	37.8	84	N	84	E	100	36.4	175	S	5	E	277	105	8.5	8.3	97	2	49.8
6316	49.6	75	N	75	E	100	36.3	175	S	5	E	274	102	8.4	8.3	71	2	53.1
6320	42.9	75	N	75	E	100	36.6	175	S	5	E	277	105	8.5	8.3	90	1	49.0
6324	36.5	75	N	75	E	100	36.3	175	S	5	E	277	105	8.6	8.3	73	2	45.0
6332	24.4	163	S	17	E	86	36.8	176	S	4	E	282	110	8.5	8.3	65	3	60.8
6336	85.5	165	S	15	E	100	35.6	176	S	4	E	281	108	8.5	8.3	72	2	59.6
6348	70.1	27	N	27	E	100	37.3	175	S	5	E	274	101	8.3	8.3	53	3	40.7

6360	85.0	65	N	65	E	87	36.7	176	S	4	E	260	83	8.3	8.4	46	3	73.4
6364	44.0	118	S	62	E	100	37.1	176	S	4	E	261	83	8.3	8.5	79	4	69.4
6368	4.4	245	S	65	W	100	37.1	176	S	4	E	261	84	8.3	8.5	81	3	38.8
6380	19.9	138	S	42	E	70	36.8	175	S	5	E	261	85	8.4	8.6	62	4	53.8
6408	49.0	252	S	72	W	100	37.7	175	S	5	E	283	112	8.5	8.2	57	2	65.4
6416	29.1	135	S	45	E	100	37.6	176	S	4	E	283	112	8.4	8.2	64	2	62.2
6420	73.8	193	S	13	W	94	37.7	176	S	4	E	281	109	8.3	8.3	66	2	70.0
6424	77.9	156	S	24	E	100	37.9	176	S	4	E	289	118	8.4	8.3	49	3	66.5
6428	82.3	140	S	40	E	100	39.1	177	S	3	E	288	117	8.2	8.3	53	1	66.8
6432	85.9	298	N	62	W	100	37.8	176	S	4	E	277	104	8.2	8.3	41	4	67.8
6456	36.3	165	S	15	E	58	37.9	176	S	4	E	281	108	8.3	8.2	62	4	73.8
6460	89.9	182	S	2	W	100	38.0	177	S	3	E	280	106	8.3	8.2	74	3	52.3
6484	41.8	169	S	11	E	100	38.4	176	S	4	E	280	107	8.3	8.2	88	4	80.0
6488	61.5	308	N	52	W	100	38.7	177	S	3	E	286	113	8.3	8.2	47	3	42.9
6500	15.3	83	N	83	E	52	38.7	177	S	3	E	290	118	8.4	8.2	41	4	39.9
6508	82.9	219	S	39	W	48	38.5	178	S	2	E	291	119	8.4	8.2	62	2	68.5
6512	70.6	98	S	82	E	58	38.7	177	S	3	E	291	119	8.4	8.2	85	1	81.4
6528	68.9	178	S	2	E	100	38.8	177	S	3	E	292	121	8.4	8.2	77	4	72.3
6552	84.3	156	S	24	E	100	39.1	176	S	4	E	291	120	8.4	8.2	82	2	59.3
6560	38.3	142	S	38	E	54	38.8	177	S	3	E	298	128	8.4	8.2	54	1	73.0
6564	61.7	333	N	27	W	42	38.9	177	S	3	E	296	126	8.4	8.2	62	1	28.8
6576	90.0	316	N	44	W	100	39.1	177	S	3	E	295	124	8.4	8.2	65	1	61.7
6584	82.5	130	S	50	E	100	39.1	177	S	3	E	290	119	8.4	8.2	61	1	70.9
6600	54.0	250	S	70	W	53	39.2	177	S	3	E	298	128	8.5	8.2	73	1	72.1
6620	87.3	304	N	56	W	100	39.3	177	S	3	E	295	125	8.5	8.2	73	1	65.1
6628	83.6	116	S	64	E	100	39.2	177	S	3	E	294	123	8.5	8.3	91	1	77.4
6648	29.4	155	S	25	E	100	39.3	177	S	3	E	299	128	8.4	8.2	57	1	67.2
6676	42.4	108	S	72	E	100	39.5	177	S	3	E	304	135	8.5	8.2	61	2	65.6
6704	78.8	60	N	60	E	100	39.4	177	S	3	E	298	128	8.4	8.3	80	4	64.4
6708	87.4	27	N	27	E	100	39.4	177	S	3	E	298	127	8.4	8.3	70	4	54.0
6712	34.7	309	N	51	W	100	39.3	176	S	4	E	296	127	8.4	8.3	75	2	28.4
6732	83.5	239	S	59	W	100	39.3	177	S	3	E	302	132	8.4	8.2	67	2	78.1
6736	48.3	34	N	34	E	48	39.5	177	S	3	E	302	132	8.4	8.2	80	3	26.8
6748	41.6	199	S	19	W	100	39.3	177	S	3	E	303	133	8.3	8.2	51	4	79.2
6752	63.6	106	S	74	E	100	39.3	177	S	3	E	301	131	8.3	8.2	43	1	81.2
6756	87.8	230	S	50	W	90	38.3	177	S	3	E	300	130	8.2	8.2	73	2	70.2
6760	25.7	153	S	27	E	100	39.5	177	S	3	E	299	129	8.2	8.2	91	1	63.7
6764	48.9	121	S	59	E	100	39.6	177	S	3	E	297	127	8.2	8.2	91	1	76.3
6768	40.4	357	N	3	W	100	39.5	177	S	3	E	298	128	8.2	8.2	97	2	.9
6780	48.6	257	S	77	W	53	39.6	177	S	3	E	282	109	8.2	8.2	50	2	64.6
6800	44.1	120	S	60	E	100	39.7	177	S	3	E	276	102	8.5	8.2	73	1	72.1
6804	70.5	165	S	15	E	44	39.8	177	S	3	E	277	103	8.3	8.2	65	2	70.5
6808	16.9	92	S	88	E	63	39.7	177	S	3	E	278	104	8.2	8.2	43	1	44.0
6812	81.0	154	S	26	E	100	39.9	177	S	3	E	278	104	8.2	8.2	94	2	62.4
6824	77.8	166	S	14	E	100	39.9	178	S	2	E	281	108	8.3	8.2	69	1	63.1
6828	74.8	149	S	31	E	100	39.9	177	S	3	E	282	109	8.2	8.2	67	2	69.9
6840	45.3	109	S	71	E	100	39.9	177	S	3	E	279	105	8.4	8.2	57	3	68.2
6848	67.5	76	N	76	E	100	39.8	177	S	3	E	275	101	8.2	8.2	63	4	66.2
6872	29.0	137	S	43	E	100	40.1	176	S	4	E	272	98	8.2	8.2	44	3	64.7
6884	85.7	220	S	40	W	100	40.3	176	S	4	E	272	97	8.2	8.2	43	3	66.0
6888	71.6	201	S	21	W	100	40.0	176	S	4	E	273	99	8.2	8.2	76	3	71.8
6892	76.8	53	N	53	E	100	40.2	176	S	4	E	275	101	8.2	8.2	55	2	58.5
6900	73.0	140	S	40	E	100	40.1	176	S	4	E	279	106	8.3	8.2	45	1	74.1
6912	79.4	275	N	85	W	100	40.2	176	S	4	E	278	106	8.2	8.2	51	1	75.7
6928	65.8	1	N	1	E	61	40.2	176	S	4	E	270	95	8.4	8.2	59	3	25.8
6932	68.5	156	S	24	E	100	39.7	177	S	3	E	270	94	8.4	8.2	57	4	74.1
6948	23.0	287	N	73	W	100	40.1	176	S	4	E	270	94	8.2	8.2	62	1	37.5
6988	73.6	131	S	49	E	100	40.5	176	S	4	E	259	81	8.2	8.2	79	4	76.9
7012	64.1	147	S	33	E	82	40.8	176	S	4	E	238	54	8.2	8.3	74	2	79.4
7040	22.3	200	S	20	W	100	40.9	176	S	4	E	218	34	8.4	8.3	42	2	61.9

7052	78.2	131	S	49	E	89	40.8	176	S	4	E	214	30	8.4	8.4	93	2	72.9
7072	76.9	145	S	35	E	100	41.0	176	S	4	E	220	36	8.5	8.3	49	2	67.8
7080	66.6	162	S	18	E	100	41.1	176	S	4	E	217	33	8.3	8.5	82	2	73.4
7092	69.8	149	S	31	E	100	41.0	177	S	3	E	209	26	7.9	8.3	52	2	73.6
7100	60.8	94	S	86	E	100	41.0	178	S	2	E	188	8	7.0	8.1	49	2	72.2

REPEAT SECTION

	(--FORMATION--)					CLOSURE	(--BORE HOLE--)					(SONDE)				LIKENESS		APP
DEPTH	DIP	AZM	BRG			QUAL	DEV	AZM	BRG			AZ1	RBR	D1-3	D2-4	QUAL		DIP
7004	10.8	120	S	60	E	100	40.5	175	S	5	E	249	69	8.1	8.2	62	3	47.3
7012	64.6	146	S	34	E	69	40.5	175	S	5	E	236	54	8.1	8.2	71	2	79.2
7024	15.0	122	S	58	E	68	40.6	176	S	4	E	228	44	8.1	8.2	66	4	50.6
7048	30.2	331	N	29	W	77	40.9	176	S	4	E	216	32	8.2	8.1	81	4	17.7
7060	64.2	150	S	30	E	100	40.9	176	S	4	E	224	40	8.4	8.4	49	2	78.4
7068	70.4	155	S	25	E	100	40.7	177	S	3	E	211	27	8.1	8.3	63	2	71.6
7076	85.6	323	N	37	W	84	41.0	176	S	4	E	215	31	8.0	8.2	50	4	52.7
7092	68.0	152	S	28	E	100	41.1	176	S	4	E	212	28	7.5	8.0	61	2	74.1
7096	84.9	342	N	18	W	100	41.6	176	S	4	E	206	24	7.2	7.9	73	1	44.8
7100	66.1	70	N	70	E	62	41.3	175	S	5	E	192	13	6.8	7.8	53	3	62.6

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Report on Operations

No. T 277-181

Mr. Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, CA 90024

Santa Paula Calif.
August 3, 1977

DEAR SIR:

Operations at well No. "Barker-Ferndale" 2, API No. 111-20604, Sec. 16, T. 4N, R. 21W, S.B., B & M. Ojai Field, in Ventura County, were witnessed on July 26, 1977. Mr. Ms. Toni M. Callaway, representative of the supervisor was present from 0600 to 0800. There were also present Mr. D. Zielke, pumper

Present condition of well: 10 3/4" cem. 906'; 7" cem. 6620', perf. 6274' WSO, perf. 6274-6430' (at intervals). P.B.T.D. 6579'. T.D. 7246'.

The operations were performed for the purpose of demonstrating a water shut-off on the 7" casing by means of a production test.

DECISION:

THE 7" SHUT-OFF AT 6274' IS APPROVED.

r

M. G. MEFFERD
~~JOHN F. MATTHEWS, JR.~~
Acting State Oil and Gas Supervisor

By John L. Heck Deputy

OG109 (2-75—OSP—20M)

30986-705 2-75 20M ① ◇ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 275-448

Mr. Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, Calif. 90024

Santa Paula, Calif.
Dec. 31, 1975

DEAR SIR:

Your (111-20604) proposal to plug and redrill Well No. "Barker-Ferndale" 2, Section 16, T. 4N, R. 21W, S.B. B. & M., Ojai Field, Ventura County, dated 12/29/75, received 12/29/75, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. The stub of the 7" casing shall be plugged with at least 50' of cement.
2. The drilling fluid used shall be of a quality and in sufficient quantity to control all the subsurface conditions in order to prevent blowouts; and a reserve supply of this material shall be kept on hand to meet any emergency. NO CONTAMINANTS OR TOXIC MATERIAL SHALL BE USED IN ANY DRILLING FLUID THAT IS TO BE PLACED IN AN UNLINED SUMP.
3. Any sump used during drilling operations shall be thoroughly cleaned of all drilling materials and the site restored to its prior condition as soon as drilling operations are completed.
4. Blowout prevention equipment, at least of the Division of Oil and Gas Class III rating, shall be installed and maintained in operating condition at all times.
5. Constant surveillance of drilling fluid characteristics and volume shall be maintained by drilling personnel, and by the use of return monitoring equipment and a mud pit level indicator with a visual and audible alarm device.
6. Blowout-prevention practice drills shall be conducted at least weekly for each crew, and recorded in the log book.
7. This Division shall be consulted before placing any plugs or sidetracking any hole.
8. At least 5000 psi BOPE equipment shall be used during sand-packing operations.
9. THIS DIVISION SHALL BE NOTIFIED TO WITNESS:
   a. The cementing, location and hardness of both cement plugs.
   b. A pressure test of the blowout prevention equipment before starting redrilling operations.
   c. A production test within 30 days after the sand-pack oil has been recovered.

NOTE: A COPY OF THIS APPROVAL SHALL BE POSTED AT THE WELL SITE PRIOR TO COMMENCING OPERATIONS.

Blanket Bond
MD:b
cc: Harry Hull

HAROLD W. BERTHOLF
~~JOHN F. MATTHEWS, Jr.~~, State Oil and Gas Supervisor

By W. G. Woodard, Chief Deputy

25476-705 7-74 50M ①D OSP
OG 111

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS RECEIVED
DEC 29 1975
SANTA PAULA, CALIFORNIA

DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
BB	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well No. BARKER-FERNDALE #2 R/D #1, API No. _____,

Sec. 16, T. 4N, R 21W, S.B. B. & M., Silverthread Field, Ventura County.

The present condition of the well is as follows:

1. Total depth. 7246'

2. Complete casing record, including plugs and perforations:

10 3/4", 40.5#, J-55 cmtd @ 906'(shoe) w/500 cu. ft.
7", 23#, K-55 cmtd @ 6620' (shoe) w/900 cu. ft.
Perf'd 2 JHPF: 6460, 6459, 6450, 6449, 6440, 6439, 6430, 6429, 6410, 6409, 6390, 6389, 6370, 6369, 6350, 6349, 6335, 6320, 6319, 6305, 6304, 6295, 6294, 6285, 6284, 6275, 6274.

3. Present producing zone name Mohnian Zone in which well is to be recompleted Mohnian

4. Present zone pressure TP=100 CP=100 New zone pressure Same

5. Last produced 12-22-75 (Date) | 41 (Oil, B/D) | 5 (Water, B/D) | 60 (Gas, Mcf/D)

or

6. Last injected -- (Date) | -- (Water, B/D) | -- (Gas, Mcf) | -- (Surface pressure, psig.)

The proposed work is as follows:

1. Plug 7" casing 6510-6200.
2. Cut & pull 7" casing from 1000'±.
3. Install BOPE
4. Directionally Redrill 8 3/4" hole to a bottom hole location 150' N & 450' E from surface.
5. Cement 7", 23#, K-55 casing @ 6600' w/900 cu. ft.
6. Perforate as indicated by logs.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 940 East Santa Clara (Street)
Ventura, California 93001 (City) (State) (Zip)
Telephone Number (805) 648-2514
BLANKET BOND

ARGO PETROLEUM CORPORATION (Name of Operator)
By Thomas E. Doyle 12/29/75 (Name) (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

10340-705 1-73 15M ⓓ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

WELL SUMMARY REPORT

SUBMIT IN DUPLICATE

Operator ARGO PETROLEUM CORPORATION, Well No. ARGO BARKER FERNDALE #2, API No. 111-20604,

Sec. 16, T. 4N, R. 21W, S.B. B. & M., Silverthread Field, Ventura County.

Location 2880' E and 1077' S from NW corner of Sec. 16.
(Give surface location from property or section corner, or street center line and/or lambert coordinates)

Elevation of ground above sea level 1061 feet.

All depth measurements taken from top of KB which is 12 feet above ground.
(Derrick Floor, Rotary Table or Kelly Bushing)

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Date _____ Signed C. Barbour

B. L. GRAHAM (Engineer or ~~Geologist~~) Title Executive Vice President

Commenced drilling 4-26-75

Completed drilling 5-21-75

Total depth (1st hole) 7246' (2nd) _____ (3rd) _____

Present effective depth 6579'

Junk _____

DIVISION OF OIL AND GAS
RECEIVED
MAR 19 1976
SANTA PAULA, CALIFORNIA

GEOLOGICAL MARKERS — DEPTH

Formation and age at total depth Miocene

Commenced producing 6-8-75 (Date) Flowing/~~gas lift/pumping~~ (Cross out unnecessary words)

Name of producing zone Miocene

	Clean Oil bbl. per day	Gravity Clean Oil	Per Cent Water including emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressure
Initial production	97	32.0	4.4	58	340	800
Production after 30 days	96	32.0	2.2	25	520	880

CASING RECORD (Present Hole)

Size of Casing (A. P. I.)	Depth of Shoe	Top of Casing	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Numbers of Sacks or Cubic Feet of Cement	Depth of Cementing if through perforations
10 3/4"	906'	Surface	40.5#	K-55 ST&C (R-3)	New	13 3/4"	500 cf	
7"	6620'	Surface	23#	K-55 LT&C (R-3)	New	8 3/4"	900 cf	

PERFORATED CASING
(Size, top, bottom, perforated intervals, size and spacing of perforation and method.)

2 - 0.41" JHPF @ intervals from 6460' to 6275' (28 holes)

2 - 0.33" " " " 6459' to 6274' (28 holes)

3 - ½" Bullets/ft " " 6433' to 6345' (21 holes)

Was the well directionally drilled? Yes If yes, show coordinates at total depth Closure 722.64' S72° 36' E

Electrical log depths 7244' - 4800' Other surveys DIL, Den, Cmt. Bond, Mud, Dipmeter

FORM 100 (REV. 1-73) ATTACH ONE COPY OF EACH LOG AND SURVEY 10338-705 1-73 10M ® OSP

FORM 103 SUBMIT IN DUPLICATE △ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

Well No. ARGO BARKER FERNDALE #2, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date March 8, 19 76 Signed C. Rosenlieb

940 East Santa Clara
Ventura, CA. 93001 (805) 648-2514 Title Exec. Vice Pres.
(Address) (Telephone Number) (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date 1975	
4-24	Move in Atlantic Oil Company Rig #4.
4-25	Rigging up.
4-26	Rigging up. Spudded in at 9:00 AM w/13 3/4" bit. DD from 15' to 358'.
4-27	DD to 683'.
4-28	DD to 777'. POH. Laid down DD. RIH w/DA. Reamed from 491' to 777'. Drilled to 915'. POH. Cond. mud. Ran 29 jts. 10 3/4", 40.5#, K-55 (R-3) ST&C csg. equipped with Larkin guide shoe at 906'. Baffle at 864', one centralizer on shoe jt. Dowell cementers pumped 20 cu. ft. water ahead, mixed and pumped 400 cu. ft. class "G" cmt. pre-mixed 1:1 Poz + 4% Gel + 3% CaCl2 followed with 100 cu. ft. neat cmt. w/3% CaCl2 and 10 cu. ft. water and mud. Bumped plug w/500 psi. CIP at 12:10 AM (4-29-75). Cmt. returns to surface.
4-29	Landed casing. Installed BOPE. Tested blind rams at 1000 psi and BOPE for DOG. RIH w/8 3/4" bit.
4-30	CO cmt. from 901' to 913'. Drilled to 1827'.
5-01	Drilled to 2789'.
5-02	" " 3376'.
5-03	" " 3722'. POH. Laid down DA. RIH w/DD. DD to 3865'.
5-04	DD to 4094'. POH. Laid down DD. RIH w/DA.
5-05	Reamed from 3715' to 4094'. Drilled to 4573'.
5-06	POH. RIH. Reamed from 4520' to 4573'. Cond. gas cut mud 4520' to 4534'. Drilled to 4980'. Circ gas and oil cut mud at 4796' and gas cut mud at 4901'.

FORM 103 SUBMIT IN DUPLICATE △ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

Well No. ARGO BARKER FERNDALE #2, Sec. 16, T. 4N R. 21W, S.B. B. & M.

Date March 8, 1976 Signed C. Bowers

940 East Santa Clara
Ventura, CA. 93001 (805) 648-2514 Title Exec. Vice Pres.
(Address) (Telephone Number) (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date 1975	
5-07	Cond mud for loggers. Schlumberger ran E-Log and DIL. RIH w/DA. Reamed from 4630' to 4818'. Circ gas cut mud. Drilled to 5060'. POH. Laid down DA. RIH w/DD.
5-08	CO fill from 5035' to 5060'. DD to 5185'.
5-09	DD to 5352'. POH. Laid down DD. RIH w/DA. Reamed from 4651' to 5352'.
5-10	Drilled to 5399'. POH. Laid down DA. RIH w/DD. DD to 5415'.
5-11	DD to 5492'. POH. Laid down DD. RIH w/DA. Reamed from 5338' to 5492'. Drilled to 5501'.
5-12	Drilled to 5740'. POH. Left 3 DC's and Monel in hole.
5-13	RIH, recovered fish. RIH w/DA. Reamed hole at 5550' to 5568' to cut shoulder. Began drilling new hole at 5568'. Drilled to 5602'.
5-14	Drilled to 5622'. POH. RIH. Reamed from 5550' to 5622'. Drilled to 5643'. POH. RIH. Reamed from 5550' to 5643'. Drilled to 5691'.
5-15	Drilled to 5874'.
5-16	" " 6195'. Reamed from 6073' to 6103'. Circ for mud loggers at 6195'.
5-17	Drilled to 6263'. Circ for mud loggers. Drilled to 6390'. POH. RIH. Reamed from 6340' to 6390'. Drilled to 6693'.
5-18	Drilled to 6931'. POH. RIH. Reamed from 6900' to 6931'. " " 7038'.
5-19	Drilled to 7246'. Cond. mud for loggers.

FORM 103 SUBMIT IN DUPLICATE △ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

Well No. ARGO BARKER FERNDALE #2, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date March 8, 1976 Signed C. Bowden

940 East Santa Clara
Ventura, CA. 93001 (805) 648-2514 Title Exec. Vice Pres.
(Address) (Telephone Number) (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date 1975	
5-20	Schlumberger ran DIL, Form. Den. RIH to 7246'. Cond mud to run csg. Ran 170 jts. 7", 23#, K-55 (R-3) LT&C csg equipped w/Larkin guide shoe at 6620'. With Larkin float collar at 6579'. Centralizers on jt. # 1, 3thru 21, 23, 25, 27, 29, 31 thru 34, 40, 43, 44, and 45. Baker metal petal baskets at 5640' and 4700'.
5-21	BJ cementers pumped 500 gals. mud sweep ahead, mixed and pumped in 800 cu. ft. class "G" cmt pre-mixed 1:1 Dia-mix + 6% Gel + 2% CaCl2 followed by 100 cu. ft class "G" neat cmt. Displaced w/1454 cu. ft. water. Bumped plug at 2000 psi. CIP at 3:07 AM. Float held OK. Used top and bottom plugs. Landed 7" casing. Laid down DP. Flanged up. Released rig at 7:00 PM.
5-22	Tested blind rams OK. Installed BOPE and pressure tested. Approved by DOG. Ran 2 7/8" tubing.
5-23	Changed over to lease oil. Pulled tubing. Dresser Atlas ran Cement Bond Log and Gamma Ray Log. RIH w/2 7/8" tubing. Flanged up frac head.
5-24	Dresser Atlas perforated 28 holes thru tubing (using 2 1/8" Bear Cat Gun) with 2 - 0.41" JHPF at each of the following intervals: 6460' 6410' 6335' 6285' 6450' 6390' 6320' 6275' 6440' 6370' 6305' 6430' 6350' 6295' (Total of 28 holes) Rigged up Dowell and started pumping for breakdown. Pumped down casing up to 5200 psi and could not obtain a breakdown. Will re-perforate.
5-25	Wait on availability of perforating company.

FORM 103 SUBMIT IN DUPLICATE △ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

Well No. ARGO BARKER FERNDALE #2, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date March 8, 19 76 Signed C. Dashner

940 East Santa Clara
Ventura, CA. 93001 (805) 648-2514 Title Exec. Vice Pres.
(Address) (Telephone Number) (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date

1975
5-26 Rigged up Welex and re-perforated through tubing with 2" sidewinder gun. Perforated 2 - 0.33" JHPF at each of the following intervals:

6459'	6409'	6335'	6284'
6449'	6389'	6319'	6274'
6439'	6369'	6304'	
6429'	6349'	6294	(Total of 28 additional holes)

Rigged up Dowell and resumed pumping for breakdown. Unable to breakdown. Obtained ISIP = 4350 psi. Spotted 1000 gals. 12 - 3% HCL-HF acid followed by 2000 gals 15 - 3% HCL-HF acid (plus inhibitor and anti-sludge) and pumped to formation. Shut in overnight and let soak.

5-27 Rigged up Dowell and frac'd down 7" casing as follows:

BBLS	GALS	SAND #/GAL	#SAND	CUM SAND	ATR
120	5,000	-	-	-	120
120	5,000	0.5	2,500	2,500	144
120	5,000	1	5,000	7,500	269
120	5,000	2	10,000	17,500	399
258	11,500	3	34,700	52,200	690
25	FLUSH (Screen Out)				715
663	Total				

ISIP = 4000 psi Fg = 1.01
Total lease oil used = 663 bbls.
" sand used = 52,200# of 20/40 mesh.
Pumped at an average pressure of 4600 psi and an average rate of 15 BPM.
Immediate SIP = 5000 psi
SIP after 15 min = 2700 psi.
Well screened out at start of flush. Calculate 35,000# sand in formation.

FORM 103 SUBMIT IN DUPLICATE △ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

Well No. ARGO BARKER FERNDALE #2, Sec. 16, T. 4N R. 21W, S.B. B. & M.

Date March 8, 19 76 Signed C. Bonner

940 East Santa Clara
Ventura, CA. 93001 (805) 648-2514 Title Exec. Vice Pres.
(Address) (Telephone Number) (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date 1975	
5-27 (cont)	Dowell circulated out sand to 6100'. Agnew & Sweet set tubing plug at 50'. Removed frac head. Landed tubing at 1616'. Removed BOP. Installed production tree. Set tbg. plug. Shut in.
5-28	On production 2:30 PM, 16/64" bean. Produced 104 bbls in 13 hrs., cut 6 to 15%
5-29	Installed 20/64" bean. Average 13 bbls/hr.
5-30	Prod. 101 bbls/18 hrs. TP = 200, CP = 650. Changed to 14/64" bean at 11:00 PM.
5-31	Prod 103 bbls/22 hrs, cut 0.7%, 16/64" bean TP = 170 CP = 1000
6-01 thru 6-07	Producing frac oil. Frac oil recovered 6-7-75
6-08	Initial production: clean oil 97 bbl, cut 4.4%, TP = 340 CP = 800, 14/64" bean, Gas 58 Mcf.
7-08	Prod after 30 days clean oil 96 bbls, cut 2.2%, TP = 520 CP = 880, 14/64" bean, Gas 25 Mcf.
7-09 thru 7-16	Producing
7-17	8 bbls, cut 2.4%, TP = 80, CP = 1240
7-18	MIRU CPS. Killed well w/83# CaCl2 water. Removed tree. Installed BOP.

FORM 103 SUBMIT IN DUPLICATE △ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

Well No. ARGO BARKER FERNDALE #2, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date March 8, 19 76 Signed C. Bowler

940 East Santa Clara
Ventura, CA. 93001 (805) 648-2514 Title Exec. Vice Pres.
(Address) (Telephone Number) (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date	
1975 7-19	Ran tubing in, tagged fill at 6280'. CO frac sand to bottom (6579'). PU, landed tubing at 6183'. Displaced cc water w/lease crude. On production 9:30 PM, 12/64" bean.
7-20	Well dead. Rigged up to swab. Swabbed from 3000' to 6000'. Swabbed 136 bbls.
7-21	Ran swab 4 times, well flowing. On production 10:00 AM.
7-22	24 bbls, 21 hrs, cut 0.3%, TP = 60, CP = 1100, 16/64" bean.
7-23 to 7-27	Producing. Shut in to re-frac.
7-28	MIRU CPS production hoist. Killed well w/260 bbls 83# CaCl2 water. Removed tree, installed BOP. RIH w/tubing, tagged fill at 6564'. POH. Shut in.
7-29	Rigged up Dowell. Acid washed perfs w/12-3% HCL-HF. POH w/washer RIH w/tbg to 6195'. Shut down.
7-30	RIH from 6195', tagged fill at 6550'. CO to 6579'. POH. RIH w/Baker Model "G" packer. Displaced cc water w/lease crude. Set packer at 6165'. Pump shoe at 6166'. Tail to 6198'. Installed production tree. Shut in.
7-31	Rigged up to swab. Swabbed from surface to 6000'. Fluid level down to 5500'. Shut down.
8-01	Swabbed 133 bbls water and oil. Put well on 16/64" bean. Flowed 33 bbls. 8 hrs, TP = 150, cut 1.6%. Moved out CPS
8-02	Prod. 42 bbl, cut 4.0%, TP = 60, CP = 0
8-03	" 62 " " 4.2% " 90 " 0

FORM 103 SUBMIT IN DUPLICATE △ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

Well No. ARGO BARKER FERNDALE #2, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date March 8, 1976 Signed C. Bowles

940 East Santa Clara
Ventura, CA. 93001 (805-648-2514) Title Exec. Vice Pres.
(Address) (Telephone Number) (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date

1975

8-04 Dowell rigged up pump truck to wellhead and injected 100 bbls. of lease crude mixed with 240 gals of U66 Miscible Solvent down tubing. Average TP = 3000 psi. Avg. CP = 3000 psi (backup). Max. injection pressure after 100 bbls = 3750 psi. After 30 mins. TP dropped to 800 psi. Injected at 1 BPM avg rate. Displaced tubing with 40 bbls. lease crude. Max. inj. press = 4000psi. In place at 1:20 PM. Let well soak for 2 hrs. Attempted to inject additional 100 bbls. lease crude. Could only pump ½ BPM at 3000 psi. Inj. press. rose rapidly when attempting to exceed 3000 psi. Injected approx 60 bbls. Shut job down. Tore out Dowell. Turned well to flowline on 16/64" bean. After 45 mins. TP = 60 psi.

8-05 MIRU CPS production hoist. Removed production tree, unset packer, installed BOP. Displaced crude w/83# cc water. POH with tubing and packer. Shut in.

8-06 Rigged up Dresser Atlas and, using a 5 7/16" centralized carrier gun, perforated w/3 - ½" bullets per foot in each of the following intervals:

6433'	6380'
6420'	6360'
6405'	6345'
6391'	

(Total of 21 holes)

Tagged fill at 6558'. Tore out Dresser Atlas. RIH w/sawtooth collar, 2 7/8" EU tbg., 2½" TL shoe one jt above. Shoe at 6150'. Sawtooth at 6180'. Installed frac head and shut down.

8-07 Rigged up Dowell. Changed over from 83# cc water to 2% CaCl2 water. Frac'd down 7" csg. as follows:

FORM 103 SUBMIT IN DUPLICATE △ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

Well No. ARGO BARKER FERNDALE #2, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date March 8, 19 76 Signed C. Bowden

940 East Santa Clara
Ventura, CA. 93001 (805) 648-2514 Title Exec. Vice Pres.
(Address) (Telephone Number) (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date

1975

8-07 cont

BBLS	GALS	SAND #/GAL	#SAND	CUM SAND	ATR
240	10,000	-	-	-	240
240	10,000	1	10,000	10,000	490
720	30,000	2	60,000	70,000	1270
197	FLUSH				1467
1397	TOTAL				

ISIP = 4200 psi Fg = 1.05
Total sand used = 70,000 # of 20/40 mesh
Total frac fluid used = 1397 bbls. CaCl2 water containing 40#/1000 gals of J266 (Gel)
Immediate SIP = 3800 Psi
SIP after 15 min = 3000 psi

8-08 Displaced frac fluid w/83# CaCl2 water. 2000 psi necessary to break circ. Rec. approx. 10 sacks sand on change over. Removed frac head. CO frac sand from 6179' to 6579'. Circ clean.

8-09 POH w/tbg. RIH w/Baker Model "G" packer. Hung tbg at 6169'. Removed BOP. Disp. 83# cc water w/lease crude. Set packer at 6160'. Pump shoe at 6161' w/tbg tail at 6196'. Installed production tree. Left well open to trap on 16/64" bean.

8-10 Rigged up to swab. Swabbed water and oil. Parted sand line while swabbing from 6161'. Removed production tree. Installed BOP. Pulling tbg and stripping out sand line.

8-11 Finished pulling tbg to recover swab. Had approx. 480' of sand on top of swab string. Laid down packer. RIH w/tbg. Tagged fill at 6315' and co to 6338'. Shut down.

8-12 Bled well. Changed over to cc water. CO from 6338' to 6579'. Circ clean. Pulled up and hung tbg at 6179'. Removed BOP. Installed production tree. Changed over from cc water to oil.

FORM 103 SUBMIT IN DUPLICATE △ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

Well No. ARGO BARKER FERNDALE #2, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date March 8, 1976 Signed C. Dashner

940 East Santa Clara
Ventura, CA. 93001 (805) 648-2514 Title Exec. Vice Pres.
(Address) (Telephone Number) (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date 1975	
8-13	Rigged up to swab. Swabbed from 3500', fluid level at 1500'. Made feeler run to check bottom, not fill. Turned well to flowline on 14/64" bean.
8-14	Well dead. TP = 0 CP = 1000
8-15	Rigged up and swabbed from 3500'. F.L. at 2600'. Ran feeler, no fill. Swabbed from 4000', 3 runs, well began flowing. Put well on 15/64" bean, TP = 270 CP = 600
8-16	Well dead. Swabbed 2800' to 4000'. Well flowed one hr., turned to gas. Ran feeler, no fill. Swabbed from 6100' w/very little fluid. Shut down.
8-17	Flud level 3000'. Swabbed from 5000'. Rec. Gel and water. Swabbed. F.L. to 5500', turned to flow line on 15/64" bean, CP = 140.
8-18	Swabbed from 4000'. Well flowed 30 min. and died. Laid down swabbing equipment. Made feeler run, no fill.
8-19	Bled well, began flowing thru casing. MIRU pump and tank. Killed well w/83# cc water. Ran pump and rods. Seated pump and tested tbg. at 500 psi. Shut down.
8-20	Displaced 83# cc water w/lease water. Started well pumping, thru 18/64" bean.
8-21 thru 8-26	Pumping frac oil. Frac oil recovered 8-26-75.
8-27	Production: clean oil 83 bbls, cut 16.0%, Gas 24 mcf, TP = 180, CP = 0.

111-20604

DIVISION OF OIL AND GAS
RECEIVED
APR 5 1975
SANTA PAULA, CALIFORNIA

111-20604

SEALAND DIRECTIONAL DRILLING CO.

COMPANY ARCO PETROLEUM CORPORATION

PAGE # 1

WELL A.D.P. BARKER FERNDALE # 2 LOCATION FERNDALE RANCH DATE MARCH 1975

	Measured Depth	Drift Angle	Vertical Depth	Drift Feet	Drift Direction	COORDINATES North	South	East	West	REMARKS
1	118 00	1°15'	117 97	2 57	S 72° 00' E		0 79	2 44		
2	206 00	1°30'	205 94	2 30	S 59° 00' E		1 97	4 41		
3	328 00	1°30'	327 90	3 19	S 59° 00' E		3 61	7 14		
4	485 00	1°30'	484 85	4 11	S 62° 00' E		5 54	10 77		
5	521 00	3°30'	520 78	2 20	N 88° 00' E		5 46	12 97		
6	553 00	5°00'	552 66	2 79	N 79° 00' E		4 93	15 71		
7	585 00	6°15'	584 47	3 48	N 66° 00' E		3 51	18 89		
8	617 00	7°30'	616 20	4 18	N 54° 00' E		1 05	22 27		
9	648 00	8°30'	646 86	4 58	N 43° 00' E	2 30		25 39		
10	679 00	8°45'	677 50	4 72	N 29° 00' E	6 43		27 68		
11	710 00	10°30'	707 98	5 65	N 24° 00' E	11 59		29 98		
12	742 00	12°30'	739 22	6 93	N 24° 00' E	17 92		32 80		
13	915 00	15°30'	905 93	46 23	N 22° 00' E	60 78		50 12		
14	1042 00	15°30'	1028 31	33 94	N 23° 00' E	92 02		63 38		
15	1230 00	15°45'	1209 25	51 03	N 24° 00' E	138 64		84 14		
16	1477 00	16°30'	1446 08	70 15	N 24° 00' E	202 73		112 67		
17	1637 00	16°30'	1599 49	45 44	N 24° 00' E	244 24		131 15		
18	1890 00	17°00'	1841 44	73 97	N 24° 00' E	311 81		161 24		
19	2090 00	17°30'	2032 18	60 14	N 24° 00' E	366 75		185 70		
20	2373 00	18°00'	2301 33	87 45	N 24° 00' E	466 64		221 27		
21	2623 00	18°30'	2538 41	79 33	N 25° 00' E	518 54		254 80		
22	2875 00	18°45'	2777 04	81 00	N 25° 00' E	591 95		289 03		
23	3128 00	19°30'	3015 53	84 45	N 25° 00' E	668 49		324 72		
24	3256 00	19°30'	3136 19	42 73	N 25° 00' E	707 22		342 78		
25	3399 00	17°45'	3272 38	43 60	N 25° 00' E	746 74		361 21		

SEALAND DIRECTIONAL DRILLING CO.

COMPANY ARGO PETROLEUM CORPORATION

WELL A.D.P. BARKER FERNDALE # 2 LOCATION FERNDALE RANCH DATE MARCH 1975

	Measured Depth	Drift Angle	Vertical Depth	Drift Feet	Drift Direction	COORDINATES North	South	East	West	REMARKS
26	3558 00	16°30'	3424 83	45 16	N 23° 00' E	788 31		378 86		
27	3703 00	15°45'	3564 39	39 36	N 19° 00' E	825 53		391 67		
28	3736 00	15°30'	3596 19	8 82	N 21° 00' E	833 76		394 83		
29	3765 00	16°00'	3624 07	7 99	N 26° 00' E	840 94		398 33		
30	3797 00	15°30'	3654 91	8 55	N 31° 00' E	848 27		402 73		
31	3828 00	14°30'	3684 92	7 76	N 34° 00' E	854 70		407 07		
32	3859 00	13°00'	3715 13	6 97	N 37° 00' E	860 27		411 26		
33	3890 00	12°00'	3745 45	6 45	N 41° 00' E	865 14		415 49		
34	3921 00	11°15'	3775 85	6 05	N 48° 00' E	869 19		419 99		
35	3955 00	10°45'	3809 25	6 34	N 55° 00' E	872 83		425 18		
36	3985 00	10°45'	3838 72	5 60	N 64° 00' E	875 28		430 21		
37	4017 00	11°00'	3870 13	6 11	N 69° 00' E	877 47		435 91		
38	4049 00	10°30'	3901 59	5 83	N 76° 00' E	878 88		441 57		
39	4148 00	9°00'	3999 37	15 49	N 87° 00' E	879 69		457 04		
40	4358 00	9°00'	4206 78	32 85	N 88° 00' E	880 84		489 87		
41	4545 00	9°15'	4391 35	30 06	S 87° 00' E	879 27		519 89		
42	4745 00	8°30'	4589 15	29 56	S 84° 00' E	876 18		549 29		
43	4933 00	7°45'	4775 43	25 35	S 73° 00' E	868 77		573 53		
44	4960 00	7°45'	4802 18	3 64	S 74° 00' E	867 77		577 03		
45	5060 00	7°15'	4901 38	12 62	S 66° 00' E	862 64		588 56		
46	5092 00	7°45'	4933 09	4 32	S 55° 00' E	860 16		592 10		
47	5124 00	8°45'	4964 72	4 87	S 50° 00' E	857 03		595 83		
48	5150 00	9°30'	4990 36	4 29	S 44° 00' E	853 94		598 81		
49	5187 00	10°00'	5026 80	6 42	S 36° 00' E	848 75		602 58		
50	5217 00	9°45'	5056 37	5 08	S 27° 00' E	844 22		604 89		

SEALAND DIRECTIONAL DRILLING CO.

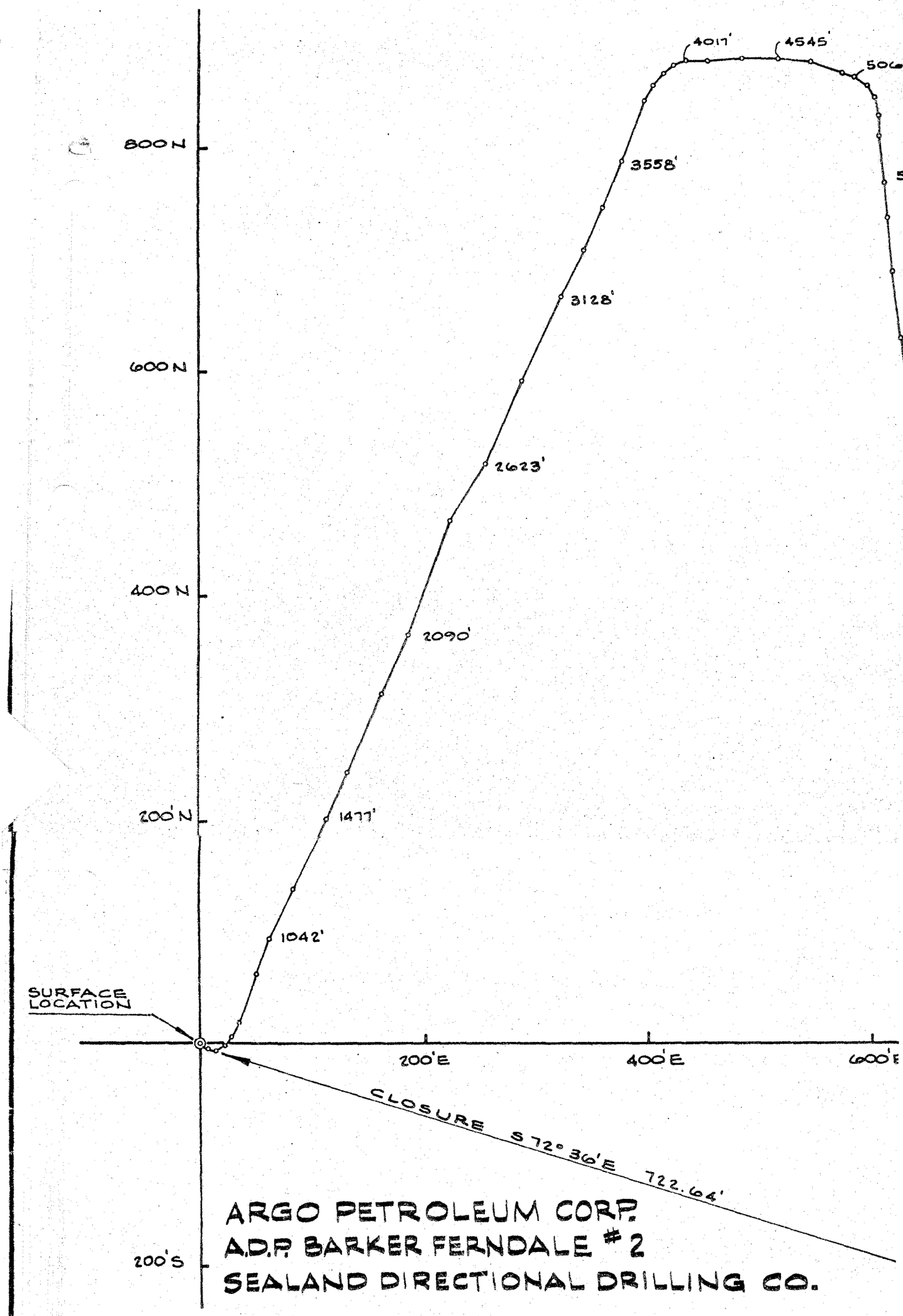
COMPANY ARGO PETROLEUM CORPORATION

WELL A.D.P. BARKER FERNDALE # 2 LOCATION FERNDALE RANCH DATE MARCH 1975

	Measured Depth	Drift Angle	Vertical Depth	Drift Feet	Drift Direction	COORDINATES North	South	East	West	REMARKS
51	5249 00	10°30'	5087 83	5 83	S 20° 00' E	838 74		606 88		
52	5281 00	10°45'	5119 27	5 97	S 12° 00' E	832 90		608 12		
53	5311 00	11°45'	5148 64	6 11	S 06° 00' E	826 82		608 76		
54	5388 00	13°30'	5223 51	17 98	S 02° 00' E	808 85		609 39		
55	5401 00	14°15'	5236 11	3 20	SOUTH	805 65		609 39		
56	5430 00	15°30'	5264 06	7 75	S 02° 00' E	797 90		609 66		
57	5538 00	16°30'	5367 61	30 67	S 06° 00' E	767 40		612 85		
58	5569 00	18°45'	5396 96	9 96	S 06° 00' E	757 49		613 89		
59	5602 00	19°45'	5428 02	11 15	S 05° 00' E	746 38		614 86		
60	5622 00	19°45'	5446 84	6 76	S 05° 00' E	739 65		615 45		
61	5698 00	20°45'	5517 91	26 93	S 05° 00' E	712 82		617 80		
62	5761 00	24°30'	5575 24	26 13	S 07° 00' E	686 88		620 98		
63	5821 00	26°15'	5629 05	26 54	S 06° 00' E	660 49		623 75		
64	5874 00	28°00'	5675 85	24 88	S 07° 00' E	635 80		626 78		
65	6011 00	31°30'	5792 66	71 58	S 07° 00' E	564 75		635 50		
66	6103 00	34°15'	5868 71	51 78	S 06° 00' E	513 25		640 91		
67	6262 00	35°30'	5998 15	92 33	S 06° 00' E	421 43		650 56		
68	6390 00	37°30'	6099 70	77 92	S 05° 00' E	343 81		657 35		
69	6617 00	39°00'	6276 11	142 86	S 05° 00' E	201 50		669 80		
70	6834 00	40°00'	6442 34	139 48	S 03° 00' E	62 21		677 10		
71	7057 00	41°45'	6608 71	148 49	S 03° 00' E		86 08	684 87		
72	7246 00	43°30'	6745 81	130 10	S 02° 00' E		216 10	689 41		
					(Closure) S 72° 36' E 722.64'					

111-20604

16-4N-21W



FORM 109

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Report on Operations

No. T 275-217

MK Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, California 90024

Santa Paula Calif.
July 7, 1975

DEAR SIR:

Operations at well No. "Barker-Ferndale" 2, API No. 111-20604, Sec. 16, T. 4N, R. 21W, S.B., B & M. Ojai Field, in Ventura County, were witnessed on 4/29/75. Mr. Larry Bright, engineer, representative of the supervisor was present from 2200 to 2330. There were also present Mr. P. Wortman, driller

Present condition of well: 10 3/4" cem. 906'. T.D. 906'.

The operations were performed for the purpose of inspecting and testing the blowout prevention equipment and installation.

DECISION:

THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

Cert

r
cc: Harry Hull

THOMAS B. GAY, JR., Acting Chief
~~JOHN F. MATTHEWS, JR.~~
~~State Oil and Gas Supervisor~~

By D. C. Peters Deputy

FORM 109 (REV. 1-73)

19190-705 11-73 20M ② OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 275-134

Mr. Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, California 90024

Santa Paula, Calif.
April 18, 1975

(111-20604)

DEAR SIR:

Your proposal to drill Well No. "Barker-Ferndale" 2, Section 16, T. 4N, R. 21W, S.B.B. & M., Ojai Field, Ventura County, dated 4/16/75, received 4/17/75, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Sufficient cement shall be pumped back of the 9 5/8" casing to fill from the shoe to the surface.
2. The drilling fluid used shall be of a quality and in sufficient quantity to control all subsurface conditions in order to prevent blowouts. NO CONTAMINANTS OR TOXIC MATERIAL SHALL BE USED IN ANY DRILLING FLUID THAT IS TO BE PLACED IN AN UNLINED SUMP.
3. Constant surveillance of drilling fluid characteristics and volume shall be maintained by drilling personnel and by the use of mud pit level, volume, and return monitoring equipment.
4. Blowout prevention equipment, at least of the Division of Oil and Gas Class III rating, shall be installed and maintained in operating condition at all times.
5. Blowout-prevention practice drills shall be conducted at least weekly for each crew, and recorded in the log book.
6. Any sump used during drilling operations shall be thoroughly cleaned of all drilling materials and the site restored to its prior condition as soon as drilling operations are completed.
7. THIS DIVISION SHALL BE NOTIFIED TO WITNESS:
   a. A pressure test of the blowout prevention equipment before drilling out of the shoe of the 9 5/8" casing, and after the 5 1/2" casing is cemented.
   b. A production test within 30 days after the sand-pack oil has been recovered.

NOTE: A COPY OF THIS APPROVAL SHALL BE POSTED AT THE WELL SITE PRIOR TO COMMENCING OPERATIONS.

Blanket Bond
DER:b
cc: Harry Hull

Ralph Cahill/DER

Shale 5500 - 6050 ; @ 5708 well was up to 31° angle
pulled back to 3601 + redrilled from 5601 to 5708
No need to file notice for this too!

Thomas E. Gay, Jr., Acting Chief
JOHN F. MATTHEWS, Jr., State Oil and Gas Supervisor

By _____, Deputy

25476-705 7-74 50M ①D OSP
OG 111

20604

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Notice of Intention to Drill New Well

DIVISION OF OIL AND GAS
RECEIVED
APR 17 1975
SANTA PAULA, CALIFORNIA

This notice and indemnity or cash bond shall be filed, and approval given, before drilling begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered void.

FOR DIVISION USE ONLY					
MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121
200R	4-26-75 200R	✓	BB	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to commence drilling well No. FERNDALE #2, API No. _____ (Assigned by Division)

Sec. 16, T. 4N, R. 21W, S.B.B. & M., Silverthread Field, Ventura County.

Legal description of mineral-right lease, consisting of _____ acres, is as follows: _____ (Attach map or plat to scale)

PREVIOUSLY SUBMITTED

Do mineral and surface leases coincide? Yes XX No _____ If answer is no, attach legal description of both surface and mineral leases, and map or plat to scale.

Location of well 2880 feet East (Direction) along ~~property~~ section line and 1077 feet South (Direction)

at right angles to said line from the Northwest corner of ~~property~~ section 16 or

If well is to be directionally drilled, show proposed coordinates at total depth 750' East of surface

Elevation of ground above sea level 1061 feet.

All depth measurements taken from top of 1073 K.B. which is 12 feet above ground. (Derrick Floor, Rotary Table or Kelly Bushing)

PROPOSED CASING PROGRAM

SIZE OF CASING INCHES A.P.I.	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS	CALCULATED FILL BEHIND CASING
9 5/8"	40#	K-40	0	800	800	800
5 1/2"	17#	K-55	0	8000	TD	2500

(A complete drilling program is preferred and may be submitted in lieu of the above program)

Intended zone(s) of completion Producing zones Ferndale R/D #6 (Name, depth and expected pressure) Estimated total depth 8000

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 940 East Santa Clara (Street)

Ventura, California 93001 (City) (State) (Zip)

Telephone Number (805) 648-2514

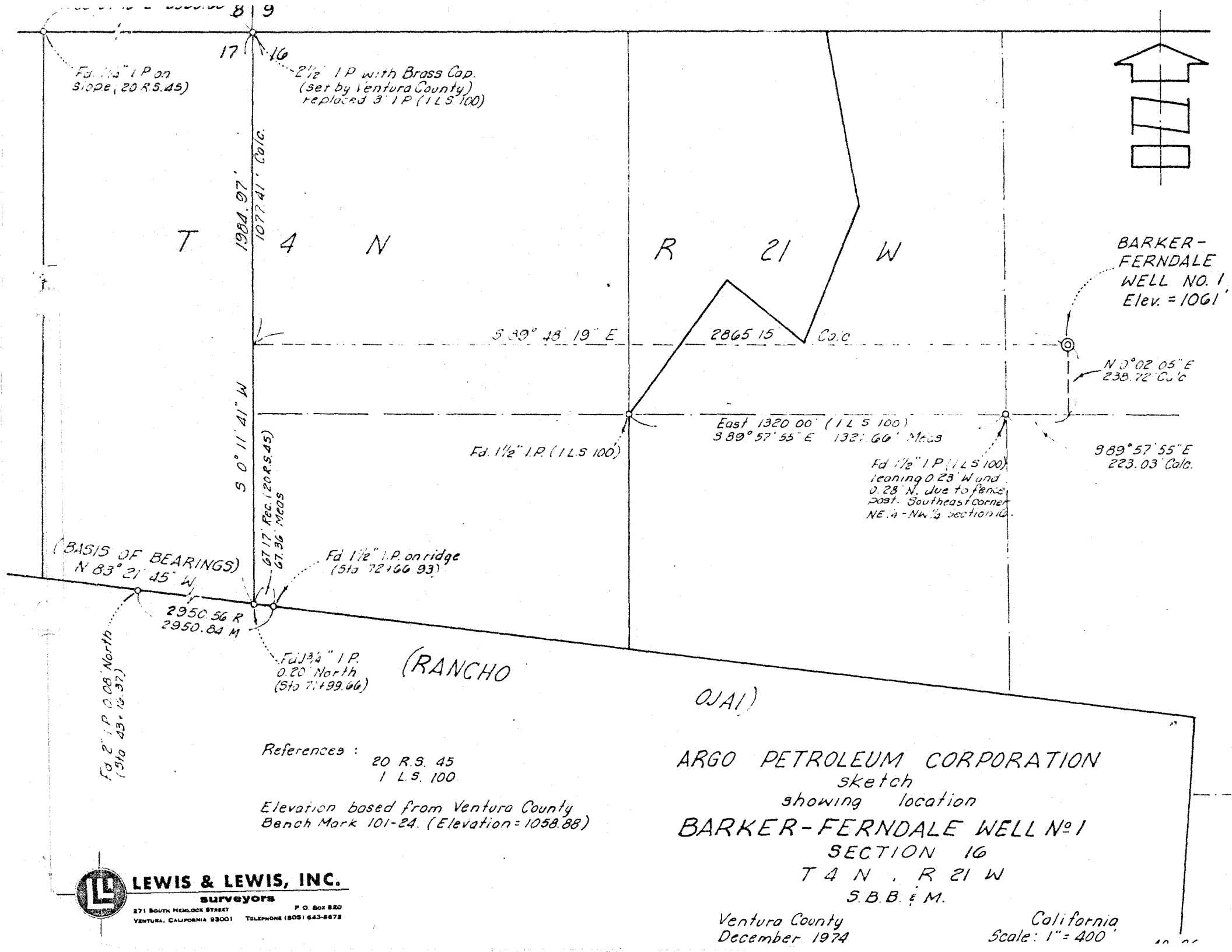
BLANKET BOND

ARGO PETROLEUM CORPORATION (Name of Operator)

By Ralph L. Cahill (Name) 4/16/75 (Date)

Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

OG105 (12-73-GSR1-15M)



References :
20 R.S. 45
1 L.S. 100

Elevation based from Ventura County Bench Mark 101-24. (Elevation = 1058.88)

ARGO PETROLEUM CORPORATION

sketch showing location

BARKER-FERNDALE WELL No. 1

SECTION 16
T 4 N . R 21 W
S.B.B. & M.

Ventura County California
December 1974 Scale: 1" = 400'

LEWIS & LEWIS, INC.
surveyors
271 SOUTH HEMLOCK STREET P.O. Box 820
VENTURA, CALIFORNIA 93001 TELEPHONE (805) 643-8673

NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

NOTICE OF RECORDS DUE

SCANNED

Date November 23, 2011

To: William J. Hill, Agent
Vintage Production California LLC
9600 Ming Ave., Suite 300
Bakersfield CA 93311

Division Office: Ventura-District 2
1000 S. Hill Road, Suite 116
Ventura, CA 93003

In accordance with Division 3 of the Public Resources Code, the following records must be filed with this office within 30 days of the date of this notice, covering the rework **(Notice dated 09/08/11)**
of your well "Barker-Ferndale" 3 111-20609 , Ojai
Field, Ventura County, Sec. 16 , T. 4N , R. 21W , SB B. & M.

RECORDS: *Records are due within 60 days after completion, suspension, or abandonment of any well, or upon completion of additional work in any well. Records shall be* ***submitted in duplicate.***

OIL AND GAS OPERATION
- ☐ Well summary (Form OG 100)
- ☐ Core or sidewall sample (Form OG 101)
- ☐ Well history (Form OG 103)

GEOTHERMAL OPERATION
- ☐ Well summary (Form OGG 100)
- ☐ Core or sidewall sample (Form OGG 101)
- ☐ Well history (Form OGG 103)

LOGS, TESTS, AND SURVEYS: *All logs, tests, and surveys are due within 60 days after completion, suspension, or abandonment of any well, or upon completion of additional work in any well. Logs, tests, and surveys shall be* ***submitted in duplicate.***

- ☐ Electric log (2" = 100 ft.) (5" = 100 ft.)
- ☐ Directional survey
- ☐ Dipmeter (computed)
- ☐ Two copies of all logs run on each well
- ☐ Velocity survey
- ☐ Mud log
- ☐ Pressure measurements (flowing and static)
- ☐ Other _____
- ☐ Water analysis
- ☐ Oil and/or gas analysis
- ☐ Temperature survey
- ☐ R/A survey
- ☐ Spinner survey
- ☒ Cement bond log **ran on 10/07/11**

REPORTS FOR THE MONTH(S) OF *Production, oil and gas disposition, and injection reports are due on or before the 30th day of each month for the preceding calendar month.*

OIL AND GAS OPERATION
- ☐ Production and disposition reports (Form OG110 or computer report)
- ☐ Injection reports (Form OG 110B or computer report)

GEOTHERMAL OPERATION
- ☐ Production reports (Form OGG 110S, 110W, or computer report)
- ☐ Injection reports (Form OGG 110I or computer report)

Name	Title	Signature
Steven Fields	Operations Engineer	

OG 170 (6/09)
cc:

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

CHECK LIST-RECORDS RECEIVED AND WELL STATUS

OPERATOR **Vintage Prod California LLC** WELL DESIGNATION: **"Barker-Ferndale" 3**

API No. **11120609** SEC **16** , T. **4N** , R. **21W** , **SB** B. and M.

COUNTY: **Ventura** FIELD **Ojai**

Type of Notice: **Rework** **Date:** **9/8/2011** **Report Number:** **P211-302**

RECORDS RECEIVED (ATTACH PAGES IF REQUIRED)

	Date	OK	NEED	Remarks
Well Summary (OG100)	11/8/11			
History (OG103)				
E-Log				
Mud Log				
Dipmeter				
Directional				
Core and/or SWS				
CBL			✓	

NEW STATUS

DATE: 9/11

NOTICE OF RECORDS DUE

DATE: _____

DATE: _____

DATE: _____

DATE: _____

WELL STATUS INQUIRY

DATE: _____

DATE: _____

Well Stat

Change Required: NO

Change Done: _____

ABANDONMENTS/REABANDONMENTS/DRILLS/REDRILLS

ABANDONMENT DATABASE : _____ SURFACE INSPECTION NEEDED _____ COMPLETED _____
Date and Inspector

FINAL LETTER NEEDED _____ COMPLETED _____ DRILL/REDRILL DATABASE _____
(Date)

ENGINEER'S CHECK LIST

T-REPORT(S) _____ OPERATOR'S NAME _____ WELL DESIGNATION ✓ SIGNATURE ✓

LOCATION _____ ELEVATION: _____ CONFIDENTIAL RELEASE DATE: _____ PERMIT REQUIREMENTS MET ✓

CLERICAL CHECK LIST

LOCATION CHANGE (OG165) _____ ELEVATION CHANGE (OG165) _____ RELEASE OF BOND (OG150) _____

REMARKS

RECORDS SCANNED: 11/22/11
(Date)

RECORDS APPROVED: 11/23/11
(Date and Engineer)

Modified OGD2

RECEIVED

NOV - 8 2011

Div. of Oil, Gas & Geothermal Resources

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

HISTORY OF OIL OR GAS WELL

Operator Vintage Production California, LLC Field Ojai County Ventura

Well Barker Ferndale 3 Sec. 16 T. 4N R. 21W MD B.&M.

A.P.I. No. 04-111-20609 Name Ted Garner (Person submitting report) Title Operations Engineer (President, Secretary, or Agent)

Date 10/31/2011 (Month, day, year) Signature

Address 9600 Ming Avenue, Bakersfield, CA 93311 Telephone Number (661) 869-8000

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment, with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, and initial production data.

REWORK HISTORY: P211-302

9/22/2011

Rig up pulling unit. Remove head. Stroke unit with rig. 5 strokes 300 psi. Bleed down well. Off load rod equipment. Pull pump off seat. Tbg on vacuum. Lay down polish rod and subs. Pull out of hole with 40 1" rods. Came to wax. Run in hole with rods. Secure rig and well till AM. Hot oil Tbg and rods in the morning.

9/23/2011

Open well to baker tank with 90 psi on tbg. Off load 50 bbls of oil to hot oil truck. Hot oil rods and tbg with 40 bbls. Hot oil 10 bbls down flow line. Pull out of hole with rods and pump. Laying down 12 3/4 slick due to rod wear. Bleed down csg to baker tank with 100 psi. Remove production tree. Nipple up BOPE. Rig up work floor and tbg equipment. Unland donut. Secure rig and well till Monday. Scan out with tbg on Monday.

9/26/2011

Bleed down well. 75 psi. on the tbg. and 100 psi. on csg. Rig up scanner. Scan tbg. out of hole. Found 26 jts. yellow, 114 jts. blue, 7 jts. green and 0 jts. red. Laid down green tbg. Rig down scanner. Make up 7" 23# positive csg. scraper and bumper sub. Run in hole with scraper. Tag @ 4608'. No other restrictions. Pull out of hole with scraper. Make up 1 1/4 x 26' polish rod on sandline. Run in hole with sandline. Unable to feel pick up. Pull out of hole. Break down polish rod. Secure well and rig till AM. Wireline tag fill, cut tbg. in morning.

9/27/2011

Bleed down well. 30 psi. on csg. Unload new tbg. and rods. Rig up wireline. Make feeler run. Tag fill @ 4774'. Make 2 1/4" gauge run. Unable to get deeper than 4659'. Make up 2 1/8" chemical cutter. Run in hole and cut liner @ 4673'. Rig down wireline. Unload fishing tool equipment and sand bin. Relocate 1 Baker tank and 1 Rain for Rent tank. Make up spear and drill collars. Run in hole with fishing tool assembly to 4579'. Secure well and rig until AM. Catch fish in morning.

9/28/2011

Bleed down well 20 psi. on tbg. 30 psi. on csg. Run in hole. Tag @ 4615'. Latch onto fish. Attempt to jar loose fish. Get off of fish. Pull out of hole. Break down tools. Secure well and rig until AM. Make chemical cut on liner in morning.

9/29/2011

Bleed down well. 30 psi. on csg. Rig up wireline. Run sinker bar and collar locator. Tag @ 4680'. Unsure if liner cut @ 4673'. Possible partial cut. Make up chemical cutter. Cut liner @

OG103 (6/97/GSR/5M)
Printed on recycled paper.

SUBMIT IN DUPLICATE

RECEIVED
NOV - 8 2011
Div. of Oil, Gas & Geothermal Resources Ventura

HISTORY OF OIL OR GAS WELL

4640'. Rig down wireline. Make up fishing tools. Run in hole. Catch fish. Pull out of hole. Break down tools. Recovered liner hanger and about 25' of liner with 20' of wire mesh. Secure well and rig until AM. Pick up and run in hole with wash pipe in morning.

9/30/2011

Bleed down well. 30 psi. on csg. Unload tools and 5 jts. 6" wash pipe. Wait on Baker for 2 hrs. to bring right shoe. Make up shoe, 5 jts. 6" wash pipe and jars. Run in hole. Stacked out @ 2491'. Unable to work through. Pull out of hole. Stood back 2 jts. wash pipe. Run in hole. Stacked out @ 2491'. Pull out of hole. Stood back 2 jts. wash pipe. Laid down jars and 1 jt. wash pipe. Found shoe egg shaped. 5 15/16" on 1 side and 6 1/16" on the other side. Secure well and rig until AM. Run in hole with 5" wash pipe on Monday.

10/3/2011

Bleed down well. 30 psi. on csg. Unload 5 jts. 5" wash pipe and tools. Run in hole with 2 stands 6" wash pipe. Lay them down. Pick up 5 jts. 5" wash pipe with shoe and jars. Run in hole with tbg. Tag @ 4638'. Rig up mud pump. Change well over to lease water. 52 bbls. to fill well. Recovered 130 bbls. oil. Spotted power swivel. Secure well and rig until AM. Wash over liner tomorrow. Noticed head on unit of Ferndale 1 has no bolts holding it on. Unit is 8' away from Ferndale 3. Shut unit down and notified lease operator.

10/4/2011

Open up well. 0 psi. on tbg. and csg. Rig up power swivel. Tag fill @ 4638'. Reverse circulate well full. 2 bbls. to fill. Rotate over fish @ 4640'. Reverse circulate down to first centralizer @ 4698'. Rotate past. Reverse circulate down to 4715'. Set down 8000 lbs. Rotate down to 4722'.Got stuck. Lost rotation. Pulled 30000 lbs. over and set off jars twice. Got rotation back. Continued to rotate down to 4780'. Reverse circulate well clean. Spot gel pill across perfs. Rig down swivel. Pull out of hole to wash pipe. Secure well and rig until AM. Pull wash pipe and run in hole with overshot in morning.

10/5/2011

Open up well. 0 psi. on tbg. and csg. Pull out of hole with wash pipe. Laid down 1 jt., jars and shoe. Made up overshot, collars and jars. Run in hole. Latched onto fish @ 4640'. Pull out of hole. Laid down tools and liner. Made up 7" 23# positive scraper. Run in hole to 3367'. Secure well and rig until AM. Continue in hole with scraper in morning.

10/6/2011

Open up well. 0 psi. on tbg. and csg. Continue to run in hole with scraper. Scraped or pushed something from 4730' to 4743'. Pull up to 4712'. Reverse circulate gel pill out. Pull out of hole with scraper. Laid down bumper sub and scraper. Remove PGSR and install shooting flange. Rig up wireline. Run 5.9" gauge ring. Tag @ 4716'. Run 3 1/8" sinker bar. Tag @ 4780'. Run Baker wireline set retrievable bridge plug. Plug got stuck @ 2230'. Worked free. Sent bridge plug to shop to have gauge rings turned down. Rig down wireline. Secure well and rig until AM.

10/7/2011

Open up well. 0 psi. on tbg. and csg. Rig up wireline. Run Baker wireline set retrievable bridge plug. Set bridge plug. Bottom of plug @ 4707'. Top of plug @ 4702'. Fill csg. with 10 bbls. water. Pressure test csg. to 1000 psi. Held 10 minutes. Run cement bond log. Tool malfunctioned. Rerun CBL with 1000 psi. on csg. Rig down wireline. Dump 1 sack of sand on top of bridge plug. Top of sand @ 4697'. Secure well and rig until AM. Run guns in morning.

10/8/2011

Open up well 0 psi. on tbg. and csg. Make up 1 jt. 2 7/8" tbg. on sandline. Make feeler run. Tag @ 4686'. Measure and pick up guns. Rig up tester. Make up BHA. Test in hole. All tbg.

RECEIVED

NOV - 8 2011

Div. of Oil, Gas & Geothermal Resources

HISTORY OF OIL OR GAS WELL

tested good @ 6000 psi. Tag @ 4693'. Rig down tester. Secure well and rig until Monday.

10/10/2011

Open up well. 0 psi. on tbg. and csg. Held 3rd party safety meetings with Halliburton, Tiger, Pros and Thompco. Rig up wireline. Ran correlation log. Set packer. Top of packer @ 4282'. Top shots @ 4440'. Bottom shots @ 4680'. Rig up manifold and lines to Baker tank. Drop bar and shoot guns. Well built to 600 psi. in 55 minutes. Opened choke to 16/64". Well bled down to 60 psi. in 1 hour 20 minutes. Closed choke @ 2:40 PM. Spot Halliburton equipment. Well built to 400 psi. @ 3:45 PM. Open to tank wide open. Fluid to surface.

10/11/2011

Well had 880 psi. on tbg. 60 psi. on csg. Bled to Baker tank. Recovered 7 bbls. oil. Rig up Halliburton. Secure well and rig until AM.

10/12/2011

Well had 920 psi. on tbg. Bled to Baker tank. Recovered 9 bbls. oil. Halliburton performed acid foam job as per engineering program. Rig down Halliburton. Secure well and rig until AM. Flowback well in morning.

10/13/2011

Overnight shut in pressure on well was 1900 psi. on tbg. 0 psi. on csg. Rig down Halliburton trucks. Reposition Baker tank. Dump neutralizer in tanks. Flowback well. Started @ a 16/64". Ended @ a 28/64". First 35 bbls. cut 42% water with a 4 ph. Next 75 bbls. averaged a 84% cut with a 2 ph. Flowed back a total of 110 bbls. Helped Pros rig up second Baker tank. Turned well over to Pros for monitoring.

10/17/2011

Open up well. 60 psi. on tbg. 10 psi. on csg. Bled well down Filled csg. with 3 bbls. lease water. Pumped 50 bbls. lease water down tbg. Released packer. Pull out of hole with guns. Laid down excess tbg., packer and guns. Found 2 jts. tbg. between vent and guns full of flour sand. Run in hole with wash pipe. Laid down wash pipe. Run in hole with drill collars. Laid down drill collars. Run in hole with tbg. to 1247'. Secure well and rig until AM.

10/18/2011

Bleed down well. 100 psi. on tbg. and csg. Pump 30 bbls. lease water down tbg. Pull out of hole with tbg. Make up BHA. Load up wash pipe and drill collars. Rig up tester. Test tbg. in hole. Found collar leak on jt. # 44. Replaced collar. All other tbg. tested good @ 6000 psi. Land tbg. on donut. Shoe @ 4292'. Tail @ 4325'. Rig down tester. Rig down tbg. tools and working floor. Remove and load out BOPE. Nipple up wellhead. Rig down mud pump. Clean location. Move equipment on location. Secure well and rig until AM.

10/19/2011

Bleed down well. 300 psi. on tbg. 200 psi. on csg. Pick up and bucket test acid pump. Run in hole with rods and pump. Load TCP equipment. Pick up 12 replacement 7/8" rods. Respace well. Install load cell. Make up new polish rod. Seat pump. Fill tbg. with 21 bbls. lease water. Pressure test to 600 psi. in 3 strokes. Hang head. Hang well on. Move out tanks and mud pump. Rig down to half mast. Hydraulic pump went out on rig. Secure rig. Help with unit and roustabout crew. Turn well over to lease operator and Pros. Well pumping. Fix rig. RDMO in morning.

10/20/2011

Rig down. Clean location. Turn well over to lease operator and R & R for unit repairs.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

No. T 211-307

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

Report on Operations

William J. Hill, Agent
Vintage Production California LLC
9600 Ming Ave. Suite 300
Bakersfield, CA 93311

Ventura, California
October 4, 2011

Your operations at well "Barker-Ferndale" 3 **, API No.** 111-20609
Sec. 16 **, T.** 4N **, R.** 21W **,** SB **B. & M.** Ojai
Field in Ventura **County,**
were witnessed on 9/28/2011 **by** David Ortiz **, representative of the supervisor.**

Operations Witnessed	Result – Def.	Engineer	Date
BOPE Inspection	Approved – 0	David Ortiz	9/28/2011

The operations were performed for the purpose of inspecting the blowout prevention equipment and installation.

DECISION: Approved

tkc

By

Elena M. Miller
State Oil and Gas Supervisor

District Deputy

OG109 Rev9/01 (9/89/GSR1/5M)

API No. VE-20609 DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES T 21N 30W

BLOWOUT PREVENTION EQUIPMENT MEMO

Operator Vintage Prod LLC Well "Barker Ferndale" 3 Sec. 16 T. 4N R. 21W
Field OJAI County Ventura Spud Date

VISITS:	Date	Engineer	Time	Operator's Rep.	Title
1st	9-28-11		(09:00 to 10:45)	Griz Beaman	Rig Superintendent
2nd			(to)	Fred Gonzalez	Rig Operator

Contractor Excalibur Rig # 36 Contractor's Rep. & Title

Casing record of well: 10-3/4" (40.5#) 0-808' cem w/ 500 cu ft to surface; 7" (23#), K-55 0-5785' cem @ 5785 w/ 500 cu ft; 3½" WW screen (2⅞" base pipe) 4616' to 4783'

OPERATION: ~~Testing~~ (Inspecting) the blowout prevention equipment and installation. Critical well? Y ☐ N ☒

DECISION: The blowout prevention equipment and its installation on the 7" casing are approved.

Proposed Well Opns: Rework . MACP: psi

Hole size: " fr. ' to ', " to ' & " to '

REQUIRED BOPE CLASS: II 2M

CASING RECORD OF BOPE ANCHOR STRING					Cement Details	Top of Cement	
Size	Weight(s)	Grade(s)	Shoe at	CP at		Casing	Annulus
7"	23#	J-55	4787'				

BOP STACK

API Symb.	Ram Size (in.)	Manufacturer	Model or Type	Vert. Bore Size (in.)	Press. Rtg.	Date Last Overhaul
R	2⅞	Cameron	—	7"	3M	
Rd	CSO	"	"	7	"	

TEST DATA

Gal. to Close	Recov. Time (Min.)	Calc. GPM Output	psi Drop to Close	Secs. to Close	Test Date	Test Press.

ACTUATING SYSTEM

Accumulator Unit(s) Working Pressure 1700 psi
Total Rated Pump Output gpm Fluid Level
Distance from Well Bore 50' ft. 1/2

	Accum. Manufacturer	Capacity	Precharge
1	Hydril	gal.	1050 psi
2		gal.	psi

CONTROL STATIONS	Elec.	Hyd.	Pneu.
✓ Manifold at accumulator unit		✓	
Remote at Driller's station			
Other:			

EMERG. BACKUP SYSTEM			Press.	Wkg.Fluid
✓ N_2 Cylinders	1	L= "	1800	gal.
Other:	2	L= "	2000	gal.
	3	L= "		gal.
	4	L= "		gal.
	5	L= "		gal.
	6	L= "		gal.
	TOTAL:			gal.

HOLE FLUID MONITORING EQUIPMENT

		Alarm Type: Audible	Alarm Type: Visual	Class
	Calibrated Mud Pit			A
	Pit Level Indicator			B
	Pump Stroke Counter			B
	Pit Level Recorder			B
	Flow Sensor			B
	Mud Totalizer			C
	Calibrated Trip Tank			C
	Other:			

AUXILIARY EQUIPMENT

	No.	Size (in.)	Rated Press	Connections: Weld	Connections: Flange	Connections: Thread	Test Press.
✓ Kill Line	1	2"	3M		X		3M
✓ Control Valve(s)	4		3M		✓		3M
✓ Check Valve(s)	1		3M		X		
~~Aux. Pump Cnnct.~~							
~~Choke Line~~							
~~Control Valve(s)~~							
~~Pressure Gauge~~							
~~Adjstble Choke(s)~~							
~~Bleed Line~~							
✓ Upper Kelly Cock	1	2"			X		3M
Lower Kelly Cock							
Standpipe Valve							
✓ Stndpipe Pres. Gau.	1	2⅞			X		3M
✓ Pipe Safety Valve		2⅞"			✓		3M
Internal Preventer							

Hole Fluid Type	Weight	Storage Pits (Type & Size)
Lease Water	—	300 bbls

REMARKS AND DEFICIENCIES:

OGD9 (9/06)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

No. T 211-307

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

Report on Operations

William J. Hill, Agent
Vintage Production California LLC
9600 Ming Ave. Suite 300
Bakersfield, CA 93311

Ventura, California
October 4, 2011

Your operations at well "Barker-Ferndale" 3 **, API No.** 111-20609
Sec. 16 **, T.** 4N **, R.** 21W **,** SB **B. & M.** Ojai
Field in Ventura **County,**
were witnessed on 9/28/2011 **by** David Ortiz **, representative of the supervisor.**

Operations Witnessed	Result – Def.	Engineer	Date
BOPE Inspection	Approved – 0	David Ortiz	9/28/2011

The operations were performed for the purpose of inspecting the blowout prevention equipment and installation.

DECISION: Approved

tkc

By **Elena M. Miller**
State Oil and Gas Supervisor

District Deputy

OG109 Rev9/01 (9/89/GSR1/5M)

API No. 04-20609 DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES T 21N 30W

BLOWOUT PREVENTION EQUIPMENT MEMO

Operator Vintage Prod LLC Well "Barker Ferndale" 3 Sec. 16 T. 9N R. 21W
Field OJAI County Ventura Spud Date

VISITS:	Date	Engineer	Time	Operator's Rep.	Title
1st	9-28-11		(09:00 to 10:45)	Eric Beaman	Rig Supervisor/Lead
2nd			(to)	Fred Gonzalez	Rig Operator

Contractor Excalibur Rig # 36 Contractor's Rep. & Title

Casing record of well: 16-3/4" (40.5#) @ 808' cem w/ 500 cu ft to surface; 7" (23#), K-55 @ 5785' cem @ 5785 w/ 500 cu ft; 3½" WHP screens (2⅞" base pipe) 4616' to 4783'

OPERATION: ~~Testing~~ (Inspecting) the blowout prevention equipment and installation. Critical well? Y ☐ N ☒

DECISION: The blowout prevention equipment and its installation on the 7" casing are approved.

Proposed Well Opns: Rework . MACP: psi

Hole size: " fr. ' to ', " to ' & " to '

REQUIRED BOPE CLASS: II 2M

CASING RECORD OF BOPE ANCHOR STRING					Cement Details	Top of Cement	
Size	Weight(s)	Grade(s)	Shoe at	CP at		Casing	Annulus
7"	23#	J-55	4787'				

BOP STACK

API Symb.	Ram Size (in.)	Manufacturer	Model or Type	Vert. Bore Size (in.)	Press. Rtg.	Date Last Overhaul
R	2⅞	Weatherford	—	7"	3M	
Rd	CSO	"	"	7	"	

TEST DATA

Gal. to Close	Recov. Time (Min.)	Calc. GPM Output	psi Drop to Close	Secs. to Close	Test Date	Test Press.

ACTUATING SYSTEM

Accumulator Unit(s) Working Pressure 1700 psi
Total Rated Pump Output gpm Fluid Level
Distance from Well Bore 50' ft. 1/2

	Accum. Manufacturer	Capacity	Precharge
1	Hydril	gal.	1000 psi
2		gal.	psi

CONTROL STATIONS	Elec.	Hyd.	Pneu.
✓ Manifold at accumulator unit		✓	
Remote at Driller's station			
Other:			

EMERG. BACKUP SYSTEM			Press.	Wkg.Fluid
✓ N_2 Cylinders	1	L= "	1800	gal.
Other:	2	L= "	2000	gal.
	3	L= "		gal.
	4	L= "		gal.
	5	L= "		gal.
	6	L= "		gal.
	TOTAL:			gal.

AUXILIARY EQUIPMENT

	No.	Size (in.)	Rated Press	Connections: Weld	Flange	Thread	Test Press.
Fill-up Line							
✓ Kill Line	1	2"	3M		X		3M
✓ Control Valve(s)	4		3M		—		3M
✓ Check Valve(s)	1		3M		X		
~~Aux. Pump Cnnct.~~							
~~Choke Line~~							
~~Control Valve(s)~~							
~~Pressure Gauge~~							
Adjstble Choke(s)							
~~Bleed Line~~							
✓ Upper Kelly Cock	1	2"			X		3M
Lower Kelly Cock							
Standpipe Valve							
✓ Stndpipe Pres. Gau.	1	2⅞			X		3M
✓ Pipe Safety Valve		2⅞			—		3M
Internal Preventer							

HOLE FLUID MONITORING EQUIPMENT

	Alarm Type: Audible	Visual	Class
Calibrated Mud Pit			A
Pit Level Indicator			B
Pump Stroke Counter			B
Pit Level Recorder			B
Flow Sensor			C
Mud Totalizer			C
Calibrated Trip Tank			C
Other:			

Hole Fluid Type	Weight	Storage Pits (Type & Size)
lease water	—	300 bbls

REMARKS AND DEFICIENCIES:

OGD9 (9/06)

NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES

PERMIT TO CONDUCT WELL OPERATIONS

No. P **211-302**

(Old)		(New)
520	Field Code	520
12	Area Code	12
10	Pool Code	10

William J. Hill, Agent
Vintage Production California LLC
9600 Ming Ave., Suite 300
Bakersfield, CA 93311

Ventura, California
September 20, 2011

Your proposal to **rework** well **"Barker-Ferndale" 3**, A.P.I. No.**111-20609**, Section **16**, T.**4N**, R.**21W**, **S.B.** B. & M., **Ojai** Field, **Ojai-Silverthread** Area, **Miocene** Pool, **Ventura** County, dated **09/08/11**, received **09/12/11** has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED:

1. Blowout prevention equipment, as defined by this Division's publication No. M07, shall be installed and maintained in operating condition and meet the following minimum requirements:
   (a) **Class II 2M**
   (b) **2M lubricator** for perforating operations if using wireline.
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface condition in order to prevent blowouts.
3. The Division routinely monitors monthly well production data, and if anomalous water production is indicated, remedial action will be ordered.
4. No program changes are made without prior Division approval.
5. **THIS DIVISION SHALL BE NOTIFIED TO:**
   a. Inspect the blowout prevention equipment prior to commencing downhole operations.

The Division recommends, as a minimum, that carbon monoxide monitoring equipment and a vent line be installed and maintained in operating condition during all extensive perforating operations.

Engineer: Bruce H. Hesson

Phone: (805) 654-4761

Elena M. Miller
State Oil and Gas Supervisor

By
Bruce H. Hesson, District Deputy

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work is completed or the operations have been suspended. Issuance of this permit does not preclude the recipient from the obligation of being in compliance with all applicable Federal, State and Local laws, regulations and ordinances.

OG 111

NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

FOR DIVISION USE ONLY			
	Forms		
Bond	OGD114	OGD121	
1800 800	111 ✓	115 ✓	

NOTICE OF INTENTION TO REWORK / REDRILL WELL

Detailed instructions can be found at: www.conservation.ca.gov/dog/ P211-302

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework ☒ / redrill ☐ (Check one) well Barker Ferndale 3, API No. 111-20609,

Sec. 16, T. 4N, R. 21W, S.B. B.&M., Ojai-Silvwerhread Field, Ventura County.

The complete casing record of the well (present hole), including plugs and perforations, is as follows: (Attach wellbore schematics diagram also.)

See attached program

The total depth is: _____ feet. The effective depth is: _____ feet.

Present completion zone(s): _____ (Name). Anticipated completion zone(s): _____ (Name).

Present zone pressure: _____ psi. Anticipated/existing new zone pressure: _____ psi.

Is this a critical well as defined in the California Code of Regulations, Title 14, Section 1720(a) (see next page)? Yes☐ No☒

For redrilling or deepening only, is a California Environmental Quality Act (CEQA) document required by a local agency? Yes☐ No☐ If yes, see next page.

The proposed work is as follows: (A complete program is preferred and may be attached.)

RECEIVED
SEP 12 2011
Div. of Oil, Gas & Geothermal Resources Ventura

See Attached Program

If well is to be redrilled or deepened, show proposed coordinates (from surface location) and true vertical depth at total depth: _____ feet _____ (Direction) and _____ feet _____ (Direction) Estimated true vertical depth: _____

Will the Field and/or Area change? Yes☐ No☐ If yes, specify New Field: _____ New Area: _____

The Division must be notified immediately of changes to the proposed operations. Failure to provide a true and accurate representation of the well and proposed operations may cause rescission of the permit.

Name of Operator			
Vintage Production California			
Address		City/State	Zip Code
270 Quail Court Unit 201		Santa Paula	93060
Name of Person Filing Notice	Telephone Number	Signature	Date
Alex Iwasiw	661-212-1535		09-08-11
Individual to contact for technical questions:	Telephone Number	E-Mail Address:	
Alex Iwasiw	661 -212-1535	Alex_Iwasiw@Oxy.com	

This notice and an indemnity or cash bond must be filed, and approval given, before the workover begins. (See the reverse side for bonding information.) If operations have not commenced within one year of the Division's receipt of the notice, this notice will be considered cancelled.

Vintage Production California LLC

A subsidiary of Occidental Petroleum Corporation

Wellwork Program

Well Name:	**Barker Ferndale 3**	*Location:*	**SEC 16 - 4N - 21W**
Field Name:	**Siverthread**	*API :*	**111-20609**
County, ST:	**Ventura County, California**	*Present Zones:*	**Mohnian**
Purpose:	**Recomplete in BCF Zone**	*Date:*	**08/24/2011**

Present Condition (well drilled in 1975):

Total depth: 6330'

PBTD: 4790"

10- 3/4", 40.5#; K-55 csg. 0' - 808' cmt'd w/ 500 cuft (cement to surface)

7", 23#; K-55 csg. 0' - 5785' cmt'd at 5785' w/ 500 cuft.

3-1/2" WW Screen (2-7/8" base pipe) 4616' to 4783' set on BP and gravel packed with 10/16 gravel.

Effective Perforations:

4 (.44") JHPF 4712' to 4726', 4730'-4739', 4759' to 4775' (1989).
and WW Screen 30 M - 4618' to 4627', 4698' to 4781'

Isolated Perforations:

3 (.38") HPF 4710' - 4838'

2 (.38") HPF 5032' - 5225'

2 (.44") HPF 5415' - 5694'

WSO: None

Plugs: Baker ret BP @ 5340'
Baker N-1 Ezy Drill @ 4783'

Casing Issues: Thin casing 3300' to 3000' by Dia-Log, but no visible holes.

RECEIVED
SEP 12 2011
Div. of Oil, Gas & Geothermal Resources
Ventura

Wellwork Program (all depths refer to the original KB height which was 12' above ground level)

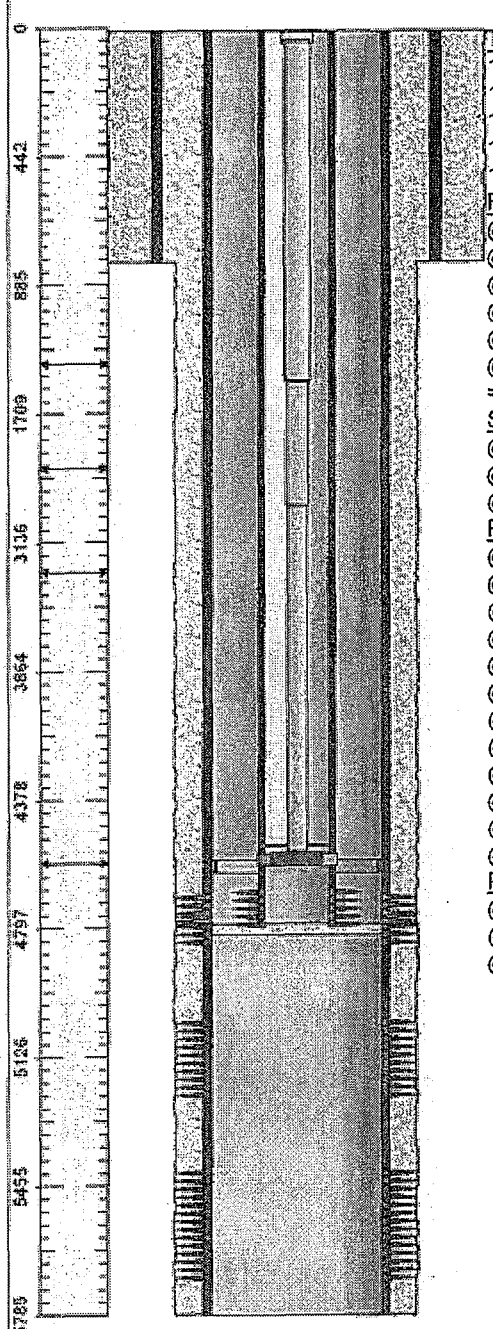
1. MIRU, POOH with rods and pump, visually inspect.
2. Nipple up BOPE, POOH w tubing, scan out.
3. Make up 7" positive scraper, RIH to screen top, POOH.
4. Rig up CT unit with sideways jet tool. RIH and jet 2-1/2" ID screen, POOH, RDMO CT unit.
5. (Be careful to not wash gravel around adapter and stick jet tool.)
6. Make 2-7/8" cutter tool, RIH and make cut near 4685', POOH.
7. RIH with 2-1/2" spear on jarring BHA. Spear into WWS adapter. Jar out of hole.
8. RIH with 2-1/2" spear on jarring BHA. Spear into WWS stub. Jar WWS out of hole, POOH.
9. MU 7" bit on tbg, RIH and clean out to 4783', POOH.
10. Rig up wireline, MU WL retrievable BP, RIH log per top at 4715', set BP at 4710'.
11. Run Cast-V or USIT CBL log and DSL with 1000 psi on casing from 4710' to 3000'.

(If bond log shows poor bond above or below perf interval prepare to sqeeze cement to isolate)

	(Note all depth for squeeze work v e determined after bond log is run.)	
	(Depths for producing perfs may va y depending on results from neutron log.)	
	12a	Rig up wireline.
	12b	RIH with perf guns, shoot sqz holes at determined depth.
	12c	Rig down wireline.
	12d	Attempt to break down squeeze perfs, record rate and pressure.
	12e	Rig up cementers.
	12f	Mix and pump Class G cement with addatives.
	12g	Squeeze cement away.
		(Production engineer to determine cement volume, addatives and pressures once break down rate and pressure are determined.)
	12h	Reverse tubing clean.
	12i	Wait on squeeze overnight.
	12j	POOH with tubing.
	12k	Make up 7" bit and drill collars.
	12l	RIH tag TOC, drill out cement past upper squeeze holes.
	12m	Pressure test holes to 1500 psi.
	12n	If holes test good return to drilling cement, else re-squeeze.
	12o	POOH with clean out string.
13.	Pick up TCP guns with packer underbalance system, RIH.	
14.	Corelate gun depth with wireline.	
15.	Perforate the following intervals, allow well to flow back if possible:	
	4440' - 4680'	
16.	Prep well for foam acid stimulation.	
17.	Pump designed stimulation job, RDMO pump company.	
18.	Flow back well if possible, pull out of hole with TCP guns.	
19.	RIH with tubing production string. Set tubing intake below 4300', nipple down BOPE.	
20.	RIH with rods and acid pump. Seat pump and test.	
21.	RDMO.	

RECEIVED
SEP 12 2011
Div. of Oil, Gas & Geothermal Resources
Ventura

Wellbore Diagram : FERNDALE-003



Tubing String Quantity (Top-Bottom Depth) Desc
1 @(12-14) Tubing Hanger-Single (2.875")
146 @(14-4556) J-55 2.875 OD/ 6.50# T&C External Upset 2.441 ID 2.347
1 @(4556-4557) Seat Nipple/Shoe - Standard (2.875") Mechanical Type
1 @(4557-4588) J-55 2.875 OD/ 6.50# T&C External Upset 2.441 ID 2.347
1 @(4588-4589) Notched Collar - N/A
Rod String (Top-Bottom Depth) Desc
@(12-38) 1.250 (1 1/4 in.) C x 26
@(38-50) 1.000 (1 in.) D Rod Sub(s)
@(50-1340) 1.000 (1 in.) N-78 (D) x 30 Rod
@(1340-2720) 0.875 (7/8 in.) N-78 (D) x 30 Rod
@(2720-4580) 0.750 (3/4 in.) N-78 (D) x 30 Rod
@(4580-4600) Rod Pump (Insert) (NON-SERIALIZED) - 25-125-RHA-20-4 (Bore = 1.25)
Surface Casing (Top-Bottom Depth) Desc
@(12-808) Wellbore Hole OD-13.7500 - N/A
@(12-808) Cement
@(12-808) K-55 10.750 OD/ 40.50# Round Short 10.050 ID 9.894 Drift - N/A
Production Casing (Top-Bottom Depth) Desc
@(808-5785) Wellbore Hole OD- 8.7500
@(12-5785) K-55 7.000 OD/ 23.00# Round Long 6.366 ID 6.241 Drift - N/A
@(12-5785) Cement
@(4710-4783) Producing Interval (Completion)
@(4712-4726) Perforations - Open
@(4730-4749) Perforations - Open
@(4759-4775) Perforations - Open
@(4710-4783) Perforations - Open
@(4783-4787) Bridge Plug Cast Iron 7.000"
@(4783-4838) Perforations - Abandoned
@(5032-5225) Perforations - Abandoned
@(5415-5694) Perforations - Abandoned
Production Liner (Top-Bottom Depth) Desc
@(4616-4619) Casing Liner Hanger - 6.000" OD - N/A
@(4619-4783) J-55 2.875 OD/ 6.40# Round Long 2.441 ID 2.347 Drift - N/A
@(4698-4783) Wire Wrapped Screen - Open

RECEIVED

SEP 12 2011

Div. of Oil, Gas & Geothermal Resources Ventura

PROPERTY/WELL TRANSFER OR ACQUISTION

Seneca Resources Corporation (S2630)

to

Vintage Production California LLC (V1370)

Effective April 25, 2008

OPERATOR ~~ARCO~~ Seneca
LSE & NO "Barker Ferndale" 3
MAP 202

	(1)	(2)	( )	( )	( )	( )
INTENTION	DRILL-	SUPP TO (1)	alter casing	ALTER CASING	rework	
NOTICE DATED	5-22-75	7-2-75	9-13-78	11/3/82	8-17-89	
P-REPORT NUMBER	275-180	275-251	278-259	283-178	289-290	
CHECKED BY/DATE						
MAP LETTER DATED	5-31-75 lac	1-15-76				
SYMBOL		●	N/C	NC	N/C	

	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED
NOTICE	5-23-75		1-7-75		9-13-78		11/8/82		8-17-89			
HISTORY	→		4-30-76		10-27-78		10/24/84		12-13-89			
SUMMARY	→		4-30-76		✓		10/24/84		12-13-89			
IES/ELECTRIC LOG									CALIPER LOG 12-13-89			
DIRECTIONAL SURV			1-6-77									
CORE/SWS DESCRIP												
OTHER ILL FDL dig. dip			4-30-76 4-30-76		WSO 11/3/78 1-13-81							
RECORDS COMPLETE	✓		✓		✓		11/15/84	PL	1-18-90	SPM		

ENGINEERING CHECK

T-REPORTS	
OPERATOR'S NAME	
WELL DESIGNATION	
LOC & ELEV	
SIGNATURE	
SURFACE INSPECTION	
FINAL LETTER OK	

CLERICAL CHECK

POSTED TO 121 _____ 170 MAILED _____ FINAL LETTER MAILED _____

RELEASED BOND _____

REMARKS: ~~NEED~~ PRODUCTION TEST dwk 1/29/90

DIVISION OF OIL & GAS

RECEIVED

DEC 13 1989

HISTORY OF OIL OR GAS WELL

VENTURA, CALIFORNIA

SENECA RESOURCES CORPORATION OJAI FIELD VENTURA COUNTY
WELL: "ARGO BARKER FERNDALE" 3 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20609 ERIC R. WILSON, DIVISION ENGINEER

Eric Wilson 12/8

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

8/16/89

Day 1. MIRU Oilwell. Bled tbg. Gas only. Fill tbg. with lease water. Rig for rods. Pump stuck. Work stuck pump. Unable to work loose. Rig up and back off rods. Pull rods. Spider out. Back off pull rod on pump. Bled casing. Unbolt wellhead. Remove tree. Fill tbg. with lease water. RU A&F Testers. Blow drain. RO testers. Bolt on N/L Acme mechanical gate. Rig for tbg. Pull 55 stands. SDFN.

8/17/89

Day 2. Bled tbg. & csg. Finish stripping out well. Approx. 15' of sand above pump. Pump sanded in jt. 2-7/8" Buttress. RU Archer Reed. Hit bridge @ 4394'. Work through. Tag fill @ 4524'. Fine sand and mud in sample. RO Archer Reed. Run 2-7/8" STC, 1 jt. 2-7/8", 2-1/2" API T/L shoe. Measure & run 136 jts. 2-7/8" Buttress. Rig pump to well. Fill well with 95 bbls. lease oil. Fill pump pit with 87 bbls. lease oil. Haul 13 jts. 2-7/8" EU8 to well. Rig wt. indicator. Measure & run 9 jts. Strip on PGSR stripper. Rig working platform. Tubing tail @ 4372'. Note: Total oil hauled for well = 182 bbls.

8/18/89

Day 3. Bled tubing & casing. Tubing stuck. Work free. Pull through sand 40'. Rig poorboy swivel. Rig to backscuttle. Clean out sand 4332'-4808'. Heavy scale returns running 4746'-4778'. Circulate well 1 hr. on bottom. Pull tbg. to 2986'. Fill well with oil. SDFN. Note: Fine sand 4332'-4994'. Coarse sand 4494'-4746'.

8/19/89

Day 4. Bled tbg. & csg. Run tbg. Tag fill @ 4808'. Order out sand. Pull tbg. to 4177'. Dump 30 sacks Silica sand down tbg. with lease water. Pull tbg. to 3573'. Close well in. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "ARGO BARKER FERNDALE" 3 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20609 — ERIC R. WILSON, DIVISION ENGINEER

EW 12/8

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

8/20/89

Day 5. Bled tbg. & csg. Run tbg. Tag top of sand @ 4635'. Rig pump. Circulate out sand to 4650'. Change well over to lease water. Pull tbg., keeping well full. RU A&F Testers. Make up Baker fullbore packer. Run packer & tbg., testing to 5000 psi. Set packer @ 3490'. Pressure csg. to 500 psi. Hold for 5 minutes. Finish testing tbg. RO testers. Set packer @ 3993'. Pressure csg. & tbg. to 500 psi. Bled well 225 psi in 5 min. Bled to 0 in 15 min. Casing bled to 475 in 15 min. Pressure tbg. to 1800 psi. Bled to 1200 in 5 min., bled to 1000 in 10 min., 700 in 15 min., 300 in 30 min. SDFN. Note: Unable to establish pump rate down tbg. Barnett Trucking transferred oil from pump & well to tank battery (150 bbls.).

8/21/89

Day 6. 0 pressure tbg. & csg. Open surface string valve. Pressure casing to 500 psi. Pressure tbg. to 1500 psi. No bleed thru surface. Bled tbg. & csg. Open unloader. RU & run 780' 3/4" rods. Rig rod jar, guide & sandline. Run rods. Tag top of sand @ 4675'. (Plug moved down well 25'.) Pull rods. Release Baker fullbore packer. Pull tbg. & packer. Keep well full of lease water. RU Dia-Log. Run casing caliper tool. Tag fill @ 4663'. Run Caliper Log 4634' to surface. Found thin casing 3300'-3000', but no visible holes. RO Dia-Log. Close well in. SDFN.

8/22/89

Day 7. 0 pressure. Rig up and run 300' 3/4" rods with bailer. Rig rod jars & sandline. Run rods. Tag fill @ 4665'. Pull rods. Make up Baker 7" Model "G" ret. bridge plug. Run plug & tbg. Set plug with bottom @ 4650' & top @ 4639'. Pull tubing to 4610'. Spot 2 sacks Silica sand. Pull tbg. & ret. tool. Make up 2-1/2" API T/L shoe. Run pump shoe & 136 jts. 2-7/8" buttress. Land tbg. on donut with shoe @ 4035'. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "ARGO BARKER FERNDALE" 3 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20609 — ERIC R. WILSON, DIVISION ENGINEER

ERW 12/8

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

8/23/89
Day 8. 0 pressure on tbg. & csg. Remove BOPE. Make up swab tree & equipment. Run swab. Pull 1000' each run to 4000'. Pull fluid from 4000'. Swab well down. Fine sands last 800'. Swab approx. 141 bbls. RO swab equipment. SDFN.

8/24/89
Day 9. Small amount of gas on casing. RU Archer Reed. Make feeler run with 1-1/2" tools. Tag fill @ 4632'. Sand sample Silica sand. RO Archer Reed. Make up swab equipment. Bolt on N/L Acme mechanical gate. Rig for tbg. Pull tbg. SDFN.

8/25/89
to
8/29/89
SHUT DOWN UNTIL 8/29/89. WAITING ON LINER.

8/30/89
Day 10. Make up 1 jt. 2-3/8" tbg. on sandline. Run in well. Tag fill @ 4632'. Pull and lay down tag. jt. Make up Baker ret. head. Run tbg. & tool to 4640'. Change well over to oil. Backscuttle Silica sand off bridge plug. Latch onto plug & release. Pull tbg. & plug. Bolt on PGSR stripper. Rig working floor. Make up 6-1/8" rock bit. Run bit & tbg. to 4590'. Strip on PGSR rubber. Tag fill @ 4657'. Rig pump to backscuttle. Unable to circulate out deeper. Pull tbg. to 4085'. SDFN. Note: Transferred 250 bbls. oil to well. Total oil transferred to well to date = 282 bbls. Last time tag fill 8/21/89 @ 4665'.

8/31/89
Day 11. 125 psi on well. Run tbg. Tag fill @ 4654'. Circulate sand out to 4720'. Circulate well clean. POH with tbg. & 6-1/8" bit. Make up Baker Model "G" BP. RIH with tbg. Set BP @ 4700'. Pressure test casing to 500 psi. Bled 5 psi in 5 minutes. Bled well off. Release BP. POH with tbg. & plug. Make up 6-1/8" bit. RIH to 480'. Secure well. SDFN.
Note: Casing is tested positive to 4700'.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "ARGO BARKER FERNDALE" 3 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20609 — ERIC R. WILSON, DIVISION ENGINEER

EW 12/8

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

9/1/89
Day 12. Bled tbg. & csg. Run tbg. Tag fill @ 4722'. Strip on PGSR rubber. Rig pump to circulate. Circulate out fill to 4843'. Circulate well clean. Pull tbg. to 4343'. Let set 1 hour. Run tbg. Tag fill @ 4843'. Pull tbg. & bit. Remove PGSR cage. Bolt on shooting flange. Keep hole full of oil. SDFN.

9/2/89
Day 13. Stand by for Schlumberger. RU Schlumberger. Run Baker wireline N-1 Ezy drill plug & set with top @ 8743'. Perf well per program 4 (0.44") JHPF 4759'-4775', 4730'-4749' & 4712'-4726'. Pull last gun to 4000'. Let well set 45 min. Run gun. Tag fill @ 4771'. RO Schlumberger. Make up 2-7/8" STC. Run tbg. to 4035'. Close well in. SDFN. Note: Schlumberger tag was in error. Actual tag @ 4783'.

9/3/89
Day 14. Bled tbg. & csg. Run tbg. Tag down @ 4783'. Rig pump to backscuttle. Circulate out gas. Unable to work tbg. deeper. Rig pump to circulate. Unable to work tbg. deeper. Pull tbg. to 4600'. Let well set 1 hr. Tag down @ 4783'. LD extra tbg. Pull tbg., keeping well full of oil. Leave 600' kill string in well. SDFN.

9/4/89
Day 15. Bled tbg. & csg. Pull kill string. Bolt on shooting flange. RU Schlumberger. Tag top plug @ 4783'. RO Schlumberger. Measure & PU 2-7/8" x 3-1/2" 30 mesh liner assembly. RU A&F Testers. Test tbg. in hole @ 5000 psi. Trouble testing due to rod cut tbg. & buttress. Set liner on plug @ 4783'. RO testers. Rig filters & Baker pump truck. Mix & spot Silica sand in well (27 sks) to liner. Displace to liner. No pressure buildup. Mix & spot 2 sks. Let settle. Note: Transfer 87 bbls. oil to well. Total oil to date 369.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "ARGO BARKER FERNDALE" 3 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20609 — ERIC R. WILSON, DIVISION ENGINEER

EW 12/8

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

9/5/89
Shut down for Holdiay.

9/6/89
Day 16. Bled tbg. & csg. Transfer oil to Baker pump truck. Pump into casing. Pressure buildup to 800 psi. RO Baker pump truck. Rig pump to circulate. Circulate well clean 1-1/2 hrs., no sand returns. Unscrew tbg. off liner. Pull & LD 2 jts. 2-7/8" tbg. Land tbg. on donut with shoe @ 4532' & tail @ 4561'. Remove BOE. Bolt on wellhead. Make up X-mas tree. Clean pump tank. Break out pump lines & load out. Load out BOE & tbg. tools. SDFN. Note: Transferred 65 bbls oil from pump to prod. pit. Total to well to date 304. Transferred 1 jt. 2-7/8" Butt. from well to junk & 16 jts. 2-7/8" EU8 from rack to well.

9/7/89
Day 17. Bled tbg. Rig for rods. Make up N/L Acme rod BOE. Check & run exchange pump & rods, (42 1", 43 7/8", & 62 3/4"). Respace well & seat pump, (2-1/2 x 1-1/2 x 20 - 005). Pressure tbg. to 350 psi. Hang well on. Clean & load out rod tools. Clean location. RWTP @ 3:00 p.m. @ 6 SPM - 120" stroke. RD. Leave rig on location.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 289-290
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
August 21, 1989

Your proposal to rework well "Barker-Ferndale" 3, A.P.I. No. 111-20609, Section 16, T. 4 N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 8/17/89, received 8/17/89, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOG Class II 2M requirements shall be installed and maintained in operating condition at all times.
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. Any sump used during these operations shall be thoroughly cleaned and filled with earth as soon as operations are completed.
4. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.

Blanket Bond
SF:ljg

Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

ISION OF OIL AND
RECEIVED
AUG 17 1989
ENTURA, CALIFORNIA

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	FORMS	
	OGD 114	OGD 121
83	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well Argo Barker Ferndale #3 (Well designation), API No. 111-20609

Sec. 16, T. 4N, R. 21W, S.B. B. & M., Silverthread Field, Ventura County.

The present condition of the well is as follows:

1. Total depth 5785'
   Effective 5340' bridge plug

2. Complete casing record, including plugs and perforations (present hole)
   10-3/4" (40.5#, K-55) cmt'd @ 808'.
   7" (23#, K-55) cmt'd @ 5785'

   3 (.375") BHPF 4710'-4838' (27 holes)

   2 (.375") BHPF 5032'-5225' (30 holes)

   2 (0.44") BHPF 5415'-5694' (52 holes)

3. Present producing zone name Miocene ; Zone in which well is to be recompleted ---

4. Present zone pressure 1500 psi ; New zone pressure 1500 psi

5. Last produced 8/10/89 (Date) | 57 (Oil, B/D) | 0 (Water, B/D) | 15 (Gas, Mcf/D)

   (or)

   Last injected --- (Date) | --- (Water, B/D) | --- (Gas, Mcf/D) | --- (Surface pressure, psig)

6. Is this a critical well according to the definition on the reverse side of this form? ☐ (Yes) ☒ (No)

The proposed work is as follows:

Cleanout to 4810', set BP @ 4786', test casing.
Reperforate 4710'-4780' and run a screened liner from 4786'-4700'.

Note: If well is to be redrilled, show proposed new bottom-hole coordinates and true vertical depth.

It is understood that if changes in this plan become necessary, we are to notify you immediately.

Address 725 E. Main Street, Suite 200 (Street)

Santa Paula (City) CA (State) 93060 (Zip)

Telephone Number (805) 656-2445

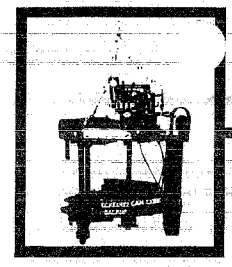
Seneca Resources Corporation (Name of Operator)

By Eric R. Wilson (Name - Printed)

Eric R. Wilson (Name - Signature) 8/17/89 (Date)

Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

OG107 (8/87/DWRR/5M)



Coastal Casing & Tubing, Inc.

P.O. Box 6715 • Ventura, CA 93006 • (805) 642-4969
P.O. Box 301 • El Centro, Ca 92244-0301 • (619) 353-1995
3232 H Street Unit #7 • Bakersfield, Ca 93301 • (805) 322-6934

8/17/89

Pam Ceccarelli / Carl Issac 656-2445

Requested verbal approval to start work on "Barker-Ferndale" 3.

Proposal:

Clean out sand from 4000'
Set Bridge Plug @ 4800'
Reperf from 4710'-4780'

Notice of Intent on its way.

OK'd by Pam

Mike 2, 83
MD. H Hall
Called Henry
Hall operator has
DOG for injectivity test
will advise A
Regular Product
Submitting Hall Data.

16-4-21
111-20609

Argo Petroleum Corporation

CECIL O. BASENBERG
Executive Vice President

DIVISION OF OIL AND GAS
RECEIVED
MAR 14 1983
SANTA PAULA, CALIFORNIA

March 11, 1983

Mr. L. B. Carroll, District Engineer
Sun Production Company
23928 Lyons Avenue
Newhall, California 91321

Re: Ferndale Ranch Pressure Maintenace
Project by Natural Gas Injection

Dear Mr. Carroll:

Argo Petroleum Corporation has initiated a pressure maintenance project by natural gas injection on the Ferndale Ranch property into the Miocene reservoir within the Big Canyon Fault. Ferndale Well #3 has been converted from an oil and gas producer to an injection well by the installation of a packer above the producing zone. The early data from the gas injection indicates that injectivity can be maintained below frac pressure.

The data obtained from this small project will enable Engineering to evaluate the feasibility of gas injection in other reservoirs throughout the field.

If you have any questions, please advise.

Sincerely,

Cecil O. Basenberg

COB/ld

cc: Division of Oil and Gas
Santa Paul, CA

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF PROPERTY AND WELL TRANSFER

Field or county	District
Ojai	2
Former owner	**Date**
Argo Petroleum Corp.	Sept. 10, 1987

Name and location of well(s)

Sec. 16, T. 4N., R. 21W., SBB&M

"Barker-Ferndale" 1	(111-20423)	"Valex-Ferndale" 211	(111-21178)
"Barker-Ferndale" 2	(111-20604)	"Valex-Ferndale" 214	(111-21180)
"Barker-Ferndale" 3	(111-20609)	"Valex-Ferndale" 215	(111-21206)
"Barker-Ferndale" 4	(111-20685)	"Valex-Ferndale" 313	(111-21314)
"Barker-Ferndale" 5	(111-20702)	"Ferndale" 8	(111-20732)
"Barker-Ferndale" 6	(111-20730)		
"Valex-Ferndale" 107	(111-21066)		
"Valex-Ferndale" 110	(111-21163)		
"Valex-Ferndale" 209	(111-21105)		

Description of the land upon which the well(s) is (are) located

Date of transfer, sale, assignment, conveyance, or exchange	New owner	Type of organization
7-17-87	Seneca Resources Cprporatipn	Corp.
	Address: 511 16th St. Mall, Ste 300, Denver, CO 80202	Telephone No.: (303) 825-7401

Reported by
Seneca Resources Corp.

Confirmed by
Argo Petroleum Corp.

New operator new status (status abbreviation)	Request designation of agent
PA	
Old operator new status (status abbreviation)	**Remarks**
PA	

Deputy Supervisor: Patrick J. Kinnear

Signature: Patrick J. Kinnear

OPERATOR STATUS ABBREVIATIONS

PA – Producing Active
NPA – No Potential, Active
PI – Potential Inactive
NPI – No Potential, Inactive
Ab – Abandoned or No More Wells

FORM AND RECORD CHECK LIST

Form or record	Initials	Date	Form or record	Initials	Date
Form OGD121			Map and book		
Form ODG148			Notice to be cancelled		
New well cards			Bond status		
Well records			EDP files		
Electric logs					
Production reports					

Form OG100 (7/79)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

API No. 111-20609

WELL SUMMARY REPORT

Operator	Well				
Argo Petroleum Corporation	Barker-Ferndale #3				
Field	**County**	**Sec.**	**T.**	**R.**	**B.&M.**
Ojai	Ventura	16	4N	21W	S.B.

Location (Give surface location from property or section corner, street center line and/or California coordinates)
2851' E. & 1077' S. from NW corner of Sec. 16

Elevation of ground above sea level
1061'

Commenced drilling (date)
5/31/75

Completed drilling (date)
7/4/75

Commenced producing (date)
7/20/75 Producing

☒ Flowing ☐ Pumping
☐ Gas lift

Name of producing zone(s)
Miocene

Total depth

(1st hole)	(2nd)	(3rd)
6330'		

Present effective depth
5340' (retrievable BP)

Junk
Drill collars
6327' - 6023'

PBTD 5785'
(Plugged w/100 sx
above fish.)

Depth measurements taken from top of:
☐ Derrick Floor ☐ Rotary Table ☒ Kelly Bushing
Which is 12 feet above ground

GEOLOGICAL MARKERS	DEPTH

Formation and age at total depth
Miocene

	Clean Oil (bbl per day)	Gravity Clean Oil	Percent Water including emulsion	Gas (Mcf per day)	Tubing Pressure - Gas Injection-	Cosing Pressure
Initial 11/22/82 Production	-	-	-	683	1980	(pkr.)
~~Production~~ After 30 days	-	-	-	585	2075	(pkr.)

CASING RECORD (Present Hole)

Size of Casing (API)	Top of Casing	Depth of Shoe	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Number of Sacks or Cubic Feet of Cement	Depth of Cementing (if through perforations)
10-3/4"	0	808'	40.5#	K-55 ST&C	New	13-3/4"	500 cf	
7"	0	5785'	23#	K-55 LT&C	New	8-3/4"	500 cf	

PERFORATED CASING (Size, top, bottom, perforated intervals, size and spacing of perforation and method.)
Effective: 3 (0.38") BHPF 4710'-4838' (27 holes), 2 (0.38") BHPF 5032'-5225' (30 holes).
Ineffective: 2 (0.44") BHPF at intervals 5415'-5694' (52 holes).

DIVISION OF OIL AND GAS
RECEIVED
OCT 24 1984
SANTA PAULA, CALIFORNIA

Was the well directionally drilled? If yes, show coordinates at total depth
☒ Yes ☐ No Closure: 203.93' S 81° 06' E

Electrical log depths
6020' to 808'

Other surveys
DIL, Den, Dip, Form. Factor, Cmt. Bond, Mud Log

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Name	Title	
Argo Petroleum Corporation	District Superintendent	
Address	**City**	**Zip Code**
411 S. Beckwith Road	Santa Paula	93060
Telephone Number	**Signature**	**Date**
(805) 933-1321	Harry Hull	10/23/84

SUBMIT IN DUPLICATE

DIVISION OF OIL & GAS

HISTORY OF OIL & GAS WELL

ARGO PETROLEUM CORPORATION OJAI FIELD VENTURA COUNTY
WELL: BARKER-FERNDALE #3 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20609 HARRY E. HULL DISTRICT SUPERINTENDENT

Harry Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

11/06/82
MIRU CPS. Unable to bleed down tubing. RU pump tank. Unseated pump. Backscuttled 220 bbls. lease oil. SDFN.

11/07/82
Started up job. Bled well. Began pulling rods, found heavy wax. Finished pulling and laying down rods and pump. Hot oiled tubing with 35 bbls. Removed tree. Installed and tested BOPE. Hauled 23 jts. tubing from rack. Unlanded tubing, found it to be Buttress. Relanded. SDFN.

11/08/82
Unlanded tubing. Pick up 23 jts. Found top of fill @ 5254'. Backscuttle out fill to 5340'. Backscuttle well clean. POH. MU bit & positive scraper & bumper sub. RIH. Scraper stopped @ 5068'. Pull & lay down 23 jts. tbg. SDFN.

11/09/82
POH with bit & scraper. MU STC and RIH. PU 22 jts. 2-7/8" tbg. RIH to fill 5338'. POH & lay down 22 jts. 2-7/8" tbg. Rig up hydrotest and test tubing in hole with 7" Baker Model R-3 packer with Model "L" sliding sleeve. Test in hole at 4500 psig. Set packer @ 4667' with 18,000 lbs. compression. Landed tbg. Removed BOPE. MU gas injection tree. RDMO.

DIVISION OF OIL AND GAS
RECEIVED
OCT 24 1984
SANTA PAULA, CALIFORNIA

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 283-178

520 (field code)
12 (area code)
10 (new pool code)
10 (old pool code)

REPORT ON PROPOSED OPERATIONS

Mr. Harry Hull, Agent
Argo Petroleum Corp.
411 S. Beckwith Rd.
Santa Paula, CA 93060

Santa Paula, California
July 18, 1983

Your alter casing and proposal to convert to gas inj. well "Barker-Ferndale" 3, A.P.I. No. 111-20609, Section 16, T. 4N, R. 21W, SB B. & M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 11/3/82, received 11/8/82 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. The reservoir pressure shall not be increased to a point that exceeds the initial reservoir pressure in the zone to be injected.
2. A step rate test or any other acceptable method to establish the maximum allowable surface injection pressure shall be run.
3. Injection shall cease if any evidence of damage is observed, or upon written notice from the Division.
4. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.
5. THIS DIVISION SHALL BE NOTIFIED TO WITNESS:
   a. A survey to demonstrate that injected fluid is confined below 4710'.
   b. A step rate test.

- ALL WORK HAS BEEN COMPLETED SOME TIME BACK
- WILL BE CONVERTED BACK TO OIL STATUS IN 30 DAYS

Blanket Bond
MS:b

M. G. MEFFERD, State Oil and Gas Supervisor

By
Murray W. Dosch, Deputy Supervisor

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

OG111 (4/82/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

DIVISION OF OIL AND GAS
RECEIVED
NOV 8 1982
SANTA PAULA, CALIFORNIA

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	OGD114	OGD121
65	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well No. Barker-Ferndale #3, API No. 111-20609, Sec. 16, T. 4N, R. 21W, S.B.B. & M., Ojai Field, Ventura County.

The present condition of the well is as follows:

1. Total depth. 6330'; PBTD 5806'

2. Complete casing record, including plugs and perforations:
   10-3/4" cmt'd @ 808' (40.5#, K-55).
   7" cmt'd @ 5785' (23#, K-55).
   Perfs: 4710'-4838'
   5032'-5225'
   5415'-5694' (ineffective, below bridge plug @ 5340').

3. Present producing zone name Miocene Zone in which well is to be recompleted Miocene

4. Present zone pressure 1500 psia New zone pressure 1500 psia

5. Last produced (presently) 9-17-82 (Date) 29 (Oil, B/D) 2 (Water, B/D) 36 (Gas, Mcf/D)

or

6. Last injected _____ (Date) _____ (Water, B/D) _____ (Gas, Mcf) _____ (Surface pressure, psig.)

The proposed work is as follows: Conversion to gas injection.

1. Pull rods and pump. Install BOPE.
2. Scrape & clean out casing to BP @ 5340'.
3. Equip well with 2-7/8" tubing and Baker R-3 packer set @ 4650'±.
4. Install and test 3000-psi injection head.
5. Commence injection of Ferndale lease produced gas, into Miocene Zone 4710'-4838' & 5032'-5225'.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 940 E. Santa Clara St. (Street)
Ventura, CA (City) 93001 (State) (Zip)
Telephone Number (805) 653-5111

Argo Petroleum Corporation (Name of Operator)
By Harry Hull (Name) 11-3-82 (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

(1-78-GSRI-15M)

FORM 103

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
OCT 27 1978
SANTA PAULA, CALIFORNIA

History of Oil or Gas Well

OPERATOR Argo Petroleum Corporation FIELD SILVERTHREAD

Well No. Argo Barker Ferndale#3, Sec. 16, T. 4N, R. 22W, S.B B. & M.

Date October 13, 1978 Signed

940 East Santa Clara
Ventura, California 93001 (805) 648-2514 Title Executive Vice-President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date

1978

RE-COMPLETION

9-12 C.P.S. MIRU. Bled well down. Pulled rods and pump. Ran feeler and tagged fill at 5700'. Removed prod. tree. Installed BOP. Pulled tbg. RIH w / Baker ret. bridge plug and set at 5340'. POH.

9-13 Rigged up Dresser Atlas and perf'd w// 2 - 3/8 bullet holes at each of the following intervals.

5225'	5141'	5076'
5216	5131'	5062'
5204'	5117'	5051'
5183'	5106'	5041'
5164'	5088'	5032'

(Total 30 Holes)

Moved out D.A. Installed frac head. Rigged up Dowell and sand frac'd down 7" csg. The interval 5225'-5032'. Moved out Dowell. Removed frac head.

9-14 At 7:00 A.M. CP=1000 PSI. Rigged up Dresser Atlas and perf'd w//3 - 3/8" bullet holes at each of the following intervals:

4838'	4740'
4832'	4730'
4774'	4717'
4756'	4710'
4748'	

(Total 27 Holes)

Moved out D.A. Installed frac head. Rigged up Dowell and sand frac'd down 7" csg. The interval 4838'-4710'. Moved out Dowell. Removed frac head.

9-15 At 7:00 A.M. CP-950 PSI. Attempted to bleed well into pump tank thru bean. Flowed 53 bbls. Rigged up to flow well thru H&H manifold to tank and prod. facility.
Released C.P.S. rig at 2:00 P.M. Well flowed 72 bbls. f/3:00 P.M. to 6:00 A.M. (9-16-78).

9-16 Well flowed 107 bbls. load oil, cut 0.1%, CP=750, 6/64" bean.

FORM 103 SUBMIT IN DUPLICATE 62802-705 5-72 20M ② OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR Argo Petroleum Corporation FIELD SILVERTHREAD

Well No. Argo Barker Ferndale #3, Sec. 16, T. 4N, R. ~~22W~~ 21W, S.B B. & M.

Date October 13, 19 78 Signed C. Bagnall

940 East Santa Clara
Ventura, CAlifornia 93001 (805) 648-2514 Title Executive Vice-President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date 1978	
9-17 thru Oct. 7	Flowing load oil.
Oct. 8	Flowing form oil. 120 bbl. gross, cut 0.2%, CP=500 PSI, bean 12/64".

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

No. T 278-354

DIVISION OF OIL AND GAS

Report on Operations

Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, CA 90024

Santa Paula, Calif.
Nov. 20, 1978

Your operations at well "Barker-Ferndale" 3, API No. 111-20609, Sec. 16, T. 4, R. 21, S.B., B.& M. Ojai Field, in Ventura County, were witnessed on 11/3/78. T.E. Adams, representative of the supervisor, was present from 0600 to 0800. There were also present Ed Hunter, pumper

Present condition of well: additions to the casing record since proposal dated 9/13/78: Perf. intervals 4710-5225'.

The operations were performed for the purpose of demonstrating a water shut-off on the 7" casing by means of a production test.

DECISION:

THE 7" SHUT-OFF AT 4710' IS APPROVED.

M. G. MEFFERD
State Oil and Gas Supervisor

By
Deputy Supervisor
John L. Hardoin

OG109 (6-77-GSRI-15M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 278-254

REPORT ON PROPOSED OPERATIONS

Santa Paula, California

September 13, 1978

Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, CA 90024

Your proposal to alter casing in well "Barker-Ferndale" 3
(Name and number)
, A.P.I. No. 111-20609, Section 16, T. 4N, R. 21W,
S.B. B. & M., Ojai field, Ventura County,
dated 9/13/78, received 9/13/78, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Hole fluid of sufficient quality and quantity shall be maintained in the hole to control any subsurface condition, and a reserve supply shall be on hand for emergencies.
2. Blowout prevention equipment of at least DOG Class II, 3M, with a hydraulic actuating system shall be installed and maintained in operating condition at all times.
3. THIS DIVISION SHALL BE NOTIFIED TO WITNESS a production test of shut off within 30 days after completing the well.

NOTE: A COPY OF THIS APPROVAL SHALL BE AVAILABLE AT THE WELL SITE DURING THE PROPOSED OPERATIONS.

Blanket Bond
MWD:r
cc: Harry Hull

M. G. MEFFERD
State Oil and Gas Supervisor

By John L. Hardoin
Deputy Supervisor

John L. Hardoin

OG111 (11-76—GSR1—30M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS RECEIVED SEP 13 1978 SANTA PAULA, CALIFORNIA

DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
BB	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well No. ARGO BARKER FERNDALE #3, API No. 111-20609, Sec. 16, T. 4N, R. 21W, S.B. B. & M., Silverthread Field, Ventura County.

The present condition of the well is as follows:

1. Total depth. 6330'

2. Complete casing record, including plugs and perforations:

10 3/4" 40.5#, K-55 ST&C @ 808'.
7", 23#, K-55 LT&C @ 5785'

Perf 5694-5415' (52 holes)

3. Present producing zone name Miocene Zone in which well is to be recompleted Fault Zone Miocene

4. Present zone pressure 1500 New zone pressure 1500

5. Last produced 9/12/78 (Date) | 36 (Oil, B/D) | 33 (Water, B/D) | 74 (Gas, Mcf/D)

or

6. Last injected ------- (Date) | ---------- (Water, B/D) | -------- (Gas, Mcf) | ---------- (Surface pressure, psig.)

The proposed work is as follows:

Set BP @ 5350'+. Perf 5225-5032' (30 holes) Sand frac. Perf 4838-4710' (27 holes) Sand Frac. Test Fault Zone.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 940 East Santa Clara (Street)
Ventura, California 93001 (City) (State) (Zip)
Telephone Number (805) 648-2514

ARGO PETROLEUM CORPORATION (Name of Operator)
By Harry Hull (Name) 9/13/78 (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

OG107 (12-73-GSR1-15M)

FORM 103

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
APR 30 1976
SANTA PAULA, CALIFORNIA

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

Well No. Argo Barker Ferndale #3, Sec. 16, T. 4N, R. 21W SB B. & M.

Date February 27, 1976 Signed C. Bourbeau

940 E. Santa Clara
Ventura, CA 93001 (805) 648-2514 Title Exec. Vice-President

(Address) (Telephone Number) (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date	
1975	
5-30	Atlantic Oil Company Rig #4, Rigging up.
5-31	Spudded in @ 7:00 A.M. Drilled rat hole to 42'. RIH w/ 13 3/4" bit. No returns thru conductor pipe. Cemented conductor pipe. C.O. cmt. f/10' to 42'. Drilled to 56'.
6-1	Drilled to 810'.
6-3	Cond. mud for csg. POH. Ran 23 jts. 10 3/4", 40.5#, K-55, ST&C csg. equipped w/ Larkin guide shoe @ 808' w/ insert baffle @ 766', one centralizer on shoe jt. Dowell cementers pumped 50 cu. ft. H20 ahead, mixed and pumped in 400 cu. ft. class "G" cmt. pre-mixed 1:1 POZ & 6% Gel & 3% CaCl2 followed by 100 cu. ft. class "G" neat cmt. w/ 3% CaCl2. Displaced w/ 422 cu. ft. H20. Bumped plug @ 500 psi. CIP @ 9:35 A.M. Cmt. returns to surface. Landed csg. Flanged up.
6-4	Tested blind rams @ 1200 psi. O.K. Installed and tested BOPE. O.K. by DOG. RIH w/ 8 3/4" bit. C.O. cmt. @ 766'. Drilled to 1460'.
6-5	Drilled to 1932'. POH. Laid down D.A. RIH w/ D.D. Dynadrilled to 2024'.
6-6	Dynadrilled to 2419'. POH. Laid down D.D. RIH w/ drilling assembly. Reamed f/ 1932' to 2419'. Drilled to 2453'.
6-7	Drilled to 3081'.
6-8	" " 3637'.
6-9	" " 4114'.
6-10	Drilled to 4487'. Cir. gas cut mud @ 4433'.

FORM 103 SUBMIT IN DUPLICATE △ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

Well No. Argo Barker Ferndale #3, Sec. 16, T. 4N, R. 21W, SB B. & M.

Date February 27, 19 76 Signed C. Dunlop

940 E. Santa Clara
Ventura, CA 93001 (805) 648-2514 Title Exec. Vice-President
(Address) (Telephone Number) (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date 1975	
6-25	Screwed into fish. Worked pipe, unscrewed from fish. Laid down packer and tools. Lost 1 jt. H.W. and tail pipe in hole. RIH w/ fishing tools. No recovery. POH. Top of fish @ 5930'.
6-26	Fishing. No recovery.
6-27	Fishing. No recovery.
6-28	RIH w/ wash pipe. Washed over fish to 6001'. Top of fish @ 5934'. POH.
6-29	Screwed into fish. Ran Dia-Log free point indicator. Shot and backed off pipe at 5953'. Washing over fish.
6-30	Washed over fish. POH. RIH. Screwed into fish @ 5953'. Ran spud bar, stopped at 6124'. Shot off top of fish @ 6023'. POH. Recovered 2 singles H.W., Bumper sub, XO sub.
7-1	RIH. Reamed f/ 5918' to 6023'. Washed over fish to 6064'. Top of fish @ 6023'. POH.
7-2	Schlumberger ran density log f/ 6009' to 4300'. RIH. Cond. mud to set cmt. plug. Hung open end 4½" D.P. @ 6011'. Pumped 40 cu. ft. H20 ahead. Dowell cementers mixed and pumped in 100 sacks class "G" neat cmt. w/ 2% CaCl2. Followed w/ 10 cu. ft. H20 and 420 cu. ft. mud. CIP @ 5:40 P.M. Est. top of cmt. @ 5750'.
7-3	RIH w/ D.A. C.O. cmt. stringers f/ 5202' to 5265'. Circ. to 5806'. Ran 143 jts. 7", 23#, K-55 (R-3), LT&C csg. equipped w/ Larkin guide shoe @ 5785', float collar @ 5743', w/ centralizers @ jts. 1-2-3-4-5-6-7-9-11-12-13-16-17-18-23-25-26-27-30-31. Dowell cementers pumped in 100 cu. ft. CW7 pre-flush ahead, mixed and pumped 400 cu. ft. class "G" cmt. 1:1 POZ & 4% Gel & 2% CaCl2, followed by 100 CU. ft. class "G" cmt. w/ 2% D-33. Displaced w/ 1269 cu. ft. H20. Bumped plug w/ 1000 psi. CIP @ 12:00 midnight.

FORM 103 SUBMIT IN DUPLICATE △ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

Well No. Argo Barker Ferndale #3, Sec. 16, T. 4N, R. 21W, SB B. & M.

Date February 27, 1976 Signed C. Barker

940 E. Santa Clara
Ventura, CA 93001 (805) 648-2514 Title Exec. Vice-President
(Address) (Telephone Number) (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date 1975	
6-11	Circ. f/mud loggers @ 4487'. Drilled to 4696'. POH. Laid down drilling assembly. RIH w/ D.D. Reamed and C.O. fill f/ 4643' to 4696'. Circ. gas cut mud. Dynadrilled to 4725'.
6-12	Dynadrilled to 4970'. Reamed f/ 4750' to 4758'.
6-13	Dynadrilled to 5127'. Circ. f/ mud loggers.
6-14	Dynadrilled to 5347'. POH. Laid down D.D.
6-15	Made up bit, junk sub., D.T. RIH. Tight hole @ 4454'. Reamed f/ 4676' to 4827'. Stuck pipe @ 4827'. Pumped in 40 bbls. oil and worked pipe.
6-16	Circ. oil out of hole. Ran Dia-Log free point indicator and string shot. Shot and backed off drill collars @ 4687'. RIH, screwed into top of fish and jarred fish loose. Reamed tight hole @ 4687'. POH. Laid down D.C. RIH w/ D.A.
6-17	Reamed f/ 4687' to 5088'. Drilled from 5060' to 5381'. POH.
6-18	RIH w/ D.D. Dynadrilled to 5593'.
6-19	Dynadrilled to 5781'. POH.
6-20	RIH w/ drilling assembly. Reamed f/ 4718' to 5060'.
6-21	Reamed f/ 5060' to 5781'. Drilled to 6135'. POH.
6-22	RIH. Reamed f/ 6100' to 6135'. Drilled to 6330'. Stuck pipe. Worked pipe, pumped in 35 bbls. oil.
6-23	Worked stuck pipe. Circ. oil out of hole. Ran Dia-Log free point indicator, POH. Made up Hydro tools. RIH. Worked pipe.
6-24	Top of fish @ 5989'. RIH. Filled pipe w/ 600 ft. water. Set packer @ 5940'.

FORM 103 SUBMIT IN DUPLICATE △ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

Well No. Argo Barker Ferndale #3, Sec. 16, T. 4N, R. 21W, SB B. & M.

Date February 27, 1976 Signed

940 E. Santa Clara
Ventura, CA 93001 (805) 648-2514 Title Exec. Vice-President
(Address) (Telephone Number) (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date 1975

7-4 Landed casing. Flanged up. Laid down D.P. Released rig @ 4:00 P.M.

7-5 thru 7-8 Waiting on production hoist availability.

7-9 MIRU C.P.S. Installed and tested tbg. head.

7-10 Dresser Atlas ran cement bond log. D/A (using a 4" casing carrier gun) perforated with 2 - 0.44" bullets per foot at each of the following intervals:

5694'	5622'	5532'	5470'
5688'	5604'	5524'	5455'
5675'	5591'	5513'	5448'
5666'	5582'	5500'	5435'
5658'	5565'	5492'	5423'
5644'	5551'	5480'	5415'
5636'	5542'	(Total of 52 holes)	

7-11 RIH w/ tubing to bottom. Displaced CaCl2 water w/ lease crude. Pulled up and landed tbg. @ 5320'. Installed frac head.

7-12 R.U. Dowell and frac'd down 7" csg. as follows:

BBLS.	GAL.	SAND #/GAL.	#SAND	CUM SAND	ATR
120	5,000	-	-	-	120
120	5,000	1	5,000	5,000	245
120	5,000	2	10,000	15,000	375
240	10,000	3	30,000	45,000	645
240	10,000	4	40,000	85,000	925
170	Flush				1095
1010	Total				

ISIP= 2800 Frac. Grad.= 0.88

Total lease crude used= 1010 bbls.

Total sand used= 85,000 lbs., 20/40 Mesh w/ 600 lbs. of adomite added at blender. Pumped at an ave. press. of 3700 psi. and an ave. rate of 30 BPM.

FORM 103 SUBMIT IN DUPLICATE △ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

Well No. Argo Barker Ferndale #3, Sec. 16, T. 4N, R. 21W, SB B. & M.

Date February 27, 1976 Signed C. Barclay

940 E. Santa Clara
Ventura, CA 93001 (805) 648-2514 Title Exec. Vice-President

(Address) (Telephone Number) (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date 1975	
7-12	Immediate SIP = 2700 psi SIP after 15 min. = 2000 psi
7-13	Press. 1200 psi. Killed well w/ 94# CaCl2 H20. Removed frac head. RIH, tagged fill at 5464' and C.O. to 5743'. Pulled up landed tbg. w/ tail at 5358', shoe @ 5329'. Shut down.
7-14	Removed BOP. Installed production tree. Displaced Brinaad w/ lease crude. Moved out C.P.S. Well on production @ 2:30 P.M.
7-15 thru 7-19	Flowing frac oil. Recovered frac oil 7-19-75.
7-20	Initial production: Clean oil - 282 bbls., cut - 1.5%, Bean - 12/64" TP = 780, CP = 1830, Gas - 242 mcf.
8-20	(Production after 30 days) Clean oil - 94 bbls., cut - 4.2%, Bean - 8/64", TP = 820, CP = 1850, Gas - 107 mcf.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
APR 30 1976
SANTA PAULA, CALIFORNIA

WELL SUMMARY REPORT

SUBMIT IN DUPLICATE

Operator ARGO PETROLEUM CORPORATION, Well No. Argo Barker Ferndale #3, API No. 111-20609

Sec. 16, T. 4N, R. 21W, S.B. B. & M., Silverthread Field, Ventura County.

Location 2851' E. and 1077' S. from NW Corner of Sec. 16
(Give surface location from property or section corner, or street center line and/or lambert coordinates)

. Elevation of ground above sea level 1061 feet.

All depth measurements taken from top of Kelly Bushing which is 12 feet above ground.
(Derrick Floor, Rotary Table or Kelly Bushing)

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Date February 27, 1976 Signed [signature]

B. L. Graham (Engineer or Geologist) Title Exec. Vice-President

Commenced drilling 5-31-75

Completed drilling 7-4-75

Total depth (1st hole) 6330' (2nd) (3rd)

Present effective depth 5785'

Junk (Drill Collars)
6327' - 6023'

Commenced producing 7-20-75 (Date) Flowing/~~gas lift/pumping~~ (Cross out unnecessary words)

GEOLOGICAL MARKERS	DEPTH

Formation and age at total depth Miocene

Name of producing zone Miocene

	Clean Oil bbl. per day	Gravity Clean Oil	Per Cent Water including emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressure
Initial production	282	32.0	1.5	242	780	1830
Production after 30 days	94	32.0	4.2	107	820	1850

CASING RECORD (Present Hole)

Size of Casing (A. P. I.)	Depth of Shoe	Top of Casing	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Numbers of Sacks or Cubic Feet of Cement	Depth of Cementing if through perforations
10 3/4"	808'	Surf.	40.5#	K-55 ST&C	New	13 3/4"	500 c.f.	
7"	5785'	Surf.	23#	K-55 LT&C (R-3)	New	8 3/4"	500 c.f.	

PERFORATED CASING

(Size, top, bottom, perforated intervals, size and spacing of perforation and method.)

2- 0.44" Bullets per foot at intervals: 5694' to 5415' (52 holes)

Was the well directionally drilled? Yes If yes, show coordinates at total depth Closure: 203.93' S81° 06'E

Electrical log depths 6020' to 808' Other surveys DIL, Den., DIP, Form. Factor, Cmt. Bond, Mud

FORM 100 (REV. 1-73) ATTACH ONE COPY OF EACH LOG AND SURVEY 10338-705 1-73 10M ② OSP

111-20609

SEALAND DIRECTIONAL DRILLING CO.

COMPANY ARCO PETROLEUM

PAGE 1

WELL A.E. FERNDALE # 3 LOCATION SILVERTHREAD DATE 6 - 75

	Measured Depth	Drift Angle	Vertical Depth	Drift Feet	Drift Direction	COORDINATES North	South	East	West	REMARKS
1	207 00	2°15'	206 84	8 13	S 16° W		7 82		2 24	
2	420 00	2°30'	419 64	9 29	S 16° W		16 75		4 80	
3	634 00	2°45'	633 39	10 27	S 19° W		26 46		8 14	
4	810 00	3°00'	809 15	9 21	S 16° W		35 31		10 68	
5	1020 00	3°00'	1018 80	10 99	S 16° W		45 97		13 71	
6	1242 00	3°00	1240 56	11 62	S 17° W		56 98		17 11	
7	1434 00	3°15'	1432 25	10 89	S 16° W		67 45		20 11	
8	1623 00	3°45'	1620 85	12 36	S 14° W		78 44		23 10	
9	1840 00	4°15'	1837 25	16 08	S 14° W		95 04		28 99	
10	1932 00	4°30'	1928 97	7 22	S 12° W		102 10		28 49	
11	1945 00	4°00'	1941 94	0 91	S 14° W		102 98		28 71	
12	2008 00	2°15'	2004 89	2 47	S 62° W		104 14		30 89	
13	2071 00	2°15'	2067 84	2 47	N 46° W		102 42		32 67	
14.	2134 00	5°00	2130 60	5 49	N 44° W		98 47		36 48	
15	2165 00	6°15'	2161 42	3 37	N 41° W		95 93		38 69	
16	2197 00	6°30'	2193 21	3 62	N 32° W		92 86		40 61	
17	2229 00	6°15'	2225 02	3 48	N 16° W		89 51		41 57	
18	2260 00	7°15'	2255 77	3 91	N 06° W		85 62		41 98	
19	2291 00	7°00'	2286 54	3 78	N 06° E		81 86		41 58	
20	2327 00	7°45'	2317 20	4 18	N 16° E		77 84		40 43	
21	2354 00	9°15'	2348 84	5 14	N 18° E		72 95		38 84	
22	2385 00	10°00'	2379 37	5 38	N 25° E		68 07		36 57	
23	2453 00	12°00'	2445 88	14 14	N 26° E		55 36		30 37	
24	2579 00	12°30'	2568 89	27 27	N 25° E		30 64		18 85	
25	2736 00	12°45'	2722 02	34 65	N 25° E	0 76			4 21	

DIVISION OF OIL AND GAS
RECEIVED
JAN 6 - 1977
SANTA PAULA, CALIFORNIA

DIVISION OF OIL AND GAS
RECEIVED
JAN 6 - 1977
SANTA PAULA, CALIFORNIA

SEALAND DIRECTIONAL DRILLING CO.

COMPANY ARCO PETROLEUM

WELL A.B. FERNDALE LOCATION SILVERTHREAD DATE 6 -- 75

	Measured Depth	Drift Angle	Vertical Depth	Drift Feet	Drift Direction	COORDINATES North	South	East	West	REMARKS
26	2892 00	13°00'	2874 02	35 09	N 24° E	32 82		10 06		
27	3081 00	13°30'	3057 80	44 12	N 25° E	72 81		28 71		
28	3254 00	13°45'	3225 84	41 12	N 25° E	110 08		46 09		
29	3413 00	14°00'	3380 12	38 47	N 25° E	144 95		62 35		
30	3569 00	13°45'	3531 65	37 08	N 25° E	178 56		78 02		
31	3800 00	13°15'	3756 50	52 95	N 24° E	226 93		99 56		
32	3964 00	11°30'	3917 21	32 70	N 24° E	256 80		112 86		
33	4119 00	10°30'	4069 61	28 25	N 24° E	282 61		124 35		
34	4279 00	9°15'	4227 53	25 72	N 24° E	306 11		134 81		
35	4433 00	7°45'	4380 12	20 77	N 22° E	325 37		142 59		
36	4595 00	6°30'	4541 08	18 34	N 21° E	342 49		149 16		
37	4696 00	6°45'	4641 38	11 87	N 13° E	354 06		151 83		
38	4713 00	5°30'	4658 30	1 63	N 25° E	355 54		152 52		
39	4744 00	5°15'	4689 17	2 84	N 43° E	357 62		154 46		
40	4776 00	5°00'	4721 05	2 79	N 56° E	359 18		156 77		
41	4808 00	4°30'	4752 95	2 51	N 76° E	359 78		159 21		
42	4840 00	3°30'	4784 89	1 95	N 88° E	359 85		161 16		
43	4870 00	3°30'	4814 83	1 83	S 64° E	359 05		162 80		
44	4903 00	4°30'	4847 73	2 59	S 54° E	357 53		164 90		
45	4935 00	5°30'	4879 58	3 07	S 45° E	355 36		167 07		
46	4966 00	6°30'	4910 38	3 51	S 36° E	352 52		169 13		
47	4998 00	6°45'	4942 16	3 76	S 21° E	349 01		170 48		
48	5029 00	7°30'	4972 89	4 05	S 07° E	344 99		170 97		
49	5060 00	9°00'	5003 51	4 85	S 08° E	340 19		171 64		
50	5128 00	9°30'	5070 58	11 22	S 02° E	328 98		172 03		

DIVISION OF OIL AND GAS
RECEIVED
JAN 6 - 1977
SANTA PAULA, CALIFORNIA

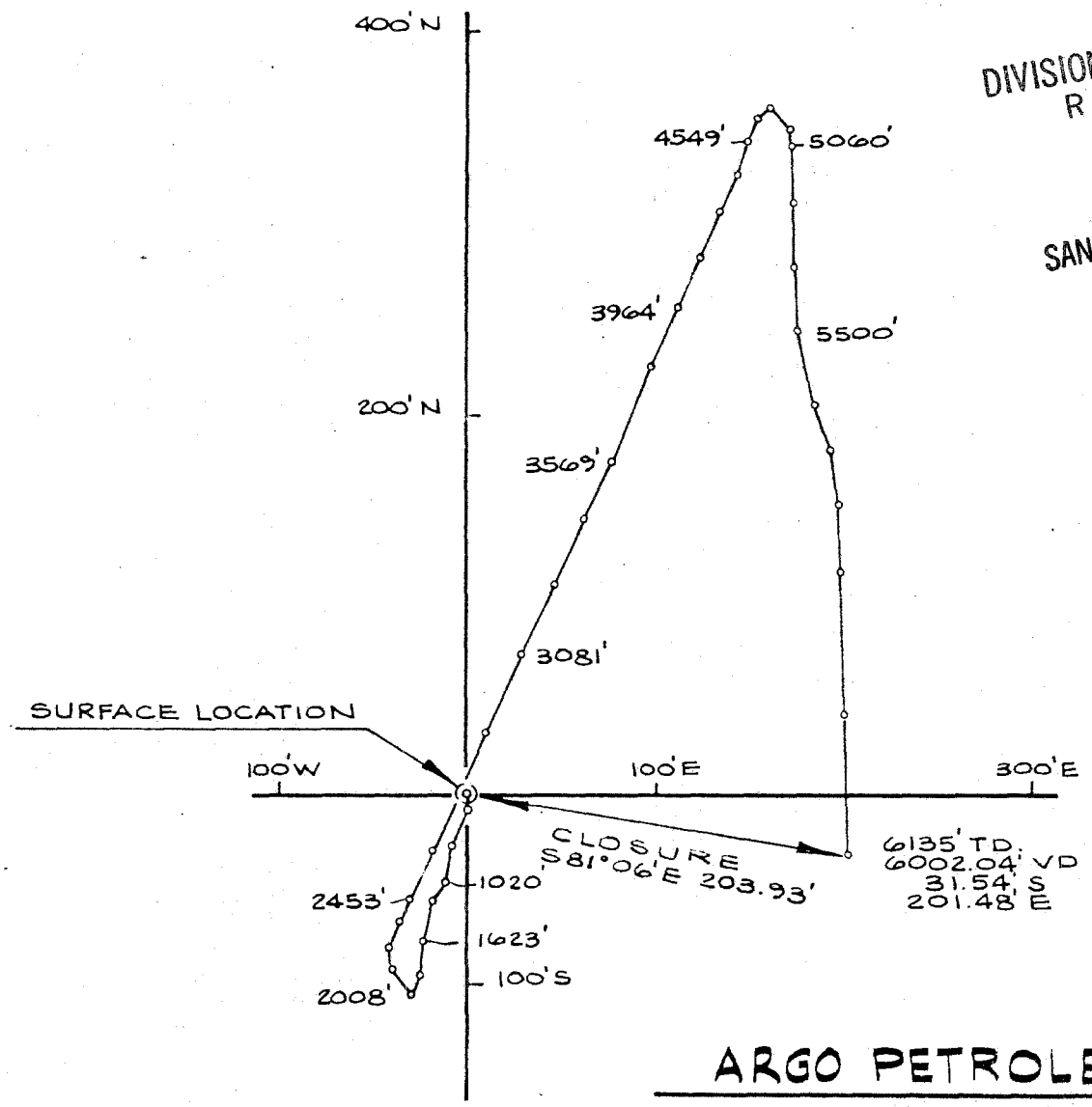
SEALAND DIRECTIONAL DRILLING CO.

COMPANY ARCO PETROLEUM

PAGE # 3

WELL A.E. FERNDALE # 3 LOCATION SILVERTHREAD DATE 6 - 75

	Measured Depth	Drift Angle	Vertical Depth	Drift Feet	Drift Direction	COORDINATES North	South	East	West	REMARKS
51	5222 00	11°15'	5162 77	18 34	S 02° E	310 66		172 67		
52	5350 00	12°15'	5287 86	27 16	SOUTH	283 50		172 67		
53	5381 00	12°30'	5318 13	6 71	S 01° W	276 79		172 55		
54	5405 00	13°30'	5341 47	5 60	S 03° E	271 20		172 94		
55	5437 00	14°30'	5372 45	8 01	S 09° E	263 29		174 09		
56	5468 00	15°45'	5402 29	8 41	S 10° E	255 01		175 55		
57	5500 00	17°30'	5432 91	9 62	S 10° E	245 54		177 22		
58	5531 00	18°30'	5462 31	9 84	S 06° E	235 75		178 15		
59	5561 00	20°00'	5490 40	10 26	S 07° E	225 57	—	179 50	—	
60	5589 00	20°45'	5516 53	9 92	S 12° E	215 87		181 53		
61	5620 00	22°00'	5545 32	11 61	S 15° E	204 66		184 56		
62	5652 00	23°15'	5574 72	12 63	S 15° E	192 46		187 83		
63	5683 00	24°30'	5602 93	12 86	S 13° E	179 93		190 72	—	
64	5714 00	25°30'	5630 91	13 35	S 12° E	166 82		193 50		
65	5746 00	26°30'	5659 55	14 28	S 09° E	152 77		195 73		
										TOP OF PLUG AT 5905'
66	5823 00	27°30'	5727 35	35 55	S 03° E	117 27		197 59		
67	5978 00	28°30'	5964 07	73 96	S 02° E	43 63		200 17		
68	6135 00	28°30'	6002 04	74 91	S 01° E		31 54	201 48		CLOSURE:
	6330	28°30'	6073 41	93 04	S 01 E		124 57	203 10		203.93' S 81°06' E



DIVISION OF OIL AND GAS
RECEIVED
JAN 6 - 1977
SANTA PAULA, CALIFORNIA

N

SCALE 1"=100'

ARGO PETROLEUM

A.B. FERNDALE # 3

SEALAND DIRECTIONAL DRILLING CO.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Report on Operations

No. T 277-179

Mr. Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, CA 90024

Santa Paula Calif.
August 2, 1977

DEAR SIR:

Operations at well No. "Barker-Ferndale" 3, API No. 111-20609, Sec. 16, T. 4N, R. 21W, S.E., B & M. Ojai Field, in Ventura County, were witnessed on July 20, 1977. Mr. Mr. Toni M. Callaway, representative of the supervisor was present from 0600 to 0800. There were also present Mr. E. Weight, pumper

Present condition of well: 10 3/4" cem. 808'; 7" cem. 5785', perf. 5415', WSO, perf. 5415-5694' (at intervals), P.B.T.D. 5785'. T.D. 6330'. Junk in hole (drill collars 6327-6023').

The operations were performed for the purpose of demonstrating a water shut-off on the 7" casing be means of a production test.

DECISION:

THE 7" SHUT-OFF AT 5415' IS APPROVED.

F

M. G. MEFFERD
~~XXXXXXXXXXXXXXXXXX~~
Acting JOHN F. MATTHEWS, JR.
State Oil and Gas Supervisor

By [signature] Deputy

OG109 (2-75—OSP—20M)

30986-705 2-75 20M ① ◇ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 275-251

Mr. Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, California 90024

Santa Paula Calif.
July 8, 1975

DEAR SIR:

Your supplementary proposal to drill (111-20609) Well No. "Barker-Ferndale" 3, Section 16, T. 4N, R. 21W, S.B. B. & M., Ojai Field, Ventura County, dated 7/2/75, received 7/7/75, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT IN ALL OTHER RESPECTS THE WELL SHALL BE REDRILLED IN ACCORDANCE WITH THE PROVISIONS SET FORTH IN OUR REPORT No. P275-180 DATED MAY 23, 1975.

Blanket Bond
DER:r
cc: Henry Hull

THOMAS E. GAY, JR., Acting Chief
~~JOHN F. MATTHEWS, Jr., State Oil and Gas Supervisor~~

By L. C. Ritzius, Deputy

25476-705 7-74 50M ①D OSP
OG 111

DIVISION OF OIL AND GAS
RECEIVED
JUL 7 1975
SANTA PAULA, CALIFORNIA

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

SUPPLEMENTARY NOTICE

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
B	✓	✓

DIVISION OF OIL AND GAS

Santa Paula, Calif.

A notice to you dated May 22, 19 75, stating the intention to

drill (Drill, rework, abandon), Well No. BARKER FERNDALE #3, API No. _____,

Sec. 16, T. 4N, R. 21W, S.B. B. & M., Silverthread Field,

Ventura County, should be amended because of changed conditions.

The present condition of the well is as follows:

Total depth 6330'

Complete casing record including plugs and perforations:

10 3/4", 40.5#, K-55 csg. cmt'd. at 808'

8 3/4" hole to 6330'. Junk (drill collars) 6327-6023'.

We now propose

To install 223' of cmt plug using 100 sacks cmt. from 6023' (top fish) to 5800'. Run and cmt. 7", 23#, K-55 csg. at 5800'. Cmt. to 4400' using 875 sacks cmt. Gun perforate for production at selective intervals from 5700' to 5413'. Oil sand pack thru perfs for completion.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 940 East Santa Clara (Street)

Ventura, California 93001 (City) (State) (Zip)

Telephone Number (805) 648-2514

BLANKET BOND

ARGO PETROLEUM CORPORATION (Name of Operator)

By Ralph P. Cahill (Name) 7/2/75 (Date)

Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

FORM 123 (REV. 1-73)

10344-705 1-73 6M ② OSP

FORM 109

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Report on Operations

No. T 275-205

Mr. Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, California 90024

Santa Paula, Calif.
June 19, 1975

DEAR SIR:

Operations at well No. "Barker-Ferndale" 3, API No. 111-20609, Sec. 16, T. 4N, R. 21W, S.B., B & M. Ojai Field, in Ventura County, were witnessed on June 4, 1975. Mr. A. Lorathbough, representative of the supervisor was present from 0630 to 0730. There were also present P. Wertman, driller

Present condition of well: 10 3/4" csg. 808' T.D. 830'.

The operations were performed for the purpose of inspecting and testing the blowout prevention equipment and installation.

DECISION:

THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

Ralph Cahill/DER 7/2/75 8:00 am
TD 6330
Top Fish 6023 Will sqz 6330-5800
Will csg 7" @ 5800 Zone @ about 11490 in Big Canyon Fault
Will bring E log in & fate sqzd.
7/2/75 2:00 pm
Will perf. sd. fr. 5900± - 5700± & sand frac.
Will take prod. WSO
Will file sqzd.

b
cc: ~~Operator~~ Harry Hull

Thomas E. Gay, Jr., Acting Chief
~~JOHN F. MATTHEWS, JR.~~
State Oil and Gas Supervisor

By D C Reitzel Deputy

FORM 109 (REV. 1-73)

19190-705 11-73 20M ② OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 275-180

XX Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, California 90024

Santa Paula, Calif.
May 23, 1975

DEAR SIR:

Your proposal to drill (111-20609) Well No. "Barker-Ferndale" 3, Section 16, T. 4N, R. 21W, S.B.B. & M., Ojai Field, Ventura County, dated 5/22/75, received 5/23/75, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Sufficient cement shall be pumped back of the 9 5/8" casing to fill from the shoe to the surface.
2. The drilling fluid used shall be of a quality and in sufficient quantity to control all subsurface conditions in order to prevent blowouts. NO CONTAMINANTS OR TOXIC MATERIAL SHALL BE USED IN ANY DRILLING FLUID THAT IS TO BE PLACED IN AN UNLINED SUMP.
3. Any sump used during drilling operations shall be thoroughly cleaned of all drilling materials and the site restored to its prior condition as soon as drilling operations are completed.
4. Blowout prevention equipment, at least of the Division of Oil and Gas Class III rating, shall be installed and maintained in operating condition at all times.
5. This Division shall be consulted before placing any plugs or sidetracking any hole.
6. A directional survey shall be filed with this Division, if one is made.
7. Blowout prevention equipment of at least 5000 psi working pressure shall be installed and maintained in operating condition at all times while sand-fracturing.
8. THIS DIVISION SHALL BE NOTIFIED TO WITNESS:
   a. A pressure test of the blowout prevention equipment before drilling out of the shoe of the 9 5/8" casing.
   b. A pressure test of the blowout prevention equipment immediately prior to the sand-fracturing operations.
   c. A production test within 30 days after the sand-pack oil.

NOTE: A COPY OF THIS APPROVAL SHALL BE POSTED AT THE WELL SITE PRIOR TO COMMENCING OPERATIONS.

Blanket Bond
ALL:b
cc: Everything

Cahill will have to check NSE to arrive at proposed BH loc, OK

6/17/75 Cahill/DER While reaming after recovered fish, lost hole @ 5300'± - drilling new hole @ 5345

Thomas E. Gay, Jr., Acting Chief
JOHN F. MATTHEWS, JR., State Oil and Gas Supervisor

By _____, Deputy

25476-705 7-74 50M ①D OSP
OG 111

20609

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS RECEIVED
MAY 23 1975
SANTA PAULA, CALIFORNIA

DIVISION OF OIL AND GAS
Notice of Intention to Drill New Well

This notice and indemnity or cash bond shall be filed, and approval given, before drilling begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY					
MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121
202	5-31-75	✓	bb	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to commence drilling well No. BARKER FERNDALE #3, API No. _____ (Assigned by Division),

Sec. 16, T. 4N, R. 22W S.B. B. & M., Silverthread Field, Ventura County.

Legal description of mineral-right lease, consisting of _____ acres, is as follows: _____ (Attach map or plat to scale)

PREVIOUSLY SUBMITTED

Do mineral and surface leases coincide? Yes X No _____ If answer is no, attach legal description of both surface and mineral leases, and map or plat to scale.

Location of well 2851 feet East (Direction) along ~~property~~ section line and 1077 feet South (Direction)

at right angles to said line from the Northwest corner of ~~property~~ section 16 or

If well is to be directionally drilled, show proposed coordinates at total depth _____

Elevation of ground above sea level 1061 feet.

All depth measurements taken from top of KB (Derrick Floor, Rotary Table or Kelly Bushing) which is 12 feet above ground.

PROPOSED CASING PROGRAM

SIZE OF CASING INCHES A.P.I.	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS	CALCULATED FILL BEHIND CASING
9 5/8"	40#	K-40	0	800	800	800
7"	23# 26#	K-55	0	7500	TD	7500

(A complete drilling program is preferred and may be submitted in lieu of the above program)

Intended zone(s) of completion Lower Mohnian Sands (Name, depth and expected pressure) Estimated total depth 7500

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 940 East Santa Clara (Street)
Ventura, California 93001 (City) (State) (Zip)
Telephone Number (805) 648-2514

ARGO PETROLEUM CORPORATION (Name of Operator)
By Ralph Colwell (Name) 5/22/75 (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

BLANKET BOND

OG105 (12-73-GSR1-15M)

NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

NOTICE OF RECORDS DUE

Date March 5, 2012

To: Alan E. White Agent
Vintage Production California LLC
9600 Ming Ave., Suite 300
Bakersfield CA 93311

Division Office: Ventura-District 2
1000 S. Hill Road, Suite 116
Ventura, CA 93003

In accordance with Division 3 of the Public Resources Code, the following records must be filed with this office within 30 days of the date of this notice, covering the notice to rework **(Notice dated 08/02/11)**
of your well "Barker-Ferndale" 4 111-20685 , Ojai
Field, Ventura County, Sec. 16 , T. 4N , R. 21W , SB B. & M.

RECORDS: *Records are due within 60 days after completion, suspension, or abandonment of any well, or upon completion of additional work in any well. Records shall be* ***submitted in duplicate.***

OIL AND GAS OPERATION
☐ Well summary (Form OG 100)
☐ Core or sidewall sample (Form OG 101)
☐ Well history (Form OG 103)

GEOTHERMAL OPERATION
☐ Well summary (Form OGG 100)
☐ Core or sidewall sample (Form OGG 101)
☐ Well history (Form OGG 103)

LOGS, TESTS, AND SURVEYS: *All logs, tests, and surveys are due within 60 days after completion, suspension, or abandonment of any well, or upon completion of additional work in any well. Logs, tests, and surveys shall be* ***submitted in duplicate.***

☐ Electric log (2" = 100 ft.) (5" = 100 ft.)
☐ Velocity survey
☐ Water analysis
☐ R/A survey
☐ Directional survey
☐ Mud log
☐ Oil and/or gas analysis
☐ Spinner survey
☐ Dipmeter (computed)
☐ Pressure measurements (flowing and static)
☐ Temperature survey
☒ Cement bond log **ran on 08/08/11**
☐ Two copies of all logs run on each well
☐ Other

REPORTS FOR THE MONTH(S) OF *Production, oil and gas disposition, and injection reports are due on or before the 30th day of each month for the preceding calendar month.*

OIL AND GAS OPERATION
☐ Production and disposition reports (Form OG110 or computer report)
☐ Injection reports (Form OG 110B or computer report)

GEOTHERMAL OPERATION
☐ Production reports (Form OGG 110S, 110W, or computer report)
☐ Injection reports (Form OGG 110I or computer report)

Name	Title	Signature
Steven Fields	Operations Engineer	

OG 170 (6/09)
cc:

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

CHECK LIST-RECORDS RECEIVED AND WELL STATUS

OPERATOR **Vintage Prod California LLC** WELL DESIGNATION: **"Barker-Ferndale" 4**

API No. **11120685** SEC **16** , T. **4N** , R. **21W** , **SB** B. and M.

COUNTY: ~~Ventura~~ , FIELD **Ojai**

Type of Notice: **Rework** **Date:** **8/2/2011** **Report Number:** **P211-249**

RECORDS RECEIVED (ATTACH PAGES IF REQUIRED)

	Date	OK	NEED	Remarks
Well Summary (OG100)	1/24/12			
History (OG103)				
E-Log				
Mud Log				
Dipmeter				
Directional				
Core and/or SWS				
CBL			✓	

NEW STATUS

DATE: 8/11

NOTICE OF RECORDS DUE

DATE: _____

DATE: _____

DATE: _____

DATE: _____

WELL STATUS INQUIRY

DATE: _____

DATE: _____

Well Stat.

Change Required: ND

Change Done: _____

ABANDONMENTS/REABANDONMENTS/DRILLS/REDRILLS

ABANDONMENT DATABASE : _____ SURFACE INSPECTION NEEDED _____ COMPLETED _____
Date and Inspector

FINAL LETTER NEEDED _____ COMPLETED _____ DRILL/REDRILL DATABASE _____
(Date)

ENGINEER'S CHECK LIST

T-REPORT(S) _____ OPERATOR'S NAME _____ WELL DESIGNATION _____ SIGNATURE _____

LOCATION _____ ELEVATION: _____ CONFIDENTIAL RELEASE DATE: _____ PERMIT REQUIREMENTS MET _____

CLERICAL CHECK LIST

LOCATION CHANGE (OG165) _____ ELEVATION CHANGE (OG165) _____ RELEASE OF BOND (OG150) _____

REMARKS

RECORDS SCANNED: _____
(Date)

RECORDS APPROVED: _____
(Date and Engineer)

Modified OGD2

RESOURCES AGENCY OF CALIFORNI
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

Rec'd 01-24-12 DOGGR D2 Ventura

HISTORY OF OIL OR GAS WELL

Operator Vintage Production California, LLC Field Ojai County Ventura
Well Barker Ferndale 4 Sec. 16 T. 4N R. 21W SB B.&M.
A.P.I. No. 04-111-20685 Name Lawrence F Young Title Operations Engineer
(Person submitting report) (President, Secretary, or Agent)
Date 10/12/2011
(Month, day, year)
Signature
Address 9600 Ming Avenue, Bakersfield, CA 93311 Telephone Number (661) 869-8000

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment, with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, and initial production data.

REWORK HISTORY: P211-249

8/2/2011

Rig up Hoist, Remove Horses head, S.I.C.P 125 psi, S.I.T.P 80 psi, Fluid on surface, Longstroke pump unable to pressure, Bleed off Lots of well gas, Held third party safety meeting, Filled tubing wit 1.0 bbls and Pressure tubing wit 600 psi good for 10 mins, Bleed of and repressured by longstroking pump in 5 strokes to 600 psi GOOD for 15 mins, Pulled Pump loose, Rig rods for hot oil, Pump 45 bbls of hot oil down tubing, then Hot oiled Flowline with 15 bbls, Rig up Rod equipment, As directed by Program, Pulled rods and Laid down 46-7/8" Slick rods and 35-3/4" Slick Rods, Laid down Insert Pump, No visible Damage or wear, Notified Harbison Fischer for Pump pick up, Remove Production tree and tubing Rotator, Strip on BOPE, Function test BOPE GOOD, Secure well and Rig, Shut job down till A.M. Job Plan for 8-3-11 is to Install working floor and Tubing tools Measured out with tbg string and Pick up and Run 4.5 13.5# Positive scraper to 6900'

8/3/2011

Bled well 20 psi tubing 40 psi casing. Rig working floor and tubing equipment. Pulled tubing 134 2 7/8" and 97 2 3/8" joints with 3 joint G/A. Tallied all tubing. Broke out production equipment. Made up 4 1/2" 13.5 lb. Positive scrapper and bumper sub. Ran in hole with 112 stands to 6900' no restrictions, pulled 97 stands and secured well.8-4-11 pull 15 stands make up and run Bridge plug.

8/4/2011

Bled well 20 psi. Pulled 15 stands and broke off scrapper. Measured and made up 4 1/2 13.5 lb. Lockset baker bridge plug. Material # H646300945 With Retrieving head SN 11678895 Ran in hole with 109.5 stands Set at 6770' Got off pull up and dump 2 sacks sand Est. top sand 6747'.Filled hole with 123 bbls. Lease water Pressure test casing to 1500 psi bled 50 psi in 15 minutes. Good test. Pulled tubing 95 stands and secured well. 8-5-11 pull ret. tool. Run bond log from BP to 3000'.

8/5/2011

Rig up tubing tools and Pulled out of hole with 15 stands of 2 7/8" eue 8rd tbg, Changed out Rams in BOPE installed Blind Rams, Nipple up Shooting flange, Held third party safety meeting, Rig up Schlumberger, Rig up all tools a Found out that they rig up the wrong tools, rig up 7" tools, Needed 4 1/2" tool, Ordered tools for Monday, Rigged out Schlumberger, Secure well and rig Shut job down, Job plan for 8-8-11 Rig up Schlumberger, and log Casing from Bridge plug to 3000'

OG103 (6/97/GSR/5M)
Printed on recycled paper.

SUBMIT IN DUPLICATE

Rec'd 01-24-12 DOGGR D2 Ventura

HISTORY OF OIL OR GAS WELL

8/8/2011

Rig up Full lubricator and 4 1/2" Cement Bond log tools, Run in hole, Filled casing with 13 bbls of Lease water and Pressured casing to 2000 psi, As directed by Vintage Engineer, And Maintain pressure throughout Log, Cement Bond Log from 6747 Est. top of sand up to 3000', Vintage Engineer Confirmed a good Log and to Proceed with Program, Rig out Schlumberger, Lay down Tools and Full lubricator, Secure Well and rig, Shut job down till A.M, Job Plan for 8-9-11 Haul in TCP guns in A.M, Pick up and Test in hole, and correlate with Wireline.

8/9/2011

Off loaded 28 Jts of TCP Guns on the Ground, As directed By Vintage Engineer, Remove BOPE and Install Donut Hanger Flange Below BOPE, Reinstall BOPE and Working floor, Held Safety meeting, Run 2 3/4" Steel bull plug, Bottom shot At 6670', Pick Up 28 jts of 2 3/4" Vann Guns Loaded 6 SPF W/Millennium Charges 620', In order as specified by Halliburton Tool Hand, and Top shot At 6050', Safety spacer, 2 3/4" Mechanical Extended Firing Head, 1 stand of 2 3/8" tbg, 2 3/8" Maximum differential bar vent, 1 stand of 2 3/8" tbg, 2 3/8" EUD 8rd 4.7# Centralizer sub, 4 1/2" 11.6 to 13.5# PLT Packer, 2 3/8" EUD 8rd 4.7# N-80 tbg sub 4', 1 stand of 2 3/8" tbg, R.A. Sub 2 3/8" 8rd N-80 (#0009 BK /1174216), Tested all Bottom BHA to 7000 psi, GOOD test, Rig up Ace pump test and tested in hole with remaining 45 stands of 2 3/8" tbg, Crossed over to 2 7/8" eue 8rd tbg, Changed out Drag tools and Tested in hole with 49 stands of 2 7/8" eue 8rd J-55 tbg, Sub out with a 2'-2'-4'-6'-8'-8'and donut, All tested at 7000 psi, Rig out hydro tester, Secure rig and Well, Shut job till A.M. Job plan for 8-10-11 Rig up Wireline and Correlate TCP guns to depth and set packer, test surface equipment, Apply 500 psi to casing and Perforate.

8/10/2011

Change Blind rams and Install 2 7/8" Pipe rams, Rig up Western wireline and correlate TCP Guns to Depth, Rigged up Pro's Master choke manifold to Baker tank and Mud pump, Unland tbg Hanger and Removed 15' of 2 7/8" subs to be on depth by the Correlation, fluid to R.A. is at 5828', Set 4 1/2" PLT Packer with 19,000# Compression at 5897'.85, rig up top Flow tree and Nipple up to choke manifold, Drop 1.25" Bar in 30 sec TCP guns went off at 13:15 pm, S.I.T.P went from 100 climb to 200 psi, flow back in to Mud pump, gas at first then Fluid Oil and Water, Begin to Monitor well, from 13:15 pm to 16:45 pm Recovered 62 bbls of Oil and water total, Have Pro's Monitoring Well flow Overnight and recording pressures and Tank levels, Secure rig and Well, Shut job down till am, Job plan for 8-11-11 Rig up Halliburton acid trucks, Follow HES acid /foam Schedule

8/11/2011

Well still Flowing back in to tank, 30 Psi on tbg and 170 bbls total in Baker tank, S.I.C.P at 0 psi, As directed by Halliburton Packer hand, Pressured casing to 800 psi, Good test and left pressure an casing, Held third party safety meeting, Rig up And assist Halliburton with Hardlines from wellhead to Pump trucks, Prime and test Line to 3000 psi, Follow HES acid/foam Schedule, Was able to Pump 650 bbls of acid and 111 bbls of clay fix, Shut job down for night, Rig out Halliburton from Safety Value, Close Well in, Secure rig, Shut job till A.M., Job plan for 8-12-11, Flow back well into baker tank and Monitor Production, By checking levels.

8/12/2011

Began to flow well into baker tank. Starting pressure 2200 Psi. Flowed a total of 400 barrels with ending pressure at 300Psi.Turn well over to Pros and flow overnight. Rig supervisor stayed on location until acid spill cleaned up.

8/13/2011

SUBMIT IN DUPLICATE

Rec'd 01-24-12 DOGGR D2 Ventura

HISTORY OF OIL OR GAS WELL

Spotted Baker Tank and run 2" hard line from manifold to tank. Test line to 1200#. Tubing shut in pressure 1050 p.s.i. Began flowing well back at 9:30 A.M. P.H.-1. Release rig crew at 2:30A.M. Total recovery in tank, 128.3 barrels at 30 p.s.i. with P. H. of 4.5. PRO employee to monitor flow back for rest of weekend. Monday morning activity depends on well.

8/15/2011

Pros. Still flowing well back 90 psi. Choke 32 Rate 220 Bpd 86 % cut. Cleaned up location. Got orders to let well continue to flow back. Turned over to Pros. 8-16-11 monitor well.

8/16/2011

Received orders to let well continue to flow back. Checked with Pros tubing pressure 50 psi. Choke 64 average BPD 240 cut 80 % at 7:00 amulet well flow back until 5:00 pm closed in.

8/17/2011

Tubing pressure 1300 psi. Bled slow to tank through choke. Recovered 96 bbls. Fluid. Tubing pressure stabilized at 100 psi. Closed in at valve, removed flow tree. Released packer let equalize. Bled 300 psi off tubing through choke well laid dead. Pulled tubing stood back 25 stands laid down 50 joints 2 7/8" stood back 48 2 3/8".Layed down 28 guns all had fired. Ran 15 stands and secured well. 8-18-11 Hydrotest in hole.

8/18/2011

Well pressure 200 psi. Bled off. Pulled 15 stands. Assisted Ventura crane in loading spent guns. Made up gas anchor with new 1 piece shoe. Unable to get shoe to test leaking out top thread bad. Replaced shoe rigged Ace tester hydrotest tubing in hole laid down 7 bad joints due to leaks in middle breaks bottom side of collars also replaced 8- 2 3/8" collars. All tubing tested to 6000 psi. Shoe at 5505' and bottom at 5574' Rigged out tester and secured well. 8-19-11 Nipple down BOPE install tree.

8/19/2011

Bled 50 psi off tubing. Rig out floor and tubing equipment. Nipple up production flange and tree. Dump 10 gallons of corrosion inhibitor down tubing. Stroked exchange acid pump in diesel. Installed diptube, ran in hole with rods picked up 26 guided rods on top. Spaced well dress new polish rod and packing. Filled tubing with 15 bbls. lease water. Pressured with rig to 600 psi. Good. Hung head and well on unable to check stroke due to electrical. Loaded tools lowered mast cleaned location. Moved equipment out of way.8-22-11 move rig and equipment to next well.

SUBMIT IN DUPLICATE

NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES

No. P **211-249**

520 (Old) Field Code 520 (New)
12 (Old) Area Code 12 (New)
10 (Old) Pool Code 10 (New)

PERMIT TO CONDUCT WELL OPERATIONS

William J. Hill, Agent
Vintage Production California LLC
9600 Ming Ave., Suite 300
Bakersfield CA 93311

Ventura, California
August 9, 2011

Your proposal to **rework** well **"Barker-Ferndale" 4**, A.P.I. No. **111-20685**, Section **16**, T.**4**, R.**21** **S.B.** B. & M., **Ojai** Field, **Silverthread** Area, **Miocene** Pools, **Ventura**, County, dated **08/02/11**, received **08/02/11** has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment, as defined by this Division's publication No. MO7, shall be installed and maintained in operating condition and meet the following minimum requirements:Class II 2M
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. No program changes are made without Division approval.

Engineer: Steve Fields

Phone: (805) 654-4761

Elena M. Miller
State Oil and Gas Supervisor

By
Bruce Hesson, District Deputy

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work is completed or the operations have been suspended. Issuance of this permit does not preclude the recipient from the obligation of being in compliance with all applicable Federal, State and Local laws, regulations and ordinances.

OG 111

520 Silverthread Avenue 10

NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

FOR DIVISION USE ONLY		
	Forms	
Bond	OG0114	OG0121
1000 000	111 ✓	115 ✓

NOTICE OF INTENTION TO REWORK / REDRILL WELL

Detailed instructions can be found at: www.conservation.ca.gov/dog/

P211-249

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework ☒ / redrill ☐ (Check one) well Barker Ferndale 4, API No. 111-20685-01

Sec. 16, T. 4N, R. 21W, S.B. B.&M., Ojai-Silvwerhread Field, Ventura County.

The complete casing record of the well (present hole), including plugs and perforations, is as follows: (Attach wellbore schematics diagram also.)

See attached program

3

The total depth is: _____ feet. The effective depth is: _____ feet.

Present completion zone(s): _____ (Name). Anticipated completion zone(s): _____ (Name).

Present zone pressure: _____ psi. Anticipated/existing new zone pressure: _____ psi.

Is this a critical well as defined in the California Code of Regulations, Title 14, Section 1720(a) (see next page)? Yes☐ No☒

For redrilling or deepening only, is a California Environmental Quality Act (CEQA) document required by a local agency? Yes☐ No☐ If yes, see next page.

The proposed work is as follows: (A complete program is preferred and may be attached.)

See Attached Program

If well is to be redrilled or deepened, show proposed coordinates (from surface location) and true vertical depth at total depth: _____ feet _____ (Direction) and _____ feet _____ (Direction) Estimated true vertical depth: _____

Will the Field and/or Area change? Yes☐ No☐ If yes, specify New Field: _____ New Area: _____

The Division must be notified immediately of changes to the proposed operations. Failure to provide a true and accurate representation of the well and proposed operations may cause rescission of the permit.

RECEIVED
AUG - 2 2011
Div. of Oil, Gas & Geothermal Resources
Ventura

Name of Operator			
Vintage Production California			
Address: 270 Quail Court Unit 201		City/State: Santa Paula	Zip Code: 93060
Name of Person Filing Notice: Alex Iwasiw	Telephone Number: 661-212-1535	Signature	Date: 08-02-11
Individual to contact for technical questions: Alex Iwasiw	Telephone Number: 661 -212-1535	E-Mail Address: Alex_Iwasiw@Oxy.com	

This notice and an indemnity or cash bond must be filed, and approval given, before the workover begins. (See the reverse side for bonding information.) If operations have not commenced within one year of the Division's receipt of the notice, this notice will be considered cancelled.

Vintage Production California LLC

A subsidiary of Occidental Petroleum Corporation

Wellwork Program

Well Name:	**Barker Ferndale 4**	*Location:*	**SEC 16 - 4N - 21W**
Field Name:	**Siverthread**	*API :*	**111-20685-01**
County, ST:	**Ventura County, California**	*Present Zones:*	**Mohnian**
Purpose:	**Recomplete in Lower Mohnian 6050'-6200' and 6300' -6670'**	*Date:*	**4/26/2011**

Present Condition (well re-drilled in 1978):

Total depth: 7485'

PBTD: 7306'

9-5/8", 36#; K-55 csg. 0' - 828' cmt'd w/ 500 cuft (cement to surface)

7", 26 & 23#; K-55 csg. 0' - 4462' (window) cmt'd thru float collar at 6929' w/ 305 cuft.

4-1/2", 13.5 & 11.6#, N-80 & K-55 csg. Hung 4349' - 7485' (Brown hanger) cmt'd w/ 650 cuft.

Effective Perforations:

3 (.38") JHPF 7427, 7420, 7414 and 7406' (12 holes thru-tubing) 4/28/78

2 (.25") JHPF 7102', 7095', 7083', 7061', 7055', 7041', (12 holes thru-tbg.) 4/30/78.

2 (.50") JHPF 6995', 6987', 6970', 6954', 6929', 6921', 6914', (14 holes thru-tbg.) 5/7/78.

2 (.25") JHPF 6827', 6821', 6813', 6807', 6796', (15 holes thru-tbg.) 5/11/78.

4 (.39") JHPF 7418', 7411', 7404', 7396', 7389', 7370', 7357', 7349', 7332;, 7326', 7279', 7266', 7257', 7246', 7239', 7228', 7217', 7203', 7196', 7156', 7148', 7141', 7131', 7114', 7091', 7075', 7066', 7049', 7003', 6977', 6960', 6949', 6935', 6906', 6896', 6883', 6876', 6869', 6860', 6851', 6835', 6817', 6802', 6792', (176 holes thru-tbg.) 10/24/82.

4 (.39") JHPF 7432', 7430', 7423', 7409', 7400, 7390', 7367', 7359', 7354', 7269', 7257', 7248', 7228', 7222', 7210', 7200', Casing guns, June 1990.

Isolated Perforations:

None

Squeeze Holes:

none

Casing Issues:

None recorded

Plugs:

None

Wellwork Program (all depths refer to the original KB height which was 12' above ground level)

1. MiRU, POOH with rods and pump, visually inspect.
2. Nipple up BOPE, POOH w tubing, scan out.

3.	Make up 4-1/2" positive scraper, RIH to 6900, POOH.
4.	Make up 4-1/2" retreivable BP, RIH and set at 6770', dump two sax sand, POOH.
5.	Circulate hole clean if necessary.
6.	Pressure test casing to 1500 psi.
7.	Rig up wire line
8.	Run compensated neutron and cement bond log from BP to 3000'.
	(If bond log shows poor bond above or below perf interval prepare to sqeeze cement to isolate)
	(Note all depth for squeeze work will be determined after bond log is run.)
	(Depths for producing perfs may vary depending on results from neutron log.)
9.	Rig up wireline.
10.	RIH with perf guns, shoot sqz holes at determined depth.
11.	Rig down wireline.
12.	Attempt to break down squeeze perfs, record rate and pressure.
13.	Rig up cementers.
14.	Mix and pump Class G cement with addatives.
15.	Squeeze cement away.
	(Production engineer to determine cement volume, addatives and pressures
	once break down rate and pressure are determined.)
16.	Reverse tubing clean.
17.	Wait on squeeze overnight.
18.	POOH with tubing.
19.	Make up 4-1/2" bit and drill collars.
20.	RIH tag TOC, drill out cement past upper squeeze holes.
21.	Pressure test holes to 1500 psi.
22.	If holes test good return to drilling, else re-squeeze.
23.	POOH with clean out string.
24.	Pick up TCP guns with packer underbalance system, RIH.
25.	Corelate gun depth with wireline.
26.	Perforate the following intervals, allow well to flow back if possible.
	For acid stim perf the following:
	6300' -6670'
	6050' - 6200'
27.	Prep well for foam acid stimulation.
28.	Pump designed stimulation job, RDMO pump company.
29.	Flow back well if possible, pull out of hole with TCP guns.
30	RIH with tubing production string. Set tubing intake below 5500'. Nipple down BOPE
31.	RIH with rods and acid pump. Seat pump and test.
32.	RDMO.

PROPERTY/WELL TRANSFER OR ACQUISTION

Seneca Resources Corporation (S2630)

to

Vintage Production California LLC (V1370)

Effective April 25, 2008

OPERATOR ARCO
LSE & NO "Barker Ranch" 4
MAP 203

	(1)	(2)	( )	( )	( )	( )
INTENTION	Drill	Recomplete & Recomp	Rework	rework	rework	
NOTICE DATED	7-28-76	2-8-77	10-20-82	6-14-90	1-28-91	
P-REPORT NUMBER	276-278	278-70	282-389	290-255	291-77	
CHECKED BY/DATE						
MAP LETTER DATED	7-2-77 PMD 8-9-76 LKC	4/C				
SYMBOL	⊕					

	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED
NOTICE	7-30-76		2-14-78		10-21-82		6/18/90		1-30-91			
HISTORY	6-21-77		8-25-78		12-2-82		2/5/91					
SUMMARY	6-21-77		8-25-78		12-2-82							
IES/ELECTRIC LOG	5-14-81		8-25-78									
DIRECTIONAL SURV	6-21-77		8-25-78									
CORE/SWS DESCRIP			1-13-81				CSG GR Incomp 2/5/91					
OTHER	MUD LOG 6-21-77 FM FACIES 6-21-77 MICRO SEIS 6-21-77 CONT DIP 6-21-77 COMP FM DIP 6-21-77 BOREHOLE 6-21-77 DUAL IND 6-21-77		DLL FFD DIP< Sonic CBL CCL GRL	8-25-78			6 months OK					
RECORDS COMPLETE	✓		✓		12-9-82 MS		2/5/91 BH					

ENGINEERING CHECK

T-REPORTS	
OPERATOR'S NAME	
WELL DESIGNATION	
LOC & ELEV	
SIGNATURE	
SURFACE INSPECTION	
FINAL LETTER OK	

CLERICAL CHECK

POSTED TO 121 _____ 170 MAILED _____ FINAL LETTER MAILED _____

RELEASED BOND _____

REMARKS: NEED PRODUCTION TEST 4/13/78

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES

REPORT OF CORRECTION OR CANCELLATION

Ventura, California
July 14, 1993

James A. Beck, Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

In accordance with your reply to our Well Status Inquiry dated June 28, 1993

the following change pertaining to your well "Barker-Ferndale" 4
(Well Designation)

Ojai field, Ventura County,

Sec. 16, T. 4N, R. 21W, SB B.M., is being made in our records:

___ The corrected location is _____

___ The corrected elevation is _____

___ Report No. _____, dated _____, has been corrected as follows: _____

Your notice to rework dated January 28, 1991,
(Drill, abandon, etc.)
and our Report No. P 291-077, issued in answer thereto, are hereby cancelled inasmuch as the work will not be done. If you have a drilling bond on file covering this notice it will be returned. No request for such return is necessary.

___Other: _____

tkc

WILLIAM F. GUERARD, Jr.
Acting State oil and Gas Supervisor

By _____
Patrick J. Kinnear, Deputy Supervisor

OG165

The Resources Agency of California
Department of Conservation
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

WELL STATUS INQUIRY

SECOND NOTICE

Ventura, California
June 28, 1993

James A. Beck, Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

In a notice dated 1-28, 1991, you propose to rework well "Barker-Ferndale" 4 (111-20685-01) Sec. 16, T. 4N, R. 21W, SBB.&M., Silverthread (Field or County)

Please indicate below, conditions or intentions regarding this proposed work and return the completed form to this office within 10 days.

WILLIAM F. GUERARD, Jr.
Acting State Oil and Gas Supervisor

By Patrick J. Kinnear, Deputy Supervisor

PK:nr

___PROSOSED WORK HAS BEEN DONE. (If you check this space, please file the required well records on this work in duplicate within 60 days after work was completed.*)

___PROPOSED WORK IS IN PROGRESS AND SHOULD BE COMPLETED ABOUT _____,19____.

___PROPOSED WORK HAS NOT BEEN DONE, BUT WE STILL INTEND TO DO THE WORK.**

___SUPPLEMENTARY NOTICE (Form OG123) ATTACHED.

___PLEASE CONSIDER THIS FORM AS A SUPPLEMENTARY NOTICE.

_X_WE DO NOT INTEND TO DO THE PROPOSED WORK. Please cancel our notice to REWORK _____, dated 1/28/1991.

___OTHER:_____

DIVISION OF OIL AND GAS
RECEIVED
JUL 13 1993
VENTURA, CALIFORNIA

B M'L
(Signature)

BARRY McMAHAN/PROD SUPT 7-9-93
(Name and Title) Date

*Division 3 of the Public Resources Code states in part:
Section 3215,...Well records shall be filed 60 days after completion or suspension of proposed work.

**Section 3203,...If operations have not commenced within one year of receipt of the notice, the notice will be considered cancelled. (To prevent cancellation, file a Supplementary Notice with the Division.)

OGD3

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P291- 77
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
February 1, 1991

Your proposal to rework well "Barker Ferndale" 4, A.P.I. No. 111-20685-01, Section 16, T. 4 N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 1/28/91, received 1/30/91, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOG Class II 2M requirements shall be installed and maintained in operating condition at all times.
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. Wire line operations are conducted through at least a 2M lubricator.
4. The proposed bridge plug at 6780' does not fulfill the requirements for abandonment of the lower portion of the well.
5. The Division will monitor the monthly production of this well for a period of six months and if anomalous water production is indicated, remedial action well be required.
6. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.

Blanket Bond
SF:ljg

Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
JAN 30 1991
VENTURA, CALIFORNIA

Notice of Intention to Rework Well

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	FORMS	
	OGD 114	OGD 121
53	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well Barker Ferndale #4 (Well designation), API No. 111-020685

Sec. 16, T. 4N, R. 21W, SB B. & M., Ojai Field, Ventura County.

The present condition of the well is as follows:

1. Total depth
   See Attached
2. Complete casing record, including plugs and perforations (present hole)
   See Attached

3. Present producing zone name Mohnian ; Zone in which well is to be recompleted Mohnian
4. Present zone pressure 1900 ; New zone pressure 1900
5. Last produced 1/91 (Date) | 18 (Oil, B/D) | 17 (Water, B/D) | 30 (Gas, Mcf/D)
   (or)
   Last injected N/A (Date) | (Water, B/D) | (Gas, Mcf/D) | (Surface pressure, psig)
6. Is this a critical well according to the definition on the reverse side of this form? ☐ (Yes) ☒ (No)

The proposed work is as follows:

Set bridge plug @ 6780'.

Perforate and frac the zone from 6670' - 6760'.

Note: If well is to be redrilled, show proposed new bottom-hole coordinates and true vertical depth.

It is understood that if changes in this plan become necessary, we are to notify you immediately.

Address 725 E. Main St., Ste. 200 (Street)
Santa Paula (City) CA. (State) 93060 (Zip)
Telephone Number (805) 656-2445

Seneca Resources Corporation (Name of Operator)
By James A. Beck (Name-Printed)
James A. Beck (Name-Signature) 1/28/91 (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

OG107 (8/87/DWRR/5M)

SENECA RESOURCES CORPORATION
FERNDALE #4 CASING DETAIL

DEPTH REFERENCE	:	KB is 12' above GL
EFFECTIVE DEPTH	:	7446' (Float Collar)
CEMENT TOP	:	6400'
CASING DETAIL	:	9-5/8" (36.0 #, K-55) cmnt'd at 828' with 500 cf.
		7" (23 & 26 # ,K-55) cmnt'd at 4462' with 305 cf.
		4-1/2" (11.6 & 13.5 #, N-80 & K-55, hung at 4349' and cemented at 7485' with 650 cf. (Min. Burst - 5350 PSI)
PERFORATIONS	:	3 (.38") jhpf @ 7427, 7420, 7414, & 7406' (12 holes) from 4/28/78 through-tubing.
		2 (.25") jhpf @ 7102, 7095, 7083, 7061, 7055, & 7041' (12 holes) from 4/30/78 through-tubing.
		2 (.50") jhpf @ 6995, 6987, 6970, 6954, 6929, 6921, & 6914' (14 holes) from 5/7/78 through-tubing.
		2 (.25") jhpf @ 6827, 6821, 6813, 6807, & 6796' (15 holes) from 5/11/78 through-tubing.
		4 (.39") jhpf @ 7418, 7411, 7404, 7396, 7389, 7370, 7357, 7349, 7332, 7326, 7279, 7266, 7257, 7246, 7239, 7228, 7217, 7203, 7196, 7156, 7148, 7141, 7131, 7114, 7091, 7075, 7066, 7049, 7003, 6977, 6960, 6949, 6935, 6906, 6896, 6883, 6876, 6869, 6860, 6851, 6835, 6817, 6802, & 6792' (176 holes) from 10/24/82 through-tubing.
		4 (.39") jhpf @ 7532, 7430, 7423, 7409, 7400, 7390, 7367, 7359, 7354, 7269, 7257, 7248, 7228, 7222, 7210 & 7200' from 6/90 with casing guns.

DIVISION OF OIL AND GAS
RECEIVED
FEB 5 1991
VENTURA, CALIFORNIA

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION
WELL: "BARKER FERNDALE #4
A.P.I. #111-20685-01

OJAI FIELD VENTURA COUNTY
SEC. 16, T4N, R21W, SBB&M
JAMES A. BECK, GENERAL MANAGER

James A. Beck

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

6/21/90
Day 1. MIRU Signal. Fill & press. tbg. to 200 psi. Found pump stuck. Worked pump loose. POH with rods & pump. MU 12 dbls. 3/4" rods on sandline & run. Tag fill @ 7432'. Remove tree. Install & test BOPE. PU 21 jts. 2-7/8" tbg. Went through bridge @ 7432'. Tbg. stopped @ 7470'. SDFN.

6/22/90
Day 2. Bled well. Continue measuring tbg. out of hole. MU 3-3/4" bit - 4-1/2" - 13.50# positive csg. scraper. Run tbg. & scraper to 7453'. Pulled scraper & tbg. out of liner. Note: No restrictions thru liner with scraper. SDFN

6/23/90
Day 3. Bled well. Continue pulling tbg. Found bottom 53 doubles wet. Bit, scraper & 10' of tbg. plugged with sand. LD scraper & clean out sand. Install bailing gate. SDFN.

6/24/90
No activity.

6/25/90
No activity.

6/26/90
Day 4. Bled well. RU Halliburton Logging Service. Ran Casing Inspection Log per program. Ran GR-CCL Log per program. Pulled tool. SDFN.

6/27/90
Day 5. Bled well. RU Halliburton Logging Service. Perforate well 4 (0.44") over 2' w/3-3/8" casing guns @ 7432', 7430' 7423', 7409', 7400', 7390', 7367', 7359', 7354', 7269', 7257', 7248', 7228', 7222', 7210' & 7200'. RO HLS. Well showed no fluid rise after perforating. SDFN.

6/28/90
Day 6. Bled well. RU A&F Testers. MU Baker 4-1/2" ret. packer. Test tbg. in hole 7000 psi. Fill csg. with oil. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "BARKER FERNDALE #4 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20685-01 — JAMES A. BECK, GENERAL MANAGER

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

6/29/90
Day 7. Bled well. Found vacuum on csg. Pulled tbg. & packer. Found 1 rubber ring missing & torn up on 4-1/2" ret. pkr. MU 4-1/2" fullbore pkr. Run tbg. to top perforations. SDFN.

6/30/90
Day 8. Bled well. Finish running tbg. & Baker 4-1/2" fullbore packer. RU B.J. pump truck. Set packer @ 7170'. Fill casing with 55 bbls. oil & put 500# on csg. with Homco pump. Get breakdown 1-1/4 BPM 3750# with 900# csg. Max. rate = 1-1/4 BPM & max. press. = 4700#. No communication around pkr. Bled well. RO B.J. Release pkr. Measure out of hole with tbg. LD pkr. MU new 2" T/L seating ring in buttress shoe. RIH with tbg. to top of perforations. SDFN.

7/1/90
Day 9. Bled well. Continue running tbg. Tag fill @ 7435'. Pull & LD extra tbg. Land tbg. with tail @ 6762.38. Remove BOE & install production tree. RIH with exchange pump & rods. (Changed 17 3/4" boxes.) Repack stuffing box. Fill & press. tbg. to 300#. RDMO.

7/2/90
No activity.

7/3/90
Day 10. Clean pump tank & cellar. Load out pump & BOPE equipment. Put extra tbg. on rack. Move out equipment.

9/9/90
Day 1. MIRU Oilwell. Unseat pump. POH with rods & pump. Bled well & remove tree. Install BOE. RU mud pump & lines & broke circulation with 190 bbls. of oil. Turn hole over & SWI until a.m.

9/10/90
Day 2. Install PGSR stripper & PU tbg. Tag fill @ 7414', TD 7446' (32' fill). Reverse circ. hole clean to 7446'. Spot frac string trailers & POH with production string. Changed BOP rams. RU A&F Testers & plug tested X-overs. Started testing in with frac string to 9,000 psi. Tested in with 50 jts. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "BARKER FERNDALE #4 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20685-01 — JAMES A. BECK, GENERAL MANAGER

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

9/11/90
Day 3. Continue testing with frac string to 10000 psi. Unable to test 3-1/8" with A&F. RO A&F. RU HydroTest. Continue testing in with frac string to 10,000 on 3-1/2". Test top X-overs & 3-1/2 valve. Set packer with elements @ 7170' & bottom @ 7173' in 25,000# compression. SDFN.

9/12/90
Day 4. RU Halliburton to frac. Put 500 psi on csg., bleeding off flow, (500 to 200 in 3 min.). Frac Stage I interval 7196'-7432'. Prepad #1: 51 bbls. oil. ISIP = 4700, 5 min. = 1628 & 10 min. = 1355. Frac grad. = 1.03. Prepad #2: 51 bbls. Super "E". ISIP = 4700. Frac grad. = 1.03. Breakdown 10 BPM @ 8250 psi during 1st prepad. 5 min. SIP = 3030, 10 min. = 2826. Max. rate = 16 BPM, avg. rate = 14 BPM, max. press. = 9900#, avg. press. = 8800#. Avg. conc. = 4.5 ppg, max. conc. = 6 ppg. Total sand pumped = 65,000# 20/40 mesh resin-coated, total sand out = 55,000#, total oil = 700 bbls. & total gel = 358 bbls. Well screened out during flush. Shut well in. RO Halliburton. Maintained 500 on csg. until 3:30 p.m. Final press. on tbg. 1800 psi @ 3:30. Note: Screened out. Calculate top of sand @ 4742', tbg. tail & pkr. @ 7173'.

9/13/90
Day 5. RU for coil tbg. Test lines to 6300 psi. Bled tbg. & start in with coil tbg. with Halliburton pumping @ 1/2 BPM @ 1200 psi. Tag top of sand @ 4720'. Circ. out @ 1-1/2 BPM @ 4750 psi for 1 hr., then 1 BPM @ 2750 psi. Reverse circ. Hard packed sand from 4720'-5812', soft from 6170'-7373'. Hard sand @ 7373'. Had to circ. down tbg. to make hole. Circ. to 7384'. Unable to make hole. Circ. tbg. clean & pull up to 6700'. SDFN.

9/14/90
Day 6. 400 psi. Bled to 50 psi. Broke circ. RIH with coil tbg. Circ. hole clean for 1 hr. @ 7384'. POH. Closed tbg. in & cleaned coil tbg. out with nitrogen. Bled into Baker tank. RO coil tbg. Tbg. had built up to 700 psi. Bled tbg., well flowing. Shut in & hook up steel line. Press. dropped to 250 psi. then to 50 psi. SWI. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "BARKER FERNDALE #4 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20685-01 — JAMES A. BECK, GENERAL MANAGER

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

9/15/90
Day 7. 700 psi tbg. Open to flowline. Press. dropped off kill string. Flowing. Unset Baker pkr. & RU to circ. Turned hole over. POH, laying down 3-1/2" Buttress & 2-7/8" CS Hydril. Run back in with 20 stds. of 2-3/8" Buttress. SDFN.

9/16/90
Day 8. 200 psi tbg. Bled well. Start RIH to clean out fill. Had to stop 3 times & turn hole over to work out gas. RIH to 7290' & apparently hit hard stringer of sand on csg. walls. Had to work tbg. loose. Circulate hole clean & install PGSR stripper. Pull above perfs & SDFN. Used 50 bbls. oil.

9/17/90
Day 9. 0 psi. RIH with tbg. to 7227' & tagged stringer of frac sand. Circ. from 7227'-7446'. Turn hole over on each std. until sand cleared. Circ. on bottom for 3-1/2 hrs. to clean up sand. POH, LD excess tbg. Remove PGSR stripper & land tbg. with tail @ 6605.13'. SDFN.

9/18/90
Day 10. 0 psi. Load out all equipment. MU tree. LD 78 3/4" rods. RIH with 142 3/4" rods, changed out 10 rod boxes. RIH with 7/8" off ground. Changed out 42 7/8" rod boxes. Space well & press. tbg. to 300 psi. RDMO.

9/19/90
Day 11. Load out all rods & junk tbg. Clean location.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P290- 255
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
June 19, 1990

Your proposal to rework well "Barker-Ferndale" 4, A.P.I. No. 111-20685-01, Section 16, T. 4N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 6/14/90, received 6/18/90, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOG Class II 2M requirements shall be installed and maintained in operating condition at all times.
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. Wire line operations are conducted through at least a 2M lubricator.
4. Any sump used during these operations shall be thoroughly cleaned and filled with earth as soon as operations are completed.
5. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.

Blanket Bond
SF:ljg

Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
JUN 18 1990
VENTURA, CALIFORNIA

Notice of Intention to Rework Well

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	FORMS	
	OGD114	OGD121
BB	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well "Barker" Ferndale 4 R/D #1 (Well designation), API No. 111-20685-01

Sec. 16, T. 4N, R. 21W, SB B. & M., Silverthread Field, Ventura County.

The present condition of the well is as follows:

1. Total depth 7486'

   Eff. Depth 7446' F.C.

2. Complete casing record, including plugs and perforations (present hole)

   See attached.

3. Present producing zone name Mohnian ; Zone in which well is to be recompleted Mohnian

4. Present zone pressure 2000 psi ; New zone pressure 2000 psi

5. Last produced 6/15/90 (Date) | 18 (Oil, B/D) | 2 (Water, B/D) | 30 (Gas, Mcf/D)

   (or)

   Last injected --- (Date) | (Water, B/D) | (Gas, Mcf/D) | (Surface pressure, psig)

6. Is this a critical well according to the definition on the reverse side of this form? ☐ (Yes) ☐ (No)

The proposed work is as follows:

Perforate and hydraulically fracture the zone from 7170'-7435' in two stages. Clean out and place on production.

Note: If well is to be redrilled, show proposed new bottom-hole coordinates and true vertical depth.

It is understood that if changes in this plan become necessary, we are to notify you immediately.

Address 725 E. Main St., Suite 200 (Street)

Santa Paula (City) CA. (State) 93061 (Zip)

Telephone Number (805) 656-2445

Seneca Resources Corporation (Name of Operator)

By James A. Beck (Name-Printed)

James A. Beck (Name-Signature) 6/14/90 (Date)

Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

OG107 (8/87/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF PROPERTY AND WELL TRANSFER

Field or county	District
Ojai	2
Former owner	**Date**
Argo Petroleum Corp.	Sept. 10, 1987

Name and location of well(s)

Sec. 16, T. 4N., R. 21W., SBB&M

"Barker-Ferndale" 1	(111-20423)	"Valex-Ferndale" 211	(111-21178)
"Barker-Ferndale" 2	(111-20604)	"Valex-Ferndale" 214	(111-21180)
"Barker-Ferndale" 3	(111-20609)	"Valex-Ferndale" 215	(111-21206)
"Barker-Ferndale" 4	(111-20685)	"Valex-Ferndale" 313	(111-21314)
"Barker-Ferndale" 5	(111-20702)	"Ferndale" 8	(111-20732)
"Barker-Ferndale" 6	(111-20730)		
"Valex-Ferndale" 107	(111-21066)		
"Valex-Ferndale" 110	(111-21163)		
"Valex-Ferndale" 209	(111-21105)		

Description of the land upon which the well(s) is (are) located

Date of transfer, sale, assignment, conveyance, or exchange	New owner / Address	Type of organization / Telephone No.
7-17-87	Seneca Resources Cprporatipn 511 16th St. Mall, Ste 300 Denver, CO 80202	Corp. (303) 825-7401

Reported by
Seneca Resources Corp.

Confirmed by
Argo Petroleum Corp.

New operator new status (status abbreviation)	Request designation of agent
PA	
Old operator new status (status abbreviation)	**Remarks**
PA	

Deputy Supervisor: Patrick J. Kinnear

Signature: Patrick J. Kinnear

OPERATOR STATUS ABBREVIATIONS

PA – Producing Active
NPA – No Potential, Active
PI – Potential Inactive
NPI – No Potential, Inactive
Ab – Abandoned or No More Wells

FORM AND RECORD CHECK LIST

Form or record	Initials	Date	Form or record	Initials	Date
Form OGD121			Map and book		
Form ODG148			Notice to be cancelled		
New well cards			Bond status		
Well records			EDP files		
Electric logs					
Production reports					

DIVISION OF OIL AND GAS
RECEIVED
DEC 2 - 1982
SANTA PAULA, CALIFORNIA

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Argo Barker Ferndale #4, Sec 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-20685 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 11-29, 1982

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

RECOMPLETION HISTORY

Date	
10-20-82	MIRU. Bled well. Unable to work pump loose. Backed off rods - unscrewed 112 doubles down (single & pump left in hole). POH with rod. Removed tree. Installed BOPE. Unable to bleed casing down. BS & worked gas out. Unland tbg. Start POH with tbg. (wet).
10-21-82	Finish POH. Lay down 2 3/8" tbg. RU 2 3/8" Buttress tbg. MU STC & 4½" 13½# positive scraper on tbg. & RIH. Tag fill @ 7378'. CO to 7446'. Start POH.
10-22-82	Finish POH with tbg. Lay down scraper. RIH with STC. Tag bottom @ 7421' (tbg. measurement). BS tbg. for 1 hr. RU Halliburton. Spot 1000 gals. 15% HCl & additive @ 7390'. Tore out Halliburton. Pull tbg. to 1000'. SJD.
10-23-82	POH with tbg. RU Welex. Perforate 4 (0.39") JHPF at 7425' (gun misfired). TD wireline @ 7440'. Start POH with guns. Unable to pull past 6294'. Wireline pulled out of rope socket. RIH with 3 3/4" OD overshot, bumper sub & jars on tbg. Tag guns on bottom @ 7390'. POH. Recovered guns. RIH with tbg. to @ 1000'. SJD.
10-24-82	POH with tbg. RU welex. Perf'd 4 (0.39") JHPF: 6792', 6802', 6817', 6835', 6851', 6860', 6869', 6876', 6883', 6896', 6906', 6935', 6949', 6960', 6977', 7003', 7049', 7066', 7075', 7091', 7114', 7131', 7141', 7148', 7156', 7196', 7203', 7217', 7228', 7239', 7246', 7257', 7266', 7279', 7326', 7332', 7349', 7357', 7370', 7389', 7396½', 7404', 7411', 7418'. RD Welex. Surge acid into perfs using 40 bbls. lease oil. Hydrotest tbg. into hole at 5000#. Tagged bottom - no fill. Pull up & land tubing with tail @ 7110'. Remove BOPE. Install tree. RIH with exchange pump & rods. Seated pump. Fill & pressure tbg. to 300#. Spaced rods. Hung well on. SDJ.
10-25-82	Respaced well. RDMO. RTP.
10-25-82	130 bbls. gross. 12% cut. 250# tbg/csg. 18/64" bean. 20½ hr. prod.
10-26-82	108 bbls. gross. 15% cut. 250# tbg/csg. 18/64" bean. 24 hr. prod.
10-27-82	81 bbls. gross. 18% cut. 230# tbg/csg. 13/64" bean. 24 hr. prod.
10-28-82	71 bbls. gross. 8% cut. 240# tbg/csg. 13/64" bean. 24 hr. prod.

DIVISION OF OIL AND GAS
RECEIVED
DEC 2 - 1982
SANTA PAULA, CALIFORNIA

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well A.D.P. Federal #1 Sec. 8, T 4N, R 21W, S.B. & M.
A.P.I. No. 111-20621 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 11-24, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

RECOMPLETION HISTORY

Date	
10-27-82	MIRU prod. rig. Unable to work pump loose. Backed off rods & spidered out w/ same. Bled csg. Removed tree. Installed BOPE. Measured tbg. out of hole, stripping out rods. MU 2 3/8" STC & RIH w/tbg. Tagged fill @ 4787'. Rigged pump tank, unable to get pump started.
10-28-82	Ran tbg., tagged fill @ 4787'. Cleaned out sand to bottom @ 4961'. Pulled out of liner. Tested to 1000 psig. (Test witnessing waived by Hal Stoops, USGS.) Finished POH w/tbg. MU 3 3/4" bit & wire brush. RIH w/ tbg. & worked brush thru perfs 4800'-4870'. Found tight spot 4882'-4921'. Went to bottom O.K. POH. RIH w/ 10 doubles tubing.
10-29-82	Pulled 10 doubles tbg. MU 3 3/4" wash pipe w/ bumper sub. Ran tbg. Work wash pipe in top of 4½" liner. Wash pipe stopped @ 4203'. Worked down to 4235'. Unable to go below this point. POH. Lay down bumper sub & wash pipe. Unload wire wrap liner. Clean & plastic paint all blank spots on liner w/ PA-501. Touch up & catalyst. Stand by for Dia-Log. RU Dia-Log. Ran minimum ID log. Tagged fill @ 4915'. Run 10 doubles.
10-30-82	Pulled 10 doubles tbg. Unload six 3 1/8" drill collars. Made up 3 3/4" swedge, drill collars & Midway tools. Ran tbg. Tag fill @ 4914'. Pulled tbg. Laid down tools, installed bailing gate. Serviced rig, made up bailer w/ oil saver. Bailed from 4922'-4937'. Looped & kinked sand line. Cut & tied line. Pull bailer out of hole.
10-31-82	Shut down T&T to repair sand line. RIH w/ bailer. Tag fill @ 4940'. Bail to 4961'. RIH w/ 3 7/8" swedge. Work thru tight spots @ 4226' & 4850'. Tight spot @ 4226' got progressively worse as job progressed. Required 26,000# to pull thru. Pull above liner.
11-1-82	Finished POH. Stood back DC's & laid down tools. RIH w/ bailer & tagged @ 4960'. RU Welex. RIH w/ 3 1/8" x 25' gun, unable to get below 4835'. POH. Reran gun w/ tapered bull-nose. Still unable to spud deeper than 4835'. POH. RIH w/ 3 1/8" x 13' gun. Worked thru the restriction once but could not work thru again. POH - perforating postponed. Tore out Welex. RIH w/ 3 7/8" swage & tools. Worked thru tight spot @ 4226' (taking 26,000# to pull back thru). Worked thru tight spot @ 4835', appeared very minor. Pulled up & worked on 4226' restriction. Pulled above liner.
11-2-82	Ran swedge thru tight spot @ 4216'. Work thru tight spot @ 4835'. POH. Stand back

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well A.D.P. Federal #1, Sec. 8, T 4N, R 21W, S.B B. & M.
A.P.I. No. 111-20621 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 11-24, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address)

(805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
11-2-82	(Continued from Page 1) drill collars. RU Welex, ran 2 3/4" guns, perforate 4834'-4864', ran 3 1/8" gun, perf 4797'-4834'. Tore out Welex. RIH w/ 3½" wash pipe, bumpersub, & jars. Found no restrictions in liner. Pull above liner top.
11-3-82	Reran 3½" wash pipe to 4949', no restrictions seen. POH. Cleaned, measured, rabbitted, touched up TK-65 coating on 2 7/8" TDC buttress inner liner. Ran 3 jts. Johnson wire-wrapped screen (0.010" screen opening) & 19 jts. blank. MU Baker lead seal hanger (4½" x 2 7/8"). Rabbitted & measured in w/ work string. Set hanger top @ 4211.13'. Bottom of liner @ 4884'. Screen 4780.65'-4872.41'. Released from liner & POH. Laid down 24 jts. 2 3/8" tbg., bailer & DC's. MU sawtooth bar collar & TL PS, & started in hole.
11-4-82	Loaded out Midway & H&H Tools. Finished RIH w/ tbg. Tagged inner liner hanger top @ 4210.5'. Pulled up & landed w/ tail @ 4152'. Removed BOPE. Installed tree. RIH w/ 2 x 1½ x 10 RWA pump on 3/4" rods. Spaced well. Put on prod.
11-5-82	44.8 bbls. gross. W/H cut 80% (1% sand). 24 hours.
11-6-82	39.8 bbls. gross. W/H cut 80% (1% sand). 90# on csg/tbg. 16/64" bean. 24 hrs.
11-7-82	28.9 bbls. gross. 90% cut. 90# tbg/csg. 16/64" bean, 24 hrs.
11-8-82	38 bbls. gross. W/H cut 90.0%. 90# tbg/csg. 16/64" bean, 24 hrs.
11-9-82	53 bbls. gross (29 net). 45.3% cut. 90# tbg/csg., 16/64" bean, 24 hrs.
11-12-82	39.5 bbls. gross. 70% W/H cut. 90# tbg/csg. 16/64" bean, 24 hrs.

FORM OG111(10/81/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 282-389

REPORT ON PROPOSED OPERATIONS

520 (field code)
12 (area code)
10 (new pool code)
10 (old pool code)

Mr. Harry Hull, Agent
Argo Petroleum Corporation
P.O. Box CI
Ventura, CA 93002

Santa Paula, California
Oct. 21, 1982

Your _____ proposal to alter casing in well "Barker-Ferndale" 4,
A.P.I. No. 111-20685, Section 16, T. 4N, R. 21W, SB B. & M.,
Ojai field, Silverthread area, Miocene pool,
Ventura County, dated 10/20/82, received 10/21/82 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Hole fluid of sufficient quality and quantity shall be maintained in the hole to control any subsurface condition, and a reserve supply shall be on hand for emergencies.
2. Blowout prevention equipment of at least DOG Class II 1M shall be installed and maintained in operating condition at all times.
3. Wire line operations shall be conducted through at least a 1M lubricator.
4. The division will monitor the monthly productionof this well for a period of six months - and if anomalous water production is indicated, remedial action will be ordered.
5. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.

Blanket Bond
RLH:b

M. G. MEFFERD, State Oil and Gas Supervisor

By Murray W. Dosch
Murray W. Dosch, Deputy Supervisor RLH

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

DIVISION OF OIL AND GAS
RECEIVED
OCT 21 1982
SANTA PAULA, CALIFORNIA

PW

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered canceled.

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
BB	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well No. Ferndale #4 R/D, API No. 11120685,

Sec. 16, T. 4N, R12W (21W), SB B. & M., Silverthread Field, Ventura County.

The present condition of the well is as follows:

1. Total depth. 7486'

2. Complete casing record, including plugs and perforations:
   9 5/8" (36#, K-55) cmt'd @ 828'
   7" M.O. (23 & 26#, K-55) cmt'd @ 4462'
   4½" liner (11.6 & 13.5#, N-80 & K-55) hung @ 4349' cmt'd @ 7485'
   Liner plugged back to 7446'
   Perforations: 7406'-7427', 7041'-7102', 6914'-6995', 6796'-6827'.

3. Present producing zone name Miocene Zone in which well is to be recompleted Miocene

4. Present zone pressure 1000 psig New zone pressure 1000 psig

5. Last produced Current (Date) | 27 (Oil, B/D) | 1 (Water, B/D) | 40 (Gas, Mcf/D)

   or

6. Last injected (Date) | (Water, B/D) | (Gas, Mcf) | (Surface pressure, psig.)

The proposed work is as follows:

MIRU production rig. Install BOP. Run csg. caliper log. RU wireline perforaters and perforate selectively in the following intervals:
7326'-7425', 7196'-7279', 7049'-7156', 6792'-7003'. Return well to production.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 940 E. Santa Clara Street (Street)
Ventura (City) CA (State) 93001 (Zip)
Telephone Number (805) 653-5111

Argo Petroleum Corporation (Name of Operator)
By Harry Hull (Name) 10-20-82 (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
AUG 25 1978
SANTA PAULA, CALIFORNIA

WELL SUMMARY REPORT

SUBMIT IN DUPLICATE

Operator Argo Petroleum Corporation, Well No. ARGO BARKER FERNDALE #4 R/D, API No. 111-20685-01,

Sec. 16, T. 4N, R. 21W, S.B. B. & M., Silverthread Field, Ventura County.

Location 2908' E along section line and 1077' S at right angles from the NW corner of Section 16. Elevation of ground above sea level 1061 feet.
(Give surface location from property or section corner, or street center line and/or lambert coordinates)

All depth measurements taken from top of KB which is 12 feet above ground.
(Derrick Floor, Rotary Table or Kelly Bushing)

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Date June 6, 1978 Signed C. Bozeb

Jack Cook (Engineer or Geologist) Title Exec. Vice-President

Commenced drilling 3-19-78

Completed drilling 4-15-78

Total depth (1st hole) 7486 (2nd) (3rd)

Present effective depth 7306 (sand plug)

Junk

Commenced producing 7-3-78 (Date) ~~flowing/gas lift~~/pumping (Cross out unnecessary words)

GEOLOGICAL MARKERS	DEPTH

Formation and age at total depth Miocene

Name of producing zone Miocene

	Clean Oil bbl. per day	Gravity Clean Oil	Per Cent Water including emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressure
Initial production	40	30.1	4.0	63	140	140
Production after 30 days	32	30.1	1.2	59	120	160

Casing Record (Present Hole)

Size of Casing (A. P. I.)	Depth of Shoe	Top of Casing	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Numbers of Sacks or Cubic Feet of Cement	Depth of Cementing if through perforations
9 5/8	828	Surface	36#	K-55 LT&C	New	12¼"	500 cf	
7	4462 (window)	"	26&23#	K-55 LT&C	New	8 3/4"	305 cf	
4½"	7485	4349	13.5 & 11.6#	N-80 & K-55 LT&C	New	6 1/8"	650 cf	

Perforated Casing
(Size, top, bottom, perforated intervals, size and spacing of perforation and method.)

(3 - 3/8" jets: 7427-7406' (10 holes) ineffective) 2 - ¼" jets: 7102-7041 (12 holes)

2 - ¼" jets: 6995-6914 (14 holes)

3 - ¼" jets: 6827-6796 (15 holes)

Was the well directionally drilled? Yes If yes, show coordinates at total depth See survey

Electrical log depths 7482-4461 Other surveys DIL, FF, DEN, DIP, SONIC, CBL, CCL, GRL

OG 100 ATTACH ONE COPY OF EACH LOG AND SURVEY 20795-705 1-74 3M ② OSP

SUBMIT IN DUPLICATE

20798-705 1-74 6M ② OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR Argo Petroleum Corporation FIELD Silverthread

Well No. ARGO BARKER FERNDALE #4 R/D, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date June 6, 19 78 Signed C. Hasenb

940 East Santa Clara
Ventura, California 93001 (805) 648-2514 Title Exec. Vice-President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date 1978	
3-8	MIRU T&T. Pulled and laid down rods and pump. Removed production tree. Installed mechanical gate. Lowered tbg to 6307'. Installed BOE.
3-9	Rigged up BJ cmtrs and pumped in 140 bbls water to fill hole. Pumped in 120 cu. ft. neat class "G" cmt thru tbg hung at 6307'. Disp w/182 cu. ft. water. CIP at 11:15AM. WOC 4 hrs. Tagged top of cmt at 5858'. Location and hardness of cmt witnessed and approved by DOG. POH w/tbg. Rigged up GO International and shot 4 - ½" holes 4600-4601'.
3-10	RIH w/Baker full bore pkr and set at 4446'. Backed up annulus w/1500 psi. Unable to circ thru 9 5/8" x 7" annulus. Pumped 100 cu. ft. water w/3200 psi at 8 CFM. Pumped in 50 cu. ft. neat class "G" cmt. Disp w/172 cu. ft. water. Maximum pressure 3000 psi. WOC 4 hrs. POH w/tbg. Bottom 8 jts cmt up. Archer Reed tagged cmt at 4445'.
3-11	Laid down 2 7/8" tbg. Removed BOE. Installed tree. Released T&T.
3-17	MIRU Camrich Drilling Co. Rig #1. Drilled rat hole. Picked up 3½" DP.
3-18	RIH w/6 1/8" bit. CO cmt 4446-4550'. POH. Rigged up Welex and ran CBL 4550-4400'. RIH w/7" section mill.
3-19	Milled 7" csg 4462-4504'. POH w/mill. RIH w/12¼" hole opener. Opened hole from 4462-4504'. Circ hole clean. POH. RIH w/3½" open end DP to 4545'.
3-20	HOWCO pumped 50 cu. ft. water ahead and followed w/90 cu. ft. class "G" cmt mixed w/20% sand. Disp w/178 cu. ft. mud. CIP at 1:40AM. POH. RIH w/DA to 4000'. WOC 4 hrs. CO soft cmt 4261-4266'. WOC 8 hrs. CO soft cmt to 4380'. WOC 4 hrs. CO to 4388'. WOC 4 hrs. CO to 4400'.
3-21	WOC 4 hrs. CO to 4466'. POH. RIH w/6 1/8" DD. DD from 4466' to 4541'.
3-22	POH w/DD. RIH w/DA w/6 1/8" bit. Changed over to Ken-X drilling fluid. Drilled from 4541-4664'. Reamed from 4541-4591'.
3-23	Drilled to 4910'. Reamed from 4748-4910'.

OG 103

SUBMIT IN DUPLICATE

20798-705 1-74 8M ② OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR Argo Petroleum Corporation FIELD Silverthread

Well No. ARGO BARKER FERNDALE #4 R/D, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date June 6, 19 78 Signed

940 East Santa Clara
Ventura, California 93001 (805) 648-2514 Title Exec. Vice-President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1978	
3-24	Drilled to 5075'. Built mud wt to 72#. Chg bits. Hit fill at 4719'. CO fill and built wt to 75#. CO fill 5004-5075'. Built mud wt to 77#.
3-25	Reamed from 4960-5075'. Drilled to 5245'.
3-26	POH. RIH w/locked drilling set up. RIH. Hit fill at 4491'. Pulled up to shoe at 4462'. Ran in, CO fill 4491-4502'. Hit 7" csg stub. POH. Welex ran CBL. RIH w/Grant 6" x 15" HO. Opened hole from 4462-4502'. Cond mud. POH.
3-27	RIH w/3½" open end DP. Hit fill at 4492'. CO to 4502'. Cond hole. HOWCO pumped 50 cu. ft. Diesel and followed w/10 cu. ft. water and 100 cu. ft class "G" cmt pre-mixed w/20% sand + 3% CaCl2. Disp w/171 cu. ft. mud. CIP at 5:40AM. Pulled up to 3800', closed pipe rams and squeezed 10 cu. ft. cmt away. WOC. POH. RIH w/DA. Tagged cmt at 4162'. Changed over to clay base mud. WOC. CO cmt stringers and soft cmt to 4350'. WOC 4 hrs. CO soft cmt to 4364'. WOC.
3-28	CO cmt to 4456'. Polished off plug to 4466'. Cond mud. POH w/DA. RIH w/DD. DD to 4547'. Kicked into old hole. POH w/DD.
3-29	RIH w/DA. Hit fill at 4598'. CO to 5245'. Reamed from 5184-5245'. Reamed from 4466-4749'.
3-30	Drilled to 5409'.
3-31	Reamed from 5350-5409'. Drilled to 5497'.
4-1	Drilled to 5672'.
4-2	Drilled to 5993'.
4-3	Drilled to 6242'. Reamed tight hole from 5872-5993'.
4-4	Drilled to 6392'. Reamed from 5829-6351'.
4-5	Drilled to 6432'. Cond hole. POH. RIH w/Reese 5 3/4" x 6 1/8" core barrel + jars. RIH to 6392'. Unable to circ. Pulled up to 6267'. Reamed to 6362'. (Had 1580 units of trip gas). POH. Laid down core barrel.

OG 103

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
AUG 25 1978
SANTA PAULA, CALIFORNIA

History of Oil or Gas Well

OPERATOR Argo Petroleum Corporation FIELD Silverthread

Well No. ARGO BARKER FERNDALE #4 R/D, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date June 6, 19 78 Signed

940 East Santa Clara
Ventura, California 93001 (805) 648-2514 Title Exec. Vice-President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1978	
4-6	RIH w/DA. Reamed from 6119-6432'. (Had 1060 units of trip gas). Cond mud. POH. RIH w/Reese 4½" x 5 7/8" core barrel. RIH to 6360'. Plugged CB. POH and laid down CB. RIH w/DA. Ran in to 5933'. Unable to circ. Pulled up to 5622'. Circ OK.
4-7	Circ down to 5740'. Hole started packing off. Pulled up to 5473'. Unable to circ. Pulled up to 5158'. Circ out running shale. CO to 5190'.
4-8	Raised mud wt to 94#. CO to 5442'. CO and reamed 5442-5990'.
4-9	CO and reamed from 5990-6432'. Drilled to 6496'.
4-10	Drilled to 6752'. Reamed from 6117-6157' & 6396-6436'.
4-11	Drilled to 6789'. Cond mud for loggers. POH. Rigged up Schlumberger. Ran DIL log 6789-4461', and took sidewall samples. Moved out loggers. RIH w/DA. Reamed from 6519-6789'. Drilled to 6859'.
4-12	Drilled to 7166'. Reamed from 6645-6685' and 6934-7034'.
4-13	Drilled to 7353'. Reamed 6670-6720' & 6829-7322'.
4-14	Reamed from 7322-7353'. Drilled to 7486'. Reamed from 7269-7408'. Cond mud to log. POH. Rigged up Schlumberger.
4-15	Ran DIL, FF, DENSITY, DIPMETER, SONIC LOGS and took sidewall samples. RIH w/DA. Reamed from 6861-7486'.
4-16	Cond mud for csg. POH. Ran 4½" csg as follows: 67 jts, 13.5#, LT&C, N-80, Oilwell csg (2774.61'), and 9 jts, 11.6#, LT&C, K-55 Bakersfield Pipe & Supply csg (344.43'). Total of 76 jts = 3119.04' + Brown 7" x 4½" liner hanger = 17.58'. Cent on every other jt. Hung 4½" csg at 7485', top of hanger at 4349'. HOWCO pumped 50 cu. ft. water ahead and followed w/650 cu. ft. class "G" cmt pre-mixed 1:1 POZ + 4% gel + 0.75% CFR2 + 12% salt. Disp w/441 cu. ft. mud. CIP at 5:30PM. Bumped plug w/2500 psi. Pulled stinger out of liner and backscuttled clean. No cmt returns. POH.

SUBMIT IN DUPLICATE

20798-705 1-74 8M ② OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR Argo Petroleum Corporation FIELD Silverthread

Well No. ARGO BARKER FERNDALE #4 R/D, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date June 6, 19 78 Signed C. Bowles

940 East Santa Clara
Ventura, California 93001 (805) 648-2514 Title Exec. Vice-President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date 1978	
4-17	Rigged up Triangle and ran temp survey. RIH w/6 1/8" bit and tagged top of liner at 4349'. POH. RIH w/3 3/4" bit on 2 - 2 7/8" DC + 105 jts of 2 3/8" tbg + 3½" DP. Tagged cmt stringers at 7353'. CO to baffle collar at 7446'. Circ hole clean.
4-18	Changed hole fluid over to water. POH. Laid down 3½" DP. RIH w/93 jts of 2 3/8" tbg.
4-19	Landed tbg on donut at 2866'. Released rig at 3:00 AM.
4-20 and 4-21	Moving out drilling rig.
4-22	MIRU CPS. Installed BOE. Tested csg at 2000 psi. OK. Schlumberger attempted to run CBL. Stoppped at 6000'. POH.
4-23	RIH w/3 3/4" bit, stopped at 7420'. Worked to 7445'. Circ bottoms up. Had samll amount of rubber and gas in returns. POH. Schlumberger ran CBL, CCL & GRL, 7436-4346'.
4-24	RIH w/Baker full bore w/Model "N" tbg tester. Ran in to 4248'. Closed tester and tested tbg to 3000 psi. OK. Closed full bore, pumped in 2½ BPM at 3000 psi. Mixed and pumped in 115 cu. ft. class "G" cmt. Disp w/116 cu. ft. water. Final squeeze press 3200 psi. WOC 4 hrs. Released tool and POH.
4-25	RIH w/2 - 2 5/8" DC and 6 1/8" bit. CO cmt from 4082-4349'. Press test at 2000 psi. OK. POH. RIH w/3 3/4" bit to top of liner.
4-26	Drilled cmt 4349-4353'. Press tested lap at 2000 psi for 15 min. OK. RIH to 7445', BS clean. POH. Schlumberger unable to work logging tool into liner. POH.

SUBMIT IN DUPLICATE

20798-705 1-74 8M ③ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR Argo Petroleum Corporation FIELD Silverthread

Well No. ARGO BARKER FERNDALE #4 R/D, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date June 6, 19 78 Signed C. Bozenko

940 East Santa Clara
Ventura, California 93001 (805) 648-2514 Title Exec Vice-President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date 1978	
4-27	RIH w/3 3/4" bit + 4½" Baker csg scraper. Scraped liner 4349-4395'. RIH to bottom. POH. Schlumberger ran CBL & CCL from 4739-4335'. Moved out logger. RIH w/Johnston tester. Set test tool at 4285' w/tail to 4295'. Opened tool at 6:15PM. Had slight blow after 5 min, then dead remainder of test. Closed tool at 7:15PM. POH. IH = 1808 psi, IF = 31 psi, FF = 31 psi, FH = 1808 psi. Test witnessed and approved by DOG.
4-28	RIH w/4½" Baker full bore w/2 3/8" top lock shoe above FB. RIH to 7295', changed over to lease crude, set FB at 7295'. Swabbed luid down to 2900'. Laid down swab. Schlumberger shot 3 - 3/8" HPF at 7427, 7420, 7414, 7406. POH. Shut down.
4-29	No press on csg or tbg. Ran swab to 3900', fluid at 3600'. Pulled swab, let set ½ hr. Ran swab to 3900'. No fluid entry. Pumped 18 bbls oil down tbg. Press to 2000 psi. Dowell pressured tbg to 5250 psi. Unable to break down shot holes. Pulled full bore loose and POH. RIH w/STC to 7420. Dowell pumped in 20 cu. ft. 20/40 mesh sand down tbg. Disp w/28 bbls oil. Pulled up to 7" csg. Shut down.
4-20	POH. Ran swab, tagged fill at 7306'. POH. RIH w/4½" Baker full bore + 2 3/8" T/L shoe 1 jt up. Set FB at 6747'. Filled tbg and press to 2000 psi. OK. Swabbed fluid level to 4000'. POH w/swab. Schlumberger using a thru tbg jet gun, perf'd w/2 - ¼" jet holes at each of the following intervals: 7102' 7061' 7095' 7055' 7083' 7041' (Total 12 holes) Moved out Schlumberger. Shut down.
5-1	TP = 370 psi. Placed well on production thru 6/64" bean at 9:15AM, TP = 100 psi. At 10:15AM TP = 150 psi. 11:15AM TP = 80 psi. 1:30PM TP = 50 psi. Well produced all gas. Shut in until 5:30 PM. TP - 100 psi. Put well on production. Well heading slightly. Installed 12/64" bean at 7:00 PM. Well headed w/little TP. Installed 10/64" bean. Shut in.

OG 103

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
AUG 25 1978
SANTA PAULA, CALIFORNIA

History of Oil or Gas Well

OPERATOR Argo Petroleum Corporation FIELD Silverthread

Well No. ARGO BARKER FERNDALE #4 R/D, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date June 6, 19 78 Signed

940 East Santa Clara
Ventura, California 93001 (805) 648-2514 Title Exec. Vice-President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date

1978

5-2 TP = 570. At 7:45 AM placed well on production 10/64" bean. Produced 9½ bbls at 1:00 PM, TP = 125. Installed 12/64" bean, prod 1 bbls at 3:00 PM. Opened well, and ran swab. RUN #1: FL at 1500', rec 10.86 bbls including ½ hr flowing. RUN #2: FL at 2800', rec 4.66 bbls. RUN #3: FL at 4000', rec 1.9 bbls, no follow up, gas only. RUN #4: FL at 4300', no recovery. Total fluid swabbed and flowed = 29 bbls. Laid down swab. Ran sinker bar, tagged fill at 7308'. Shut down.

5-3 TP = 470. Opened tbg and bled off gas. Filled tbg w/16 bbls lease crude. Pressured to 1800 psi. Bled off to 1200 psi in 5 min. Released and POH w/full bore. RIH w/4½" FB + 1 jt 2 3/8" tbg + remainder of 2 7/8" tbg. Set FB at 4378'.

5-4 Installed frac head. Dowell sand frac'd down tbg the interval 7102-7041'. Moved out Dowell. Removed frac head. Flowed well to tank thru 8/64" bean. Pressures: 3000 psi at 9:15PM, 2000 psi at 9:30PM, 1340 psi at 10:30PM, 1086 psi at 11:00 PM, 940 psi at 11:30PM.

5-5 740 psi at 6:30AM. Flowed 95 bbls in 9 hrs 15 min. Subsequent pressures and rates:

PSI	TIME	BBLS
720	8:00AM	
740	9:00AM	4.2
720	10:00AM	4.9
720	11:00AM	4.3
720	12:00AM	4.4
700	1:00PM	3.9
690	2:00PM	4.1
680	3:00PM	4.0
680	4:00PM	4.9

Total oil flowed back = 137.7 bbls w/trace of water. Closed well in. Opened unloader on FB. Pumped 170 bbls, 73# Ken-X down csg and killed well. POH w/FB.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
AUG 25 1978
SANTA PAULA, CALIFORNIA

History of Oil or Gas Well

OPERATOR Argo Petroleum Corporation FIELD Silverthread

Well No. ARGO BARKER FERNDALE #4 R/D, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date June 6, 19 78 Signed C. Dysinger

940 East Santa Clara
Ventura, California 93001 (805) 648-2514 Title Exec. Vice-President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date

1978

5-6 RIH w/Baker ret BP. Well folowing thru tbg. Set Otis tbg at 42'. Set BP at 7019'. Pressured csg to 2000 psi. OK. Ret tbg plug. Changed over to lease crude. POH w/tbg.

5-7 RIH w/4½" Baker full bore and set at 4741'. Swabbed fluid level down to 4000'. Schlumberger, using a thru tubing jet gun, perf'd 2 - ½" jet holes at each of the following intervals:

6995'	6929'
6987'	6921'
6970'	6914'
6954'	(Total 14 holes)

Moved out Schlumberger. Swabbed from 3800 to 4300'. Shut in at 7:30PM.

5-8 TP = 300 psi at 7:30 AM. Installed frac head. Rigged up Dowell and sand frac'd down tbg the interval 6995-6914'. Removed frac head. Opened well at 3:00 PM thru 1/8" bean.

TIME	PSI	BBLS	CUM BBLS
3:00PM	2550	----	----
4:00	375	10.8	10.8
5:00	400	6.5	17.3
6:00	350	5.4	22.7
7:00	300	5.4	28.1
8:00	250	3.1	31.2
9:00	250	3.8	35.0
6:00AM 5-9-78	380	28.0	63.0

5-9 Well flowing load oil at 2 BPH rate. Shut in. Changed over to 73# Ken-X. Released FB and POH. RIH w/Baker ret BP to 5600'. Well flowing thru tbg. Attempted to set tbg plug.

5-10 Set tbg plug at 96'. RIH w/BP. Tagged fill at 6618'. POH. RIH w/STC, CO bridge at 6618'. CO frac sand 6735-6895'. POH to 4300'.

SUBMIT IN DUPLICATE

20798-705 1-74 8M ② OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR Argo Petroleum Corporation FIELD Silverthread

Well No. ARGO BARKER FERNDALE #4 R/D, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date June 6, 19 78 Signed

940 East Santa Clara
Ventura, California 93001 (805) 648-2514 Title Exec. Vice-President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date

1978

5-11 POH w/STC. RIH w/4½" Baker ret BP and set at 6870'. Changed over to lease crude. POH. RIH w/Baker FB and set at 4742'. Swabbed fluid down to 4000'. Schlumberger, using a thru tbg jet gun, perf'd w/2 - ¼" jet holes at each of the following intervals:

6827'	6807'
6821'	6796'
6813'	

(Total 15 holes)

Well on vacuum after perf job.

5-12 TP = 0 psi. Installed frac head. Pressured annulus to 1500 psi. Dowell sand frac'd down tbg the interval 6827-6796'. Blender broke down. Cut job short. Removed frac head. Circ sand out of tbg. Changed over to Ken-X.

5-13 Released full bore and POH. RIH w/Baker ret tool. Tagged light sand at 5918'. CO to hard sand at 6648'. CO to BP at 6870'. Pulled BP above liner top.

5-14 POH w/BP. RIH w/Baker ret tool. Tagged fill at 6895'. CO to BP at 7019'. Pulled BP above liner top.

5-15 Unable to bleed well off. Pumped in 84# mud. Killed well. POH w/BP. Ran Otis and tagged fill at 7172'. (Bottom perf at 7102'). RIH w/Baker lock-set pkr + T/L pump shoe 2 jts above. RIH to 6147'. Well flowing. Closed well in.

5-16 Set Otis tbg plug. RIH w/Baker lock-set pkr at 7012. POH w/tbg plug. Disp Ken-X w/lease crude. Set pkr at 7012' w/1000# compression. Made feeler run to 7117'. Set Otis tbg plug at 274'. Removed BOE. Packer at 7012'. Pump shoe at 6945'.

5-17 Replaced leaking donut and flange. Installed production tree. Pulled tbg plug. Placed well on production thru 8/64" bean, at 8:30PM. Released rig.

5-18 Flowed 42 bbls in 23 hrs. TP = 280, CP = 1300.

SUBMIT IN DUPLICATE

20798-705 1-74 8M ② OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR Argo Petroleum Corporation FIELD Silverthread

Well No. ARGO BARKER FERNDALE #4 R/D, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date June 6, 19 78 Signed C. Bozek

940 East Santa Clara
Ventura, California 93001 (805) 648-2514 Title Exec. Vice-President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date
1978
5-19

Flowed 49 bbls, cut 0.2%, TP = 180, CP = 1320, 10/64" bean (Load oil).

SEALAND DIRECTIONAL DRILLING CO.

COMPANY ARGO PETROLEUM CORP. 111-20685 PAGE #1

WELL BARKER FERNDALE #4 R.D. #1 LOCATION FERNDALE RANCH DATE 3 - 78

	Measured Depth	Drift Angle	Vertical Depth	Drift Feet	Drift Direction	COORDINATES North	South	East	West	REMARKS
1	4500	16° 30'	4281 34	9 94	N 69° E	673 37		1085 41		
2	4591	18° 00'	4367 89	28 12	N 76° E	680 17		1112 70		
3	4727	18° 15'	4497 05	42 59	N 75° E	691 19		1153 84		
4	4880	18° 00'	4642 56	47 28	N 74° E	704 22		1199 29		
5	4975	17° 30'	4733 16	28 57	N 75° E	711 61		1226 88		
6	5068	16° 15'	4822 44	26 02	N 75° E	718 35		1252 02		
7	5191	13° 30'	4942 04	28 71	N 76° E	725 30		1279 88		
8	5223	12° 30'	4973 28	6 93	N 76° E	726 98		1286 60		
9	5409	10° 30'	5156 17	33 90	N 70° E	738 57		1318 45		
10	5512	9° 45'	5257 68	17 44	N 69° E	744 82		1334 73		
11	5667	9° 30'	5410 55	25 58	N 68° E	754 40		1358 45		
12	5746	8° 30'	5488 68	11 68	N 66° E	759 15		1369 12		
13	5839	7° 45'	5580 83	12 54	N 67° E	764 05		1380 66		
14	5962	6° 15'	5703 10	13 39	N 59° E	770 95		1392 14		
15	6128	5° 30'	5868 34	15 91	N 54° E	780 30		1405 011		
16	6283	4° 30'	6022 86	12 16	N 66° E	785 25		1416 12		
17	6432	4° 15'	6171 45	11 04	N 83° E	786 60		1427 08		
18	6789	5° 45'	6526 65	35 77	S 72° E	775 55		1461 10		DIVISION OF OIL AND GAS RECEIVED AUG 25 1978 SANTA PAULA, CALIFORNIA
19	7000	8° 00'	6735 60	29 37	S 44° E	754 43		1481 50		
20	7150	10° 30'	6883 09	27 34	S 37° E	732 60		1497 95		
21	7250	12° 00'	6980 90	20 79	S 29° E	714 42		1508 03		
22	7350	13° 30'	7078 14	23 34	S 24° E	693 09		1517 53		
23	2480	16° 00'	7203 10	35 83	S 08° W	657 61		1512 54		CLOSURE: 1649.31' N 60° 30' E

164-21 Revised #1

DIVISION OF OIL AND GAS
RECEIVED
JAN 12 1984
SANTA PAULA, CALIFORNIA

Geol

D-21

SEALAND DIRECTIONAL DRILLING CO.

COMPANY ARGO PETROLEUM CORP. PAGE #1

WELL BARKER FERNDALE #4 R.D. #1 LOCATION FERNDALE RANCH DATE 3 - 78

	Measured Depth	Drift Angle	Vertical Depth	Drift Feet	Drift Direction	COORDINATES North	South	East	West	REMARKS
1	4500	16° 30'	4281 34	9 94	N 69° E	673 37		1085 41		
2	4591	18° 00'	4367 89	28 12	N 76° E	680 17		1112 70		
3	4727	18° 15'	4497 05	42 59	N 75° E	691 19		1153 84		
4	4880	18° 00'	4642 56	47 28	N 74° E	704 22		1199 29		
5	4975	17° 30'	4733 16	28 57	N 75° E	711 61		1226 88		
6	5068	16° 15'	4822 44	26 02	N 75° E	718 35		1252 02		
7	5191	13° 30'	4942 04	28 71	N 76° E	725 30		1279 88		
8	5223	12° 30'	4973 28	6 93	N 76° E	726 98		1286 60		
9	5409	10° 30'	5156 17	33 90	N 70° E	738 57		1318 45		
10	5512	9° 45'	5257 68	17 44	N 69° E	744 82		1334 73		
11	5667	9° 30'	5410 55	25 58	N 68° E	754 40		1358 45		
12	5746	8° 30'	5488 68	11 68	N 66° E	759 15		1369 12		
13	5839	7° 45'	5580 83	12 54	N 67° E	764 05		1380 66		
14	5962	6° 15'	5703 10	13 39	N 59° E	770 95		1392 14		
15	6128	5° 30'	5868 34	15 91	N 54° E	780 30		1405 01		
16	6283	4° 30'	6022 86	12 16	N 66° E	785 25		1416 12		
17	6432	4° 15'	6171 45	11 04	N 83° E	786 60		1427 08		
18	6789	5° 45'	6526 65	35 77	S 72° E	775 55		1461 10		
19	7000	8° 00'	6735 60	29 37	S 44° E	754 43		1481 50		
20	7150	10° 30'	6883 09	27 34	S 37° E	732 60		1497 95		
21	7250	12° 00'	6980 90	20 79	S 29° E	714 42		1508 03		
22	7350	13° 30'	7078 14	23 34	S 24° E	693 09		1517 53		
23	7480	16° 00'	7203 10	35 83	S 08° W	657 61		1512 54		
										CLOSURE: 1649.31' N 60° 30' E

4850 - 4687

sec N72E from KOP (origin)

KB = 1073

D-21

SEALAND DIRECTIONAL DRILLING CO.

COMPANY Arso

WELL ARF #4 RD-1 LOCATION _____ DATE _____

STATION NO	MEASURED DEPTH	COURSE LENGTH	DRIFT ANGLE	VERTICAL COURSE	VERTICAL DEPTH	SECTION	COURSE DEVIATION	DRIFT DIRECTION	COORDINATE DIFFERENCES NORTH	COORDINATE DIFFERENCES SOUTH	COORDINATE DIFFERENCES EAST	COORDINATE DIFFERENCES WEST	RECTANGULAR COORDINATES NORTH	RECTANGULAR COORDINATES SOUTH	RECTANGULAR COORDINATES EAST	RECTANGULAR COORDINATES WEST
4400					4252 57								670 32	-20	1077 46	0
4465 KOP					4247 78	—							669 87		1076 13	
1	4500	35	16 30	33 56	4281 34	9.93	9 94	N 69 E	3 56		9 28		673 40		1085 41	
2	4591	91	18 —	86 55	4367 89	37.98	28 12	N 76 E	6 80		27 28		680 20		1112 69	
3	4728	137	18 15	130 11	4498 —	80.82	42 90	N 75 E	11 10		41 44		691 30		1154 13	
4	4880	152	18 —	144 56	4642 56	127.76	46 97	N 74 E	12 95		45 15		704 35 22	RPC	1194 29 8	
5	4975	95	17 30	90 60	4733 16	156.29	28 567	N 75 E	7 39		27 59		711 61		1226 88	
6	5068	93	16 15	89 28	4822 44	182.27	26 02	N 75 E	6 73		25 13		718 34		1252 01	
7	5191	123	13 30	119 60	4942 20	210.91	28 71	N 76 E	6 95		27 86		725 29		1279 87	
8	5323	32	12 30	31 24	4973 44 28	217.82	6 936	N 76 E	1 68		6 72		726 98		1286 60	
9	5409	186	10 30	182 89	5156 33	251.70	33 896	N 70 E	11 59		31 85		738 57		1318 45	
10	5512	103	9 45	101 51	5257 84	269.12	17 44	N 69 E	6 25		16 28		744 82		1334 73	
11	5667	155	9 30	152 87	5410 71	294.64	25 58	N 68 E	9 58		23 72		754 40		1358 45	
12	5716	79	8 30	78 13	5488 84 68	306.25	11 677	N 66 E	4 75		10 67		759 15		1369 12	
13	5839	93	7 45	92 15	5580 83	318.74	12 54	N 67 E	4 90		11 54		764 05		1380 66	
14	5962	123	6 15	122 37	5703 10	331.79	13 39	N 59 E	6 90		11 48		770 95		1392 14	
15	6128	166	5 30	165 24	5868 34	346.9	15 91	N 54 E	9 35		12 87		780 30		1405 01	
16	6283	155	4 30	154 52	6022 86	359	12 16	N 66 E	4 95		11 11		785 25		1416 12	
17	6432	149	4 15	148 59	6171 45	369.8	11 04	N 83 E	1 35		10 95		786 60		1427 08	
18	6789	357	5 45	355 20	6526 65	398.7	35 767	S 72 E		11 05	34 02		775 55		1461 10	
	7000	211	8 0.1	208 95	6735 60		29 37	S 44 E		21 13	20 40		754 42		1481 50	

Form 209

SEALAND DIRECTIONAL DRILLING CO.

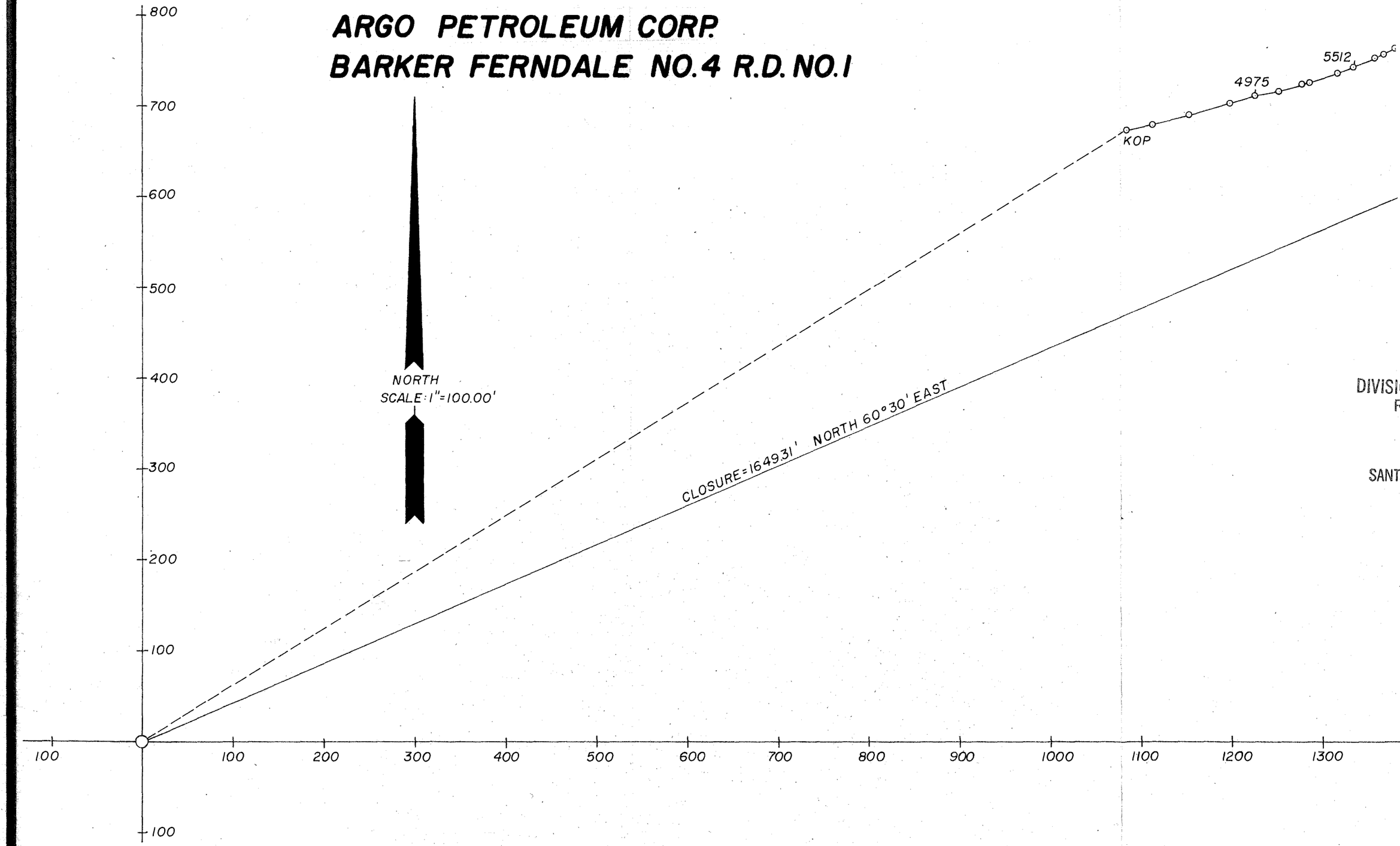
COMPANY _____

WELL _____ LOCATION _____ DATE _____

STATION NO	MEASURED DEPTH	COURSE LENGTH	DRIFT ANGLE	VERTICAL COURSE	VERTICAL DEPTH	SECTION	COURSE DEVIATION	DRIFT DIRECTION	COORDINATE DIFFERENCES NORTH	COORDINATE DIFFERENCES SOUTH	COORDINATE DIFFERENCES EAST	COORDINATE DIFFERENCES WEST	RECTANGULAR COORDINATES NORTH	RECTANGULAR COORDINATES SOUTH	RECTANGULAR COORDINATES EAST	RECTANGULAR COORDINATES WEST
	7150	150	10 30	147 49	6883 09		27 34	S 37 E		21 83	16 45		732 595		1497 95	
	7250	100	12 —	97 81	6980 90		20 79	S 29 E		18 18	10 08		714 41		1508 03	
	7350	100	13 30	97 24	7078 14		23 34	S 24 E		21 32	9 49		693 09		1517 52	
	7480	130	16 25	124 81	7202 95		~~25~~ 36 ~~80~~ 378	S 8 W		~~29~~ 36 51 02	4 15		657 07 ~~663~~ 58	~~632 63~~	1521 67	~~1543~~
TD	7486	86	16 25	82 56	7285 51		24 065	8		23 83	3 32		633 24 out		1524 99	~~1543 36 out~~
	7100		10 —					N 45 W								

Form 209

ARGO PETROLEUM CORP.
BARKER FERNDALE NO.4 R.D. NO.1



DIVISI
F

SANT

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

RECEIVED
JUN 21 1977
SANTA PAULA, CALIFORNIA

WELL SUMMARY REPORT

SUBMIT IN DUPLICATE

Operator ARGO PETROLEUM CORPORATION, Well No. ARGO BARKER-FERNDALE #4, API No. 111-20685

Sec. 16, T. 4N, R. 21W, S. B. B. & M., Silverthread Field, Ventura County.

Location 2908' E. along section line and 1077' S. at right angles from the
(Give surface location from property or section corner, or street center line and/or lambert coordinates)
NW corner of Sec. 16. Elevation of ground above sea level 1061 feet.

All depth measurements taken from top of KB which is 12 feet above ground.
(Derrick Floor, Rotary Table or Kelly Bushing)

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Date May 17, 1977 Signed C. Boerlage

Jack Cook
(Engineer or Geologist) Title Executive Vice President

Commenced drilling 9-1-76

Completed drilling 9-22-76

Total depth (1st hole) 6992' (2nd) (3rd)

Present effective depth 6871'

Junk

GEOLOGICAL MARKERS | DEPTH

Formation and age at total depth

Commenced producing 2-25-77 (Date) Flowing/gas lift/pumping (Cross out unnecessary words)

Name of producing zone Mohnian

	Clean Oil bbl. per day	Gravity Clean Oil	Per Cent Water including emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressure
Initial production	25	30.1°	42.0	39	190	-
Production after 30 days	28	30.1°	11.0	19	50	-

Casing Record (Present Hole)

Size of Casing (A. P. I.)	Depth of Shoe	Top of Casing	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Numbers of Sacks or Cubic Feet of Cement	Depth of Cementing if through perforations
9 5/8"	828'	Surface	36#	K-55 LT&C	New	12 1/4"	500 C.F.	
7"	6871'	Surface	26 & 23#	K-55 LT&C	New	8 3/4"	550 C.F.	

Perforated Casing

(Size, top, bottom, perforated intervals, size and spacing of perforation and method.)

4 - 0.35" Jets at int. from 6620' to 6758'. (Total of 36 holes)
4 - 3/8" Bullets at int. from 6619' to 6757'. (Total of 36 holes)
4 - 3/8" Bullets at int. from 6421' to 6535'. (Total of 24 holes)

Was the well directionally drilled? If yes, show coordinates at total depth Closure: 1239.08' N 69° 13' E.

Electrical log depths 6991' - 825' Other surveys DIL, DIPMETER, SONIC, DENSITY, CBL, CCL, GAMMA, MUD.

OG 100 ATTACH ONE COPY OF EACH LOG AND SURVEY

20796-705 1-74 3M ② OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

No. T 278-358

DIVISION OF OIL AND GAS

Report on Operations

Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, CA 90024

Santa Paula, Calif.
Nov. 20, 1978

Your operations at well "Parker-Ferndale" 4, API No. 111-20685-01, Sec. 16, T. 4N, R. 21W S.B. B.& M. Ojai Field, in Ventura County, were witnessed on 11/3/78. T. E. Adams, representative of the supervisor, was present from 0600 to 0800. There were also present Ed Hunter, pumper

Present condition of well: additions to the casing record since report No. T278-127: Perf. interval 7427-6796'; WSO, T.D. 7486.

The operations were performed for the purpose of demonstrating a water shut-off on the 4 1/2" casing by means of a production test.

DECISION:

THE 4 1/2" SHUT-OFF AT 6796' IS APPROVED.

b

H. G. MEFFERD
State Oil and Gas Supervisor

By
Deputy Supervisor
John L. Hardoin

OG109 (6-77-GSRI-15M)

FORM 109

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Report on Operations

No. T 278-127

Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, CA. 90024

Santa Paula, Calif.
May 3, 1978

DEAR SIR:

Operations at well No. "Barker-Ferndale" 4, API No. 111-20685-01, Sec. 16, T. 4N, R. 21W, S.B.B & M. Ojai Field, in Ventura County, were witnessed on 4/27/78. Mr. T.F.Adams & Ed Hickey, representative of the supervisor was present from 2000 to 2200. There were also present Jack Cook, company foreman

Present condition of well: additions to the casing record since Report No. T278-92: Lap test 7" x 4 1/2" Co 4349-7485', T.D. 7486'.

The operations were performed for the purpose of demonstrating that no fluid has access to the well through the seal between the 7" and 4 1/2" casings.

DECISION:

THE SEAL BETWEEN THE 7" AND 4 1/2" CASINGS IS APPROVED.

b

M. G. MEFFERD
~~JOHN F. MATTHEWS, JR.~~
State Oil and Gas Supervisor

By John L. Hardoin Deputy

FORM 109 (REV. 1-73)

10942-705 1-73 22M ② OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Report on Operations

No. T 278-92

MK Dr. Morris S. Frankel, Agent
Argo Petroleum Corp.
10880 Wilshire Blvd., Suite 1003
Los Angeles, CA. 90024

Santa Paula, Calif.
March 21, 1978

DEAR SIR:

Operations at well No. "Barker-Ferndale" 4, API No. 111-20685-01, Sec. 16, T. 4N, R. 21W, S.B., B & M. Ojai Field, in Ventura County, were witnessed on 3/20/78. MK Ms. Toni M. Callaway, representative of the supervisor was present from 1500 to 1630. There were also present F. Bumann, Camrich Drilling Company

Present condition of well: additions to the casing record since Report No. T278-85: window 4462'-4504'. Plugged ... cement, 4550-4388'.

The operations were performed for the purpose of testing the blowout prevention equipment and installation.

DECISION:

THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

b

M. G. MEFFERD
~~EXXX

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Report on Operations

No. T 278-85

xMr. Dr. Morris S. Frankel, Agent
Argo Petroleum Corp.
10880 Wilshire Blvd., Suite 1003
Los Angeles, Calif. 90024

Santa Paula, Calif.
March 13, 1978

DEAR SIR:

Operations at well No. "Barker-Ferndale" 4, API No. 111-20685-0(Sec. 16, T. 4N, R. 21W, S.B. B & M. Ojai Field, in Ventura County, were witnessed on 3/9/78. Mr. T. E. Adams, representative of the supervisor was present from 1600 to 1630. There were also present Warren Thompson, contract foreman

Present condition of well: additions to the casing record since proposal dated 2/8/78: plugged with cem. 6322-5858'.

The operations were performed for the purpose of witnessing the location and hardness of a cement plug placed below 5858'.

DECISION:

THE LOCATION AND HARDNESS OF THE CEMENT PLUG AT 5858' IS APPROVED.

b

M. G. MEFFERD
~~JOHN E. MATTHEWS, JR.~~
State Oil and Gas Supervisor

By John L. Hardoin Deputy
John L. Hardoin

OG109 (2-75—OSP—20M)

30986-705 2-75 20M ① OSP

RESOURCES AGEN OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 278-70

REPORT ON PROPOSED OPERATIONS

Santa Paula, California

Feb. 17, 1978

Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, Calif. 90024

Your proposal to plug back & redrill well "Barker-Ferndale" 4
(Name and number)
, A.P.I. No. 111-20685-01, Section 16, T. 4N, R. 21W,
S.B. B. & M., Ojai field, Ventura County,
dated 2-8-78, received 2-14-78, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Hole fluid of sufficient quality and quantity shall be maintained in the hole to control any subsurface condition, and a reserve supply shall be on hand for emergencies.
2. Any sump used during these operations shall be thoroughly cleaned and filled with earth as soon as operations are completed.
3. Materials placed in an unlined sump shall not contain contaminants or toxic substances.
4. Blowout prevention equipment of at least DOG Class III, 3M, A, shall be installed and maintained in operating condition at all times.
5. Blowout prevention practice drills shall be conducted at least weekly for each crew, and recorded in the log book.
6. The hole shall be plugged with cement from 6322' to 6037', or above.
7. Oil and gas zones back of the 5" casing shall be protected with cement.
8. This office shall be consulted before placing any plugs or sidetracking any hole.
9. THIS DIVISION SHALL BE NOTIFIED:
   a. TO INSPECT the installed blowout prevention equipment before commencing downhole operations.
   b. TO WITNESS the location and hardness of the cement plug at 6037', or above.
   c. TO WITNESS a production test of shut off within 30 days after completing the well.

NOTE: A COPY OF THIS APPROVAL SHALL BE AVAILABLE AT THE WELL SITE DURING THE PROPOSED OPERATIONS.

Blanket Bond
MD:b

M. G. MEFFERD
State Oil and Gas Supervisor

By
Deputy Supervisor

John L. Hardoin

OG111 (11-76—GSR1—30M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

RECEIVED
FEB 14 1978
SANTA PAULA, CALIFORNIA

DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	OGD114	OGD121
BB	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well No. ARGO BARKER FERNDALE #4, API No. _____,

Sec. 16, T. 4N, R. 21W, S.B.B. & M., Ojai Field, Ventura County.

The present condition of the well is as follows:

1. Total depth. 6992'.

2. Complete casing record, including plugs and perforations:

9 5/8" surface to 828'.

7" surface to 6871'.

3. Present producing zone name Miocene Zone in which well is to be recompleted Miocene

4. Present zone pressure 1800 New zone pressure 2000

5. Last produced currently (Date) | 24 (Oil, B/D) | 13 (Water, B/D) | 75 (Gas, Mcf/D)

or

6. Last injected ---------- (Date) | --------- (Water, B/D) | ---------- (Gas, Mcf) | --------- (Surface pressure, psig.)

The proposed work is as follows:

Plug back to 4800'. Redrill easterly to a proposed total depth of 7500'.

Proposed bottom hole 1630' N61°E of surface.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 940 East Santa Clara (Street)
Ventura, California 93001 (City) (State) (Zip)
Telephone Number (805) 648-2514

ARGO PETROLEUM CORPORATION (Name of Operator)
By Harry C. Hall (Name) 2/8/78 (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

OG107 (8-75—GSRI—15M)

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
NOV - 7 1977
SANTA PAULA, CALIFORNIA

History of Oil or Gas Well

OPERATOR Argo Petroleum Corporation FIELD Silverthread

ARGO-BARKER
Well No. FERNDALE #4, Sec. 16, T. 4N, R. 21W, S. B. B. & M.

Date October 24, 19 77 Signed

940 East Santa Clara
Ventura, CA. 93001 (805) 648-2514 Title Exec. Vice-President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1977	RECOMPLETION
9-19	MIRU T & T Production Service.
9-20	Removed production tree. Installed and tested BOE. Unseated packer. Killed well w/brine water. Pulled tubing. RIH w/HOWCO EZE drill squeeze tool to 6200'.
9-21	Lowered squeeze tool. Stopped at 6265'. Washed down to 6285'. POH. RIH w/STC. CO sand 6285'-6430'. Circ clean, POH. RIH w/squeeze tool to 6200'.
9-22	Lowered squeeze tool and set at 6390'. HOWCO pumped 50 cu. ft. class "G" neat cmt away at 18 cu. ft./min @ 3000 PSI. Pulled out of retainer, put 2 cu. ft. cmt on top of retainer. Press tested csg at 4000 PSI. OK. POH. RIH w/STC on 2 7/8" tbg to 6058'. Changed over to lease crude. Rigged up Schlumberger. Using a hyper dome jet 2" solid carrier gun, perf'd w/2 holes per ft at the following intervals: 6322', 6300', 6286', 6277'-6265', 6253'-6245', 6198'-6187', 6144'-6137' (Total of 90 holes).
9-23	Installed frac head. Dowell sand frac'd the intervals: 6322'-6137'.
9-24	TP = 1500 PSI, CP = 1300 PSI. Unable to kill well. Ran in and set Otis type "D" tbg plug at 62'. Stripped off frac head. Removed BOE. Installed production tree. Landed tbg at 6058'. Retrieved tbg plug and put well on production at 9:00 P.M., TP = 900, CP = 800. T & T moved out.
9-25 thru 10-3	Flowing load oil.
10-4	Prod 78 gross, cut 3.5%, TP = 340, CP = 1400, 10/64" bean.

OG 103

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Report on Operations

No. T 278-52

Mr. Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, CA. 90024

Santa Paula, Calif.
Feb. 2, 1978

DEAR SIR:

Operations at well No. "Barker-Ferndale" 4, API No. 111-20685', Sec. 16, T. 4N, R. 21W, S.B., B & M. Ojai Field, in Ventura County, were witnessed on 12/21/77. Mr. P.R. Wygle, representative of the supervisor was present from 0630 to 0730. There were also present D.Zelko, pumper

Present condition of well: 9 5/8" cem. 828'; 7" cem. 6871', perf. 6137-6322', WSO 6137', perf. (ints) 6421-6785 (cem off). T.D. 6992'. Plugged with 50 cu.ft. of cem. below retainer at 6390' and with cem. 6390-6380'±.

The operations were performed for the purpose of demonstrating a water shut-off on the 7" casing by means of a production test.

DECISION:

THE 7" SHUT-OFF AT 6137' IS APPROVED.

b

M. G. MEFFERD
~~JOHN F. MATTHEWS, Jr.~~
State Oil and Gas Supervisor

By John L. Hardoin Deputy
John L. Hardoin

OG109 (2-75—OSP—20M)

30986-705 2-75 20M ① ◇ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 277-339 fw

REPORT ON PROPOSED OPERATIONS

Santa Paula, California

Sept. 19, 1977

Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, CA. 90024

Your proposal to alter casing well "Barker-Ferndale" 4 (Name and number)

, A.P.I. No. 111-20685- , Section 16, T. 4N, R. 21W,

S.B. B. & M., Ojai field, Ventura County,

dated 9-15-77, received 9-16-77, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Hole fluid of sufficient quality and quantity, shall be maintained in the hole to control any subsurface condition, and a reserve supply shall be on hand for [illegible].
2. Blowout prevention equipment of at least DOG Class II, with hydraulic actuating system, shall be installed on the 7" casing and maintained in operating condition at all times.
3. THIS DIVISION SHALL BE NOTIFIED TO WITNESS A PRODUCTION TEST OF SHUT OFF WITHIN 30 DAYS AFTER COMPLETING THE WELL.

NOTE: A COPY OF THIS APPROVAL SHALL BE AVAILABLE AT THE WELL SITE DURING THE PROPOSED OPERATIONS.

Blanket Bond
MD:b

M. G. MEFFERD
State Oil and Gas Supervisor

By John L. Hardoin
Deputy Supervisor

John L. Hardoin

OG111 (11-76—GSR1—30M)

FORM 107

DIVISION OF OIL AND GAS
RECEIVED
SEP 19 1977
SANTA PAULA, CALIFORNIA

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given before work begins; one copy only

REWORK

Santa Paula, Calif. September 15, 1977

DIVISION OF OIL AND GAS

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of deepening, redrilling, plugging or altering casing at Well No. ~~ARGO~~ BARKER — (Cross out unnecessary words)

FERNDALE #4, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Ojai Field, Ventura County.

The present condition of the well is as follows:

1. Total depth. 6992'

2. Complete casing record, including plugs:

9 5/8" surface to 828'.
7", 23 & 26#, K-55, 8rd R-3 surface to 6871'.
Perf: 6758, 6730, 6705, 6684, 6657, 6650, 6628, 6620, Baker Model "C" bridge plug at 6607'.
Perf: 6535, 6510, 6484, 6476, 6428, 6421, 6406-21 Bad casing 6448-6484. Unable to swage out to 6 1/8". Present effective depth 6448'.

3. Last produced. 9-1-77 (Date) | 6 (Oil, B/D) | 30 (Water, B/D) | (Gas Mcf/D)

The proposed work is as follows:

Run EZE drill cement retainer and set at 6400'. Squeeze 6400-6448' with 50 cu.ft. class "G" neat cement. Perforate 6137-44, 6187-98, 6245-53, 6265-77, 6286-6322. Sand oil frac above perfs. Return to production.

Sent 19 1977
ITO - Billy Gembon
Anticipated
pressure 3000psi
6137' TD 6332'

MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121
-	-	-	BB	✓	✓

940 East Santa Clara
(Address)

(805) 648-2514
(Telephone No.)

ARGO PETROLEUM CORPORATION
(Name of Operator)

By Dennis Watson 9/15/77

24226-705 8-68 15M OSP

DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

REPORT OF CORRECTION OR CANCELLATION

Santa Paula, California

Sept. 20, 1977

Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, Calif. 90024

In accordance with our telephone conversation of Sept. 19, 1977

the following change pertaining to your well "Barker-Ferndale" 4 (111-20685),

Ojai field, Ventura County,

Sec. 16, T. 4N, R. 21W, S.B. B. & M., is being made in our records:

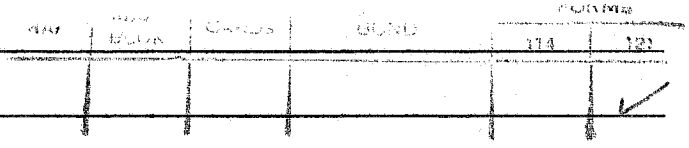
☐ The corrected location is

☐ The corrected elevation is

☐ Report No. , dated , has been corrected as follows:

☒ Your notice to plug back and redrill (Drill, abandon, etc.) dated 6-27-77, and our report No. P277-334, issued in answer thereto, are hereby cancelled inasmuch as the work will not be done. If you have a drilling bond on file covering this notice it will be returned. No request for such return is necessary.

☐ Other:



State Oil and Gas Supervisor

By John L. Hardoin
Deputy Supervisor John L. Hardoin

OG 165 (1-77-GSRI-3M)

Argo
Petroleum
Corporation

10880 Wilshire Boulevard
Los Angeles, California 90024

Telephone (213) 475-4976
Cable - Argpetro
Telex - 67-4080

Reply to:
940 East Santa Clara
Ventura, Calif. 93001

September 19, 1977

DIVISION OF OIL AND GAS
RECEIVED
SEP 1[illegible]
SANTA PAULA, CALIFORNIA

Mr. Murray Dosch
Division of Oil & Gas
P. O. Box 67
Santa Paula, California 93060

Dear Mr. Dosch:

As per our telephone conversation of this date, please cancel our Notice of Intention to Redrill well number ARGO-BARKER-FERNDALE #4, dated September 14, 1977 (#P277-334).

Very truly yours,

ARGO PETROLEUM CORPORATION

Bill Graham

Bill Graham
Engineer

BLG/jrw

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 277-334

REPORT ON PROPOSED OPERATIONS

Santa Paula, , California

Sept. 14, 1977

Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, Calif.90024

Your plug back and redrill proposal to redrill well "Barker-Ferndale" 4
(Name and number)

, A.P.I. No. 111-20685, Section 16, T. 4N, R. 21W,

S.B. B. & M., Ojai field, Ventura County,

dated 6-27-77, received 9-14-77, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. The drilling fluid used shall be of a quality and in sufficient quantity to control all subsurface conditions in order to prevent blowouts; and a reserve supply of this material shall be kept on hand to meet any emergency.
2. Blowout prevention equipment, at least of the Division of Oil and Gas Class III,3M rating, shall be installed and maintained in operating condition at all times.
3. The hole shall be plugged with cement from 6758' to 6321'.
4. THIS DIVISION SHALL BE NOTIFIED TO WITNESS:
   a. The location and hardness of the cement plug at 6321'.
   b. A production test within 30 days after the well has been completed to production.

NOTE: A COPY OF THIS APPROVAL SHALL BE POSTED AT THE WELL SITE PRIOR TO COMMENCING OPERATIONS.

MD:b

M. G. MEFFERD
State Oil and Gas Supervisor

By
Deputy Supervisor

John L. Hardoin

OG111 (11-76—GSR1—30M)

FORM 107

DIVISION OF OIL AND GAS
RECEIVED
SEP 14 1977
SANTA PAULA, CALIFORNIA

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Notice of Intention to Deepen, Redrill, Plug or Alter Casing of Well

This notice must be given before work begins; one copy only

Ventura Calif. June 22 19 77

DIVISION OF OIL AND GAS

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of deepening, redrilling, ~~plugging or altering casing~~ at Well No. "Barker - " FERNDALE (#)4
(Cross out unnecessary words)

, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Ojai Field, Ventura County.

The present condition of the well is as follows:

1. Total depth. 6992'.

2. Complete casing record, including plugs:

9 5/8" surface to 828'.
7" surface to 6871'.

3. Last produced. currently producing (Date) 5 (Oil, B/D) 1+ (Water, B/D) ? (Gas Mcf/D)

The proposed work is as follows:

Plug back to 5100'. Redrill due East to a proposed total depth of 7000'. Zone is to be ~~continuously cored~~.

Proposed bottom hole 1600' N63°E of surface.

Sept. 14 77
MO - R Cahill
Will cp 7" casing
None this off point
Mill out 7" plug
Redrill
Will Run

MAP | MAP BOOK | CARDS | FORMS 114 121

BB

940 East Santa Clara
(Address)
(805) 648-2514
(Telephone No.)

ARGO PETROLEUM CORPORATION
(Name of Operator)
By Ralph F Cahill 6/27/77

24226-705 8-68 15M OSP

SUBMIT IN DUPLICATE

20798-705 1-74 8M ⓒ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
JUN 21 1977
SANTA PAULA, CALIFORNIA

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

ARGO
Well No. BARKER-FERNDALE #4, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date May 17, 1977 Signed C. Bentley

(Address) (Telephone Number) Title Executive Vice President (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1976	
Aug. 31	MIRU Atlantic Rig #4
Sept. 1	Spud'd. in @ 5:00 A.M. Drld. 12 1/4" hole to 142'.
2	Drilled to 384'. POH. Pick up D.D. to 711'.
3	D.D. to 786'. POH. Made up D.A. RIH. Drilled to 840'. POH. Rig to run csg. Ran 20 jts. 9 5/8" 36#, K-55 (R-3), LT&C Oilwell csg. Equip. with Larkin guide shoe @ 828' w/insert Baffle @ 785' one Centralizer on shoe jt. Dowell cemtrs. pumped 100 cu.ft. H2O ahead, mixed & pumped in 400 cu.ft. class "G" cmt. pre-mixed 1:1 POZ + 4% Gel + 2% CaCl2 followed by 100 cu.ft. class "G" neat cmt. treated with 2% CaCl2. Displ. with 341 cu.ft. mud. Bump plug @ 300 PSI C.I.P. @ 1:30 P.M. Cmt. to surface W.O.C. welded head. Set in BOPE. Flanged up.
4	Test rams with 1000 PSI. OK. Made up D.D. RIH. Tested BOPE. OK'd by DOG. Drilled out baffle and shoe. D.D. 8 3/4" hole to 1178'.
5	POH. Cond. mud. Pick up D.A. RIH. Drilled to 2008'.
6	Drilled to 3169'.
7	Drilled to 3993'.
8	Drilled to 4584'.
9	Drilled to 4891'. POH with D.A. RIH with D.D.
10	D.D. to 5116'.
11	D.D. to 5253'. POH. RIH. Clean out fill from 5213'-5251'. Circ. gas cut mud. Build wt. to 80#. C.O. fill from 5240'-5253'.
12	Circ & cond. mud. Run to btm. Hit 12' fill. POH. Lay down D.D. Made up D.A. RIH. Ream from 4893'-5253'. POH. Pick up D.D. RIH. C.O. 15' fill. Circ. Btms. up.
13	D.D. to 5409'. Circ. btms up. Build mud wt. to 92#.

SUBMIT IN DUPLICATE

20798-705 1-74 8M ② OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

ARGO
Well No. BARKER-FERNDALE #4, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date May 17, 19 77 Signed C. Barker

940 Santa Clara
Ventura, Ca. 93001 (805) 648-2514 Title Executive Vice President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date 1976	
Sept. 14	POH. Pick up D.A. RIH. Ream from 5253'-5409'. Drilled to 5673'. POH.
15	RIH. Ream from 5553'-5673. Drilled to 6083'. POH. Tight 5916'-5847'.
16	POH. RIH. Ream from 5847'-6083'. Drl. to 6452'.
17	Ream from 6300'-6452'. Drilled to 6556'.
18	POH. RIH. with core bbl. Cored to 6561'. POH. Core recovery 3'-6".
19	P.U. D.A. RIH. Ream from 6530'-6561'. Drilled to 6808'. POH. Tight.
20	RIH. Drilled to 6992'. POH. Rigged up Schlumberger. Logging: 825'-6984';
21	Logging. POH. Rigged down Schlumberger. P.U. D.A. RIH. C.O. fill from 6987'-6992'. Circ. & cond. mud. POH. Rig up Schlumberger. Logging: 825'-6991'; DIL, Dipmeter, Sonic. Rig down Schlumberger. Rig up to run csg.
22	Ran 7", Oilwell casing as follows:

1 Jt. 7" 26# N-80 LT&C (R-3) Csg.	41.40
93 Jts. 7" 23# K-55 LT&C (R-3) Csg.	3852.87
71 Jts. 7" 26# K-55 Buttress (R-3) Csg.	2933.64
B&W Float Collar @ 6829'.	1.20
1 Jt. 7" 26# K-55 Buttress (R-3) Csg.	41.08
B&W Guide Shoe @ 6871'	1.20
TOTAL	6871.39

Centralizer on jts. #1, 22, 24, 26, 28, 31, 33, 35, 37, 39, 41, 43, 45, 47 & 50. B&W Dual Turbine Cent. on jts. #2, 4, 6, 7, 8, 10, 12, 14, 16, 21, 30, 32, 34, 36, 38, 40, 42, 44, 46, & 48. Dowell Cmtrs. pumped 100 cu.ft. H2O ahead. Mixed & P. I. 450 cu.ft. class "G" cmt. pre-mixed 1:1 POZ + 4% gel + 2% CaCl2 followed by 100 cu.ft. class "G" neat cmt. Displ. with 1492 cu.ft. mud. Bump plug @ 1000 PSI. Used top & btm. plug C.I.P. @ 8:40 P.M. Bacteria killer used in mix water. Float held OK. Tear out BOP.

OG 103

SUBMIT IN DUPLICATE

20798-705 1-74 8M ⓐ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

Well No. ARGO BARKER-FERNDALE #4, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date May 17, 1977 Signed C. Boerlage

940 Santa Clara
Ventura, Ca. 93001 (805) 648-2514 Title Executive Vice President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1976	
Sept. 23	Cut off csg. Flanged up tbg. head. Tested @ 3000 lbs. for 15 min. OK. Lay down 4 1/2" drill pipe. Picked up & installed BOE.
24	RIH. Hit float collar @ 6829'. Drill out float collar. C.O. cmt. to 6857'. Circ. hole clean. POH. Rigged up loggers. Welex ran CBL, CCL, and Gamma Logs 6857'-5000'. Rigged down loggers. Dowell cmtrs. pumped in 9 5/8" x 7" Annulus @ rate of 8 cu.ft./min. @ 1000 PSI using H2O, mixed & pumped in 140 Cu.ft. class "G" cmt. treated with 3% CaCl2. C.I.P. @ 11:05 P.M. POH.
25	Pressure tested pipe rams @ 1400 PSI for 10 min. Approved by DOG. RIH with 2 7/8" Tbg., champhered collar, Baker "F" nipple. (2.25" I.D.) + 1 jt. 2 7/8" tbg. w/top lock pump shoe to 6850'. Displaced mud with oil. Used 267 bbls. lease crude. Put on donut & landed tbg. w/tail at 6304'. Flanged up tbg. head. Installed Shaeffer gate. P.U. & install frac head. Rig up Welex. Perforated with four 0.35' jet holes at the following intervals: 6758' 6695' 6650' 6730' 6684' 6628' 6705' 6657' 6620' (total 36 holes) Rigged down Welex. R.U. Dowell.
26	Dowell unable to establish pumping rate. Approx. 1/2 bbl/min. @ 5000 PSI. Equalized 1000 gal. 10% HCL + 5% HFL acid down tbg. Closed csg. pumped acid to top of perfs. @ 1/2 bbl/min. @ 5000 PSI. Acid in place @ 1:08 P.M. 2:10 P.M. pumped 12 bbls. @ rate of 5 bbls/min. @ 4800 PSI. Bled back 11 bbls. Wait 15 min., pumped down csg-tbg. annulus @ rate of 8 1/2 bbls/min. @ 4800 PSI. Bled back 11 bbls. Repeated process, same results. Dowell pumped in 1000 gals. 10% HCL + 5% HFL acid. Displ. acid to top of perfs. @ 6620' with 24 bbls. lease crule oil. Acid in place @ 6:30 P.M.
27	Dowell established breakdown at 8 1/2 BPM @ 4800 PSI. Displaced crude with 70# brine H2O. Removed frac head. RIH to 6850'. Circ. out oil and acid. Dowell pumped in 1000 gals. 10% acetic + 3% HFL acid. Equalized w/rig pump. Laid lown 18 jts. tbg.

OG 103

SUBMIT IN DUPLICATE

20798-705 1-74 6M ⓐ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
JUN 21 1977
SANTA PAULA, CALIFORNIA

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

Well No. ARGO BARKER-FERNDALE #4, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date May 17, 1977 Signed [signature]

940 Santa Clara
Ventura, Ca. 93001 (805) 648-2514 Title Executive Vice President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date

1976

Sept. 28 Rigged up Dresser Atlas and perforated w/four 3/8" bullets at each of the following intervals:

6757'	6694'	6649'
6729'	6683'	6627'
6704'	6656'	6619' (Total 36 Holes)

Rigged down Dresser Atlas. Installed Otis back flow valve in Baker "F" nipple. Stripped in hole w/tbg. Removed stripper. Landed tbg. on frac head w/tail at 6304'. Displaced brine H_2O with lease crude. Installed frac head. Rigged up Dowell and frac'd. 7" csg. as follows:

BBLS.	GALS.	SAND #/GAL.	# SAND	CUM SAND	ATR
240	10,000	-	-	-	240
130	5,000	0.5	2,500	2,500	373
360	15,000	1.0	15,000	17,500	748
360	15,000	1.5	22,500	40,000	1131
32	1,300	4.0	5,200	45,200	1167
177	Flush				1344
1299	Total				

ISIP= 3900 Fg= 0.96 Total filtered Hamp lease crude used= 1299 bbls. Total sand used= 45,200# of 20/40 mesh. Pumped at an ave. rate of 14 BPM and ave. press. of 4600 PSI. Immediate SIP= 4100 PSI. SIP after 15 min.= 3550 PSI.

29 Tbg. press. 1900 PSI. Bled back to 700 PSI, and changed over from crude to 74# brine H_2O. Removed frac head. RIH w/tbg. and tagged sand at 6571'. Spotted 500 gal. acetic + 3% HF acid. POH. Rigged up Dresser Atlas and perforated with four 3/8" bullets at each of the following intervals:

6535'	6476'
6510'	6428'
6484'	6421' (Total 24 holes)

30 Rigged down D/A. Well began flowing. Stripped in hole and landed tbg. @ 6304'. Installed frac head. Changed to lease crude. Rigged up Dowell and frac'd 7" csg. as follows:

SUBMIT IN DUPLICATE

20798-705 1-74 8M ② OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

ARGO
Well No. BARKER-FERNDALE #4, Sec. 16, T. 4N, R. 2W, S.B. B. & M.

Date May 17, 1977 Signed C. Barbee

940 Santa Clara
Ventura, Ca. 93001 (805) 648-2514 Title Executive Vice President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date
1976

Sept. 30 (Cont)

BBLS.	GALS.	SAND #/GAL.	# SAND	CUM SAND	ATR
240	10,000	-	-	-	240
120	5,000	0.5	2,500	2,500	363
360	15,000	1.0	15,000	17,500	738
360	15,000	1.5	22,500	40,000	1121
194	Flush (Screened out)				1314
1274	Total				

ISIP= 3100 PSI Fg.= 0.86 Total filtered Hamp lease crude used= 1274 bbls. Total sand used= 40,000 lbs. of 20/40 mesh. Pumped at an ave. rate of 14 BPM and an ave. press of 4500 PSI. Screened out at 5000 PSI. SIP after 15 min.= 3300 PSI.

Oct. 1 TP= 1800 PSI. Bled down to 800 PSI. Attempt to change over to 74# brine H2O. Tubing plugged. HOWCO unable to pump thru tbg. @ 5000 PSI. Otis wire line stopped 60 ft. above plug. POH w/tbg. Found 60 ft. frac sand above plug. Serviced Otis valve, RIH with tbg. to 6304'.

2 600 PSI on csg. Attempt to circ. Tbg. plugged. Cleaned frac sand out of shaker tank and pits. Received 300 bbls. brine H2O. Shut down. CP- 600 PSI.

3 Rigged up NOWSCO 3/4" tbg. and HOWCO pump truck. C.O. bridges in tbg. 60' to 4000', 5100' to 5600', and 6150' to plug @ 6292'. Circ. POH. Left nozzle off 3/4" tbg. in hole. Shut down.

4 Ran Otis magnet to 90', rec. nozzle. RIH, rec. plug. Changed to 74# brine H2O. Set Otis tbg. plug at 200'. Stripped donut, tore out BOE. Installed prod. tree.

5 RIH w/Otis wire line, rec. plug @ 200'. RIH w/NOWSCO 3/4" tbg. Tagged sand at 6365', C.O. to 6582' using 74# brine H2o and polymer.

6 Sand not being carried out. Changed over to lease water w/polymer. Unable to lift sand. POH w/NOWSCO tbg, tore out Halliburton. Chg'd over to 74# brine H2o.

OG 103

SUBMIT IN DUPLICATE

20798-705 1-74 8M ® OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
JUN 21 1977
SANTA PAULA, CALIFORNIA

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

ARGO
Well No. BARKER-FERNDALE #4, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date May 17, 1977 Signed C. D. Barker

940 Santa Clara
Ventura, Ca. 93001 (805) 648-2514 Title Executive Vice President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1976	
Oct. 7	Removed master gate. Installed BOE. P.U. tbg., tagged fill at 6580'. Circ. and C.O. to 6857'. Landed tbg. w/tail at 6304'. Tore out BOE. Installed prod. tree.
8	Changed over from brine to lease crude. Released rig at 8:00 A.M. Well on production 7:00 P.M.
9 thru Nov. 16	Prod. Load Oil.
17-18	Well dead. W.O. prod. hoist.
19	C.P.S. MIRU. Installed BOE. Killed well with brine H2o. Pulled tbg. Made up Baker Model "G" packer. Ran 2000' 2 7/8" tbg., installed disc valve. RIH. Set packer at 6308', tested with 500 PSI, OK. Tore out BOE. Installed prod. tree.
20	Hooked up flow line. Dropped bar, well would not flow. RIH w/swab string, unable to knock out disc.
21	RIH with 3/4" x 5' spud bar. Spudded thru disc at 4308', pulled spud bar RIH w/swab. Fluid level at 300'. Swabbed to 3200'. Shut down.
22	Fluid level 1600', swabbed to 4100'. Shut down.
23	TP= O, CP= 150 PSI. Bled down. Removed tree, inst. BOE, released packer. Killed well with 74# brine water + 15 gal. chemside #3 inhibitar POH. RIH w/sawtooth collar. Tagged bottom at 6822'. Circ gas out. POH.
24	RIH w/Baker Model "R" packer + 2000' 2 7/8" tbg. + disc. valve and one single + T/L pump + 2 7/8" tbg. to surface, total 6307'. Tested annulus @ 1500 PSI, OK. Removed BOE, inst. prod. tree. Dropped bar, had meduim to light gas blow one hr. Ran swab, fluid level 1100'. Swabbed to 4200'. Continued swabbing, fluid level to 3400'. Turned well to prod. tank at 5:00 P.M. thru 12/64" choke.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

20798-705 1-74 8M ② OSP

DIVISION OF OIL AND GAS
RECEIVED
JUN 21 1977
SANTA PAULA, CALIFORNIA

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

Well No. ARGO BARKER-FERNDALE #4, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date May 17, 19 77 Signed C. Rosenhead

940 Santa Clara
Ventura, Ca. 93001 (805) 648-2514 Title Executive Vice President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date 1976	
Nov. 25	TP= 600 PSI, bled to zero. Ran swab, fluid level 1500', swabbed to 4200' Fluid rose to 2800', well began flowing. Turned to tank.
26	TP= 860 PSI, prod. 186 bbls. in 16 hrs. C.P.S. moved out.
27 thru Dec. 1	Prod. load oil.
2-4	Well dead. WO rig.
5	NOWSCO MIRU.
6	Ran 3/4" tbg. to fill at 4351'. C.O. to 4520', lost circ. P.U. Circ. down to 4720'. P.U. Unable to establish circ. Shut down.
7	RIH, circ. down to 4850' w/lease crude. No sand returns. Tbg sticking, P.U. S.D.
8	RIH. C.O. to 4950', sand returns. POH.
9	RIH. C.O. to 4955', tbg. plugged. POH. (tbg. burst at 4500 PSI). Moved out NOWSCO. MIRU C.P.S. Installed BOE, released packer.
10	Killed well with 70# NaCl water. POH. RIH w/sawtooth collar. Tagged fill @ 6357'. C.O. to 6382'. Pump failed. Shut down.
11	C.O. fill 6372'-6759'. POH.
12	RIH. C.O. fill 6643'-6853'. Could not go deeper. POH.
13	RIH. w/Baker Model "R" packer. Set packer at 6298', pump shoe at 6246'. Tore out BOE, installed prod. tree.
14	Hooked up F.L. Moved out C.P.S. Well flowing without swabbing.
15	Prod. 56 bbls. cut 60%, TP= 120 PSI.
16 thru Jan. 31-77	Prod. load oil. Well died.

DOG 1083

SUBMIT IN DUPLICATE

20798-705 1-74 6M ② OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

Well No. ARGO BARKER-FERNDALE #4, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date May 17, 1977 Signed C. Dobrilla

940 Santa Clara
Ventura, Ca. 93001 (805) 648-2514 Title Executive Vice President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1977	
Feb. 1	C.P.S. MIRU. Killed well with 74# brine H20. POH.
2	RIH WITH 6 1/8" bit. Tagged fill at 6587', C.O. to 6640'. POH. Ran Baker 7" ret. bridge plug and set at 6586'. POH.
3	RIH w/Atlas 7" washer. Washed perfs. from 6535' to 6421' with 600 gal. aromatic solvent. POH. RIH w/prod. string. Set Baker M-F prod. packer at 6369'. Removed BOE, inst. prod. tree. Hook up lines.
4	C.P.S. moved out. Shut well in.
5	Prod. 25 bbls., TP= 225, 11/64 choke.
6 thru 24	Prod. load oil.
25	Initial prod.: Gross 43, clean oil 25, cut 42%, TP= 190, CP= 0, gas 39 mcf, grav. 30.1° API.
Mar. 25	Prod. after 30 days: Gross 32, Clean oil 28, Cut 11.0%, TP= 50, CP= -, gas 19 mcf., grav. 30.1° API.

OG 103

RECEIVED
DEC - 3 1976

DIVISION OF OIL AND GAS
RECEIVED
JUN 21 1977
SANTA PAULA, CALIFORNIA

Well File

SEALAND DIRECTIONAL DRILLING CO.

COMPANY ARGO PETROLEUM

WELL FERNDALE #4 LOCATION FERNDALE RANCH DATE 9 - 76

PAGE #1

	Measured Depth	Drift Angle	Vertical Depth	Drift Feet	Drift Direction	COORDINATES North	South	East	West	REMARKS
1	142	1° 15'	141 97	3 10	S 76° W		0 75		3 01	
2	260	1° 00'	259 95	2 06	S 63° W		1 69		4 85	
3	354	1° 15'	353 93	2 05	S 54° W		2 89		6 51	
4	384	1° 15'	383 92	0 65	S 54° W		3 27		7 04	
5	438	0° 30'	437 92	0 47	S 79° E		3 36		6 58	
6	502	2° 30'	501 86	2 79	N 63° E		2 09		4 09	
7	565	4° 45'	564 64	5 22	N 62° E	0 36		0 52		
8	628	7° 00'	627 17	7 68	N 61° E	4 08		7 24		
9	692	9° 15'	690 34	10 29	N 57° E	9 68		15 87		
10	724	10° 30'	721 80	5 83	N 56° E	12 94		20 70		
11	840	13° 45'	834 48	27 57	N 53° E	29 53		42 72		
12	935	14° 45'	926 35	24 19	N 55° E	43 40		62 54		
13	1092	17° 15'	1076 29	46 56	N 55° E	70 11		100 68		
14	1188	19° 00'	1167 06	31 25	N 55° E	88 03		126 28		
15	1355	19° 30'	1324 48	55 75	N 55° E	120 01		171 95		
16	1607	19° 15'	1562 39	83 08	N 56° E	166 47		240 83		
17	1892	19° 30'	1831 04	95 13	N 56° E	219 67		319 70		
18	2210	20° 00'	2129 86	108 76	N 54° E	283 60		407 69		
19	2459	20° 00'	2363 84	85 16	N 54° E	333 66		476 59		
20	2774	19° 45'	2660 31	106 44	N 57° E	391 63		565 86		
21	3090	19° 45'	2957 72	106 78	N 60° E	445 02		658 34		
22	3405	20° 45'	3252 29	111 60	N 60° E	500 82		754 99		
23	3688	20° 45'	3516 93	100 26	N 60° E	550 95		841 82		
24	4000	21° 00'	3808 21	111 81	N 63° E	601 71		941 44		
25	4125	21° 15'	3924 71	45 30	N 63° E	622 28		981 81		

SEALAND DIRECTIONAL DRILLING CO.

COMPANY ARCO PETROLEUM

WELL FERNDALE #4 LOCATION FERNDALE RANCH DATE 9 - 76

	Measured Depth	Drift Angle	Vertical Depth	Drift Feet	Drift Direction	COORDINATES North	South	East	West	REMARKS
26	4179	20° 00'	3975 45	18 47	N 63° E	630 66		998 27		
27	4274	19° 15'	4065 14	31 32	N 63° E	644 88		1026 18		
28	4369	17° 45'	4155 62	28 96	N 63° E	658 03		1051 99		
29	4465	16° 15'	4247 78	26 86	N 64° E	669 81		1076 13		
30	4558	14° 45'	4337 72	23 68	N 62° E	680 93		1097 04		
31	4654	14° 15'	4430 77	23 63	N 62° E	692 02		1117 90		
32	4779	13° 45'	4552 19	29 71	N 62° E	705 97		1144 13		
33	4874	12° 30'	4644 94	20 56	N 62° E	715 62		1162 29		
34	4934	13° 15'	4703 34	13 75	N 65° E	721 43		1174 75		
35	4965	13° 30'	4733 48	7 24	N 69° E	724 02		1181 51		
36	4996	13° 00'	4763 69	6 97	N 74° E	725 94		1188 21		
37	5027	11° 30'	4794 07	6 18	N 76° E	727 44		1194 21		
38	5058	10° 30'	4824 55	5 65	N 80° E	728 42		1199 77		
39	5089	9° 00'	4855 17	4 85	N 82° E	729 09		1204 57		
40	5121	7° 45'	4886 88	4 32	EAST	729 09		1208 89		
41	5152	7° 45'	4917 60	4 18	S 79° E	728 29		1212 99		
42	5184	8° 15'	4949 27	4 59	S 68° E	726 57		1217 25		
43	5215	8° 15'	4979 95	4 45	S 57° E	724 15		1220 98		
44	5253	8° 30'	5017 53	5 62	S 51° E	720 62		1225 35		
45	5281	9° 15'	5045 17	4 50	S 42° E	717 28		1228 36		
46	5313	8° 45'	5076 80	4 87	S 32° E	713 15		1230 94		
47	5345	8° 00'	5108 49	4 45	S 22° E	709 02		1232 61		
48	5377	8° 15'	5140 16	4 59	S 12° E	704 53		1233 56		
49	5444	8° 30'	5206 42	9 90	S 01° W	694 63		1233 39		
50	5600	8° 45'	5360 60	23 73	S 04° W	670 96		1231 73		

SEALAND DIRECTIONAL DRILLING CO.

COMPANY ARGO PETROLEUM

PAGE #3

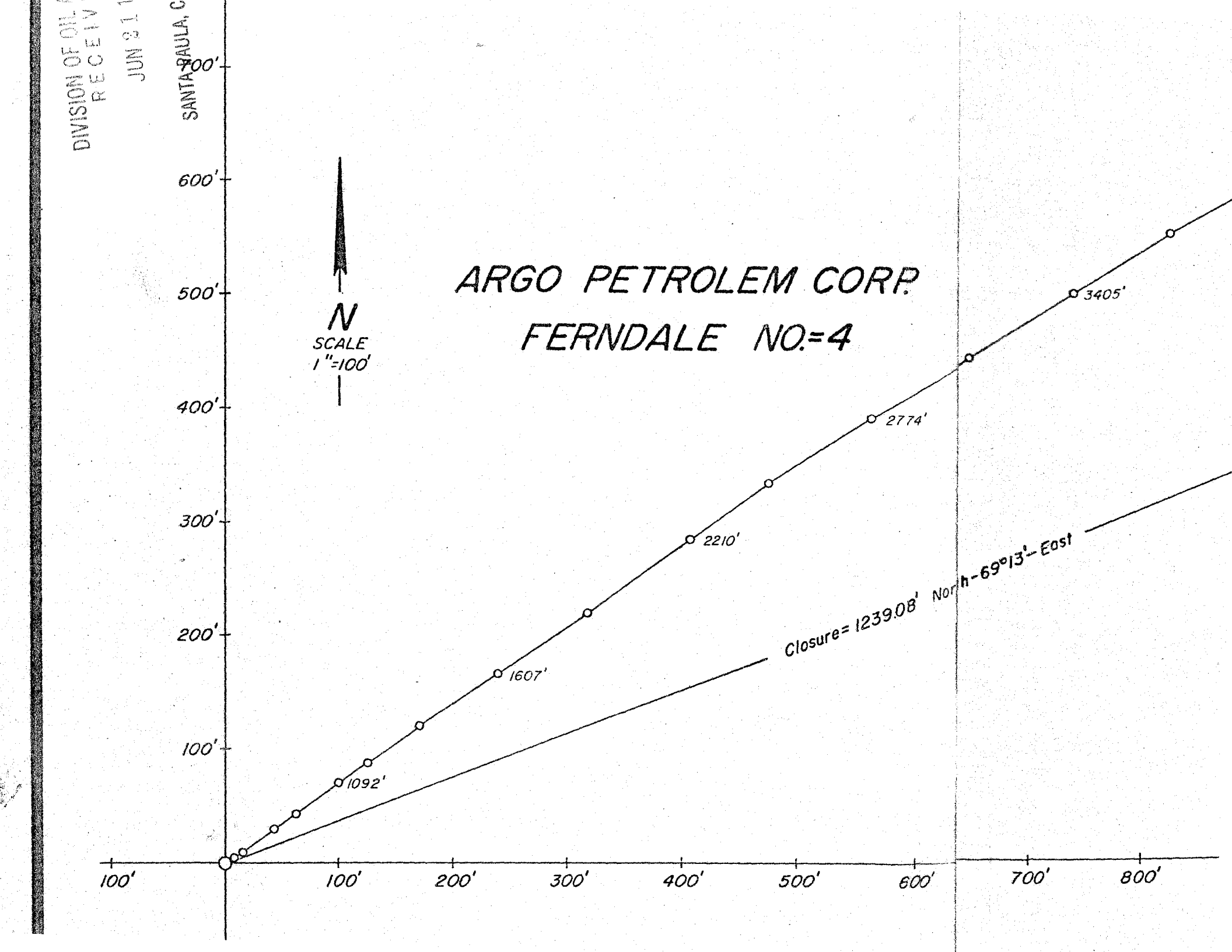
WELL FERNDALE #4 LOCATION FERNDALE RANCH DATE 9 - 76

	Measured Depth	Drift Angle	Vertical Depth	Drift Feet	Drift Direction	COORDINATES North	South	East	West	REMARKS
51	5766	9° 15'	5524 44	26 68	S 11° W	644 77		1226 64		
52	5893	8° 45'	5649 96	19 32	S 13° W	625 95		1222 29		
53	6051	9° 15'	5805 91	25 40	S 14° W	601 31		1216 15		
54	6206	9° 30'	5958 78	25 58	S 15° W	576 60		1209 53		
55	6365	9° 45'	6115 48	26 93	S 15° W	550 59		1202 56		
56	6585	10° 30'	6331 80	40 09	S 19° W	512 68		1189 51		
57	6808	11° 15'	6550 52	43 51	S 23° W	472 63		1172 51		
58	6992	11° 15'	6730 99	35 90	S 23° W	439 59		1158 48		

CLOSURE: 1239.08' N 69° 13' E

DIVISION OF OIL
RECEIV
JUN 21 1

SANTA PAULA, C



RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Report on Operations

No. T277-180

Mr. Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, CA 90024

Santa Paula, Calif.
August 3, 1977

DEAR SIR:

Operations at well No. "Barker-Ferndale" 4, API No. 111-20685, Sec. 16, T. 4N, R. 21W, S.B. B & M., Ojai Field, in Ventura County, were witnessed on July 26, 1977. Mr. Ms. Toni M. Callaway, representative of the supervisor was present from 0600 to 0800. There were also present Mr. D. Zielke, pumper

Present condition of well: 9 5/8" cem. 328'; 7" cem. 6871', perf. 6421' WSO, perf. 6421-6756' (at intervals). P.B.T.D. 6871'. T.D. 6992'.

The operations were performed for the purpose of demonstrating a water shut-off on the 7" casing by means of a production test.

DECISION:

THE 7" SHUT-OFF AT 6421' IS APPROVED.

M. G. MEFFERD
Acting JOHN F. MATTHEWS, JR.
State Oil and Gas Supervisor

By John L Hoole Deputy

OG109 (2-75—OSP—20M)

30986-705 2-75 20M ① ◇ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Report on Operations

No. T 276-295

Mr. Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, Calif. 90024

Santa Paula, Calif.
Sept. 28, 1976

DEAR SIR:

Operations at well No. "Barker-Ferndale" 4, API No. 111-20685, Sec. 16, T. 4N, R. 21W, S.B., B & M. Ojai Field, in Ventura County, were witnessed on 9/25/76. Mr. M. Dosch, representative of the supervisor was present from 0600 to 0730. There were also present L. Valenzuela, driller.

Present condition of well: 9 5/8" cem. 828'; 7" cem. 6871'; T.D. 6871'; plugged with cement 6857-6871'.

The operations were performed for the purpose of testing and inspecting the blowout prevention equipment and installation.

DECISION:

THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

b

HAROLD W. BERTHOLF
~~JOHN F. MATTHEWS, JR.~~
State Oil and Gas Supervisor

By _____ Deputy

30986-705 2-75 20M ① ◇ OSP

RW

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Report on Operations

No. T 276-268

Mr. Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, Calif. 90024

Santa Paula, Calif.
Sept. 21, 1976

DEAR SIR:

Operations at well No. "Barker-Ferndale" 4, API No. 111-20685, Sec. 16, T. 4N, R. 21W, S.B., B & M. Ojai Field, in Ventura County, were witnessed on 9/4/76. Mr. P. E. Wygle, representative of the supervisor was present from 1130 to 1330. There were also present C. Parent, contract foreman

Present condition of well: 9 5/8" cem. 828'. T.D. 840'.

The operations were performed for the purpose of testing the blowout prevention equipment and installation.

DECISION:

THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

b

JOHN F. MATTHEWS, JR.
State Oil and Gas Supervisor

By John L. Hodo Deputy

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

REPORT OF CORRECTION OR CANCELLATION

Santa Paula, California

August 27, 1976

Mr. Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, Calif. 90024

In accordance with your telephone call dated August 27, 1976

the following change pertaining to your well No. "Barker-Ferndale" 4 (111-20685)

Sec. 16, T. 4N, R. 21W, S.B. B. & M., Ojai field,

Ventura County, District No. 2, is being made in our records:

☒ The corrected location is FR NW cor of Sec. 1077S 2908E.

☐ The corrected elevation is

☐ Report No. , dated , has been corrected as follows:

☐ Your notice to (Drill, abandon, etc.) dated ,
and our report No. P , issued in answer thereto, are hereby cancelled inasmuch as the work will not be done. If you have a drilling bond on file covering this notice it will be returned. No request for such return is necessary.

☐ Other:

MAP	PLAT BOOK	CARDS	BOND	FORMS 114	FORMS 121
202	9-4-76 W				

HAROLD W. BERTHOLF
~~JOHN F. MATTHEWS~~
State Oil and Gas Supervisor

By
Deputy Supervisor

OGD 165

20799-705 1-74 3M ① OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 276-278

Mr. Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, Calif. 90024

Santa Paula, Calif.
Aug. 9, 1976

DEAR SIR:

Your proposal to drill (111-20685) Well No. "Barker-Ferndale" 4, Section 16, T. 4N, R. 21W, S.B.B. & M., Ojai Field, Ventura County, dated 7/28/76, received 7/30/76, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Sufficient cement shall be pumped back of the 9 5/8" casing to fill from the shoe to the surface.
2. The drilling fluid used shall be of a quality and in sufficient quantity to control all subsurface conditions in order to prevent blowouts; and a reserve supply of this material shall be kept on hand to meet any emergency. No contaminants or toxic material shall be used in any drilling fluid that is to be placed in an unlined sump.
3. Constant surveillance of drilling fluid characteristics and volume shall be maintained by drilling personnel, and by the use of a mud pit level indicator with a visual and audible alarm device.
4. Any sump used during drilling operations shall be thoroughly cleaned of all drilling materials and the site restored to its prior condition as soon as drilling operations are completed.
5. Blowout prevention equipment, at least of the Division of Oil and Gas Class III rating, shall be installed and maintained in operating condition at all times.
6. Blowout-prevention practice drills shall be conducted at least weekly for each crew, and recorded in the log book.
7. At least 5000 psi BOPE equipment shall be used during sand-packing operations.
8. This Division shall be consulted before placing any plugs or sidetracking any hole.
9. THIS DIVISION SHALL BE NOTIFIED TO WITNESS:
   1. A pressure test of the blowout prevention equipment before drilling out of the shoe of the 9 5/8" casing.
   2. A production test within 30 days after the sand-pack oil has been recovered.

NOTE: A COPY OF THIS APPROVAL SHALL BE POSTED AT THE WELL SITE PRIOR TO COMMENCING OPERATIONS.

Blanket Bond
MD:b

HAROLD W. BERTHOLF
~~JOHN F. MATTHEWS, Jr.~~, State Oil and Gas Supervisor

By _____, Deputy

25476-705 7-74 50M ①D OSP
OG 111

20685

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Notice of Intention to Drill New Well

DIVISION OF OIL AND GAS
RECEIVED
JUL 30 1976
SANTA PAULA, CALIFORNIA

pw

This notice and indemnity or cash bond shall be filed, and approval given, before drilling begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY					
MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121
202 PLW	8-7-76	✓	BB	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to commence drilling well No. ARGO "BARKER-FERNDALE" #4 API No. _____ (Assigned by Division),

Sec. 16, T. 4N, R. 21W, S.B. B. & M., SILVERTHREAD Field, VENTURA County.

Legal description of mineral-right lease, consisting of _____ acres, is as follows: _____ (Attach map or plat to scale)

PREVIOUSLY SUBMITTED

Do mineral and surface leases coincide? Yes X No _____ If answer is no, attach legal description of both surface and mineral leases, and map or plat to scale.

Cahill/DM 8/27 2908

Location of well ~~3008~~ 'E feet East (Direction) along section line ~~property~~ and 1077'S feet South (Direction)

at right angles to said line from the NW ~~property~~ corner of section 16 or

If well is to be directionally drilled, show proposed coordinates at total depth 1320' S 2° 45' E.

Elevation of ground above sea level 1061 feet.

All depth measurements taken from top of KB (Derrick Floor, Rotary Table or Kelly Bushing) which is 12 feet above ground.

PROPOSED CASING PROGRAM

SIZE OF CASING INCHES A.P.I.	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS	CALCULATED FILL BEHIND CASING
9 5/8"	40#	K-40	0	800	800	800
5 ½"	17#	K-55	0	8000	TD	2500

(A complete drilling program is preferred and may be submitted in lieu of the above program)

Intended zone(s) of completion MOHNIAN SAND (Name, depth and expected pressure) Estimated total depth 8000'

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 940 E. Santa Clara (Street)
VENTURA, CA. 93003 (City) (State) (Zip)
Telephone Number (805) 648-2514

ARGO PETROLEUM CORPORATION (Name of Operator)
By Richard Berger (Name) 7-28-76 (Date)
Type of Organization CORPORATION (Corporation, Partnership, Individual, etc.)

OG105 (12-73-GSR1-15M) CC: PLAN. COMM

D. ARTMENT OF CONSERVATI .N
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
1000 S. Hill Rd, Suite 116 Ventura, CA 93003-4458
Phone:(805) 654-4761 Fax:(805) 654-4765

REPORT OF WELL ABANDONMENT

Ventura, California
October 07, 2014

Denny Brown
Vintage Production California LLC (V1370)
9600 Ming Avenue, Suite 300
Bakersfield, CA 93311

Your report of abandonment of well **"Barker-Ferndale" 5**, A.P.I. No. **111-20702**, Section **16**, T. **04N**, R. **21W**, **SB** B.&M., **Ojai** field, **Ventura** County, dated **9/11/2014**, received **9/12/2014**, has been examined in conjunction with records filed in this office. We have determined that all of the requirements of this Division have been fulfilled relative to plugging and abandonment of the well, removal of well equipment and junk, and filing of well records.

NOTE:
1. Surface plugging completed on 6/30/2014.

2. Site inspection made and approved on 7/1/2014.

Blanket Bond

Steven Bohlen
State Oil and Gas Supervisor

By _____
Bruce Hesson
District Deputy

tkc

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

CHECK LIST-RECORDS RECEIVED AND WELL STATUS

Operator: **Vintage Production California LLC** WELL DESIGNATION **"Barker-Ferndale" 5**

API No. **11120702** SE **16** T: **4N** R.: **21W** , **SB** B. and M.

County: **Ventura** FIELD: **Ojai**

Type of Notice: **Abandonment** **Date** **10/8/2013** **Report Number:** **P213-0368**

RECORDS RECEIVED (ATTACH PAGES IF REQUIRED)

	Date	OK	NEED	Remarks
Well Summary (OG100)				
History (OG103)	9-12-14	✓		
E-Log				
Mud Log				
Dipmeter				
Directional				
Core and/or SWS				

NEW STATUS

DATE: _____

NOTICE OF RECORDS DUE

DATE: _____

DATE: _____

DATE: _____

DATE: _____

WELL STATUS INQUIRY

DATE: _____

DATE: _____

Well Stat

Change Required: Yes

Change Done: TKC 10-7-14

ABANDONMENTS/REABANDONMENTS/DRILLS/REDRILLS

CalWims Abandonment Form: _____ SURFACE INSPECTION NEEDED _____ COMPLETED 6-27-14 *Date and Inspector*

FINAL LETTER NEEDED Yes COMPLETED 10-7-14 *(Date)* Calwims DRILL/REDRILL Form _____

ENGINEER'S CHECK LIST

T-REPORT(S) _____ OPERATOR'S NAME _____ WELL DESIGNATION _____ SIGNATURE _____

Calwims Location _____ Calwims ELEVATION: _____ CONFIDENTIAL RELEASE DATE: _____ PERMIT REQUIREMENTS MET _____

CLERICAL CHECK LIST

LOCATION CHANGE (OG165) _____ ELEVATION CHANGE (OG165) _____ RELEASE OF BOND (OG150) _____

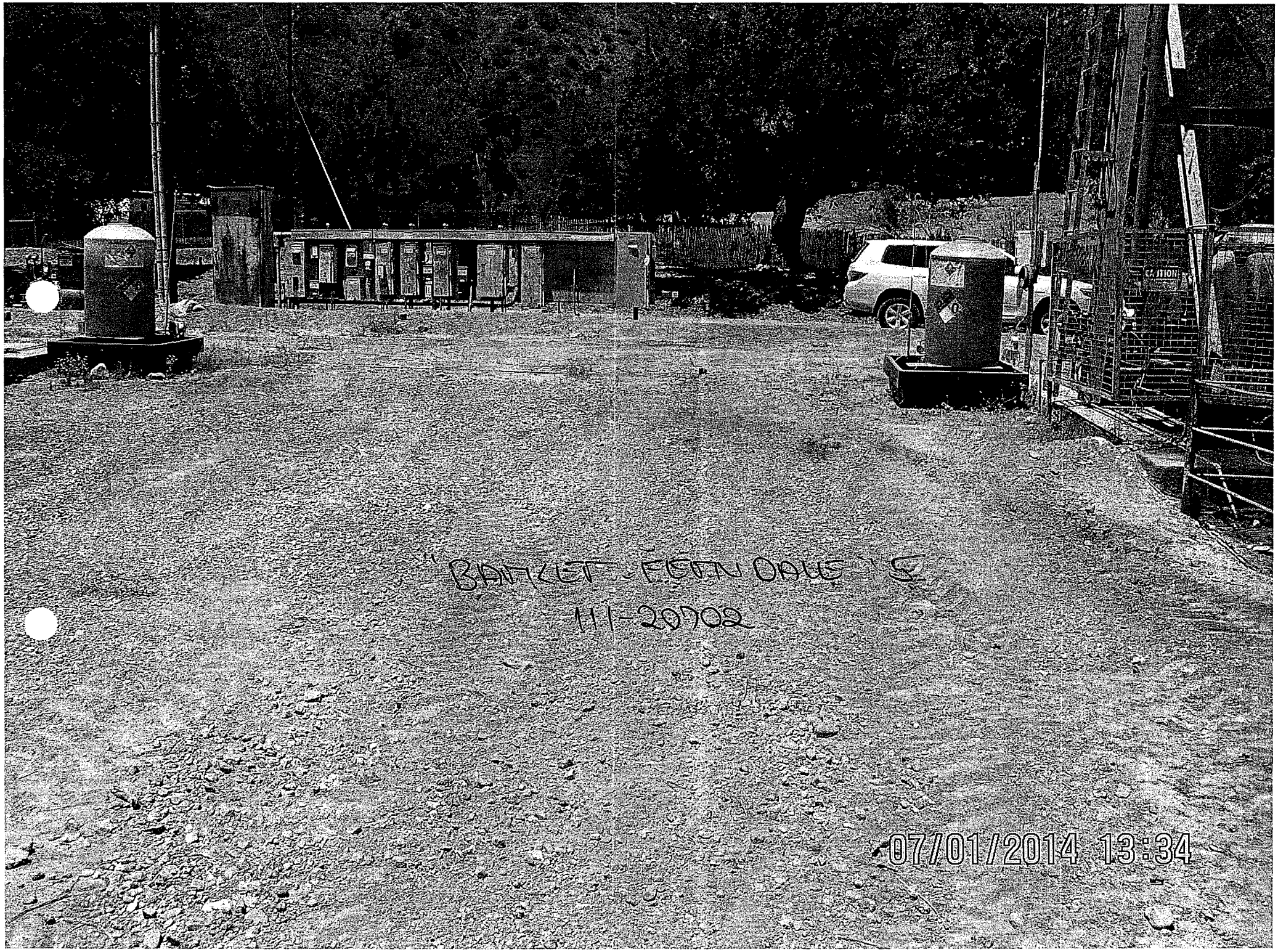
REMARKS

RECORDS SCANNED: _____ *(Date)*

RECORDS APPROVED: 9-22-2014 BH *(Date and Engineer)*

Modified OGD2

AOR Database _____


BASKET FERN OAKS
11-1-20702
07/01/2014 13:34

SUBMIT IN DUPLICATE
RESOURCES AGENCY OF CALIFORNIA
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES

Rec'd 09-12-14 DOGGR D2 Ventura

HISTORY OF OIL OR GAS WELL

Operator: Vintage Production California LLC **Field:** OJAI **County:** VENTURA
Well: Barker-Ferndale 5 **Sec:** 16 **T:** 4N **R:** 21W **M.D.B. & M.**

API#: 04-111-20702 **Name:** Deborah Young for Denny Brown (Person submitting report) **Title:** Agent (President, Secretary, or Agent)

Signature: [signature] **Date** 09/11/2014

9600 Ming Ave., Suite 300, Bakersfield, CA. 93311 (Address) (661) 869-8000 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items such as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, and initial production data.

Well Abandonment

Work Type	Primary Reason	Secondary Reason	Start Date	End Date
ABANDONMENT	PLUG & ABANDON		04/25/2014	07/01/2014

4/24/2014 @06:00 **04/25/2014** @06:00

Shut down for the night.

Discussed planned operations and filled out required permits.

Pre trip for rig move to Ferndale 5. From Ferndale 107.

Drop rig mat and rig up hoist.

N/D Prod tree. N/U BOP and function test. Contact DOGGR. Waived BOP test. Ernie Blevins.

Tubing Pressure = 35 psi.
Casing Pressure = 40 psi.
Accumulator Pre-Charge Pressure = 1100 psi.
Initial Accumulator Pressure = 3000 psi.
Manifold Pressure = 1500 psi.
Annular Pressure = No Annular Preventer Installed.
Time to close pipe rams = 3 sec.
Time to open pipe rams = 2 sec.
Time to close Annular BOP = No Annular Preventer Installed.
Final Accumulator Pressure = 2650 psi.
Function Test BOPE = Good

Unset Baker 7" 23# loc set packer. POOH W/ tubing 20 joints of 2 7/8 J-55 EUE 8rd, laying down. Packer dragging out pulling slowly.

Lunch

Cont POOH laying down tubing laid down 70 joints total. Secure well. Crew shut down for the weekend.

Crew travel from Ferndale 5 to Bakersfield.

Shut down for the night.

4/27/2014 @06:00 **04/28/2014** @06:00

Shut down for the night.

Crew travel from Bakersfield to Ferndale 5.

Discussed planned operations and filled out required permits.

Tubing Pressure = - 0 psi.
Casing Pressure = 0 psi.
Accumulator Pre-Charge Pressure = 1100 psi.
Initial Accumulator Pressure = 3000 psi.
Manifold Pressure = 1500 psi.
Annular Pressure = No Annular Preventer Installed.
Time to close pipe rams = 3 sec.
Time to open pipe rams = 2 sec.
Time to close Annular BOP = No Annular Preventer Installed.
Final Accumulator Pressure = 2650 psi.
Function Test BOPE = Good

Cont POOH laying down 2 7/8 J-55 tubing string. Laid down a total of 170 joints and 1 = Baker Loc set packer 7" 23#.

HISTORY OF OIL OR GAS WELL

Operator: Vintage Production California LLC **Field:** OJAI **County:** VENTURA
Well: Barker-Ferndale 5 **Sec:** 16 **T:** 4N **R:** 21W **M.D.B. & M.**

Lunch

R/D work floor. N/D BOP. N/U Tree prep for MMI CTU. Load out all tools and equipment.

Drop guy wires and rig down hoist.

Move rig from Ferndale 5 to Ferndale 2.

Shut down for the night.

6/15/2014 @06:00 06/16/2014 @06:00

Shut down for the night.

Crew travel from Bakersfield to Ferndale 5.

Discussed planned operations and filled out required permits.

Tubing pressure = 30 psi.
Casing pressure = 40 psi.
Function test BOPE = Good.

RIH W/ MMI CTU and tag well @ 6273Mix and pump 416 cubic feet of class G cement + 35% silica flour + additives from 6273 to ETOC @ 4980. Displace coil and wash up. POOH w/ coil and secure well. R/U MMI W/L shoot perf form 595 to 600 feet R/O MMI W/L.

Lunch.

Shut down for the night.

6/16/2014 @06:00 06/17/2014 @06:00

Shut down for the night.

Discussed planned operations and filled out required permits.

Tubing pressure = 0 psi.
Casing pressure = 0 psi
Function test BOPE = Good.

RIH W/ MMI CTU and tag well @ 4706. DOGGR Kris Gustafson witnessed tag. Mix and pump 157 bbls of abandonment mud from 4706 to 600 feet. Displace coil and wash up. Mix and pump 150 cubic feet of class G cement + 35% silic flour + additives from 600 feet to surface. Displace coil and wash up. POOH w/ coil. Secure well.

Pre trip for move to Ojai Fee 129 from Ferndale 5.

Move equipment from Ferndale 5 to Ojai Fee 129.

Shut down for the night.

6/23/2014 @06:00 06/24/2014 @06:00

Shut down for night.

Crew traveled to location

Discussed JSA's, LOTO & job operations. Made out all paperwork

MIRU MMI CTU.

Tubing pressure= 0 psi
Casing pressure= 0 psi
Function Test BOPE= Good

R.I.H with 1.5" coil tagged @ 188' . Pumped 10 bbls fresh water ahead . Mixed and pumped 85 cf G / w 35% silica Flour . Displaced coil with 10 bbls fresh water . Got cmt to surface . P.O.O.H washed up equipment . Secured well.

RDMO.

Shut down for night.

6/29/2014 @06:00 06/30/2014 @06:00

SDFN

Excavated wellhead and cut off same. Topped off cement.

SDFN

6/30/2014 @06:00 07/01/2014 @06:00

SDFN

Welded on top plate and back filled. P&A completed. DOGGR Kris Gustafson witnessed.

SUBMIT IN DUPLICATE
RESOURCES AGENCY OF CALIFORNIA
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES

Rec'd 09-12-14 DOGGR D2 Ventura

HISTORY OF OIL OR GAS WELL

Operator: Vintage Production California LLC **Field:** OJAI **County:** VENTURA
Well: Barker-Ferndale 5 **Sec:** 16 **T:** 4N **R:** 21W **M.D.B. & M.**

New Holes

Wellbore No.	Hole Size (in)	Top MD (ft)	Btm MD (ft)	Start Date	End Date

New Casing/Liner Strings

Size	Assembly Name	Installed	Wellbore No	Top MD (ft)	Btm MD (ft)

New Perforated Intervals

Date Shot	Wellbore No.	Top MD (ft)	Btm MD (ft)	Length (ft)	SPF	Phasing (°)
06/16/2014	00	595	600	5	4	90.00

Status of this particular flowline is unknown. However it is standard practice to remove flow lines from well location back to production header. The lines are cut, drained, flushed and removed. Surface restoration was verified by DOGGR representative Kris Gustafson.

D ARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
1000 S. Hill Rd, Suite 116 Ventura, CA 93003-4458
Phone:(805) 654-4761 Fax:(805) 654-4765

No. **T214-0271**

REPORT ON OPERATIONS

Denny Brown
Vintage Production California LLC (V1370)
9600 Ming Avenue, Suite 300
Bakersfield, CA 93311

Ventura, California
July 11, 2014

Your operations at well **"Barker-Ferndale" 5**, A.P.I. No. **111-20702**, Sec. **16**, T. **04N**, R. **21W**, **SB** B. & M., **Ojai** field, in **Ventura** County, were witnessed on **7/1/2014**. **Clifford R. Knight**, a representative of the supervisor.

The operations were performed for the purpose of **plugging and abandonment**.

DECISION:

APPROVED

Steven Bohlen
State Oil and Gas Supervisor

By _____
Bruce Hesson
District Deputy

CRK/tkc
OG109

T 2N-027W
#1, 1

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

CEMENTING/PLUGGING MEMO

Operator Vintage Well No. Barker Ferndale #5
API No. 111-20702 Sec. 16 T. 04N R. 21W, SB B&M
Field Ojai, County Ventura. On 7-1-14,
(Mr.)/ Ms. C. Knight representative of the supervisor, was present from 0900 to 0930.

There were also present Richard Flora w/ MMI

Casing record of well:

The operations were performed for the purpose of: Abandonment

☒ The plugging/cementing operations as witnessed and reported are approved.

☐ The location and hardness of the cement plug @ _____ are approved.

Hole size: _____ " fr. _____ ' to _____ ', _____ " to _____ ' & _____ " to _____ '

Casing				Cemented			Top of Fill		Squeezed Away	Final Pressure	Perforations
Size	Wt.	Top	Bottom	Date	MO-Depth	Volume	Annulus	Casing			
9 5/8"	36	Surf	788'	6-17-14	Hydrostatic	130 cf			50 cf	Hydrostatic	595-600
7"	23	Surf	6470	6-16/17	Hydrostatic	420 cf					

Casing/tubing recovered: _____ " Shot/cut at _____ ', _____ ', _____ ', Pulled fr. _____ ';
_____ " Shot/cut at _____ ', _____ ', _____ ', Pulled fr. _____ '.

Junk (in hole): _____

Hole fluid (bailed to) at _____ '. Witnessed by _____

Mudding	Date	bbls	Displaced	Poured	Fill	Engineer
10/30	6-17-14	157	X		600'	KG

Cement Plugs		Placing	Placing Witnessed		Top Witnessed			
Date	Sx./cf	MO & Depth	Time	Engineer	Depth	Wt/Sample	Date & Time	Engineer
					6273'	C/O tag	—	Rpt by G. Langford
6-16-14	420 cf	CTO 6273	—	Rpt by G. Langford	4705'	CT tag	6-17-14 0915	KG
6-17-14	130 cf	CTO 600'	—	Rpt by G. Langford	NO TAG upgraded	—	—	—
6-30-14	50 cf	upgraded to surface	—	RPT by Richard	surface	visual	7-1-14	CK/KG

TURAL RESOURCES AGENCY OF CALIFOR
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
1000 S. Hill Rd, Suite 116 Ventura, CA 93003 - 4458

PERMIT TO CONDUCT WELL OPERATIONS

No. P 213-0368

Old	New
520	520
FIELD CODE	
12	12
AREA CODE	
10	10
POOL CODE	

Ventura, California
October 21, 2013

Alan E. White, Agent
Vintage Production California LLC (V1370)
9600 Ming Avenue, Suite 300
Bakersfield, CA 93311

Your proposal to **Abandon** well **"Barker-Ferndale" 5**, A.P.I. No. **111-20702**, Section **16**, T. **04N**, R. **21W**, **SB** B. & M., **Ojai** field, **Silverthread** area, **Miocene** pool, **Ventura** County, dated **10/8/2013**, received **10/8/2013** has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED:

1. Blowout prevention equipment, as defined by this Division's publication No. MO7, shall be installed and maintained in operating condition and meet the following minimum requirements: **Class II 2M**
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. A diligent effort shall be made to clean out to 6,273'
4. **The well shall be perforated at the base of freshwater from 595'-600'.**
5. All portions of the well not plugged with cement are filled with inert mud fluid having a minimum density of 72lbs.,cu. ft (9.6 Lbs/gal) and a minimum gel shear strength of 25lbs./100 sq. ft.
6. Well site restoration shall be completed within 60 days following the completion of plugging.
7. This office shall be contacted by phone prior to making any program changes and no changes are made without Division approval.
8. **THIS DIVISION SHALL BE NOTIFIED TO:**
   a. Inspect the installed blowout prevention equipment prior to commencing abandonment operations.
   b. Witness the location and hardness of the cement plug at 4,980'.
   c. Witness the mudding operations.
   d. Witness the placing of the cement plug from 600' to surface.
   e. Witness the location and hardness of cement at surface, including all annular spaces after the wellhead has been cut off. If necessary, fill the annulus with cement from 30' to surface.
   f. Inspect the restored well site.

Blanket Bond Dated: 4/23/2003

Tim Kustic
State Oil and Gas Supervisor

Engineer Bruce Hesson
Office (805) 654-4761

By _____
Bruce Hesson, *District Deputy*

BH/bh

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended. Issuance of this permit does not affect the Operator's responsibility to comply with other applicable state, federal, and local laws, regulations, and ordinances.

NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

Rec'd 10-08-13 DOGGR D2 Ventura
FOR DIVISION USE ONLY

Bond	Forms	
	~~OG114~~	OGD121
	CALWIMS	115

5/20/12/10 WD

NOTICE OF INTENTION TO ABANDON / RE-ABANDON WELL

Detailed instructions can be found at: www.conservation.ca.gov/dog

P213-0368

In compliance with Section 3229, Division 3, Public Resources Code, notice is hereby given that it is our intention to abandon ☒ / re-abandon ☐ (Check one) well Barker-Ferndale 5, API No. 04-111-20702,

Sec. 16, T. 4N, R. 21W, SB B.&M., Ojai Field, Ventura County.

The complete casing record of the well (present hole), including plugs and perforations, is as follows: (Attach wellbore schematics diagram also.)

9 5/8", 36#, K55 Surface Csg cmt'd @ 788'. ✓

7", K55, 23# & 26# Prod Csg to 6470'. Csg cmt'd @ 6470'. TTOC @ 5892'.

Perforations: 5080'-5700' Open
5708'-6324' Isolated

Cement Retainer @ 6273'

The total depth is: 6604 feet. The effective depth is: 6273 feet.

Present completion zone(s): _____ (Name). Present zone pressure: 1000 psi.

Oil or gas shows: _____ (Name and depth) feet. Depth to base of fresh water: ± 600' feet.

Top of uppermost hydrocarbon zone (which may be behind unperforated casing): ~~±100~~ No ? feet. (Depth of interval)

Is this a critical well as defined in the California Code of Regulations, Title 14, Section 1720(a) (see next page)? Yes☐ No☒

The proposed work is as follows: (A complete program is preferred and may be attached.)

Pull injection string and packer.
Clean out to 6273'.
Place cement plug from 6273' up to 4980'.
Place abandonment mud from 4980' to 600'. Perforate casing with 4, 1/2" jhpf from 595'to 600'.
Place surface cement plug from 600' to surface.
Restore site.

The Division must be notified immediately of changes to the proposed operations. Failure to provide a true and accurate representation of the well and proposed operations may cause rescission of the permit.

Name of Operator			
Vintage Production California LLC			
Address		City/State	Zip Code
9600 Ming Ave. Suite 300		Bakersfield, Ca.	93311
Name of Person Filing Notice	Telephone Number:	Signature	Date
Deborah Young for Denny Brown	661-869-8178		10/08/2013
Individual to contact for technical questions:	Telephone Number:	E-Mail Address:	
Geoff Kimler	661-869-8029	geoff_kimler@oxy.com	

This notice must be filed, and approval given, before plugging and abandonment operations begin. If operations have not commenced within one year of the Division's receipt of the notice, this notice will be considered cancelled.

Rec'd 10-08-13 DOIGGR D2 Ventura

CRITICAL WELL DEFINITION

As defined in the California Code of Regulations, Title 14, Section 1720 (a), "Critical well" means a well within:

(1) 300 feet of the following:
  (A) Any building intended for human occupancy that is not necessary to the operation of the well; or
  (B) Any airport runway.
(2) 100 feet of the following:
  (A) Any dedicated public street, highway or the nearest rail of an operating railway that is in general use;
  (B) Any navigable body of water or watercourse perennially covered by water;
  (C) Any public recreational facility such as a golf course, amusement park, picnic ground, campground or any other area of periodic high-density population; or
  (D) Any officially recognized wildlife preserve.

This form may be printed from the DOGGR website at www.conservation.ca.gov/dog/

Rec'd 10-08-13 DOIGGR D2 Ventura

VINTAGE PRODUCTION CALIFORNIA, LLC

Ojai Field
Ventura Country, California
Barker-Ferndale 5 - P&A Program
August 31, 2013

Ferndale 5
P&A Program

Well Data:
API #: 04-111-20702
Location: Sec. 16-T4N-R21W SB B&M
Commenced Drilling: 10/16/76
Completed Drilling: 10/31/76
Ground Level: 1061'
Kelly Bushing: 1073'
All measurements are from KB; 12'
BFW @ ± 600 **Top of Hydrocarbon @** ± 5400'
TD @ 6604' **ED @** 6273'

Casing: 9 5/8", 36#, K55 Surface Csg, Cmt'd @ 788'.
7", 26#, K55 12' to 40', 23# 40' to 4126', 26# fro 4126' to 6470'. Cmt'd @ 6470'.
TTOC at 5892'

Perforations: Perf'd: 5080'-5700'; Open
Perf'd: 5708'-6324'; Squeezed

Plugs: Cement Retainer @ 6273'.

Tubing Detail: 2 7/8", 176 joints with 7", 23# Baker lock-set packer @ 5013'

Proposed Program:

Note: Contact the DOGGR representative to witness all procedural steps required to be witnessed (i.e.; clean-out depth, cement plug placement and hardness, perforating, mudding operations, surface plug and site restoration). All cement slurries and abandonment mud will conform to DOGGR specifications.

1. Make lease inspection and determine if tubing and packers are present. If necessary, MIRU a production hoist. Bleed well off. Circulate and kill well as necessary.

2. Install a back pressure valve. Remove tree and install a DOGGR Class II (2M) BOP. **Do not initiate any downhole work until DOGGR has inspected BOPE.**

3. MIRU pulling unit. Pull from hole injection string and Baker Lock Set packer at 5013'.

VINTAGE PRODUCTION CALIFORNIA, LLC

Ojai Field
Ventura Country, California
Barker-Ferndale 5 - P&A Program
August 31, 2013

4. RIH with open-ended tubing and make diligent effort to clean out to 6273', or deeper. **Notify DOGGR to witness clean-out depth**.

5. Rig up cementers. Lay a Cement Plug (Class G Cmt + 35% Silica Flour + additives) from clean out depth, 6273' up to 4980', (Calculated Volume + 50% excess of perf'd interval: 416 cft.). Place cement in stages as necessary.

6. RIH and tag plug at or above 4980', re-cement if necessary. **Notify DOGGR to witness tag**.

7. RU wireline perforating equipment and perforate 7" casing with 4, 0.5" JHPF from 595' to 600'.

8. Spot abandonment Mud from top of plug @ 4980' up to 600'. Abandonment mud shall conform to DOGGR permit specifications – 76 lb/cft with minimum gel strength of 26 lbs./100 sq ft. (Calculated Volume: 167 bbls). **Notify DOGGR to witness mud operation.**

9. Rig up cementers. Lay a Cement Plug (Class G Cmt + 35% Silica Flour + additives) from 600' to surface, (Calculated Volume + 10% excess: 142 cft.). **Notify DOGGR to witness.**

10. Fill all un-cemented annuli to a depth of at least 30' to 5' with cement. Dig outside the conductor casing 5' below ground level. Cut casings off 5' below ground level. Weld on a steel top plate with well identification, well name and API #. Remove cellars and pads. **Notify DOGGR to witness surface abandonment**.

11. Restore surface location to original grade within 60 days. **DOGGR to approve final surface restoration.**

Rec'd 10-08-13 DOIGGR D2 Ventura

VINTAGE PRODUCTION CALIFORNIA, LLC

Ojai Field
Ventura Country, California
Barker-Ferndale 5 - P&A Program
August 31, 2013

Rec'd 10-08-13 DOIGGR D2 Ventura

VINTAGE PRODUCTION CALIFORNIA, LLC

Ojai Field
Ventura Country, California
Barker-Ferndale 5 - P&A Program
August 31, 2013

VINTAGE PETROLEUM LLC - CALIFORNIA

FERNDALE 5

Event: HISTORY
Event End: 10/10/1996 00:00
Sec Reason:

Water Depth: 1,051.0ft
Datum: Original KB @ 1,073.00ft (default)
API No.: 0411120702

Wellbore: ORIGINAL HOLE
PBMD:
Btm TMD: 6,604.0ft
Spud Date: 10/13/1976 02:00
BH Coord X: 1,671,479.86usft
BH Coord Y: 341,239.07usft

Casing Shoes (ftKB) | Schematic (7/13/1989) | Options: Top/Btm/Type/Status

788.0

5,658.0ft, 5,659.0ft, PERFORATED, OPEN
5,664.0ft, 5,670.0ft, PERFORATED, OPEN
5,670.0ft, 5,678.0ft, PERFORATED, OPEN
5,680.0ft, 5,690.0ft, PERFORATED, OPEN
5,692.0ft, 5,700.0ft, PERFORATED, OPEN
5,708.0ft, 5,709.0ft, PERFORATED, SQUEEZED
5,748.0ft, 5,749.0ft, PERFORATED, SQUEEZED
5,780.0ft, 5,781.0ft, PERFORATED, SQUEEZED
5,784.0ft, 5,799.0ft, PERFORATED, OPEN
5,815.5ft, 5,816.5ft, PERFORATED, SQUEEZED
5,818.0ft, 5,819.0ft, PERFORATED, SQUEEZED
5,882.0ft, 5,883.0ft, PERFORATED, SQUEEZED
5,914.0ft, 5,918.0ft, PERFORATED, OPEN
5,922.0ft, 5,925.0ft, PERFORATED, OPEN
6,056.0ft, 6,057.0ft, PERFORATED, SQUEEZED
6,115.0ft, 6,116.0ft, PERFORATED, SQUEEZED
6,171.0ft, 6,172.0ft, PERFORATED, OPEN
6,175.0ft, 6,176.0ft, PERFORATED, OPEN
6,211.5ft, 6,212.5ft, PERFORATED, OPEN
6,215.0ft, 6,216.0ft, PERFORATED, SQUEEZED
6,219.0ft, 6,229.0ft, PERFORATED, OPEN
6,225.0ft, 6,226.0ft, PERFORATED, SQUEEZED
6,323.0ft, 6,324.0ft, PERFORATED, ISOLATED

6,470.0

PLUG BACK Report Date: 1/14/1984 00:00

Component	Top MD (ftKB)	Btm MD (ftKB)
CR-PRM	6,273.0	6,277.0

SURFACE CASING Report Date: 10/14/1976 00:00

Item	OD (in)	Grade	Wt. (ppf)	Top MD (ftKB)	Btm MD (ftKB)
CASING JOINT(S)	9.625	K-55	36.00	12.0	788.0

PRODUCTION CASING Report Date: 10/31/1976 00:00

Item	OD (in)	Grade	Wt. (ppf)	Top MD (ftKB)	Btm MD (ftKB)
CASING JOINT(S)	7.000	K-55	26.00	12.0	40.0
CASING JOINT(S)	7.000	K-55	23.00	40.0	4,126.0
CASING JOINT(S)	7.000	K-55	26.00	4,126.0	6,470.0

PROPERTY/WELL TRANSFER OR ACQUISTION

Seneca Resources Corporation (S2630)

to

Vintage Production California LLC (V1370)

Effective April 25, 2008

OPERATOR SENECA RESOURCES A.P.I. 111 - 20702

WELL NO. "BARKER-FERNDALE" 5 SECTION 16, T. 4 N, R. 21 W

MAP

INTENTION	CONVERT TO INJECTION					
NOTICE DATED	—					
P-REPORT NUMBER	293-083					
CHECKED BY/DATE						
MAP LETTER DATED	7-30-94					
SYMBOL						

	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED
NOTICE	10-19-92											
HISTORY	7-19-93											
SUMMARY												
E-LOG												
MUD LOG												
DIPMETER												
DIRECTIONAL												
CORE/SWS												
CBL												

ENGINEERING CHECK

T-REPORTS	✓					
OPERATOR'S NAME	✓					
WELL NO.	✓					
LOC & ELEV	✓					
SIGNATURE	✓					
SURFACE INSP.	✓					
DRILL CARD						
RECORD'S COMPLETE	✓ SF					

FINAL LETTER OK _____

MAILED _____

RELEASED BOND _____

INJECTION BOOK _____

IDLE WELL LIST _____

SURFACE INSP. CARD _____

REMARKS: _____

OK TO RELEASE FROM CONFIDENTIAL _____

ABANDONED-REMOVED FROM E.D.P. _____

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND
GEOTHERMAL RESOURCES

No. T296-218

Report on Operations

Barry McMahan, Agent
Seneca Resources Corp.
P.O. Box 630
Santa Paula, CA 93060

Ventura, California
October 8, 1996

Your operations at well "Barker-Ferndale" 5, API No. 111-20702,
Sec. 16, T. 4N, R. 21W, S.B. B.&M. Ojai Field, in Ventura County,
were witnessed on 9-18-96. Steve Mulqueen, representative of
the supervisor, was present from 0900 to 1100. There were also present
Martin Chapman, Welaco Engineer
Present condition of well: 9 5/8" cem 788'; 7" cem 6470', perf & sqz 5080', 5100'-5110', & 5140', perf @ ints 5628'-5790', perf & sqz 5815', 5818', & 5892', perf @ ints 5911'-5925', perf & sqz 6056' & 6115', perf @ ints 6171'-6323', 2 7/8" tbg hq 5012' w/inj pkr @ 5007'. TD 6604'. Plugged w/cem 6604'-6429', w/cem ret @ 6273', & w/bp @ 6030' & 5790'.

The operations were performed for the purpose of demonstrating that the injection fluid is confined to the strata below 5628' and not entering the perforations @ 5080', 5100'-5110' & 5140'.

DECISION:

The Mechanical Integrity Test (MIT) is approved since it indicates that all of the injection fluid is confined to the formations below 5628' at this time.

svl

William F. Guerard, Jr.
State Oil and Gas Supervisor

By

Patrick J. Kinnear
Deputy Supervisor

OG109 (Modified 1993)

State of California
Department of Conservation
Division of Oil, Gas, and Geothermal Resources

No. T 296-28

MECHANICAL INTEGRITY TEST (MIT)

Operator: SENECA RESOURCES Well designation: "BARKER-FERNDALE" 5

Sec. 16, T. 4N, R. 21W, SB B.& M. API No.: 111-20702 Field: OIAI

County: VENTURA Witnessed/Reviewed on: 9-18-96.

STEVE MULQUEEN, representative of the supervisor, was present from 0900 to 1100.

Also present were: MARTIN CHAPMAN, WELACO ENGINEER

Casing record of the well:

Present condition of well: 9 5/8" cem 788'; 7" cem 6470', perf & sqz 5080', 5100'-5110', & 5140', perf @ ints 5628'-5790', perf & sqz 5815', 5818', & 5892', perf @ ints 5911'-5925', perf & sqz 6056' & 6115', perf @ ints 6171'-6323', 2 7/8" tbg hg 5012' w/inj pkr @ 5007'. TD 6604'. Plugged w/cem 6604'-6429', w/cem ret @ 6273', & w/ bp @ 6030' & 5790'.

The MIT was performed for the purpose of DEMONSTRATING THAT THE INJECTION FLUID IS CONFINED TO THE STRATA BELOW 5628' AND NOT ENTERING THE PERFORATIONS @ 5080, 5100'-5110' & 5140'.

☒ The MIT is approved since it indicates that all of the injection fluid is confined to the formations below 5628 feet at this time.

☐ The MIT is not approved due to the following reasons: (specify)

Well: "BARKER - FERNDALE" 5 Date: 9-18-96 Time: 1200

Observed rate: 366 B/D Meter rate: _____ B/D Fluid level: 0 feet

Injection pressure: 1500 psi MASP: _____ Pick-up depth: 6376 feet

Initial annulus pressure: SLIGHT BLOW psi Pressure after bleed-off: 0 psi

Casing vented during test (Y/N): Y Survey company: WELACO PROD. LOGGING

SPINNER COUNTS

DEPTH	COUNTS	RATE	DEPTH	COUNTS	RATE

COMMENTS: KB 12'
TEMP 6376' - 4900

TRACER CASING AND TUBING RATE CHECKS

	Interval	Time (sec.)	Rate (B/D)
TBG	4941 - 4950 (9)	8	350
CSG	5591 - 5600 (9)	79	366
TBG	200 - 209 (9)	10	280

Background log: 5700 to 5550 OK

COMMENTS: & 4950 TO 5050 OK
PEAK @ 5040' BACKGROUND

TOP PERFORATION CHECK

Top perforation depth: 5628 Wait at: 5600 for 300 seconds Beads: (Y/N) _____

7" Casing shoe at: 6470 WSO holes at: _____ Arrival time: *Calculated* — *Actual* —

	LOG FROM	TO	SLUG @	LOG FROM	TO	SLUG @	COMMENTS:
DN	5600	5650	5638				
DN	5570	5650	5645				
DN	5570	5700	5685				

PACKER CHECK

Packer at: 5012 Wait at: 4950 for 300 seconds Beads: (Y/N) —

Tubing tail at: 5012 Tubing size: 2 7/8 2nd Packer at: — Mandrel: —

LOG FROM	TO	SLUG @	LOG FROM	TO	SLUG @	COMMENTS:
4950	5075	5035				
5075	4950	5040				

COMMENTS: 7" csg, perfs 5628' - 6323'

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND
GEOTHERMAL RESOURCES

No. T295-140

Report on Operations

Barry McMahan, Agent
Seneca Resources Corp.
P.O. Box 630
Santa Paula, CA 93061

Ventura, California
September 7, 1995

Your operations at well "Barker-Ferndale" 5, API No. 111-20702,
Sec. 16, T. 4N, R. 21W, S.B. B.&M. Ojai Field, in Ventura County,
were witnessed on 7-31-95. Pete Wyqle, representative of
the supervisor, was present from 1100 to 1300. There were also present
B. McMahan, Operator's Rep.
Present condition of well: 9 5/8" cem 788'; 7" cem 6470', perf & sqz 5080', 5100'-5110', & 5140', perf @ ints 5628'-5790', perf & sqz 5815', 5818', & 5892', perf @ ints 5911'-5925', perf & sqz 6056' & 6115', perf @ ints 6171'-6323', 2 7/8" tbg hg 5012' w/inj pkr @ 5007'. TD 6604'. Plugged w/cem 6604'-6429', w/cem ret @ 6273', & w/ bp @ 6030' & 5790'.

The operations were performed for the purpose of demonstrating that the injected fluid is confined to strata below 5628', and is not entering the squeezed perforations @ 5080', 5100'-5110', & 5140'.

DECISION:

The Mechanical Integrity Test (MIT) is approved since it indicates that all of the injection fluid is confined to the formations below 5628' at this time.

svl

William F. Guerard, Jr.
State Oil and Gas Supervisor

By

Patrick J. Kinnear
Deputy Supervisor

OG109 (Modified 1993)

State of California
Department of Conservation
Division of Oil, Gas, and Geothermal Resources

No. T295-140

MECHANICAL INTEGRITY TEST (MIT)

Operator: Seneca Well designation: "Ferndale" 5

Sec. 16, T. 4N, R. 21W, SB B.& M. API No.: 111-20702 Field: Ojai

County: Ventura Witnessed/Reviewed on: 7-31-95.

P. Wygle, representative of the supervisor, was present from 1100 to 1300.

Also present were: B. McMahan, operator's rep.

CASING RECORD OF WELL: 9-5/8" cem 788'; 7" cem 6470', perf & sqz 5080', 5100'-5110', & 5140', perf @ ints 5628'-5790', perf & sqz 5815', 5818', & 5892', perf @ ints 5911'-5925', perf & sqz 6056' & 6115', perf @ ints 6171'-6323', 2-7/8" tbg hg 5012' w/inj pkr @ 5007'. TD 6604'. Plugged w/cem 6604'-6429', w/ cem ret @ 6273', & w/ bp @ 6030' & 5790'.

The MIT was performed for the purpose of demonstrating that the injected fluid is confined to strata below 5628', & is not entering the squeezed perforations @ 5080', 5100'-5110', & 5140'.

☐ The MIT is approved since it indicates that all of the injection fluid is confined to the formations below 5628' feet at this time.

☐ The MIT is not approved due to the following reasons: (specify)

Well: Seneca "Ferndale" 5 Date: 7-31-95 Time: 1100-

Observed rate: 350 B/D Meter rate: 350 B/D Fluid level: — feet

Injection pressure: 1150 psi MASP: _____ Pick-up depth: 6370 feet

Initial annulus pressure: 0 psi Pressure after bleed-off: 0 psi

Casing vented during test (Y/N): Y Survey company: Welco

SPINNER COUNTS

DEPTH	COUNTS	RATE	DEPTH	COUNTS	RATE	COMMENTS:

TRACER CASING AND TUBING RATE CHECKS

Background log: 5700 to 5550

Interval	Time (sec.)	Rate (B/D)
5540 - 5550	88	346
5050 - 5060	88	346
4940 - 4950	14	357
100 - 110	15	333

COMMENTS: 5050 4950

TD 6604
ED 6408

TOP PERFORATION CHECK

Top perforation depth: 5628 Wait at: 5550 for 300 seconds Beads: (Y/N) _____

Casing shoe at: _____ WSO holes at: 5080 Arrival time: *Calculated* _____ *Actual* _____

LOG FROM	TO	SLUG @	LOG FROM	TO	SLUG @	COMMENTS:
5550	5650	5590				
5650	5500	5639				

PACKER CHECK

Packer at: 5007 Wait at: 4950 for 300 seconds Beads: (Y/N) _____

Tubing tail at: 5012 Tubing size: 2 7/8 2nd Packer at: _____ Mandrel: _____

LOG FROM	TO	SLUG @	LOG FROM	TO	SLUG @	COMMENTS:
4950	5100	5050				
5100	4925	5065				

COMMENTS: _____

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS
AND GEOTHERMAL RESOURCES

No.T293-209

REPORT ON OPERATIONS

James A. Beck, Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
September 8, 1993

Your operations at well "Barker-Ferndale" 5, API No. 111-20702, Sec. 16, T. 4N, R. 21W, S.B.B.&M. Ojai Field, in Ventura County, were witnessed on 7-23-93. Pete Wygle, representative of the supervisor, was present from 1400 to 1630. There were also present .

Present condition of well: 9 5/8" cem 788'; 7" cem 6470', perf & sqz 5080', 5100'-5110', & 5160', perf @ ints 5628'-5790', perf & sqz 5815', 5818'& 5892', perf @ ints 5911'-5925', perf & sqz 6056' & 6115', perf @ ints 6171'-6323'. TD 6604'. Plugged W/ cem 6604'-6429'.

The injection survey was performed for the purpose of demonstrating that the injected fluid is confined to strata below 5628' and not entering perforations @ 5080', 5100'-5110' & 5140'.

DECISION:

The injection survey is approved since it indicates that all of the injection fluid is confined to the formations below 5628' at this time.

tkc

WILLIAM F. GUERARD, Jr.
State Oil and Gas Supervisor

By
Patrick J. Kinnear
Deputy Supervisor

OG109

State of California
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

4

No. T 209

INJECTION (M.I.T.) SURVEY

Operator: Seneca Res. Corp. Well Designation: "Barker-Ferndale" 5

Sec. 1, T. 4N, R. 21W, SB B.&M. A.P.I. No.: 111-20702 Field: Ojai

County: Ventura Witnessed on (date): 7-23-93 . P. Wygle,

representative of the Supervisor, was present from 1400 to 1630.

Also present: _____

Casing record of well: 9 5/8" cem 788'; 7" cem 6470', perf & sqz 5080', 5100'-5110' & 5160'; perf @ ints 5628'-5790', perf & sqz 5815', 5818' & 5892', perf @ ints 5911-5925', perf & sqz 6086' & 6115', perf @ ints 6171-6323'. TD 6604'. Plugged w/cem 6604'-6429'.

The injection survey was performed for the purpose of demonstrating that the injected fluid is confined to strata below 5628' AND not entering ~~[redacted]~~ @ 5080', 5100'-5110' and 5140' perforations

[X] The injection survey is approved since it indicates that all of the injection fluid is confined to the formations below 5628 feet at this time.

[ ] The injection survey is not approved due to the following reasons: (specify)

Note: _____

9/7

OGD6 (DWRR/11/88/5M)

M.I.T. DATA SHEET

Well: Seneca Res. "Barker-Ferndale" 5 Date: 7-23-93 Time: 1400

Observed Rate: 368 B/D Meter Rate: 411 B/D

Injection Pressure: 725 psi MASP: _____ psi Pick-up Depth: 6395 feet

Initial Annulus Pressure: 0 psi Pressure After Bleed-off: 0 psi

Casing Vented During Test (Y/N): Y

SPINNER COUNTS

DEPTH	COUNTS	RATE (B/D)	DEPTH	COUNTS	RATE (B/D)	COMMENTS:
No Spinner						

R. A. T. CASING RATE CHECKS

INTERVAL	TIME (sec.)	RATE (B/D)	COMMENTS:

R. A. T. TUBING RATE CHECKS

INTERVAL	TIME (sec.)	RATE (B/D)	COMMENTS:
4950-4975	34	368	

Background Log: From 5700 to 5600 Comments: _____

TOP PERFORATION CHECK

Top perforation at: 5628 Wait at: 5600 for 300 seconds Beads: (Y/N) ~

Casing shoe at: 6470 WSO holes/CP at: ~

Log	dn	from 5600	to 5700	slug at 5650	COMMENTS:
Log	up	from 5700	to 5600	slug at 5660	
Log		from	to	slug at	
Log		from	to	slug at	

PACKER CHECK

Packer at: 5013 Wait at: 4975 for 300 seconds

Tubing tail at: 5100 Tubing size: 2 7/8 2nd packer at: ~ Mandrel: ~

Log	dn	from 4975	to 5050	slug at gone	COMMENTS:
Log	up	from 5050	to 4975	slug at gone	
Log		from	to	slug at	
Log		from	to	slug at	

Survey Company: _____ Wireline Technician: _____

Remarks: _____

STATE OF CALIFORNIA—THE RESOURCES AGENCY

PETE WILSON, *Governor*

DEPARTMENT OF CONSERVATION

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

1000 SOUTH HILL ROAD, SUITE 116
VENTURA, CALIFORNIA 93003-4458
(805) 654-4761
TELEFAX (805) 654-4765

September 7, 1993

James A. Beck, Agent
P.O. Box 630
Santa Paula, CA. 93060

Re: Water Disposal Project
Ojai Oil Field
"Barker-Ferndale" 5

Dear Mr. Beck:

On July 23, 1993, we were notified of pressure on the casing-tubing annulus on "Barker-Ferndale" 5. After a thorough check of all possible causes, it was assumed that the pressure was as a result of leaking perforations at either 5080', 5100'-5110' or 5140'. This was determined as the pressure was not present when the injection packer was reset above these perforations.

Inasmuch as the perforations at 5080', 5100'-5110' and 5140' are above the permitted zone of injection, we are unable to approve injection into these. However, verbal approval and this letter constitutes written approval, was given to allow injection operations to continue provided that:

1. The mechanical integrity of the 7" casing above 5080' is determined once every five years.

   The initial determination was made on February 18, 1993.

2. No injection is permitted into zones above 5628'

   This shall be determined by an annual injection survey that demonstrates that the tubing, packer, top perforation at 5628' is not leaking and that fluid is not entering the perforations at 5080', 5100'-5110' and 5140'. This was initially demonstrated on July 23, 1993.

3. Requirements specified in our approval of the water disposal project dated February 23, 1993 shall apply.

If you have any questions, concerning this addition to you approval to inject in this well, please feel free to contact us at (805) 654-4761.

Steven A. Fields
Operations Engineer

State of California
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. T 293-046

INJECTION (M.I.T.) SURVEY

Operator: Seneca Resources Corp Well Designation: Barker - Ferndale #5

Sec. 16, T. 4N, R. 21W, S.B. B.&M. A.P.I. No.: 111-20702 Field: Ojai

County: Ventura Witnessed on (date): 2/18/93 . Fariba M. Neese,

representative of the Supervisor, was present from 13:00 to 14:00.

Also present: _____

Casing record of well: 9 5/8" cmt. @ 788'; 7" cmt. @ 6470', perfd sqzd 6115', 6056', 5892' 5818', 5815', 5140', 5110-5100', & 5080'. Perfs @ 6323', 6267', 6242', 6225', 6219', 6215', 6217', 6175', 6171', 5925'-5922', ✓ 5918'-5914', 5911'*, 5790-5784', 5780', 5748', 5732' 5708', 5700'-5692', 5690'-5684', 5680'-5678', 5670'-5654', 05628'. TD. 6604. L?

The injection survey (mechanical integrity test) was performed for the purpose of pressure testing the 2 7/8" tubing and 7" casing down to the packer depth of 5500'.

☑ The injection survey (mechanical integrity test) is approved since it indicates that all of the injection fluid is confined to the formations below 5500' feet at this time.

☐ The injection survey is not approved due to the following reasons: (specify)

Note: _____

OGD6 (DWRR/11/88/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
OCT 19 1999
VENTURA, CALIFORNIA

Notice of Intention to Rework Well

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	FORMS	
	OGD 114	OGD 121

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well Ferndale #5 (Well designation), API No. 111-20702

Sec. 16, T. 4N, R. 21W, SB B. & M., Silverthread Field, Ventura County.

The present condition of the well is as follows:

1. Total depth 6,604'.

2. Complete casing record, including plugs and perforations (present hole)
   See Attached.

3. Present producing zone name Mohnian ; Zone in which well is to be recompleted N/A

4. Present zone pressure 1,500 psi. ; New zone pressure N/A

5. Last produced 04/91 (Date) | 0 (Oil, B/D) | 65 (Water, B/D) | ---------- (Gas, Mcf/D)
   (or)
   Last injected N/A (Date) | ____ (Water, B/D) | ____ (Gas, Mcf/D) | ____ (Surface pressure, psig)

6. Is this a critical well according to the definition on the reverse side of this form? ☐ (Yes) ☒ (No)

The proposed work is as follows:

Convert to Waste Water Disposal Well - proposed conversion program is attached.

Note: If well is to be redrilled, show proposed new bottom-hole coordinates and true vertical depth.

It is understood that if changes in this plan become necessary, we are to notify you immediately.

Address 725 E. Main St, Ste 200 (Street)
Santa Paula, CA 93060 (City) (State) (Zip)
Telephone Number (805) 656-2445
933-2217

Seneca Resources Corp. (Name of Operator)
By James Beck, General Manager (Name - Printed)
James A. Beck (Name - Signature) (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

DIVISION OF OIL AND GAS
RECEIVED
OCT 27 1992
VENTURA, CALIFORNIA

Seneca Resources Corporation
Barker-Ferndale #5
Silverthread Field

Convert to Waste Water Disposal Program

Proposed Program:

1.) MIRU a production hoist, pull rods and pump.

2.) Remove tree and install double ram hydraulic BOPE. Unland tbg and tag for fill. Clean out as directed by Seneca's Wellsite Supervisor. Measure out of hole.

3.) Pick up and run 7", 23# X 26# casing scraper to 6,350'±, POOH.

4.) Pick up 7", 26# injection packer and hydrotest in hole on 2-7/8" tubing to 5,500'±. (Note: Packer will need to be equipped with wireline re-entry guide on bottom). Space out, fill annulus with inhibited packer fluids, set packer, pressure test annulus to 1,000 psi, remove BOPE and install injection tree. RDMO.

5.) Run R/A injection profile survey within 90 days of initializing injection.

Prepared By: J. Cook

Approved By: B. McMa

DIVISION OF OIL AND GAS
RECEIVED
OCT 27 1992
VENTURA, CALIFORNIA

Seneca Resources Corporation
Barker-Ferndale #5
Silverthread Field

Convert to Waste Water Disposal Program

Present Conditions:

TD: 6,604′ ETD: 6,428′ KB: 12′

Casing: 9-5/8", 36#, K-55-L cem @ 788′ w/ 500 C.F.

7", 23# & 26#, K-55-L cem @ 6,470′ w/ 521 C.F. Sqz. cem′t @ 6,115′, 6,056′, 5,892′, 5,818′- 5,815′, 5,140′, 5,110′- 5,100′, 5,080′ w/ 266 C.F. total (Theroretical TOC Behind 7" - 5,080′).

Perforations:
6,323′, 6,267′, 6,262′, 6,225′, 6,219′, 6,215′, 6,217, 6,175′, 6,171′, 6,115′ - sqz′d, 6,056′- sqz′d, 5,925′-5,922′, 5,918′- 5,914′,, 5,911′, 5,892′- sqz′d, 5,818′- sqz′d, 5,815′ - sqz′d, 5,790′- 5,784′,5,780′, 5,748′, 5,732′, 5,708′, 5,700′- 5,692′, 5,690′-5,684′, 5,680′- 5,678′, 5,670′- 5,654′, 5,628′, 5,140′- sqz′d, 5,110′- 5,100′- sqz′d, 5,080′- sqz′d.

Tubing Detail:

Top:	12.00′	KB
Next:	314.85′	10 Jts 2-7/8" N-80
Next:	1.10′	Flag Jt.
Next:	5,242.19′	168 Jts 2-7/8" J-55
Next:	.60′	T/L Shoe
Bottom:	24.55′	1 Jt 2-7/8" w/ STC
Total:	5,600.29′	

Present Status: Shut-In

OPERATOR ARCO
LSE & NO Barker-Ferndale
MAP 203

	(1)	(2)	( )	( )	( )	( )
INTENTION	DRILL	alter csg	alter casing	rework	Supp.	rework
NOTICE DATED	10-11-76	1-10-84	~~2-2-89~~ ~~3-6-89~~	11/3/89	1-3-90	1-28-91
P-REPORT NUMBER	276-346	284-9	~~289-65~~ ~~3-6-89~~	289-420	290-18	291-76
CHECKED BY/DATE						
MAP LETTER DATED	6-4-77 ◎ 10-16-76					
SYMBOL	◎	NC	NC	NC	NC	

	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED
NOTICE	10-13-76		1-12-84		3-6-89		11/6/89		1-4-90		1-30-91	
HISTORY	5-16-77		3-15-85		9-8-89		→		1/29/90			
SUMMARY	5-16-77		3-15-85									
IES/ELECTRIC LOG (2" DIL)	5-14-81											
DIRECTIONAL SURV	5-16-77											
CORE/SWS DESCRIP	dig dio 1-13-91 ~~5-16-77~~											
OTHER (FINDERSKIN DIL; MUD LOG; FM FAC; CONT DIP; VARIABLE DEN; MICROSFL)	5-16-77 5-16-77 DR 5-16-77 5-16-77 5-16-77 5-16-77											
RECORDS COMPLETE			3-26-85 SAM		9-8-89 SAM		pmc		pmc			

ENGINEERING CHECK

T-REPORTS	
OPERATOR'S NAME	
WELL DESIGNATION	
LOC & ELEV	
SIGNATURE	
SURFACE INSPECTION	
FINAL LETTER OK	

CLERICAL CHECK

POSTED TO 121 _____ 170 MAILED _____ FINAL LETTER MAILED _____

RELEASED BOND _____

REMARKS: ~~NEED DIRECTIONAL~~ WSO 7/21/77

Eligible for release 5-3-80 AP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No.P292-099
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
April 21, 1992

Your supplementary proposal to rework well "Barker-Ferndale" 5, A.P.I. No. 111-20702, Section 16, T. 4N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated -------, received 4/1/92, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Requirements specified in permit No. P291-76, dated Feb. 1, 1991 shall apply.

Blanket Bond
SF:tkc

Engineer Steve Fields

Phone (805) 654-4761

K.P. HENDERSON, Acting Chief

By Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

121 ✓

DIVISION OF OIL AND GAS
RECEIVED
APR 1 1992
VENTURA, CALIFORNIA

The Resources Agency of California
Department of Conservation
DIVISION OF OIL AND GAS

WELL STATUS INQUIRY

Ventura, California
March 11, 1992

Murdock M. Baker, Jr. Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

In a notice dated 1/28, 1991, you propose to rework well "Barker-Ferndale" 5 (111-20702)
Sec. 16, T. 4N, R. 21W, SBB.&M., Ojai
(Field or County)

Please indicate below, conditions or intentions regarding this proposed work and return the completed form to this office within 10 days.

K.P. HENDERSON, Acting Chief
By Patrick J. Kinnear
Patrick J. Kinnear, Deputy Supervisor

SPM/tkc

___PROSOSED WORK HAS BEEN DONE. (If you check this space, please file the required well records on this work in duplicate within 60 days after work was completed.*)

___PROPOSED WORK IS IN PROGRESS AND SHOULD BE COMPLETED ABOUT _____,19____.

_X_PROPOSED WORK HAS NOT BEEN DONE, BUT WE STILL INTEND TO DO THE WORK.**

~~X~~ SUPPLEMENTARY NOTICE (Form OG123) ATTACHED.

X PLEASE CONSIDER THIS FORM AS A SUPPLEMENTARY NOTICE.

___WE DO NOT INTEND TO DO THE PROPOSED WORK. Please cancel our notice to _____ _____, dated _____,19____.

___OTHER: _____

James A. Beck
(Signature)

James A. Beck, Exploration Manager
(Name and Title)

*Division 3 of the Public Resources Code states in part:
Section 3215,...Well records shall be filed 60 days after completion or suspension of proposed work.

**Section 3203,...If operations have not commenced within one year of receipt of the notice, the notice will be considered cancelled. (To prevent cancellation, file a Supplementary Notice with the Division.)

OGD3

OPERATOR Seneca
WELL NO. "Barker-Fendale" 5
MAP

INTENTION	Supp.					
NOTICE DATED						
P-REPORT NUMBER	292-099					
CHECKED BY/DATE						
MAP LETTER DATED						
SYMBOL						

	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED
NOTICE	4-1-92											
HISTORY												
SUMMARY												
E-LOG												
MUD LOG												
DIPMETER												
DIRECTIONAL												
CORE/SWS												
CBL												

ENGINEERING CHECK

T-REPORTS						
OPERATOR'S NAME						
WELL NO.						
LOC & ELEV						
SIGNATURE						
SURFACE INSP.						
DRILL CARD						

RECORD'S COMPLETE _____ _____ _____ _____ _____ _____

FINAL LETTER OK _____
MAILED _____
RELEASED BOND _____

INJECTION BOOK _____
IDLE WELL LIST _____
SURFACE INSP. CARD _____

REMARKS: _____

OK TO RELEASE FROM CONFIDENTIAL _____
ABANDONED-REMOVED FROM E.D.P. _____

ECA

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P291- 76
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
February 1, 1991

Your proposal to rework well "Barker Ferndale" 5, A.P.I. No. 111-20702, Section 16, T. 4 N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 1/28/91, received 1/30/91, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOG Class II 2M requirements shall be installed and maintained in operating condition at all times.
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. Wire line operations are conducted through at least a 2M lubricator.
4. The Division will monitor the monthly production of this well for a period of six months and if anomalous water production is indicated, remedial action well be required.
5. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.

Blanket Bond
SF:ljg

Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Hinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

DIVISION OF OIL & GAS
RECEIVED
JAN 29 1990

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: ~~"ARCO"~~ BARKER FERNDALE" 5 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20702 — JAMES A. BECK, GENERAL MANAGER

James A. Beck

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

11/21/89
Day 1. MIRU Oilwell. Bled tbg. POH with rods. Remove tree. Rig for tbg. Unland tbg. Free Flo-Log tool. Set flange. Make up donut. Land tbg. SDFN.

11/22/89
Day 2. Bled tbg. Rig for rods. Make up tree & BOE. Pull rods & pump. Bled csg. Bolt on Homco mechanical gate & check. Rig for tbg. Pull tbg. Make up Robinson 7" positive csg. scraper & run to 5630'. Pull tbg. & scraper. Leave 10 stds. for kill string. SDFN.

11/23/89
Day 3. Bled well. Pull kill string. Make up Baker K-1 cement retainer plug. Measure & run tbg. Set drillable plug @ 5475'. Pull tbg. to 5470'. Rig line from lease water tank to well. SDFN.

11/24/89
Shut down for Holiday.

11/25/89
No activity.

11/26/89
Day 4. Plumb suction line & lines to well. Rig to circulate. Change well over to treated lease water. Press. plug & csg. to 2000 psi. Bled press. Pull tbg. Fill well. RU A&F Testers. Test csg. & plug to 3000 psi. Held for 5 min. RU Schlumberger. Tag plug @ 5470'. Perf 4 (0.44") JHPF @ 5140'. Breakdown perfs @ 1700 psi @ 3 BPM. Pump 3 bbls. lease water. Bled surface pipe, on vacuum. RU A&F Testers. Make up Baker 7" ret. packer. Test tbg. in well to 5000 psi. All tbg. tested. RO tester. Close well in with packer @ 5106'. SDFN.

11/27/89
Day 5. Pull packer to 5037' & set. RU Halliburton cementers. Press. csg. to 500 psi. Establish breakdown with fresh water. Pump 10 bbls. @ 3 BPM @ 1800 psi. Mix & pump 100 sks. Class "G" cement with additives. Displace with 31-1/2 bbls. water. Final squeeze press. = 2000 psi. Release packer. Backscuttle tbg. clean. Reset pkr. Press. cement to 2000 psi. Hold for 5 min. Release pkr. Pull tbg. & pkr. Fill well with treated lease water. Install Homco shooting flange. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION OJAI FIELD VENTURA COUNTY
WELL: "ARGO BARKER FERNDALE" 5 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20702 JAMES A. BECK, GENERAL MANAGER

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445
****

11/28/89
Day 6. Pressure csg. to 2000 psi. Held o.k. RU Schlumberger. Run gun. Tag top of cement @ 5091'. Perf 3 (0.44") JHPF @ 5080'. RO Schlumberger. Press. csg. to 2200#. No breakdown. Press. to 1800 & close in. Bled to 1460 in 10 min. Bled to 1300 in 15 min.. & 1080 in 30 min. Bled press. Make up Baker 7" ret. packer. Run pkr. to 5008'. RU Halliburton. Set pkr. Press. csg. to 500 psi. Pump into formation 1/8 BPM @ 1500, press. building, 1/8 BPM @ 2000, press. building. Bled tbg. & csg. RO pump truck. Release & pull pkr. Run 6 stds. SDFN. Note: Used 5 bbls. water for test.

11/29/89
Day 6. Bled well. Pull kill string. Make up 6-1/8" rock bit. Measure & PU 6 3-1/2" drill collars. Run tools. Strip on PGSR stripper. Tag cmt. @ 5095'. RU pump & power swivel. Backscuttle & drill out cement. Drop out of cement @ 5142'. Run bit to 5164'. Press. csg. to 2000 psi. Close well in. 5 min. SI = 340 psi, 10 min. = 520 & 15 min. = 600#. Bled press. RO swivel. Run tbg. to 5195'. Rig pump suction to #2 production tank. Change well over to oil. Pull tbg. & collars to 1836'. SDFN.

11/30/89
Day 7. Bled well. Pull tbg. & collars. LD extra tbg. & collars. MU Schlumberger tbg. gun assembly. MU Baker 7" ret. pkr. Run assy, packer & tbg. RU Schlumberger wireline truck Run log. Correlate tbg. with well. RO Schlumberger. Make up spacing 2-7/8" pup jt. Set pkr. with 30,000# packoff. Land tbg. on donut with shoe @ 4956'. Packer @ 5022'. Release tool @ 5058' & tail of gun assy. @ 5118' (tbg. meas). Remove BOE. Bolt on flange. MU swab tree. Rig line to frac tank. Swab fluid to 1000'. LD swab equipment. Drop firing bar. Perf well 4 (0.38") JHPF 5100'-5110'. Small blow on tbg., steady. SDFN. Note: Perf well 800 psi under balance. Used 195.9 bbls. oil to change over.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION OJAI FIELD VENTURA COUNTY
WELL: "ARGO BARKER FERNDALE" 5 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20702 JAMES A. BECK, GENERAL MANAGER

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445
****

12/1/89
Day 8. 260# tbg. Bled gas press. Started flowing oil Open well to frac tank through adjustable choke. Well flowed 18 bbls. in 4 hrs. Well quit flowing. RU swab equipment. Run swab. F.L. @ 1940'. Pull 600' fluid each run. Swab F.L. to 4900'. Swab total of 13 bbls. Let well set 1 hr. Run swab. F.L. @ 4780'. Take sample on run. Water in last run. SDFN. Note: Tbg. volume 29 bbls. Prior swab = 6 bbls. Total fluid from formation = 8 bbls.

12/2/89
Day 9. 450# on tbg. Bled tbg., gas only. Run swab. Tag fluid @ 3609'. Swab 600' fluid each run. Swab to 4950'. Let set 1 hr. Run swab. Fluid @ 4700'. Tag only. Let set 1 hr. Fluid @ 4650'. Let set 1 hr. Fluid @ 4700'. Let set 1 hr. Fluid @ 4860'. Let set 1 hr. Fluid @ 4900'. Tag only. Let set 2 hrs. Fluid @ 4800'. SDFN. Note: Total fluid swabbed = 9 bbls. Total fluid from formation = 17 bbls. Analysis of swab fluid: 26.5° API @ 90°F with 4% water cut.

12/3/89
Day 10. 300# tbg. Bled well, gas only. Run swab. Tag fluid @ 3800'. Pull & LD swab equipment. Unbolt wellhead. Remove tree. Bolt on Homco mechanical gate. Rig for tbg. Open unloader. Let fluid equalize. Release pkr. Well blew in. Close well in. Rig line to cellar. Let well blow down. Unland tbg. Lower tbg. 69'. Set pkr. Open unloader. RU B.J. pump truck. Displace tbg. with 28 bbls. Xylene. Set pkr. Land tbg. on donut with pkr. @ 5094'. Remove BOE. Bolt on wellhead. Make up tree. RU B.J. pump. Pump total 2000 gal. Xylene. Displace with 5 bbls. oil. Close well in with 2000#. RO B.J. SDFN. Note: Pump Xylene into formation @ approx. 1/8 BPM.

12/4/89
Day 11. 750# tbg. Plumb steel line to tbg. Pump oil down tbg. to displace Xylene. Press. to 2000, bled to 1600. Cont. pumping oil after bleed off. Pump total 5 bbls. oil. Close well in with 2000 psi on well. Make up tree & steel flow line to frac tank. SDFN. Note: Total displacement = 10 bbls. oil. 24 bbls. Xylene pumped into formation, 19 still in tbg. 55 bbls. to recover.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION OJAI FIELD VENTURA COUNTY
WELL: "ARGO BARKER FERNDALE" 5 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20702 JAMES A. BECK, GENERAL MANAGER

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445
****

12/5/89
Day 12. 900# tbg. Open to frac tank through 8/64" bean. Well bled off. Load out pump lines & hoses. Small amt. flow. Break out 2-7/8" full open valve. Make up tree. Rig for rods. Check & run exchange pump (2-1/2" x 1-1/2" x 16' x 18' x 20 RHA-005) & rods. LD 16 3/4" & 3 1" rods. Space well & seat pump. Hang well on. Press. tbg. to 300 psi. RWTP. RDMO.

12/13/89
Day 1. MIRU Oilwell. Bled tbg. Pump stuck. Work pump. Rods parted. Pull rods. Found pulled pin. Remove tree. Put out guy lines. Standby for BOE equipment. SDFN.

12/14/89
Day 2. Bolt on Homco hyd. gate. Rig for tbg. Release pkr. Set pkr. @ 5000'. Fill well. Test csg. to 2300. Hold for 5 min. 2100 psi after 35 min. Bled press. Release pkr. Pull tbg. wet to rods. Fluid turned to water after 10 stds. Work pump off seat. Pull rods & pump. Finish pulling tbg. LD Schlumberger guns. All guns fired. Put out load guys. SDFN.

12/15/89
Day 3. Change BOE rams. RU HydroTest. Make up 1 jt. 2-7/8" Baker 7" ret. pkr. Measure, PU & test 3-1/2" Buttress frac tbg. to 10,000 psi. Test x-over & safety valve. RO tester. Raise working platform. SDFN.

12/16/89
Day 4. Bled well. Set pkr. @ 4954' & tail @ 4984' with 30,000 set down wt. RU B.J. Titan frac lines. Press. csg. to 500 psi. Unable to break down perfs @ 4000 psi. Surge well. Unable to frac well. RO B.J. Rig surge to tbg. Close well in with 12,000 psi on tbg. Order out acid truck for a.m. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION OJAI FIELD VENTURA COUNTY
WELL: "ARGO BARKER FERNDALE" 5 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20702 JAMES A. BECK, GENERAL MANAGER

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

12/17/89
Day 5. 700# tbg. Bled tbg. Release pkr. Lower tbg. 130'. Set pkr. @ 5090' & tail @ 5121'. RU B.J. Titan. Displace acid. Set pkr., press. csg. to 500 psi. Spot 12 bbls. 7.5% HCl. Displace with 24.5 bbls. oil. Pump 5 bbls. oil, communication to W.S.O @ 5080. Bled press. Pull pkr. & reset @ 4853'. Squeeze acid with 30 bbls. oil. Final = 5 BPM @ 3084#. Frac as follows: Breakdown = none noted. Pre-pad = 95 bbls., ISIP = 2100#, F.G. @ .78. Holes open = 4, avg. press. = 5100# (3300# corrected for friction). Avg. rate = 15 BPM, max. press. = 5400# (3600# corrected for friction). Max. sand conc. = 3 ppg, avg. sand conc. = 1.5 ppg. Total sand pumped = 10,130#, total sand out = 10,000#. Total oil pumped = 380 bbls. FSIP = 2360#, F.G. = .82, 5 min. = 1860#, 10 min. = 1686# & 15 min. = 1551#. Total load of 420 bbls. Close well in. Hook up flow head. RO B.J. SDFN.

12/18/89
Day 6. 1250# tbg. Open to frac tank through adj. choke @ 6 BPH @ 8:35 a.m. Pressure 1000 psi. 6 bbls. in tank. Release crew till a.m.

12/19/89
to Recovering load oil.
1/2/90

12/29/89
RU Flo-Log. Run Cap-Temp-Noise Survey.

1/3/90
Day 7. 30# tbg./1000 csg. Bled csg. RO flowline. Open unloader on pkr. Well flowed small amount through csg. Release pkr. Tbg. on vacuum. Measure & PU 5 jts. 3-1/2" Buttress. Reset pkr. @ 5121'. Rig steel line pump to tbg. Fill tbg. with lease water. Pump into holes @ 5140', communicated through perfs @ 5100'-5110'. Close csg. Pump 4 bbls. into formation @ 1800 psi @ 61.2 BPM. Bled tbg. & csg. Trouble releasing pkr. Suspect pump sand on top. Work pkr. free (60'). Pull & LD 3-1/2" Buttress frac string. LD pkr. & 1 jt. 2-7/8" EU8. Pulled & LD 155 jts. 3-1/2" Buttress & 1 jt. 2-7/8" EU8. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION OJAI FIELD VENTURA COUNTY
WELL: "ARGO BARKER FERNDALE" 5 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20702 JAMES A. BECK, GENERAL MANAGER

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445
****

1/3/90
Day 8. 30# tbg./1000 csg. Bled csg. RO flowline. Open unloader on pkr. Well flowed small amount through csg. Release pkr. Tbg. on vacuum. Measure & PU 5 jts. 3-1/2" Buttress. Reset pkr. @ 5121'. Rig steel line pump to tbg. Fill tbg. with lease water. Pump into holes @ 5140', communicated through perfs @ 5100'-5110'. Close csg. Pump 4 bbls. into formation @ 1800 psi @ 61.2 BPM. Bled tbg. & csg. Trouble releasing pkr. Suspect pump sand on top. Work pkr. free (60'). Pull & LD 3-1/2" Buttress frac string. LD pkr. & 1 jt. 2-7/8" EU8. Pulled & LD 155 jts. 3-1/2" Buttress & 1 jt. 2-7/8" EU8. SDFN.

1/4/90
Day 9. Bled csg. Small amount of pressure. Change BOP rams. Run tbg. to 1370'. Well blew in through csg. Circulate out oil & gas to frac tank. Finish running tbg. to 5152'. RU B.J. cementers. Spot 50 sks. Class "G" with additives. Pull tbg. to 4776'. Backscuttle well clean. Displace & squeeze cmt. with 2-1/2 bbls. water. Hold 2000 psi on well. RO B.J. Close well in until a.m. Note: Transferred 30 jts. 2-7/8" N-80 tbg. from Fillmore yard to Ferndale rack. Est. TOC @ 4950'.

1/5/90
Day 10. 1700 psi on well. Bled well. Pull tbg. MU 6-1/8" bit. PU 6 3-1/2" Homco DC's. Run tbg. & collars. Tag TOC @ 4974'. Rig pump & power swivel. Drill out cement 4974'-4992', easy. Hit hard cement @ 4992'. Continue drilling out cement to 5054'. Circulate well clean. Pull tbg. to 5051'. SDFN.

1/6/90
Day 11. Circulate well & move tbg. Power swivel quit working. Order out new power swivel & replace. Tag cmt. @ 5054'. Drill out cement. Hard drilling @ 5080'-5090'. Pull tbg. to 4806' to test swivel. Rotate freely. Test WSO holes @ 5080' to 1000 psi. Hold for 30 min., o.k. Run tbg. Drill out cmt. 5090'-5121'. Test perf holes 5100'-5110' to 1000 psi. Hold for 15 min. Drill out hard cmt. 5121'-5153'. Circ. well clean. Pull tbg. to 5151'. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION OJAI FIELD VENTURA COUNTY
WELL: "ARGO BARKER FERNDALE" 5 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20702 JAMES A. BECK, GENERAL MANAGER

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445
****

1/7/90
Day 12. Drill hard cmt. 5153'-5172'. Drop out of cmt. Hit frac sand. RO swivel. Backscuttle out frac sand to 5300'. Hit formation sand. Unable to backscuttle . Rig power swivel. Clean out fill to plug @ 5475'. Circ. well clean. Test csg. to 1000 psi, hold 5 min. Bled press. Change well over to oil. Drill on plug. Trouble with power swivel. Drill through plug. Run bit to 5714'. Pull tbg. to 5114'. SDFN.

1/8/90
Day 13. 0# press. Load out power swivel. Pull tbg. & collars. LD collars. RU Schlumberger. Run Baker wireline set plug. Plug hanging up. Work down to 5800'. Unable to move plug. Rig pump. Fill well with oil. Pump against plug & work free. Set plug @ 5790'. RO Schlumberger. Measure & run STC, 1 jt 2-7/8" EU8, 2-1/2" T/L shoe & 174 jts. 2-7/8" tbg. Tail @ 5460'. Drop 2 sks. Silica sand down tbg. SDFN.

1/9/90
Day 14. Bled well. Move extra tbg. to well, measure & PU. Tag top of sand @ 5780' (plug 5790'). Pull tbg. to 5720'. Dump 2 sks. Silica sand down tbg. Let set 1 hr. RO pump lines & line to frac tank. Tag down to top of sand @ 5770'. Pull & LD extra tbg. Land tbg. on donut with shoe @ 5564' & tail @ 5595'. Remove BOPE. Install wellhead. Make up tree. Check & run exchange pump & rods Fill tbg. with lease water, press. to 300#. RDMO. Note: From rack to well: 14 jts. 2-7/8" EU8, 14 7/8" & 8 1" rods.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P290- 18
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
January 8, 1990

Your supplementary proposal to rework well "Barker-Ferndale" 5, A.P.I. No. 111-20702, Section 16, T. 4 N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 1/3/90, received 1/4/90, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Requirements specified in permit No. P289-420 dated 11/8/89 shall apply.
2. The proposed bridge plug at 5700' does not fulfill the requirements for abandonment of the lower portion of the well.

Blanket Bond
SF:ljg

Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

JAN 4 1990

SUPPLEMENTARY NOTICE

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
83	–	✓

DIVISION OF OIL AND GAS

Ventura Calif.

A notice to you dated November 3, 19 89, stating the intention to

rework (Drill, rework, abandon), Well No. "Barker" Ferndale 5, API No. 111-20702,

Sec. 16, T. 4N, R. 21W, S.B. B. & M., Silverthread Field,

Ventura County, should be amended because of changed conditions.

The present condition of the well is as follows:

Total depth 6604' Eff. Depth 5475'

Complete casing record including plugs and perforations:

SEE ATTACHED.

RECEIVED
JAN 4 1990
VENTURA, CALIFORNIA

We now propose

To abandon the BCFZ recompletion (5100-5110').
Remove the plug at 5475'.
Return the well to production from the lower intervals after setting a retrievable plug at 5700'±.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 725 E. Main St., Suite 200 (Street)

Santa Paula, (City) CA. (State) 93060 (Zip)

Telephone Number (805) 656-2445

Seneca Resources Corporation (Name of Operator)

By James W. Beck (Name) 1/3/90 (Date)

Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

OG123 (4-74-GSR1-5M)

RECEIVED
JAN 1997

SENECA RESOURCES CORPORATION
FERNDALE 5 CASING DETAIL

EFFECTIVE DEPTH : 5475' with Drillable plug of 11/89.

CASING DETAIL : 9-5/8" (36.0 #, K-55) cmnt'd at 788' with 400 cf.
7" (23 & 26 # ,K-55) cmnt'd at 6470' with 300 cf.

PERFORATIONS : 4(1/2") BHPF @ 5708,5748,5780 5818 >(sqz-6/27/89), 5892>(sqz-1/17/84) from 11/9/76

4 (.38") jhpf @ 5658, 5815.5>(sqz-6/27/89) from 1/20/84

4 (.44") jhpf @ 5670-5678 & 5784 - 5790 from 6/28/89

4 (.44") jhpf @ 5654-5670 and 5680-5690' from 7/10/89

4 (.44") jhpf @ 5692-5700'from 7/10/89

1 JHPF Formation Test holes @ 5731.5, 5911 from 4/7/89

4 (.44") jhpf from 5914-5918 & 5922-5925 from 4/12/89

4 (.5") BHPF @ 6056>(sqz-11/5/76) 6115>(sqz-11/5/76), 6215, 6225, & 6323 from 11/5/76 ineffective below drillable at 6030'

4 (.38") jhpf @ 6171, 6175, 6211.5, 6219 from 1/20/84 ineffective below drillable at 6030'

1 JHPF Formation Test holes @ 6262, & 6267' ineffective below drillable at 6030' from 4/7/89

4 JHPF with tubing conveyed guns 5100-5110' from 12/89

4 JHPF Squeeze Holes at 5080 & 5140'

CASING PLUGS : Drillable plug at 6030'.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P289-420
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
November 8, 1989

Your proposal to rework well "Barker-Ferndale" 5, A.P.I. No. 111-20702, Section 16, T. 4N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 11/3/89, received 11/6/89, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOG Class II 2M requirements shall be installed and maintained in operating condition at all times.
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. Wire line operations are conducted through at least a 2M lubricator.
4. The proposed bridge plug at 5475' does not fulfill the requirements for abandonment of the lower portion of the well.
5. The Division will monitor the monthly production of this well for a period of six months and if anomalous water production is indicated, remedial action well be required.
6. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.

Blanket Bond
b

Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
NOV 6 1989
VENTURA, CALIFORNIA

Notice of Intention to Rework Well

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	FORMS	
	OGD 114	OGD 121
BB	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well Argo Barker Ferndale #5 (Well designation), API No. 111-20702

Sec. 16, T. 4N, R. 21W SB B. & M., Silverthread Field, Ventura County.

The present condition of the well is as follows:

1. Total depth 6604'

   Effective Depth 6030' Drillable

2. Complete casing record, including plugs and perforations (present hole)

   SEE ATTACHED.

3. Present producing zone name Mohnian ; Zone in which well is to be recompleted BCFZ

4. Present zone pressure 1500 ; New zone pressure 2000

5. Last produced 11/89 (Date) | 18 (Oil, B/D) | 46 (Water, B/D) | 50 (Gas, Mcf/D)

   (or)

   Last injected _____ (Date) | _____ (Water, B/D) | _____ (Gas, Mcf/D) | _____ (Surface pressure, psig)

6. Is this a critical well according to the definition on the reverse side of this form? ☐ (Yes) ☒ (No)

The proposed work is as follows:

Set drillable plug at 5475' (5202' TVD).
Squeeze at 5080' (4813' TVD) & 5140' (4869' TVD).
Perforate 5100'-5110' (4830'-4840' TVD).
Put well on production.

Note: If well is to be redrilled, show proposed new bottom-hole coordinates and true vertical depth.

It is understood that if changes in this plan become necessary, we are to notify you immediately.

Address 725 E. Main St., Suite 200 (Street)
Santa Paula, (City) CA. (State) 93060 (Zip)
Telephone Number (805) 656-2445

Seneca Resources Corporation (Name of Operator)
By Eric R. Wilson (Name - Printed)
Eric R. Wilson (Name - Signature) 11/3 (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

OG107 (8/87/DWRR/5M)

SENECA RESOURCES CORPORATION
FERNDALE 5 CASING DETAIL

CASING DETAIL	:	9-5/8" (36.0 #, K-55) cmnt'd at 788' with 400 cf. 7" (23 & 26 # ,K-55) cmnt'd at 6470' with 300 cf.
PERFORATIONS	:	4(1/2") BHPF @ 5708,5748,5780 5818 >(sqz-6/27/89), 5892>(sqz-1/17/84) from 11/9/76 4 (.38") jhpf @ 5658, 5815.5>(sqz-6/27/89) from 1/20/84 4 (.44") jhpf @ 5670-5678 & 5784 - 5790 from 6/28/89 4 (.44") jhpf @ 5654-5670 and 5680-5690' from 7/10/89 4 (.44") jhpf @ 5692-5700'from 7/10/89 1 JHPF Formation Test holes @ 5731.5, 5911 from 4/7/89 4 (.44") jhpf from 5914-5918 & 5922-5925 from 4/12/89 4 (.5") BHPF @ 6056>(sqz-11/5/76) 6115>(sqz-11/5/76), 6215, 6225, & 6323 from 11/5/76 ineffective below drillable at 6030' 4 (.38") jhpf @ 6171, 6175, 6211.5, 6219 from 1/20/84 ineffective below drillable at 6030' 1 JHPF Formation Test holes @ 6262, & 6267' ineffective below drillable at 6030' from 4/7/89

Seneca Resources Corporation
a National Fuel Gas System company

DIVISION OF OIL AND
RECEIVED
NOV 6 1989
VENTURA, CALIFORNIA

November 3, 1989

Division of Oil & Gas
6401 Telephone Road, Suite 240
Ventura, California 93003

RE: ARGO BARKER FERNDALE #5
(API NO. 111-20702)

Gentlemen:

Enclosed please find, in duplicate, "Notice of Intention to Rework Well" for Argo Barker Ferndale #5 for your approval.

Should you have any questions, please call me at (805) 656-2445.

Sincerely,

Carol Fletcher

Carol Fletcher
Operations Secretary

/csf
Encl.

ISION OF OIL AND
RECEIVED
SEP 8 1989
...URA, CALIFORNIA

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION OJAI FIELD VENTURA COUNTY
WELL: "ARGO BARKER FERNDALE" #5 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20702 ERIC R. WILSON, DIVISION ENGINEER

Eric R. Wilson 9/5

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

4/1/89

Day 1. MIRU Oilwell. Bled tbg. Pull rods & plunger. Bled csg. Remove tree. Pull & measure tbg. Fill csg. with 140 bbls. lease water. Run 10 stands kill string. SDFN. Note: Used 140 bbls. water in well. Total bbls. lease water on location = 230.

4/2/89

Day 2. Bled tbg. & csg. Unload collars & tools. Plumb steel line from pump to well & test to 1200 psi. Pull kill string. Make up 6-1/8" rock bit. Measure & PU 4 ea. 4-3/4" drill collars. Run collars & tbg. out of mast. Haul extra tbg. to location (19 jts.). Measure & PU. Tag top of fill @ 6235' (below perfs). Pull tbg. to 6210'. Strip on stripper head & bolt on. SDFN.

4/3/89

Day 3. Bled tbg. & csg. Rig pump & poor boy swivel. Fill well with 27 bbls. lease water. Clean out fill 6235' to BP @ 6269'. Circulate well clean. Lots of gas returns. RU power swivel. Drill out cement retainer. LD swivel. Ran tbg. to fill @ 6400'. RU poor boy swivel. Unable to circulate out fill. Pull tbg., collars & bit. Make up 7", 23-26# positive casing scraper. RIH to 6400'. LD extra tbg. Run scraper to 5270'. SDFN. Note: Used 166 bbls. lease water. Total fluid used in well = 306 bbls.

4/4/89

Day 4. Casing pressure = 0. Tubing on vacuum. Pull tbg. & scraper. Rig water line from Baker tank to well. Fill well with 67 bbls. water. Let set 30 minutes. Refill with 14 bbls. RU Schlumberger. Run GST log per program 5080'-6330'. Used 76 bbls. lease water for logging. LD logging tools. SDFN. Note: Total water used = 157 bbls. Total water in well = 463 bbls.

4/5/89

Day 5. Service rig. Schlumberger run GST log per eng. program. Fluid level 2500'. Fill casing. Note: Used 118 bbls. water. Total water in well = 581.

ISION OF OIL AND
RECEIVED
SEP 8 1989
ENTURA, CALIFORNIA

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION OJAI FIELD VENTURA COUNTY
WELL: "ARGO BARKER FERNDALE" #5 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20702 ERIC R. WILSON, DIVISION ENGINEER

EW 9/5

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

4/6/89
Day 6. Service rig. Run GST log. Fluid level 650'. Fill casing with lease water & keep full. Tear out Schlumberger. Used 54 bbls. lease water. Close well in. Note: Total water in well 635 bbls.

4/7/89 No activity.

4/8/89
Day 7. Service rig. Open well. Fill casing with 41 bbls. lease water. Fluid level 1071'. Rig Schlumberger. Run RFT per engineering program. (Attempt formation tests @ 6267' and 6262'. No sample recovery. Pressures on both test equaled hydrostatic.) Keep well full of lease water. Used 80 bbls. (Total water in well = 756 bbls.) Close well in. SDFN.

4/9/89
Day 8. Service rig. Open well. Start lease water in casing. Run Schlumberger RFT per engineering program. Fluid level @ 230'. Keep well full of lease water. Attempt formation test at 5911'. Shut in pressure = 2267 psi. Recovered 3000 cc sample from this test. Appears to be 4 parts water to one part oil. Used 116 bbls. lease water. Total water in well 872 bbls. Close well in. SDFN.

4/10/89
Day 9. Service rig, open well. Start filling casing with lease water. Schlumberger run RFT log per engineering program. Fluid level 390'. Keep casing full of lease water. Attempt formation test at 5731-1/2' Shut in pressure = 2147 psi. Recover 300 cc sample of strong emulsion. Used 99 bbls. lease water. Total water in well 971 bbls. Close well in until a.m.

4/11/89
Day 10. Service rig. Open well. Tear out Schlumberger. Take off bailing gate. Rig for tubing. Close well in. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "ARGO BARKER FERNDALE" #5 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20702 — ERIC R. WILSON, DIVISION ENGINEER

EW 9/5

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

4/12/89

Day 11. Service rig. Open well. Run & lay down 4 3/4" collars. Rig Schlumberger. Run Baker N-1 drillable BP & set @ 6030' EL. Bolt on N/L Acme bailing gate. Rig Schlumberger lubricator. Run 4" guns & perf well 4 (0.44) JHPF @ 5914'-5918', 5922'-5925'. Tear out Schlumberger. Take off bailing gate. Rig for tubing. Rig A&F Testers. Make up Baker 7" retrievamatic packer with 2-1/2" API B/L shoe. Run to 60' & set. Release packer. Measure & test tubing in well to 5000 psi. Set packer @ 5626'. Tear out test tools. Fill well with 56 bbls. lease water. Test backside to 1100 psi. Hold for 5 minutes. Bled pressure. Release packer. Finish testing tubing to 5000 psi. All tubing tested. Tear out tester. Set packer @ 5905' with 20,000 set down weight. Tear out working floor. Take off BOPE. Make up xmas tree with 2-7/8" full open valve. Close well in. SDFN. Note: Total water in well 1027 bbls.

4/13/89

Day 12. Service rig. Open well. Vacuum on tubing & casing. Plumb x-mas tree to flowline. Make up swab equipment. Rig line to Baker tank. Run swab. Hit fluid 233'. Pull 1000' fluid each run. Swab fluid level to 5570'. Swab from 5880'. Swab 33.5 bbls. Let well set 1 hr. Tag fluid @ 5710'. Swab from 5880'. Swab 2.9 bbls. Let well set 2 hrs. 20 minutes. Tag fluid @ 5540'. Pull 90' fluid. Let well set 1 hr. Tag fluid @ 5340'. Tear out swab equipment. Run 4 stands 3/4" rods. Run on sandline. Tag bridge plug at 6030'. Pull rods. Close well in. SDFN. NOTE: Swab total 36 bbls. fluid. Last 2 runs oil & water. After 12th run enough steady gas flow for flare. See attached report for swab data.

ISION OF OIL AND
RECEIVED
SEP 8 1989
VENTURA, CALIFORNIA

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "ARGO BARKER FERNDALE" #5 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20702 — ERIC R. WILSON, DIVISION ENGINEER

EW 9/5

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

4/14/89

Day 13. Service rig. 110 psi on tubing. Bled tubing. Rig swab equipment. Run swab. Tag fluid @ 3650'. Swab stopped @ 3900'. Pull swab. Found sand in cups. Lay down swab for sandline repair @ 9130'. Leave well open. Start up job @ 4:30. Lay down swab equipment. Put on rod reagan & rod BOPE. Run 4 stands rods. Run on sandline. Tag bridge plug @ 6030'. Pull rods. Rig swab equipment. Hit fluid @ 3426'. Swab set down @ 3630'. Work swab to 4050'. Pull swab. Swab oil, gas & water. Swab 4 bbls. fluid. Close well in. SDFN.
Note: #1 run: Fluid level @ 3650'. Not enough to measure.
#2 run: Fluid level 3630'. Swab 4 bbls.
Total fluid swab = 40 bbls. Haul 100 bbls. water from Baker tank.

4/15/89

Day 14. 80 psi on tbg. Bled tbg. Run swab. Hit fluid @ 3530'. Pull 1000' fluid each run. Swab fluid to 4480' (11 bbls.). Tear out swab equipment. Rig Halliburton. Rig pump to casing. Fill casing with 19 bbls. lease water. Pressure to 500 psi. Keep 500 psi on casing. Pump 500 gals. Xylene with 5 gals. Hyflo IV down tbg. Flush with 35 gals. 3% KCl water with 3 gals. Morflo II. Final pump pressure 3500 psi, 1/4 BPM. Used total 37 bbls. for casing annulus. RO Halliburton. Rig swab equipment. Fluid at surface. Swab fluid to shoe. Swab 40 bbls. Let well set 1 hr. Fluid @ 5390'. Let well set 2-1/2 hrs. Fluid level @ 5000'. Swab from shoe. Swab total 58 bbls. after treatment. Gas blow last 2 runs. Close well in till a.m.
Note: See attached for swab information. Fluid pumped into new perfs = 47 bbls. Fluid swab after treatment = 58 bbls. Fluid swab before before treatment = 11 bbls. Total fluid swab = 69 bbls. Haul 290 bbls. lease water from Baker Tanks.

ISION OF OIL AND
RECEIVED
SEP 8 1989
ENTURA, CALIFORNIA

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION OJAI FIELD VENTURA COUNTY
WELL: "ARGO BARKER FERNDALE" #5 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20702 ERIC R. WILSON, DIVISION ENGINEER

EW 9/5

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445
****

4/16/89

Day 15. 110 psi on tbg. Casing on vacuum. Bled tbg. Fluid level in casing @ 7:30 a.m. was 408'. Run swab. Hit fluid @ 3933'. Swab 1000' fluid. On #2 run swab from shoe. Gas returns. Swab fluid level down. Tear out swab equipment. Put on rod BOE. Run 4 stands rods. Run on sandline. Tag BP @ 6030'. Pull rods. Make up swab equipment. Run swab (2 hrs.). Tag fluid @ 5191'. Swab from shoe. Swab fluid to shoe. Oil, water & sand. Steady gas blow. Close well in till a.m. Note: See attached for swab information. Tank gauge @ 8:00 a.m. = 52 bbls. water, 19 bbls. oil. Swab 20.5 bbls. Total fluid from zone after treatment = 78.5 bbls. Total fluid from zone = 89.5 bbls.

4/17/89

Day 16. 210 psi on tubing. Bled off slowly. Run swab. Hit fluid @ 3590'. Swab 1000' fluid each run. Swab fluid to 5560'. Tear out swab equipment. Rig McMahan's. Pump 12 bbls. oil mixed with 5 gal. HyFlo IV down tubing @ 180°F. Displace with 36 bbls. oil @ 150°F. Rig pump. Hold 500 psi back pressure on packer. Used 27 bbls. lease water. After 41 bbls., tubing pressured up. Final pump pressure = 2600 psi @ 11:45. 725 psi @ 11:50. 250 psi @ 11:55. 100 psi @ 12:00. Vacuum @ 12:05. Tear out McMahan's. Rig swab equipment. Let well set 2 hrs. Run swab. Hit fluid @ 170'. Swab 500' fluid each run to 3000'. Swab 1000' fluid each run to 5500'. Gas blow last 3 runs. Open well to test trap through 7/64" bean. SDFN. Note: See attached for swab information.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "ARGO BARKER FERNDALE" 5 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20702 — ERIC R. WILSON, DIVISION ENGINEER

EW 9/5

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

4/18/89

Day 17. 60 psi on tubing. Bled press. Run swab. Hit fluid level @ 3700'. Swab 1000' fluid. Tear out swab equipment. Rig steel line from xmas tree to Baker tank. Replace 2" valves on xmas tree. Test lines to 1500 psi. Rig Halliburton pump. Pressure casing to 500 psi & hold @ 500 psi. Acidize perfs with 750 gals. nitrified 7-1/2% HCl (with nitrogen). Displace with 35 bbls. 3% KCl water. Pump pressure 3500 psi @ 1/3 BPM. Final pump pressure 3300 psi @ 3:00 pm. 2100 psi @ 3:30. Bled thru 19/64" bean. Bled to 0 in 17 min. Well bled back 4 bbls. fluid (water). Rig swab equipment. Run swab. Hit fluid @ 2000'. Swab 1000' fluid each run. Swab fluid to 4280'. Small amount acid. Gas blow on tbg. Open well to Baker tank thru 20/64" choke. SDFN. Note: See attached for swab information. Water in Baker tank = 111. Oil in tank = 69. Used 62 bbls. lease water down casing. Total 1126. Used 52 bbls. water & acid. Swab & flow back 30 bbls. 22 to recover. Swab 5 bbls. oil before treatment. 2 to recover. Total fluid swabbed from zone = 179.5 bbls.

4/19/89

Day 18. Open well. Run swab. Fluid @ 2694'. Swab 1000' fluid each run. Swab fluid to 5575'. Swab 23.5 bbls. water. Tear out swab equipment. Run 4 stands rods. Run on sandline. Tag fill @ 5991'. Pull rods. Rig swab equipment. Run swab 4 hrs. Fluid @ 4878'. Swab from shoe. Small amount of gas. Swab fluid to 5120'. Swab total 27 bbls. fluid: Sand, water and small amount of oil. Close well in. SDFN. Note: Swab total = 27 bbls. 70.5 bbls. oil in Baker tank. 135 bbls. water in Baker tank. Fluid from formation = 3 bbls. Total fluid swabbed from zone = 182.5 bbls. See attached for swab information.

ISION OF OIL AND
RECEIVED
SEP 8 1989
ENTURA, CALIFORNIA

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "ARGO BARKER FERNDALE" 5 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20702 — ERIC R. WILSON, DIVISION ENGINEER

EW 9/5

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

4/20/89

Day 19. 210 psi on well. Bled to Baker tank thru 16/64" choke. 0 press. in 10 min. Run swab. Tag fluid @ 3400'. Swab 1000' fluid. Tear out swab equipment. Run 4 stands rods on sandline. Tag fill @ 5986'. (Bottom perf 5925'.) Pull rods. Break down xmas tree. Bolt on wellhead. Make up xmas tree. Check and run exchange pump & rods. Respace well. Clean & load out rod & tbg. tools. Load out power swivel. Fill tbg. with lease water. Hang well on. Pressure to 200 psi. Lay mast down. Return well to production @ 8 SPM @ 3:30 p.m. thru 14/64" positive bean. Break down all swab equipment. Leave rig on jacks. Note: Swab 32 bbls. fluid. Total from zone = 186 bbls. Water in Baker tank = 138.5 bbls. Oil in Baker tank - 69.5 bbls.

4/21/89

No activity.

4/22/89

Day 20. Well pumping ok. Finish loading out equipment. Finish laying down rig. Clean location. RDMO.

5/16/89

Day 1. MIRU Oilwell. Bled tbg. Rig for rods. Pump stuck. Work pump loose. Strip on rod BOPE. Pull rods & pump. Run 300' rods. Rig rod jars and sandline. Run rods. Tag fill @ 5931'. Pull sandline & rods. Unbolt wellhead. Take off Xmas tree. Change studs in BOPE. Bolt on N/L Acme mechanical gate. Close well in. SDFN. (Note: New perfs @ 5914'-5918', 5922'-5925'. BP @ 6030'. ECI transferred 228 bbls. oil to clean Baker tank.)

DIVISION OF OIL AND
RECEIVED
SEP 8 1989
VENTURA, CALIFORNIA

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "ARGO BARKER FERNDALE" 5 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20702 — ERIC R. WILSON, DIVISION ENGINEER

EW 9/5

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

5/17/89

Day 2. Bled tubing and casing. Rig pump. Fill tubing with oil. Rig wt. indicator. Open sleeve in packer. Change well over with 206 bbls. oil. Circulate out water to slop Baker tank. Release packer. Well flow back through tubing. Let bleed to cellar. Tear out & load out pump. Pull & lay down 9 jts. 2-7/8" EU8 tubing (276.82). Reset packer @ 5624' with 10,000# set down wt. Land tubing on donut. Take off BOE. Bolt on wellhead. Make up xmas tree. Check & run exchange pump & rods. Respace well. Seat pump. Clean & load out rod & tbg. tools. Hang well on. Pressure tbg. to 350 psi. Lay mast down. Clean location. RWTP. Leave rig on location.

6/21/89

Day 1. MIRU Oilwell. Bled tubing. Pull rods & pump. Run 600' of rods. Rig rod jars & sandline. Run rods. Tag fill @ 5952'. Bled casing. Unbolt wellhead. Take off X-mas tree. Bolt on N/L Acme mechanical gate. Pull tubing & packer, measure out. Run 10 stand kill string. Close well in. SDFN.

6/22/89

Day 2. Bled tubing & casing. Pull kill string. RU Schlumberger. Run Baker retrievable bridge plug. Trouble setting depth from Collar log. Pull plug. Run log. Rerun plug. Set plug @ 5903'. RO Schlumberger. RU A&F Tester. Run Baker 7" fullbore packer. Test to 5000 psi. RO testers. With tubing tail @ 5852', change over with 120 bbls. lease water. Pull tbg. to 5550'. Close well in. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "ARGO BARKER FERNDALE" 5 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20702 — ERIC R. WILSON, DIVISION ENGINEER

EW 915

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

6/23/89

Day 3. Bled tubing and casing. Run packer to 5850'. RU Dowell. Set packer @ 5850'. Fill well with 35 bbls. lease water. Press. perfs @ 5892 to 1900 psi, no break down. Move packer to 5790'. Test perfs @ 5818' & 5815'. Break down @ 1500# - 1/2 BPM, slow buildup. Move packer to 5755'. Test perfs 5780', 5815' & 5818'. Break down @ 1500# - 1/2 BPM, slow buildup. Move packer to 5724'. Test perfs 5748', 5780', 5815' & 5818'. Break down @ 1500# - 1/2 BPM stable. Move packer to 5692'. Test perfs 5708', 5748', 5780', 5815' & 5818'. Break down @ 1500# - .53 BPM stable. Move packer to 5629'. Test perfs 5658', 5708', 5748', 5780', 5815' & 5818'. Break down @ 1400# - 1/2 BPM stable. Hold back pressure on packer for all break down tests. RO Dowell. Close well in. SDFN.

6/24/89

Day 4. Bled tubing. On vacuum. Bled casing. Release packer. Run packer to 5790'. RU Dowell. Fill casing with lease water. Mix & spot 7 sx Silica 45-36 sand. Set packer. Let well set 1-1/2 hrs. for sand to drop. Tag top of sand @ 5868' with packer. Pull packer to 5790'. Set packer. Pump 250 gals. 15% HCl acid. Hold 300 psi back pressure. Pump acid into formation @ 1.3 BPM, 2900#. Cement perfs 5815' - 5818' with 30 sx Class "G" cement with additives. Final pressure = 2820#. Displace cement to 5805'. Hold 400 psi back pressure on packer. Release packer. Backscuttle tubing clean. Reset packer. Pressure tubing & cement to 1500 psi.. Pressure backside to 500 psi. RO Dowell. 1300 psi on tubing. Close well in. SDFN.

6/25/89
thru Shut down.
6/26/89

ISION OF OIL AND
RECEIVED
SEP 8 1989
VENTURA, CALIFORNIA

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "ARGO BARKER FERNDALE" 5 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20702 — ERIC R. WILSON, DIVISION ENGINEER

EW 9/5

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

6/27/89

Day 5. 1100 psi on tubing. Bled tubing & casing. Release packer. Tag top of cement @ 5794'. Pull tubing & packer. Make up 6-1/8" bit, pick up 6 ea. 3-1/2" drill collars. Run collars & tubing to 5737'. Strip on PSGR stripper. Run to 5790'. Rig pump & power swivel. Drill out cement from 5795' to 5818'. Circulate well clean. Run tools & collars to sand bridge. Circulate out Silica sand to 5888'. Circulate well clean. Pull tubing & tools. Pull 60 stands. SDFN.
Note: Cement soft.

6/28/89

Day 6. Bled tubing & casing. Finish pulling tubing. Lay down 3-1/2" collars. Make up Baker 7" fullbore packer. Run packer and tubing. Set packer @ 5790'. Fill tubing. Pressure squeeze holes @ 5815' - 5818' to 1000 psi. Hold pressure 30 minutes. Bled pressure. Release packer. Pull tubing and packer. Make up ret. head for wireline set bridge plug. Run tool & tubing to 5866'. Strip on stripper. Rig pump & poorboy swivel. Backscuttle out Silica sand from 5888' to 5900'. Circulate well clean. Bridge plug on ret. tool. Set down and retrieve plug, lower to 5904'. Circulate well bottoms up. Pull tubing and bridge plug to 5600'. Close well in. Ship water from pump to Baker tank. SDFN.
Note: Found bridge plug @ 5900'.

6/29/89

Day 7. Bled tubing and casing. Run tubing & plug. Tag fill @ 5914'. Pull to 5904'. Rig pump to circulate. Change well over to oil. Pull tubing & plug. Rig Schlumberger. Tag fill with gun @ 5921'. Perf well as per program: 4 (0.44") JHPF 5790'-5784' & 5678'-5670'. RO Schlumberger. Run tubing to 5546'. Close well in. SDFN. Note: Transferred 223.3 bbls. oil from Tank Battery to well.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "ARGO BARKER FERNDALE" 5 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20702 — ERIC R. WILSON, DIVISION ENGINEER
EW 9/5

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

6/30/89

Day 8. Bled tubing and casing. Run tubing to 5904'. Rig poorboy swivel & pump. Backscuttle out fill from 5914'-6027'. Mud & sand returns. Circulate well clean. Pull & lay down extra tubing. Land tubing on donut with 179 jts. to shoe @ 5593' + 1 joint to tail @ 5627'. Remove BOPE. Bolt on wellhead. Make up X-mas tree. Rig for rods. Check & run exchange 2-1/2 x 1-1/4 x 20 - 005 RHA pump & 138 3/4", 26 7/8" & 21 1" rods. Respace well. Seat pump. Clean & load out rod & tubing tools. Load out pump. Hang well on. Pressure tubing to 300 psi. Lay mast down. RWTP. Haul extra tubing to rack. Clean location. Leave rig on location.
Note: Well flowed small amount while running rods. Pump oil from pump to Baker tank.

7/9/89

Day 1. MIRU Oilwell. Pulled rods & pump. Rig & made feeler run with 10 dbls. 3/4" rods on sandline. Tag fill @ 6030'. RO sandline. Bled well. Removed flange & tree. Install BOP. Built floor. Pulled & measured 80 dbls. 2-7/8" tbg. Left 10 dbls. kill string in hole. Shut well in. SDFN.

7/10/89

Day 2. Bled well off. Rigged & filled well with Barnett vacuum truck. Pulled kill string. RU Schlumberger. Perforate as per program 4 (0.44") JHPF with 4" guns 5692'-5700'. Spot pump & tank. Spot Reagan frac tank. Clean shaker tank on pump. RU A&F Tester. Made up Baker Model "C" bridge plug ret. tool & retrievamatic pkr. Testing in hole @ 6000 psi with collar locator 3 jts. above retrievamatic pkr. Close well on. SDFN.

ISION OF OIL AND
RECEIVED
SEP 8 1989
ENTURA, CALIFORNIA

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "ARGO BARKER FERNDALE" 5 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20702 — ERIC R. WILSON, DIVISION ENGINEER

EW 9/5

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

7/11/89

Day 3. RU A&F Testers. Finish testing in to 6000# while measuring tbg. in. Tag down 5913' (perf). Cannot get 1st setting. RO A&F. Go to 2nd setting. Set Model "C" BP @ 5795'. Test to 1000#. Rig pump and change over with 200 BO. Set retrievamatic @ 5756'. RU Dowell. Pump Xylene stimulation on zone 5784'-5790'. Spot 9 bbls. Xylene ahead, followed by 21.5 bbls. displacement oil. Close unloader. Continue displacement with dead oil. Shut down and bled back 1 bbl. to repair swedge. Displaced additional 12.7 bbls. 8.2 bbls. Xylene out perfs. Avg. rate = .13 BPM. Avg. press. = 3900#. Max. rate = .20 BPM. Max. press. = 4090#. SDFN with 2800# on well to bleed to formation.

7/12/89

Day 4. Start up job. RU Dowell. Ship 40 bbls. from Baker tank to pump tank. Pump final 2.8 bbls. displacement on Zone I (5784'-5790'). Avg. rate = .15 BPM. Avg. press. = 4000#. FSIP = 4000#, 15 min. = 1920#, 30 min. = 1500#. Bled well off .5 bbls. Unset packer. Well flowing about 1 BPH through tbg. Rig to retrieve BP @ 5795' and reset @ 5704'. Reset packer at 5685'. RU Dowell to treat Zone II (5692'-5700'). Spot 8 bbls. Xylene down tubing, followed by 23 bbls. disp. oil. Close unloader. Follow with 11 bbls. disp. + 2 bbls. overdisp. Avg. rate = .21 BPM. Avg. press. = 2500#, max. rate = .22 BPM, max. press. = 2660#. Total Xylene out perfs = 8 bbls.

Note: As Xylene contacted formation, backside communication was evident.

FSIP = 2660#, 15 min. = 860#. Bled well to 0 psi. Tore out Dowell. Released packer. Pulled out of hole with tubing, keeping hole full. Dumped 1 sx sand down casing. Ran 20 dbl. kill string. Land on donut. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "ARGO BARKER FERNDALE" 5 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20702 — ERIC R. WILSON, DIVISION ENGINEER

EW 9/5

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

7/13/89

Day 5. Bled well. Casing on vacuum. Light blow on tbg. Rig & pull 11 dbls. Close well back in. Clean location. Standby for Schlumberger. Rig & finish pulling tbg. RU Schlumberger. Install shooting flange & lubricator. Run gun down to 5692.5'. Pulled out. RO Schlumberger. Called out Cavins 3-1/8" bailer. Change of orders. Install shooting flange. RU Schlumberger. Shoot 4 (0.44") JHPF 5680'-5690' & 5654'-5670', (E Log depths). RO Schlumberger. Removed shooting flange. Rig and run 10 dbls. kill string. Close well in. SDFN. Note: Filled hole after pulling kill string.

7/14/89

Day 6. Bled well. No pressure. Install working floor. Rigged & pulled kill string. RU A&F Tester. Make up Baker tools as per program. Run & test tbg. @ 6000 psi. with tail @ 5687.09'. Set packer. Establish injectivity, 2700 psi. Unset packer. Spotted 20 bbls. Xylene and 15 bbls. oil. Rig and lay down 12' of subs & 2 jts. tbg. Reset packer @ 5540.74'. RU Dowell. Treat zones with Xylene. Held 500 psi on outside while treating well. Displaced with additional 23 bbls. oil. With 1 bbl. over displacement, pressure broke from 2500 psi to 800 psi. Pressure bled to 330 psi in 10 minutes. Avg. rate = .2 BPM. Avg. press. = 2600#. Max. rate = .48 BPM @ 800#. Max. press. = 2990#. 20 bbls. Xylene to formation. Close well in. SDFN.

7/15/89

Day 7. Found 80 psi on tbg. Rig & ship oil from pump tank to Regen tank. Bled well of to pump tank. Rig & unset pkr. PU 3 jts. 2-7/8" tbg. Rig & backscuttle down to BP @ 5705'. Heavy gas returns from 5705'. Backscuttle clean . Latch onto BP and release same. Bled well off. Pulled tbg. & BP. Broke out pkr. collar locator, seating nipple and ret. tool with BP. Filled hole each 10 dbls. Rig & run production string, same as before pulling. Ran 90 dbls. Land on donut. Close well in. SDFN. Note: Transfer 60 bbls. oil from Regen frac tank back to pump tank. Job total transfer from storage tank = 400 bbls.

ISION OF OIL AND
RECEIVED
SEP 8 1989
VENTURA, CALIFORNIA

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "ARGO BARKER FERNDALE" 5 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20702 — ERIC R. WILSON, DIVISION ENGINEER

EW 9/5

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

7/16/89

Day 8. Bled well off. Well flowing small stream out casing. Measured & picked up 11 jts. 2-7/8" tbg. Tag fill @ 5935.76'. Rig pump. Backscuttle from 5935' - 6020'. Lay down 13 jts. tbg. on donut. Tore out floor. Removed BOP. Install & flange up tree. Rig for rods. Checked exchange pump. Install rod BOP. Ran pump & rods with L/H box 2 singles above pump. Respaced and hung well on. Pressure tbg. to 350 psi. Clean & load out tools. Clean location. Unable to move pump with Barnett tractor & wench. Order out 60 bbl. vacuum truck to clean tank. RWTP. RDMO.

7/17/89

Day 9. Start up job. Clean shaker tank on pump. Moved pump. MIRU wind guys. SJD till a.m. Barker Ferndale #3.

7/18/89

Producing 31 BOPD, 50 BWPD & 40 MCFPD.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No.P 289-61
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr.
SENECA RESOURCES CORP.
P.O. Box 630
Santa Paula, CA 93060

Ventura, California
March 7, 1989

Your proposal to alter casing well "Barker-Ferndale" 5, A.P.I. No. 111-20702, Section 16, T. 4N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 2/2/89, received 3/6/89, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOG Class II 2M requirements shall be installed and maintained in operating condition at all times.
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. Wire line operations are conducted through at least a 2M lubricator.
4. The Division will monitor the monthly production of this well for a period of six months and if anomalous water production is indicated, remedial action well be required.

Blanket Bond
SF:ljg

Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

DIVISION OF OIL AND G.
RECEIVED
MAR 6 1989
VENTURA, CALIFORNIA

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	FORMS	
	OGD114	OGD121
✓	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention

to rework well ~~Aera~~ Barker Ferndale #5 (Well designation), API No. 111-20702

Sec. 16, T. 4N, R. 21W, SB B. & M., Silverthread Field, Ventura County.

The present condition of the well is as follows:

1. Total depth 6604' Drilled 10/76
   6273' Effective 1/84

2. Complete casing record, including plugs and perforations (present hole)

   9 5/8" 36# K-55 ST & C CMN'T @ 788' N/400 CF
   7" 23 & 26# K-55 LT & C CMN'T @ 6470' N/350 CF

   Cement Retainer At 6273.
   4(1/2") BHPF @ 5708 5748 5780 5818 5892(cp'd) 6056(cp'd),6115,6215,6225
   4(1/2") BHPF @ 6323 INEFFECTIVE BELOW RETAINER
   4(3/8") JHPF @ 5658, 5815.5, 6171 6175 6211.5 6219

3. Present producing zone name MOHNIAN ; Zone in which well is to be recompleted MOHNIAN

4. Present zone pressure 1500 ; New zone pressure 1500

5. Last produced 04/01/88 (Date) | 33 (Oil, B/D) | 170 (Water, B/D) | 69 (Gas, Mcf/D)

   (or)

   Last injected _____ (Date) | _____ (Water, B/D) | _____ (Gas, Mcf/D) | _____ (Surface pressure, psig)

6. Is this a critical well according to the definition on the reverse side of this form? ☐ (Yes) ☒ (No)

The proposed work is as follows:

Formation test The Mohnian Zone with cased hole wireline tool and Densely Reperforate the zone if formation test prove successful, over the interval from 5650-6219

Note: If well is to be redrilled, show proposed new bottom-hole coordinates and true vertical depth.

It is understood that if changes in this plan become necessary, we are to notify you immediately.

Address 725 E. Main P.O. BOX 630 (Street)
Santa Paula, Ca 93606 (City) (State) (Zip)

Telephone Number (805) 656-2445

SENECA RESOURCES (Name of Operator)

By A. Carl Isaac (Name-Printed)

A. Carl Isaac (Name-Signature), Engr. 3/2/89 (Date)

Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF PROPERTY AND WELL TRANSFER

Field or county	District
Ojai	2
Former owner	**Date**
Argo Petroleum Corp.	Sept. 10, 1987

Name and location of well(s)

Sec. 16, T. 4N., R. 21W., SBB&M

"Barker-Ferndale" 1	(111-20423)	"Valex-Ferndale" 211	(111-21178)
"Barker-Ferndale" 2	(111-20604)	"Valex-Ferndale" 214	(111-21180)
"Barker-Ferndale" 3	(111-20609)	"Valex-Ferndale" 215	(111-21206)
"Barker-Ferndale" 4	(111-20685)	"Valex-Ferndale" 313	(111-21314)
"Barker-Ferndale" 5	(111-20702)	"Ferndale" 8	(111-20732)
"Barker-Ferndale" 6	(111-20730)		
"Valex-Ferndale" 107	(111-21066)		
"Valex-Ferndale" 110	(111-21163)		
"Valex-Ferndale" 209	(111-21105)		

Description of the land upon which the well(s) is (are) located

Date of transfer, sale, assignment, conveyance, or exchange	New owner	Type of organization
7-17-87	Seneca Resources Cprporatipn	Corp.
	Address: 511 16th St. Mall, Ste 300, Denver, CO 80202	Telephone No.: (303) 825-7401

Reported by
Seneca Resources Corp.

Confirmed by
Argo Petroleum Corp.

New operator new status (status abbreviation)	Request designation of agent
PA	
Old operator new status (status abbreviation)	**Remarks**
PA	

Deputy Supervisor: Patrick J. Kinnear

Signature: Patrick J. Kinnear

OPERATOR STATUS ABBREVIATIONS

PA – Producing Active
NPA – No Potential, Active
PI – Potential Inactive
NPI – No Potential, Inactive
Ab – Abandoned or No More Wells

FORM AND RECORD CHECK LIST

Form or record	Initials	Date	Form or record	Initials	Date
Form OGD121			Map and book		
Form ODG148			Notice to be cancelled		
New well cards			Bond status		
Well records			EDP files		
Electric logs					
Production reports					

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 284-9

520 (field code)
12 (area code)
10 (new pool code)
10 (old pool code)

REPORT ON PROPOSED OPERATIONS

Mr. Harry Hull, Agent
Argo Petroleum Corporation
411 S. Beckwith Road
Santa Paula, CA 93060

Santa Paula, California
January 13, 1984

Your _____ proposal to alter casing well "Barker-Ferndale" 5, A.P.I. No. 111-20702, Section 16, T. 4N, R. 21W, S.B. B. & M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 1/10/84, received 1/12/84 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Hole fluid of sufficient quality and quantity shall be maintained in the hole to control any subsurface condition, and a reserve supply shall be on hand for emergencies.
2. Blowout prevention equipment of at least DOG Class II 2M with a hydraulic actuating system shall be installed and maintained in operating condition at all times.
3. The division will monitor the monthly production of this well for a period of six months and if anomalous water production is indicated, remedial action will be ordered.
4. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.

Blanket Bond
MS:r

M. G. MEFFERD, State Oil and Gas Supervisor

By Michael Stutt
Murray W. Dosch, Deputy Supervisor

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

DIVISION OF OIL AND GAS
RECEIVED
JAN 12 1984
SANTA PAULA, CALIFORNIA

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	OGD114	OGD121
BB	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well No. Barker Ferndale #5, API No. 111-20702, Sec. 16, T. 4N, R. 21W, S.B. B. & M., (Silverthread area) Ojai Field, Ventura County.

The present condition of the well is as follows:

1. Total depth. 6604'

2. Complete casing record, including plugs and perforations:
   9-5/8" cmt'd @ 788' (36#, K-55).
   7" cmt'd @ 6470' (23# & 26#, K-55).
   Perfs: 4 (1/2") bullet holes @ 5708', 5748', 5780', 5818', 5892', 6056', 6115', 6215', 6225', 6323', (40 holes).
   Retrievable BP set @ 5764'.

3. Present producing zone name Miocene Zone in which well is to be recompleted Miocene

4. Present zone pressure 1500 New zone pressure 1500

5. Last produced 1/05/84 (Date) | 15 (Oil, B/D) | 276 (Water, B/D) | 105 (Gas, Mcf/D)

   or

6. Last injected _____ (Date) | _____ (Water, B/D) | _____ (Gas, Mcf) | _____ (Surface pressure, psig.)

The proposed work is as follows:

1. Install and test double-ram mechanical BOPE, 2M.
2. POH with BP.
3. Set retainer at 6250' and cement squeeze perfs @ 6323'.
4. Lay sand plug to 6170'. Set fullbore at 5930'. Cement squeeze perfs @ 6056' and 6115'.
5. Set retainer at 5830' and cement squeeze perfs @ 5892'.
6. Drill out cement. Clean out sand plug to 6250'.
7. Perforate 4 jet holes at 5658', 6171', 6175'.
8. Return to production.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 411 S. Beckwith Road (Street)
Santa Paula, (City) Ca. (State) 93060 (Zip)
Telephone Number (805) 933-1321

Argo Petroleum Corporation (Name of Operator)
By Harry Hull (Name) 1-10-84 (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

Form C-3100(7/79)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

API No. 111-20702

WELL SUMMARY REPORT

Operator	Well				
Argo Petroleum Corporation	Argo Barker Ferndale #5				
Field	**County**	**Sec.**	**T.**	**R.**	**B.&M.**
OJAI (Silverthread)	Ventura	16	4N	21W	S.B.

Location (Give surface location from property or section corner, street center line and/or California coordinates)
2894' E & 1077' S from NW corner of Sec. 16

Elevation of ground above sea level
1061'

Commenced drilling (date): 10/13/76
Completed drilling (date): 10/31/76
Commenced producing (date): 11/26/76
☒ Flowing ☐ Pumping ☐ Gas lift

Name of producing zone(s): Mohnian

Total depth: (1st hole) 6604' (2nd) (3rd)

Present effective depth: 6273' (cement retainer)

Junk:

Depth measurements taken from top of: ☐ Derrick Floor ☐ Rotary Table ☒ Kelly Bushing
Which is 12 feet above ground

GEOLOGICAL MARKERS	DEPTH

Formation and age at total depth:

	Clean Oil (bbl per day)	Gravity Clean Oil	Percent Water including emulsion	Gas (Mcf per day)	Tubing Pressure	Casing Pressure
Initial Production	189	30.3	6.0	362	600	1400
Production After 30 days	175	30.3	12.0	347	820	1300

CASING RECORD (Present Hole)

Size of Casing (API)	Top of Casing	Depth of Shoe	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Number of Sacks or Cubic Feet of Cement	Depth of Cementing (if through perforations)
9-5/8"	0	788'	36#	K-55 LT&C	New	12-1/4"	500 cf	
7"	0	6470'	23 & 26#	K-55 LT&C	New	8-3/4"	521 cf	6056' = 28 cf 5892' = 100 cf

PERFORATED CASING (Size, top, bottom, perforated intervals, size and spacing of perforation and method.)
4 (1/2") bullet holes @ 5708', 5748', 5780', 5818', 5892' (CP'd), 6056' (CP'd), 6115', 6215', 6225'. Holes @ 6323' ineffective (below retainer).
4 (3/8") jet holes @ 5658', 5815.5', 6171', 6175', 6211.5', 6219'.

Was the well directionally drilled? If yes, show coordinates at total depth
☒ Yes ☐ No Closure: 1542.39' S 75° 25' W

Electrical log depths
6584' - 784' DIL

Other surveys
DM, FF, Den., VDL, CBL, Mud

DIVISION OF OIL AND GAS
RECEIVED
MAR 15 1985
SANTA PAULA, CALIFORNIA

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Name	Title	
Harry E. Hull	District Superintendent	
Address	**City**	**Zip Code**
411 S. Beckwith Road	Santa Paula	93060
Telephone Number	**Signature**	**Date**
(805) 933-1321	Harry E. Hull	3-14-85

SUBMIT IN DUPLICATE

DIVISION OF OIL AND GAS
RECEIVED
MAR 15 1985
SANTA PAULA, CALIFORNIA

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: ARGO BARKER FERNDALE #5 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20702 HARRY E. HULL DISTRICT SUPERINTENDENT

Harry E. Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

1-13-84

MIRU SPS. POH with rods & pump. Removed tree, installed BOPE. Rigged for tbg. Fill well with lease water treated with AC48-S (anti clay swelling agent). Unlanded tbg. PU additional tbg. Lower same & latch onto temporary BP @ 5764'. Lower BP & drift csg. with same to 6283'. Filled well. Well held enough water to circulate . POH with BP. RIH with sawtooth collar to 2000'. SJD.

1-14-84

Continued in hole with tbg. Tag fill @ 6233'. RO fill to 6405', took 35 bbls. to fill hole. PO with tbg. MU Baker Model "K" retainer on tbg. Rigged Loomis Testers, test tbg. to 5000 psi while RIH. Set retainer @ 6273', sheared out & pulled stinger above perfs. SDFN.

1-15-84

Stabbed into retainer. Attempted to establish breakdown into perfs at 6323'. Press. to 3500 psi. Bled to 3300 in 1 min. Surged fluid to perfs to 4500 psi 3 times, thru 5000 psi, 1 min. SI 4000 psi. No commumications to perfs above. Abort squeeze job. Spotted 19 sx. 20/40 sand on top of retainer. Wait one hour. Top of sand 6213'. (Perf @ 6215'). POH. Ran Baker Full Bore Packer to 5600'. SDFN.

1-16-84

Started up job. Tagged sand @ 6213'. Set FB @ 6133'. Pumped away 3/4 BPM @ 1500#. Reset FB @ 5930'. Mix-pump 8 sx sand. Pumped sand out FB. PU & wait 1 hr. Reset FB @ 6133' to test sand plug. Press. to 3000#, bled to 2600# 1 minute. RIH & tag sand @ 6187'. Reset FB @ 6081' to test 6115' perfs. Press to 3000#, bled to 2650# 1 minute. No breakdown of 6115' perfs. Reset FB @ 5930' (tail @ 5947') to cement perfs @ 6056' & 6115'. Breakdown 1.5 BPM @ 1900# with 10 bbls. lease water. Opened unloader, closed csg., & pumped away 4 BPM @ 1300# (as test of all perfs). Pumped 10 bbls. fresh water. Mix-pump 50 sx. (57.5 cf slurry) "G" cement with 0.75% D-60. Displaced with 21.5 bbls. fresh water. Closed tool. Continued displace. With cement @ perfs, 1.4 BPM @ 1350#. Final pump-in 0.2 BPM @ 5000# tbg. (1000# csg.). C.I.P. 3:00 p.m. 3 minute SIP 4800#. Bled tbg. Net displacement 35 bbls. Reset FB @ 5909'. Opened unloader, BS out 2 bbls. strung out cement. Pressured tbg. to 4500# @ 3:44 p.m. Closed well in. Estimate TOC @ 5947 and 28.5 cf cement out/below 6056' perfs. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: ARGO BARKER FERNDALE #5 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20702 HARRY E. HULL DISTRICT SUPERINTENDENT

Harry E. Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

1-17-84

Started up job. Reset FB @ 5835' (top of packer), 5852' (tail). Filled hole, took 35 bbls. Closed unloader. Pumped 10 bbls. lease water. Breakdown 2.75 BPM @ 2450# into 5892' perfs. Press. csg. to 1400#, no communication observed. In 4-1/2 minutes tbg. bled from 2450# to 500#. Opened unloader. Established circulation with 6 bbls. fresh water. Mix-pump 65 sx. (74.75 cf slurry) "G" cement with .75% D-60. Displaced with 15 bbls. fresh water. Closed unloader & press. csg. to 1000#. Continued displ. With cement @ perfs, 2.5 BPM @ 2050#. Max. of 3900# at 34 bbls. displ. Slowed to idle speed for final squeeze but pressure falling. Shut down, bled from 3300# to 1800# in 5 minutes. Bled off tbg., got back 1 bbl. Relaxed tool & BS tbg. clear, 2 bbls. very dilute cement came back. Closed tool. Repressured tbg. to 2100#, bled to 650# in 5-1/2 minutes. Pumped additional 2 bbls. to overdisplace perfs. Final net displacement 37 bbls. Final pump-in 1 BPM @ 3000#. C.I.P. 11:26 a.m. Pressure bled from 3000# to 500# in 10 minutes. Closed in. SDFN.

1-18-84

Started up job. 0# on well. Filled csg. Filled tbg. with 5 bbls. Pumped 5 bbls. lease water, breakdown 2 BPM @ 3000#. 1 minute SIP 1500#. Opened unloader. Pumped 5-3/4 bbls. fresh water. Mix-pump 50 sx (57.5 cf slurry) "G" neat cement. Displaced with 20 bbls. fresh water. Closed unloader and press. csg. to 1000#. Continued displacement. With cement at perfs, 2 BPM at 2450#. Semi-final pump-in 0.3 BPM at 5300#, with 31.9 bbls. displacement. 1 minute SIP 5150#. Bled tbg., 1.7 bbls. came back. Relaxed tool and BS tbg. clean, 4 bbls. good cement back. Repressured tbg. with additional 1.3 bbls. Final pump-in 0.2 BPM at 4500#. C.I.P. at 10:30 a.m. 5 minute SIP 4300#. Estimate 29.8 cf cement out holes today + 70 cf yesterday = 100 cf total. Estimate TOC at 5873'. Closed well in for 3 hrs. Released fullbore. POH with same. MU 6-1/8" bit. RIH with tbg. to 5600'. RU power swivel. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: ARGO BARKER FERNDALE #5 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20702 HARRY E. HULL DISTRICT SUPERINTENDENT

Harry E. Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

1-19-84
Continued in hole with bit. Tag cement @ 5871'. Drill out cement to 5910' (perf @ 5892'). Continue RIH, tag cement @ 5974', fell out of cement @ 6082' (perf @ 6056'). Perf @ 6115' ineffective, could not breakdown. Continue RIH, tag sand @ 6186'. Drill out sand plug to retainer (6273'). Backscuttle hole clean. Pull up, lay down excess tbg. Finish POH with bit. SDFN.

1-20-84
Drove to & service equipment. Rig up Welex. Found FL @ 300'. Found cement retainer @ 6272' (Set @ 6273' by tbg. meas.). Tied to Dual Induction Log, perf'd the following intervals with 4 (.375") JH: 5658', 5815.5', 6171', 6175', 6211.5', 6219' (24 holes total). Tear out Welex. Made up STC., one jt., T/L pump shoe. Run in hole. Land tbg. with tail @ 5969', shoe @ 5938'. Load out pump system & tbg. tools. Remove & load working platform & BOPE. Install production tree. Rig for & run in hole with rods & exchange pump. Space well out. Hung well on. Fill & press. to 350 psi. Load out tools. RDMO.
Well on @ 1900 hrs. Rod detail: 24 1", 16 7/8", 156 3/4".
Pump size: 2-1/2" x 1-3/4" x 16' x 20' RHA.
Plgr. size: 60" x .003"

1-22-84
280 bbls. gross. 98% w/h cut. 0.2 BS. 180# tbg/csg. 20/64" bean. 24 hrs. production. 23-1/2 hrs. test.

1-23-84
256 bbls. gross. 95% cut. 0.2 BS. 160# tbg/csg. 20/64" bean. 24 hrs. production. 24-1/2 hrs. test.

2/26/84
204 bbls. gross. 81% cut. 150# tbg/csg. 20/64" bean. 24 hrs.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
MAY 16 1977
SANTA PAULA, CALIFORNIA

WELL SUMMARY REPORT

SUBMIT IN DUPLICATE

ARGO

Operator ARGO PETROLEUM CORPORATION, Well No. BARKER FERNDALE #5, API No. 111-20702,

Sec. 16, T. 4N, R. 21W, S.B.B. & M., Silverthread Field, Ventura County.

Location 2894' East along section line and 1077' South at right angles from the
(Give surface location from property or section corner, or street center line and/or lambert coordinates)

NW corner of Sec. 16. Elevation of ground above sea level 1061 feet.

All depth measurements taken from top of K.B. which is 12 feet above ground.
(Derrick Floor, Rotary Table or Kelly Bushing)

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Date 5-2-77 Signed C. Rosenthal

JACK COOK (Engineer or Geologist) Title Executive Vice President

Commenced drilling 10-13-76

Completed drilling 10-31-76

Total depth (1st hole) 6604' (2nd) (3rd)

Present effective depth 6470'

Junk

Commenced producing 11-26-76 (Date) Flowing/~~gas lift/pumping~~ (Cross out unnecessary words)

GEOLOGICAL MARKERS — DEPTH

Formation and age at total depth

Name of producing zone Mohnian

	Clean Oil bbl. per day	Gravity Clean Oil	Per Cent Water including emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressure
Initial production	189	30.3	6.0	362	600	1400
Production after 30 days	175	30.3	12.0	347	820	1300

CASING RECORD (Present Hole)

Size of Casing (A. P. I.)	Depth of Shoe	Top of Casing	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Numbers of Sacks or Cubic Feet of Cement	Depth of Cementing if through perforations
9 5/8"	788'	Surface	36#	K-55 LT & C	New	12 1/4"	500 c.f.	
7"	6470'	"	26&23#	K-55 LT & C	New	8 3/4"	521 c.f.	

PERFORATED CASING
(Size, top, bottom, perforated intervals, size and spacing of perforation and method.)

4-1/2" Bullets at intervals from 6056' to 6323' (Total of 20 holes)

4-1/2" " " " " 5708' to 5892' (Total of 20 holes)

Was the well directionally drilled? Yes If yes, show coordinates at total depth Closure: 1542.39' S. 75° 25' W.

Electrical log depths 6584' - 784 Other surveys DIL, DM, FF, Den., Gamma, Mud.

OG 100 ATTACH ONE COPY OF EACH LOG AND SURVEY 20796-705 1-74 3M ② OSP

SUBMIT IN DUPLICATE

20798-708 1-74 8M ⓖ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

ARGO
Well No. BARKER FERNDALE #5, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date May 2, 1977 Signed C. Bozarth

940 East Santa Clara
Ventura, Ca. 93003 (805) 648-2514 Title Executive Vice President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1976	
Oct. 12	MIRU Atlantic Rig #4. D.D. 12 1/4" rat hole to 41'.
13	Spudded in 2:00 A.M. Drilled 12 1/4" hole to 742'.
14	Drilled to 790'. Cir. & Cond. mud. POH. Rigged up to run csg. Ran 19 jts. 9 5/8" 36# K-55 LT&C Oilwell csg. W/B&W guide shoe @ 788'. Baffle @ 746' W/Centralizer on btm. jt. B.J. Cmtrs. pumped 100 Cu. Ft. H20 ahead. Mixed & pumped in 400 cu. ft. class "G" cmt. premixed 1:1 POZ with 4% gel + 2% CaCl2 followed by 100 Cu.Ft. class "G" neat cmt. treated with 2% CaCl2. Displaced with 324 cu.ft. mud. Bumped plug with 500 PSI Cmt. to surface. C.I.P. @ 5:45 A.M. Weld on head. Set in BOE and flanged up.
15	D.D. mouse hole. Laid down DD. Test blind rams, With 1000# 15 min. OK. Inspected and tested BOPE by DOG. OK. Made up D.A. RIH and tagged top of cmt. @ 741'. C.O. cmt. and Baffle @ 746' and shoe @ 788'. Drilled 8 3/4" hole to 875'. POH Picked up D.D. RIH D.D. to 974'.
16	D.D. to 1411'. POH. Laid down D.D made up DA, RIH and reamed 875'-1411'. Drilled to 1659'.
17	Drilled to 2354'.
18	Drilled to 2837'.
19	Drilled to 3370'.
20	Drilled to 3919'.
21	Drilled to 4501'.
22	Drilled to 4525'. POH with D/A. RIH with D.D. D.D. to 4604'. Lost 200 PSI. Ck'd. pump. ok. Mud system contaminated w/no-stick. POH. RIH w/new D.D. D.D. to 4622'

OG 103

SUBMIT IN DUPLICATE

20798-705 1-74 8M ② OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

ARGO
Well No. BARKER FERNDALE #5, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date May 2, 1977 Signed J. Rosenberg

940 East Santa Clara
Ventura, Ca. 93003 (805) 648-2514 Title Executive Vice President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1976	
Oct. 23	D.D. to 4649'. Sand line parted during survey. Stripped out. RIH D.D. to 4737'. POH with D.D.
24	RIH with D/A. Reamed D.D. hole 4525'-4737'. POH. Tight hole 5501'-4801'
25	RIH. Reamed from 5471'-5501'. Drilled to 5752'.
26	Drilled to 6028'. Reamed from 5737'-5753'.
27	Drilled to 6277'. Drilling breaks at 6179'-6205' and at 6228'.
28	Drilled to 6590'. Drilling break at 6313'.
29	Drilled to 6604'. Circ. & cond. mud for logs. Rig'd. up Schlumberger. Ran D.M., F.F., DIL, Density logs 6584'-784'.
30	RIH. Ream 6578'-6604'. Circ. & cond. mud. Took sidewall samples from 6288'-5105' @ intervals. Ran V.D.L. Rig down loggers. RIH. Circ. hole clean.
31	Rigged up to run csg. Ran 167 jts. 7" + (106 jts. 23# from Sumitomo + 61 jts. 26# from pipe sales) K-55, R-3, LT&C equip. with B & W Guide shoe @ 6470'. Diff. float @ 6429' w/centralizers on jt. #1. Turbos on jts. #2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 25, 28, 30, 32, 34, 36, 38, 40, 42, and centralizer on jt. 44. Casing Detail: 60 jts. 26# 2344' 106 jts. 23# 4086' 1 jt. 26# 40' 6470' B.J. Cmtrs. pumped 50 cu.ft. + H20 ahead. Mixed & pumped in 350 cu.ft. class "G" neat cmt. pre-mixed 1:1 Diamix + 4% gel + 2% CaCl2 followed by 171 cu.ft. of class "G" neat cmt. mixed with 2% CaCl2. Displaced with 1420 cu.ft. H20. Bumped plug with 2000 PSI. Cmt. in place @ 6:40 A.M. Flanged up tbg. heads. Tested head with 3500 PSI.
Nov. 1	Laid down 4 1/2" D.P. & Kelly. Rig released @ 7:00 A.M. Tearing out.
2&3	Moved out drilling rig.
4	C.P.S. MIRU. Installed BOE, tested @ 1500 PSI, and approved by D.O.G.

OG 103

SUBMIT IN DUPLICATE

20798-705 1-74 8M ② OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

ARGO
Well No. BARKER FERNDALE #5, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date May 2, 1977 Signed C. Boerlage

940 East Santa Clara
Ventura, Ca. 93003 (805) 648-2514 Title Executive Vice President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date

1976

Nov. 5 Rigged up Welex. Ran CBL, CCL, and Gamma logs 6401'-5000'. Rigged down Welex. RIH w/sawtooth collar on tbg. Changed over to lease crude. Rigged up Dresser Atlas and perforated w/four 1/2" bullets at each of the following intervals: 6323', 6225', 6215', 6115', 6056'. (Total of 20 holes).

6 900 PSI on well head. Installed frac head. Attempted break-down @ 5000 PSI. Avg. 1.5 BPM. Pumped 57 bbls. Shut down.

7 Dowell pumped 331 bbls. Hamp crude treated w/adomite. Started pumping at 1 BPM. Formation broke down to 3800 PSI @ 12 BPM. (Total of 57 + 331 = 388 bbls. prepad). Dowell frac'd. 7" csg. as follows:

BBLS	GALS.	SAND #/GAL	#SAND	CUM. SAND	ATR
240	10,000	-	-	-	240
240	10,000	1.0	10,000	10,000	490
120	5,000	0.5	2,500	12,500	613
120	5,000	1.0	5,000	17,500	738
240	10,000	2.0	20,500	37,500	998
238	FLUSH				1236
1198					

ISIP= 3600 PSI Fg.= 0.97 Total lease crude used = 1198 bbls. filtered Ha Hamp crude. Total sand used = 10,000 lbs. 100 mesh + 27,500 lbs. 20/40 mesh. Pumped at an avg. rate of 20 BPM and avg. press. of 4300 PSI. Immediate SIP= 3500 PSI. SIP after 15 min.= 3000 PSI

8 1100 PSI on well head. Removed frac head. Rigged up Dresser Atlas. Ran gun and tagged fill at 6291'. Installed frac head. Dowell pumped in 72 sacks 20/40 mesh sand at avg. 4400 PSI.

9 Tore out frac head. Rigged up D/A. Ran gun and tagged fill at 6015'. CP=800 PSI. Bled press. to 240 PSI (10 bbls. thru adjustable bean). RIH and tagged fill at 5980'. CP rose to 600 PSI in 10 Min. D/A perf. w/four 1/2" bullets at each of the following intervals: 5892', 5818', 5780', 5748', 5708'. (Total of 20 Holes) Tagged fill at 5974'. CP inc. from 600 to 650 PSI. Ran sawtooth collar on 2 7/8" tbg. to 5555'.

SUBMIT IN DUPLICATE

20798-705 1-74 8M ② OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

Well No. ARGO BARKER FERNDALE #5, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date May 2, 1977 Signed C. Rosenlieb

940 East Santa Clara
Ventura, Ca. 93003 (805) 648-2514 Title Executive Vice President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date

1976

Nov. 9 Installed frac head. Dowell frac'd 7" csg. as follows:

BBLS	GALS.	SAND #/GAL	#SAND	CUM SAND	ATR
240	10,000				240
120	5,000	1.0	5,000	5,000	365
130	5,000	2.0	10,000	15,000	500
240	10,000	2.0	20,000	35,000	760
120	5,000	3.0	15,000	50,000	895
60	2,500	6.0	15,000	65,000	970
162	FLUSH				1142
1072					

ISIP= 2500 PSI Fg.= 0.81 Total filtered Hamp lease crude used= 1072 bbls Total sand used= 10,000 lbs. 100 mesh @ 1#/gal., 40,000 lbs. 20/40 mesh at 1, 2, & 3 #/gal., 15000 lbs. 10/20 mesh at 6#/gal. total= 65,000#. Pumped at an avg. rate of 22 BPM and an avg. press. of 2900 PSI. Immediate SIP= 2300 PSI. SIP after 15 min.= 1000 PSI.

10 CP= 770 PSI, could not bleed below 500 PSI. Changed over to 74# brine H20. Removed frac head. RIH. tagged fill at 5824'. C.O. to 6420'. Hung tbg. w/tail at 5681'.

11 Removed BOE. Installed prod. tree. Displaced brine H20 w/lease crude. Well on prod. (flowing) at 4:00 P.M. Moved out prod. rig.

12 Prod. 210 bbl. gross, cut 12%, TP= 400, CP= 0, 14/64" choke. Load oil.

13 thru 25 Prod. load oil.

26 Initial prod.: Gross 201, clean oil 189, cut 6.0%, TP= 600, CP= 1400, Gas= 362 Mcf, choke 14/64".

Dec. 26 Prod. after 30 days: Gross 199, Clean oil 175, Cut 12.0%, TP= 820, CP= 1300, Gas= 347 Mcf, choke 14/64". Gravity 30.3° API.

BB

OG 103

111-20702

RECEIVED
JAN - 7 1977

SA

SEALAND
DIRECTIONAL DRILLING CO.

COMPANY ARCO PETROLEUM

PAGE #1

WELL ARCO BARKER FERNDALE #5 LOCATION SILVERTHREAD DATE 10 - 76

	Measured Depth	Drift Angle	Vertical Depth	Drift Feet	Drift Direction	COORDINATES North	South	East	West	REMARKS
1	115	0° 30'	115 00	1 00	N 86° E	0 07		1 00		
2	197	0° 45'	196 99	1 07	S 64° E		0 40	1 96		
3	294	0° 45'	293 98	1 27	S 37° E		1 41	2 72		
4	358	0° 45'	357 97	0 84	S 35° E		2 10	3 20		
5	487	1° 00'	486 95	2 25	S 25° E		4 14	4 15		
6	615	1° 00'	614 93	2 23	S 17° E		6 27	4 80		
7	742	0° 45'	741 92	1 66	S 14° E		7 88	5 20		
8	875	1° 00'	874 90	2 32	S 21° E		10 05	6 03		
9	906	1° 30'	905 89	0 81	S 45° W		10 62	5 46		
10	938	2° 30'	937 86	1 40	S 79° W		10 89	4 09		
11	968	4° 00'	967 79	2 09	S 86° W		11 04	2 01		
12	1000	5° 30'	999 64	3 07	S 86° W		11 25		1 05	
13	1030	6° 45'	1029 43	3 53	S 88° W		11 37		4 57	
14	1062	8° 15'	1061 10	4 59	S 86° W		11 69		9 16	
15	1094	9° 30'	1092 66	5 28	S 84° W		12 24		14 41	
16	1126	11° 15'	1124 05	6 24	S 83° W		13 00		20 61	
17	1156	11° 30'	1153 45	5 98	S 77° W		14 35		26 44	
18	1188	13° 00'	1184 63	7 20	S 76° W		16 09		33 42	
19	1220	14° 00'	1215 68	7 74	S 71° W		18 61		40 74	
20	1250	15° 00'	1244 66	7 76	S 75° W		20 62		48 24	
21	1281	16° 15'	1274 42	8 67	S 75° W		22 87		56 62	
22	1313	17° 45'	1304 90	9 76	S 76° W		25 23		66 09	
23	1343	19° 15'	1333 22	9 89	S 74° W		27 96		75 60	
24	1375	20° 45'	1363 14	11 34	S 75° W		30 89		86 55	
25	1471	22° 45'	1451 67	37 12	S 75° W		40 50		122 41	

DIVISION OF OIL AND GAS
RECEIVED
MAY 16 1977
SANTA PAULA, CALIFORNIA

SEALAND DIRECTIONAL DRILLING CO.

COMPANY ARGO PETROLEUM

PAGE #2

WELL ARGO BARKER FERNDALE #5 LOCATION SILVERTHREAD DATE 10 - 76

	Measured Depth	Drift Angle	Vertical Depth	Drift Feet	Drift Direction	COORDINATES North	South	East	West	REMARKS
26	1629	23° 15'	1596 84	62 37	S 74° W		57 69		182 36	
27	1786	23° 45'	1740 54	63 23	S 74° W		75 12		243 14	
28	1944	23° 45'	1885 16	63 63	S 73° W		93 72		303 99	
29	2101	23° 45'	2028 86	63 23	S 73° W		112 21		364 46	
30	2259	23° 45'	2173 48	63 63	S 73° W		130 81		425 31	
31	2426	24° 15'	2325 74	68 59	S 72° W		152 01		490 54	
32	2584	24° 00'	2470 08	64 26	S 72° W		171 87		551 65	
33	2741	24° 30'	2612 94	65 11	S 71° W		193 07		613 21	
34	2900	24° 30'	2757 62	65 94	S 70° W		215 62		675 17	
35	3055	24° 30'	2898 66	64 28	S 69° W		238 66		735 18	
36	3243	24° 00'	3070 41	76 47	S 68° W		267 31		806 08	
37	3402	24° 15'	3215 38	65 30	S 68° W		291 77		866 63	
38	3558	24° 15'	3357 61	64 07	S 68° W		315 77		926 03	
39	3717	24° 30'	3502 29	65 94	S 69° W		339 40		987 59	
40	3801	23° 00'	3579 61	32 82	S 67° W		352 22		1017 80	
41	3958	21° 30'	3725 69	57 54	S 67° W		374 70		1070 77	
42	4114	19° 00'	3873 19	50 79	S 66° W		395 36		1117 17	
43	4272	16° 30'	4024 68	44 87	S 66° W		413 61		1158 16	
44	4428	15° 00'	4175 36	40 38	S 65° W		430 68		1194 76	
45	4523	14° 30'	4267 33	23 79	S 64° W		441 11		1216 14	
46	4553	14° 30'	4296 57	7 51	S 68° W		443 92		1223 10	
47	4587	14° 30'	4329 29	8 51	S 74° W		446 27		1231 28	
48	4618	14° 15'	4359 34	7 63	S 79° W		447 73		1238 77	
49	4649	13° 00'	4389 55	6 97	S 85° W		448 34		1245 71	
50	4680	12° 30'	4419 82	6 71	S 89° W		448 46		1252 42	

DIVISION OF OIL AND GAS
RECEIVED
MAY 16 1977
SANTA PAULA, CALIFORNIA

SEALAND DIRECTIONAL DRILLING CO.

COMPANY ARGO PETROLEUM

PAGE #3

WELL ARGO BARKER FERNDALE #5 LOCATION SILVERTHREAD DATE 10 - 76

	Measured Depth	Drift Angle	Vertical Depth	Drift Feet	Drift Direction	COORDINATES North	South	East	West	REMARKS
51	4710	12° 30'	4449 11	6 49	N 83° W		447 67		1258 86	
52	4870	11° 45'	4605 76	32 58	N 75° W		439 24		1290 33	
53	5028	12° 00'	4760 31	32 85	N 78° W		432 41		k322 46	
54	5123	11° 15'	4853 48	18 53	N 80° W		429 19		1340 71	
55	5218	10° 00'	4947 04	16 50	N 80° W		426 32		1356 96	
56	5375	8° 15'	5102 42	22 53	N 82° W		423 18		1379 27	
57	5501	7° 45'	5227 27	16 99	N 82° W		420 82		1396 09	
58	5720	7° 30'	5444 40	28 59	N 74° W		412 94		1423 57	
59	5751	7° 15'	5475 15	3 91	N 74° W		411 86		1427 33	
60	5847	7° 00'	5570 43	11 70	N 75° W		408 83		1438 63	
61	5974	6° 00'	5696 73	13 28	N 74° W		405 17		1451 40	
62	6130	5° 00'	5852 14	13 60	N 65° W		399 42		1463 73	
63	6290	4° 00'	6011 75	11 16	N 69° W		395 42		1474 15	
64	6446	3° 45'	6167 42	10 20	N 65° W		391 11		1483 39	
65	6604	3° 30'	6325 13	9 65	N 74° W		388 45		1492 67	

CLOSURE: 1542.39' S 75° 25' W

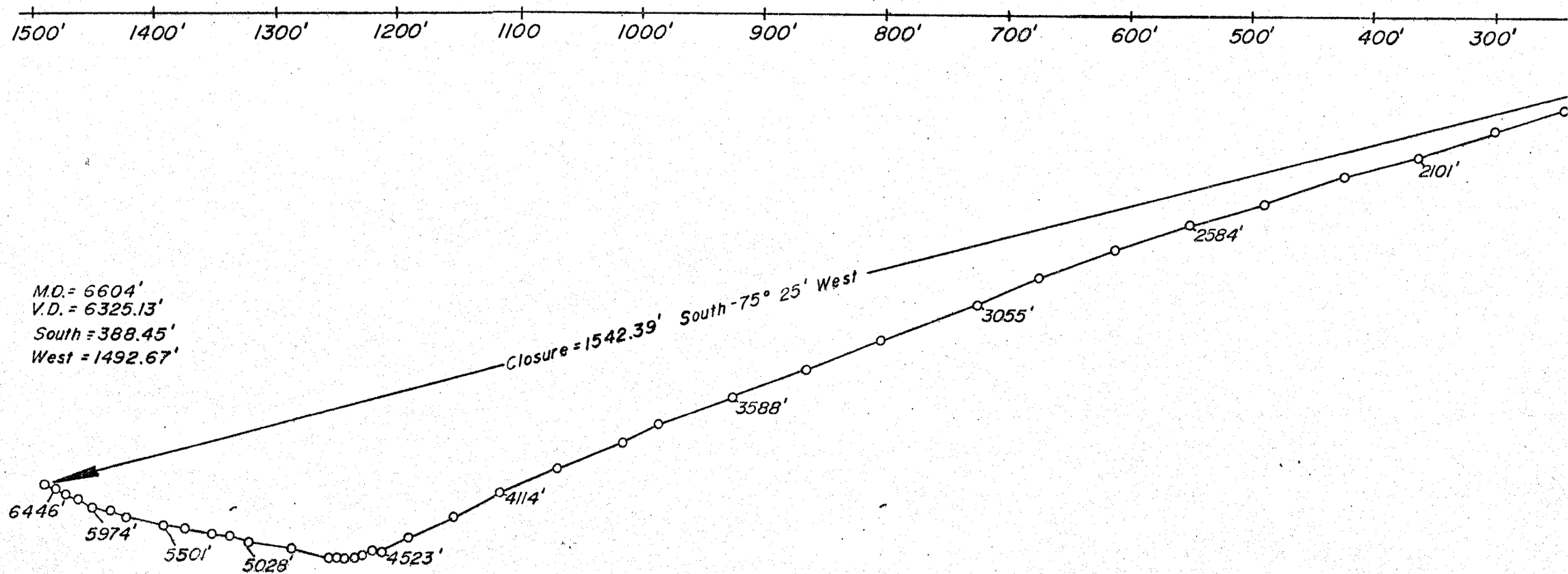
DIVISION OF OIL AND GAS
RECEIVED
MAY 16 1977
SANTA PAULA, CALIFORNIA

ARGO PETROLEUM CORP.

FERNDALE - 5

N

SCALE
1" = 100'



RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Report on Operations

No. T 277-172

Mr. Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, Ca. 90024

Santa Paula, Calif.
July 29, 1977

DEAR SIR:

Operations at well No. "Barker-Ferndale" 5, API No. 111-20702, Sec. 16, T. 4N, R. 21W, SB, B & M. Ojai Field, in Ventura County, were witnessed on July 21, 1977. Mr. ~~Mr.~~ Ms. T. Callaway, representative of the supervisor was present from 0600 to 0800. There were also present

Present condition of well: 9 5/8" cem. 788'; 7" cem. 6470' Perf. 5708' WSO, Perf. 5708 - 5892' and 6056 - 6323'. P.B.T.D. 6470', T.D. 6604'

The operations were performed for the purpose of demonstrating a water shut-off on the 7" casing by means of a production test.

DECISION:

THE 7" SHUT-OFF AT 5708' IS APPROVED.

ljg

JOHN F. MATTHEWS, JR.
State Oil and Gas Supervisor

By _____ Deputy

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Report on Operations

No. T 276-313

Mr. P. S. Magruder, Jr., Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, Calif. 90024

Santa Paula, Calif.
Oct. 19, 1976

DEAR SIR:

Operations at well No. "Barker-Ferndale" 5, API No. 111-20702, Sec. 16, T. 4N, R. 21W, S.B., B & M. Ojai Field, in Ventura County, were witnessed on 10/15/76. Mr. T.E.Adams, representative of the supervisor was present from 1400 to 1500. There were also present Cliff Parent, contract foreman

Present condition of well: 9 5/8" cem. 788' T.D. 790'.

The operations were performed for the purpose of inspecting and testing the blowout prevention equipment and installation.

DECISION:

THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

b

HAROLD W. BERTHOLF
~~JOHN F. MATTHEWS, Jr.~~
State Oil and Gas Supervisor

By _____ Deputy

OG109 (2-75—OSP—20M)

30986-705 2-75 20M OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 276-346

Mr. Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, Calif. 90024

Santa Paula, Calif.
Oct. 13, 1976

DEAR SIR:

Your proposal to drill (111-20702) Well No. "Barker-Ferndale" 5, Section 16, T. 4N, R. 21W, S.B.B. & M., Ojai Field, Ventura County, dated 10/11/76, received 10/13/76, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Sufficient cement shall be pumped back of the 9 5/8" casing to fill from the shoe to the surface.
2. The drilling fluid used shall be of a quality and in sufficient quantity to control all subsurface conditions in order to prevent blowouts; and a reserve supply of this material shall be kept on hand to meet any emergency. No contaminants or toxic material shall be used in any drilling fluid that is to be placed in an unlined sump.
3. Any sump used during drilling operations shall be thoroughly cleaned of all drilling materials and the site restored to its prior condition as soon as drilling operations are completed.
4. Blowout prevention equipment, at least of the Division of Oil and Gas Class III rating, shall be installed and maintained in operating condition at all times.
5. Blowout-prevention practice drills shall be conducted at least weekly for each crew and recorded in the log book.
6. Fresh waters and oil or gas zones back of the 5 1/2" casing shall be protected with cement.
7. This Division shall be consulted before placing any plugs or sidetracking any hole.
8. THIS DIVISION SHALL BE NOTIFIED TO WITNESS:
   a. A pressure test of the blowout prevention equipment before drilling out of the shoe of the 9 5/8" casing.
   b. A demonstration of the 5 1/2" shut-off by a production test within 30 days after the frac oil has been recovered.

NOTE: A COPY OF THIS APPROVAL SHALL BE POSTED AT THE WELL SITE PRIOR TO COMMENCING OPERATIONS.

Blanket Bond
JLH:b

HAROLD W. BERTHOLF
~~JOHN F. MATTHEWS, Jr.~~, State Oil and Gas Supervisor

By _____, Deputy

25476-705 7-74 50M ①D OSP
OG 111

DIVISION OF OIL AND GAS
RECEIVED
OCT 13 1976
SANTA PAULA, CALIFORNIA

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Notice of Intention to Drill New Well

This notice and indemnity or cash bond shall be filed, and approval given, before drilling begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY					
MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121
203	10-26-76 TA	✓	BB	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to commence drilling well No. ARGO BARKER FERNDALE #5, API No. _____ (Assigned by Division),

Sec. 16, T. 4N, R. 21W S.B. B. & M., Silverthread Field, Ventura County.

Legal description of mineral-right lease, consisting of _____ acres, is as follows: _____ (Attach map or plat to scale)

PREVIOUSLY SUBMITTED

Do mineral and surface leases coincide? Yes X No _____ If answer is no, attach legal description of both surface and mineral leases, and map or plat to scale.

Location of well 2894 feet East (Direction) along ~~property~~ section line and 1077 feet south (Direction)

at right angles to said line from the NW ~~property~~ corner of section 16 or

If well is to be directionally drilled, show proposed coordinates at total depth 1320' S 75° W

E Extention

Elevation of ground above sea level 1061 feet.

All depth measurements taken from top of KB (Derrick Floor, Rotary Table or Kelly Bushing) which is 12 feet above ground.

PROPOSED CASING PROGRAM

SIZE OF CASING INCHES A.P.I.	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS	CALCULATED FILL BEHIND CASING
9 5/8"	36#	K-40	0	800	800	800
5 1/2"	17#	K-55	0	6500	TD	3500

(A complete drilling program is preferred and may be submitted in lieu of the above program)

Intended zone(s) of completion Mohnian sands (Name, depth and expected pressure) Estimated total depth 6500

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 940 East Santa Clara (Street)
Ventura, California 93001 (City) (State) (Zip)
Telephone Number (805) 648-2514
BLANKET BOND

ARGO PETROLEUM CORPORATION (Name of Operator)
By Ralph P Cahill (Name) 10/11/76 (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

OG105 (12-73-GSR1-15M)

PROPERTY/WELL TRANSFER OR ACQUISTION

Seneca Resources Corporation (S2630)

to

Vintage Production California LLC (V1370)

Effective April 25, 2008

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF WELL PLUGGING AND ABANDONMENT

Ventura, California

September 21, 1994

James A. Beck, Agent
Seneca Resources Corp.
P.O. Box 630
Santa Paula, CA 93061

Your report of the plugging and abandonment of well "Barker-Ferndale" 6,

A.P.I. No. 111-20730, Section 16, T. 4N, R. 21W, S.B. B.& M.,

Ojai field, Ventura County,

dated --------, received 12-14-93, has been examined in conjunction with records filed in this office. We have determined that all of the requirements of this Division have been fulfilled relative to plugging and abandonment of the well, removal of well equipment and junk, and the filing of well records.

svl

William F. Guerard, Jr
State Oil and Gas Supervisor

By
Patrick J. Kinnear
Deputy Supervisor

cc: Conservation Committee
Update

Modified OG159 (4/94)

OPERATOR Seneca Resources Corp. A.P.I. 111 - 20730

WELL NO. "Barker-Ferndale" 6 SECTION 16, T. 4 N, R. 21 W

MAP

INTENTION	Abandon					
NOTICE DATED	10-11-93					
P-REPORT NUMBER	293-376					
CHECKED BY/DATE						
MAP LETTER DATED	12/15/93					
SYMBOL						

	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED
NOTICE	10-13-93											
HISTORY	12-14-93											
SUMMARY												
E-LOG												
MUD LOG												
DIPMETER												
DIRECTIONAL												
CORE/SWS												
CBL												

ENGINEERING CHECK

T-REPORTS	✓					
OPERATOR'S NAME	✓					
WELL NO.	✓					
LOC & ELEV	✓					
SIGNATURE	✓					
SURFACE INSP.	OK 7/20/94					
DRILL CARD						
RECORD'S COMPLETE	FMN					

FINAL LETTER OK ✓

MAILED

RELEASED BOND

INJECTION BOOK

IDLE WELL LIST

SURFACE INSP. CARD

REMARKS:

OK TO RELEASE FROM CONFIDENTIAL

ABANDONED-REMOVED FROM E.D.P.

DIVISION OF OIL AND GAS
HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — ~~SESPE FIELD~~ Oaji, VENTURA COUNTY
WELL: ~~FERNDALE 6~~ Barker-Ferndale 6 — SEC 33, T4N, R21W
API #: 111-20730 — BARRY McMAHAN, PRODUCTION SUPERINTENDENT
BMM
P.O. BOX 630, SANTA PAULA, CALIFORNIA, 93061 — (805) 933-2217

****

11-13-93

Day 1. MIRU. Released Guiberson pkr. Nipple up BOP. POH w/2 7/8" tbg. LD dn pkr. MU 2 7/8" STC. Measured in hole w/tbg. Tag fill @ 5570'. RU pump & tank to clean oit to 5630' (BP).

11-16-93

Day 3. Tag BP @ 5630'. RU BJ Services. Change well over w/200 bbls of 79# (10.6 ppg) mud. Mix & pump 100 sks Class "G" cmt. Displace to balance plug w/28 bbls mud. PU & hang tubing @ 5095'. Mix & pump 100 sks Class "G" cmt. Displace to balance plug w/24 bbls of mud. Est top of cmt @ 4560'. SD.

11-17-93

Day 4. Ran back in hole w/tbg. Tag cmt @ 4631' (witnessed and approved by Peter Wygle of DOG). Pull & lay dn tbg string. RU HLS. Shoot 4JH @200'. RU BJ. Pump dn 7" csg & establish circ w/9 5/8" surf pipe. Mix & pump 127 sks Class "G" neat. Fill 7" + 7" x 9 5/8" annulus w/cmt 200' to surf (witnessed & approved by Peter Wygle of DOG). Rem BOP. Top off 7" w/14 sks Class "G" cmt. Rem tbg head. RDMO.

DIVISION OF OIL AND GAS
RECEIVED
DEC 14 1993
VENTURA, CALIFORNIA

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

No. T293-312

Report on Operations

James A. Beck, Agent
Seneca Resources Corp.
P.O. Box 630
Santa Paula, CA 93061

Ventura, California
December 21, 1993

Your operations at well "Barker-Ferndale" 6, API No. 111-20730,
Sec. 16, T. 4N, R. 21W, S.B. B.&M. Ojai Field, in Ventura County,
were witnessed on 11-17-93. Pete Wygle, representative of
the supervisor, was present from 1200 to 1300. There were also present
W. Wright, Engineer
Present condition of well: 9 5/8" cem 822'; 7" cem 6410', perf 200' & @ ints 4770'-4828', 5148'-5607', & 6132'-6261', WSO @ 6132', damaged 5324'-5330'. TD 6505'. Plugged w/BP @ 5630' & w/cem 5630'-4631' & 200' - 5'.

The operations were performed for the purpose of abandonment.

DECISION:

The plugging operations as witnessed and reported are approved.

scv

William F. Guerard, Jr.
State Oil and Gas Supervisor

By _____
for Patrick J. Kinnear
Deputy Supervisor

OG109 (Modified 1993)

52630

T293-312

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCE

CEMENTING/PLUGGING MEMO

Operator Seneca Res Corp Well No. "Barker-Ferndale" 6

API No. 111-20730 Sec. 16, T. 4N, R. 21W, SB B&M

Field Ojai ,County Vta . On 11-17-93 ,

Mr. /Ms. P Wygle , representative of the supervisor, was present from 1200 to 1300 .

There were also present W Wright, engineer

Casing record of well: 9 5/8" cem 822'; 7" cem 6410', perf 200' f/ @ intvs 4770'-4828', 5148'-5607', & 6132'-6241', WSO @ 6132', damaged 5324'-5330', TD 6505', Plugged w/ BP @ 5630' & w/ cem 5630'-4631' & 200'-5'

The operations were performed for the purpose of abandonment

☒ The plugging/~~cementing~~ operations as witnessed and reported are approved.

☐ The location and hardness of the cement plug @ _____' are approved.

Hole size: _____" fr. _____' to _____', _____" to _____' & _____" to _____'

Casing				Cemented			Top of Fill		Squeezed Away	Final Press.	Perfs.
Size	Wt.	Top	Bottom	Date	MO-Depth	Volume	Annulus	Casing			

Casing/~~tubing~~ recovered: pf & npf 7 " shot/cut at 200' ', ', ' pulled fr. ';

" shot/cut at ', ', ' pulled fr. '.

Junk (in hole):

Hole fluid (bailed to) at '. Witnessed by

Mudding	Date	bbls.	Displaced	Poured	Fill	Engr.
10.7 ppg	10/13	175	tbg 4631	~	to surf	PRW

CO to old BP @ 5630'.

Cement Plugs		Placing	Placing Witnessed		Top Witnessed			
Date	Sx./cf	MO & Depth	Time	Engr.	Depth	Wt/Sample	Date & Time	Engr.
11/16	230 cf	tbg 5630	~	rptd	4631	wt of tbg	11/17 0800	PRW
11/16	146 cf	circ dn 7"	1200	PRW	5'	visual	✓ 1200	PRW

OGD10 (11/93/GSR1/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND
GEOTHERMAL RESOURCES

No. P293-376

PERMIT TO CONDUCT WELL OPERATIONS

520 (field code)
12 (area code)
10 (new pool code)
10 (old pool code)

WATER DISPOSAL

James A. Beck, Agent
Seneca Resources Corporation
P.O. Box 630
Santa Paula, CA. 93061

Ventura, California
October 19, 1993

Your proposal to abandon well "Barker-Ferndale" 6, A.P.I. No. 111-20730, Section 16, T. 4N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 10/11/93, received 10/13/93, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOGGR Class II 2M requirements shall be installed and maintained in operating condition at all times.
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. A diligent effort shall be made to clean out the well to at least 6410'.
4. All portions of the well not plugged with cement are filled with inert mud fluid having a minimum density of 72 lbs./cu. ft and a minimum gel-shear strength of 25 lbs./100 sq. ft.
5. Freshwater formations are protected by cementing either through perforations in the 7" casing at 200' or a cavity shot at 200'. The volume of cement inside the 7" casing and 7" x 9-5/8" shall be at least 100 feet above the perforations.
6. The 7" casing and all annuli shall be plugged with cement from 30' to the surface.
7. This office shall be consulted before deviating from the proposed abandonment program.
8. THIS DIVISION SHALL BE NOTIFIED:
   A. To witness the location and hardness of the cement plug at 4670'.
   B. To witness the mudding of the well.
   C. To witness the placing of the fresh water plug inside the 7" casing and the plug in the 7" x 9-5/8" casing annulus.
   D. To witness the placing of cement inside the 7" casing and all annuli.

Blanket Bond
SAF:sf

Engineer Steven A. Fields

Phone (805) 654-4761

William F. Guerard, Jr.
State Oil and Gas Supervisor

By

Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

OG111 (Modified 1993)

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
OCT 13 19

Notice of Intention to Abandon Well

VENTURA, CALIFORNIA

FOR DIVISION USE ONLY			
CARDS	BOND	FORMS OGD114	FORMS OGD121
	BB	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3229, Division 3, Public Resources Code, notice is hereby given that it is our intention

to abandon well ~~FERNDALE~~ Barker #6, API No. 111-20730,

Sec. 16, T. 4N, R. 21W, S.B. B. & M., SILVERTHREAD Field, VENTURA County.

commencing work on NOVEMBER 1, 19 93

The present condition of the well is:

1. Total depth 6505'

2. Complete casing record, including plugs and perforations (present hole)
SEE ATTACHED WELLBORE DIAGRAM
AND LIST OF PERFORATIONS

3. Last produced 2/78 (Date) 3 (Oil, B/D) 5 (Gas, Mcf/D) 26 (Water, B/D)

or

4. Last injected 9/15/89 (Date) INJECTIVITY TEST (Water, B/D) (Gas, Mcf/D) (Surface pressure)

Additional data for dry hole (show depths):

5. Oil or gas shows ON MUD LOG:
4770-5105'
5290-5490'

6. Stratigraphic markers
T. LOWER MOHNIAN SANDS 5148'

7. Formation and age at total depth MIOCENE

8. Base of fresh water sands 200'± (QAL)

9. Is this a critical well according to the definition on the reverse side of this form? ☐ Yes ☒ No

The proposed work is as follows:

SEE ATTACHED DETAILED PROCDURE

It is understood that if changes in this plan become necessary, we are to notify you immediately.

Address PO BOX 630 (Street)
SANTA PAULA (City) CA (State) 93060 (Zip)
Telephone Number (805) (Area Code) 933-2217 (Number)

SENECA RESOURCES CORP (Name of Operator)
By BARRY McMAHAN (Print Name)
Barry McMahan (Signature) 10/11/93 (Date)

OG108 (10/85/DWRR/5M)

DIVISION OF OIL AND GAS
RECEIVED
OCT 1 5 19
VENTURA, CALIFORNIA

AB Ferndale 6
Plug and Abandonment
Detailed Procedure

1. Rig up service unit. Install and test BOP as per CA Div of Oil & Gas requirements.

2. Release 2-7/8" Guiberson Uni-Six packer at 4704'. Trip out of hole with 2-7/8" tubing, 2-7/8" F Nipple with bell entry collar and packer.

3. Trip in the hole with 2-7/8" tubing and retrieving tool for 7" Model C bridge plug. Clean off fill from top of bridge plug at 5630' and retrieve it.

4. Attempt to pull bridge plug through tight spots at 4762 - 5324' and pull it out of well.

5. If bridge plug cannot be pulled through tight spots, push it to bottom of well to 6410' EPBTD. Trip out of hole with retrieving tool.

6. Notify CA Dept of Oil & Gas to witness setting of cement plugs.

7. Trip in hole with 2-7/8" workstring open ended. Spot cement in 7" casing from 6410' EPBTD to 4670' (100' above top perforation at 4770'). Will require 325 sacks Class G cement at slurry yield of 1.15 cubic feet/sack of cement.

8. After cement has set (Approximately 12 hours), set full weight of tubing on cement to test hardness.

9. Spot 177 barrels of drilling mud with gel shear of 25#/100 square feet and weighted with bentonite to 9.7#/gallon (17.5#/cubic feet) from top of plug at 4670' to 50' below ground level.

10. Cut off casing 6' below final restored ground level.

11. Spot cement in 7" casing from 50' to surface. (Approximately 10 sacks Class G cement at slurry yield of 1.15 cubic feet /sack cement.) Setting time is approximately 45 minutes. Trip out of hole laying down workstring. Rig down service unit.

DIVISION OF OIL AND GAS
RECEIVED
OCT 15 1993
VENTURA, CALIFORNIA

12. Surface casing is to be capped and welded. Cap is to have weep hole and is to be inscribed with name of operator (Seneca Resources Corporation), API well serial number (04111-20730), well name and number (AB Ferndale #6), surveyed location of well (2837'E 1077'S NW Cor Sec 16 T4N R21W SBB&M) and date well was plugged. Fill cellar from casing cut off point to restored ground level with soil.

13. Restore well site as per CA Dept of Oil & Gas requirements.

Cement additives for plug from 6410' to 4670' will include 2% calcium chloride for a compressive strength of 1000 psi after 10 hours.

SBHT at 6505' TD is 134 Deg F and at top of cement plug it is 117 Deg F.

Slurry Fluid Loss for both plugs will be 1500 cc/30 minutes.

Additives for surface plug will include 3% calcium chloride for a compressive strength of 1000 psi after 10 hours.

Total Drilling Mud Required:	177 Barrels
Total Cement Required:	335 Sacks Class G Total
	325 Sacks w/ 2% CaCl
	10 Sacks w/ 3% CaCl

Prepared By: Sandra K Cole 10/8/93

Approved By: S. M. M. 10/11/93

Approved By: J. A. Beck 10/11/93

Ferndale 6

822' 9 5/8" OD 32.30#/ft H40 INT CSG

Cemented w/ 500 CF Cement

6-1/8" Swedge through tight spots:

4764' 4772'

4782-86'

4799-4802'

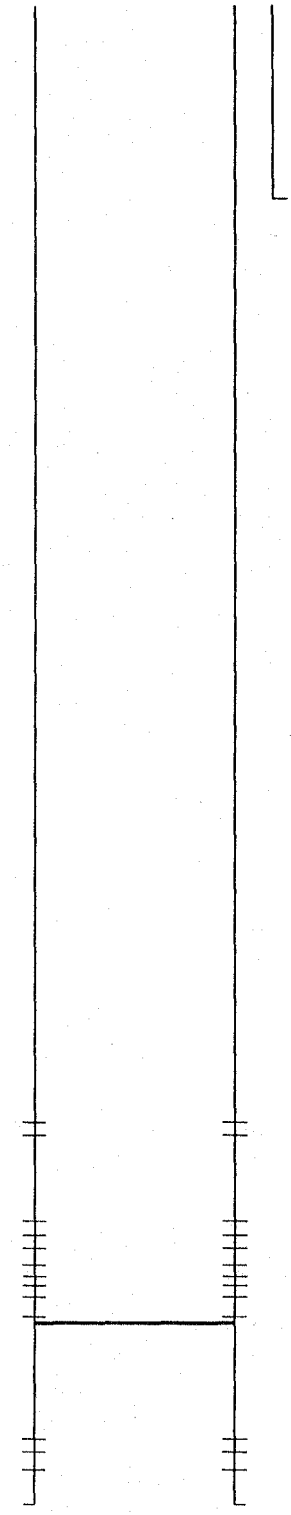
4804-06'

5-1/8" Bit hit Tight Spot 5324'

5630 - 5638' BRIDGE PLUG Model C

6410' 7" OD 26.00#/ft K55 PROD CSG

Cemented w/ 637 CF Cement



KB ELEV: 1073'

PBTD: 6410'

TD: 6505'

KB 12'

DIVISION OF OIL AND GAS
RECEIVED
OCT 1 3 1995
VENTURA, CALIFORNIA

4770 - 4828' PERFS 100 Holes in Select Intervals

5148 - 5197' PERFS 132 Holes in Select Intervals

5250 - 5314' PERFS 208 Holes in Select Intervals

5366 - 5438' PERFS 212 Holes in Select Intervals

5452 - 5526' PERFS 132 Holes in Select Interval

5567 - 5607' PERFS 80 Holes in Select Intervals

6132 - 6185' PERFS 20 Holes in Select Intervals

6210 - 6261' PERFS 13 Holes in Select Intervals

AB Ferndale #6
List of Perforations

All Perforated at 4 JSPF

DIVISION OF OIL AND GAS
RECEIVED
OCT 13 1995
VENTURA, CALIFORNIA

4770-4780'

4813-4828'

5148-5154'

5154-5164'

5177-5179'

5182-5187'

5187-5197'

5250-5257'

5260-5262'

5268-5280'

5280-5295'

5302-5314'

5366-5376'

5379-5394'

5401-5409'

5418-5438'

5452-5455'

5459-5466'

5477-5489'

5500-5506'

5521-5526'

5567-5572'

5581-5586'

5590-5594'

5601-5607'

OPERATOR Argo
LSE & NO "Ferndale" 6
MAP 203

	(1)	(2)	( )	( )	( )	( )
INTENTION	Drill	[illegible]	alter csg	alter csg	alter casing	
NOTICE DATED	12-29-76	10-11-77	11-16-83	11/30/83	3-28-89	
P-REPORT NUMBER	277-27	277-387	283-334	283-353	289-125	
CHECKED BY/DATE					10/25/89 BH	
MAP LETTER DATED	7-3-77 PRW 1-8-77 loc				10/29/89	
SYMBOL	D	N/C	N/C	N/C	NC	

	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED
NOTICE	12-30-76		10-13-77		11-16-83		11/30/83		3-29-89			
HISTORY	6-21-77				12-18-84		12-18-84		10/2/89			
SUMMARY	6-21-77				12-18-84		12-18-84					
2" DI-lat w/micro con IES/ELECTRIC LOG	5-14-81											
DIRECTIONAL SURV	6/21/77											
CORE/SWS DESCRIP	1-10-81											
OTHER Mud Log Fract Final Comp Report Fin Fract Dual Induction	6-21-77 6-21-77 6-21-77 6-21-77											
RECORDS COMPLETE					RSH		RSH		JMC			

ENGINEERING CHECK

T-REPORTS	
OPERATOR'S NAME	
WELL DESIGNATION	
LOC & ELEV	
SIGNATURE	
SURFACE INSPECTION	
FINAL LETTER OK	

CLERICAL CHECK

POSTED TO 121 _____ 170 MAILED _____ FINAL LETTER MAILED _____

RELEASED BOND _____

REMARKS: ~~Need Production Test~~ - done 7/22/77

STATE OF CALIFORNIA-RESOURCES AGENCY
GEORGE DEUKMEJIAN, *Governor*

DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS
6401 TELEPHONE ROAD, SUITE 240
VENTURA, CALIFORNIA 93003-4458
(805) 654-4761

October 13, 1989

Murdock M. Baker, Jr. Agent
Seneca Resources Corp.
725 E. Main St. Suite 200
P.O. Box 630
Santa Paula, CA. 93060

Re: "Barker-Ferndale" 6

Dear Mr. Baker:

Seneca Resources was granted approval to conduct an injectivity test in "Barker-Ferndale" 6. This period of injection was to be used to test the zone for possible long term injection. On July 20, 1989, Seneca submitted the required data as pursuant to California Code of Regulations Section 1724.7, to initiate a water disposal project.

This is to acknowledge receipt of your letter dated October 9, 1989 indicating that the injectivity test was concluded and injection into the well was terminated. The request dated July 20, 1989 to initiate a water disposal project utilizing this well has been cancelled.

If you have any questions, please contact us immediately.

Sincerely,

Steven A. Fields
Operations Engineer

Seneca Resources Corporation

a National Fuel Gas System company

ISION OF OIL AND
RECEIVED
OCT 11 1989
ENTURA, CALIFORNIA

October 9, 1989

Steven A. Fields
Division of Oil & Gas
6401 Telephone Road, Suite 240
Ventura, California 93003

RE: ARGO BARKER FERNDALE #6
(API NO. 111-20730)

Dear Steve:

Please accept this letter as notice of our intention to forfeit Permit No. 289-125, dated May 2, 1989, to conduct an injectivity test in "Argo Barker Ferndale 6".

Seneca Resources forfeits this permit because we cannot inject fluid into this specific well and reservoir, and meet D.O.G. requirements with respect to reservoir pressures above hydrostatic.

If you have any questions, please contact me at (805) 656-2445.

Sincerely,

James A. Beck
Geological Manager

JAB:csf

DIVISION OF OIL & GAS
RECEIVED
OCT 3 1989
VENTURA, CALIFORNIA

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION OJAI FIELD VENTURA COUNTY
WELL: ARGO BARKER FERNDALE 6 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20730 ERIC R. WILSON, DIVISION ENGINEER

Eric R. Wilson 9/12/89

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

5/2/89

Day 1. MIRU Oilwell. Tear out pump lines to Barker Ferndale #5. Spot & raise mast. Rig pump to well. Bled tubing. Bled casing to Baker tank. Gas & oil returns. Unbolt wellhead. Take off x-mas tree. Change studs in BOE. Bolt on N/L Acme mechanical gate & check. Pump 35 bbls. lease water down tubing to kill well. Oil & gas returns. Rig working platform. Rig for tubing. Unland tubing. Measure & PU 2-7/8" EU8 tubing. Tag bridge plug @ 4957'. Pull plug loose. Run plug to 5075'. Plug stopped. Work tubing off plug. Pull tubing thru tight spot @ 4766' to check for plug. Run tubing to 4860'. Dump 4 sx sand (20 mesh silica) down tubing. Pull tubing to 4675'. Close well in till a.m. Note: Est. 20' sand above bridge plug.

5/3/89

Day 2. Bled tubing and casing. Run tubing. Tag top fill @ 5057'. Pull tubing. Measure out. Make up N/L Acme 5-11/16" impression block. Run tubing. Set down @ 4769' with 20,000# set down weight. Pull tubing and block. Block measure 5-9/16" mashed diameter. Pull 9 stands kill string. Close well in. Put out load & wind guys. Move power swivel to rig site. Order out swedge tools for a.m. SJD. Note: Tubing measured out 5' longer than tubing measurement on work sheet. (BP @ 5080'.)

5/4/89

Day 3. Service rig. Bled tubing & casing Pull kill string. Make up 5-3/4" N/L Acme swedge & tools. Pick up & run tools & 6 4-3/4" drill collars, accelerator & tubing. Work thru tight spot at 4769'. Approx. 2' to swedge out. Pull tubing, collars & tools. Make up 5-7/8" swedge. Run tools & tubing. Work 5-7/8" swedge thru tight spot @ 4769'. Clean up tight spot. Run swedge to 5047'. Pull tubing & tools to 4638'. Close well in. Note: Last time back thru tight spot. Used jars 1 time. Pull free 2nd pull.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: ARGO BARKER FERNDALE 6 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20730 — ERIC R. WILSON, DIVISION ENGINEER

EW 9/12

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

PAGE 2

5/5/89

Day 4. Service rig. Bled tubing and casing. Small amount of gas. Run 5-7/8" swedge thru tight spot @ 4769'. Pull tubing, collars & tools. Make up 6" swedge. Run swedge, tools & tubing. Work swedge thru tight spot @ 4769. Clean up. Run swedge. Hit small tight spot @ 4788'. Hit small tight spot @ 4800'. Clean up. Run swedge to 5047'. Pull tubing & tools. Work back thru tight spot @ 4769'. Clean out more. Run thru with no jar. Let well set 45 minutes. Work tight spot @ 4769'. Pull tubing, collars & tools. Make up 6-1/8 string mill. Run mill, jars, collars and tubing to 4570'. Close well in.

5/6/89

Day 5. Bled tbg. & csg. Rig pump. Fill well with 12 bbls. lease water. Circulate out 34 bbls. oil & water to Baker tank. Run tubing to 4748'. Strip on stripper. Rig power swivel. Hit tight casing @ 4764' with 6-1/8" mill. Mill out casing to 4772'. Hit tight casing @ 4782'. Mill to 4786'. Hit tight casing @ 4799'. Mill to 4802'. Hit tight casing @ 4804'. Mill to 4806-1/2'. Run mill to 5017'. Pull tubing & tools to 4370'. Close well in till a.m. (Note: Used 16 bbls. lease water for milling. Total 28 bbls.).

5/7/89

Day 6. Bled tbg. & csg. Run mill & tbg. to 4874'. Pull tubing, collars & mill. Caliper mill worn to 6-1/16. Make up ret. head. Run tool & tbg. Tag fill @ 5057'. Rig Poor Boy swivel & pump. Backscuttle out sand to BP @ 5080'. Circulate well clean. Pull tubing & BP. No B/P on tubing. Run ret. head & tbg. to 5080'. Rig pump to circulate. Work ret. head over BP. Let well clean up. Pull tubing & BP. Small amount drag on bottom. Pull thru milled casing, o.k. Check while pulling for BP. Lay down BP. Make up Robinson 5-7/8" rock bit. Run bit, 6 4-3/4" drill collars & tubing to 4612'. Strip on stripper. Close well in till a.m. (Note: Used 3.6 bbls. lease water. Total used 31.6. McMahan's transferred from Baker tank 101 bbls. oil & 119 bbls. water.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: ARGO BARKER FERNDALE 6 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20730 — ERIC R. WILSON, DIVISION ENGINEER

EW 9/12

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

5/8/89

Day 7. Bled tbg. & csg. Run tubing, collars & bit. Tag top of fill @ 5088'. Rig pump & power swivel. Backscuttle out fill to top of cement @ 5105'. Drill out cement from 5105' to 5273'. Soft drilling 5243' - 5273'. Loss of power on power swivel. Lay down swivel. Pull tubing to 4738'. Pick up power swivel. Loss of power. Lay down power swivel. Close well in. Load out power swivel. SDFN. (Note: Circulate well clean between connections.)

5/9/89

Day 8. Bled tubing & casing. Run tubing, collars & bit to 5273'. Rig pump & power swivel. Drill out cement from 5273' to 5324'. Unable to drill deeper. Indication of drilling on metal. Pull tubing, collars & 5-7/8" bit. Make up Robinson 5-5/8" bit. Run bit, 6 4-3/4" collars & tubing. Pull tubing to 5306'. Rig pump & power swivel. Unable to drill @ 5324'. Pull tubing, collars & bit to 4506' (70 stands). Close well in till a.m. (Note: Casing damage in well from 5324' to 5332.)

5/10/89

Day 9. Bled tubing & casing. Finish pulling tubing, collars & bit. Stand back collars. Make up Robinson 5-1/8" bit. Run bit & tubing to 5304'. Rig pump & power swivel. Tag cement @ 5324'. Drill thru bad casing, no problem. Continue drilling out cement to 5584'. Circulate well clean.. Lay down power swivel. Pull tubing to 4485'. SDFN. (Note: Circulate well clean between connections. All cement returns over shaker. Casing damage 5324'-5332').

5/11/89

Day 10. Bled tbg. & csg. Run tbg. to 5582'. Rig pump & power swivel. Drill out cement 5584' to 5606'. Run tbg. to 5615'. Circulate well clean. No sand return. Tag BP @ 5630'. Pull tbg. to 5615'. Standby for Baker chemical. Mix 20 gals. Cronox E80Z & 2 gals. Magnatreat OS with 283 bbls. clean lease water. Rig pump & circulate Baker tank 30 minutes. Change well over with treated lease water. Used 220 bbls. Pull tbg., measuring out. Run 6 4-3/4" drill collars & lay down. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION OJAI FIELD VENTURA COUNTY
WELL: ARGO BARKER FERNDALE 6 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20730 ERIC R. WILSON, DIVISION ENGINEER

EW 9/12

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445
****

PAGE 4

5/12/89
Day 11. Bled casing. Pressure bled off. Well flow water same amount. Rig Schlumberger. Bolt on bailing gate. Run 4" x 8' gun. Gun stopped @ 5324'. Tear out Schlumberger. Rig for tubing. Make up 5-1/8" bit. Run bit and tubing. Small indication bit going through tight spot @ 5324'. Pull tubing and bit. Rig Schlumberger. Run 3-3/8" x 15' gun. Gun stopped @ 5324'. Run 3-3/8" x 4' collar locator. Indication going through tight spot. Tag down @ 5620'. Order out shorter guns. Run 3-3/8" x 10'. Gun stopped @ 5324'. Run 3-3/8" x 7'. Gun stopped @ 5324'. Tear out Schlumberger. Rig up and run tubing to 4200'. Close well in. SDFN.

5/13/89
Day 12. Small amount of pressure on casing. Bled tubing and casing. Run tubing to 5341'. Rig Schlumberger to perf. #1 gun misfired. Trouble getting back into tubing. Tear out Schlumberger. Pull tubing. Rig bailing gate & Schlumberger. Perf well per program: 4 (0.34") JHPF: #1 5607'-5601', #2 5594'-5590', #3 5586'-5581', #4 5572'-5567', #5 5526'-5521', #6 5506'-5500', #7 5489'-5477', #8 5466'-5458.5', 5455'-5452', #9 5438'-5418', #10 5409'-5401', #11 5394'-5379.5. 1 more run with 2-1/8" guns. Close well in. SDFN.

5/14/89
Day 13. 250 psi on casing. Bled casing. Continue to perf well. 2-1/8" enerjet O phase 4 (0.34") JHPF #1 5376.5'-5366'. Tag top of fill @ 5615'. Run strip log on bottom perfs. Change out lubricator. Continue perf well with 4" guns 4 (0.44") JHPF #2 5314'-5302', #3 5295'-5280', #4 5280'-5268', #5 5262'-5260.5', 5257'-5250', #6 5197'-5187', #7 5187'-5182.5', 5179.5'-5177', #8 5164'-5154', #9 5154'-5148'. Run strip log on perfs. Tear out Schlumberger. Rig up and run extra tubing. Pull and lay down. Rig up A&F Testers. Make up Guiberson 7" x 2-7/8" uni-packer 6, 2-7/8" "F" nipple with bell entry collar. Test tubing to 5000 psi. All tubing tested. Land tubing on donut with packer @ 4707'. Tear out tester. Close well in. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: ARGO BARKER FERNDALE 6 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20730 — ERIC R. WILSON, DIVISION ENGINEER

EW 9/12

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

PAGE 5

5/15/89
Day 14. Shut down till a.m.

5/16/89
Day 15. Mix 20 gals. Crono & E8OZ & 2 gal. Magnatreat OS with 182 bbls. lease water in Baker tank. Rig pump. Circulate tank 20 minutes to mix. Rig pump to well. Change over to treated water. Backscuttle 144 bbls. Returns to Baker slop tank. Set packer @ 4704'. Land tubing on donut with 12,000# set down weight. Test casing to 700 psi. Hold for 5 minutes. Bled pressure. Clean and load out tubing tools. Take off BOPE. Bolt on wellhead with 2-7/8" full-open valve. Haul extra tubing to rack. Clean location. RDMO.

STATE OF CALIFORNIA-RESOURCES AGENCY
GEORGE DEUKMEJIAN, *Governor*

DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS
6401 TELEPHONE ROAD, SUITE 240
VENTURA, CALIFORNIA 93003-4458
(805) 654-4761

September 20, 1989

Murdock M. Baker, Jr. Agent
Seneca Resources Corp.
725 E. Main St. Suite 200
P.O. Box 630
Santa Paula, CA. 93060

Re: "Barker-Ferndale" 6

Seneca Resources was granted approval in our permit No. 289-125, dated May 2,1989 to conduct an injectivity test in "Barker-Ferndale" 6 for a period not to exceed 60 days. This period of injection is to be used to test the zone for possible long term injection. On July 20, 1989, Seneca submitted the required data as pursuant to California Code of Regulations Section 1724.7, to initiate a water disposal project.

During a recent inspection of the well by this Division, a shut-in pressure reading of 1100 psig was noted. In conversation with your staff, it has been noted that the formation may be above hydrostatic pressure. This is further documented by a review of the submitted data for the proposed injection project which indicated a reservoir pressure of 2100 psi, the possible confined reservoir as indicated by the geological information, and a review of production records for this well.

The Division has a policy against allowing injection into zones above hydrostatic pressure since the potential for upward migration away from the wellbore is increased. In order to determine, whether the zone is above hydrostatic pressure, at this time, please schedule a pressure fall-off survey within 14 days to determine the reservoir pressure in the vicinity of the injection well.

The approval process for the water disposal project has been temporarily halted pending the reservoir pressure determination and to address the landowners concerns. At the conclusion of the pressure fall-off test, the decision will be made as to continue in the project approval process and address the landowners concerns or terminate the injectivity test and deny the project.

If you have any questions, please contact us immediately.

Sincerely,

Steven A. Fields
Operations Engineer

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No.P 289-125
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
May 2, 1989

Your proposal to alter casing, test inject. in well "Barker-Ferndale" 6, A.P.I. No. 111-20730, Section 16, T. 4 N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 3/28/89, received 3/29/89, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOG Class II 2M requirements shall be installed and maintained in operating condition at all times.
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. Wire line operations are conducted through at least a 2M lubricator.
4. A pressure test is conducted to demonstrate the mechanical integrity of the 7" casing.
5. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.
6. THIS DIVISION SHALL BE NOTIFIED:
   a. To witness a pressure test of the 7" casing.

NOTE:

1. Your request to conduct an injectivity test in the Miocene pool in the Silverthread area of Ojai field is approved. The test shall not extend past 60 days of injection and the surface injection pressure shall not exceed 1650.
2. This permit was held in abeyance pending a 15 day comment period.

Blanket Bond
SF:ljg

Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

STATE OF CALIFORNIA-RESOURCES AGENCY GEORGE DEUKMEJIAN, *Governor*

DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS
6401 TELEPHONE ROAD, SUITE 240
VENTURA, CALIFORNIA 93003-4458
(805) 654-4761

March 31, 1989

The Daily Chronicle
P.O.Box 30
Santa Paula, CA. 93060
Attn: Laura

Re: Public Notice

Please print the attached the public notice for three consecutive days beginning at the earliest date.

Billing should be to the:

Division of Oil and Gas
6401 Telephone Road
Suite 240
Ventura, CA 93003

Please contact me at (805) 654-4761 if you have any questions.

Sincerely,

Steven A. Fields
Operations Engineer

SAF:sf
Attachment

PUBLIC NOTICE

The State Oil and Gas Supervisor has received an application from Seneca Resources Corporation to conduct an injectivity test for the purpose of investigating the feasibility of initiating a waste-water disposal project in Section 16, T.4 N., R.21 W., S.B. B.& M. into the Miocene zone in the Silverthread area of the Ojai oil field, Ventura County. A description of the proposed project can be obtained from Division of Oil and Gas, 6401 Telephone Road, Suite 240, Ventura, CA. 93003, (805) 654-4761.

Comments on this project should be submitted to the above office no later than 15 calendar days from the date of publication of this notice.

Signed

Patrick J. Kinnear

Deputy Supervisor

STATE OF CALIFORNIA-RESOURCES AGENCY GEORGE DEUKMEJIAN, *Governor*

DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS
6401 TELEPHONE ROAD, SUITE 240
VENTURA, CALIFORNIA 93003-4458
(805) 654-4761

March 31, 1989

County of Ventura
Planning Division
Oil Enforcement
800 S. Victoria Avenue
Ventura, CA. 93003

The State of California, Division of Oil and Gas has received an application from Seneca Resources Corporation to conduct an injectivity test for the purpose of investigating the feasibility of initiating a waste-water disposal project in Section 16, T.4 N., R. 21 W., S.B. B&M, into the Miocene zone in the Silverthread area of the Ojai Oil field, Ventura County.

A brief description of the injectivity test is attached.

If you have any comments on the above injectivity test, please submit them within 15 calendar days from the date of this letter.

Any questions, please feel free to contact us at (805) 654-4761.

Sincerely,

Steven A. Fields
Operations Engineer

See project file

Proposed Injectity Test

Seneca Resources Corp. has requested from the Division of Oil and Gas approval for a 60 day temporary injection period in order to determine the feasibility of initiating a waste-water disposal project. Seneca requested the injectivity test for well "Barker-Ferndale" 6. If the injection rates are successful, Seneca will, request approval for long term injection.

"Barker-Ferndale" 6 is located within the Ojai Oil field. (See attached map). The well was drilled in February 1977. After setting surface casing at 824' and cementing it to surface, drilling continued to 6505'. Afterwhich, 7" casing was cemented to 6410' with cement behind pipe to a calculated top of 3500'. The well produced for a short time in 1977 and has been shut-in since February 1978.

Monitoring System

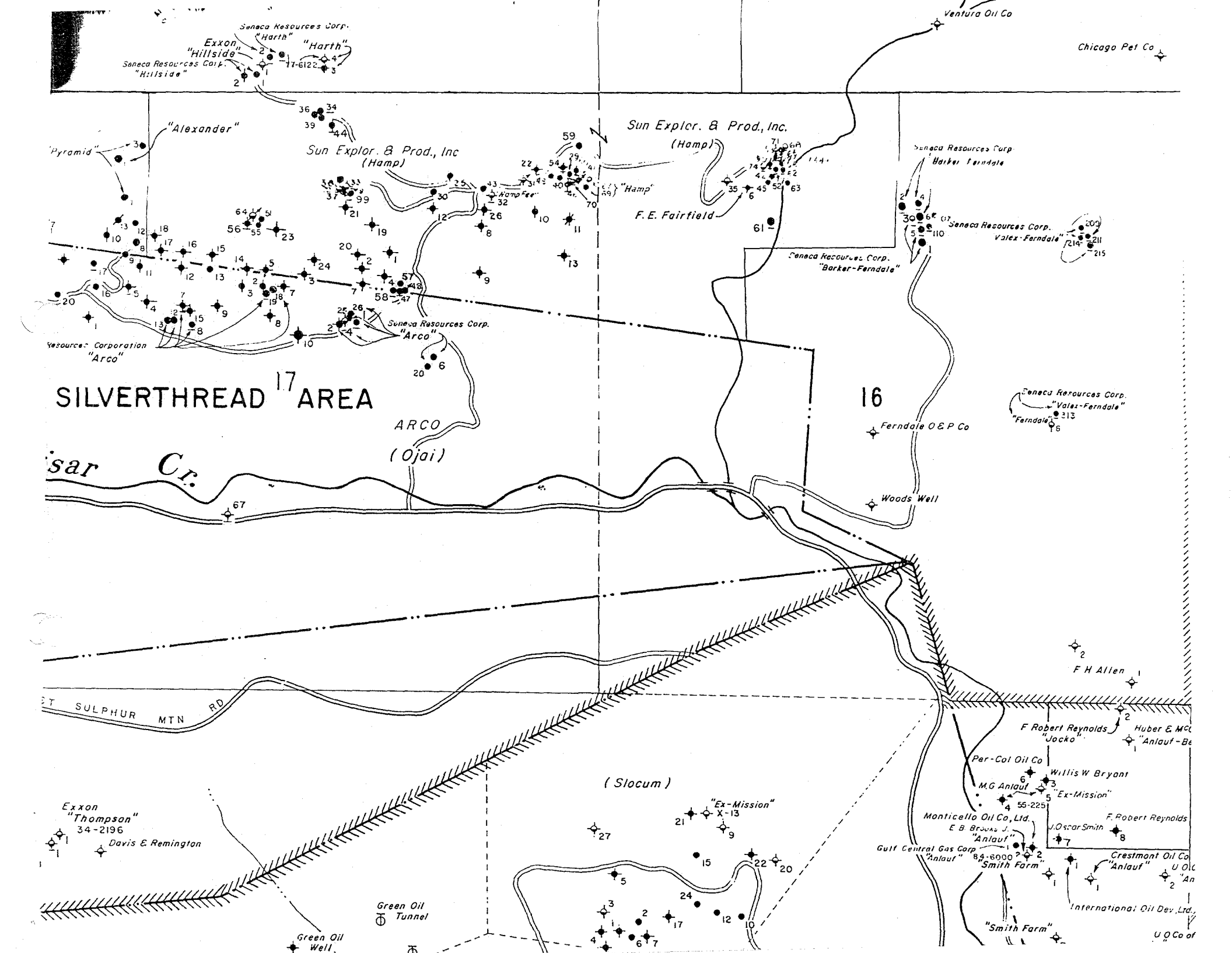
The well will have tubing and packer set immediately above the proposed injection zones. A tracer, spinner or static temperature survey will be run during the injectivity test. Injection pressure gauges will be installed at the wellhead. Maximum allowable injection pressure will be limited to 1000 psi for the injectivity test.

Zone of Injection

The proposed zone for the injectivity test in the Miocene zone at a depth of 4770 extending throufgh the proposed injection interval. This zone is presently the primary zone of production on the Ferndale lease.

Injection Fluid

The source of the injection fluid will be water produced from "Ferndale" lease operated by Seneca Resources Corp.


SILVERTHREAD 17 AREA
16
ARCO
(Ojai)
(Slocum)
Ventura Oil Co
Chicago Pet Co
Seneca Resources Corp.
"Harth"
Exxon
"Hillside"
Seneca Resources Corp.
"Hillside"
"Harth"
"Alexander"
"Pyramid"
Sun Explor. & Prod., Inc
(Hamp)
Sun Explor. & Prod., Inc.
(Hamp)
"Hamp"
F. E. Fairfield
Seneca Resources Corp.
"Barker-Ferndale"
Seneca Resources Corp.
"Valez-Ferndale"
Seneca Resources Corp.
"Arco"
Resources Corporation
"Arco"
Ferndale O & P Co
Woods Well
Seneca Resources Corp.
"Valez-Ferndale"
"Ferndale"
F H Allen
F Robert Reynolds
"Jocko"
Huber & MC
"Anlauf-Be
Per-Col Oil Co
Willis W Bryant
M.G Anlauf
"Ex-Mission"
55-225
Monticello Oil Co, Ltd.
E B. Brooks J.
"Anlauf"
F. Robert Reynolds
J. Oscar Smith
Gulf Central Gas Corp
"Anlauf"
84-6000
"Smith Farm"
Crestmont Oil Co
"Anlauf"
International Oil Dev, Ltd.
"Smith Farm"
"Ex-Mission"
X-13
Exxon
"Thompson"
34-2196
Davis & Remington
Green Oil
Tunnel
Green Oil
Well
SULPHUR MTN RD
Sisar Cr.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

Ventura, California
April 4, 1989

Murdock M. Baker, Jr. Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

I have received your notice dated March 28, 1989, of intention to rework and test injectivity in, "Barker-Ferndale" 6
(Well name and number)

Sec. 16, T. 4N, R. 21W, S.B. B.&M.

Your notice cannot be answered until the application to conduct the injectivity test has proceeded through a public comment period. The Division will publish a request for public comments in a local newspaper of general circulation to the project area on or about April 7, 1989. The public comment period will last 15 days from the last date of publication. In the event that any public comments are received then they must be resolved prior to the approval of the injectivity test. If the comments are sufficient, then a public hearing may be required.

No injection operations are authorized on this well until you receive written approval from the Division.

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kenny
Deputy Supervisor

STATE OF CALIFORNIA-RESOURCES AGENCY
GEORGE DEUKMEJIAN, *Governor*

DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS
6401 TELEPHONE ROAD, SUITE 240
VENTURA, CALIFORNIA 93003-4458
(805) 654-4761

March 31, 1989

The Daily Chronicle
P.O.Box 30
Santa Paula, CA. 93060
Attn: Laura

Re: Public Notice

Please print the attached the public notice for three consecutive days beginning at the earliest date.

Billing should be to the:

Division of Oil and Gas
6401 Telephone Road
Suite 240
Ventura, CA 93003

Please contact me at (805) 654-4761 if you have any questions.

Sincerely,

Steven A. Fields
Operations Engineer

SAF:sf
Attachment

PUBLIC NOTICE

The State Oil and Gas Supervisor has received an application from Seneca Resources Corporation to conduct an injectivity test for the purpose of investigating the feasibility of initiating a waste-water disposal project in Section 16, T.4 N., R.21 W., S.B. B.& M. into the Miocene zone in the Silverthread area of the Ojai oil field, Ventura County. A description of the proposed project can be obtained from Division of Oil and Gas, 6401 Telephone Road, Suite 240, Ventura, CA. 93003, (805) 654-4761.

Comments on this project should be submitted to the above office no later than 15 calendar days from the date of publication of this notice.

Signed

Patrick J. Kinnear

Deputy Supervisor

STATE OF CALIFORNIA-RESOURCES AGENCY GEORGE DEUKMEJIAN, *Governor*

DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS
6401 TELEPHONE ROAD, SUITE 240
VENTURA, CALIFORNIA 93003-4458
(805) 654-4761

March 31, 1989

County of Ventura
Planning Division
Oil Enforcement
800 S. Victoria Avenue
Ventura, CA. 93003

The State of California, Division of Oil and Gas has received an application from Seneca Resources Corporation to conduct an injectivity test for the purpose of investigating the feasibility of initiating a waste-water disposal project in Section 16, T.4 N., R. 21 W., S.B. B&M, into the Miocene zone in the Silverthread area of the Ojai Oil field, Ventura County.

A brief description of the injectivity test is attached.

If you have any comments on the above injectivity test, please submit them within 15 calendar days from the date of this letter.

Any questions, please feel free to contact us at (805) 654-4761.

Sincerely,

Steven A. Fields
Operations Engineer

Proposed Injectity Test

Seneca Resources Corp. has requested from the Division of Oil and Gas approval for a 60 day temporary injection period in order to determine the feasibility of initiating a waste-water disposal project. Seneca requested the injectivity test for well "Barker-Ferndale" 6. If the injection rates are successful, Seneca will, request approval for long term injection.

"Barker-Ferndale" 6 is located within the Ojai Oil field. (See attached map). The well was drilled in February 1977. After setting surface casing at 824' and cementing it to surface, drilling continued to 6505'. Afterwhich, 7" casing was cemented to 6410' with cement behind pipe to a calculated top of 3500'. The well produced for a short time in 1977 and has been shut-in since February 1978.

Monitoring System

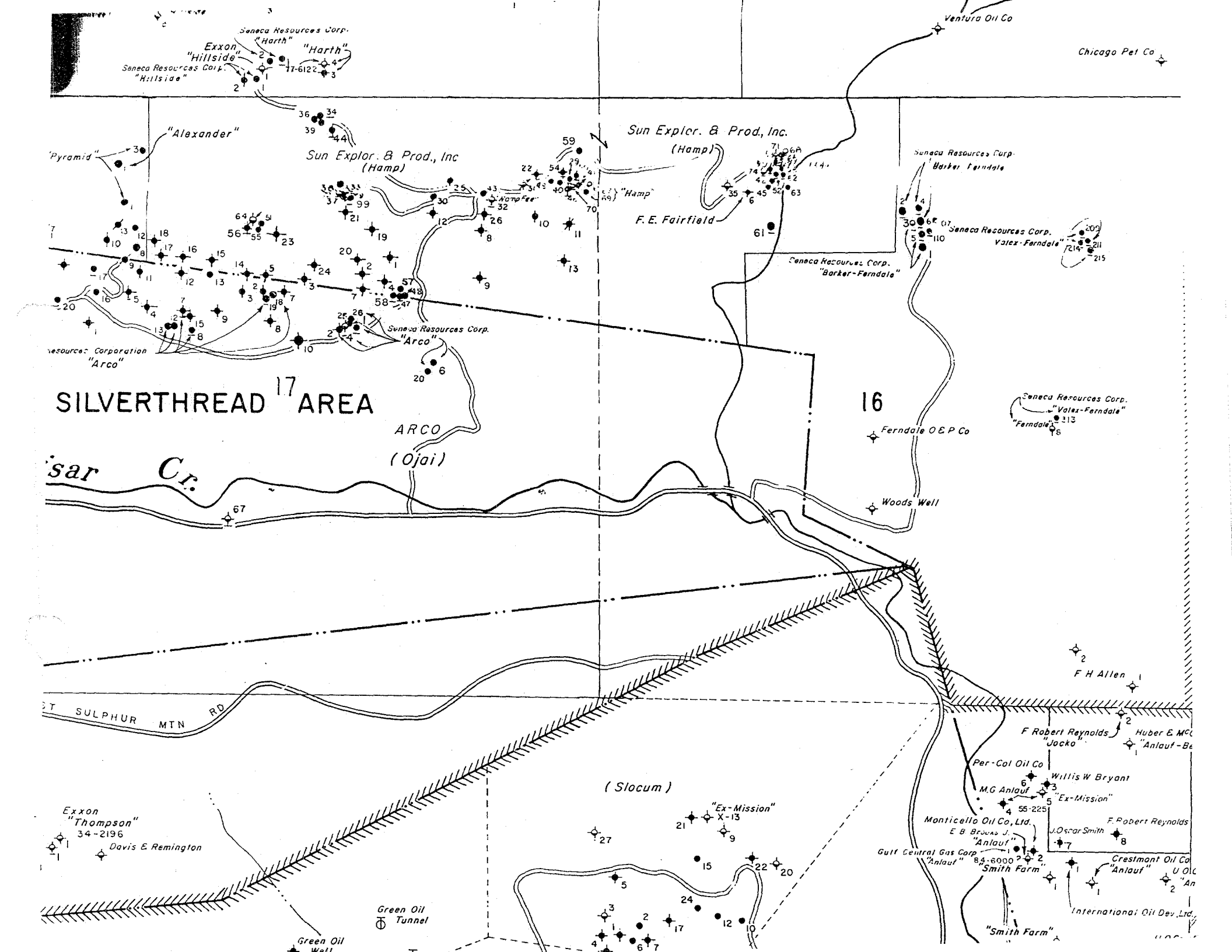
The well will have tubing and packer set immediately above the proposed injection zones. A tracer, spinner or static temperature survey will be run during the injectivity test. Injection pressure gauges will be installed at the wellhead. Maximum allowable injection pressure will be limited to 1000 psi for the injectivity test.

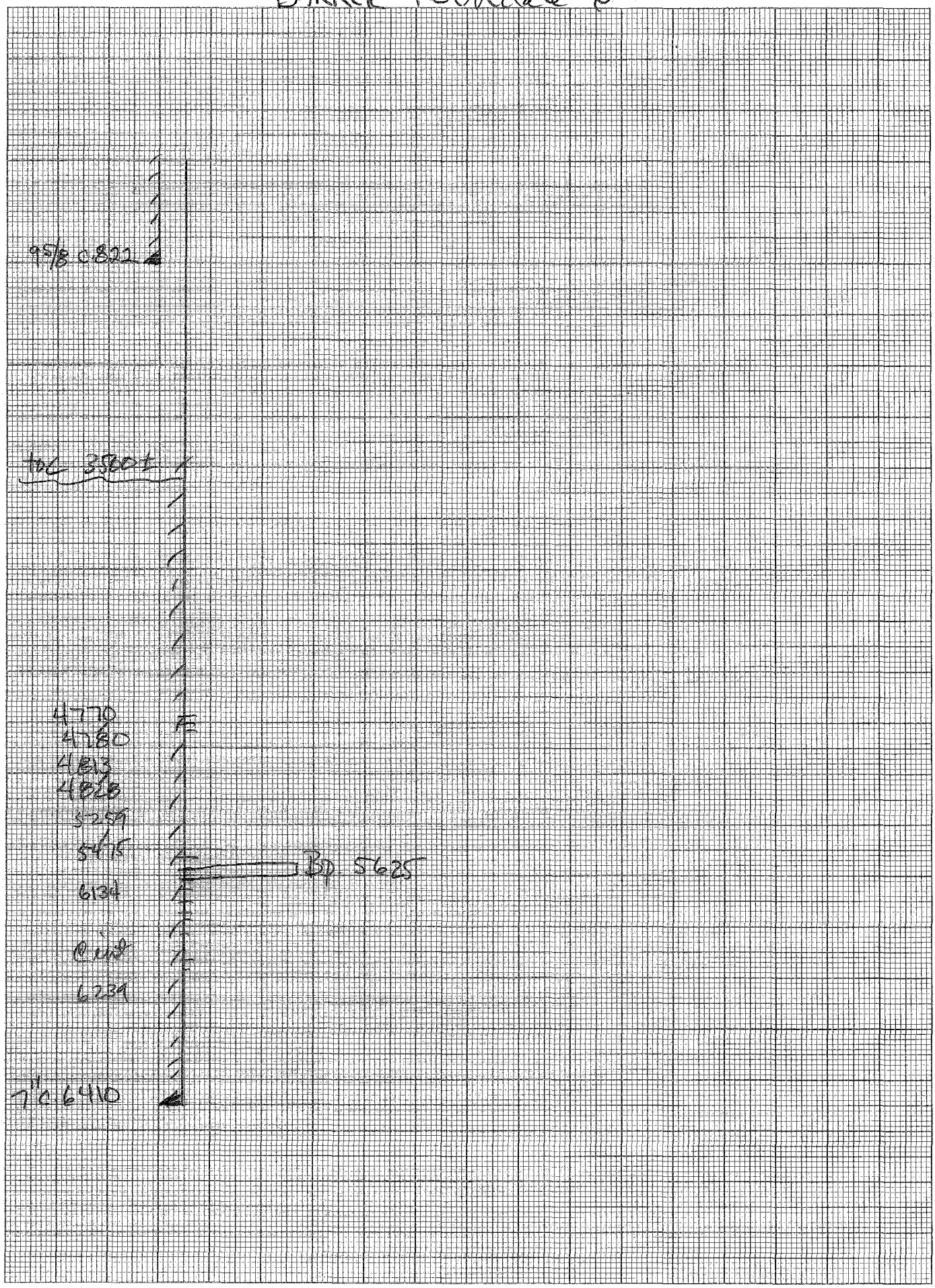
Zone of Injection

The proposed zone for the injectivity test in the Miocene zone at a depth of 4770 extending throufgh the proposed injection interval. This zone is presently the primary zone of production on the Ferndale lease.

Injection Fluid

The source of the injection fluid will be water produced from "Ferndale" lease operated by Seneca Resources Corp.


Seneca Resources Corp.
"Harth"
Exxon
"Hillside"
"Harth"
Seneca Resources Corp.
"Hillside"
77-6122
Ventura Oil Co
Chicago Pet Co
"Alexander"
"Pyramid"
Sun Explor. & Prod., Inc
(Hamp)
Sun Explor. & Prod., Inc.
(Hamp)
"Hamp"
F. E. Fairfield
Seneca Resources Corp.
"Barker-Ferndale"
Seneca Resources Corp.
"Valex-Ferndale"
Seneca Resources Corp.
"Barker Ferndale"
Seneca Resources Corp.
"Arco"
Resources Corporation
"Arco"
SILVERTHREAD 17 AREA
ARCO
(Ojai)
16
Ferndale O & P Co
Seneca Resources Corp.
"Valex-Ferndale"
"Ferndale"
Woods Well
Sisar Cr.
67
F H Allen
F Robert Reynolds
"Jocko"
Huber E. McC
"Anlauf-Be
Per-Col Oil Co
Willis W Bryant
M.G Anlauf
"Ex-Mission"
55-225
Monticello Oil Co, Ltd.
E. B. Brooks J.
"Anlauf"
F. Robert Reynolds
J. Oscar Smith
Gulf Central Gas Corp
"Anlauf"
84-6000
"Smith Farm"
Crestmont Oil Co
"Anlauf"
International Oil Dev. Ltd.
"Smith Farm"
T SULPHUR MTN RD
(Slocum)
"Ex-Mission"
X-13
Exxon
"Thompson"
34-2196
Davis & Remington
Green Oil
Tunnel
Green Oil



461510
10 X 10 TO THE CENTIMETER 18 X 25 CM.
KEUFFEL & ESSER CO. MADE IN U.S.A.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF PROPERTY AND WELL TRANSFER

Field or county	District
Ojai	2
Former owner	**Date**
Argo Petroleum Corp.	Sept. 10, 1987

Name and location of well(s)

Sec. 16, T. 4N., R. 21W., SBB&M

"Barker-Ferndale" 1	(111-20423)	"Valex-Ferndale" 211	(111-21178)
"Barker-Ferndale" 2	(111-20604)	"Valex-Ferndale" 214	(111-21180)
"Barker-Ferndale" 3	(111-20609)	"Valex-Ferndale" 215	(111-21206)
"Barker-Ferndale" 4	(111-20685)	"Valex-Ferndale" 313	(111-21314)
"Barker-Ferndale" 5	(111-20702)	"Ferndale" 8	(111-20732)
"Barker-Ferndale" 6	(111-20730)		
"Valex-Ferndale" 107	(111-21066)		
"Valex-Ferndale" 110	(111-21163)		
"Valex-Ferndale" 209	(111-21105)		

Description of the land upon which the well(s) is (are) located

Date of transfer, sale, assignment, conveyance, or exchange	New owner	Type of organization
7-17-87	Seneca Resources Cprporatipn	Corp.
	Address: 511 16th St. Mall, Ste 300, Denver, CO 80202	Telephone No.: (303) 825-7401

Reported by: Seneca Resources Corp.

Confirmed by: Argo Petroleum Corp.

New operator new status (status abbreviation)	Request designation of agent
PA	
Old operator new status (status abbreviation)	**Remarks**
PA	

Deputy Supervisor: Patrick J. Kinnear

Signature: Patrick J. Kinnear

OPERATOR STATUS ABBREVIATIONS

PA – Producing Active
NPA – No Potential, Active
PI – Potential Inactive
NPI – No Potential, Inactive
Ab – Abandoned or No More Wells

FORM AND RECORD CHECK LIST

Form or record	Initials	Date	Form or record	Initials	Date
Form OGD121			Map and book		
Form ODG148			Notice to be cancelled		
New well cards			Bond status		
Well records			EDP files		
Electric logs					
Production reports					

Form OG100 (7/79)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

API No. 111-20730

WELL SUMMARY REPORT

Operator	Well				
Argo Petroleum Corporation	Barker-Ferndale #6				
Field	**County**	**Sec.**	**T.**	**R.**	**B.&M.**
Ojai	Ventura	16	4N	21W	S.B.

Location (Give surface location from property or section corner, street center line and/or California coordinates)
2837' E & 1077' S from NW corner of Sec. 16

Elevation of ground above sea level
1061'

Commenced drilling (date)
2-10-77

Completed drilling (date)
2-28-77

Commenced producing (date)
7-13-77

[X] Flowing [ ] Pumping
[ ] Gas lift

Name of producing zone(s)
Mohnian

Total depth

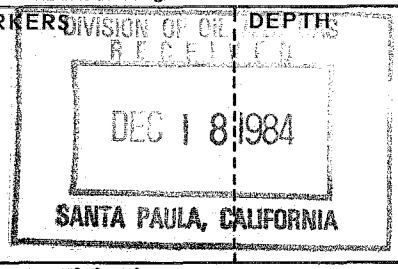
(1st hole)	(2nd)	(3rd)
6505'		

Present effective depth
5108'

Junk
Model "C" BP at 5625'
Cannot be retrieved due to bad casing 5324'-5330'.

Depth measurements taken from top of:
[ ] Derrick Floor [ ] Rotary Table [X] Kelly Bushing
Which is 12 feet above ground

GEOLOGICAL MARKERS **DEPTHS**



Formation and age at total depth

	Clean Oil (bbl per day)	Gravity Clean Oil	Percent Water including emulsion	Gas (Mcf per day)	Tubing Pressure	Casing Pressure
Initial Production	14	30.1	60%	15	80	80
Production After 30 days	11	30.1	70%	87	80	80

CASING RECORD (Present Hole)

Size of Casing (API)	Top of Casing	Depth of Shoe	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Number of Sacks or Cubic Feet of Cement	Depth of Cementing (if through perforations)
9-5/8"	0	822'	32.3#	H-40 ST&C	New	12-1/4"	500 cf	
7"	0	6410'	26#	K-55 LT&C	New	8-3/4"	637 cf	

PERFORATED CASING (Size, top, bottom, perforated intervals, size and spacing of perforation and method.)
6261' - 6132' (total of 33 0.40" shot holes). Ineffective.
5475' - 5259' (total of 25 0.375" bullet holes). Ineffective.
4828' - 4813' & 4780' - 4770' (total of 100 0.44" jet holes).

Was the well directionally drilled? If yes, show coordinates at total depth
[X] Yes [ ] No Closure 1004.06' S66°22'W

Electrical log depths
6504' - 822'

Other surveys
FDC, DM, AVL, FF, CBL

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Name	Title	
Harry E. Hull	District Superintendent	
Address	**City**	**Zip Code**
411 S. Beckwith Road	Santa Paula	93060
Telephone Number	**Signature**	**Date**
(805) 933-1321	Harry E. Hull	12-7-84

SUBMIT IN DUPLICATE

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARCO PETROLEUM CORPORATION
WELL: BARKER-FERNDALE #6
A.P.I. #111-20730

OJAI FIELD VENTURA COUNTY
SEC. 16, T4N, R21W, SBB&M
HARRY E. HULL DISTRICT SUPERINTENDENT

Harry E. Hull

411 E. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

★ ★

11/21/83

MIRU SPS. RU pump tank. Pumped lease oil down csg. at 2500#, unable to break circulation. Jarred pump loose. Unable to pump down tbg. @ 2000#. Continued to jar pump out, freed up halfway out of hole. Finally broke circulation at 500#. Turned system over, working out gas. Hole fluid ±60% water. Finished pulling rods & pump. Found seating ring and holddown on pump polished severely. Removed tree. Installed and tested double hydraulic BOPE. BS system while building working platform. Finally killed well. Unlanded tbg. and measured same out of hole. Found ±15' of flour sand in gas anchor. MU STC and PS. RIH with tbg. to 3000'. SDFN.

11/22/83

Started up job. BS hole, killing same. RIH with tbg. Measured & PU additional tbg. Tagged fill @ 6141'. (Top perf @ 6132' by wireline.) Unable to make hole circulating either direction while working tbg. RU poorboy swivel. Still unable to make hole. Aborted cleanout. POH with tbg. Found STC bevelled in, appeared to have been on iron. MU Baker 7" 26# positive scraper. RIH to 5735', desired depth. BS hole clean while killing same. PU to 3000'. SDFN.

11/23/83

Start up job. Backscuttle hole, removing gas from system. Finish POH with tbg. and scraper. MU Baker Modol "C" BP. RIH and set same at 5625'. Spotted 2 sx (20 mesh) sand over BP. PU and change system over to clean lease oil. Pull tbg. tail up to 5000'. Swab fluid down to 2000'. POH with tbg. SDFN.

11/24/83

RU Dresser Atlas with full lubricator. Shot 4 (0.375") BH @ 5259', 5282', 5298', 5325', 5374', 5421', 5463', 5475'. (Total of 25 holes.) Noted 520' of fluid rise in 7" csg. RD Dresser. Made up Baker Model "C" retrieving head & P.S. RIH & landed tbg. with tail @ 5029', P.S. @ 4998'. (Well blowing gas & flowing oil on both sides). Tear out tbg. equipment & remove BOPE. Install production tree. Rig for rods. PU 2-1/2" x 1-1/2" x 15' x 19 RWA Armco pump. RIH with pump & rods. Space well out. Hang well on. Press. to 400 psi. Clean & load out circulating pump. RDMO. Well on production @ 7:30 p.m. on 12/64" bean. 7 SPM. Csg. shut in.

DIVISION OF OIL & GAS
SANTA PAULA, CALIFORNIA

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION
WELL: BARKER-FERNDALE #6
A.P.I. #111-20730

OJAI FIELD
SEC. 16, T4N, R21W, SBB&M
HARRY E. HULL DISTRICT SUPERINTENDENT

Harry E. Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

★ ★

11/25/83
185 bbls. gross. 99% cut. 0.3% sand. 150# tbg/0 csg. 24 hrs. Stacking rods in a.m.

11/27/83
MIRU SPS. POH with rods & pump. Found pump stuck open. RU sandline & made feeler run. Tag fill @ 5560'. (BP @ 5625'. BTM perf. 5475'.) POH & lay down 9 jts. 2-7/8" tbg. RIH with exchange pump. Hang well on. Press. tbg. to 400#. RDMO. Well on @ 7:00 p.m. Tail @ 4742'.

124 bbls. gross. 85% cut. 15% sand. 150# tbg/0 csg. 14-3/4 hrs.

11/28/83
200 bbls. gross. 100% wellhead cut. 150# tbg/csg. shut. 12/64" bean. 24-1/2 hrs. 1.0 sand & mud.

12/02/83
MIRU CPS. Pulled rods & pump. RU pump tank. Changed over to treated lease water, circulated out ±60 bbls. oil. Removed tree. Twisted off 2 donut studs. Waited on repair equipment & welder. Modified & repaired same. Installed & tested double hydraulic BOPE. PU additional tbg. & tagged fill @ 5437'. (BP @ 5625'.) Pulled over perfs. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: BARKER-FERNDALE #6 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20730 — HARRY E. HULL DISTRICT SUPERINTENDENT

Harry E. Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

★ ★

12/03/83

Start up job. RIH and clean out fill to 5625' (Bridge Plug). Returns of flour sand, shale & siltstone (up to 1/2" diameter). Backscuttle clean. Release B.P. Pulled into tight spot in csg. @ 5331'. Worked up to 35,000 lbs. over weight. Unable to come up hole. Worked B.P. back down thru tight spot (5331'-5340'). Run B.P. to 5625' and reset same. Backscuttle bottoms up, bringing up constant stream of sand & gravel. Pulled up, retrieving head drug thru tight spot @ 15,000 lbs. over weight. Dimensions of retrieving head:

Guide shoe	5-1/8" O.D.
Body	4-1/2" O.D. x 32"
Max. B.P. O.D.	6.08"

POH with tbg. Noted scarring on retrieving head. RU Dialog. Ran Minimum I.D. Log 5457' (pick up) to surface. Tight pipe 5330' - 5324' (5-15/16" I.D.). RIH with Model "C" bridge plug. Set same @ 5200'. Lay down 12 jts. tbg. SDFN.

12/04/83

Start up job. RIH to 5180' with tbg. Spot 2 sacks of sand on B.P. (20 mesh). Changed over to lease oil. POH with tbg. Wait on Dresser Atlas. Scheduled for 2 p.m. Did not show up. SJD @ 4:00 p.m. Dresser Atlas showed up @ 4:30 p.m. SDFN.

12/05/83

RU Dresser. Change of orders. Stood by for jet guns. Perf'd 4 (0.44") JHPF 4770' - 4780', 4813' - 4828'. Tore out Dresser. RIH with retrieving head, P.S. & tbg. Land with shoe @ 4585' & tail @ 4619'. Clean & loaded out tbg. tools, working platform & BOPE. Installed production tree. PU exchange pump & RIH (well overflowed running in with pump). Spaced well out & hang well on. 100# on csg. & 500# on tbg. this a.m.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: BARKER-FERNDALE #6 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20730 — HARRY E. HULL — DISTRICT SUPERINTENDENT

Harry E. Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

★ ★

12/06/83
Start up job. 500# on tbg. & 100# on csg. Bled well down thru flowline, respace well. Press. tbg. to 400# with unit. Clean location, rig down & made lease move. As of 5:00 a.m. produced 142 bbls. 1% cut. Annular volume = 139 bbls. to pump off. Will shoot fluid level.

12/07/83
6 bbls. gross. 0.1% cut. 110# tbg/0# csg. shut. 12/64" bean. 24 hrs. F.L. = 234' FOP.

12/08/83
2 bbls. gross. N/S. 80# tbg/40# csg. shut. 12/64" bean. 24 hrs.

12/10/83
RU SPS pump tank to csg. Mixed 25 gals. Dowell F33 surfactant with 60 bbls. lease oil, pumped same down csg. Continued pumping lease oil down csg. @ 0 psi. Well began pressurizing after total of 179 bbls. pumped. Pumped in 9 bbls. oil with final pump-in of 1.7 BPM @ 2800# csg., 3000# tbg. Rod rattigan valve stem leaking gas. 3 minute SIP = 2450# csg. Bled well, 1.5 bbl. came back. Repaired leak. Reattempted pump-in with 0.4 BPM @ 2300# csg., 2500# tbg. Put away 2 bbls. before well pressure reached 2300#. 5-min. SIP = 2100# csg. Bled well. Bled back 2 bbls. Used total of 186 bbls. oil. Estimate 7 bbls. net out perfs. Pressured csg. to 2000#. Closed well in. Moved out pump tank. In a.m.: 1700# tbg/csg. shut in pressure. RTP.

12/11/83
221 bbls. gross. 60% cut. 0.4 mud & sand. 200# tbg/150# csg. 12/64" bean. 24 hrs.

12/12/83
218 bbls. gross. 100% cut. 220# tbg/100# csg. shut. 12/64" bean. 24 hrs.

12/13/83
216 bbls. gross. 100% cut. 210# tbg/80# csg. 12/64" bean. 24 hrs.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: BARKER-FERNDALE #6 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20730 — HARRY E. HULL DISTRICT SUPERINTENDENT

Harry E. Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

★ ★

12/14/83
MIRU. Bled well down. POH with rods & pump. Removed tree, installed BOPE. Build floor & rig for tbg. Close well in.

12/15/83
Started up job. RU pump system. Circulated gas out with lease water. Unlanded tbg. Measured & PU additional tbg. Lost slip insert out of slips. Unable to find same on surface. Assumed it went downhole. (Later found slip insert had been lost in VF #107, the well worked on immediately prior to this well.) Continued to PU tbg. Tagged Model "C" BP @ 5254'. (Originally set @ 5200'.) BP probably in lower perforated interval. Latched onto BP. Equalized and BS clean. Unable to pull BP, worked same downhole to 5267'. Worked up to 30,000# over weight, finally started moving BP up hole. Freed up considerably but dragged all the way out. (Hanging up on casing collars.) Removed BOPE. Unable to find slip insert. BP in very bad shape. Some marks on bottom of retrieving head. RIH with STC & PS to 3000'. SDFN.

12/16/83
Start up job. Bled well down. Backscuttle well around, circulating gas out of system. Continue RIH, picking up additional tbg. Tag fill @ 5600'. Backscuttle well clean. Pulled tbg. tail to 5578'. RU Dowell cementers. Pump 2 bbls. fresh water ahead, 100 sx. (115 cf) Class "G" neat cement. Displace with 27 bbls. lease water. RD Dowell. Pull tbg. tail to 4920'. Backscuttle well clean. Pull tail to 4615'. SDFN.

12/17/83
Started up job. RIH with tbg. Tagged cement @ 5108'. BS bottoms up. Changed well over to lease oil. PU and laid down extra tbg. Landed with tail @ 4616', PS @ 4585'. RU Dowell. Tested lines to 5000#. Using lease oil, established injection rate of 3.5 BPM @ 3800# with 10 bbls. in. With 25 bbls. in, 3.5 BPM @ 4000#. With 40 bbls. in, 2-1/4 BPM @ 4000#. With 55 bbls. in, 2 BPM @ 4000#. Used total of 195 bbls. for changeover and 55 bbls. for pump-in. ISIP = 3750#. F.G. = 1.17. 5 min. SIP = 3500#. 15 min. SIP = 3375#. Bled well. Tore out Dowell. Removed BOPE. Installed tree. Ran exchange pump & rods. Tested tbg. to 350#. RDMO.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: BARKER-FERNDALE #6 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-20730 — HARRY E. HULL — DISTRICT SUPERINTENDENT

Harry E. Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

★ ★

12/17/83
118 bbls. gross. N/S. 150# tbg/0# csg. 12/64" bean. 13-1/2 hrs.

12/18/83
29 bbls. gross. 98% cut. 120# tbg/0# csg. 12/64" bean. 24 hrs.

12/19/83
1 bbl. gross. N/S. 120# tbg/0# csg. shut. 12/64" bean. 24 hrs.

12/20/83
1 bbl. gross. 0.2% cut. 100# tbg/0# csg. 12/64" bean. 24 hrs.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 283-353

520 (field code)
12 (area code)
10 (new pool code)
10 (old pool code)

REPORT ON PROPOSED OPERATIONS

Mr. Harry Hull, Agent
Argo Petroleum Corp.
411 S. Beckwith Rd.
Santa Paula, CA 93060

Santa Paula, California
Dec. 1, 1983

Your proposal to alter casing well "Barker-Ferndale" 6, A.P.I. No. 111-20730, Section 16, T. 4N, R. 21W, SB B. & M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 11/30/83, received 11/30/83 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Hole fluid of sufficient quality and quantity shall be maintained in the hole to control any subsurface condition, and a reserve supply shall be on hand for emergencies.
2. Blowout prevention equipment of at least DOG Class II 2M, with a hydraulic actuating system, shall be installed and maintained in operating condition at all times.
3. The division will monitor the monthly production of this well for a period of six months and if anomalous water production is indicated, remedial action will be ordered.
4. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.

Blanket Bond
MS:b

M. G. MEFFERD, State Oil and Gas Supervisor

By [signature]
Murray W. Dosch, *Deputy Supervisor*

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

OG111 (11/82/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

DIVISION OF OIL AND GAS
RECEIVED
NOV 30 1983
SANTA PAULA, CALIFORNIA

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	OGD114	OGD121
BB	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well No. "Barker-Ferndale" #6, API No. 111-20730,

Sec. 16, T. 4N, R. 21W, S.B. B. & M., Silverthread Field, Ventura County.

The present condition of the well is as follows:

1. Total depth. 6505'
   Effective Depth: 6370'
   Bridged Depth: 5625' (retrievable BP)
2. Complete casing record, including plugs and perforations:
   9-5/8" 32.30# H-40, ST&C, cmt'd @ 822'
   7" 26# K-55, LT&C, cmt'd @ 6410'

   Perf'd: 6134', 6150', 6260', w/3-3/8" BHPF
   6132', 6133', 6150', 6151, 6260', 6261' w/2 - 0.45" JHPF
   6141', 6185', 6210', 6239', w/ 3 - 0.40" JHPF

   5259', 5282', 5298', 5325', 5374', 5421', 5463', 5475'
   w/ 4 - 3/8" BHPF

3. Present producing zone name Mohnian Zone in which well is to be recompleted same
4. Present zone pressure unknown New zone pressure unknown
5. Last produced November 1983 (Date) | Ø (Oil, B/D) | 185 (Water, B/D) | 19 (Gas, Mcf/D)

   or

6. Last injected Never (Date) | --- (Water, B/D) | --- (Gas, Mcf) | --- (Surface pressure, psig.)

The proposed work is as follows:

1. MIRU. Install Class II BOE. Clean out to BP @ 5625'.
2. Reset retrievable BP @ 5200'.
3. Perf selectively 4770' - 4828'.
4. Production test.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 411 S. Beckwith Road (Street)
Santa Paula, California 93060 (City) (State) (Zip)
Telephone Number (805) 933-1321

Argo Petroleum Corporation (Name of Operator)
By Harry Hall (Name) 11-30-83 (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

(1-78-GSRI-15M)

DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 283-334

520 (field code)
12 (area code)
10 (new pool code)
10 (old pool code)

REPORT ON PROPOSED OPERATIONS

Mr. Harry Hull, Agent
Argo Petroleum Corporation
411 S. Beckwith Rd.
Santa Paula, CA 93060

Santa Paula, California
Nov. 21, 1983

Your proposal to alter casing well "Barker-Ferndale" 6, A.P.I. No. 111-20730, Section 16, T. 4N, R. 21W, SB B. & M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 11/16/83, received 11/16/83 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Hole fluid of sufficient quality and quantity shall be maintained in the hole to control any subsurface condition, and a reserve supply shall be on hand for emergencies.
2. Blowout prevention equipment of at least DOG Class II 2M, with a hydraulic actuating system, shall be installed and maintained in operating condition at all times.
3. The proposed bridge plug at 5700' will not fulfill the requirements for the abandonment of the lower portion of the hole without further consideration.
4. The division will monitor the monthly production of this well for a period of six months and if anomalous water production is indicated, remedial action will be ordered.
5. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.

Blanket Bond
MS:b

M. G. MEFFERD, State Oil and Gas Supervisor

By Michael Stettner for
Murray W. Dosch, Deputy Supervisor

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

OG111 (11/82/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

RECEIVED
NOV 16 1983
SANTA PAULA, CALIFORNIA

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
BB	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well No. ~~Argo Valex~~ "Barker - Ferndale #6, API No. 111-20730,

Sec. 16, T. 4N, R. 21W, S.B. B. & M., Silverthread Field, Ventura County.

The present condition of the well is as follows:

1. Total depth. 6505'
   Effective Depth 6370'
2. Complete casing record, including plugs and perforations:
   9-5/8" 32.30# H-40, ST&C, cmt'd @ 822'
   7" 26# K-55, LT&C, cmt'd @ 6410'
   Perf'd: 6134', 6150', 6260', w/ 3-3/8" BHPF
   6132', 6133', 6150', 6151', 6260', 6261' w/2-0.45 JHPF
   6141', 6185', 6210', 6239', w/3-0.40 JHPF

3. Present producing zone name Mohnian Zone in which well is to be recompleted same
4. Present zone pressure unknown New zone pressure unknown
5. Last produced August 1978 (Date) | 3 (Oil, B/D) | 27 (Water, B/D) | 30 (Gas, Mcf/D)
   or
6. Last injected Never (Date) | (Water, B/D) | (Gas, Mcf) | (Surface pressure, psig.)

The proposed work is as follows:

1. MIRU, install Class III BOE, clean out to 6370'.
2. Set retrievable BP @ 5700'.
3. Perf selectively 5282' - 5475' (28 holes).
4. Production test.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 411 S. Beckwith Road (Street)
Santa Paula, (City) California (State) 93060 (Zip)
Telephone Number (805) 933-1321

Argo Petroleum Corporation (Name of Operator)
By Harry Hall (Name) 11-16-83 (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

NOTICE OF RECORDS DUE

Santa Paula, California
May 8, 19 81

Mr. Harry Hull, Agent
Argo Petroleum Corporation
P. O. Box CI
Ventura, CA 93002

In accordance with Division 3 of the Public Resources Code of California, the following records are due, covering

he drilling in 1977

f your well(s) "Barker-Ferndale" 6 (111-20730)

Ojai Field, Ventura County, Sec. 16, T. 4N R. 21W, S.B. B. & M.

RECORDS: *Records are due within 60 days after completion, suspension, or abandonment of any well, or upon completion of additional work n any well. Records shall be submitted in duplicate. Division forms must be signed in the spaces provided.*

OIL AND GAS OPERATION	GEOTHERMAL OPERATION
☐ Well summary (Form OG 100)	☐ Well summary (Form OGG 100)
☐ Core or sidewall sample (Form OG 101)	☐ Core or sidewall sample (Form OGG 101)
☐ History (Form OG 103)	☐ History (Form OGG 103)

OGS, TESTS, AND SURVEYS: *All logs, tests and surveys are due within 60 days after completion, suspension, or abandonment of any well, upon completion of additional work in any well. Logs, tests and surveys shall be submitted in duplicate.*

☐ Electric log (1" = 50 ft.)	☐ Velocity survey	☐ Water analysis	☐ R/A survey
☐ Directional survey	☐ Mud log	☐ Oil and/or gas analysis	☐ Spinner survey
☐ Dipmeter (computed)	☐ Pressure measurements (flowing and static)	☐ Temperature survey	☐ Cement bond log

☒ Other We need 2 copies of 2" Dual Induction - Laterolog run 2-26-77.

We received only 5" copies.

EPORTS FOR THE MONTH OF : *Production, oil and gas disposition, and injection reports e due on or before the 30th day of each month for the preceding calendar month. Signatures must be provided as required on Division forms.*

OIL AND GAS OPERATION	GEOTHERMAL OPERATION
☐ Production and disposition reports (Form OG 110 or computer report)	☐ Production reports (Form OGG 110)
☐ Injection reports (Form OG 110B or computer report)	☐ Injection reports (Form OGG 110B)

AME	*TITLE*
Jane E. Robles for John L. Hardoin	Deputy Supervisor
GNATURE Jane E. Robles	*TELEPHONE NUMBER* ( )

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

REPORT OF CORRECTION OR CANCELLATION

Santa Paula, California

May 21, 1979

Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, CA 90024

In accordance with letter dated May 10, 1979

the following change pertaining to your well "Barker-Ferndale" 6 (111-20730),

Ojai field, Ventura County,

Sec. 16, T. 4N, R. 21W, S.B. B. & M., is being made in our records:

☐ The corrected location is

☐ The corrected elevation is

☐ Report No. , dated , has been corrected as follows:

☒ Your notice to alter casing (Drill, abandon, etc.) dated Oct. 11, 1977, and our report No. P 277-387, issued in answer thereto, are hereby cancelled inasmuch as the work will not be done. If you have a drilling bond on file covering this notice it will be returned. No request for such return is necessary.

☐ Other:

State Oil and Gas Supervisor

By John L. Hardoin, Deputy Supervisor

b

OG 165 (1-77-GSRI-3M)

FORM 157

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT ON PROPOSED CHANGE OF WELL DESIGNATION

Santa Paula, California

April 10, 1979

Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, CA 90024

DEAR SIR:

To conform with the other wells on this lease, relative to change in designation of well(s) in Sec. 16, T. 4N, R. 21W, S.B. B. & M., Ojai field, Ventura County, District No. 2, has been received;

and in accordance with Section 3203, Public Resources Code, reading in part as follows:

> "* * * The number or designation by which any well heretofore drilled has been known, and the number or designation specified for any well in a notice filed as required by Section 3203, shall not be changed without first obtaining a written consent of the Supervisor."

the proposed change in designation is hereby authorized as follows:

From:	To:
"Ferndale" 6 (111-20730)	"Barker-Ferndale" 6 (111-20730)

M. G. MEFFERD
JOHN E. MATTHEWS, JR.
State Oil and Gas Supervisor

By John L. Hardoin
John L. Hardoin, *Deputy Supervisor*

57998-705 11-71 3M ① OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 272-387

REPORT ON PROPOSED OPERATIONS

Santa Paula, , California

Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, Calif. 90024

Oct. 17, 1977

Your proposal to alter casing well "Ferndale" 6
(Name and number)
, A.P.I. No. 111-20730, Section 16, T. 4N, R. 21W,
S.B. B. & M., Ojai field, Ventura County,
dated 10-11-77, received 10-13-77, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Mole fluid of sufficient quality and quantity shall be maintained in the hole to control any subsurface condition, and a reserve supply shall be on hand for emergencies.
2. Blowout prevention equipment of at least DOG Class II, 5M, shall be installed and maintained in operating condition at all times.
3. THIS DIVISION SHALL BE NOTIFIED TO WITNESS A PRODUCTION TEST OF SHUT OFF WITHIN 30 DAYS AFTER COMPLETING THE WELL.

NOTE: A COPY OF THIS APPROVAL SHALL BE AVAILABLE AT THE WELL SITE DURING THE PROPOSED OPERATIONS.

Blanket Bond
MD:b

M. G. MEFFERD
State Oil and Gas Supervisor

By
Deputy Supervisor

John L. Hardoin

OG111 (11-76—GSR1—30M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

DIVISION OF OIL AND GAS
RECEIVED
OCT 13 1977
SANTA PAULA, CALIFORNIA

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	OGD114	OGD121
BB	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well No. ARGO BARKER FERNDALE #6, API No. 111-20730,

Sec. 16, T. 4N, R. 21W, S.B. B. & M., Silverthread Field, Ventura County.

The present condition of the well is as follows:

1. Total depth. 6505' PBTD 6320'

2. Complete casing record, including plugs and perforations:

9 5/8", 32#, H-40 csg @ 822'.
7", 26#, K-55 LT&C at 6410'.

PERFS: 6134, 6150, 6260 9 holes 3/8" bullets
6132-33, 6150-51, 6160-61 12 holes .45" jets
6141, 6185, 6210, 6239 12 holes .40" jets

3. Present producing zone name Mohnian Sands Zone in which well is to be recompleted Same

4. Present zone pressure 1900# New zone pressure 2000#

5. Last produced 10-11-77 (Date) | 1 (Oil, B/D) | 36 (Water, B/D) | 55 (Gas, Mcf/D)

or

6. Last injected _____ (Date) | _____ (Water, B/D) | _____ (Gas, Mcf) | _____ (Surface pressure, psig.)

The proposed work is as follows:

Squeeze off above pers with 50 sxs class "G" cmt with EZEdril squeeze tool at 6000'. Perforate 7" with 2 shots/ft 4766-76', 4810-24', 4839-44', 4906-20' (86 holes). Swab test for fluid entry. Breakdown and sand oil frac w/45000# sand. Return well to production.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 940 East Santa Clara (Street)
Ventura, California 93001 (City) (State) (Zip)

Telephone Number (805) 648-2514

ARGO PETROLEUM CORPORATION (Name of Operator)

By Dewey Watson (Name) 10/11/77 (Date)

Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

OG107 (8-75—GSRI—15M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

NOTICE OF RECORDS DUE

Santa Paula, Calif.

July 6, 1977

xMr. Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, Calif. 90024

In accordance with Division 3 of the Public Resources Code of California the following records are due, covering the drilling and completion of your well(s) No. "Ferndale" 6

Sec. 16, Tp. 4N, R. 21W, S.B. B. & M., Ojai (Field or County)

- ☐ Well summary (Form 100)
- ☐ Drillers log (Form 101) NOTE: Not required if electric log is filed.
- ☐ Core record (Form 101)
- ☐ History (Form 103)
- ☐ Electric log: (1" = 50 ft.)
- ☐ Production report (Form 110) for months of
- x☒ Other Approval to drill this well was contingent upon our witnessing a production water shut-off within 30 days of sand pack oil recovery. Please make arrangements immediately.

These records should be submitted *in duplicate* as soon as possible.

Please be sure that the records are signed in the spaces provided.

tmc;b

John L. Hardoin

John L. Hardoin *Deputy Supervisor*

OG170 (11-73-GSR1-2M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
JUN 21 1977
SANTA PAULA, CALIFORNIA

WELL SUMMARY REPORT

SUBMIT IN DUPLICATE

Operator ARGO PETROLEUM CORPORATION, Well No. ARGO-BARKER-FERNDALE #6, API No. 111-20730,

Sec. 16, T 4N, R 21W, S.B. B. & M., Silverthread Field, Ventura County.

Location 2837' E & 1077' S from the NW corner of Sec. 16
(Give surface location from property or section corner, or street center line and/or lambert coordinates)

. Elevation of ground above sea level 1061 feet.

All depth measurements taken from top of KB which is 12 feet above ground.
(Derrick Floor, Rotary Table or Kelly Bushing)

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Date June 10, 1977 Signed C. Boenke

JJCook (Engineer or Geologist) Title Exec. Vice-President

Commenced drilling 2-10-77

Completed drilling 2-28-77

Total depth (1st hole) 6505' (2nd) (3rd)

Present effective depth 6410'

Junk

GEOLOGICAL MARKERS	DEPTH

Formation and age at total depth

Commenced producing (Date) Flowing/~~xxxxxxxxxxxx~~ (Cross out unnecessary words) Name of producing zone Mohnian

	Clean Oil bbl. per day	Gravity Clean Oil	Per Cent Water including emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressure
Initial production						
Production after 30 days						

Casing Record (Present Hole)

Size of Casing (A. P. I.)	Depth of Shoe	Top of Casing	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Numbers of Sacks or Cubic Feet of Cement	Depth of Cementing if through perforations
9 5/8"	822'	Surf	32.3#	H-40 ST&C	N	12¼"	500 cf	
7"	6410'	"	26#	K-55 LT&C	N	8 3/4	637cf	

Perforated Casing

(Size, top, bottom, perforated intervals, size and spacing of perforation and method.)

2 - 3/8" bullets at 6260', 6150' & 6134' (Total of 9 holes)

2 - 0.45" Jets @ 6261', 6260', 6151', 6150', 6133', 6132' (Total of 12 holes)

3 - 0.40" JHPF @ 6239', 6210', 6185', 6141' (Total of 12 Holes)

Was the well directionally drilled? Yes If yes, show coordinates at total depth Clos: 1004.06' S66°22'W

Electrical log depths 6504'-822' Other surveys DIL, FDC, DM, AVL, FF, CBL, CCL, GRL

OG 100 ATTACH ONE COPY OF EACH LOG AND SURVEY 20796-705 1-74 3M ② OSP

SUBMIT IN DUPLICATE

20798-705 1-74 8M ⓒ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
JUN 21 1977
SANTA PAULA, CALIFORNIA

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

Well No. ARGO-BARKER-FERNDALE #6, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date June 10, 19 77 Signed C. Rosenberg

940 East Santa Clara
Ventura, CA. 93001 (805) 648-2514 Title Exec. Vice-President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date 1977	
2-9	MIRU Atlantic Rig #4. Drilled rat hole.
2-10	Spudded in @ 12:01 AM w/DA. Drilled 12¼" hole to 344'.
2-11	Drilled to 824'. Cond mud. POH. Ran 21 jts 9 5/8", 32.3#, H-40 ST&C (R-3) Sumitomo csg w/B&W guide shoe to 822', baffle at 783'.
2-12	HOWCO pumped 100 cu. ft. water ahead, followed w/400 cu. ft. class "G" cmt. pre-mixed 1:1 POZ + 4% Gel + 2% CaCl2 and 100 cu. ft. class "G" neat cmt + 2% CaCl2. Disp w/356 cu. ft. mud. Bumped plug w/350 psi. CIP @ 12:45AM. Cmt returns to surface. Landed 9 5/8" csg. Installed BOE and flanged up. Tested blind rams at 1000 psi. OK.
2-13	RIH w/DA. Tested BOE at 1000 psi. Witnessed and approved by DOG. CO cmt from 783' and shoe at 822'. Drilled 8 3/4" hole to 1037'. POH w/DA. RIH w/DD.
2-14	DD to 1537'.
2-15	POH w/DD. RIH w/DA. Reamed from 1037' to 1537'. Drilled to 2167'.
2-16	Drilled to 2998'.
2-17	Drilled to 3207'. POH w/DA. RIH w/DD. DD to 3454'.
2-18	POH w/DD. RIH w/DA. Reamed from 3197' - 3454'. Drilled to 3836'.
2-19	Drilled to 4196'.
2-20	Drilled to 4620'.
2-21	Drilled to 5218'.
2-22	Drilled to 5730'.

OG 103

SUBMIT IN DUPLICATE

20798-705 1-74 9M © OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

Well No. ARGO-BARKER-FERNDALE #6, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date June 10, 19 77 Signed C. Bamberger

940 East Santa Clara
Ventura, CA. 93001 (805) 648-2514 Title Exec. Vice-President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date 1977	
2-23	Drilled to 6022'. Reamed from 5812'-5872'.
2-24	Drilled to 6303'. Reamed from 5276' - 5560'.
2-25	Drilled to 6505'. Reamed from 6405'-6446'.
2-26	Cond mud. POH. Rigged up Schlumberger. Ran DIL, FDC & DM logs 6504'-822'. Moved out loggers. RIH, cond mud, POH.
2-27	Rigged up Welex. Ran AVL and FF logs 6443'-4500'. Shot 30 SWS from 5662'-6348', recovered 29. Moved out Welex. RIH cond mud, POH. Ran 159 jts (82 jts Pipe Sales & 77 jts Oilwell) 7", 26#, K-55 LT&C csg equipped w/B&W guide shoe at 6410', float collar at 6370'. Centralizers on jts 1,15, 25,31,37,40,42,44,46,48,50,52,54,56 & 58. Turbos on jts 2,3,4,6,8,10,12,14,16,18,20,22,24,26,28,30,32,34,36 & 38. HOWCO pumped 50 cu. ft. water ahead, followed w/437 cu. ft. class "G" cmt pre-mixed 1:1 POZ + 4% Gel + 2% CaCl2 and 200 cu. ft. class "G" neat cmt + 2% CaCl2. Disp w/1368 cu. ft. water. Bumped plug w/2200 psi. CIP at 10:45PM.
2-28	Tore out BOE. Landed 7" csg. Laid down DP. Flanged up and tested tbg head. Release rig at 7:00 PM.
3-1	Moving out drilling rig.
3-2 thru 3-8	WO comp of operations on ABF #2 (same island)
3-9	CPS. MIRU. Installed BOE. Rigged up Welex. Ran CBL, CCL, & GRL logs 6320'-3800'. Moved out Welex. RIH w/2 7/8" tbg.
3-10	RIH to float collar at 6370'. Changed over w/224 bbls filtered lse crude. POH.
3-11	Rigged up Dresser Atlas. Using a 5 7/16" E-gun, perf'd w/ 3 - 3/8" bullets at each of the following intervals:

OG 103

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

20798-705 1-74 6M ② OSP

DIVISION OF OIL AND GAS
RECEIVED
JUN 21 1977
SANTA PAULA, CALIFORNIA

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

Well No. ARGO-BARKER-FERNDALE #6, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date June 10, 19 77 Signed C. Rosenberg

940 East Santa Clara
Ventura, CA. 93001 (805) 648-2514 Title Exec. Vice-President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date

1977

3-11 cont

6260' 6150' 6134' (Total of 9 holes)
Moved out Dresser Atlas. Installed frac head. RIH w/ST collar on 2 7/8" tbg to 5992'. Landed tbg.

3-12

Rigged up Dowell. Attempted to break down shot holes. Unable to obtain breakdown at press of 5200 to 5600 psi. Removed frac head. POH w/2 7/8" tbg. Changed to 3½" pipe rams.

3-13

Rigged up Dresser Atlas. Using a 4" gun perf'd w/2 - 0.45" jets at each of the following intervals:

6261' 6150'
6260' 6133'
6151' 6132' (Total of 12 holes)

Tore out Dresser Atlas. RIH w/Baker 7" full bore pkr on 3 ½" tb and set pkr at 6025'.

3-14

Installed frac head. Pressured annulus to 1000 psi. Rigged up Dowell. Pumped 124 bbls filtered lse crude at 9 BPM w/ 6500 psi. Shut down. ISIP = 4500 psi FG = 1.18. Spotted 500 gal BJ 15% HCL acid + 25% Toluene. Waited 1 hr. Began frac: pumped in 120 bbls then started sand at 0.5#/gal 20/40 M + 100 M. Lost 2 Allisons after pumping 127 bbls. Flushed w/63 bbls. Pumped total of 310 bbl filtered lse crude. Total sand used = 2100# of 20 M + 2100# of 100 M. Avg pump press = 6500 psi. Immediate SIP = 4500 psi. SIP after 15 min = 2800 psi. Spotted 300 gal. Dowell DAD 15% HCL acid + 25% Toluene. Shut down.

3-15

Pressured annulus to 2000 psi. Started frac. ISIP = 4700psi Fg = 1.14. Pumped total of 405 bbl filtered lse crude + 2450# of 100 M sand (1650# at 0.5#/gal and 800# at 1#/gal). After 340 bbls in, lost 2 pumps. Flushed w/65 bbls. Pumped at avg rate of 14.5 BPM and avg press of 7100 psi. Immediate SIP = 4900 psi. SIP after 20 min = 3500 psi. SIP after 3 hrs = 2000 psi. Hooked up well to tank on adjustable

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

20798-705 1-74 BM ⓒ OSP

DIVISION OF OIL AND GAS
RECEIVED
JUN 21 1977
SANTA PAULA, CALIFORNIA

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

Well No. ARGO-BARKER-FERNDALE #6, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date June 10, 19 77 Signed C. Barker

940 East Santa Clara
Ventura, CA. 93001 (805) 648-2514 Title Exec. Vice-President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date

1977

3-15 cont

bean.
5:00PM Flowed thru 6/64" bean TP = 750
8:30PM Shut down. Installed positive bean and press recorder. TP = 750.
9:30PM Opened thru 8/64" bean TP = 600
11:30PM TP = 340. Put well on 9/64" bean, TP = 40. Prod 29 bbls in 5 hr.

3-16

2:30AM TP = 40. Prod 43 bbl in 3 hr.
6:30AM TP = 40. Prod 32 bbls in 4 hrs. Cut 0.1% sand (Total prod = 104 bbls)

Removed frac head. Ran Otis wireline feeler and tagged fill at 6332' (float collar at 6370'.) Installed frac head. Dowell pumped in 200 bbls filtered lse crude. ISIP = 5050 psi. Fg = 1.14. Pumped 14.5 BPM, avg press = 7250 psi.

3-17

TP = 1250. Removed frac head. Rigged up Schlumberger. Using a 2 1/8" thru tbg Hyper Jet gun, shot 3 - 0.40" JHPF at 6239', 6210', 6185', 6141' (Total of 12 holes) Installed frac head. Dowell pump in 125 bbls filtered lse crude at rate of 15 BPM and at 7500 psi. ISIP = 4950 psi Fg = 1.18. SIP after 15 min = 2900 psi. Pumped in 300 blls filtered crude w/500# adomite at 15 BPM and press of 7150 psi ISIP = 5100 psi, Fg = 1.2. SIP after 15 min = 2900 psi. Shut in.

3-18

Dowell frac'd down 3½" tbg as follows:

BBLS	GAL	SAND #/GAL	# SAND	CUM SAND	ATR
195	8,000	0	0	0	195
90	3,800	START 100 M @ 0.25#/gal			285
40	2,000	0.25	500	500	325
40	2,000	0.5	1,000	1,500	367
40	2,000	1.0	2,000	3,500	409
30	1,500	1.5	2,000	5,500	441
30	1,500	2.0	3,000	8,500	474

OG 103

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

20798-705 1-74 8M ⓒ OSP

DIVISION OF OIL AND GAS
RECEIVED
JUN 21 1977
SANTA PAULA, CALIFORNIA

History of Oil or Gas Well

OPERATOR ARGO PETROLEUM CORPORATION FIELD Silverthread

Well No. ARGO-BARKER-FERNDALE #6, Sec. 16, T. 4N, R. 21W, S.B. B. & M.

Date June 10, 19 77 Signed C. Barker

940 East Santa Clara
Ventura, CA. 93001 (805) 648-2514 Title Exec. Vice-President
(Address) (Telephone Number) (President, Secretary or Agent)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1977	
3-18 cont	50 2,500 2.5 6,000 14,500 530 80 3,500 3.0 10,500 25,000 620 40 2,000 3.5 7,000 32,000 667 15 FLUSH (Screened Out) 682 650 TOTAL ISIP & Fg N/A (did not shut down during job). Total filtered lse crude used = 650 bbls. Total sand used = 32000# (31000# of 20/40 M and 1000# of 100 M). Pumped at an avg rate of 15 BPM and avg press of 7200 psi. FSIP N/A due to screen out.
3-19	Prepared to run NOWSCO. Shut down and put well on flow test. Well prod 90 bbl in 21 hr thru a 9/64" bean. TP = 100, cut 20% (0.2% sand).
3-20	TP = 350. Rigged up Dowell. Pumped 14 bbl 74# brine water down tbg at 3500 psi. Bled to 1250 psi (into formation). Opened well to tank. Flowed 14 bbl brine water. Pressured annulus to 1500 psi w/rig pump. Pumped 25 bbls brine water in tbg w/6000 psi. Held 30 min. bled to 4800 psi. Opened well to tank. Flowed 13 bbl, then dead. Rigged up Otis. Made feeler run, tagged fill at 5070', worked down to 5104'. Moved out Otis. Turned well to tank thru 18/64" bean.
3-21	Opened by-pass on pkr and killed well w/220 bbls of 74# brine water. Pulled full bore packer loose. POH and laid down 3½" tbg.
3-22	Changed pipe rams. RIH w/ST collar on 2 7/8" tbg. Tagged fill at 6150'. CO frac sand to 6336'. PU to 5996', and landed tbg. Tore out BOE, installed prod tree. Shut down.
3-23	Disp brine w/240 bbl lse crude. Turned well to tank thru 9/64" bean. CPS moved out.
3-24	Prod 35 bbls load oil, cut 40% TP = 180, CP = 400, 9/64" bean.

OG 103

RECEIVED
MAR 29 1977

DIVISION OF OIL AND GAS
RECEIVED
JUN 21 1977
Well File

SEALAND
DIRECTIONAL DRILLING CO.

COMPANY ARGO PETROLEUM

SANTA PAULA, CALIFORNIA

PAGE #1

WELL BARKER FERNDALE #6 LOCATION FERNDALE RANCH DATE 2 - 77

	Measured Depth	Drift Angle	Vertical Depth	Drift Feet	Drift Direction	COORDINATES North	South	East	West	REMARKS
1	132	1° 15'	131 97	2 88	N 24° W	2 63			1 17	
2	221	1° 30'	220 94	2 33	N 16° W	4 86			1 81	
3	344	1° 15'	343 91	2 68	N 26° W	7 27			2 99	
4	469	1° 15'	468 88	2 73	N 24° W	9 76			4 10	
5	597	1° 00'	596 86	2 23	N 18° W	11 88			4 79	
6	724	1° 00'	723 84	2 22	N 15° W	14 02			5 36	
7	824	1° 15'	823 82	2 18	N 28° W	15 95			6 38	
8	913	1° 15'	912 80	1 94	N 31° W	17 61			7 38	
9	1005	1° 15'	1004 78	2 01	N 36° W	19 23			8 56	
10	1061	1° 00'	1060 77	0 98	N 47° W	19 90			9 27	
11	1092	1° 15'	1091 76	0 68	N 86° W	19 95			9 94	
12	1123	2° 00'	1122 74	1 08	S 83° W	19 82			11 01	
13	1155	2° 45'	1154 70	1 54	S 79° W	19 53			12 52	
14	1186	3° 30'	1185 64	1 89	S 70° W	18 88			14 30	
15	1218	4° 15'	1217 55	2 37	S 66° W	17 92			16 47	
16	1280	6° 00'	1279 21	6 48	S 66° W	15 28			22 39	
17	1343	7° 45'	1341 63	8 51	S 68° W	12 10			30 27	
18	1406	9° 30'	1403 77	10 40	S 67° W	8 04			39 84	
19	1469	11° 15'	1465 56	12 29	S 67° W	3 24			51 15	
20	1592	13° 30'	1585 16	28 71	S 66° W		8 44		77 38	
21	1665	14° 15'	1655 91	17 97	S 66° W		15 75		93 80	
22	1781	15° 45'	1767 56	31 49	S 67° W		28 05		122 78	
23	1906	17° 30'	1886 77	37 59	S 68° W		42 13		157 63	
24	2032	18° 45'	2006 08	40 50	S 69° W		56 64		195 44	
25	2158	19° 00'	2125 22	41 02	S 70° W		70 67		233 99	

DIVISION OF OIL AND GA
RECEIVED
JUN 21 1977
SANTA PAULA, CALIFORNIA

SEALAND DIRECTIONAL DRILLING CO.

COMPANY ARCO PETROLEUM

PAGE #2

WELL BARKER FERNDALE #6 LOCATION FERNDALE RANCH DATE 2 - 77

	Measured Depth	Drift Angle	Vertical Depth	Drift Feet	Drift Direction	COORDINATES North	South	East	West	REMARKS
26	2282	19° 30'	2242 11	41 39	S 71° W		84 15		273 13	
27	2411	20° 30'	2362 94	45 18	S 73° W		97 36		316 33	
28	2494	21° 15'	2440 30	30 80	S 73° W		106 16		345 10	
29	2597	22° 15'	2535 63	39 00	S 73° W		117 56		382 40	
30	2733	22° 45'	2661 05	52 59	S 73° W		132 94		432 69	
31	2861	23° 15'	2778 66	50 53	S 73° W		147 71		481 01	
32	2987	23° 15'	2894 43	49 74	S 72° W		163 08		528 31	
33	3112	22° 30'	3009 92	47 84	S 71° W		178 65		573 54	
34	3197	22° 15'	3088 59	32 19	S 71° W		189 13		603 97	
35	3231	21° 45'	3120 17	12 60	S 69° W		193 65		615 73	
36	3262	21° 15'	3149 06	11 24	S 67° W		198 04		626 07	
37	3325	20° 15'	3208 17	21 81	S 62° W		208 28		645 32	
38	3388	19° 45'	3267 46	21 29	S 56° W		220 18		662 97	
39	3516	17° 45'	3389 37	39 02	S 49° W		245 78		692 42	
40	3577	16° 30'	3447 86	17 32	S 49° W		257 15		705 50	
41	3673	14° 30'	3540 80	24 04	S 50° W		272 60		723 91	
42	3800	13° 30'	3664 29	29 65	S 49° W		292 05		746 29	
43	3923	12° 15'	3784 49	26 10	S 49° W		309 17		765 99	
44	4050	11° 00'	3909 16	24 23	S 48° W		325 38		784 00	
45	4175	9° 30'	4032 45	20 63	S 48° W		339 18		799 33	
46	4307	7° 30'	4163 32	17 23	S 48° W		350 71		812 13	
47	4463	6° 45'	4318 24	18 33	S 45° W		363 68		825 10	
48	4591	5° 30'	4445 65	12 27	S 41° W		372 94		833 15	
49	4717	4° 30'	4571 26	9 89	S 42° W		380 29		839 76	
50	4842	3° 30'	4696 03	7 63	S 47° W		385 49		845 34	

SEALAND DIRECTIONAL DRILLING CO.

COMPANY ARCO PETROLEUM

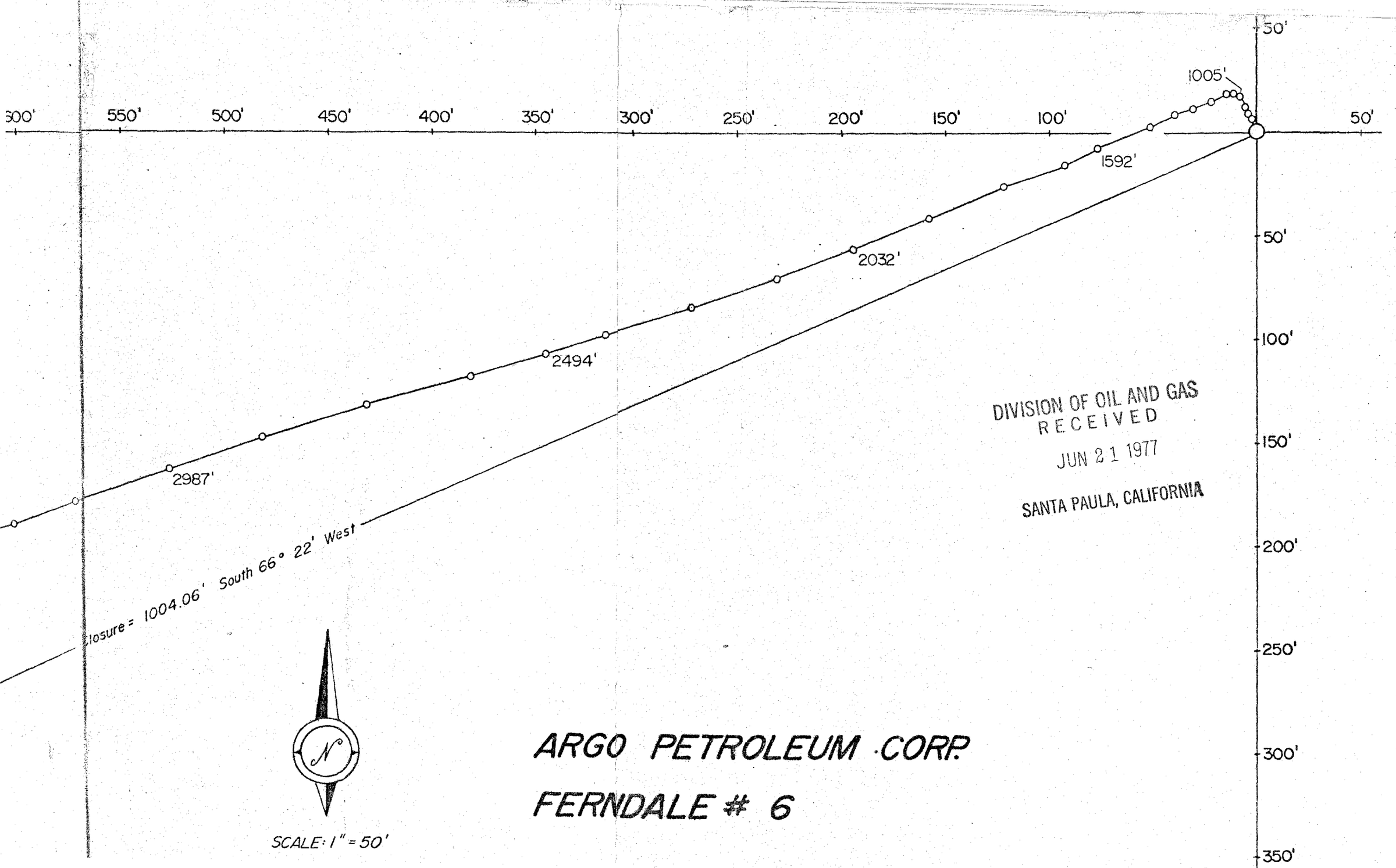
PAGE #3

WELL BARKER FERNDALE #6 LOCATION FERNDALE RANCH DATE 2 - 77

	Measured Depth	Drift Angle	Vertical Depth	Drift Feet	Drift Direction	COORDINATES North	South	East	West	REMARKS
51	5000	2° 30'	4853 88	6 89	S 55° W		389 44		850 99	
52	5155	2° 30'	5008 73	6 76	S 71° W		391 64		857 38	
53	5314	2° 00'	5167 63	5 55	S 81° W		392 51		862 86	
54	5471	3° 00'	5324 42	8 22	S 74° W		394 77		870 76	
55	5633	2° 30'	5486 27	7 07	S 76° W		396 48		877 62	
56	5788	2° 45'	5641 09	7 44	N 84° W		395 70		885 02	
57	6085	3° 00'	5937 68	15 54	S 85° W		397 05		900 50	
58	6295	2° 45'	6147 44	10 08	S 78° W		399 14		910 36	
59	6505	2° 45'	6357 20	10 08	S 71° W		402 42		919 89	

DIVISION OF OIL AND GAS
RECEIVED
JUN 21 1977
SANTA PAULA, CALIFORNIA

CLOSURE: 1004.06 ' S66° 22' W



DIVISION OF OIL AND GAS
RECEIVED
JUN 21 1977
SANTA PAULA, CALIFORNIA

SCALE: 1" = 50'

ARGO PETROLEUM CORP.

FERNDALE # 6

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Report on Operations

No. T 277-171

Dr. Morris S. Frankel, Agent
Mr. Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, Ca. 90024

Santa Paula, Calif.
July 29, 1977

DEAR SIR:

Operations at well No. "Ferndale" 6, API No. 111-20730, Sec. 16, T. 4N, R. 21W, SB, B & M. Ojai Field, in Ventura County, were witnessed on July 20, 1977. ~~Mr.~~ Ms. T. Callaway, representative of the supervisor was present from 0600 to 0800. There were also present

Present condition of well: 9 5/8" cem. 822'; 7" cem. 6410' Perf. 6132' WSO, Perf. 6132-6261' (at intervals), P.B.T.D. 6410', T.D. 6505'

The operations were performed for the purpose of demonstrating a water shut-off on the 7" casing by means of a production test.

DECISION:

THE 7" SHUT-OFF AT 6132' IS APPROVED.

ljg

JOHN F. MATTHEWS, JR.
State Oil and Gas Supervisor

By Deputy

FORM 109

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Report on Operations

No. T. 277-42

xMr. Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, Calif. 90024

Santa Paula, Calif.
Feb. 24, 1977

DEAR SIR:

Operations at well No. "Ferndale" 6, API No. 111-20730, Sec. 16, T. 4N, R. 21W, S.B., B & M. Ojai Field, in Ventura County, were witnessed on 2/13/77. Mr. T.M.Calleway, representative of the supervisor was present from 0200 to 0800. There were also present C.Parent, foreman

Present condition of well: 9 5/8" csm. 824'; T.D. 824'.

The operations were performed for the purpose of testing and inspecting the blowout prevention equipment and installation.

DECISION:

THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

b

M. G. MEFFERD
~~JOHN F. MATTHEWS, JR.~~
Acting, State Oil and Gas Supervisor

By _____ Deputy

FORM 109 (REV. 1-73)

19190-705 11-73 20M ② OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 277-27

Mr. Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, California 90024

Santa Paula, Calif.
Jan. 11, 1977

DEAR SIR:

Your proposal to drill Well No. "Ferndale" 6 (111-20730),
Section 16, T. 4N., R. 21W., S.B. B. & M., Ojai Field, Ventura County,
dated 12/29/76, received 12/30/76, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT

1. Sufficient cement shall be pumped back of the 9 5/8" casing to fill from the shoe to the surface.
2. The drilling fluid used shall be of a quality and in sufficient quantity to control all subsurface conditions in order to prevent blowouts; and a reserve supply of this material shall be kept on hand to meet any emergency. No contaminants or toxic material shall be used in any drilling fluid that is to be placed in an unlined sump.
3. Constant surveillance of drilling fluid characteristics and volume shall be maintained by drilling personnel, and by the use of return monitoring equipment and a mud pit level indicator with a visual and audible alarm device.
4. Any sump used during drilling operations shall be thoroughly cleaned of all drilling materials and the site restored to its prior condition as soon as drilling operations are completed.
5. Blowout prevention equipment, at least of the Division of Oil and Gas Class III rating, shall be installed and maintained in operating condition at all times.
6. Blowout-prevention practice drills shall be conducted at least weekly for each crew, and recorded in the log book.
7. Blowout prevention equipment of at least 5000 psi working pressure shall be installed and maintained in operating conditions during sand-pack operations.
8. This Division shall be consulted before placing any plugs or sidetracking any hole.
9. THIS DIVISION SHALL BE NOTIFIED TO WITNESS:
   a. A pressure test of the blowout prevention equipment before drilling out of the shoe of the 9 5/8" casing.
   b. A production test within 30 days after the sand-pack oil has been recovered.

10. A COPY OF THIS APPROVAL SHALL BE POSTED AT THE WELL SITE PRIOR TO COMMENCING OPERATIONS.

Blanket Bond
MD:B

M. G. MEFFERD (acting)
JOHN F. MATTHEWS, JR., State Oil and Gas Supervisor

By _____, Deputy

OG 111

111-20730

20730

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Notice of Intention to Drill New Well

2

DIVISION OF OIL AND GAS
RECEIVED
DEC 30 1976
SANTA PAULA, CALIFORNIA

This notice and indemnity or cash bond shall be filed, and approval given, before drilling begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY					
MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121
202	1-8-77	✓	BB	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to commence drilling well No. FERNDALE #6, API No. _____ (Assigned by Division)

Sec. 16, T. 4N, R. 21W S.B. B. & M., Silverthread Field, Ventura County.

Legal description of mineral-right lease, consisting of _____ acres, is as follows: _____ (Attach map or plat to scale)

Previously Submitted

Do mineral and surface leases coincide? Yes X No _____ If answer is no, attach legal description of both surface and mineral leases, and map or plat to scale.

Location of well 2837 feet east (Direction) along section line and 1077 feet south (Direction)

at right angles to said line from the northwest corner of section 16 or property

If well is to be directionally drilled, show proposed coordinates at total depth 920' S63°W

Elevation of ground above sea level 1061 feet.

All depth measurements taken from top of KB which is 12 feet above ground. (Derrick Floor, Rotary Table or Kelly Bushing)

PROPOSED CASING PROGRAM

SIZE OF CASING INCHES A.P.I.	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS	CALCULATED FILL BEHIND CASING
9 5/8"	36#	K-40	0	800	800	Surface
5 1/2"	17#	K-55	0	6500	6500	1200

(A complete drilling program is preferred and may be submitted in lieu of the above program)

Intended zone(s) of completion Mohnian Sands (Name, depth and expected pressure) Estimated total depth 6500

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 940 East Santa Clara (Street)
Ventura, California 93001 (City) (State) (Zip)

Telephone Number (805) 648-2514

ARGO PETROLEUM CORPORATION (Name of Operator)

By Joseph Cahyel (Name) 12/28/76 (Date)

Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

PROPERTY/WELL TRANSFER OR ACQUISTION

Seneca Resources Corporation (S2630)

to

Vintage Production California LLC (V1370)

Effective April 25, 2008

RESOURCES AGENCY OF CALIFORNI
DEPARTMENT OF CONSERVATIO
DIVISION OF OIL AND GAS

REPORT OF WELL PLUGGING AND ABANDONMENT

Ventura, California

September 21, 1994

James A. Beck, Agent
Seneca Resources Corp.
P.O. Box 630
Santa Paula, CA 93061

Your report of the plugging and abandonment of well "Ferndale" 8,

A.P.I. No. 111-20732, Section 16, T. 4N, R. 21W, S.B. B.& M.,

Ojai field, Ventura County,

dated --------, received 12-14-93, has been examined in conjunction with records filed in this office. We have determined that all of the requirements of this Division have been fulfilled relative to plugging and abandonment of the well, removal of well equipment and junk, and the filing of well records.

svl

William F. Guerard, Jr
State Oil and Gas Supervisor

By
Patrick J. Kinnear
Deputy Supervisor

cc: Conservation Committee
Update

Modified OG159 (4/94)

OPERATOR Argo
WELL NO. Feingold a-1
MAP 203

cont. 3rd Notice

INTENTION	Susp. Retrill	alter csg	plug back Abandon	Abandon		
NOTICE DATED	6-22-82	7-28-83	9-1-83	10-11-93		
P-REPORT NUMBER	282-209	283-211	283-258	293-377		
CHECKED BY/DATE						
MAP LETTER DATED			pwc 8/17/85	12/25/63		
SYMBOL				DB-164		

	REC'D	NEED	REC'D	NEED	REC'd	NEED	REC'D	NEED	REC'D	NEED	REC'D
NOTICE	6-24-82		7-29-83		9-2-83		10-13-93				
HISTORY	4-25-83		See below		2-24-84		12-14-93				
SUMMARY	4-25-83				2-24-84						
E-LOG											
MUD LOG											
DIPMETER											
DIRECTIONAL											
CORE/SWS											
CBL											
RECORDS COMPLETE	MJK	6-19	MJK	8-18-83	MJK	6-12-84					

ENGINEERING CHECK

T-REPORTS			✓	✓		
OPERATOR'S NAME			✓	✓		
WELL NO.			✓	✓	OK 2 MW 7/28/94	
LOC & ELEV			✓	✓		
SIGNATURE			✓	✓		
SURFACE INSP.				Need (12-23)		
FINAL LETTER OK			MLS			

Follow up 8-85

FINAL LETTER MAILED ✓

REMARKS: Notice 7-28-83 work never completed, plugged back (notice dated 9-2-83) and suspend MS 4-17-84

RELEASED BOND

DIVISION OF OIL AND GA
HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION
WELL: FERNDALE 8
API #: 111-20732

SESPE FIELD, VENTURA COUNTY
SEC 16, T4N, R21W
BARRY McMAHAN, PRODUCTION SUPERINTENDENT

B M'M

P.O. BOX 630, SANTA PAULA, CALIFORNIA, 93061 (805) 933-2217

****

11-08-93
Day 1. MIRU.

11-09-93
Day 2. Cut off well cap. Weld on wellhead. Install BOPE. MU 9 5/8" full bore pkr. RIH. Pkr stopped @ 170'. POH w/tbg & pkr. RIH open ended (OE). Tagged @ 650'. Circ out heavy mud. POH w/tbg. MU bit & scraper. Rotate & work scraper to 580' (depth ok'd verbally by Steve Fields of the DOG). Press test csg to 500 psi. Held for 5 min. POH w/scraper. MU retainer. RIH & set retainer @ 565'. Press to 500 psi. Held for 5 min. Stab out of retainer. POH. Remove running tool. Run OE to 565'. Mix & pump 50 sxs Class "G" cmt. Disp w/2.5 bbls. POH w/tbg.

11-10-93
Day 3. RIH w/tbg. Tag cmt plug @ 447'. Change well over to drlg mud w/35 bbls mud. Witnessed & approved by S. Mulgreen of the DOG. Pull & lay dn tbg. Rem BOP. Set 60' surface plug witnessed & approved by S. Mulgreen of DOG. RDMO.

DIVISION OF OIL AND GAS
RECEIVED
DEC 14 1993
VENTURA, CALIFORNIA

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

No. T293-308

Report on Operations

James A. Beck, Agent
Seneca Resources Corp.
P.O. Box 630
Santa Paula, CA 93061

Ventura, California
December 14, 1993

Your operations at well "Ferndale" 8, API No. 111-20732, Sec. 16, T. 4N, R. 21W, S.B. B.&M. Ojai Field, in Ventura County, were witnessed on 11-10-93. Steve Mulqueen, representative of the supervisor, was present from 0900 to 1100. There were also present Bill Wright

Present condition of well: 13 3/8" cem 119'; 9 5/8" cem 1151', perfs @ ints 891'-903' & 984'-1016'. TD (present hole) 3186'. Plugged w/cem 1350'-677', retainer @ 565' & plugged w/cem 63'-5'.

The operations were performed for the purpose of abandonment.

DECISION:

The plugging operations as witnessed and reported are approved.

scv

William F. Guerard, Jr.
State Oil and Gas Supervisor

By Patrick J. Kinnear

Patrick J. Kinnear
Deputy Supervisor

OG109 (Modified 1993)

T 293-308

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

Cementing/Plugging Memo

Operator SENECA RESOURCES CORPORATION Well No. "FERNDALE" 8

API No. 111-20732 Sec. 16, T. 4N, R. 21W, SB B&M

Field OJAI, County VENTURA. On 11-10-93,

Mr. ~~Ms.~~ S. MULQUEEN, representative of the supervisor, was present from 0900 to 1100.

There were also present BILL WRIGHT

Casing record of well: 13 3/8" cem 119'; 9 5/8" cem 1151', perfs @ in T 891'-903' & 984'-1016'. TD (present hole) 3186'. Plugged w/ cem 1350'-677', retainer @ 565' & plugged w/ cem 63'-5'.

The operations were performed for the purpose of ABANDONMENT

☒ The plugging/~~cementing~~ operations as witnessed and reported are approved.

☐ The location and hardness of the cement plug @ _____' are approved.

Hole size: _____" fr. _____' to _____', _____" to _____' & _____" to _____'

Casing				Cemented			Top of Fill		Squeezed Away	Final Press.	Perfs.
Size	Wt.	Top	Bottom	Date	MO-Depth	Volume	Annulus	Casing			

Casing/tubing recovered: _____" shot/cut at _____', _____', _____' pulled fr. _____';

_____" shot/cut at _____', _____', _____' pulled fr. _____'.

Junk (in hole): _____

Hole fluid (bailed to) at _____'. Witnessed by _____

Mudding	Date	Bbls.	Displaced	Poured	Fill	Engr.
11.6 #/g CLAY GEL	11-10-93	33	TBG @ 447	—	SURFACE	S. MULQUEEN

TESTED CASING TO 500# FOR 5MIN., PLUG @ 447

Cement Plugs		Placing	Placing Witnessed		Top Witnessed			
Date	Sx./cf	MO & Depth	Time	Engr.	Depth	Wt/Sample	Date & Time	Engr.
11/9	50 sx	RETAINER @ 565'	—	REPORTED	447	10K#	11/10 0800	S. MULQUEEN
11/10	33 cf	TBG @ 63'	0900	S. MULQUEEN	5'	VISUAL	11/10 0930	"

OGD10 (1/93/GSR1/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

No. P293-377

PERMIT TO CONDUCT WELL OPERATIONS

520 (field code)
12 (area code)
10 (new pool code)
10 (old pool code)

James A. Beck, Agent
Seneca Resources Corporation
P.O. Box 630
Santa Paula, CA. 93061

Ventura, California
October 19, 1993

Your proposal to abandon well "Ferndale" 8, A.P.I. No. 111-20732, Section 16, T. 4N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 10/11/93, received 10/13/93, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOGGR Class I 1M requirements shall be installed and maintained in operating condition at all times.
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. A diligent effort shall be made to clean out the well to at least 677'.
4. All portions of the well not plugged with cement are filled with inert mud fluid having a minimum density of 72 lbs./cu. ft and a minimum gel-shear strength of 25 lbs./100 sq. ft.
5. This office shall be consulted before deviating from the proposed abandonment program.
6. THIS DIVISION SHALL BE NOTIFIED: Witness c/o depth
   A. To witness the location and hardness of the cement plug at 677'.
   B. To witness the mudding of the well.
   C. To witness the placing of the surface plug or to verify its location.

Blanket Bond
SAF:sf

Engineer Steven A. Fields

Phone (805) 654-4761

William F. Guerard, Jr.
State Oil and Gas Supervisor

By Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

OG111 (Modified 1993)

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
OCT 13 1993
VENTURA, CALIFORNIA

Notice of Intention to Abandon Well

FOR DIVISION USE ONLY			
CARDS	BOND	FORMS OGD114	FORMS OGD121
✓	BB	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3229, Division 3, Public Resources Code, notice is hereby given that it is our intention to abandon well FERNDALE #8 R/D #2, API No. 111-~~20756~~ 20732,

Sec. 16, T. 4N, R. 21W, S.B. B. & M., SILVERTHREAD Field, VENTURA County.

commencing work on OCTOBER 27, 19 93.

The present condition of the well is:

1. Total depth 3186'

2. Complete casing record, including plugs and perforations (present hole)
SEE ATTACHED WELLBORE DIAGRAM

3. Last produced N/A
(Date) (Oil, B/D) (Gas, Mcf/D) (Water, B/D)

or

4. Last injected N/A
(Date) (Water, B/D) (Gas, Mcf/D) (Surface pressure)

Additional data for dry hole (show depths):

5. Oil or gas shows 391-1016'

6. Stratigraphic markers
T. MONTEREY SHALE 3080'

7. Formation and age at total depth MIOCENE

8. Base of fresh water sands 50'± (QAL)

9. Is this a critical well according to the definition on the reverse side of this form? ☐ Yes ☒ No

The proposed work is as follows:

SEE ATTACHED DETAILED PROCEDURE

It is understood that if changes in this plan become necessary, we are to notify you immediately.

Address PO BOX 630 (Street)
SANTA PAULA (City) CA (State) 93060 (Zip)
Telephone Number (805) 933-2217 (Area Code) (Number)

SENECA RESOURCES CORP (Name of Operator)
By BARRY McMAHAN (Print Name)
B. McM (Signature) 10/11/93. (Date)

OG108 (10/85/DWRR/5M)

DIVISION OF OIL AND GAS
RECEIVED
OCT 1 3 1993
VENTURA, CALIFORNIA

AB Ferndale #8 R/D #2
Plug and Abandonment
Detailed Procedure

1. Rig up service unit.

2. Contact CA Div of Oil & Gas to witness setting of cement plug.

3. Pick up and trip in hole with 2-7/8" workstring open-ended. Tag top of cement plug at 677'.

4. Spot 48.5 barrels of drilling mud with gel shear of 25#/100 square feet and weighted with bentonite to 9.7#/gallon (17.5#/cubic feet) from top of plug at 677' to 50' below surface.

5. Cut off casing 6' below final restored ground level.

6. Spot cement from 50' to surface ground level. (Approximately 20 sacks Class G cement with 3% CaCl at a yield of 1.15 cubic feet/sack.) Slurry fluid loss will be 1500 cc/30 minutes and setting time is approximately 45 minutes. Cement is to have compressive strength of 1000 psi after 10 hours.

7. Trip out of hole laying down workstring.

8. Surface pipe is to be capped and welded. Cap is to have weep hole and is to be inscribed with name of operator (Seneca Resources Corporation), API lease serial number (API# 04111-20732), well name and number (AB Ferndale #8 R/D #2), surveyed location of well (2755' S 4064' E of NW Cor Sec 16 T4N R21W SBB&M) and date well was plugged. Fill cellar from casing cut off point to restored ground level with soil.

9. Restore well site as per Ca Div of Oil & Gas requirements.

Total Drilling Mud Required: 48.5 Barrels.
Total Cement Required: 20 Sacks Class G w/ 3% CaCl.

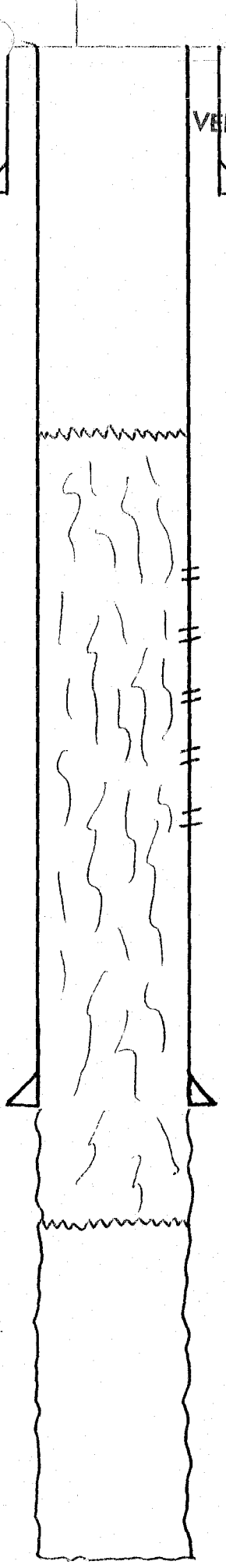
Prepared By: Sandra K Cole 10/8/93

Approved By: B. M'M 10/11/93.

Approved By: J B Beck 10/11/93

DIVISION OF OIL AND GAS
RECEIVED
OCT 1 5 ...
VENTURA, CALIFORNIA

Ferndale #8 R/D #2



13 3/8" 119'
Cemented w/
350 ft³ Cement

Ground Level Elevation
1179'

Top of Cement Plug 677'

4 SPF 3/8" Holes

891' - 893'
896' - 903'
984' - 989'
992' - 994'
1006' - 1016'

Cement Plug in well
from 1350' - 677'.
Cemented w/ 345 Ft³
Class G w/ 3% $CaCl_2$.

9 5/8" 1151'
36#
Cemented w/
550 ft³
Cement

8/28/83 Tagged Plug at
677'. Witnessed by
Dept Oil & Gas.

8/30/83 Approved location of
Cement Plug

3186'
8 3/4" Open Hole

22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS
AMPAD

OPERATOR Argo
LSE & NO Ferndale A
MAP 203

	(1)	(2)	(3)	(4)	( )	( )
INTENTION	Drill	DRill	Supp to redrill	Rework (Suspend)	Redrill	Supp Redrill 30 Kd
NOTICE DATED	12/29/76	7/23/80	11/25/80	11/25/80	12-30-81	2-24-82
E-REPORT NUMBER	277-29	280-242	280-432	280-423	281-471	282-85
HECKED BY/DATE		CW 3/26/81				
AP LETTER DATED	1/8/77	8/2/86		-		3-1-83
SYMBOL						

	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED
NOTICE	12/30/76		7/25/80		11/28/80		11/28/80		12-30-82			
HISTORY			3/26/80		3/26/80		3/26/81		4-25-83		4/25/83	
SUMMARY			✓		✓		3-26-81		4-25-83		4/25/83	
IES/ELECTRIC LOG DIGS #1			3/26/81		3/26/81				12-7-83		12-7-83	
DIRECTIONAL SURV			3/26/81		3/26/81				3-26-81		12-7-83	
CORE/SWS DESCRIP									CBL 12-7-83		CBL 12-7-83	
OTHER Dip-Cluster list mud dip graph plot cont dip #1			3/26/81 3/26/81 3/26/81		3/26/81 3/26/81 3/26/81				DIP CLUSTER 12-7-83 FDC/CNL 12-7-83		mud 12-7-83	
RECORDS COMPLETE	JR		JR		JR				2-8-84		2-8-84	

ENGINEERING CHECK

T-REPORTS	✓
OPERATOR'S NAME	✓
WELL DESIGNATION	✓
LOC & ELEV	✓ 1179
SIGNATURE	✓
SURFACE INSPECTION	
FINAL LETTER OK	

CLERICAL CHECK

POSTED TO [illegible] 170 MAILED _____ FINAL LETTER MAILED _____

RELEASED BOND _____

REMARKS: 1st notice to drill cancelled

* Actual elev 1179'

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF PROPERTY AND WELL TRANSFER

Field or county	District
Ojai	2
Former owner	**Date**
Argo Petroleum Corp.	Sept. 10, 1987

Name and location of well(s)

Sec. 16, T. 4N., R. 21W., SBB&M

"Barker-Ferndale" 1	(111-20423)	"Valex-Ferndale" 211	(111-21178)
"Barker-Ferndale" 2	(111-20604)	"Valex-Ferndale" 214	(111-21180)
"Barker-Ferndale" 3	(111-20609)	"Valex-Ferndale" 215	(111-21206)
"Barker-Ferndale" 4	(111-20685)	"Valex-Ferndale" 313	(111-21314)
"Barker-Ferndale" 5	(111-20702)	"Ferndale" 8	(111-20732)
"Barker-Ferndale" 6	(111-20730)		
"Valex-Ferndale" 107	(111-21066)		
"Valex-Ferndale" 110	(111-21163)		
"Valex-Ferndale" 209	(111-21105)		

Description of the land upon which the well(s) is (are) located

Date of transfer, sale, assignment, conveyance, or exchange	New owner	Type of organization
7-17-87	Seneca Resources Cprporatipn	Corp.
	Address: 511 16th St. Mall, Ste 300, Denver, CO 80202	Telephone No.: (303) 825-7401

Reported by: Seneca Resources Corp.

Confirmed by: Argo Petroleum Corp.

New operator new status (status abbreviation)	Request designation of agent
PA	
Old operator new status (status abbreviation)	**Remarks**
PA	

Deputy Supervisor: Patrick J. Kinnear

Signature: Patrick J. Kinnear

OPERATOR STATUS ABBREVIATIONS

PA – Producing Active
NPA – No Potential, Active
PI – Potential Inactive
NPI – No Potential, Inactive
Ab – Abandoned or No More Wells

FORM AND RECORD CHECK LIST

Form or record	Initials	Date	Form or record	Initials	Date
Form OGD121			Map and book		
Form ODG148			Notice to be cancelled		
New well cards			Bond status		
Well records			EDP files		
Electric logs					
Production reports					

CALIFORNIA
DIVISION OF OIL AND GAS

Sept. 11, 1984

To: Mr. Harry Hull, Agent
Argo Petroleum Corp.
411 S. Beckwith Rd.
Santa Paula, CA 93060

From: Div. of Oil & Gas
Box 67
Santa Paula, CA 93060

Subject: ☒ Request for confidential status dated Aug. 9, 1984.

☐ Request for extension of confidential status dated _____, 19___.

☐ Subject request is approved

☐ Subject request is partially approved

☒ Subject request is denied.

Records approved for confidential status are:

WELL NAME AND NUMBER	FIELD OR COUNTY	DATE ON WHICH RECORDS WILL BECOME PUBLIC
"Ferndale" 8	Ojai Field Sec. 16, T. 4N., R. 21W	

Murray W. Dosch
District Deputy

cc: Petroleum Information Service
M.J. Systems

SEE REVERSE SIDE FOR RECORDS DENIED CONFIDENTIAL STATUS OR EXTENSION OF CONFIDENTIAL STATUS AND REMARKS.

OGD181 (3-79-DWRR-2M)

Form OG100 (7/79)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

API No. 111-20732

WELL SUMMARY REPORT

Operator	Well				
ARGO PETROLEUM CORPORATION	BARKER-FERNDALE #8 REDRILL NO. 2				
Field	**County**	**Sec.**	**T.**	**R.**	**B.&M.**
OJAI	VENTURA	16	4N	21W	S.B.

Location (Give surface location from property or section corner, street center line and/or California coordinates) SBB&M
2,755' South & 4,064' East of the NW corner of Sec. 16, T4N, R21W,

Elevation of ground above sea level
1,179'

Commenced drilling (date)
April 8, 1983

Completed drilling (date)
April 16, 1983

Commenced producing (date)
N/A

☐ Flowing ☐ Pumping
☐ Gas lift

Name of producing zone(s)
NONE

Total depth

(1st hole)	(2nd)	(3rd)
10,135'	7,644'	3,186'

Present effective depth
Plugged back to 677'

Junk
NONE

Depth measurements taken from top of:
☐ Derrick Floor ☐ Rotary Table ☒ Kelly Bushing
Which is feet above ground

GEOLOGICAL MARKERS	DEPTH
Monterey Shale	3,080'

Formation and age at total depth
Monterey Shale, Mohnian

	Clean Oil (bbl per day)	Gravity Clean Oil	Percent Water including emulsion	Gas (Mcf per day)	Tubing Pressure	Casing Pressure
Initial Production	---	---	---	---	---	---
Production After 30 days	---	---	---	---	---	---

CASING RECORD (Present Hole)

Size of Casing (API)	Top of Casing	Depth of Shoe	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Number of Sacks or Cubic Feet of Cement	Depth of Cementing (if through perforations)
13-3/8"	Surface	119'	48#	H-40, ST&C	New	17-1/2"	350 ft^3	---
9-5/8"	Surface	1,151'	36#	K-55, ST&C	New	12-1/4"	550 ft^3	---

PERFORATED CASING (Size, top, bottom, perforated intervals, size and spacing of perforation and method.)

Four perf/ft., 3/8" dia.: 891'-893', 896'-903', 984'-989', 992'-994', and 1,006'-1,016'. Perfs ineffective. Cement plugged 1350'-677' with 345 cf cement. Well suspended.

Was the well directionally drilled? If yes, show coordinates at total depth
☒ Yes ☐ No 523' N & 703' W. of the surface location.

Electrical log depths
Dual Induction TD to casing.

Other surveys
Mud Log, Directional Survey, FDC-CNL, Dipmeter

DIVISION OF OIL AND GAS
RECEIVED
FEB 24 1984
SANTA PAULA, CALIFORNIA

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Name	Title	
Harry E. Hull	District Superintendent	
Address	**City**	**Zip Code**
411 S. Beckwith Road	Santa Paula, California	93060
Telephone Number	**Signature**	**Date**
(805) 933-1321	Harry E. Hull	Feb. 21, 1984

SUBMIT IN DUPLICATE

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

DIVISION OF OIL AND GAS
RECEIVED
FEB 24 1984
SANTA PAULA, CALIFORNIA

Operator Argo Petroleum Corporation Field Ojai County Ventura
Well Barker-Ferndale #8 R/D #2, Sec. 16, T4N, R 21W, S.B.B. & M.
A.P.I. No. 111-20732 Name Harry E. Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date Feb. 21, 1984.

Signature Harry E. Hull

411 S. Beckwith Road, Santa Paula, Ca. 93060 (Address) (805) 933-1321 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
8-24-83	MIRU SPS. RU 2 tanks, pump and power swivel. Moved in 115 jts. 2-3/8" tubing. Removed wellhead flange. Installed BOPE and tested same. MU 6-1/2" bit and 3 3-3/4" drill collars. PU tubing off ground and RIH to 1135'. Circulated and conditioned mud for 2 hours at 1135'.
8-25-83	Continued PU tubing off ground. RIH to 1336'. RU power swivel. Drilled out to 1580', pipe sticking. Pulled up to 1336' and circulated hole clean. Made wiper run to shoe. RIH and drilled 1336'-1626', pipe sticking. Pulled up to 1375' and circulated hole clean. RIH to 1470'. Drilled to 1782', pipe sticking. Pulled up to 1501' and circulated hole clean. Drilled to 1595'. Presently POH for bit change.
8-26-83	POOH from 1750'. Change bit and add jars. RIH. Stopped at 1291'. Drilled out fill to 1667'. Torqued up. Bit plugged. POH. RIH to 1478'. Circulated. Drilled to 1808'. Hole staying open better now. Mud wt. 71#. Vis. 80 sec.
8-27-83	Clean out to 1850'. Hose broke. POH. RIH. Stopped at 1565'. Clean out to 1583'. Change of orders. POH. With OE tbg. at 1350', pump 300 sx. G + 3% $CaCl_2$. POOH. Shut down. Displace with 20 cf water. CIP at 10:45 p.m. (8-26-83).
8-28-83	M.U. & RIH with bit and tbg. Tag cement @ 677'. Witnessed by D.O.G. POH and lay down all tbg. Remove BOP and flanged up. RDMO. Well Suspended.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 283-258

520 (field code)
12 (area code)
10 (new pool code)
10 (old pool code)

REPORT ON PROPOSED OPERATIONS

Mr. Harry Hull, Agent
Argo Petroleum Corporation
411 S. Beckwith Rd.
Santa Paula, CA 93060

Santa Paula, California
Sept. 12, 1983

Your plug back and suspend proposal to well "Ferndale" 8,
A.P.I. No. 111-20756, Section 16, T. 4N, R. 21W, SB B. & M.,
Ojai field, Silverthread area, Miocene pool,
Ventura County, dated 9/1/83, received 9/2/83 has been examined in conjunction with records filed in this office.

THE PROPOSAL, COVERING PLUG BACK AND SUSPEND OPERATIONS, IS APPROVED ACCORDING TO PRIOR AGREEMENT.

Blanket Bond
MS:b

window
9⅝" @ 1151'
plug back 1024'
K.O. at 9⅝" shoe 1151'
T.D. 3186'

M. G. MEFFERD, State Oil and Gas Supervisor

By _____
Murray W. Dosch, Deputy Supervisor

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

OG111 (4/82/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
SEP - 6 1983
SANTA PAULA, CALIFORNIA

~~SUPPLEMENTARY NOTICE~~
Rework Notice

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
BB	✓	✓

DIVISION OF OIL AND GAS

SANTA PAULA Calif.

A notice to you dated JULY 28, , 1983, stating the intention to

REWORK (Drill, rework, abandon), Well No. ~~BARKER~~ " FERNDALE " 8 R/D2, API No. 111-20732,

Sec. 16, T. 4N, R. 21W, S.B. B. & M., OJAI Field,

VENTURA County, should be amended because of changed conditions.

The present condition of the well is as follows:

Total depth 3,186'

Complete casing record including plugs and perforations:

13 3/8" @ 119', 48#, H-40, S.T.& C., 17½" Hole, 350 CF Cmt to Surface
9 5/8" @ 1,151', 36#, K-55, S.T. & C., 12¼" Hole, 550 CF Cmt to Surface

4 JPF 3/8" Holes: 891' to 893', 896' to 903', 984' to 989', 992' to 994' & 1,006' to 1,016'.

* The attempt to clean out to 3,186' and run casing was stopped on 8-26-83. Unable to clean out below 1,850'.

We now propose

1. Plug from 1,350' to 676' with 300 Sx Class "G" + 3% $CaCl_2$.
2. Tag TOC. DOG witness TOC.
3. Install TBG Head. Suspend Well.

Brad Stewart/MS 9-3-83
No shows below 1350'
BGW Above 676'

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 411 South Beckwith (Street)

Santa Paula, California 93060 (City) (State) (Zip)

Telephone Number (805)933-1321

Argo Petroleum Corporation (Name of Operator)

By [signature] (Name) 9-1-83 (Date)

Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

No. T 283-116

DIVISION OF OIL AND GAS

Report on Operations

Mr. Harry Hull, Agent
Argo Petroleum Corp.
411 S. Beckwith Road
Santa Paula, CA 93060

Santa Paula, Calif.
Aug. 30, 1983

Your operations at well "Ferndale" 8, API No. 111-20732,
Sec. 16, T4N, R. 21W SB B.& M. Ojai Field, in Ventura County,
were witnessed on Aug. 27, 1983. R. Habel, representative of
the supervisor, was present from 0800 to 0900. There were also present Jake Johns,
Argo Rep.
Present condition of well: 13 3/8" cem 119'; 9 5/8" cem 1151', perfs (at intervals)
891-1016', TD 3186'. Plugged w/cem 1350-676'.

The operations were performed for the purpose of abandonment of lower zones and put well
on suspended status.

DECISION:

THE LOCATION AND HARDNESS OF THE CEMENT PLUG AT 676' IS APPROVED.

b

M. G. MEFFERD
State Oil and Gas Supervisor

By _____
Deputy Supervisor
Murray M. Doech

OG109(12-80-15M)

STATE OF CALIFORNIA—RESOURCES AGENCY

George Deukmejian, Governor

DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS
146 SOUTH OJAI STREET, P. O. BOX 67
SANTA PAULA, CALIFORNIA 93060
(805) 525-2105

August 8, 1983

Mr. Stan Brown
Argo Petroleum Corp.
411 S. Beckwith Rd.
Santa Paula, CA 93060

Re: "Ferndale" 8

Dear Mr. Brown:

In response to your request dated August 3, 1983, approval is hereby granted for Argo Petroleum Corporation to conduct injectivity test in the zone mentioned from 3026'-3186' in well "Ferndale" 8 (111-20732-02), Sec. 16, T.4N., R.21W., SBB&M. The testing period shall not exceed 30 cumulative days and surface injection pressures shall not exceed 1085 psi.

Injection rates and pressure shall be reported monthly to this office on our Form 110B. These forms shall be sent to this district office and should not be included in your regular monthly 110 report to our Sacramento office.

If you have any questions concerning the testing or reporting procedures, please contact me.

Sincerely,

Murray W. Dosch
RH:b

DIVISION OF OIL AN
RECEIVE
AUG 5 1983
SANTA PAULA, CALIFORNIA

Argo
Petroleum
Corporation

411 South Beckwith Road
Santa Paula, California 93060
Telephone (805) 933-1321
(805) 659-0640
(805) 524-2656

Corporate Office:
1661 Lincoln Blvd., Suite 400
Santa Monica, California 90404
Telephone (213) 452-8676
Cable – Argpetro
Telex – 182027

August 3, 1983

Mr. Rob Habel
State of California Resources Agency
Department of Conservation
Division of Oil & Gas
Post Office Box 67
Santa Paula, California 93060

RE: BARKER FERNDALE #8 R/D #2, REQUEST TO PERFORM INJECTIVITY TEST

Dear Rob:

Argo Petroleum is planning to run casing in the subject well, Ferndale #8, for the purpose of conducting a water injectivity test. As detailed in the "Notice of Intention to Rework" separately filed with your office, we intend to run a combination string slotted from approximately 3050' to 3186'. Above this zone, the casing will be cemented through ports at 3000', sufficient to fill outside the casing to 2000'. A cement bond log will be run to confirm the cement job. Subsequent to this preparatory work, and subject to your office's approval, we intend to perform a 30-day injectivity test using produced water from the Ferndale Ranch lease. We hereby request permission to begin this injection test upon the successful completion of the well as outlined above.

If you have any questions or require additional information, please advise.

ARGO PETROLEUM CORPORATION

Stan Brown

Stan Brown
Engineering Department

SWB/csf

xc: George Peters
Harry Hull

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 283-211

REPORT ON PROPOSED OPERATIONS

520 (field code)
12 (area code)
10 (new pool code)
10 (old pool code)

Mr. Harry Hull, Agent
Argo Petroleum Corp.
411 S. Beckwith Rd.
Santa Paula, CA 93060

Santa Paula, California
Aug. 8, 1983

Your _____ proposal to alter casing well "Ferndale" 8,
A.P.I. No. 111-20732, Section 16, T. 4N, R. 21W, S.B. B. & M.,
Ojai field, Silverthread area, Miocene pool,
Ventura County, dated 7/28/83, received 7/29/83 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Hole fluid of sufficient quality and quantity shall be maintained in the hole to control any subsurface condition, and a reserve supply shall be on hand for emergencies.
2. Blowout prevention equipment of at least DOG Class II 2M shall be installed and maintained in operating condition at all times.
3. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.

NOTE: Operator shall submit additional letter requesting approval to conduct a 30 day injectivity test.

Blanket Bond
MS:b

M. G. MEFFERD, State Oil and Gas Supervisor

By _____
Murray W. Dosch, *Deputy Supervisor*

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

OG111 (4/82/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

API No. 111-20732

WELL SUMMARY REPORT

DIVISION OF OIL AND GAS
RECEIVED
APR 25 1983
SANTA PAULA, CALIFORNIA

Operator	Well				
ARGO PETROLEUM CORPORATION	BARKER-FERNDALE NO. 8 REDRILL NO. 2				
Field	**County**	**Sec.**	**T.**	**R.**	**B.&M.**
OJAI	VENTURA	16	4N	21W	SB

Location (Give surface location from property or section corner or center line and/or California coordinates)
2,755 feet South and 4,064 feet East of the northwest corner of Section 16, T4N, R21W, SBB&M

Elevation of ground above sea level
1,179 feet

Commenced drilling (date)	Total depth			Depth measurements taken from top of:
April 8, 1983	(1st hole)	(2nd)	(3rd)	☐ Derrick Floor ☐ Rotary Table ☒ Kelly Bushing
Completed drilling (date)	10,135'	7,644'	3,186'	Which is feet above ground
April 16, 1983	Present effective depth: 3,186 feet			GEOLOGICAL MARKERS: Monterey Shale — DEPTH: 3,080 feet
Commenced producing (date)	Junk: None			
☐ Flowing ☐ Pumping ☐ Gas lift				Formation and age at total depth: Monterey Shale, Mohnian
Name of producing zone(s): None				

	Clean Oil (bbl per day)	Gravity Clean Oil	Percent Water including emulsion	Gas (Mcf per day)	Tubing Pressure	Casing Pressure
Initial Production	---	---	---	---	---	---
Production After 30 days	---	---	---	---	---	---

CASING RECORD (Present Hole)

Size of Casing (API)	Top of Casing	Depth of Shoe	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Number of Sacks or Cubic Feet of Cement	Depth of Cementing (if through perforations)
13-3/8"	Surface	119 feet	48#	H-40, ST&C	New	17-1/2"	350 ft^3	
9-5/8"	Surface	1,151 ft.	36#	K-55, ST&C	New	12-1/4"	550 ft^3	

PERFORATED CASING (Size, top, bottom, perforated intervals, size and spacing of perforation and method.)
Four perf/ft, 3/8" dia., shot with casing gun in the following intervals: 891-893', 896-903', 984-989', 992-994', and 1,006-1016'.

Was the well directionally drilled? If yes, show coordinates at total depth
☒ Yes ☐ No 523 feet North and 703 feet West of the surface location.

Electrical log depths
Dual Induction TD to casing

Other surveys
Mud log, Directional Survey, FDC-CNL, Dipmeter

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Name	Title	
Harry E. Hull	District Superintendent	
Address	**City**	**Zip Code**
411 South Beckwith Road	Santa Paula, California	93060
Telephone Number	**Signature**	**Date**
(805) 933-1321	Harry E. Hull	April 21, 1983

SUBMIT IN DUPLICATE

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Barker-Ferndale No. 8 Redrill No. 2, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-20732 Name Harry E. Hull (Person submitting report) Title Dist. Superintendent (President, Secretary or Agent)
Date April 21, 19 83

Signature Harry E. Hull

411 South Beckwith Road, Santa Paula, CA 93060 (Address) (805) 933-1321 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
04-07-83 to 04-08-83	Moved in and rigged up Monterey Drilling Rig "F". Installed BOP's on existing 9-5/8" casing and tested to 800 psi (DOG declined to witness). Ran in the hole and tagged cement at 1,024 feet and circulated hole full of mud. Drilled out cement to 1,160 feet. Pulled out of hole for Dynadrill.
04-09-83 to 04-11-83	Dynadrilled 8-3/4" hole to 2,093 feet. Tripped for new BHA. Laid down Dynadrill and picked up new BHA. Ran in hole; reamed Dynadrill run and drilled to 2,283 feet.
04-12-83 to 04-15-83	Drilled to 3,186 feet and conditioned hole for loggers. Rigged up Schlumberger and logged as follows: Dual Induction: 3,186' to 1,151' FDC-CNL: 3,186' to 2,200' Dipmeter: 3,186' to 1,151" Rigged down logger and ran into hole.
04-16-83	Pulled out of hole laying down drill pipe. Tore out BOP's and installed tubing head. Released rig at 1930 hours on April 16, 1983 with the well temporarily suspended

FORM OG111(10/81/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 282-229

REPORT ON PROPOSED OPERATIONS

520 (field code)
12 (area code)
10 (new pool code)
10 (old pool code)

Mr. Harry Hull, Agent
Argo Petroleum Corporation
Box CI
Ventura, CA 93002

Santa Paula, California
June 29, 1982

Your supplementary proposal to redrill well "Ferndale" 8,
A.P.I. No. 111-20732, Section 16, T. 4N, R. 21W, SB B. & M.,
Ojai field, Silverthread area, Miocene pool,
Ventura County, dated 6/22/82, received 6/24/82 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT IN ALL OTHER RESPECTS, THE PROVISIONS SET FORTH IN OUR REPORT NO.P281-471 DATED DEC.31,1981 shall apply.

Blanket Bond
MD:b

April 14 1983
MD - Bill Melcher
TD 3186 2nd Redrill
Should mention, would like to suspend well 6 months. Will send in proposal & Fill well & install surface valve. Do not think that well has surface valve.

M. G. MEFFERD, State Oil and Gas Supervisor

By Murray W. Dosch, Deputy Supervisor

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

SUPPLEMENTARY NOTICE

DIVISION OF OIL AND GAS
RECEIVED
JUN 24 1982
SANTA PAULA, CALIFORNIA

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
BB	—	✓

DIVISION OF OIL AND GAS

Santa Paula Calif.

A notice to you dated Dec. 30, 19 81, stating the intention to

Rework (Drill, rework, abandon), Well No. Ferndale #8, API No. 111-20732,

Sec. 16, T. 4N, R. 21W, S.B. B. & M., Ojai Field,

Ventura County, should be amended because of changed conditions.

The present condition of the well is as follows:

Total depth Hole #1 @ 10,135 R/D #1 @ 7644'

Complete casing record including plugs and perforations:

13-3/8" @ 119' 48#, H-40, ST&C 17-1/2" hole 350cf

9-5/8" @ 1160' 36#, K-55, ST&C 12-1/4" hole 550 cf

Perf'd w/4 holes/ft. 891' - 893', 896' - 903', 984' - 989', 992' - 994' and 1006' - 1016'

R/D #1 plugged 1209' - 1045' with 85cf
Well suspended 11-18-80

We now propose

1. Proceed as per notice dated ~~12-30-81~~ 12-30-81 ?

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 940 E. Santa Clara (Street)
Ventura, California 93001 (City) (State) (Zip)
Telephone Number (805) 653-5111

Argo Petroleum Corporation (Name of Operator)
By Harry Hull (Name) 6-22-82 (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

FORM OG111(10/81/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 282-85

REPORT ON PROPOSED OPERATIONS

520 (field code)
12 (area code)
10 (new pool code)
10 (old pool code)

Mr. Harry Hull, Agent
Argo Petroleum Corporation
P.O.Box CI
Ventura, CA 93002

Santa Paula, California
March 5, 1982

MS-S Ciccon 6/28/82

Your Supp proposal to ~~alter casing~~ to Redrill well "Ferndale" 8,
A.P.I. No. 111-20732, Section 16, T. 4N, R. 21W, SB B. & M.,
Ojai field, Silverthread area, Miocene pool,
Ventura County, dated 2/24/82, received 3/1/82 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED:

1. Hole fluid of sufficient quality and quantity shall be maintained in the hole to control any subsurface condition, and a reserve supply shall be on hand for emergencies.
2. Blowout prevention equipment of at least DOG Class II 1M, with a hydraulic actuating system, shall be installed and maintained in operating condition at all times.
3. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.
4. THIS DIVISION SHALL BE NOTIFIED TO WITNESS A PRODUCTION TEST OF SHUT OFF WITHIN 30 DAYS AFTER COMPLETING THE WELL.

Blanket Bond
MWD:b

M. G. MEFFERD, State Oil and Gas Supervisor

By Murray W. Dosoh, Deputy Supervisor

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

DIVISION OF OIL AND GAS
RECEIVED
MAR - 1 1982
SANTA PAULA, CALIFORNIA

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	OGD114	OGD121
SB	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well No. Ferndale #8, API No. 111-20732,

Sec. 16, T. 4N, R. 21W S.B. B. & M., Silverthread Field, Ventura County.

The present condition of the well is as follows:

1. Total depth. 10135' (orig.), plugged 5141'-3170'.
   7644' (RD #1), plugged 1209'-1045'.

2. Complete casing record, including plugs and perforations:

   13-3/8" cmt'd @ 119' (48#, H-40).
   9-5/8" cmt'd @ 1160' (36#, K-55).
   Plugged depth 1045'.
   No perforations.

3. Present producing zone name None Zone in which well is to be recompleted Delmontian Shale

4. Present zone pressure - New zone pressure 400 psi

5. Last produced Never completed (Date) _____ (Oil, B/D) _____ (Water, B/D) _____ (Gas, Mcf/D)

   or

6. Last injected N/A (Date) _____ (Water, B/D) _____ (Gas, Mcf) _____ (Surface pressure, psig.)

The proposed work is as follows:

1. Install and test 3M double-hydraulic BOPE.
2. Change over from claybase mud to lease water.
3. Run TDT-k log and cement bond log.
4. Cement squeeze if necessary.
5. Spot 2000 gals. 15% HCl, and jet perforate within the interval 765'-1020'. Clean out acid.
6. Change over to lease oil. Swab well in.
7. If necessary, run rods & pump. Place well on production.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 940 E. Santa Clara Avenue (Street)
Ventura, CA (City) (State) 93001 (Zip)

Telephone Number (805) 653-5111

Argo Petroleum Corporation (Name of Operator)

By Harry Hall (Name) 2/24/82 (Date)

Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

(1-78-GSRI-15M)

FORM OG111(10/81/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 281-471

REPORT ON PROPOSED OPERATIONS

520 (field code)
12 (area code)
10 (new pool code)
10 (old pool code)

Mr. Harry Holl, Agent
Argo Petroleum Corp.
P.O. Box CI
Ventura, CA 93002

Santa Paula, California
Dec. 31, 1981

Your proposal to redrill well "Ferndale" 8,
A.P.I. No. 111-20732, Section 16, T. 4N, R. 21W, SB B. & M.,
Ojai field, Silverthread area, Miocene pool,
Ventura County, dated 12/30/81, received 12/30/81 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Hole fluid of sufficient quality and quantity shall be maintained in the hole to control any subsurface condition, and a reserve supply shall be on hand for emergencies.
2. Unlined sumps, if they contain harmful waters, shall not be located over fresh water bearing aquifers.
3. Any sump used during these operations shall be thoroughly cleaned and filled with earth as soon as operations are completed.
4. Blowout prevention equipment of at least DOG Class III 2M B, shall be installed and maintained in operating condition at all times.
5. THIS DIVISION SHALL BE NOTIFIED TO WITNESS:
   a. A pressure test of the blowout prevention equipment before commencing downhole operations.
   b. A test of the 7" shut-off above the zone to be produced.

Blanket Bond
MD:b

M. G. MEFFERD, State Oil and Gas Supervisor

By John L. Hardoin, Deputy Supervisor

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

DIVISION OF OIL AND GAS
RECEIVED
DEC 30 1981
SANTA PAULA, CALIFORNIA

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
B&B		✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well No. Ferndale #8, API No. 111-20732, Sec. 16, T. 4N, R. 21W, S.B. B. & M., Ojai Field, Ventura County.

The present condition of the well is as follows:

1. Total depth.

   Hole #1 @ 10,135. R/D #1 @ 7644.

2. Complete casing record, including plugs and perforations:

   13 3/8" @ 119'. 48# H-40, ST&C. 17 1/2" Hole. 350cf.

   9 5/8" @ 1160'. 36#, K-55, ST&C. 12 1/4" Hole. 550cf.

   R/D #1 plugged 1209' to 1045' with 85cf.

   Well suspended 11-18-80.

3. Present producing zone name ---- Zone in which well is to be recompleted ---

4. Present zone pressure ---- New zone pressure ----

5. Last produced ---- (Date) --- (Oil, B/D) ---- (Water, B/D) ---- (Gas, Mcf/D)

   or

6. Last injected ---- (Date) --- (Water, B/D) --- (Gas, Mcf) --- (Surface pressure, psig.)

The proposed work is as follows:

1. MIRU Drilling Rig. Install & test BOPS to 1000 psi.
2. Drill cement to 1180'.
3. Directionally drill 8 3/4" hole to 3500'.
4. Run 7", 23#, K-55, ST&C casing to T.D.
5. Release rig.
6. Complete and test well.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 940 E. Santa Clara (Street)
Ventura, Ca. (City) (State) 93001 (Zip)
Telephone Number (805) 653-5111

Argo Petroleum Corporation (Name of Operator)
By Harry E. Hull (Name) 12-30-81 (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

Argo
Petroleum
Corporation

10880 Wilshire Boulevard
Los Angeles, California 90024

Telephone (213) 475-4976
Cable - Argpetro
Telex - 67-4080

Reply to:
940 East Santa Clara
Ventura, Calif. 93001

December 30, 1981

Mr. John Hardoin
Division of Oil and Gas
P. O. Box 67
Santa Paula, Ca. 93060

RE: CONFIDENTIAL STATUS -

WELL #: Ferndale #8

Dear Mr. Hardoin:

Confidential status is hereby requested for all records on the above-captioned well.

Thank you for your consideration in this matter.

Sincerely,

ARGO PETROLEUM CORPORATION

Harry Hull
District Superintendent

HEH/csf

cc: Dennis Bird - L.A. Office

Note: 1st request 7-25-80

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Ojai County Ventura
Well Barker Ferndale #8, Sec. 16, T 4N, R 21W, S.B.B. & M.
A.P.I. No. 111-20732 Name Cecil Basenberg (Person submitting report) Title Exec. Vice Pres. (President, Secretary or Agent)
Date , 19

Signature

940 E. Santa Clara, Ventura, Ca. 93001 (Address) (805) 648-2514 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1980	
11/13/80	Drilled to 7032'. Circulated the hole clean and P.O.O.H. to run logs. Rigged up Schlumberger and logged well as follows: DIL/SFL from 7045' to 3000' Dipmeter from 7020' to 3002'
11/14/80 thru 11/17/80	R.I.H. and drilled to 7606'.
11/18/80	Drilled to 7644'. Made a wiper trip to 5652' and conditioned the mud for logs. P.O.O.H. and rigged up Schlumberger. Logged the well as follows: DIL/SFL from 7659' to 6870' Dipmeter from 7646' to 6940'
11/19/80	Completed the logging and R.I.H. Started reaming tight hole from 4478'.
11/20/80	Continued reaming to 4925'. Increased mud wt. to 99#/c.f..
11/21/80	Continued reaming to 5124'. P.O.O.H. laying down the drill pipe. Released the mud logger.
11/22/80	Completed laying down excess drill pipe. R.I.H. with O.E.D.P. to 1209' and set cement plug #1 as follows: Rigged up B.J. Hughes cementers. 4 1/2" O.E.D.P. at 1209'. 85 c.f. of Class "G" cement + 3% $CACL_2$. Displaced slurry to the balance point with 82 c.f. of mud C.I.P. at 0530 hrs. W.O.C. Tagged top of cement plug at 1045' at 1000 hrs. Plug position and firmness witnessed and approved by D.O.G. Engr. Laid down the remaining drill pipe and nippled down the B.O.P.'s. Rig released and operations on B.F. #8 suspended at 2100 hrs, 11/22/80. RY:ncg

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
MAR 26 1981
SANTA PAULA, CALIFORNIA

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Ojai County Ventura
Well Barker Ferndale #8, Sec. 16, T 4N, R 21W, S.B B. & M.
A.P.I. No. 111-20732 Name Cecil Basenberg (Person submitting report) Title Exec. Vice Pres. (President, Secretary or Agent)
Date , 19
Signature

940 East Santa Clara, Ventura, Ca. 93001 (Address)
(805) 648-2514 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1980	
10/16/80	Set cement plug #3 as follows: Rigged up B.J. Hughes cementers. 4 1/2" O.E.D.P. at 3267'. Preflushed with 30 c.f. of water. 150 c.f. of Class "G" cement + 20% sand + 2% $CACL_2$. Displaced slurry to balance point with 324 c.f. of mud. C.I.P. at 0240 hrs. Calc'd top of plug at 2918' (349'). R.I.H. with a bit and tagged the top of the cement at 3129'. Polished off the plug to 3170'.
10/17/80	P.O.O.H. and picked up a dyna drill. Dyna-drilled to 3259'. Installed the mud logger at 3170'.
10/18/80 thru 10/28/80	Drilled to 5568'.
10/29/80	Drilled to 5600'. Suspended operations at 0500 hrs for repairs to rotary table. Removed and shopped rotary table.
10/30/80	Idle
10/31/80	Installed the rotary table and resumed operations at 1900 hrs. R.I.H. and reamed from 4380' to 4556'.
11/1/80	Continued reaming to 4897'.
11/2/80	Continued reaming to 5010'. P.O.O.H., left bit + stab + cross-over + 3 DC's + stab + 1 HWDP = bumper sub and 11 inches of drilling jars in the hole. Top of the fish at 4868'. Made up a fishing assembly i.e. overshot + bumper sub + oil jars + H.W.D.P. R.I.H. and engaged the fish. P.O.O.H. and laid out the fishing tools. Made up the drilling assembly. Reamed from 5010' to 5062'.
11/3/80	Reamed to 5600'.
11/4/80	Re-ream from 4958' to 5600' and drilled to 5791'.
11/5/80 thru 11/12/80	Drilled to 6947'.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Ojai County Ventura
Well Barker Ferndale #8, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-20732 Name Cecil Basenberg (Person submitting report) Title Exec. Vice Pres. (President, Secretary or Agent)
Date , 19

Signature

940 East Santa Clara Street, Ventura, Ca. 93001 (Address)

(805) 648-2514 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
10/8/80	Made a wiper trip to 8012'. Circulate and conditioned mud for logs. P.O.O.H. and logged well as follows: Rigged up Schlumber and ran - D.I.L./SFL from 9926' to 3750' Dipmeter from 9931' to 3750'
10/9/80	R.I.H. Found the hole bridged over at 9228'. Cleaned out the bridged and reamed from 9352' to T.D. at 9944'. Drilled to 10,028'.
10/10/80	Drilled to 10,135'. Trip for a bit change, received orders to plug back. RIH with 4 1/2" O.E.D.P. to 5141'. Circulate and conditioned the mud for a balanced cement plug. Released the mud logger.
10/11/80	Set plug #1 as follows: Rigged up B.J. Hughes cementers. 4 1/2" O.E.D.P. at 5141'. Preflushed with 30 c.f. of water. 129 c.f. of Class "G" cement + 20% beach sand + 2% $CACL_2$. Displaced the cement slurry to balance point with 378 c.f. of mud. C.I.P. at 0100 hrs. Calc'd top of plug at 4841' (300'). P.O.O.H. and laid down excess drill pipe. R.I.H. and tagged top of cement at 5029'. Set Plug #2 as follows: Rigged up B.H. Hughes cementers. 4 1/2" O.E.D.P. at 5014'. Preflushed with 30 c.f. of water. 122 c.f. of Class "G" cement + 20% beach sand + 2% $CACL_2$. Displaced cement slurry to balance point with 378 c.f. of mud. C.I.P. at 1400 hrs. Calc'd top of plug at 4745' (284').
10/11/80	P.O.O.H., made up a drilling assembly, R.I.H. to 4450' and conditioned mud.
10/12/80	Reamed tight hole from 4450' to 4550'. Made a wiper trip to 3286', could not get below 4000' on return trip. P.O.O.H. to 3442', hole was still tight.
10/13/80	Pipe stuck at 3424' (bit depth). Rigged up dia-log and backed off of stuck pipe at 3360'. Fish = bit + Monel D.C. + D.C. Made up a fishing assembly, i.e. screw-in sub + bumper sub + oil jars + 3 D.C.'s + STAB + 4 DC's + STAB + 2 HWDP. Engaged fish at 3360' and worked the fish down hole. Drilled up 14' and stuck the fishing assembly. Worked the tools free and P.O.O.H. with the fish.
10/14/80	Laid out the fishing tools and the fish. Made up a drilling assembly. Reamed tight hole from 3375' to 3975'.
10/15/80	Continued reaming to 4072'. P.O.O.H. R.I.H. to 3267' with O.E.D.P.

DIVISION OF OIL AND GAS
RECEIVED
MAR 26 1981
SANTA PAULA, CALIFORNIA

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Ojai County Ventura
Well Barker Ferndale #8, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-20732 Name Cecil Basenberg (Person submitting report) Title Exec. Vice Pres. (President, Secretary or Agent)
Date , 19

Signature

940 East Santa Clara St., Ventura, Ca. 93001 (Address) (805) 648-2514 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
9/6/80	Continued reaming to 4753'. P.O.O.H. and dropped two stabilizers from the drilling assembly. R.I.H. to 4753' and encountered no tight hole. Reamed from 4753' to 4899'.
9/7/80	Continued reaming to 5350'.
9/8/80	Continued reaming to T.D. at 5398'. Drilled to 5500'. P.O.O.H. and picked up a Baker Mud Motor.
9/9/80 thru 9/10/80	Baker-drilled to 5751'.
9/11/80	P.O.O.H. and picked up a dyna-drill. Dyna drilled to 5791' (lost 2 1/2 hrs. leveling rig due to ground settling under the rig.)
9/12/80	Dyna-drilled to 5914'. P.O.O.H. and picked up a conventional drilling assembly.
9/13/80	R.I.H. and stuck the pipe at 5432'. Worked the pipe loose and reamed from 5400' to 5914'. Drilled to 6077'.
9/14/80 thru 9/15/80	Drilled to 6573'.
9/16/80	Drilled to 6645'. P.O.O.H., left 2 cones in the hole from Bit #20, Bit Cond. T8-B8-I. Made up a junk basket, R.I.H. and worked the junk basket over the junk.
9/17/80	P.O.O.H., no recovery. Re-run the junk basket and recovered 1 cone. R.I.H. with a bit and boot basket. Drilled on junk from 6645' to 6650'.
9/18/80	P.O.O.H., recovered approx. 3#'s of junk from the boot basket. Re-ran boot basket with a new bit and drilled on junk from 6650' to 6660'. P.O.O.H., recovered 11 each W_2 inserts + assorted pieces of metal from the boot basket. Made up tandem boot baskets with a new bit. Drilled from 6660' to 6669'.
9/19/80 thru 10/7/80	Drilled to 9944'. Circulated the hole clean.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Ojai County Ventura
Well Barker Ferndale #8, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-20732 Name Cecil Basenberg (Person submitting report) Title Exec. Vice Pres. (President, Secretary or Agent)
Date , 19

Signature C. Basenberg

940 East Santa Clara St., Ventura, Ca. 93001 (Address)
(805) 648-2514 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
8/22/80 thru 8/24/80	Drilled to 2989'.
8/25/80	Drilled to 3211'. P.O.O.H. and picked up a dyna-drill. Dyna-drilled from 3211' to 3254'.
8/26/80 thru 8/27/80	Dyna-drilled to 3697'.
8/28/80	Dyna-drilled to 3771'. Circulate and conditioned mud for logs. P.O.O.H. and logged well as follows: Rigged up Schlumberger and ran, DIL/SFL from 3753' to 1161' Dipmeter from 3757' to 1161'. Made up a conventional drilling assembly. Reamed the dyna-drill run, starting at 3061' to 3292'.
8/29/80	Continued reaming to 3771' and drilled to 3913'.
8/30/80 thru 9/1/80	Drilled to 5045'.
9/2/80	Drilled to 5169'. P.O.O.H. and picked up a Baker Mud Motor. Baker-drilled to 5193'.
9/3/80	Baker-drilled to 5398'.
9/4/80	Stuck the pipe at 5120', while R.I.H. on a trip for a bit change. Worked the pipe free and P.O.O.H. Picked up a conventional drilling assembly and reamed tight hole from 3950' to 4030'.
9/5/80	Continued reaming tight hole to 4563'. Increased mud wt. fr 73#/c.f. to 84#/c.f.

NCY

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
MAR 26 1981
SANTA PAULA, CALIFORNIA

No. 111-20732

History of Oil or Gas Well

Argo Petroleum Corporation Field Ojai County Ventura
Barker Ferndale #8, Sec. 16, T 4N, R 21W, SB B. & M.
111-20732 Name Cecil Basenberg Title Exec. Vice Pres.
(Person submitting report) (President, Secretary or Agent)
, 19

Signature

t Santa Clara St., Ventura, Ca. 93001 (805) 648-2514
(Address) (Telephone Number)

R. 21W | B.&M. SB

ound above sea level

Kelly Bushing

DEPTH

OIL AND GAS
EIVED
26 1981
A, CALIFORNIA

Casing Pressure

Depth of Cementing (if through perforations)

ect record of the

Zip Code 93001

DUPLICATE

must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling g the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts t used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

R.U. Bawden Drilling Co's Rig #50. Spud well at 0200 hrs 8/16/80. Drilled 12" hole from surface to 121'. Circulated the hole clean to run casing. joints of 13 3/8" OD, 48#/ft, H-40, ST&C 8RD casing. Landed the casing the casing shoe at 119'. One centralizer installed on casing, 10 above shoe. Casing; NKK seamless from J.D. Rush, Gardena - not inspected.

nted the casing as follows: rigged up B.J. Hughes cementers. 50 ft^3 of G cement + 3% $CACL_2$. Displaced the slurry to 89' with 79 c.f. of mud. C.I.P. 025 hrs. Cement returns to surface. W.O.C. Cut off the casing and installed casing head.

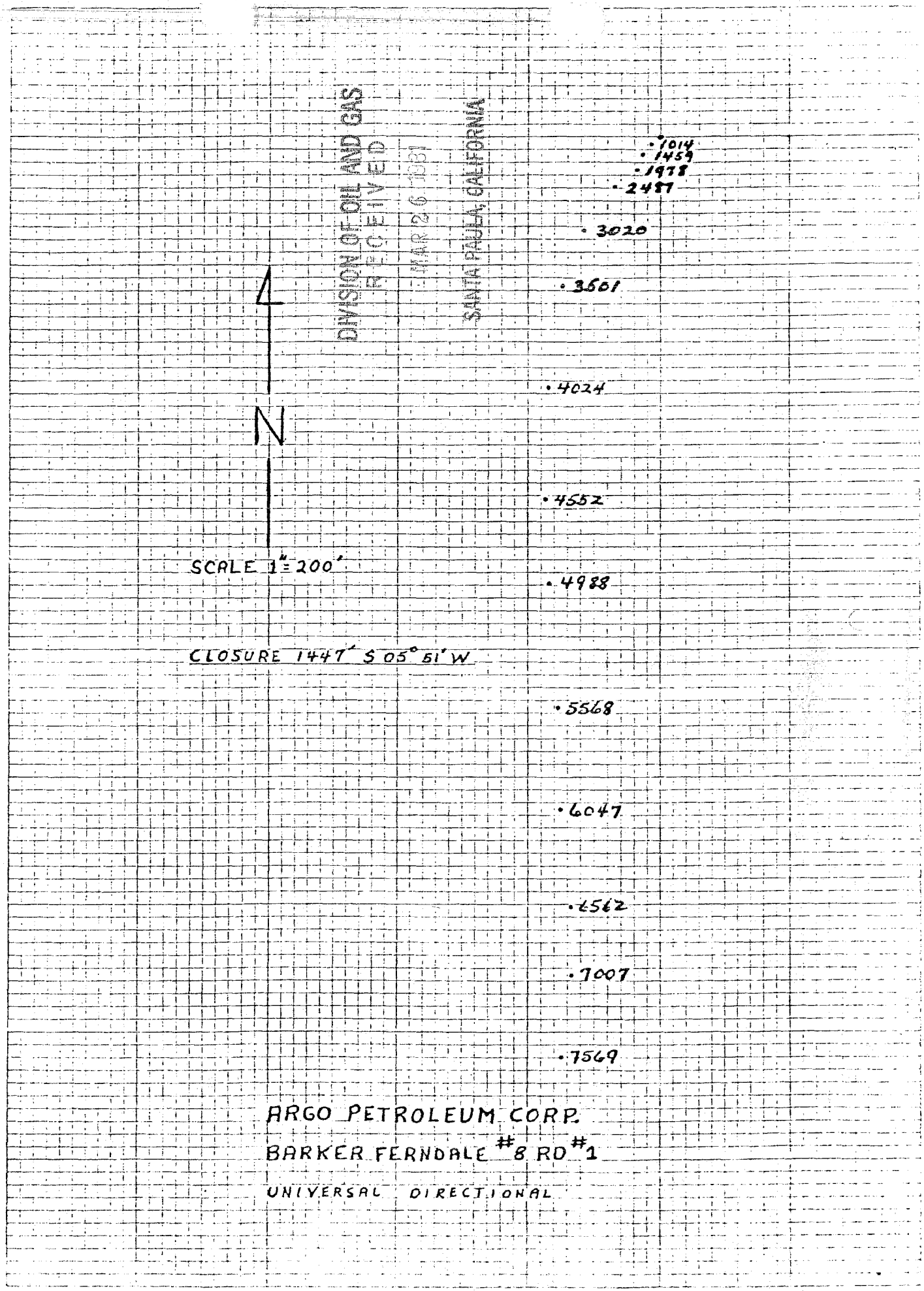
eted the casing head installation and nippled up the B.O.P./Diverter system. up a drilling assembly, R.I.H. and drilled the cement and the shoe at 119'.

ed 12 1/4" hole from 121' to 921'. Installed the mud logger at 119'.

ed to 1164'. Circulated the hole clean and made a wiper trip to the 13 3/8" Circulated and conditioned the mud for casing and P.O.O.H. Ran 30 joints 5/8" OD, 36#/ft, K-55, ST&C 8RD, R-3 casing. Landed the casing with the guide at 1160' and the baffle collar at 1120'. Install 1 ea. centralizer 10' above casing shoe. Casing: NKK seamless from J.D. Rush, Gardena - not inspected. nted the casing as follows: Rigged up Dowell cementers. Preflushed with 50 c.ft. ater. 450 c.f. of Class "G" cement + 3% $CACL_2$. Displaced slurry with 480 c.f. ud. Bumped the plug with 1000 psi C.I.P. at 1900 hrs, 8/19/80. 220 c.f. of nt returns to surface. W.O.C.

off the 13 3/8" casing and installed a 12" x 3M casing head on the 9 5/8" casing. ed up B.O.P.'s and made up 8 3/4" drilling assembly. Unable to pass the 8 3/4" through the casing head. Picked up the B.O.P.'s.

d off excess material on the interior casing head weld and re-installed the P.'s. R.I.H. and tagged the top of cement at 1120'. Pressure tested the g and B.O.P.'s. B.O.P. tests were witnessed and approved by the D.O.G. Engr. ed out the cement and the casing shoe at 1160'. Drilled 8 3/4" hole from to 1520'.



KEUFFEL & ESSER CO. MADE IN U.S.A.
10 X 10 TO THE INCH • 5 X 10 INCHES

7010 84

DIVISION OF OIL AND GAS
RECEIVED
MAR 26 1981
SANTA PAULA, CALIFORNIA

16-4N-21W

111-20732-01

UNIVERSAL
DIRECTIONAL DRILLING
DEFLECTION TOOLS AND SUPERVISION

COMPANY ARGO PETROLEUM CORP.

LOCATION FERNDALE RANCH

WELL ~~BARKER~~ FERNDALE #8 RD #1

DATE 10-17-80

STATION NO.	MEASURED DEPTH	COURSE LENGTH	DRIFT ANGLE	VERTICAL COURSE	VERTICAL DEPTH	SECTION	COURSE DEVIATION	DRIFT DIRECTION	COORDINATE DIFFERENCES NORTH	COORDINATE DIFFERENCES SOUTH	COORDINATE DIFFERENCES EAST	COORDINATE DIFFERENCES WEST	RECTANGULAR COORDINATES NORTH	RECTANGULAR COORDINATES SOUTH	RECTANGULAR COORDINATES EAST	RECTANGULAR COORDINATES WEST
1	160	160	0° 30	159 99	159 99		1 40	S 74 W						39		1 35
2	490	330	1° 15	329 92	489 91		7 20	S 45 W		5 09		5 09		5 48		6 44
3	735	245	1° 15	244 94	734 85		5 34	S 53 W		3 21		4 26		8 69		10 70
4	1014	279	1° 30	278 90	1013 75		7 30	S 46 W		5 07		5 25		13 76		15 95
5	1164	150	1° 45	149 93	1163 68		4 58	S 42 W		3 40		3 06		17 16		19 01
6	1309	145	2° 15	144 89	1308 57		5 69	S 35 W		4 66		3 26		21 82		22 27
7	1459	150	2° 30	149 86	1458 43		6 54	S 30 W		5 66		3 27		27 48		25 54
8	1723	264	2° 45	263 70	1722 13		12 67	S 30 W		10 97		6 34		38 45		31 88
9	1978	255	3°	254 65	1976 78		13 35	S 25 W		12 10		5 64		50 55		37 50
10	2235	257	3° 30	256 52	2233 30		15 69	S 42 W		11 66		10 50		62 21		48 02
11	2487	252	6°	250 62	2483 92		26 34	S 49 W		17 28		19 88		79 49		67 90
2	2641	154	7° 15	152 77	2636 69		19 43	S 51 W		12 23		15 10		91 72		83 00
13	2770	129	8° 30	127 58	2764 27		19 07	S 37 W		15 23		11 48		106 95		94 48
14	2920	150	9° 45	147 83	2912 10		25 40	S 34 W		21 06		14 20		128 01		108 68
15	3020	100	10° 15	98 40	3010 50		17 79	S 32 W		15 09		9 43		143 10		118 11
16	3188	168	10° 45	165 05	3175 55		31 34	S 31 W		26 86		16 14		169 96		134 25
17	3251	63	12° 30	61 51	3237 06		13 64	S 19 W		12 90		4 44		182 86		138 69
18	3342	91	11° 45	89 09	3326 15		18 53	S 10 W		18 25		3 22		201 11		141 91
19	3405	63	12° 15	61 57	3387 72		13 37	S 09 W		13 21		2 09		214 32		141 00
20	3501	96	12° 45	93 63	3481 35		21 19	S 08 W		20 98		2 95		235 30		146 95

Form 300

UNIVERSAL
DIRECTIONAL DRILLING
DEFLECTION TOOLS AND SUPERVISION

COMPANY ARGO PETROLEUM CORP. LOCATION FERNDALE RANCH

WELL BARKER FERNDALE #8 RD #1 DATE 10-17-80

STATION NO.	MEASURED DEPTH	COURSE LENGTH	DRIFT ANGLE	VERTICAL COURSE	VERTICAL DEPTH	SECTION	COURSE DEVIATION	DRIFT DIRECTION	COORDINATE DIFFERENCES NORTH	SOUTH	EAST	WEST	RECTANGULAR COORDINATES NORTH	SOUTH	EAST	WEST
21	3592	91	14° 30	88 10	3569 45		22 78	S 07 W		22 61		2 78		257 91		149 73
22	3720	128	16° 45	122 57	3692 02		36 89	S 08 W		36 53		5 13		294 44		154 86
23	3832	112	17° 45	106 67	3798 69		34 14	S 07 W		33 89		4 16		328 33		159 02
24	3929	97	18° 30	91 99	3890 68		30 78	S 07 W		30 55		3 75		358 88		162 77
25	4024	95	19° 30	89 55	3980 23		31 71	S 07 W		31 47		3 86		390 35		166 63
26	4087	63	20°	59 20	4039 43		21 55	S 06 W		21 43		2 25		411 78		168 88
27	4171	84	19° 30	79 18	4118 61		28 04	S 04 W		27 97		1 96		439 75		170 84
28	4232	61	19°	57 68	4176 29		19 86	S 05 W		19 78		1 73		459 53		172 57
29	4328	96	18° 45	90 91	4267 20		30 86	S 04 W		30 78		2 15		490 31		174 72
30	4456	128	18° 45	121 21	4388 41		41 14	S 01 W		41 13		72		531 44		175 44
31	4552	96	18° 15	91 17	4479 58		30 06	S 01 E		30 06		52		561 50		174 92
32	4648	96	18° 15	91 17	4570 75		30 06	S 02 E		30 04	1	05		591 54		173 87
33	4709	61	18° 45	57 76	4628 51		19 61	S 03 E		19 58	1	03		611 12		172 84
34	4797	88	18° 30	83 45	4711 96		27 92	S 03 E		27 88	1	46		639 00		171 38
35	4893	96	18° 30	91 04	4803 00		30 46	S 04 E		30 39	2	12		669 39		169 26
36	4988	95	18° 30	90 09	4893 09		30 14	S 04 E		30 07	2	10		699 45		167 15
37	5084	96	19° 30	90 49	4983 58		32 05	S 03 E		32 01	1	68		731 46		165 47
38	5220	136	18° 30	128 97	5112 55		43 15	S 02 E		43 12	1	51		774 58		163 96
39	5346	126	18° 30	119 49	5232 04		39 98	S 03 E		39 93	2	09		814 51		161 87
40	5472	126	19° 30	118 77	5350 81		42 06	S 04 E		41 96	2	93		856 47		158 94

UNIVERSAL
DIRECTIONAL DRILLING
DEFLECTION TOOLS AND SUPERVISION

COMPANY ARGO PETROLEUM CORP. LOCATION FERNDALE RANCH

WELL BARKER FERNDALE #8 RD #1 DATE 10-24-80

STATION NO.	MEASURED DEPTH	COURSE LENGTH	DRIFT ANGLE	VERTICAL COURSE	VERTICAL DEPTH	SECTION	COURSE DEVIATION	DRIFT DIRECTION	COORDINATE DIFFERENCES NORTH	SOUTH	EAST	WEST	RECTANGULAR COORDINATES NORTH	SOUTH	EAST	WEST
41	5568	96	20°	90 21	5441 02		32 83	S 03 E		32 79	1 72			889 26		157 22
42	5696	128	19° 15	120 84	5561 86		42 20	S 03 E		42 14	2 21			931 40		155 01
43	5811	115	19° 15	108 57	5670 43		37 91	S 03 E		37 86	1 98			969 26		153 03
44	5950	139	20° 15	130 41	5800 84		48 11	S 03 E		48 04	2 52			1017 30		150 51
45	6047	97	20°	91 15	5891 99		33 18	S 04 E		33 10	2 31			1050 40		148 20
46	6109	62	20° 15	58 17	5950 16		21 46	S 06 E		21 34	2 24			1071 74		145 95
47	6199	90	19°	85 10	6035 26		29 30	S 03 E		29 26	1 53			1101 00		144 42
48	6264	65	18°	61 82	6097 08		20 09	S 04 E		20 04	1 40			1121 04		143 02
49	6327	63	17° 30	60 08	6157 16		18 94	S 05 E		18 87	1 65			1139 91		141 37
50	6454	127	16° 15	121 93	6279 09		35 54	S 06 E		35 35	3 71			1175 26		137 66
51	6562	108	15°	104 32	6383 41		27 95	S 03 E		27 91	1 46			1203 17		136 20
2	6719	157	14° 15	152 17	6535 58		38 65	S 02 E		38 63	1 35			1241 80		134 85
53	6848	129	13° 30	125 44	6661 02		30 11	S 02 W		30 09		1 05		1271 89		135 90
54	7007	159	14°	154 28	6815 30		38 47	S 03 W		38 42		2 01		1310 31		137 91
55	7149	142	15°	137 16	6952 46		36 75	S 06 W		36 55		3 84		1346 86		141 75
56	7252	103	14° 30	99 72	7052 18		25 79	S 03 W		25 75		1 35		1372 61		143 10
57	7411	159	13°	154 92	7207 10		35 77	S 03 W		35 72		1 87		1408 33		144 97
58	7569	158	11° 30	154 83	7361 93		31 50	S 05 W		31 38		2 75		1439 71		147 72
							CLOSURE 1447' S 05° 51' W									

ARGO PETROLEUM CO. BARKER-FERNDALE #8RD SUMMARY

DEPTH	DIP	DIP AZM	DEV	DEV AZM	DIAM 1-3	DIAM 2-4	QUAL
TOP 6904.0	63.0	82.	13.4	172.	9.4	9.0	
BOTTOM 7652.0	66.2	157.	10.0	181.	9.2	9.0	
TOP 7008.0	75.7	301.	13.8	177.	10.0	9.3	
BOTTOM 7488.0	74.0	32.	11.9	175.	9.2	9.3	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7488			11.9	175	9.2	9.3	

DIVISION OF OIL AND GAS
RECEIVED
MAR 26 1981
SANTA PAULA, CALIFORNIA

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7408			12.8	175	10.0	9.1	
7410			12.8	174	9.4	9.1	
7412			12.8	175	9.2	9.0	
7414			12.7	174	9.1	9.1	
7416			12.7	174	9.5	9.1	
7418			12.7	175	9.5	9.1	
7420			12.6	174	9.2	9.2	
7422			12.6	173	9.3	9.3	
7424			12.5	174	9.4	9.3	
7426			12.5	174	9.3	9.2	
7428			12.4	175	9.1	9.6	
7430			12.4	175	9.0	9.6	
7432			12.4	174	9.1	9.4	
7434			12.3	174	9.1	9.5	
7436	61.1	198	12.3	174	9.3	9.5	D
7438			12.4	176	9.7	9.2	
7440			12.4	175	10.2	9.1	
7442			12.4	174	10.6	8.9	
7444			12.4	173	10.7	8.9	
7446			12.4	173	10.4	9.0	
7448			12.4	174	10.3	9.1	
7450			12.4	176	9.8	9.2	
7452			12.4	176	9.4	9.2	
7454			12.3	175	9.2	9.3	
7456			12.2	176	8.9	9.6	
7458			12.2	176	8.9	9.8	
7460			12.2	175	8.8	10.3	
7462			12.1	175	8.9	10.3	
7464			12.0	176	9.1	10.4	
7466			12.0	175	9.1	10.4	
7468			12.0	175	9.1	10.2	
7470			12.0	175	9.2	10.3	
7472			12.0	175	9.1	10.5	
7474			12.1	175	9.1	10.7	
7476			12.2	175	9.1	10.8	
7478			12.2	175	9.2	10.8	
7480			12.2	175	9.2	11.6	
7482			12.2	176	9.2	11.8	
7484			12.1	176	9.2	10.6	
7486			12.0	175	9.2	9.6	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7328	59.2	132	13.1	174	10.0	8.8	D
7330			13.1	172	9.8	9.0	
7332			13.1	172	9.3	9.0	
7334			13.1	175	9.3	9.0	
7336			13.1	176	9.4	9.1	
7338			13.2	174	9.3	9.3	
7340			13.2	173	9.2	9.3	
7342			13.1	174	9.3	9.2	
7344			13.0	176	9.5	9.3	
7346			13.1	177	10.2	9.2	
7348			13.2	176	10.3	9.2	
7350			13.1	176	10.2	9.2	
7352			13.1	175	10.8	9.2	
7354			13.1	175	10.7	9.2	
7356			13.0	175	10.4	9.2	
7358			13.0	174	10.6	9.2	
7360			12.9	175	10.5	9.1	
7362			12.9	176	10.2	9.0	
7364			12.8	175	9.9	9.1	
7366	64.1	96	12.8	174	10.1	9.2	B
7368			12.8	176	10.5	9.2	
7370			12.8	175	10.5	9.2	
7372			12.8	174	10.3	9.3	
7374			12.8	175	10.4	9.2	
7376			12.7	174	10.3	9.1	
7378			12.8	175	9.8	9.1	
7380			12.8	174	9.4	9.1	
7382			12.8	174	9.5	9.0	
7384			12.9	175	9.4	8.9	
7386			13.0	175	9.3	9.0	
7388			13.0	175	9.4	9.0	
7390			13.0	176	9.7	9.0	
7392			13.0	177	10.1	8.9	
7394			13.0	176	10.2	8.9	
7396			13.0	173	10.5	9.1	
7398			13.0	174	10.3	9.2	
7400			13.0	174	9.8	9.2	
7402			13.0	174	10.0	9.2	
7404			12.9	175	10.4	8.9	
7406			12.9	175	10.6	8.8	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7248			14.0	176	9.3	9.2	
7250			14.0	174	9.3	9.4	
7252			14.0	173	9.3	9.4	
7254			14.0	173	9.6	9.2	
7256			14.0	173	9.8	9.0	
7258			13.9	175	9.5	9.0	
7260			13.8	176	9.3	9.2	
7262			13.8	176	9.2	9.6	
7264			13.7	176	9.1	9.7	
7266	87.4	326	13.7	176	9.1	9.5	D
7268			13.7	174	9.2	9.2	
7270			13.7	173	9.3	9.1	
7272			13.8	173	9.4	9.2	
7274			13.7	173	9.7	9.2	
7276			13.7	175	10.2	9.1	
7278			13.7	175	10.2	9.1	
7280			13.7	174	10.0	9.2	
7282			13.8	174	9.9	9.2	
7284			13.8	175	9.8	9.2	
7286			13.7	177	9.9	9.3	
7288			13.6	175	9.8	9.2	
7290			13.6	175	9.6	9.2	
7292			13.6	174	9.5	9.2	
7294			13.5	173	9.3	9.2	
7296			13.4	174	9.2	9.1	
7298			13.4	175	9.2	9.0	
7300			13.4	176	9.4	9.1	
7302			13.4	176	9.4	9.2	
7304			13.4	177	9.3	9.2	
7306			13.4	176	9.3	9.1	
7308			13.4	175	9.3	9.2	
7310			13.4	175	9.2	9.3	
7312			13.4	175	8.9	9.5	
7314			13.4	177	8.9	9.5	
7316	59.9	124	13.4	178	9.0	9.3	D
7318	58.5	125	13.4	176	9.2	9.0	D
7320	47.0	134	13.3	175	9.2	9.0	D
7322	64.2	174	13.3	175	9.1	9.1	D
7324			13.2	175	9.4	9.2	
7326	64.3	134	13.2	174	9.6	9.1	D

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7168			14.8	179	9.7	9.1	
7170			14.8	178	9.7	9.1	
7172			14.8	178	9.7	9.3	
7174			14.8	178	9.7	9.3	
7176			14.8	176	9.7	9.3	
7178			14.8	177	9.7	9.2	
7180			14.8	177	9.6	9.1	
7182			14.8	177	9.6	9.3	
7184			14.8	176	9.7	9.6	
7186			14.8	176	9.9	9.8	
7188	80.5	24	14.8	176	9.9	9.6	B
7190			14.8	175	9.6	9.3	
7192	62.2	222	14.8	175	9.3	9.3	D
7194	61.1	226	14.8	175	9.2	9.6	B
7196			14.7	176	9.2	9.8	
7198			14.7	177	9.4	9.6	
7200	86.5	31	14.8	176	9.4	9.4	B
7202			14.7	177	9.3	9.3	
7204			14.6	177	9.3	9.3	
7206	63.8	223	14.6	175	9.2	9.8	B
7208			14.6	173	9.2	10.0	
7210			14.6	173	9.8	9.8	
7212			14.6	175	9.7	9.7	
7214			14.5	175	9.2	9.6	
7216			14.5	173	9.2	9.3	
7218			14.5	174	9.4	9.3	
7220			14.4	176	9.5	9.2	
7222			14.4	177	9.5	9.2	
7224			14.4	178	9.6	9.5	
7226			14.4	178	9.6	9.7	
7228			14.4	178	9.7	9.4	
7230			14.4	177	9.5	9.2	
7232			14.3	177	9.4	9.6	
7234			14.2	177	9.5	9.4	
7236			14.2	178	9.7	8.9	
7238			14.2	178	9.5	8.9	
7240			14.2	176	9.3	9.2	
7242			14.2	176	9.3	9.3	
7244			14.1	177	9.5	9.2	
7246			14.1	177	9.5	9.1	

DIVISION OF OIL AND GAS
RECEIVED
MAR 26 1981
SANTA PAULA, CALIFORNIA

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7088			14.2	176	9.1	9.9	
7090			14.2	177	9.0	10.0	
7092			14.2	176	9.0	10.1	
7094			14.2	175	9.1	10.0	
7096			14.3	174	9.3	9.9	
7098			14.2	176	9.3	10.0	
7100			14.3	178	9.2	10.0	
7102			14.3	178	9.1	9.9	
7104			14.3	177	9.1	9.8	
7106			14.3	176	9.2	10.0	
7108			14.3	177	9.1	10.1	
7110			14.4	177	9.3	10.0	
7112			14.4	175	9.7	9.6	
7114			14.4	175	9.6	9.6	
7116			14.4	176	9.6	9.5	
7118			14.4	175	9.5	9.2	
7120			14.5	175	9.6	9.2	
7122			14.6	177	9.7	9.2	
7124			14.6	177	9.7	9.2	
7126			14.6	176	9.9	9.3	
7128			14.6	177	9.9	9.5	
7130			14.6	177	9.8	9.6	
7132	56.5	223	14.6	175	9.8	9.6	B
7134			14.6	174	9.6	9.6	
7136			14.5	174	9.2	9.4	
7138			14.5	175	9.0	9.4	
7140			14.5	175	9.0	9.4	
7142			14.5	175	9.0	9.4	
7144			14.6	175	9.0	9.7	
7146			14.6	175	9.0	9.7	
7148			14.6	176	9.2	9.7	
7150			14.6	177	9.3	9.6	
7152			14.6	176	9.2	9.6	
7154			14.7	174	9.1	9.6	
7156			14.7	174	9.0	9.5	
7158			14.7	176	9.1	9.3	
7160			14.7	178	9.2	9.2	
7162			14.8	179	9.3	9.2	
7164			14.7	178	9.3	9.1	
7166			14.7	178	9.4	9.2	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7008			13.8	177	10.0	9.3	
7010			13.7	177	10.0	9.3	
7012			13.7	177	9.6	9.4	
7014			13.8	175	9.3	9.3	
7016			13.8	174	9.7	9.2	
7018			13.8	176	10.2	9.2	
7020			13.8	176	10.3	9.3	
7022			13.8	176	9.7	9.5	
7024			13.8	176	9.3	9.5	
7026			13.8	176	9.2	9.4	
7028			13.7	175	9.4	9.5	
7030			13.8	175	9.7	9.5	
7032			13.8	176	9.6	9.5	
7034			13.8	175	9.3	9.5	
7036			13.8	175	9.2	10.0	
7038			13.8	176	9.1	10.8	
7040			13.8	178	9.1	11.2	
7042			13.8	177	9.1	10.9	
7044			13.9	177	9.1	10.7	
7046			14.0	176	9.1	10.7	
7048			14.0	176	9.2	10.1	
7050			14.0	177	9.4	9.5	
7052			14.0	176	9.6	9.1	
7054			14.1	176	9.6	9.0	
7056			14.2	175	9.7	9.0	
7058			14.2	175	9.8	9.0	
7060			14.2	174	9.8	9.1	
7062			14.2	174	9.6	9.2	
7064			14.2	174	9.8	9.3	
7066			14.1	175	10.1	9.4	
7068			14.1	176	10.3	9.4	
7070			14.2	178	10.4	9.5	
7072			14.2	179	10.2	9.4	
7074			14.2	176	9.8	9.4	
7076			14.1	173	9.3	9.4	
7078			14.1	174	9.1	9.6	
7080			14.1	174	9.0	9.8	
7082			14.1	175	8.9	9.9	
7084			14.1	176	9.0	9.9	
7086			14.2	175	9.1	9.9	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7622			10.0	176	9.4	9.4	
7624	46.0	186	9.6	177	8.6	9.0	D
7626	49.7	186	9.4	179	6.8	8.1	D
7628			9.6	180	5.9	7.6	
7630			9.7	180	5.9	7.6	
7632			9.8	180	6.2	7.7	
7634	77.5	98	9.8	180	6.6	7.8	D
7636			9.8	180	6.9	7.8	
7638			9.8	180	7.5	7.9	
7640			9.9	181	8.2	8.5	
7642			10.0	181	8.9	9.1	
7644	79.0	97	10.0	181	9.2	9.2	D
7646	77.2	97	10.0	180	9.4	9.2	D
7648			10.1	179	9.5	9.3	
7650			10.1	181	9.3	9.1	
7652			10.0	181	9.2	9.0	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7542			11.3	178	10.4	8.6	
7544			11.2	178	10.0	8.8	
7546			11.1	177	10.5	9.0	
7548			11.0	176	10.5	9.0	
7550			10.9	177	10.4	9.0	
7552			10.8	177	10.4	9.0	
7554			10.8	177	10.7	8.9	
7556			10.8	176	11.0	8.7	
7558			10.9	177	10.6	9.0	
7560			11.0	178	10.2	9.1	
7562			11.0	178	10.4	9.0	
7564			11.1	177	10.7	9.0	
7566			11.2	175	10.5	8.9	
7568			11.1	176	10.2	8.8	
7570			11.0	176	9.8	9.0	
7572			11.0	175	9.3	9.1	
7574			10.9	174	9.1	9.1	
7576			10.8	173	9.0	9.2	
7578			10.7	175	9.2	9.3	
7580			10.7	176	9.6	9.2	
7582			10.6	176	9.6	9.7	
7584			10.6	176	9.2	10.5	
7586			10.6	175	9.0	10.4	
7588			10.6	175	9.0	10.3	
7590			10.6	178	9.0	10.6	
7592			10.6	179	8.9	10.4	
7594			10.6	178	9.0	10.1	
7596			10.6	179	8.9	10.2	
7598			10.5	180	8.9	10.2	
7600			10.4	180	9.0	9.8	
7602			10.3	180	9.0	9.9	
7604			10.2	179	9.0	10.2	
7606			10.2	178	8.9	10.1	
7608			10.1	178	9.0	9.9	
7610			10.0	178	9.1	9.8	
7612			10.0	177	9.1	9.9	
7614			10.0	176	9.1	9.7	
7616	59.7	135	10.0	175	9.2	9.5	B
7618			10.1	176	9.4	9.5	
7620			10.1	177	9.5	9.5	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7462	74.6	360	12.2	175	10.3	8.9	D
7464	88.0	178	12.2	174	10.3	9.0	D
7466			12.1	174	10.5	9.1	
7468			12.1	173	10.4	9.1	
7470			12.2	173	10.2	9.2	
7472	84.9	355	12.2	174	10.4	9.2	B
7474			12.2	175	10.6	9.0	
7476			12.2	173	11.0	9.1	
7478			12.1	173	11.0	9.2	
7480			12.1	174	11.1	9.3	
7482			12.2	174	12.0	9.3	
7484			12.2	174	11.4	9.3	
7486			12.2	174	9.9	9.3	
7488			12.2	174	9.4	9.3	
7490			12.1	175	9.4	9.2	
7492			12.1	174	9.5	9.2	
7494			12.0	174	9.5	9.1	
7496			12.0	174	9.8	9.1	
7498			11.9	174	9.9	9.1	
7500			11.8	174	9.7	9.1	
7502			11.8	175	9.9	9.2	
7504			11.7	176	10.2	9.1	
7506			11.6	175	10.1	9.0	
7508			11.6	174	10.0	9.1	
7510			11.6	174	10.7	9.1	
7512			11.6	174	10.9	9.1	
7514			11.6	175	11.0	9.1	
7516			11.6	175	11.2	9.1	
7518			11.6	175	11.0	9.1	
7520			11.5	174	10.3	9.1	
7522			11.5	176	9.8	9.2	
7524			11.4	177	10.1	9.2	
7526			11.4	176	10.1	9.2	
7528			11.4	177	10.2	9.2	
7530			11.4	177	10.3	8.9	
7532			11.4	177	10.0	8.6	
7534			11.4	178	10.0	8.5	
7536			11.5	177	10.2	8.5	
7538			11.5	175	10.4	8.3	
7540			11.4	177	10.8	8.3	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7382			12.8	174	9.9	9.3	
7384			12.8	175	9.8	9.2	
7386			12.8	175	9.4	9.2	
7388			12.9	175	9.3	9.2	
7390	75.5	288	13.0	175	9.3	9.4	D
7392	66.0	289	13.0	175	9.2	9.6	D
7394			13.0	174	9.1	10.0	
7396			13.0	174	9.2	10.2	
7398			13.0	174	9.2	10.4	
7400			12.9	172	9.2	10.1	
7402			12.8	171	9.2	9.9	
7404			12.8	173	9.1	10.1	
7406			12.8	172	8.8	10.5	
7408	79.8	68	12.8	172	8.9	10.5	D
7410	77.8	69	12.8	174	9.2	9.7	D
7412			12.7	173	9.3	9.3	
7414	81.7	28	12.7	172	9.2	9.1	D
7416			12.6	173	9.2	9.1	
7418	84.0	26	12.6	174	9.1	9.5	D
7420			12.5	172	9.1	9.4	
7422			12.5	172	9.3	9.2	
7424			12.4	172	9.5	9.3	
7426			12.4	171	9.3	9.2	
7428			12.4	172	9.3	9.1	
7430			12.4	173	9.4	9.1	
7432			12.4	174	9.5	9.1	
7434			12.4	172	9.6	9.1	
7436			12.4	172	9.5	9.1	
7438	62.8	297	12.4	175	9.3	9.4	D
7440			12.4	177	9.2	9.8	
7442			12.4	175	9.1	10.4	
7444	69.0	299	12.4	175	9.0	10.8	D
7446			12.4	176	9.1	10.5	
7448	78.0	45	12.4	175	9.1	10.4	B
7450			12.4	174	9.1	10.2	
7452	66.9	241	12.4	173	9.2	9.6	B
7454	81.7	357	12.4	173	9.2	9.3	B
7456	86.9	354	12.3	173	9.4	9.3	D
7458			12.2	175	9.8	9.0	
7460			12.2	176	10.0	8.9	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7302			13.5	176	9.5	9.1	
7304			13.4	176	9.4	9.2	
7306			13.4	177	9.4	9.2	
7308			13.4	177	9.4	9.2	
7310			13.4	175	9.3	9.2	
7312			13.4	174	9.3	9.3	
7314			13.4	175	9.2	9.6	
7316			13.4	176	9.0	9.5	
7318			13.4	177	9.1	9.2	
7320			13.3	176	9.3	9.0	
7322			13.2	175	9.2	9.0	
7324			13.2	175	9.2	9.2	
7326			13.1	174	9.5	9.2	
7328			13.1	175	10.0	9.0	
7330			13.1	175	10.1	8.9	
7332			13.1	174	9.6	9.0	
7334			13.1	175	9.2	9.0	
7336			13.1	175	9.4	9.0	
7338			13.2	175	9.4	9.2	
7340			13.2	175	9.2	9.4	
7342			13.2	176	9.2	9.4	
7344	88.0	19	13.2	175	9.4	9.3	D
7346	88.7	197	13.2	174	9.7	9.3	D
7348			13.2	176	10.3	9.2	
7350			13.1	177	10.2	9.1	
7352			13.1	175	10.2	9.1	
7354			13.0	174	10.9	9.2	
7356			13.0	175	10.7	9.3	
7358			13.0	176	10.4	9.3	
7360			13.0	175	10.5	9.3	
7362			13.0	175	10.5	9.2	
7364	56.9	219	12.9	175	10.4	9.2	B
7366	61.4	216	12.8	174	10.7	9.2	D
7368			12.8	174	10.8	9.2	
7370	59.4	220	12.8	174	10.5	9.0	D
7372			12.8	174	10.3	9.0	
7374	69.3	284	12.8	175	10.4	9.3	D
7376			12.7	176	10.4	9.2	
7378	67.3	289	12.7	176	10.2	9.2	D
7380	72.8	284	12.8	175	9.9	9.3	D

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7222			14.4	177	9.5	9.2	
7224			14.4	178	9.5	9.2	
7226			14.5	178	9.5	9.5	
7228			14.5	178	9.6	9.7	
7230			14.4	178	9.6	9.3	
7232			14.3	176	9.5	9.3	
7234			14.2	175	9.7	9.8	
7236			14.2	175	10.0	9.6	
7238			14.2	176	9.8	9.2	
7240			14.2	176	9.4	9.3	
7242			14.2	175	9.3	9.5	
7244			14.2	175	9.5	9.3	
7246			14.1	177	9.6	9.2	
7248			14.0	175	9.4	9.2	
7250			14.0	174	9.4	9.4	
7252			14.0	174	9.3	9.5	
7254			14.0	173	9.3	9.4	
7256			14.0	174	9.5	9.2	
7258			14.0	176	9.6	9.1	
7260			13.9	176	9.5	9.1	
7262			13.8	174	9.3	9.3	
7264			13.8	175	9.3	9.7	
7266			13.8	175	9.2	9.7	
7268			13.7	174	9.2	9.5	
7270			13.7	173	9.3	9.2	
7272			13.8	173	9.3	9.3	
7274			13.8	173	9.6	9.3	
7276			13.8	173	9.9	9.2	
7278			13.8	172	10.4	9.1	
7280			13.8	174	10.2	9.1	
7282			13.8	175	9.9	9.2	
7284			13.8	174	9.9	9.3	
7286			13.8	174	9.9	9.3	
7288			13.8	175	9.8	9.4	
7290			13.7	176	9.6	9.3	
7292			13.6	175	9.6	9.2	
7294			13.6	173	9.5	9.2	
7296			13.6	173	9.3	9.2	
7298			13.6	174	9.2	9.1	
7300			13.5	175	9.3	9.0	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7142			14.6	176	9.5	9.1	
7144			14.6	176	9.6	9.0	
7146			14.7	178	9.8	9.0	
7148			14.8	178	9.8	9.1	
7150			14.8	176	9.7	9.2	
7152			14.8	177	9.7	9.3	
7154			14.8	178	9.7	9.2	
7156			14.8	178	9.7	9.1	
7158			14.8	177	9.7	9.0	
7160			14.8	177	9.6	8.9	
7162			14.8	177	9.7	9.0	
7164			14.9	175	9.7	9.1	
7166			14.9	174	9.4	9.2	
7168			14.8	176	9.2	9.5	
7170			14.8	176	9.2	9.7	
7172			14.9	175	9.2	9.7	
7174			15.0	177	9.4	9.6	
7176			15.0	178	9.4	9.6	
7178			15.0	176	9.4	9.7	
7180			14.9	177	9.3	9.7	
7182			14.8	178	9.2	9.6	
7184			14.8	178	9.3	9.7	
7186			14.8	177	9.6	10.0	
7188			14.8	178	9.8	10.1	
7190			14.8	179	9.6	9.7	
7192			14.8	177	9.4	9.5	
7194			14.8	177	9.2	9.5	
7196			14.8	177	9.2	9.7	
7198			14.8	178	9.4	9.7	
7200			14.7	176	9.4	9.6	
7202			14.7	176	9.4	9.7	
7204			14.7	178	9.3	9.5	
7206			14.6	176	9.3	9.5	
7208			14.6	174	9.2	9.9	
7210			14.6	172	9.5	9.9	
7212			14.6	173	9.9	9.7	
7214			14.6	174	9.6	9.6	
7216			14.6	174	9.3	9.4	
7218			14.5	176	9.4	9.2	
7220			14.4	176	9.4	9.2	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7062			14.0	174	9.8	9.2	
7064			14.0	174	9.6	9.3	
7066			14.0	174	9.9	9.4	
7068			14.0	175	10.3	9.5	
7070			14.1	174	10.3	9.5	
7072			14.1	174	10.2	9.6	
7074			14.2	175	9.8	9.8	
7076			14.1	175	9.2	9.9	
7078			14.0	175	9.1	9.9	
7080			14.0	175	9.0	9.9	
7082			14.0	174	9.0	10.0	
7084			14.1	176	9.0	10.0	
7086			14.2	177	9.0	9.9	
7088			14.2	175	9.1	9.9	
7090			14.2	175	9.0	10.0	
7092			14.2	176	9.0	10.0	
7094			14.2	177	9.1	10.1	
7096			14.2	176	9.2	10.1	
7098			14.2	175	9.3	10.0	
7100			14.2	174	9.3	10.0	
7102			14.2	174	9.2	10.0	
7104			14.2	176	9.1	9.9	
7106			14.2	175	9.1	9.9	
7108			14.2	175	9.2	10.0	
7110			14.2	176	9.2	10.1	
7112			14.2	175	9.3	10.1	
7114			14.3	174	9.5	9.8	
7116			14.4	175	9.5	9.6	
7118			14.4	177	9.6	9.3	
7120			14.5	178	9.5	9.3	
7122			14.6	178	9.5	9.2	
7124			14.6	178	9.6	9.2	
7126			14.6	177	9.7	9.2	
7128			14.6	177	9.8	9.4	
7130			14.6	177	9.7	9.6	
7132			14.6	177	9.8	9.6	
7134			14.7	177	9.8	9.6	
7136			14.6	177	9.7	9.6	
7138			14.6	176	9.7	9.2	
7140			14.6	175	9.6	9.1	

DIVISION OF OIL AND GAS
RECEIVED
MAR 26 1981
SANTA PAULA, CALIFORNIA

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
6982			13.8	175	9.2	9.6	
6984	59.7	132	13.8	175	9.3	9.6	D
6986	59.0	137	13.8	176	9.4	9.5	D
6988			13.8	176	9.8	9.5	
6990			13.8	175	10.4	9.6	
6992			13.8	176	10.6	9.6	
6994			13.8	176	10.5	9.6	
6996			13.8	177	10.4	9.4	
6998			13.8	177	10.3	9.4	
7000			13.8	177	10.3	9.5	
7002			13.8	175	10.1	9.5	
7004			13.8	174	9.8	9.6	
7006			13.9	175	9.7	9.6	
7008			13.9	177	10.0	9.6	
7010			13.9	177	10.2	9.6	
7012			14.0	175	9.9	9.6	
7014			14.0	175	9.6	9.4	
7016			14.0	175	9.7	9.4	
7018			13.9	175	10.3	9.1	
7020			14.0	175	10.5	9.0	
7022			14.0	176	10.1	9.2	
7024			14.0	176	9.6	9.4	
7026			14.0	176	9.3	9.5	
7028			14.0	176	9.4	9.5	
7030			14.0	176	9.5	9.5	
7032			14.0	175	9.8	9.5	
7034			14.0	174	9.6	9.5	
7036			14.0	175	9.3	9.6	
7038			14.0	176	9.2	10.3	
7040			14.0	177	9.2	11.0	
7042			14.0	177	9.2	11.1	
7044			14.0	175	9.2	10.6	
7046			14.0	175	9.5	9.7	
7048			14.0	176	9.7	9.3	
7050			14.0	175	9.7	9.2	
7052			14.0	175	9.8	9.1	
7054			14.1	175	9.8	9.0	
7056			14.1	175	9.8	9.0	
7058			14.0	175	9.8	9.1	
7060			14.0	174	9.9	9.1	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV.	DIAM 1-3	DIAM 2-4	QUAL INDEX REST
6912			13.4	173	9.6	9.9	
6914			13.4	172	9.1	9.0	
6906			13.5	172	9.4	9.0	
6908			13.5	172	9.5	9.0	
6910			13.5	172	9.5	9.0	
6912			13.5	172	9.5	9.0	
6914			13.5	172	9.5	9.1	
6916			13.6	172	9.6	9.1	
6918			13.6	174	9.7	9.1	
6920			13.6	175	9.7	9.0	
6922			13.6	175	9.7	9.0	
6924			13.6	175	9.5	9.0	
6926			13.5	175	9.1	9.0	
6928			13.6	175	9.0	9.0	
6930			13.5	176	9.1	9.2	
6932			13.5	174	9.3	9.2	
6934			13.6	175	9.3	9.2	
6936							
6938							
6940	58.8	115	13.6	177	9.2	9.1	
6942			13.6	175	9.4	9.9	
6944			13.6	176	9.3	10.0	
6946			13.6	173	9.4	10.5	
6948			13.6	173	9.6	10.6	
6950			13.6	173	9.5	10.0	
6952	58.8	115	13.6	173	9.4	10.1	D
6954	63.0	260	13.6	174	9.3	10.1	D
6956	66.4	256	13.5	174	9.2	9.9	D
6958	55.2	255	13.6	175	9.1	9.7	D
6960			13.6	175	9.1	9.8	
6962			13.7	176	9.1	9.8	
6964			13.8	175	9.3	9.8	
6966			13.8	175	9.1	9.7	
6968	58.5	196	13.8	175	9.1	9.7	D
6970			13.8	175	9.5	9.6	
6972			13.8	175	9.5	9.5	
6974			13.8	176	9.2	9.5	
6976	59.6	138	13.8	176	9.1	9.6	D
6978	52.3	138	13.9	175	9.1	9.6	D
6980	53.9	133	13.9	175	9.1	9.7	B

****
* SCHLUMBERGER *
****

HIGH RESOLUTION

DIPMETER

****

CLUSTER LISTING
****

DIVISION OF OIL AND GAS
RECEIVED
MAR 26 1981
SANTA PAULA, CALIFORNIA

ARCO PETROLEUM CO.

OJAI

VENTURA , CALIFORNIA

~~BARKER~~-FERNDALE #8RD 111-20732-01

RUN NO. TWO JOB NO. 4774

CLUSTER RESULTS ONLY 16-4N-21W

4FT. CORR. - 2 FT. STEP

70 DEG. X1 SEARCH ANGLE

FORM OG111

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 280-423

REPORT ON PROPOSED OPERATIONS

520 (field code)
12 (area code)

Old Pool: 10 New 10 (pool code)

Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, CA 90024

Santa Paula, California
Dec. 8, 1980

Your proposal to plugging to suspend well "Ferndale" 8,
A.P.I. No. 111-20732, Section 16, T. 4N, R. 21W, S.B. B. & M.,
Ojai field, Silverthread area, Miocene pool,
Ventura County, dated 11/25/80, received 11/28/80 has been examined in conjunction with records filed in this office.

THE PROPOSAL, COVERING SUSPENDING OPERATIONS IS APPROVED ACCORDING TO PRIOR AGREEMENT.

Blanket Bond
MD:b

M. G. MEFFERD, State Oil and Gas Supervisor

By John L. Hardoin
John L. Hardoin, Deputy Supervisor

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS
RECEIVED
NOV 28 1980
SANTA PAULA, CALIFORNIA

DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
bb	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well No. Ferndale #8 R/D, API No. 111-20732, Sec. 16, T. 4N, R. 21W, S.B. B. & M., Wildcat Field, Ventura County.

The present condition of the well is as follows:

1. Total depth.
   7644'

2. Complete casing record, including plugs and perforations:

   119', 13 3/8", 48#, H-40, ST&C. 150 cf
   1160', 9 5/8", 36#, K-55, ST&C. 550 cf

3. Present producing zone name - Zone in which well is to be recompleted -

4. Present zone pressure - New zone pressure -

5. Last produced - (Date) _____ (Oil, B/D) _____ (Water, B/D) _____ (Gas, Mcf/D)

   or

6. Last injected - (Date) _____ (Water, B/D) _____ (Gas, Mcf) _____ (Surface pressure, psig.)

The proposed work is as follows:

1. Plug from 1210' to 1110'. T.O.C. witnessed by D.O.G.
2. Remove BOPS and install plate on top of wellhead.
3. Release rig.
4. Suspend well.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 940 E. Santa Clara (Street)
Ventura (City) CA. (State) 93001 (Zip)
Telephone Number (805) 648-2514

Argo Petroleum Corporation (Name of Operator)
By Harry Hall (Name) 11-25-80 (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

FORM OG111

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 280-432

REPORT ON PROPOSED OPERATIONS

520 (field code)
12 (area code)
10 (pool code)

Mr. Jack D. Jones, Agent
ARCO Oil and Gas Company
P.O. Box 147
Bakersfield, CA 93302

Santa Paula, California
Dec. 8, 1980

Your supp proposal to drill well "Ferndale" 8,
A.P.I. No. 111-20732, Section 16, T. 4N, R. 21W, S.B. B. & M.,
Ojai field, Silverthread area, Miocene pool,
Ventura County, dated 11/25/80, received 11/28/80 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT IN ALL OTHER RESPECTS THE PROVISIONS SET FORTH IN OUR REPORT NO.P280-242 DATED AUG. 1, 1980 SHALL APPLY.

Blanket Bond
MD:b

M. G. MEFFERD, State Oil and Gas Supervisor

By John L. Hardoin, Deputy Supervisor

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

DIVISION OF OIL AND GAS
RECEIVED
NOV 28 1980
SANTA PAULA, CALIFORNIA

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

SUPPLEMENTARY NOTICE

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
bb	—	✓

DIVISION OF OIL AND GAS

Santa Paula Calif.

A notice to you dated July 23, 19 80, stating the intention to

Drill (Drill, rework, abandon), Well No. Ferndale #8, API No. 111-20732,

Sec. 16, T. 4N, R. 21W, S.B. B. & M., Wildcat Field,

Ventura County, should be amended because of changed conditions.

The present condition of the well is as follows:

Total depth 10,135'

Complete casing record including plugs and perforations:

119', 13 3/8", 48#, H-40, ST&C. 150 cf

1160', 9 5/8", 36#, K-55, ST&C. 550 cf

We now propose

1. Plug well to 3200'.
2. Redrill to a bottom hole location 1500' south at a depth of 7700'.
3. Run 5 1/2" casing and complete.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 940 E. Santa Clara (Street)

Ventura (City) CA. (State) 93001 (Zip)

Telephone Number (805) 648-2514

Argo Petroleum Corporation (Name of Operator)

By Harry Hull (Name) 11-25-80 (Date)

Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

No. T 280-294

DIVISION OF OIL AND GAS

Report on Operations

Dr. Morris S. Feuttel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1603
Los Angeles, CA 90024

Santa Paula, Calif.
Nov. 25, 1980

Your operations at well "Ferndale" 8, API No. 111-20732, Sec. 16, T. 4N R. 21W S.B., B.& M. Ojai Field, in Ventura County, were witnessed on 11/22/80. M. Hickey, representative of the supervisor, was present from 0930 to 1030. There were also present F. D. Nerehen, Toolpusher

Present condition of well: 13 3/8" cem 119'; 9 5/8" cem 1160'; T.D. 7644'; plug with cement 1215-1045'. original hole T.D. 10,135'.

The operations were performed for the purpose of abandoning the well

DECISION:

THE LOCATION AND HARDNESS OF THE CEMENT PLUG AT 1045' IS APPROVED.

b

M. G. MEFFERD
State Oil and Gas Supervisor

By John L. Hardoin
Deputy Supervisor

John L. Hardoin

OG109 (6-77-GSRI-15M)

FORM OG111

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 280-242

REPORT ON PROPOSED OPERATIONS

520 (field code)
12 (area code)
10 (pool code)

Dr. Morris S. Frankel, Agent
~~Argo Petroleum Corporation~~
~~10880 Wilshire Blvd., Suite 1003~~
~~Los Angeles, CA 90024~~

Santa Paula, California
Aug. 1, 1980

Your proposal to drill well "Ferndale" 8,
A.P.I. No. 111-20732, Section 16, T. 4N, R. 21W, S.B. B. & M.,
Ojai field, Silverthread area, Miocene pool,
Ventura County, dated 7/23/80, received 7/25/80 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. A 13 5/8" casing shall be cemented at 80', with sufficient cement to fill behind the casing to the surface.
2. Sufficient cement shall be pumped back of the 9 5/8" casing to fill to the surface.
3. Unlined sumps, if they contain harmful waters, shall not be located over fresh water bearing aquifers.
4. Any sump used during these operations shall be thoroughly cleaned and filled with earth as soon as operations are completed.
5. A diverter system shall be installed on the 13 5/8" casing, and blowout prevention equipment of at least DOG Class III 2M B on the 9 5/8" casing and Class III 5 M B on the 5 1/2" casing and maintained in operating condition at all times.
6. This office shall be consulted before placing any plugs or sidetracking any hole.
7. THIS DIVISION SHALL BE NOTIFIED TO WITNESS:
   a. A pressure test of the blowout prevention equipment before drilling below 1100'.
   b. A test of the 5 1/2" shut-off above the zone to be produced.

Melchau ph 8/13/80 13" will be cem at 100', well head & 2-2" lines will be used for diverter system.

Blanket Bond
MD:b

11/21/80 TD 7644' (L. Miocene), 9⅝" Cem 1160', mud logger indicated no sds, running Shale, no tests, SWS for pulse only. to suspend P/C 1210 - 1110' DOG witness top, No fresh waters, will file Notice

M. G. MEFFERD, State Oil and Gas Supervisor

By John L. Hardoin
John L. Hardoin, Deputy Supervisor

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

DIVISION OF OIL AND GAS
RECEIVED
JUL 25 1980
SANTA PAULA, CALIFORNIA

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Notice of Intention to Drill New Well

C.E.Q.A. INFORMATION			
EXEMPT ☐ CLASS ____	NEG. DEC. ☐ S.C.H. NO. ____	E.I.R. ☒ S.C.H. NO. 78042424	DOCUMENT NOT REQUIRED BY LOCAL JURISDICTION ☐
See Reverse Side			

FOR DIVISION USE ONLY					
MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121
203	3 2 F2	✓	66	✓	✓

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to commence drilling well Ferndale #8, API No. 111-20732 (Assigned by Division),

Sec. 16, T. 4N, R. 21W, ____ B. & M., Wildcat Field, Ventura County.

Legal description of mineral-right lease, consisting of ____ acres, is as follows: ____ (Attach map or plat to scale)

Previously Submitted

Do mineral and surface leases coincide? Yes X No ____ If answer is no, attach legal description of both surface and mineral leases, and map or plat to scale.

Location of well 2755.17S (~~2840~~) feet South (Direction) along section/~~property~~ line (Cross out one) and 4064.65E (~~4000~~) feet East (Direction)

at right angles to said line from the Northwest corner of section/~~property~~ 16 (Cross out one) or

Is this a critical well according to the definition on the reverse side of this form? Yes ☐ No ☒

If well is to be directionally drilled, show proposed coordinates (from surface location) at total depth: Straight Hole feet (Direction) and ____ feet (Direction)

Elevation of ground above sea level 1200 feet.

All depth measurements taken from top of KB (Derrick Floor, Rotary Table, or Kelly Bushing) that is 18 feet above ground.

7/30/80 MD - D Burgess

PROPOSED CASING PROGRAM

SIZE OF CASING INCHES API	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS	CALCULATED FILL BEHIND CASING
* 13 3/8 9 5/8"	32#30#	H-40	Sue Surface	80' 1100'	80' 1100'	Surface Surface
5½"	17#	N-80	Surface	10,200'	10,200'	(Est. TOC @ 8000') 2200' fill

(A complete drilling program is preferred and may be submitted in lieu of the above program.)

Intended zone(s) of completion Miocene, 9000', 3870 psi (Name, depth, and expected pressure) Estimated total depth 10,200

It is understood that if changes in this plan become necessary we are to notify you immediately.

Name of Operator	Type of Organization (Corporation, Partnership, Individual, etc.)	
Argo Petroleum Corp.	Corp.	
Address	**City**	**Zip Code**
940 E. Santa Clara	Ventura	93001
Telephone Number / **Name of Person Filing Notice**	**Signature**	**Date**
642-2514 / Harry E. Hull	Harry C. Hull	7-23-80

This notice and indemnity or cash bond shall be filed, and approval given, before drilling begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

OG105 (10-78-GSRI-10M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

REPORT OF CORRECTION OR CANCELLATION

Santa Paula, California

Feb. 27, 1978

Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, CA. 90024

In accordance with Section 3203, Division 3, PRC. which requires that proposed operations commence within one year

the following change pertaining to your well "Ferndale" 8,

Ojai field, Ventura County,

Sec. 16, T. 4N, R. 21W, S.B. B. & M., is being made in our records:

☐ The corrected location is

☐ The corrected elevation is

☐ Report No. , dated , has been corrected as follows:

☒ Your notice to drill (Drill, abandon, etc.) dated Dec. 29, 1976, and our report No. P 277-29, issued in answer thereto, are hereby cancelled inasmuch as the work will not be done. If you have a drilling bond on file covering this notice it will be returned. No request for such return is necessary.

☐ Other:

MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121
203	4-8-16 (W)				✓

State Oil and Gas Supervisor

By John L. Hardoin
Deputy Supervisor John L. Hardoin

OG 165 (1-77-GSRI-3M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 277- 29

Mr. Dr. Morris S. Frankel, Agent
Argo Petroleum Corporation
10880 Wilshire Blvd., Suite 1003
Los Angeles, California 90024

Santa Paula, Calif.
Jan. 11, 1977

DEAR SIR:

Your proposal to drill Well No. (111-20732) "Ferndale" 8,
Section 16, T. 4N, R. 21W S.B. B. & M., Ojai Field, Ventura County,
dated 12/29/76, received 12/30/76, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT

1. Sufficient cement shall be pumped back of the 9 5/8" casing to fill from the shoe to the surface.
2. The drilling fluid used shall be of a quality and in sufficient quantity to control all subsurface conditions in order to prevent blowouts; and a reserve supply of this material shall be kept on hand to meet any emergency. No contaminants or toxic material shall be used in any drilling fluid that is to be placed in an unlined sump.
3. Constant surveillance of drilling fluid characteristics and volume shall be maintained by drilling personnel, and by the use of return monitoring equipment and a mud pit level indicator with a visual and audible alarm device.
4. Any sump used during drilling operations shall be thoroughly cleaned of all drilling materials and the site restored to its prior condition as soon as drilling operations are completed.
5. Blowout prevention equipment, at least of the Division of Oil and Gas Class III rating, shall be installed and maintained in operating condition at all times.
6. Blowout-prevention practice drills shall be conducted at least weekly for each crew, and recorded in the log book.
7. Blowout prevention equipment of at least 5000 psi working pressure shall be installed and maintained in operating conditions during sand-pack operations.
8. This Division shall be consulted before placing any plugs or sidetracking any hole.
9. THIS DIVISION SHALL BE NOTIFIED TO WITNESS:
   a. A pressure test of the blowout prevention equipment before drilling out of the shoe of the 9 5/8" casing.
   b. A production test within 30 days after the sand-pack oil has been recovered.

NOTE: A COPY OF THIS APPROVED NOTICE MUST BE POSTED AT THE WELL SITE PRIOR TO COMMENCING OPERATIONS.

Blanket Bond
MD:B

M. G. MEFFERD (acting)
~~JOHN F. MATTHEWS, JR.~~ State Oil and Gas Supervisor

By _____, Deputy

OG 111

20732

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS RECEIVED
DEC 30 1976
SANTA BARBARA, CALIFORNIA

111-20732

DIVISION OF OIL AND GAS
Notice of Intention to Drill New Well

This notice and indemnity or cash bond shall be filed, and approval given, before drilling begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY					
MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121
203	1-8-77 (M)	✓	B B	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to commence drilling well No. FERNDALE #8, API No. _____ (Assigned by Division)

Sec. 16, T. 4N, R. 21W, S.B. B. & M., Silverthread Field, Ventura County.

Legal description of mineral-right lease, consisting of _____ acres, is as follows: _____ (Attach map or plat to scale)

Previously Submitted

Do mineral and surface leases coincide? Yes X No _____ If answer is no, attach legal description of both surface and mineral leases, and map or plat to scale.

Location of well 4230 feet east (Direction) along property section line and 830 feet south (Direction)

at right angles to said line from the northwest corner of section 16 or

If well is to be directionally drilled, show proposed coordinates at total depth 450' N60°W

Elevation of ground above sea level 1425 feet.

All depth measurements taken from top of KB (Derrick Floor, Rotary Table or Kelly Bushing) which is 12 feet above ground.

PROPOSED CASING PROGRAM

SIZE OF CASING INCHES A.P.I.	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS	CALCULATED FILL BEHIND CASING
9 5/8"	36#	K-55	0	800	800	Surface
5 1/2"	17#	K-55	0	7500	7500	2500

(A complete drilling program is preferred and may be submitted in lieu of the above program)

Intended zone(s) of completion Miocene Sands (Name, depth and expected pressure) Estimated total depth 7500

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 940 East Santa Clara (Street)
Ventura, California 93001 (City) (State) (Zip)

Telephone Number (805) 648-2514

ARGO PETROLEUM CORPORATION (Name of Operator)

By Ralph P. Cahill (Name) 12/29/76 (Date)

Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

CHECK LIST-RECORDS RECEIVED AND WELL STATUS

Operator: **Vintage Production California LLC** WELL DESIGNATION **"Valex-Ferndale" 107**

API No. **11121066** SE **16** T: **4N** R.: **21W** , **SB** B. and M.

County: **Ventura** FIELD: **Ojai**

Type of Notice: **Rework** **Date** **5/9/2014** **Report Number:** **P214-0147**

RECORDS RECEIVED (ATTACH PAGES IF REQUIRED)

	Date	OK	NEED	Remarks
Well Summary (OG100)				
History (OG103)	1-26-15	✓		
E-Log				
Mud Log				
Dipmeter				
Directional				
Core and/or SWS				

NEW STATUS

DATE: _____

NOTICE OF RECORDS DUE

DATE: _____

DATE: _____

DATE: _____

DATE: _____

WELL STATUS INQUIRY

DATE: _____

DATE: _____

Well Stat

Change Required: _____

Change Done: _____

ABANDONMENTS/REABANDONMENTS/DRILLS/REDRILLS

CalWims Abandonment Form: _____ SURFACE INSPECTION NEEDED _____ COMPLETED _____
Date and Inspector

FINAL LETTER NEEDED _____ COMPLETED _____ Calwims DRILL/REDRILL Form _____
(Date)

ENGINEER'S CHECK LIST

T-REPORT(S) _____ OPERATOR'S NAME _____ WELL DESIGNATION _____ SIGNATURE _____

Calwims Location _____ Calwims ELEVATION: _____ CONFIDENTIAL RELEASE DATE: _____ PERMIT REQUIREMENTS MET _____

CLERICAL CHECK LIST

LOCATION CHANGE (OG165) _____ ELEVATION CHANGE (OG165) _____ RELEASE OF BOND (OG150) _____

REMARKS

RECORDS SCANNED: _____
(Date)

RECORDS APPROVED: 2-13-2015 BH
(Date and Engineer)

Modified OGD2

AOR Datbase _____

SUBMIT IN DUPLICATE
RESOURCES AGENCY OF CALIFORNIA
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES

Rec'd 01-26-15 DOGGR D2 Ventura

HISTORY OF OIL OR GAS WELL

Operator: Vintage Production California LLC **Field:** OJAI **County:** VENTURA
Well: FERNDALE VF 107 **Sec:** 16 **T:** 4N **R:** 21W **M.D.B. & M.**

API#: 04-111-21066 **Name:** Deborah Young for Denny Brown (Person submitting report) **Title:** Agent (President, Secretary, or Agent)

Signature: [signature] **Date** 12/22/2014

9600 Ming Ave., Suite 300, Bakersfield, CA. 93311 (Address) (661) 869-8000 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items such as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, and initial production data.

Rework History

Work Type	Primary Reason	Secondary Reason	Start Date	End Date
RECOMPLETION	ADD PAY NEW ZONE	PERF	08/12/2014	08/26/2014

8/11/2014 @06:00 **08/12/2014** @06:00

Discussed planned operations and filled out required permits.

Spot equipment and rig up CTU.

Tubing Pressure= N/A
Casing Pressure= 100psi
Bleed well into Adler tank.

Spot tanks. Hook up hard lines from well to tank. Rigged up CTU to wellhead.

Pressure test wellhead low 200 psi. Pressure test wellhead high 500 psi. Pressure test treating iron 5000 psi.

Ran in hole with CT. Started pumping at .2 bbl/pm. Pump rate was 0.5 bpm. Pull test. Continued to RIH with CT. Increased pump rate to 1.5 bpm. Tagged with CT at 7570'. Ernie Blevins with DOGGR waived tag and OK'd it. Pulled out of hole with CT. Closed and secured well.

8/12/2014 @06:00 **08/13/2014** @06:00

Shut down for the night.

Discuss planned operations and fill out required permits.

Run in hole with Coil Tubing. Unable to go inside liner. Attempt for a while but were unable to go inside liner. Coil Tubing Nozzle vent so couldn't go in. Pulled out the hole with Coil Tubing. Rig up Knuckle Joint and BOT Nozzle. Run in hole with new Coil Nozzle and Coil Tubing. Got inside liner with no problem and tagged at 7550'. Pumped 45 bbls of Class G Cement + additives at 1.2 bbls per minute. Started pulling Coil Tubing at about 50' - 75' displacing cement. Top of cement should be at 5650'. Pulled out the hole displacing cement in Coil Tubing. Pulled out the hole with Coil Tubing. Rigged down CTU. Close and secure well.

Shut down for the night.

8/13/2014 @06:00 **08/14/2014** @06:00

Shut down for the night.

Discuss planned operations and fill out required permits.

Run in hole with Coil Tubing and tagged top of cement at 5312'. Pulled out the hole and Rigged down CTU.

Work Over Rig Broke Down.

Shut down for the night.

8/14/2014 @06:00 **08/15/2014** @06:00

Discuss planned operations and fill out required permits.

LOTO & TRY.

Rigged up Work Over Rig.

Held safety meeting with stinger operator and swamper to discuss hazards and precautions associated with spotting mud pump, cutting bin, pipe wrangler and racks. Also discussed unloading new tubing onto pipe racks. Spotted mud pump onto location. Placed cutting bin under shaker. Spotted pipe wrangler into position. Unloaded and spotted pipe racks. Unloaded 200 new J-55 joints onto pipe racks. Spotted stinger off of location.

Nippled down top flange. Nippled up crossover spool, double gate BOPE and circulating cage. Hooked up BOPE hoses. Rigged up working floor and tubing equipment.

HISTORY OF OIL OR GAS WELL

Operator: Vintage Production California LLC **Field:** OJAI **County:** VENTURA
Well: FERNDALE VF 107 **Sec:** 16 **T:** 4N **R:** 21W **M.D.B. & M.**

Tubing pressure = N/A
Casing Pressure = 0 psi
Accumulator Pre-charge pressure = 1000 psi
Initial Accumulator pressure = 3000 psi
Manifold Pressure = 1500 psi
Annular pressure = No Annular.
Time to Close Pipe Rams = 6 sec
Time to open Pipe rams = 6 sec
Time to close Annular Bop = No Annular
Final Accumulator Pressure = 2400 psi
Function test Bope =Good

Crew Lunch.

Rigged up mud pump hoses from well bore and stand pipe to pump. Rigged up suction hose from pump to Adler tank. Hooked up hard lines from well bore to Adler tank.

Held safety meeting with wrangler operator to discuss hazards and precautions associated with picking up tubing using pipe wrangler. Prepped and measured new tubing. Made up 6-1/8" bit and bit sub. Proceeded to pick up tubing using wrangler and run in the hole. Ran 100 joints. Prepped and measured next tier of 100 joints. Continued to run in the hole. Picked up 30 more joints. Tubing tail @ 4055'. Close and secure well.

Shut down for the night.

8/15/2014 @06:00 **08/16/2014** @06:00

Shut down for the night.

Discuss planned operations and fill out required permits. Update LOTO.

Tubing pressure = 0 psi
Casing Pressure = 0 psi
Accumulator Pre-charge pressure = 1000 psi
Initial Accumulator pressure = 3000 psi
Manifold Pressure = 1500 psi
Annular pressure = No Annular.
Time to Close Pipe Rams = 6 sec
Time to open Pipe rams = 6 sec
Time to close Annular Bop = No Annular
Final Accumulator Pressure = 2400 psi
Function test Bope =Good

Held safety meeting with wrangler operator to discuss hazards and precautions associated with picking up tubing with wrangler. Proceeded to pick up tubing and run in the hole. Singled out blocks. Continued picking up new tubing. Tagged the top of the cement @ 5313'.Stripped off stripping cage. Stripped on circulating rubber and cap. Spotted swivel next to working floor. Picked up swivel and installed stiff arm and safety slings. Connected stiff arm to dead line. Made a connection with swivel. Established circulation with mud pump. Well bore took 18 barrels of lease water to fill. Began drilling out cement with swivel while reverse circulating with the mud pump. Continued drilling out cement and making connections with power swivel. Made a total of 9
connections. Drilled out 285' of cement. Drill bit is at 5598'. Reverse circulated well bore clean. Close and secure well.

Shut down for the night.

8/16/2014 @06:00 **08/17/2014** @06:00

Shut down for the night.

Discuss planned operations and fill out required permits. Update LOTO.

Pick up (1) joint of 2-7/8" J-55 6.5# EUE 8rd tubing, break circulation at 5598', pumping lease water at 3 bbls a min at 300 psi taking returns over shaker. Continue to drill out
cement from 5598' to 5629', WOB 4K, RPMS 68, taking cement cuttings over shaker.

Turn hole over pumping the short way with 35 bbls of lease water at 3.0 bbls a min at 300 psi. Install gauge and casing and pressure test back side to 300 psi with 15 min hold test good. Rig out Weatherford 2.5 power swivel.

Double up hoist. Pulled out the hole standing back (180) joints of 2-7/8" J-55 6.5# EUE 8rd tubing. Brake out and lay down (1) Baker bit sub and (1) Baker 6-1/8" rock bit.

Pick up and run in hole with (1) Baker 6-1/8" bit, (1) Baker 7" 26# positive scraper, (1) Baker 4-1/2" bumper sub, (1) 4' J-55 6.5# EUE 8rd pup joint and (20) joints of 2-7/8" J-55 6.5# EUE 8rd tubing. Rig lost hydraulic pressure. Unable to fix. Close and secure well.

Rig Broke Down.

Shut down for the night.

8/17/2014 @06:00 **08/18/2014** @06:00

Shut down for the night.

Discuss planned operations and fill out required permits. Update LOTO.

HISTORY OF OIL OR GAS WELL

Operator: Vintage Production California LLC **Field:** OJAI **County:** VENTURA
Well: FERNDALE VF 107 **Sec:** 16 **T:** 4N **R:** 21W **M.D.B. & M.**

Tubing pressure = 0 psi
Casing Pressure = 0 psi
Accumulator Pre-charge pressure = 1000 psi
Initial Accumulator pressure = 3000 psi
Manifold Pressure = 1500 psi
Annular pressure = No Annular.
Time to Close Pipe Rams = 3.5 sec
Time to open Pipe rams = 3 sec
Time to close Annular Bop = No Annular
Final Accumulator Pressure = 2400 psi
Function test Bope =Good

Continue to run in hole with (160) joints of 2-7/8" J-55 6.5# EUE 8rd tubing and tag with scraper at 5629'.

Pull out the hole laying down (4) joints of 2-7/8" J-55 6.5# EUE 8rd tubing. Pulled out the hole standing back (176) joints of 2-7/8" J-55 6.5# EUE 8rd tubing. Brake out and lay down (1) 4' 2-7/8" J-55 6.5# EUE 8rd pup joint, (1) Baker 4-1/2" bumper sub, and (1) 7" 26# Baker positive scraper with 6-1/8".

Rig out tubing handling equipment; rig out work floor, install (1) Weatherford 9" 5K hydrill. Rig up work floor, and tubing handling equipment.

Meet and greet Ace hydro tester, Weatherford TCP hand, and Weatherford packer hand. Rigged up Ace Hydro tester, hang top and bottom sheaves. Run in hole with (1) 2-7/8" pump shoe, and (8) joints of 2-7/8" J-55 6.5# EUE 8rd tubing and plug test to 6000 psi with a 8 sec hold. Test good. Pulled out the hole with (8) joints of 2-7/8" J-55 6.5# EUE 8rd tubing standing back. Pick up and Run in hole with (1) 3-3/8" steel bull plug, (26) 3-3/8" Millennium 4 SPF TCP guns, 60 degree phasing with all charges being 25 grams, 0.42" hole, with a 47" penetration, (1) 3-3/8" safety spacer, (1) mechanical firing head, (2) joints of 2-7/8" J-55 6.5# EUE 8rd tubing, (1) 2-7/8" magnum disc, (2) joints of 2-7/8" J-55 6.5# EUE 8rd tubing, (1) 2' 2-7/8 J-55 6.5# EUE 8rd pup joint, (1) Weatherford 7" CST packer, (1) 4' 2-7/8" J-55 6.5# EUE 8rd pup joint, (2) joints of 2-7/8" J-55 6.5# EUE 8rd tubing, (1) 4' 2-7/8" EUE 8rd R.A. sub hydro testing to 6000 psi with 8 sec hold with (30) joints of 2-7/8" J-55 6.5# EUE 8rd tubing. Close and secure well.

Shut down for the night.

8/18/2014 @06:00 **08/19/2014** @06:00

Shut down for the night.

Discuss planned operations and fill out required permits. Update LOTO.

Tubing pressure = 0 psi
Casing Pressure = 0 psi
Accumulator Pre-charge pressure = 1000 psi
Initial Accumulator pressure = 3000 psi
Manifold Pressure = 1500 psi
Annular pressure = No Annular.
Time to Close Pipe Rams = 3.5 sec
Time to open Pipe rams = 3 sec
Time to close Annular Bop = No Annular
Final Accumulator Pressure = 2400 psi
Function test Bope =Good

Continue to test tubing in hole to 6000 psi with a 8 sec hold with 2-7/8" J-55 6.5# EUE 8rd tubing, (2) 8' J-55 6.5# EUE 8rd pup joints, (1) 10' J-55 6.5# EUE 8rd pup joint and land 7" TCM tubing hanger. NOTE fill tubing with 13 bbls of lease water equaling 2200' for cushion. Rigged down Ace hydro tester.

Meet and greet Weatherford E-line crew. Rig up wire line and perform correlation log using GR from CBL. Pulled out the hole with logging tool. Rigged down wire line truck.

Single out hoist. Set Weatherford CST packer in 15K compression. Pressure up on casing to 300 psi Ok.

Drop Weatherford 1.25" bar to open max differential vent and under balance perforate top shot at 5065' and bottom shot at 5610'. Monitor well. It pressured up to 250 psi in 15 minutes. Open well and got gas back. Close and secure well.

Shut down for the night.

8/19/2014 @06:00 **08/20/2014** @06:00

Shut down for the night.

Discuss planned operations and fill out required permits. Update LOTO.

Tubing Pressure =1400 psi
Casing Pressure = 0 psi.
Meet and greet PROS crew. Rig up hard line from tubing to manifold. Flow back well through manifold to Adler 500 bbl tank. Total oil flowed back 75 bbls, pressure average 45 psi. Turn well over to Pros so they could monitor it through the night.

Shut down for the night.

8/20/2014 @06:00 **08/21/2014** @06:00

Pros continue flowing well back. Through day it was flowing between 3 to 8 bbls per hour at about 60% water cut. Pros continue monitoring well.

HISTORY OF OIL OR GAS WELL

Operator: Vintage Production California LLC **Field:** OJAI **County:** VENTURA
Well: FERNDALE VF 107 **Sec:** 16 **T:** 4N **R:** 21W **M.D.B. & M.**

8/21/2014 @06:00 **08/22/2014** @06:00

Shut down for the night.

Discuss planned operations and fill out required permits. Update LOTO.

Tubing pressure = 45 psi
Casing Pressure = 0 psi
Accumulator Pre-charge pressure = 1000 psi
Initial Accumulator pressure = 3000 psi
Manifold Pressure = 1500 psi
Annular pressure = No Annular.
Time to Close Pipe Rams = 3.5 sec
Time to open Pipe rams = 3 sec
Time to close Annular Bop = No Annular
Final Accumulator Pressure = 2400 psi
Function test Bope =Good

Meet and greet Weatherford packer hand. Rig up king swivel and pumping lines through manifold. Open by-pass and un-set Weatherford 7" CST packer. Close pipe rams and monitor flow back. Meet and greet TSR. Pump 200 bbs of 8 percent KCL water at 2.0 bbls a min at 250 psi. Open up well and monitor for flow back for 5 min.

Remove pumping lines. Brake out and lay down king swivel. Un-land 7" tubing hanger. Brake out and lay down (2) 8' J-55 6.5# EUE 8rd pup joints, (1) 10' J-55 6.5# EUE 8rd pup joint, Pulled out the hole laying down (2) joints of J-55 6.5# EUE 8rd tubing. Pulled out the hole standing back (152) joints of 2-7/8" J-55 6.5# EUE 8rd tubing. Hold safety meeting with Weatherford TCP hand and wrangler operator; discuss procedures for laying down TCP guns. Pulled out the hole laying down (1) 2-7/8" EUE 8rd marker sub, stand back (2) joints of J-55 6.5# EUE 8rd tubing. Brake out and lay down (1) 6' J-55 6.5# EUE 8rd pup joint, (1) Weatherford 7" CST compression packer, (1) 2' J-55 6.5# EUE 8rd pup joint, stand back (2) joints of 2-7/8" J-55 6.5# EUE 8rd tubing. Brake out and lay down (1) 2-7/8" MAGNUM disc, stand back (2) joints of 2-7/8" J-55 6.5# EUE 8rd tubing, (1) safety firing head, and (26) Weatherford spent TCP guns, and (1) steel bull plug. NOTE all shoots fired.

Run in hole with (20) joints of 2-7/8" J-55 6.5# EUE 8rd tubing as a kill string, and tubing on 7" hanger. Close and secure well.

Shut down for the night.

8/22/2014 @06:00 **08/23/2014** @06:00

Shut down for the night.

Discuss planned operations and fill out required permits. Update LOTO.

Held safety meeting with wrangler/stinger operator and swamper to discuss hazards and precautions associated with loading up TCP guns and loading out pipe wrangler and racks. Spotted stinger onto location. Loaded out spent TCP guns onto trailer. Moved trailer off of location. Spotted stinger in position. Loaded pipe racks onto wrangler. Hooked up wrangler and moved it to the next location.

Tubing pressure = 550 psi
Casing Pressure = 550 psi
Accumulator Pre-charge pressure = 1000 psi
Initial Accumulator pressure = 3000 psi
Manifold Pressure = 1500 psi
Annular pressure = No Annular.
Time to Close Pipe Rams = 3.5 sec
Time to open Pipe rams = 3 sec
Time to close Annular Bop = No Annular
Final Accumulator Pressure = 2400 psi
Function test Bope =Good

Flowed well back into return tank. Flowed back
15 barrels. Well appeared to be dead. Started to remove the tubing valve, but the well began flowing again. Hooked up mud pump hoses and hard lines. Pumped 200 barrels of
lease water to kill well

Held safety meeting with slick line crew to discuss hazards and precaution associated with rigging up lubricator and tagging fill. Spotted slick line truck onto location. Rigged up
lubricator. Ran in the hole with a sample bailer and tagged fill at 5569'. Pulled out of the hole with sample bailer. Rigged down lubricator. Spotted slick line truck off of location.

Crew Lunch.

Pulled out of the hole and stood back the 40 joint kill string.

Nippled up 9" X 7" circulating cage to the top of Hydril.

Made up 2-7/8" saw tooth collar. Ran in the hole with the tubing out of derrick. Ran 50 stands. Well began to kick out of the casing. Closed in and secured the well. KCL water is to be ordered and delivered in the morning to kill well. Close and secure well.

Shut down for the night.

HISTORY OF OIL OR GAS WELL

Operator: Vintage Production California LLC **Field:** OJAI **County:** VENTURA
Well: FERNDALE VF 107 **Sec:** 16 **T:** 4N **R:** 21W **M.D.B. & M.**

8/23/2014 @06:00 08/24/2014 @06:00

Shut down for the night.

Discuss planned operations and fill out required permits. Update LOTO.

Tubing pressure = 550 psi
Casing Pressure = 550 psi
Accumulator Pre-charge pressure = 1000 psi
Initial Accumulator pressure = 3000 psi
Manifold Pressure = 1500 psi
Annular pressure = No Annular.
Time to Close Pipe Rams = 5 sec
Time to open Pipe rams = 5 sec
Time to close Annular Bop = No Annular
Final Accumulator Pressure = 2400 psi
Function test Bope =Good

Bled down well to Adler tank. Pumped 140 of lease water to kill well.

Continued to run in the hole with the tubing out of the derrick. Ran a total of 174 joints of tubing. Singled out blocks. Picked up 7 joints of tubing off of the ground using winch line and
tagged top of cement at 5630'. Laid down 1 joint.

Crew Lunch.

Held safety meeting with vacuum truck drivers to discuss hazards and precautions associated with pulling KCL fluid from trucks with the mud pump. Spotted vacuum trucks
onto location. Pumped 340 barrels of 3% KCL water down hole to change over well bore fluid to 3% KCL. Spotted vacuum trucks off of location.

Laid down 6 joints with winch line. Doubled up blocks. Proceeded to pull out of the hole standing tubing back in the derrick. Stood back 174 total joints.

Held safety meeting with hydro tester to discuss hazards and precautions associated with rigging up sheaves and testing tubing with bar tools. Spotted test truck onto location. Rigged up tester's sheaves and line. Plug tested. Made up 2-7/8" bar tools. Proceeded to test in the hole with production string. Tested 19 stands. Close and secure well.

Shut down for the night.

8/24/2014 @06:00 08/25/2014 @06:00

Shut down for the night.

Crew travel from Ensign yard to Ferndale VF 107.

Discussed planned operations and filled out required permits.

Tubing pressure = 450 psi
Casing Pressure = 550 psi
Accumulator Pre-charge pressure = 1000 psi
Initial Accumulator pressure = 3000 psi
Manifold Pressure = 1500 psi
Annular pressure = No Annular.
Time to Close Pipe Rams = 5 sec
Time to open Pipe rams = 5 sec
Time to close Annular Bop = No Annular
Final Accumulator Pressure = 2400 psi
Function test Bope =Good

Held third party safety meeting with TSR vac truck. Pulling return tank. Turn well over with lease water 150 bbls. 2.5 BPM @ 600 psi.
S.I.T.P. = 0 psi
S.I.C.P. = 0 psi

Held third party safety meeting with Ace testers Cont RIH testing tubing to 6000 psi. All tubing tested good. Tested to donut. R/O Ace testers

Lunch

R/D work floor. N/D BOP.N/U Prod tree. Load out all tubing equipment. Cleanup location.

Crew travel from Ferndale VF 107 to Ensign stage area.

Shut down for the night.

8/25/2014 @06:00 08/26/2014 @06:00

Shut down for the night.

Crew travel from Ensign stage area to Ferndale VF 107.

Discussed planned operations and filled out required permits.

HISTORY OF OIL OR GAS WELL

Operator: Vintage Production California LLC **Field:** OJAI **County:** VENTURA
Well: FERNDALE VF 107 **Sec:** 16 **T:** 4N **R:** 21W **M.D.B. & M.**

S.I.T.P. = 600 PSI
S.I.C.P. = 600 PSI
Turn well over with lease water.

Tubing pressure = 0 psi
Casing pressure = 5 psi
Function test BOPE = Good.

P/U New pump 25-150-RHBM-24-5 Prep replacement rods (10) 3/4 D slick, (68) 7/8 D 4-Per.

Lunch

Cont to prep and pickup rods off the ground. (56) 7/8 D slick, (26) 1" D 4-Per, (20) 1" D slick, (1) 1 1/2 x 30 polish rod.

Spaced out well install stuffing box, pollution control pot, rod rotator and polish rod. Fill tubing with Ensign mud pump 10 bbls lease water. Test well to 600 psi held good. Clamped off polish rod for R&R to hang head in the morning.

Drop guy wires and rig down hoist. Move rig off location. Loaded out rig mat. Loaded out all tools and equipment. Cleaned up location.

Crew travel from Ferndale VF 107 to Ensign stage area.

Shut down for the night.

New Holes

Wellbore No.	Hole Size (in)	Top MD (ft)	Btm MD (ft)	Start Date	End Date

New Casing/Liner Strings

Size	Assembly Name	Installed	Wellbore No	Top MD (ft)	Btm MD (ft)

New Perforated Intervals

Date Shot	Wellbore No.	Top MD (ft)	Btm MD (ft)	Length (ft)	SPF	Phasing (°)
08/19/2014	10	5,065	5,610	545	6	60.00

Fish Junk left in Hole

Date	Wellbore No.	Type	Description	Top MD (ft)	Btm MD (ft)

Logs/surveys run? [X] Yes [ ] No If yes, list type(s) and depth(s)

Log Date	Wellbore No.	Top MD (ft)	Btm MD (ft)	Distance Logged (ft)	Logging Tools
08/19/2014	10	3,428	4,947	1,519	GR-CCL

L_PARTMENT OF CONSERVA. ON
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
1000 S. Hill Rd, Suite 116 Ventura, CA 93003-4458
Phone:(805) 654-4761 Fax:(805) 654-4765

No. T214-0332

REPORT ON OPERATIONS

Denny Brown
Vintage Production California LLC (V1370)
9600 Ming Avenue, Suite 300
Bakersfield, CA 93311

Ventura, California
August 22, 2014

Your operations at well **"Valex-Ferndale" 107**, A.P.I. No. **111-21066**, Sec. **16**, T. **04N**, R. **21W**, **SB** B. & M., **Ojai** field, in **Ventura** County, were witnessed on **8/18/2014**. **Ernest Blevins**, a representative of the supervisor.

The operations were performed for the purpose of **inspecting the blowout prevention equipment and installation.**.

DECISION:

APPROVED

Steven Bohlen
State Oil and Gas Supervisor

By _____
Bruce Hesson
District Deputy

EB/ms
OG109

API No. 111-21066 DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES T 214-0332

BLOWOUT PREVENTION EQUIPMENT MEMO #12, 1

Operator Vintage Prod. CA LLC Well "Valex-Ferndale" 107 Sec. 16 T. 4N R. 21W

Field Ojai County Ventura Spud Date

VISITS:	Date	Engineer	Time	Operator's Rep.	Title
1st	8-18-14	Ernie Blevins	(1300 to 1460)		
2nd			(to)		

Contractor Ensign Rig # 342 Contractor's Rep. & Title Cosme - R.S.S.

Casing record of well: Jeff Lacefield - Super.

OPERATION: Testing (inspecting) the blowout prevention equipment and installation. Critical well? Y ☐ N ☒

DECISION: The blowout prevention equipment and its installation on the 9 5/8 " casing are approved.

Proposed Well Opns: ReWork MACP: psi REQUIRED BOPE CLASS: II 2M

Hole size: " fr. ' to ', " to ' & " to '

CASING RECORD OF BOPE ANCHOR STRING					Cement Details	Top of Cement	
Size	Weight(s)	Grade(s)	Shoe at	CP at		Casing	Annulus

BOP STACK

API Symb.	Ram Size (in.)	Manufacturer	Model or Type	Vert. Bore Size (in.)	Press. Rtg.	Date Last Overhaul
AP		Hydril			3K	
Rd	2 7/8	Shaffer			3K	
Rd	CSO	"			3K	

TEST DATA

Gal. to Close	Recov. Time (Min.)	Calc. GPM Output	psi Drop to Close	Secs. to Close	Test Date	Test Press.

ACTUATING SYSTEM

Accumulator Unit(s) Working Pressure 3000 psi

Total Rated Pump Output gpm Fluid Level

Distance from Well Bore 50 ft. 1/4

	Accum. Manufacturer	Capacity	Precharge
1	Weatherford	gal.	1500 psi
2		gal.	psi

✓	CONTROL STATIONS	Elec.	Hyd.	Pneu.
✓	Manifold at accumulator unit		✓	
	Remote at Driller's station			
	Other:			

	EMERG. BACKUP SYSTEM			Press.	Wkg. Fluid
2	N_2 Cylinders	1	L= "	2700	9 gal.
	Other:	2	L= "	2600	8.5 gal.
		3	L= "		gal.
		4	L= "		gal.
		5	L= "		gal.
		6	L= "		gal.
		TOTAL:			ga

HOLE FLUID MONITORING

	Alarm Type: Audible	Alarm Type: Visual	Class
Calibrated Mud Pit			A
Pit Level Indicator			
Pump Stroke Counter			B
Pit Level Recorder			
Flow Sensor			C
Mud Totalizer			
Calibrated Trip Tank			
Other:			

TOTAL:

AUXILIARY EQUIPMENT

	No.	Size (in.)	Rated Press.	Connections: Weld	Connections: Flange	Connections: Thread	Test Press.
Fill-up Line							
✓ Kill Line		2"	3K			✓	
Control Valve(s)	2						
Check Valve(s)							
Aux. Pump Connect.							
✓ Choke Line		2"	3K			✓	
Control Valve(s)							
Pressure Gauge							
Adjustable Choke(s)							
Bleed Line							
Upper Kelly Cock							
Lower Kelly Cock							
Standpipe Valve							
Standpipe Press. Gau.							
✓ Pipe Safety Valve		2 7/8	3K				
Internal Preventer							

Hole Fluid Type	Weight	Storage Pits (Type & Size)
Lease H2O	8.2#	84 + 306 661

REMARKS AND DEFICIENCIES:

OGD9 (9/00)

TURAL RESOURCES AGENCY OF CALIFOR.
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
1000 S. Hill Rd, Suite 116 Ventura, CA 93003 - 4458

PERMIT TO CONDUCT WELL OPERATIONS

No. P 214-0147

Old	New	
520	520	FIELD CODE
12	12	AREA CODE
10	10	POOL CODE

Ventura, California
May 20, 2014

Denny Brown, Agent
Vintage Production California LLC (V1370)
9600 Ming Avenue, Suite 300
Bakersfield, CA 93311

Your proposal to **Rework** well **"Valex-Ferndale" 107**, A.P.I. No. **111-21066**, Section **16**, T. **04N**, R. **21W**, **SB** B. & M., **Ojai** field, **Silverthread** area, **Miocene** pool, **Ventura** County, dated **5/9/2014**, received **5/9/2014** has been examined in conjunction with records filed in this office. (Lat: **34.433865** Long: **-119.085293** Datum:**83**)

THE PROPOSAL IS APPROVED PROVIDED:

1. Blowout prevention equipment, as defined by this Division's publication No. M07, shall be installed and maintained in operating condition and meet the following minimum requirements: **Class II 2M and a 2M lubricator if perforating is conducted with wireline.**
2. Hole fluid of a quality and in sufficient quantity to control all subsurface conditions in order to prevent blowouts shall be used.
3. This office shall be contacted by phone prior to making any program changes and no changes are made without prior Division approval.
4. **THIS DIVISION SHALL BE NOTIFIED TO:**
   a. **Inspect the installed blowout prevention equipment prior to commencing downhole operations.**

Note: The Division recommends, as a minimum, that carbon monoxide monitoring equipment and a vent line be installed and maintained in operating condition during all extensive perforating operations.

Blanket Bond Dated: 4/23/2003

Pat Perez
Acting State Oil and Gas Supervisor

Engineer Bruce Hesson
Office (805) 654-4761

By _____
Bruce Hesson, *District Deputy*

BH/bh

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended. Issuance of this permit does not affect the Operator's responsibility to comply with other applicable state, federal, and local laws, regulations, and ordinances.

OG111 (revised 6/2011)

NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

Rec'd 05-09-14 DOGGR D2 Ventura

FOR DIVISION USE ONLY		
	Forms	
Bond	~~OGD114~~	OGD121
	CAL WIMS	115

5/20/12/10

04 "Miocene"

NOTICE OF INTENTION TO REWORK / REDRILL WELL

P214-0147

Detailed instructions can be found at: www.conservation.ca.gov/dog/

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework ☒ / redrill ☐ (Check one) well Ferndale VF 107, API No. 0411121066,

Sec. 16, T. 4N, R. 21W, SB B.&M., Ojai Field, Ventura County.

The complete casing record of the well (present hole), including plugs and perforations, is as follows: (Attach wellbore schematics diagram also.)

Surface Casing 9-5/8", H-40, 32.3# @ 816 ft. Cemented w/ 490 cf.
Production Casing: 7", N-80, 26# ft, ID=6.276", 0-5,804 ft. Cemented w/1180 cf.
Liner: 5-1/2", N-80,17#,ID=4.892",from 5,663 ft to 7,872 ft. Cemented w/1050 cf.
Wire wrapped screen: 2-7/8", ID=2.441" from 6,750 ft to 7,673 ft
Perforations: 6330-6350,7535-7658
Note: attached actual and proposal well bore diagrams.

The total depth is: 8275 feet. The effective depth is: 7673 feet.

Present completion zone(s): Mohnian (Name). Anticipated completion zone(s): Mohnian (Name).

Present zone pressure: 1200 psi. Anticipated/existing new zone pressure: ~1400 psi.

Is this a critical well as defined in the California Code of Regulations, Title 14, Section 1720(a) (see next page)? Yes☐ No☒

For redrilling or deepening only, is a California Environmental Quality Act (CEQA) document required by a local agency? Yes☐ No☒ If yes, see next page.

The proposed work is as follows: (A complete program is preferred and may be attached.)

P&A existing perforations with cement plug to liner top @ 5650'
Add. New perforations with TCP guns @ 4SPF (Mohnian formation) and return well to production.
See attached program with P&A and new Perforations details.

Please cancel previous permit dated 10-21-2013 to abandon permit #213-0372

If well is to be redrilled or deepened, show proposed coordinates (from surface location) and true vertical depth at total depth: _____ feet _____ (Direction) and _____ feet _____ (Direction) Estimated true vertical depth: _____

Will the Field and/or Area change? Yes☐ No☒ If yes, specify New Field: _____ New Area: _____

The Division must be notified immediately of changes to the proposed operations. Failure to provide a true and accurate representation of the well and proposed operations may cause rescission of the permit.

Name of Operator			
Vintage Production California			
Address: 9600 Ming Ave		City/State: Bakersfield, CA	Zip Code: 93311
Name of Person Filing Notice: Deborah Young for Denny Brown	Telephone Number: 661-869-8178	Signature	Date: 5/9/2014
Individual to contact for technical questions: Marco Ramirez	Telephone Number: 661-869-8133	E-Mail Address: marco_ramirez@oxy.com	

This notice and an indemnity or cash bond must be filed, and approval given, before the workover begins. (See the reverse side for bonding information.) If operations have not commenced within one year of the Division's receipt of the notice, this notice will be considered cancelled.

Rec'd 05-09-14 DOGGR D2 Ventura

INFORMATION FOR COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT OF 1970 (CEQA)

If an environmental document has been prepared by the lead agency, submit a copy of the ***Notice of Determination*** or ***Notice of Exemption*** with this notice. Please note that a CEQA determination by a local jurisdiction, if required, must be complete, or the Division may not issue a permit.

CRITICAL WELL DEFINITION

As defined in the California Code of Regulations, Title 14, Section 1720 (a), "Critical well" means a well within:

(1) 300 feet of the following:
  (A) Any building intended for human occupancy that is not necessary to the operation of the well; or
  (B) Any airport runway.
(2) 100 feet of the following:
  (A) Any dedicated public street, highway or the nearest rail of an operating railway that is in general use;
  (B) Any navigable body of water or watercourse perennially covered by water;
  (C) Any public recreational facility such as a golf course, amusement park, picnic ground, campground or any other area of periodic high-density population; or
  (D) Any officially recognized wildlife preserve.

WELL OPERATIONS REQUIRING BONDING

1. Drilling, redrilling, or deepening any well.
2. Milling out or removing a casing or liner.
3. Running and cementing casing or tubing.
4. Running and cementing liners and inner liners.
5. Perforating casing in a previously unperforated interval for production, injection, testing, observation, or cementing purposes.
6. Drilling out any type of permanent plug.
7. Reentering an abandoned well having no bond.

This form may be printed from the DOGGR website at www.conservation.ca.gov/dog/

Vintage Production California LLC

A subsidiary of Occidental Petroleum Corporation

Well Operations Procedure

FERNDALE VF 107

OJAI

South Team

Capital Workover – Add Perforations.

05/05/2014

Production Engineer:	Marco Ramirez	661 340 0382
Production Coordinator:	Steve Alexander	661 679 5081
Well Servicing Supervisor:	Kenneth Olson	805 830 3143

Project Data:

One Oxy	**xxxxxxx**
Total Budget:	$ 429,500
Expected Rates:	20 BOPD, 80 BWPD, 30 MCFPD
BOE/RIG DAY:	2.8

Well Data:

API #:	04-111-21066		
Datum:	KB		
KB to GL:	19'		
MD:	8,275'		
TVD:	7,930'		
PBMD:	7,673'	**Nature of Plug Back:**	wire wrapped screen @ 7,673'

Casing Data:

Surface Casing	9-5/8", H-40, 32.3# @ 816 ft. Cemented w/ 490 cf.
Production Casing:	7", N-80, 26# ft, ID=6.276", 0-5,804 ft. Cemented w/1180 cf.
Liner:	5-1/2", N-80,17#,ID=4.892",from 5,663 ft to 7,872 ft. Cemented w/1050 cf.

Wire wrapped screen: 2-7/8", ID=2.441" from 6,750 ft to 7,673 ft

Perforations:

6,330-6,350	open
7,535-7,658	open

Tubing Data: no tubing in hole.

Wellhead: N/A

Vintage Production California LLC

A subsidiary of Occidental Petroleum Corporation

Well Operations Procedure

Objective: **P&A Lower zone (5-1/2 Liner). Perforate new interval from 5065 ft to 5610 ft. Return well to production**

Current Status: Inactive well since 2012.

Well History

- Ferndale VF 107 was drilled in 1981 and completed in Valex sands with IP of 236 BOPD.
- In 1983, the well began having sanding problems after lease water was pumped in the annulus, around 500 ft of fill was found in the hole.
- In 1983 a wire wrapped inner liner was installed to eliminate sand entry, production rapidly decreased to 12 BOPD.
- In 1984 a resin-coated sand pack treatment was performed without success.
- Several cleanouts were done with not production benefit. Total rate 6 BOPD
- In 2012 rig was moved to RTP well, ran bit and found casing damaged @ 6,671 ft. Isolated lower intervals with bridge plug @ 6,420 ft and perforated 6,330-6,350 interval and performed frac job. Tested well and rate was just 2 bopd
- During next 3 months 2 maintenance jobs were done, showing pump failures due frac sand.
- Well passed to inactive in 2012.

Well Control:

- **Class BOPE:** Class II 3M as defined by DOGGR Manual M07.
  3M lubricator (when applicable).
- **Max reservoir pressure expected:**
  - 1,400 psi at 5,300' MD (5,230' TVD) = .27 psi/ft
- **Maximum anticipated SITP (operating):**
  - SITP = Pore press gradient – well fluid gradient x depth TVD
  - Most likely SITP = (.27 psi/ft – .43 psi/ft) x 5,230' =-836 psi
  - Worst case SITP = (.27 psi/ft – .1 psi/ft) x 5,230' = 889 psi
- **Kill fluid requirements:**
  - If necessary ~8.3 ppg mud/fluid will be required to control well

Work Requirements, Long Lead Items and Contacts:

1. TCP guns will be provided by Weatherford (contact John Marler @ 661 910 8586).
2. TCP correlation will be provided by Weatherford (contact Jeff Anderson @ 661 599 4804).
3. Hydrotest flow line (contact John Lindgren @ 661 487 4193)
4. Tubular Goods will be provided by JD Rush (contact Paul Fahey @ 661 496 4820).

P&A Lower Part of Well bore (5-1/2 Liner):

- MIRU CTU. RIH with open-ended and make diligent effort to clean out to 7,714', inside 2 7/8" Screened liner. **Notify DOGGR to witness clean-out depth.**
- Rig up cementers. Lay a Cement Plug (Class G Cmt + 35% Silica Flour + additives) from clean out depth, 7,714' up to 5,650', (Calculated Volume + 50% excess of perf'd interval: 215 cft.). Place cement in stages as necessary.
- RIH and tag plug at 5,650', re-cement if necessary. **Notify DOGGR to witness tag.**

Job Procedure (Add .Perforations and Completion):

1. Perform pre-move in inspection.
2. Set rig anchors and MIRU WO rig.
3. Conduct PJSM with all personnel on location covering any and all possible hazards. Fill out appropriate JSAs
4. Bleed well pressure off as necessary. Check for any H2S or LEL's present. Verify that well is kill.
5. ND well head. NU Class II 3M BOPE and pressure test.
6. Haul in new 2-7/8", J-55, 6.5# tubing.
7. RIH bit and scraper for 7", 26#, N-80 casing to 5,650 ft (Note: cement plug @ 5,650 ft). POOH, lay down scraper and bit.
8. Rig up Weatherford wire line and run drillable bridge Plug .Set BP @ 5,630 ft. POOH. Test plug and casing integrity to 300 psi

   Note: For correlation of CCL use CBL log from Jan/26/2012.
9. TCP Perforating Safety
   - Pre-Hookup Safety
     i. Upon arriving at location, check –in with OXY representative, discuss job procedures and verify materials.
     ii. Service Supervisor and crew to conduct location assessment.
     iii. After completing the location assessment, conduct Safety Meeting and complete JSA.
   - Safety Meeting should include:
     iv. All personnel on location must attend the safety meeting.
     v. Designation of a Safety Observer.
     vi. Emergency "what-if" scenarios and communications.
     vii. JSA – to be hand written and cover location and job specific issues.
     viii. Safe areas.

- Rig Up Equipment – conduct Safety Huddles when appropriate.

10. Make up and RIH with TCP guns (bottom to top):
- Steel bull plug (1')
- 3-3/8" Millennium 4 SPF TCP guns, 60° phasing – see attached perforation information. All charges to be 25 gram, 0.42" hole, 47" penetration.
- 3-3/8" safety spacer
- Mechanical firing head
- 2-7/8" 6.5# J-55 8rd EUE tubing (2 joints)
- 2-7/8 Magnum disc
- 2-7/8" 6.5# J-55 8rd EUE tubing (2 joints)
- 2-7/8 pup joint
- 7" CST packer for N-80,26# casing @ +/- 4,917 ft
- 2-7/8 pup joint
- 2-7/8" 6.5# J-55 8rd EUE tubing (2 joints)
- RA tubing tag @ +/- 4,846 ft
- 2-7/8" 6.5# J-55 8rd EUE tubing to surface

Perforations: 5065-5610 (545 ft)

11. Continue RIH with TCP assembly. DO NOT EXCEED 200 FT/MIN WHEN RIH WITH TCP GUNS.

NOTE: LAY DOWN EXCESS TUBING

12. Fill 2-7/8 tubing with ~ 13 bls of clean lease water (approx. 2,200 ft of water cushion ,corresponds to +/- 970 psi hydrostatic in tubing

13. Rig up wire line and make correlation using GR from CBL (Jan/26/2012).HAVE FULL SET OF PUP JOINTS ON LOCATION. Install pup joints if is necessary

14. Set 7" packer at +/- 4,917 ft. Note: Packer depth depends of field measurement of tubing and tools below the RA tubing tag depth.

15. Connect TIW (rated to 3M) on top of the tubing.

16. Install flow line to baker tank.

17. Pressure up back side to 300 psi and monitor for 10 minutes.

18. Drop 1.25" bar to open max differential vent and under-balance perforate proposed intervals. RECORD PRESSURE RESPONSE AFER DETONATION – BOTH ON TUBING AND BACKSIDE. Flow well back – RECORD FLOW VOLUMES AND FLUID COMPOSITION.

19. Kill well as necessary and release packer. POOH with tubing and TCP guns. Inspect TCP guns at surface ensuring that all perforations have detonated. LD guns and packer. Note: monitoring for CO2

20. Tag TD for fill

21. Run production tubing equipment with Rod Pump @ 5,400 ft.

22. Install Rod pump well head

23. Start well and evaluate results.

Attachments:

WellBoreFerndale VF 107.xlsx

ProposalWellBoreFerndale VF 10...

D. ARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
1000 S. Hill Rd, Suite 116 Ventura, CA 93003-4458
Phone:(805) 654-4761 Fax:(805) 654-4765

REPORT OF WELL CORRECTION OR CANCELLATION

Ventura, California
May 21, 2014

Denny Brown
Vintage Production California LLC (V1370)
9600 Ming Avenue, Suite 300
Bakersfield, CA 93311

In accordance with **your request dated 5/9/2014 and received 5/9/2014** the following changes pertaining to your well **"Valex-Ferndale" 107**, A.P.I. No. **111-21066**, **Ojai** field, **Ventura** County, Section **16**, T: **04N**, R. **21W**, **SB** B.&M., are being made in our records:

Your notice to (re) abandon dated 10/8/2013, and received 10/8/2013, and our report No. 213-0372 issued 10/21/2013 are cancelled, since the work will not be done. If you have an individual bond on file covering this notice, it will be returned. No request for such return is necessary.

Pat Perez
State Oil and Gas Supervisor

By _____
Bruce Hesson
District Deputy

tkc

OG165

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

CHECK LIST-RECORDS RECEIVED AND WELL STATUS

Operator: **Vintage Production California LLC** WELL DESIGNATION **"Valex-Ferndale" 107**

API No. **11121066** SE **16** T: **4N** R.: **21W** , **SB** B. and M.

County: **Ventura** FIELD: **Ojai**

Type of Notice: **Abandonment** **Date** **10/8/2013** **Report Number:** **P213-0372**

Received

RECORDS RECEIVED (ATTACH PAGES IF REQUIRED)

	Date	OK	NEED	Remarks
Well Summary (OG100)				
History (OG103)				
E-Log				
Mud Log				
Dipmeter				
Directional				
Core and/or SWS				

NEW STATUS

DATE: _____

NOTICE OF RECORDS DUE

DATE: _____

DATE: _____

DATE: _____

DATE: _____

WELL STATUS INQUIRY

DATE: _____

DATE: _____

Well Stat

Change Required: _____

Change Done: _____

ABANDONMENTS/REABANDONMENTS/DRILLS/REDRILLS

CalWims Abandonment Form: _____ SURFACE INSPECTION NEEDED _____ COMPLETED _____
Date and Inspector

FINAL LETTER NEEDED _____ COMPLETED _____ Calwims DRILL/REDRILL Form _____
(Date)

ENGINEER'S CHECK LIST

T-REPORT(S) _____ OPERATOR'S NAME _____ WELL DESIGNATION _____ SIGNATURE _____

Calwims Location _____ Calwims ELEVATION: _____ CONFIDENTIAL RELEASE DATE: _____ PERMIT REQUIREMENTS MET _____

CLERICAL CHECK LIST

LOCATION CHANGE (OG165) _____ ELEVATION CHANGE (OG165) _____ RELEASE OF BOND (OG150) _____

REMARKS

RECORDS SCANNED: _____ (Date)

RECORDS APPROVED: _____ (Date and Engineer)

Modified OGD2

AOR Data _____

...TURAL RESOURCES AGENCY OF CALIFOR...
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
1000 S. Hill Rd, Suite 116 Ventura, CA 93003 - 4458

No. P 213-0372

Old	New	
520	520	FIELD CODE
12	12	AREA CODE
10	10	POOL CODE

PERMIT TO CONDUCT WELL OPERATIONS

Ventura, California
October 21, 2013

Alan E. White, Agent
Vintage Production California LLC (V1370)
9600 Ming Avenue, Suite 300
Bakersfield, CA 93311

Your proposal to **Abandon** well **"Valex-Ferndale" 10**, A.P.I. No. **111-21066**, Section **16**, T. **04N**, R. **21W, SB** B. & M., **Ojai** field, **Silverthread** area, **Miocene** pool, **Ventura** County, dated **10/8/2013**, received **10/8/2013** has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED:

1. Blowout prevention equipment, as defined by this Division's publication No. MO7, shall be installed and maintained in operating condition and meet the following minimum requirements: **Class II 2M**
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. A diligent effort shall be made to clean out to 7,714'
4. **The well shall be perforated at the base of freshwater from 595'-600'.**
5. All portions of the well not plugged with cement are filled with inert mud fluid having a minimum density of 72lbs.,cu. ft.(9.6 Lbs/gal) and a minimum gel shear strength of 25lbs./100 sq. ft.
6. Well site restoration shall be completed within 60 days following the completion of plugging.
7. This office shall be contacted by phone prior to making any program changes and no changes are made without Division approval.
8. **THIS DIVISION SHALL BE NOTIFIED TO:**
   a. Inspect the installed blowout prevention equipment prior to commencing abandonment operations.
   b. Witness the location and hardness of the cement plug at 5,563'.
   c. Witness the mudding operations.
   d. Witness the placing of the cement plug from 600' to surface.
   e. Witness the location and hardness of cement at surface, including all annular spaces after the wellhead has been cut off. If necessary, fill the annulus with cement from 30' to surface.
   f. Inspect the restored well site.

Cancelled

Tim Kustic
State Oil and Gas Supervisor

Blanket Bond Dated: 4/23/2003

By _____
Bruce Hesson, *District Deputy*

Engineer Kris Gustafson
Office (805) 654-4761

KG/kg

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended. Issuance of this permit does not affect the Operator's responsibility to comply with other applicable state, federal, and local laws, regulations, and ordinances.

NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

Rec'd 10-08-13 DOGGR D2 Ventura

FOR DIVISION USE ONLY		
	Forms	
Bond	~~OGD114~~	OGD121
	CAL WIMS ✓	1151 ✓

520/12/10
OG

NOTICE OF INTENTION TO ABANDON / RE-ABANDON WELL

P213-0372

Detailed instructions can be found at: www.conservation.ca.gov/dog

In compliance with Section 3229, Division 3, Public Resources Code, notice is hereby given that it is our intention to abandon ☒ / re-abandon ☐ (Check one) well "Valex-Ferndale" 107 API No. 04-111-21066,

Sec. 16, T. 4N, R. 21W, SB B.&M., Ojai Field, Ventura County.

The complete casing record of the well (present hole), including plugs and perforations, is as follows: (Attach wellbore schematics diagram also.)

9 5/8", 32#, H40 Surf.Csg cmt'd @ 816'. w/490 cuft
7", 26#, N80, Prod. Casing Cmt'd @ 5804'. w/1050 cuft
5 1/2", 17#, N80, Prod. liner, Top @ 5663'-7872', Cmt w/ 1050 cuft.
2 7/8", 6.5# WWS liner 6679'-7674'. 0.006" screen from 6750'-7673'
Perfs; 6330' - 6350' Open
6652' - 7724' Isolated
7722' - 7753' Abandoned

c/o → RBP @ 6420' ✓
Cement Plug @ 7714' ✓
Cement retainer @ 7758'

Cancelled

The total depth is: 8272 feet. The effective depth is: 6420 feet.

Present completion zone(s): Mohnian (Name). Present zone pressure: 1000 psi.

Oil or gas shows: _____ feet. (Name and depth) Depth to base of fresh water: ± 600' ✓ feet.

Top of uppermost hydrocarbon zone (which may be behind unperforated casing): ± 5050' feet. (Depth of interval)

Is this a critical well as defined in the California Code of Regulations, Title 14, Section 1720(a) (see next page)? Yes☐ No☒

The proposed work is as follows: (A complete program is preferred and may be attached.)

Pull rods and tubing. Pull bridge plug at 6420'.
Circulate Clean to ~~7673~~ 7714' inside 2 7/8" WWS liner.
Place cement plug from ~~7673~~ up to 5563', filing 2 7/8" liner and covering perfs at 6330'.
Perforate 7" casing from 595' to 600' with 4 JHPF.
With mud from 5563' to 600', place cement plug from 600' to surface. Fill annulus to -30'.
Restore site.

The Division must be notified immediately of changes to the proposed operations. Failure to provide a true and accurate representation of the well and proposed operations may cause rescission of the permit.

Name of Operator			
Vintage Production California LLC			
Address		City/State	Zip Code
9600 Ming Ave. Suite 300		Bakersfield, Ca.	93311
Name of Person Filing Notice	Telephone Number:	Signature	Date
Deborah Young for Denny Brown	661-869-8178		10/08/2013
Individual to contact for technical questions:	Telephone Number:	E-Mail Address:	
Geoff Kimler	661-340-8743	geoff_kimler@oxy.com	

This notice must be filed, and approval given, before plugging and abandonment operations begin. If operations have not commenced within one year of the Division's receipt of the notice, this notice will be considered cancelled.

...TURAL RESOURCES AGENCY OF CALIFOR...
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
1000 S. Hill Rd, Suite 116 Ventura, CA 93003 - 4458

PERMIT TO CONDUCT WELL OPERATIONS

No. P 213-0372

Old	New	
520	520	FIELD CODE
12	12	AREA CODE
10	10	POOL CODE

Ventura, California
October 21, 2013

Alan E. White, Agent
Vintage Production California LLC (V1370)
9600 Ming Avenue, Suite 300
Bakersfield, CA 93311

Your proposal to **Abandon** well **"Valex-Ferndale" 107**, A.P.I. No. **111-21066**, Section **16**, T. **04N**, R. **21W**, **SB** B. & M., **Ojai** field, **Silverthread** area, **Miocene** pool, **Ventura** County, dated **10/8/2013**, received **10/8/2013** has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED:

1. Blowout prevention equipment, as defined by this Division's publication No. MO7, shall be installed and maintained in operating condition and meet the following minimum requirements: **Class II 2M**
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. A diligent effort shall be made to clean out to 7,714'
4. **The well shall be perforated at the base of freshwater from 595'-600'.**
5. All portions of the well not plugged with cement are filled with inert mud fluid having a minimum density of 72lbs.,cu. ft (9.6 Lbs/gal) and a minimum gel shear strength of 25lbs./100 sq. ft.
6. Well site restoration shall be completed within 60 days following the completion of plugging.
7. This office shall be contacted by phone prior to making any program changes and no changes are made without Division approval.
8. **THIS DIVISION SHALL BE NOTIFIED TO:**
   a. Inspect the installed blowout prevention equipment prior to commencing abandonment operations.
   b. Witness the location and hardness of the cement plug at 5,563'.
   c. Witness the mudding operations.
   d. Witness the placing of the cement plug from 600' to surface.
   e. Witness the location and hardness of cement at surface, including all annular spaces after the wellhead has been cut off. If necessary, fill the annulus with cement from 30' to surface.
   f. Inspect the restored well site.

Tim Kustic
State Oil and Gas Supervisor

Blanket Bond Dated: 4/23/2003

Engineer Kris Gustafson
Office (805) 654-4761

By _____
Bruce Hesson, *District Deputy*

KG/kg

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended. Issuance of this permit does not affect the Operator's responsibility to comply with other applicable state, federal, and local laws, regulations, and ordinances.

NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

Rec'd 10-08-13 DOGGR D2 Ventura

FOR DIVISION USE ONLY		
	Forms	
Bond	~~OGD114~~	OGD121
	CAL WIMS ✓	115 ✓

5201/12/10
OG

NOTICE OF INTENTION TO ABANDON / RE-ABANDON WELL

Detailed instructions can be found at: www.conservation.ca.gov/dog

P213-0372

In compliance with Section 3229, Division 3, Public Resources Code, notice is hereby given that it is our intention to abandon ☒ / re-abandon ☐ (Check one) well "Valex-Ferndale" 107, API No. 04-111-21066,

Sec. 16, T. 4N, R. 21W, SB B.&M., Ojai Field, Ventura County.

The complete casing record of the well (present hole), including plugs and perforations, is as follows: (Attach wellbore schematics diagram also.)

9 5/8", 32#, H40 Surf.Csg cmt'd @ 816'. w/490 cuft
7", 26#, N80, Prod. Casing Cmt'd @ 5804'. w/1050 cuft
5 1/2", 17#, N80, Prod. liner, Top @ 5663'-7872', Cmt w/1050 cuft.
2 7/8", 6.5# WWS liner 6679'-7674'. 0.006" screen from 6750'-7673'.
Perfs; 6330' - 6350' Open
6752' - 7724' Isolated
7722' - 7753' Abandoned

c/o → RBP @ 6420' ✓
Cement Plug @ 7714' ✓
Cement retainer @ 7758'

The total depth is: 8272 feet. The effective depth is: 6420 feet.

Present completion zone(s): Mohnian (Name). Present zone pressure: 1000 psi.

Oil or gas shows: _____ (Name and depth) feet. Depth to base of fresh water: ± 600' ✓ feet.

Top of uppermost hydrocarbon zone (which may be behind unperforated casing): ± 5050' (Depth of interval) feet.

Is this a critical well as defined in the California Code of Regulations, Title 14, Section 1720(a) (see next page)? Yes☐ No☒

The proposed work is as follows: (A complete program is preferred and may be attached.)

Pull rods and tubing. Pull bridge plug at 6420'.
Circulate Clean to ~~7673~~' inside 2 7/8" wws liner. 7714'.
Place cement plug from ~~7673~~' up to 5563', filing 2 7/8" liner and covering perfs at 6330'.
Perforate 7" casing from 595' to 600' with 4 JHPF.
With mud from 5563' to 600', place cement plug from 600' to surface. Fill annulus to -30'.
Restore site.

The Division must be notified immediately of changes to the proposed operations. Failure to provide a true and accurate representation of the well and proposed operations may cause rescission of the permit.

Name of Operator			
Vintage Production California LLC			
Address: 9600 Ming Ave. Suite 300		City/State: Bakersfield, Ca.	Zip Code: 93311
Name of Person Filing Notice: Deborah Young for Denny Brown	Telephone Number: 661-869-8178	Signature	Date: 10/08/2013
Individual to contact for technical questions: Geoff Kimler	Telephone Number: 661-340-8743	E-Mail Address: geoff_kimler@oxy.com	

This notice must be filed, and approval given, before plugging and abandonment operations begin. If operations have not commenced within one year of the Division's receipt of the notice, this notice will be considered cancelled.

CRITICAL WELL DEFINITION

As defined in the California Code of Regulations, Title 14, Section 1720 (a), "Critical well" means a well within:

(1) 300 feet of the following:
  (A) Any building intended for human occupancy that is not necessary to the operation of the well; or
  (B) Any airport runway.
(2) 100 feet of the following:
  (A) Any dedicated public street, highway or the nearest rail of an operating railway that is in general use;
  (B) Any navigable body of water or watercourse perennially covered by water;
  (C) Any public recreational facility such as a golf course, amusement park, picnic ground, campground or any other area of periodic high-density population; or
  (D) Any officially recognized wildlife preserve.

This form may be printed from the DOGGR website at www.conservation.ca.gov/dog/

Rec'd 10-08-13 DOGGR D2 Ventura

VINTAGE PRODUCTION CALIFORNIA, LLC

Ojai Field
Ventura Country, California
Ferndale VF 107 - P&A Program
August 31, 2013

Ferndale VF 107
P&A Program

Well Data:
API #: 04-111-21066
Location: Sec. 16-T4N-R21W SB B&M
Commenced Drilling: 7/03/81
Completed Drilling: 8/24/81
Ground Level: 1061'
Kelly Bushing: 1080'
All measurements are from KB; 19'
BFW @ ± 600 **Top of Hydrocarbon @** ± 5500'
TD @ 8272' **ED @** 6412'

Casing: 9 5/8", 32#, H40 Surface Csg, Cmt'd @ 816'. w/490 cuft.
7", 26#, N80 Prod. Csg Cmt'd @ 5804'. w/1050 cuft
5 ½", 17#, N80 Prod liner, Top @ 5663' - 7872'. Cmt w/1050 cuft.
2 7/8", 6.5#, wire wrapped screen liner, 6679'-7674'.
.006 screen from 6750'-7673'.

Perforations: 5 1/2" Perf'd: 6752'-7724'. Isolated.
7722', 7733', 7745', 7753', isolated.
6330'-6350' open

Plugs: Cement plug @ 7714'-7728'. Baker K-1 cement retainer @ 7758'.
5 ½", Model A-3 Lock-set RBP set at 6420'. Looks like this is still in hole.

Tubing Detail: 2 ½" tubing to 5718', rods and pump.

Proposed Program:

Note: Contact the DOGGR representative to witness all procedural steps required to be witnessed (i.e.; clean-out depth, cement plug placement and hardness, perforating, mudding operations, surface plug and site restoration). All cement slurries and abandonment mud will conform to DOGGR specifications.

1. Make lease inspection and determine if tubing and packers are present. Remove pumping unit, pedestal and flowlines. If necessary, MIRU a production hoist. Bleed well off. Circulate and kill well as necessary.

2. Install a back pressure valve. Remove tree and install a DOGGR Class II (2M) BOP. **Do not initiate any downhole work until DOGGR has inspected BOPE.**

VINTAGE PRODUCTION CALIFORNIA, LLC

Ojai Field
Ventura Country, California
Ferndale VF 107 - P&A Program
August 31, 2013

3. Pull and lay rods and lay down pump. Pull and stand back tubing.

4. RIH with additional tubing and pull bridge plug at 6420'.

5. MIRU CTU. RIH with open-ended tubing and make diligent effort to clean out to 7673', inside 2 7/8" Screened liner. **Notify DOGGR to witness clean-out depth**.

6. Rig up cementers. Lay a Cement Plug (Class G Cmt + 35% Silica Flour + additives) from clean out depth, 7673' up to 5563', (Calculated Volume + 50% excess of perf'd interval: 215 cft.). Place cement in stages as necessary.

7. RIH and tag plug at or above 5563', re-cement if necessary. **Notify DOGGR to witness tag**.

8. RU wireline perforating equipment and perforate 7" casing with 4, 0.5" JHPF from 595' to 600'.

9. Spot abandonment Mud from top of plug @ 5563' up to 600'. Abandonment mud shall conform to DOGGR permit specifications – 76 lb/cft with minimum gel strength of 26 lbs./100 sq ft. (Calculated Volume: 190 bbls). **Notify DOGGR to witness mud operation.**

10. Rig up cementers. Lay a Cement Plug (Class G Cmt + 35% Silica Flour + additives) from 600' to surface, (Calculated Volume + 10% excess: 130 cft.). **Notify DOGGR to witness.**

11. Fill all un-cemented annuli to a depth of at least 30' to 5' with cement. Dig outside the conductor casing 6' below ground level. Cut casings off 5' below ground level. Weld on a steel top plate with well identification, well name and API #. Remove cellars and pads. **Notify DOGGR to witness surface abandonment**.

12. Restore surface location to original grade within 60 days. **DOGGR to witness and approve site**.

Rec'd 10-08-13 DOGGR D2 Ventura

VINTAGE PRODUCTION CALIFORNIA, LLC

Ojai Field
Ventura Country, California
Ferndale VF 107 - P&A Program
August 31, 2013

VINTAGE PETROLEUM LLC - CALIFORNIA

FERNDALE VF 107

Event: WELL MAINT - RIG
Event End: 5/2/2012 00:00
Sec. Reason: DH ROD PUMP FAILURE

Water Depth: 1,061.0ft
Datum: Original KB @ 1,080.00ft (datum)
API No.: 04111121066

Wellbore: ORIGINAL HOLE
PBMD: 6,412.0ft
Btm TMD: 8,272.0ft
Spud Date: 7/3/1981 00:00
BH Coord X: 1,673,032.77usft
BH Coord Y: 341,612.41usft

Casing Shoes (ftKB) | Schematic (5/2/2012) | Openings Top/Btm/Type/Status

816.0
5,804.0
7,674.0
7,872.0

6,330.0ft, 6,350.0ft, PERFORATED, OPEN
6,700.0ft, 6,701.0ft, PERFORATED, ISOLATED
6,752.0ft, 6,753.0ft, PERFORATED, ISOLATED
6,760.0ft, 6,761.0ft, PERFORATED, ISOLATED
6,771.0ft, 6,772.0ft, PERFORATED, ISOLATED
6,787.0ft, 6,788.0ft, PERFORATED, ISOLATED
6,924.0ft, 6,925.0ft, PERFORATED, ISOLATED
6,942.0ft, 6,943.0ft, PERFORATED, ISOLATED
6,951.0ft, 6,952.0ft, PERFORATED, ISOLATED
6,957.0ft, 6,958.0ft, PERFORATED, ISOLATED
6,966.0ft, 6,967.0ft, PERFORATED, ISOLATED
6,976.0ft, 6,977.0ft, PERFORATED, ISOLATED
6,984.0ft, 6,985.0ft, PERFORATED, ISOLATED
6,992.0ft, 6,993.0ft, PERFORATED, ISOLATED
6,990.0ft, 6,991.0ft, PERFORATED, ISOLATED
7,011.0ft, 7,012.0ft, PERFORATED, ISOLATED
7,050.0ft, 7,051.0ft, PERFORATED, ISOLATED
7,064.0ft, 7,065.0ft, PERFORATED, ISOLATED
7,074.0ft, 7,075.0ft, PERFORATED, ISOLATED
7,089.0ft, 7,090.0ft, PERFORATED, ISOLATED
7,087.0ft, 7,088.0ft, PERFORATED, ISOLATED
7,065.0ft, 7,066.0ft, PERFORATED, ISOLATED
7,123.0ft, 7,124.0ft, PERFORATED, ISOLATED
7,134.0ft, 7,135.0ft, PERFORATED, ISOLATED
7,165.0ft, 7,166.0ft, PERFORATED, ISOLATED
7,236.0ft, 7,237.0ft, PERFORATED, ISOLATED
7,242.0ft, 7,243.0ft, PERFORATED, ISOLATED
7,250.0ft, 7,251.0ft, PERFORATED, ISOLATED
7,256.0ft, 7,257.0ft, PERFORATED, ISOLATED
7,202.0ft, 7,203.0ft, PERFORATED, ISOLATED
7,271.0ft, 7,272.0ft, PERFORATED, ISOLATED
7,310.0ft, 7,311.0ft, PERFORATED, ISOLATED
7,403.0ft, 7,404.0ft, PERFORATED, ISOLATED
7,411.0ft, 7,412.0ft, PERFORATED, ISOLATED
7,470.0ft, 7,471.0ft, PERFORATED, ISOLATED
7,477.0ft, 7,478.0ft, PERFORATED, ISOLATED
7,460.0ft, 7,460.0ft, , SQUEEZED
7,534.0ft, 7,535.0ft, PERFORATED, ISOLATED
7,535.0ft, 7,536.0ft, PERFORATED, ISOLATED
7,536.0ft, 7,537.0ft, PERFORATED, ISOLATED
7,538.0ft, 7,539.0ft, PERFORATED, ISOLATED
7,546.0ft, 7,547.0ft, PERFORATED, ISOLATED
7,548.0ft, 7,547.0ft, PERFORATED, ISOLATED
7,548.0ft, 7,549.0ft, PERFORATED, ISOLATED
7,550.0ft, 7,551.0ft, PERFORATED, ISOLATED
7,552.0ft, 7,553.0ft, PERFORATED, ISOLATED
7,552.0ft, 7,553.0ft, PERFORATED, ISOLATED
7,554.0ft, 7,555.0ft, PERFORATED, ISOLATED
7,556.0ft, 7,557.0ft, PERFORATED, ISOLATED
7,560.0ft, 7,557.0ft, PERFORATED, ISOLATED
7,561.0ft, 7,562.0ft, PERFORATED, ISOLATED
7,563.0ft, 7,564.0ft, PERFORATED, ISOLATED
7,565.0ft, 7,566.0ft, PERFORATED, ISOLATED
7,553.0ft, 7,567.0ft, PERFORATED, ISOLATED
7,568.0ft, 7,569.0ft, PERFORATED, ISOLATED
7,571.0ft, 7,572.0ft, PERFORATED, ISOLATED
7,571.0ft, 7,572.0ft, PERFORATED, ISOLATED
7,573.0ft, 7,574.0ft, PERFORATED, ISOLATED
7,575.0ft, 7,577.0ft, PERFORATED, ISOLATED
7,578.0ft, 7,579.0ft, PERFORATED, ISOLATED
7,578.0ft, 7,579.0ft, PERFORATED, ISOLATED
7,580.0ft, 7,581.0ft, PERFORATED, ISOLATED
7,585.0ft, 7,586.0ft, PERFORATED, ISOLATED
7,585.0ft, 7,586.0ft, PERFORATED, ISOLATED
7,590.0ft, 7,591.0ft, PERFORATED, SQUEEZED
7,591.0ft, 7,592.0ft, PERFORATED, ISOLATED
7,592.0ft, 7,593.0ft, PERFORATED, ISOLATED
7,613.0ft, 7,614.0ft, PERFORATED, SQUEEZED
7,619.0ft, 7,620.0ft, PERFORATED, ISOLATED
7,623.0ft, 7,624.0ft, PERFORATED, ISOLATED
7,626.0ft, 7,627.0ft, PERFORATED, ISOLATED
7,631.0ft, 7,632.0ft, PERFORATED, ISOLATED
7,631.0ft, 7,632.0ft, PERFORATED, ISOLATED
7,634.0ft, 7,635.0ft, PERFORATED, ABANDONED
7,638.0ft, 7,639.0ft, PERFORATED, OPEN
7,640.0ft, 7,641.0ft, PERFORATED, ISOLATED
7,645.0ft, 7,646.0ft, PERFORATED, ISOLATED
7,647.0ft, 7,648.0ft, PERFORATED, SQUEEZED
7,649.0ft, 7,650.0ft, PERFORATED, OPEN
7,650.0ft, 7,651.0ft, PERFORATED, ISOLATED
7,651.0ft, 7,652.0ft, PERFORATED, ISOLATED
7,657.0ft, 7,658.0ft, PERFORATED, ISOLATED
7,657.0ft, 7,658.0ft, PERFORATED, ISOLATED
7,661.0ft, 7,662.0ft, PERFORATED, SQUEEZED
7,694.0ft, 7,695.0ft, PERFORATED, ISOLATED
7,722.0ft, 7,723.0ft, PERFORATED, ABANDONED
7,733.0ft, 7,734.0ft, PERFORATED, ABANDONED
7,745.0ft, 7,746.0ft, PERFORATED

TUBING STRING — Report Date: 5/2/2012 00:00

Component	Top MD (ft)	Btm MD (ft)
TH-SOL	19.0	21.4
TBGJNT	21.4	5,521.6
DRAIN	5,521.6	5,524.4
TBGJNT	5,524.4	5,597.7
HTBGAN	5,597.7	5,560.2
TBGJNT	5,560.2	5,653.3
PMPSH	5,653.3	5,654.0
TBGJNT	5,654.0	5,716.6
PMPSH	5,716.6	5,717.4
STCOLL	5,717.4	5,717.8

PLUG BACK — Report Date: 4/30/2012 00:00

Component	Top MD (ft)	Btm MD (ft)
FILL	6,400.0	6,420.0

PLUG BACK — Report Date: 4/17/2012 00:00

Component	Top MD (ft)	Btm MD (ft)
FILL	6,402.0	6,420.0

MECHANICAL ITEM — Report Date: 1/23/2012 00:00

Component	Top MD (ft)	Btm MD (ft)
BP-RET	6,420.0	6,424.0

PLUG BACK — Report Date: 5/5/1982 00:00

Component	Top MD (ft)	Btm MD (ft)
MUD	7,726.0	7,730.0

PLUG BACK — Report Date: 5/5/1982 00:00

Component	Top MD (ft)	Btm MD (ft)
FILL	7,730.0	7,753.0

MECHANICAL ITEM — Report Date: 5/5/1982 00:00

Component	Top MD (ft)	Btm MD (ft)
CR-PRM	7,761.0	7,764.0

PLUG BACK — Report Date: 8/24/1981 00:00

Component	Top MD (ft)	Btm MD (ft)
FILL	7,770.0	7,772.0

MECHANICAL ITEM — Report Date: 8/25/1981 00:00

Component	Top MD (ft)	Btm MD (ft)
JUNK	7,900.0	8,225.0

ROD STRING — Report Date: 5/2/2012 00:00

Component	Top MD (ft)	Btm MD (ft)
POLROD	6.0	30.0
PNYROD	30.0	46.0
R-SPER	46.0	1,368.0
ROD	1,368.0	2,026.0
ROD	2,026.0	3,016.0
R-SPER	3,016.0	5,656.0
PNYROD	5,656.0	5,658.0
BSPMP	5,658.0	5,687.0

SURFACE CASING — Report Date: 7/5/1981 00:00

Item	OD (in)	Grade	Wt. (ppf)	Top MD (ft)	Btm MD (ft)
CASING JOINT(S)	9.625	H-40	32.30	19.0	816.0

PRODUCTION CASING — Report Date: 8/20/1981 00:00

Item	OD (in)	Grade	Wt. (ppf)	Top MD (ft)	Btm MD (ft)
CASING JOINT(S)	7.000	N-80	26.00	19.0	5,804.0

PRODUCTION LINER — Report Date: 8/24/1981 00:00

Item	OD (in)	Grade	Wt. (ppf)	Top MD (ft)	Btm MD (ft)
CASING JOINT(S)	5.500	N-80	17.00	5,663.0	7,822.0

SCREEN / SLOTTED LINER — Report Date: 8/19/1981 00:00

Item	OD (in)	Grade	Wt. (ppf)	Top MD (ft)	Btm MD (ft)
CASING JOINT(S)	2.875	J-55	6.50	6,679.0	6,750.0
WIRE-WRAPPED SCREEN		J-55	6.50	6,750.0	7,673.0
CASING JOINT(S)	2.875	J-55	6.50	7,673.0	7,674.0

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

CHECK LIST-RECORDS RECEIVED AND WELL STATUS

OPERATOR **Vintage Prod California LLC** WELL DESIGNATION: **"Valex-Ferndale" 107**

API No. **11121066** SEC **16** , T. **4N** , R. **21W** , **SB** B. and M.

COUNTY: **Ventura** FIELD **Ojai**

Type of Notice: **Rework** **Date:** **10/20/2011** **Report Number:** **P211-354**

RECORDS RECEIVED (ATTACH PAGES IF REQUIRED)

	Date	OK	NEED	Remarks
Well Summary (OG100)	2/28/12			
History (OG103)				
E-Log				
Mud Log				
Dipmeter				
Directional				
Core and/or SWS				

NEW STATUS

DATE: 2/12

NOTICE OF RECORDS DUE

DATE: _____

DATE: _____

DATE: _____

DATE: _____

WELL STATUS INQUIRY

DATE: _____

DATE: _____

Well Stat

Change Required: NO

Change Done: _____

ABANDONMENTS/REABANDONMENTS/DRILLS/REDRILLS

ABANDONMENT DATABASE : _____ SURFACE INSPECTION NEEDED _____ COMPLETED _____
Date and Inspector

FINAL LETTER NEEDED _____ COMPLETED _____ DRILL/REDRILL DATABASE _____
(Date)

ENGINEER'S CHECK LIST

T-REPORT(S) _____ OPERATOR'S NAME _____ WELL DESIGNATION _____ SIGNATURE _____

LOCATION _____ ELEVATION: _____ CONFIDENTIAL RELEASE DATE: _____ PERMIT REQUIREMENTS MET _____

CLERICAL CHECK LIST

LOCATION CHANGE (OG165) _____ ELEVATION CHANGE (OG165) _____ RELEASE OF BOND (OG150) _____

REMARKS

RECORDS SCANNED: 3/12/12
(Date)

RECORDS APPROVED: 3/12/12
(Date and Engineer)

Modfied OGD2

Division of Oil, Gas, and Geothermal Resources
District 2-Ventura
Log Report

Operator **Vintage Prod California LLC**

Well Designation: **Valex-Ferndale** **107**

API Number: **11121066** Sec. **16** T. **4N** R **21W** SB

Date Run	*Type*	*Depth from*	*Depth to*
7/30/1981	Dipmeter Arrow Plot	4518	6950
8/13/1981	Dipmeter Arrow Plot	6280	8218
7/29/1981	Dual Induction-SFL with RXO-RT	816	6966
8/1/1981	Dual Induction-SFL with RXO-RT	1750	7169
8/6/1981	Dual Induction-SFL with RXO-RT	1000	7846
8/13/1981	Dual Induction-SFL with RXO-RT	6260	8260
2/27/1984	Gamma Ray Log	6600	7630
8/13/1981	Mud Log	4500	8271
1/26/2012	SLIM Cement Mapping Tool-CBL-Reservoir Saturation Tool-TPHI-Gamma Ray	3000	6398

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

Rec'd 02-28-12 DOGGR D2 Ventura

HISTORY OF OIL OR GAS WELL

Operator Vintage Production California, LLC Field Ojai County Ventura

Well Valex Ferndale 107 Sec. 16 T. 4N R. 21W SB B.&M.

A.P.I. No. 04-111-21066 Name Deborah Young for Alan E. White (Person submitting report) Title Agent (President, Secretary, or Agent)

Date 02/27/2012 (Month, day, year) For Technical Questions Please Contact: Alex Iwasiw, Operations Engineer

Signature [signature]

Address 9600 Ming Avenue, Bakersfield, CA 93311 Telephone Number (661) 869-8000

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment, with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, and initial production data.

REWORK HISTORY: P211-354

1/21/2012

R/U. 100psi on tbg & csg. B/D well & tbg & csg died @ the same time. Hole in tbg. R/U rod equipment. Pulled pump off seat (OK). Tbg did suck a little bit. Pulled out 60 (1") slick, 66 (7/8") slick, 68 (¾") slick & 20 (¾") guided FIGs. From rod # 98-214 rods were slightly worn on body & shoulder. Pump was stuck open unable to close. N/D WH & N/U BOPE. Function test BOPE (OK). CIW. SDFW.

1/23/2012

100psi on tbg & csg. B/D well, gas only. R/U working floor & tbg equipment. R/U West Coast Pipe Inspection. Scan tbg out of hole. Scan results are 118 blue, 40 yellow, 36 green & 11 red. No leak found. Got ready to L/D 1¼" hydrill. CIW. SDFN.

1/24/2012

60psi on tbg & csg. B/D well, gas only. L/D 32 jts of 1¼" CS Hydrill tbg. MU 7" 26# positive set csg scraper & bumper sub. RIH w/7" scraper to top of liner @ 5663' w/no restrictions. POOH w/7" scraper & L/D. MU 5½" 17# positive set csg scraper & bumper sub. Ran 5½" scraper to 2500'. CIW. SDFN.

1/25/2012

50psi on tbg & csg. B/D well, gas only. Continue RIH w/5½" positive set csg scraper down to 6671' w/no restrictions until this point. Tight spot @ 6671', sat down 25K. POOH w/tbg & 5½" scraper & L/D. PU 5½" Model A-3 Lock-set RBP w/43 unloader. RIH w/RBP & set it @ 6420'. CIW. SDFN.

1/26/2012

0psi on well. R/U mud pump. Fill well w/157 bbls of lease water pumping 4.7bpm @ 0psi. After getting returns, change well over w/200 bbls of lease water pumping 4.7bpm @ 750psi. Pressured tested csg to 1000psi, OK for 15min. Dumped 2 sx sand. POOH w/tbg & retrieving head. R/U Schlumberger Wireline. Wireline tagged @ 6406'. Ran Schlumberger RST plus SCMT CBL from 6406' to 3000'. CIW. SDFN.

1/27/2012

0psi on well. RIH w/all tbg. Pulled all tbg & L/D. Total of 223 jts of 2-7/8" J55 in location. CIW. SDFW.

1/30/2012

0psi on well. R/U Schlumberger Wireline. Perf from 6330' to 6350'. R/D wireline. Atlas off-loaded 190 jts of 3½" N80 new tbg & 1 jt of 2-7/8" N80 tubing. R/U Ace Tester. PU frac pkr & started RIH w/pkr & hydrotesting tbg to 8000psi. Tested 20 jts. R/D tester. CIW. SDFN.

1/31/2012

Check & B/O 0psi from tbg & csg. Open up well & Function tested BOPE (ok). MIRU ACE hydro tester. RIH PU 3½" N-80 new tbg out of ground & testing tbg to 8000psi. PU 145, 3½" N-80 new jts all tbg tested good. R/D tester. SDFN.

SUBMIT IN DUPLICATE

Rec'd 02-28-12 DOGGR D2 Ventura

HISTORY OF OIL OR GAS WELL

2/1/2012

0psi on well. R/U Ace Tester. Finish hydrotesting tbg. Tested 1 jt 2-7/8" N80 & 172 jts 3½" N80 tbg to 8000psi (OK). R/D tester. R/D tbg equipment & N/D BOPE. Set frac 5½" Lock-set pkr @ 5679' w/13K compression. Set DBB donut on WH. Pressured tested csg to 1000psi (OK 15min). B/D pressure. CIW. SDFN.

2/2/2012

0psi on tbg & csg. PU & put away tools. RDMO.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

No. T 212-038

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

Report on Operations

William J. Hill, Agent
Vintage Production California LLC
9600 Ming Ave. Suite 300
Bakersfield, CA 93311

Ventura, California
January 25, 2012

Your operations at well "Valex-Ferndale" 107 **, API No.** 111-21066
Sec. 16 **, T.** 4N **, R.** 21W **,** SB **B. & M.** Ojai
Field in Ventura **County,**
were witnessed on 1/25/2012 **by** W. Beil **, representative of the supervisor.**

Operations Witnessed	Result – Def.	Engineer	Date
BOPE Inspection	Approved – 0	W. Beil	1/25/2012

The operations were performed for the purpose of inspecting the blowout prevention equipment and installation.

DECISION: Approved

tkc

By

Tim Kustic
State Oil and Gas Supervisor

District Deputy

OG109 Rev9/01 (9/89/GSR1/5M)

API No. 111-21066 DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES T 212-038

BLOWOUT PREVENTION EQUIPMENT MEMO

Operator Vintage Production CA LLC Well "Alex-Ferndale" 107 Sec. 16 T. 4N R. 21W
Field Oak County Ventura Spud Date

VISITS:	Date	Engineer	Time	Operator's Rep.	Title
1st	01-25-12	W. Beil	(09:30 to 10:30)	Alex Iwasiw	Prod. Engineer
2nd			(to)		

Contractor KEY ENERGY SVCS Rig # 561 Contractor's Rep. & Title Cosme Valenzuela - Rig Supervisor
Casing record of well: 9 5/8" 0-816' cem; 7" 0-5804' cem; 5 1/2" 5663'-7872' cem;
Perfs 6752'-7724' TD 8275' CMT plug 7728'-7714'

OPERATION: ~~Testing~~ (inspecting) the blowout prevention equipment and installation. Critical well? Y ☐ N ☑
DECISION: The blowout prevention equipment and its installation on the 7" " casing are approved.

Proposed Well Opns: Recomplete . MACP: psi
Hole size: " fr. ' to ', " to ' & " to '

REQUIRED BOPE CLASS: II 2M

CASING RECORD OF BOPE ANCHOR STRING					Cement Details	Top of Cement	
Size	Weight(s)	Grade(s)	Shoe at	CP at		Casing	Annulus
7"	26#	N-80 / K-55	5804'				

BOP STACK

API Symb.	Ram Size (in.)	Manufacturer	Model or Type	Vert. Bore Size (in.)	Press. Rtg.	Date Last Overhaul
Rd	2 7/8	Hydrill		7 1/16	3M	
✓	CSO	✓		✓	✓	

TEST DATA

Gal. to Close	Recov. Time (Min.)	Calc. GPM Output	psi Drop to Close	Secs. to Close	Test Date	Test Press.

ACTUATING SYSTEM

Accumulator Unit(s) Working Pressure 3000 psi
Total Rated Pump Output — gpm
Distance from Well Bore 60' ft.
Fluid Level 3/4

Accum. Manufacturer	Capacity	Precharge
Key	40 gal.	2360 psi
	gal.	psi

CONTROL STATIONS	Elec.	Hyd.	Pneu.
✓ Manifold at accumulator unit	✓	✓	
Remote at Driller's station			
Other:			

EMERG. BACKUP SYSTEM			Press.	Wkg.Fluid
✓ N_2 Cylinders	1	L= "	2180	gal.
Other:	(2)	L= "	2300	gal.
	3	L= "		gal.
	4	L= "		gal.
	5	L= "		gal.
	6	L= "		gal.
	TOTAL:			gal.

AUXILIARY EQUIPMENT

		No.	Size (in.)	Rated Press	Connections: Weld	Connections: Flange	Connections: Thread	Test Press.
	Fill-up Line							
✓	Kill Line		2"	5M			✓	
✓	Control Valve(s)	2	✓	✓			✓	
—	Check Valve(s)							
	Aux. Pump Cnnct.							
	Choke Line							
	Control Valve(s)							
	Pressure Gauge							
	Adjstble Choke(s)							
	Bleed Line							
	Upper Kelly Cock							
	Lower Kelly Cock							
	Standpipe Valve							
	Stndpipe Pres. Gau.							
✓	Pipe Safety Valve		2 7/8	5M			✓	
	Internal Preventer							

HOLE FLUID MONITORING EQUIPMENT	Alarm Type: Audible	Alarm Type: Visual	Class
Calibrated Mud Pit			A
Pit Level Indicator			
Pump Stroke Counter			B
Pit Level Recorder			
Flow Sensor			C
Mud Totalizer			
Calibrated Trip Tank			
Other:			

Hole Fluid Type	Weight	Storage Pits (Type & Size)
LEASE H2O	—	500 bbls

REMARKS AND DEFICIENCIES:

GD9 (9/06)

NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES

No. P **211-354**

520 (Old) Field Code 520 (New)
12 (Old) Area Code 12 (New)
10 (Old) Pool Code 10 (New)

PERMIT TO CONDUCT WELL OPERATIONS

William J. Hill, Agent
Vintage Production California LLC
9600 Ming Ave., Suite 300
Bakersfield CA 93311

Ventura, California
October 24, 2011

Your proposal to **rework** well **"Valex-Ferndale" 107**, A.P.I. No. **111-21066**, Section **16**, T.**4N**, R.**21W**, **S.B.** B. & M., **Ojai** Field, **Silverthread** Area, **Miocene** Pool, **Ventura**, County, dated **10/20/11**, received **10/20/11** has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED:

1. Blowout prevention equipment, as defined by this Division's publication No. M07, shall be installed and maintained in operating condition and meet the following minimum requirements: Class II 2M and 2M lubricator for perforating operations.
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface condition in order to prevent blowouts.
3. This office shall be contacted by phone prior to making any program changes and no changes are made without Division approval.
4. **THIS DIVISION SHALL BE NOTIFIED:**
   a. Inspect the blowout prevention equipment prior to commencing dowhole operations.

Engineer: Steve Fields

Phone: (805) 654-4761

Elena M. Miller
State Oil and Gas Supervisor

By
Bruce H. Hesson, District Deputy

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work is completed or the operations have been suspended. Issuance of this permit does not preclude the recipient from the obligation of being in compliance with all applicable Federal, State and Local laws, regulations and ordinances.

OG 111

SD
12- Sylvan
10 Mem

NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

FOR DIVISION USE ONLY		
	Forms	
Bond	OGD114	OGD121
1000 000	111 ✓	115 ✓

NOTICE OF INTENTION TO REWORK / REDRILL WELL

Detailed instructions can be found at: www.conservation.ca.gov/dog/ P211-354

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework ☒ / redrill ☐ (Check one) well Valex-Ferndale 107, API No. 111-21066,

Sec. 16, T. 4N, R. 21W, S.B. B.&M., Ojai-Silvwerhread Field, Ventura County.

The complete casing record of the well (present hole), including plugs and perforations, is as follows: (Attach wellbore schematics diagram also.)

See attached program

The total depth is: _____ feet. The effective depth is: _____ feet.

Present completion zone(s): _____ (Name). Anticipated completion zone(s): _____ (Name).

Present zone pressure: _____ psi. Anticipated/existing new zone pressure: _____ psi.

Is this a critical well as defined in the California Code of Regulations, Title 14, Section 1720(a) (see next page)? Yes☐ No☒

For redrilling or deepening only, is a California Environmental Quality Act (CEQA) document required by a local agency? Yes☐ No☐ If yes, see next page.

The proposed work is as follows: (A complete program is preferred and may be attached.)

RECEIVED
OCT 20 2011
Div. of Oil, Gas & Geothermal Resources
Ventura

See Attached Program

If well is to be redrilled or deepened, show proposed coordinates (from surface location) and true vertical depth at total depth: _____ feet _____ (Direction) and _____ feet _____ (Direction) Estimated true vertical depth: _____

Will the Field and/or Area change? Yes☐ No☐ If yes, specify New Field: _____ New Area: _____

The Division must be notified immediately of changes to the proposed operations. Failure to provide a true and accurate representation of the well and proposed operations may cause rescission of the permit.

Name of Operator			
Vintage Production California			
Address		City/State	Zip Code
270 Quail Court Unit 201		Santa Paula	93060
Name of Person Filing Notice	Telephone Number:	Signature	Date
Alex Iwasiw	661-212-1535		10-20-11
Individual to contact for technical questions:	Telephone Number:	E-Mail Address:	
Alex Iwasiw	661 -212-1535	Alex_Iwasiw@Oxy.com	

This notice and an indemnity or cash bond must be filed, and approval given, before the workover begins. (See the reverse side for bonding information.) If operations have not commenced within one year of the Division's receipt of the notice, this notice will be considered cancelled.

Vintage Production California LLC

A subsidiary of Occidental Petroleum Corporation

Wellwork Program

Well Name:	**Valex Ferndale 107**	*Location:*	**SEC 16 - 4N - 21W**
Field Name:	**Siverthread**	*API :*	**111-21066**
County, ST:	**Ventura County, California**	*Present Zones:*	**Mohnian**
Purpose:	**Recomplete in B Sand, 6280' - 6400'**	*Date:*	**04/26/2011**

Present Condition (original hole completed 1981):

Total depth: 8275'
PBTD: 7674'

9-5/8", 32.2#; H-40 csg. 0' - 816' cmt'd w/ 490 cuft.

7", 26#; N-80&K-55 csg. 0' - 5804' cmt'd w/ 1050 cuft.

5-1/2", 17#, N-80 csg. 5663' to 7872' cmt'd w/ 1050 cuft.
cmt'd at 7785' w/ 24 cuft
cmt'd at 7490' w/ 23 cuft
cmt'd at 6700' w/ 26 cuft

2-7/8", 6.5#, J-55 csg. 6679' to 7674' SS WWS, hung.

Effective Perforations:
In 5-1/2" casing:
4 (0.50") JHPF 7538' - 7661', selected one foot intervals, 40 holes total; 09/04/81.
4 (0.39) JHPF 7534' to 7724', selected one foot intervals, 72 holes total; 11/10/82.
4 (0.38) JHPF 6752' - 7477' , selected one foot intervals, 136 holes total; 12/23/82
4 (0.38) JHPf 7536' - 7664', selected one foot intervals, 64 holes total; 03/05/83
2-7/8" SS WWS 0.006" openning stainless steel screen 6750' - 7673"

Isolated Perforations:
4 (0.50) JHPF @ 7722', 7733', 7745', 7753'; from 09/04/81

WSO Holes:
4 (0.44) JH @ 7785' (WSO #1) sqz'd with 24 cuft.
4 (0.44) JH @ 7490' (WSO #2) sqz'd with 23.1 cuft
4 (0.44) JH @ 6700 (WSO #3) sqz'd with 26.5 cuft

Casing Issues:
Tight spot 7770' to 7820' cleaned out with econo mill.
Restriction 7613'.
Tight spot 7542', 8000# overpull.
Tight spot at 7085', 8000# overpull to pull out.
Tight spot at 6996', worked through with 4-3/4" swedge.

Plugs:
Baker K-1 cement retainer set at 7758'.
Cement plug from 7728' to 7714'.

RECEIVED
OCT 20 2011
Div. of Oil, Gas & Geothermal Resources
Ventura

Wellwork Program (all depths refer to the original KB height which was 12' above ground level)

1. MI, prep JSA, energy control and hold pre-job safety meeting.

2. RU work over rig.
3. POOH with pump and rods.
4. Install Class II 2M BOPE and function test. Notify DOG to inspect.
5. POOH w/ 2-7/8" J-55 tubing and send to JD Rush for inspection.
6. Haul in 7500' of 2-7/8" N-80 tubing.
7. Make up 5-1/2" positive scraper, RIH to 6700', POOH.
8. M/U 5-1/2" retrievable bridge plug RIH and set at 6670', dump two 2 sax sand, POOH.
9. Fill well with produced water.
10. Circulate hole clean.
11. Pressure test casing to 1000 psi.
12. Rig up wire line.
13. Run compensated neutron and Cast V CBL from 6650' to 3000'.

(If bond log shows poor bond above or below perf interval prepare to sqeeze cement to isolate)

(Note all depth for squeeze work will be determined after bond log is run.)

(Depths for producing perfs may vary depending on results from neutron log.)

a. Rig up wireline.
b. RIH with perf guns, shoot sqz holes at determined depth.
c. Rig down wireline.
d. Attempt to break down squeeze perfs, record rate and pressure.
e. Rig up cementers.
f. Mix and pump Class G cement with addatives.
g. Squeeze cement away.
h. ***(Production engineer to determine cement volume, addatives and pressures***
i. ***once break down rate and pressure are determined.)***
j. Reverse tubing clean.
k. Wait on squeeze overnight.
l. POOH with tubing.
m. Make up 5-1/2" bit and drill collars.
n. RIH tag TOC, drill out cement past upper squeeze holes.
o. Pressure test holes to 1500 psi.
p. If holes test good return to drilling, else re-squeeze.
q. Change hole over with 5% KCl water.
r. POOH with clean out string.

14. Rig up wireline.
15. Perforate the following intervals using hollow carrier 6 HPF, 60 degree phasing 0.45" dia. holes:
    6330' - 6350'
16. Rig down wireline.
17. MU and test in hole frac packer to 7000 psi with 8 sec hold.
18. Set packer at 6650'.
19. Install 15,000 psi TIW valve.
20. MIRU Halliburton fracturing equipment.
21. Pressure test treating iron to 8000 psi (frac fluid base of 4% to be supplied by VPC).
22. Frac well as per Halliburton frac program (see attached).
23. Rid down Halliburton frac equipment.
24. Attempt to flow back well.
25. Release frac packer, POOH.
26. RIH with production BHA.
27. Hydrotest tubing in hole.
28. Set pump shoe at 6000'
29. Nipple down BOPE.
30. Install production tree.
31. RIH with sand rod pump and rods, (rod design by Paul Floyd).
32. Pressure test pump to 600 psi.
33. RDMO.
34. Start well on production.

RECEIVED
OCT 20 2011
Div. of Oil, Gas & Geothermal Resources
Ventura

PROPERTY/WELL TRANSFER OR ACQUISTION

Seneca Resources Corporation (S2630)

to

Vintage Production California LLC (V1370)

Effective April 25, 2008

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF PROPERTY AND WELL TRANSFER

Field or county	District
Ojai	2
Former owner	**Date**
Argo Petroleum Corp.	Sept. 10, 1987

Name and location of well(s)

Sec. 16, T. 4N., R. 21W., SBB&M

"Barker-Ferndale" 1	(111-20423)	"Valex-Ferndale" 211	(111-21178)
"Barker-Ferndale" 2	(111-20604)	"Valex-Ferndale" 214	(111-21180)
"Barker-Ferndale" 3	(111-20609)	"Valex-Ferndale" 215	(111-21206)
"Barker-Ferndale" 4	(111-20685)	"Valex-Ferndale" 313	(111-21314)
"Barker-Ferndale" 5	(111-20702)	"Ferndale" 8	(111-20732)
"Barker-Ferndale" 6	(111-20730)		
"Valex-Ferndale" 107	(111-21066)		
"Valex-Ferndale" 110	(111-21163)		
"Valex-Ferndale" 209	(111-21105)		

Description of the land upon which the well(s) is (are) located

Date of transfer, sale, assignment, conveyance, or exchange	New owner / Address	Type of organization / Telephone No.
7-17-87	Seneca Resources Cprporatipn 511 16th St. Mall, Ste 300 Denver, CO 80202	Corp. (303) 825-7401

Reported by
Seneca Resources Corp.

Confirmed by
Argo Petroleum Corp.

New operator new status (status abbreviation)	Request designation of agent
PA	
Old operator new status (status abbreviation)	**Remarks**
PA	

Deputy Supervisor: Patrick J. Kinnear

Signature: Patrick J. Kinnear

OPERATOR STATUS ABBREVIATIONS

PA – Producing Active
NPA – No Potential, Active
PI – Potential Inactive
NPI – No Potential, Inactive
Ab – Abandoned or No More Wells

FORM AND RECORD CHECK LIST

Form or record	Initials	Date	Form or record	Initials	Date
Form OGD121			Map and book		
Form ODG148			Notice to be cancelled		
New well cards			Bond status		
Well records			EDP files		
Electric logs					
Production reports					

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

REPORT OF CORRECTION OR CANCELLATION

Ventura California

August 4, 1986

Mr. Harry Hull, Agent
Argo Petroleum Corp.
411 S. Beckwith Rd.
Santa Paula, CA 93060

In accordance with California Laws for Conservation of Petroleum and Gas Section 3203

the following change pertaining to your well No. Valex-Ferndale 107,

Sec. 16, T. 4N, R. 21W, SB B. & M., Ojai field,

Ventura County, District No. 2, is being made in our records:

☐ The corrected location is

☐ The corrected elevation is

☐ Report No. , dated , has been corrected as follows:

☒ Your notice to alter casing (Drill, abandon, etc.) dated 4-2-85, and our report No. P 285-70, issued in answer thereto, are hereby cancelled inasmuch as the work will not be done. If you have a drilling bond on file covering this notice it will be returned. No request for such return is necessary.

☐ Other:

MAP	MAP BOOK	CARDS	BOND	EDP	FORMS 114	FORMS 121

State Oil and Gas Supervisor

By Murray W. Dosch
Murray W. Dosch, Deputy Supervisor

OGD165 (8-75—GSRI—3M)

The Resources Agency of California
Department of Conservation

DIVISION OF OIL AND GAS

WELL STATUS INQUIRY

Ventura, Calif.

June 11, 1986

To: Mr. Harry Hull, Agent
Argo Petroleum Corp.
411 S. Beckwith Rd.
Santa Paula, CA 93060

In a notice dated 4/2 19 86, you propose to alter casing
well "Valex-Ferndale" 107
Sec. 16, T. 4N, R. 21W SB B. & M., Ojai
(Field or County)

Please indicate below conditions or intentions regarding this proposed work and return the completed form to this office within 10 days.

____ THIS WORK HAS BEEN DONE. If you check this space, please file the required well records on this work in duplicate within 60 days after work was completed.

____ THIS WORK IS IN PROGRESS AND SHOULD BE COMPLETED ABOUT _____ 19 ___.

____ THIS WORK HAS NOT BEEN DONE, BUT WE STILL INTEND TO DO THE WORK.*
Please give details. _____

____ WE DO NOT INTEND TO DO THIS WORK. Please cancel our notice to _____, dated _____ 19 ___.

Signature _____

(Bonds on file covering canceled notices will be returned.)

____ OTHER: _____

NOTE: Division 3 of the Public Resources Code states in part:
Section 3215, ...Well records shall be filed 60 days after completion or suspension of proposed work.

*Section 3203, ...If operations have not commenced within one year of receipt of the notice, the notice will be considered canceled. (To prevent cancelation, file a Supplementary Notice with the division.)

M. G. MEFFERD
State Oil and Gas Supervisor

By Murray W. Dosch
Murray W. Dosch

OGD3 (12/82/DWRR/1M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

NOTICE OF RECORDS DUE

Ventura, California
May 1, 19 86

Mr. Harry Hull, Agent
Argo Petroleum Corp.
411 S. Beckwith Rd.
Santa Paula, CA 93060

work was not done.

In accordance with Division 3 of the Public Resources Code of California, the following records are due, covering the alter casing (Notice dated 4/2/85)

of your well(s) "Valex-Ferndale" 107 (111-21066)

Ojai Field, Ventura County, Sec. 16, T. 4N R. 21W SB B. & M.

RECORDS: *Records are due within 60 days after completion, suspension, or abandonment of any well, or upon completion of additional work in any well. Records shall be submitted in duplicate. Division forms must be signed in the spaces provided.*

OIL AND GAS OPERATION

- ☐ Well summary (Form OG 100)
- ☐ Core or sidewall sample (Form OG 101)
- ☑ History (Form OG 103)

GEOTHERMAL OPERATION

- ☐ Well summary (Form OGG 100)
- ☐ Core or sidewall sample (Form OGG 101)
- ☐ History (Form OGG 103)

LOGS, TESTS, AND SURVEYS: *All logs, tests and surveys are due within 60 days after completion, suspension, or abandonment of any well, or upon completion of additional work in any well. Logs, tests and surveys shall be submitted in duplicate.*

- ☐ Electric log (1" = 50 ft.)
- ☐ Velocity survey
- ☐ Water analysis
- ☐ R/A survey
- ☐ Directional survey
- ☐ Mud log
- ☐ Oil and/or gas analysis
- ☐ Spinner survey
- ☐ Dipmeter (computed)
- ☐ Pressure measurements (flowing and static)
- ☐ Temperature survey
- ☐ Cement bond log
- ☐ Other

REPORTS FOR THE MONTH OF : *Production, oil and gas disposition, and injection reports are due on or before the 30th day of each month for the preceding calendar month. Signatures must be provided as required on Division forms.*

OIL AND GAS OPERATION

- ☐ Production and disposition reports (Form OG 110 or computer report)
- ☐ Injection reports (Form OG 110B or computer report)

GEOTHERMAL OPERATION

- ☐ Production reports (Form OGG 110)
- ☐ Injection reports (Form OGG 110B)

NAME	TITLE
PAM CECCARELLI	DIVISION ENGINEER
SIGNATURE Pam Ceccarelli	TELEPHONE NUMBER (805) – 654-4761

OG 170 (6/81/GSR1/6M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 285-70

PERMIT TO CONDUCT WELL OPERATIONS

520 (field code)
12 (area code)
10 (new pool code)
10 (old pool code)

Mr. Harry Hull, Agent
Argo Petroleum Corp.
411 S. Beckwith Rd.
Santa Paula, CA 93060

Santa Paula, California
April 3, 1985

Your _____ proposal to alter casing well "Valex-Ferndale" 107,
A.P.I. No. 111-21066, Section 16, T. 4N, R. 21W, S.B. B. & M.,
Ojai field, Silverthread area, Miocene pool,
Ventura County, dated 4/2/85, received 4/2/85 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Hole fluid of sufficient quality and quantity shall be maintained in the hole to control any subsurface condition, and a reserve supply shall be on hand for emergencies.
2. Blowout prevention equipment of at least DOG Class II 3M shall be installed and maintained in operating condition at all times.
3. The Division will monitor the monthly production of this well for a period of six months and if anomalous water production is indicated, remedial action will be ordered.
4. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.

Blanket Bond
MD:b

Cancelled

Engineer Michael Stettner

Phone 805-525-2105

M. G. MEFFERD, State Oil and Gas Supervisor

By _____
Murray W. Dosch, Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

OG111 (3/85/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

DIVISION OF OIL AND GAS
RECEIVED
APR 2 1985
SANTA PAULA, CALIFORNIA

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
BB	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well No. Valex-Ferndale #107, API No. 111-21066, Sec. 16, T. 4N, R. 21W, S.B. B. & M., Silverthread Field, Ventura County.

The present condition of the well is as follows:

1. Total depth. 8275'

2. Complete casing record, including plugs and perforations:
   9-5/8" (32.3#, H-40) cmt'd @ 816'.
   7" (23#, K-55 & N-80) cmt'd @ 5804'.
   5-1/2" liner hung @ 5663' & cmt'd @ 7872'. CP'd @ 7785', 7490', 6700'.
   Plugged back to 7680'. Perfs 6752'-7666' at int. (4 3/8" JHPF).
   2-7/8" (6.5#, J-55) wire-wrapped screen inner liner hung @ 6679'
   with shoe @ 7674'. Screened at int. 6750'-7673'.
   Reperforated 7555'-7657' at int. (2 1/2" JHPF).

3. Present producing zone name Valex Zone in which well is to be recompleted Argo

4. Present zone pressure 1500 New zone pressure 2000

5. Last produced 3-27-85 (Date) | 28 (Oil, B/D) | 1 (Water, B/D) | 35 (Gas, Mcf/D)

or

6. Last injected (Date) | (Water, B/D) | (Gas, Mcf) | (Surface pressure, psig.)

The proposed work is as follows:

1. Install and test Class II 2M BOPE.
2. Set retrievable bridge plug at 6160'.
3. Jet perforate 5-1/2" liner 6044'-6137'.
4. Test new interval.
5. Sand frac if necessary. Then retest.
6. Retrieve bridge plug.
7. Commingle production from old and new zones.

Cancelled

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 411 S. Beckwith Road (Street)
Santa Paula, Ca. 93060 (City) (State) (Zip)
Telephone Number (805) 933-1321

Argo Petroleum Corporation (Name of Operator)
By Harry Hull (Name) 4-2-85 (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

OPERATOR Argo Pet
LSE & NO Federal
MAP 203

	(1)	(2)	( )	( )	( )	( )
INTENTION	Drill	after csg	Sqz to Drill	after csg	after csg	
NOTICE DATED	4-23-81	9-20-82	9-28-82	3-15-83	1-13-84	
P-REPORT NUMBER	281-145	282-345	282-355	283-61	284-18	
CHECKED BY/DATE			RSH 11-10-82		pmc 6/10/85	
MAP LETTER DATED			11-13-82			
SYMBOL			●	NC	NC	

	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED
NOTICE	4-29-81		9-22-82		9-29-82		3-18-83		1-17-84			
HISTORY	7-16-82		5/10/85		7-16-82		5/10/85		5/10/85			
SUMMARY	7-16-82		5/10/85		7-16-82		5/10/85					
2" DI-SFL IES/ELECTRIC LOG GR-CCL-LOG	2-1-82								6/7/85			
DIRECTIONAL SURV	2-1-82											
CORE/SWS DESCRIP	2-1-82											
OTHER CD FF CAIED SW SVD BC SL M-SL-CH DIP	2-1-82 2-1-82 2-1-82 2-1-82 2-1-82 2-1-82 2-1-82											
RECORDS COMPLETE	RLH 8/10/82		pmc 5/14/85		RLH 12/10/82		pmc 5/14/85		pmc 6/10/85			

ENGINEERING CHECK

T-REPORTS	W30
OPERATOR'S NAME	✓
WELL DESIGNATION	✓
LOC & ELEV	✓
SIGNATURE	✓
SURFACE INSPECTION	
FINAL LETTER OK	

CLERICAL CHECK

POSTED TO M 21 OR to Reinst from compl on May 27 1983

170 MAILED

FINAL LETTER MAILED

RELEASED BOND

REMARKS: ~~W30~~ Need sqz to drill on 5½" Rcvd 9-29-82

Form OG100 (7/79)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
MAY 10 1985
SANTA PAULA, CALIFORNIA

API No. 111-21066

WELL SUMMARY REPORT

Operator	Well
Argo Petroleum Corporation	Valex-Ferndale #107

Field	County	Sec.	T.	R.	B.&M.
Silverthread - Ojai Field	Ventura	16	4N	21W	S.B.

Location (Give surface location from property or section corner, street center line and/or California coordinates)
1077' S & 2922' E from NW corner of Sec. 16.

Elevation of ground above sea level
1061'

Commenced drilling (date)
7/3/81

Completed drilling (date)
8/27/81

Commenced producing (date)
9/11/81

☒ Flowing ☐ Pumping
☐ Gas lift

Name of producing zone(s)
L. Mohnian Sand

Total depth

(1st hole)	(2nd)	(3rd)
8275'		

Present effective depth
7674'

Junk
7714'-7728' cmt. plug (25 sx).

7758' Baker "K-1" cmt. retainer.

Depth measurements taken from top of:
☐ Derrick Floor ☐ Rotary Table ☒ Kelly Bushing
Which is 18.5 feet above ground

GEOLOGICAL MARKERS	DEPTH
U. Big Canyon Fault	5060'
L. Big Canyon Fault	5656'
Lime Unit	6656'

Formation and age at total depth
Lime Unit; L. Mohnian

	Clean Oil (bbl per day)	Gravity Clean Oil	Percent Water including emulsion	Gas (Mcf per doy)	Tubing Pressure	Casing Pressure
Initial Production	202	29.3	6.0	53	720	240
Production After 30 days	274	29.3	7.4	125	600	0

CASING RECORD (Present Hole)

Size of Casing (API)	Top of Casing	Depth of Shoe	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Number of Sacks or Cubic Feet of Cement	Depth of Cementing (if through perforations)
9-5/8"	0	816'	32.2#	H-40, ST&C 8RD	New	12-1/4"	490 cf	Shoe
7"	0	5804'	26#	N-80 & K-55 ST&C 8RD	New	8-3/4"	1050 cf	Shoe
5-1/2"	5663'	7872'	17#	N-80 ST&C 8RD	New	8-3/4"	Shoe = 1050 cf	7785' = 74 cf 7490' = 23 cf
2-7/8"	6679'	7674'	6.5#	J-55 8RD	New	5-1/2" csg.	---	6700' = 26 cf ---

PERFORATED CASING (Size, top, bottom, perforated intervals, size and spacing of perforation and method.)
5-1/2": 4 (.50") JHPF 7538'-7753'. 4 (0.38") JHPF 6752'-7477'. Reperf 4 (0.38") JHPF 7536'-7664'.
2-7/8": .006" opening stainless steel screen 6750'-7673'. Reperf 2 (0.36") JHPF 7535'-7657'. All perfs are at selected intervals.

Was the well directionally drilled? If yes, show coordinates at total depth
☒ Yes ☐ No 1104.89' N & 498.95' E of surface location.

Electrical log depths
DIL 816'-8260'

Other surveys
FDC/CNL, Dipmeter, Mudlog, CBL

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Name	Title	
Harry E. Hull	District Superintendent	
Address	**City**	**Zip Code**
411 S. Beckwith Road	Santa Paula	93060
Telephone Number	**Signature**	**Date**
(805) 933-1321	Harry E. Hull	5-9-85

SUBMIT IN DUPLICATE

DIVISION OF OIL AND GAS
RECEIVED
MAY 10 1985
SANTA PAULA, CALIFORNIA

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION OJAI FIELD VENTURA COUNTY
WELL: VALEX FERNDALE #107 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21066 HARRY E. HULL DISTRICT SUPERINTENDENT

Harry E. Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

05/05/82
MIRU. RU adjustable choke from casing to flow line. Commence bleeding down tubing & casing to master trap. Casing press. 1740 psi; tbg. press. 375 psi. At 300 psi, equalize press. Csg. turned to fluid. Pressure came up to and stabilized @ 400 psi. Equalize thru 20/64" choke. Rig to and start backscuttling with ABF crude holding 250 psi back pressure. Pump total of 300 bbls. Bled well off. Tear out tree & install BOP. SJD.

05/06/82
Circulated well around, clearing gas from hole fluid. Measured out of hole with tubing, anchor, and drain. MU Baker 5-1/2" 17# positive scraper. RIH, tagged fill at 7752'. Backscuttled out fill to 7770'. Backscuttle clean on bottom. Pulled up to 5600' and landed on donut. Closed in. SJD.

05/07/82
Backscuttle well around, working gas out of system. POH with tbg. Lay down scraper. Fill hole with lease crude. RU Pengo with full lubricator. Run Baker 5-1/2" 17# wireline retrievable B.P. Set B.P. @ 7749'. RDMO Pengo. Make up Baker Model "N" retrieving head. RIH with tbg. Land tbg. on donut with tail @ 7491'. Top lock shoe @ 7456'. Install production tree. RU swab equipment. Fluid level @ surface to begin. Last swab run, fluid level @ 1500', swabbed from 2000'. Total of 41 bbls. produced. Rig failure @ 7:00 p.m. SJD.

05/08/82
0 psig on well. Ran swab. Tagged fluid at 900'. Continued swabbing. Fluid level @ 900'. Swabbed 51 bbls. (91 bbls. total.) Well started to flow. Well not flowing with enough pressure to start up trap. Flowed 45 bbls. to Baker tank. Turned well to trap on 12/64" bean. Well died. Opened to Baker tank. Changed bean to 26/64". Flow well to trap. Well died. Surged to Baker tank. Turned well back to trap on 18/64" bean. Flowed 94 bbl.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE #107 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21066 — HARRY E. HULL DISTRICT SUPERINTENDENT

Harry E. Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

05/09/82
Tbg. press. 80 psig. Csg. 0#. Opened tbg. press. Bled off. Ran swab & tag fluid @ 1700'. Well started flowing after lst run, to Baker tank. Choked to 26/64". Installed 20/64" and turned to trap press. Bled to 150 psig. Changed to 26/64" choke. Well died. Opened to Baker tank. Flowed 57 bbls. with no back pressure. Installed 24/64" bean and put to trap. Tore out swab. RDMO. Flowed 57 bbls. to Baker Tank. Flowed 237 to trap. This a.m.: 200# tbg. 30% cut.

05/10/82
114 bbls. gross. 30% cut. 165# tbg/0# csg. 24/64" bean. 24 hrs.

05/11/82
347 bbls. gross. 38% cut. 230# tbg/0# csg. 24/64" bean. 24 hrs.

05/12/82
398 bbls. gross. 34% cut. 180# tbg/0# csg. 24/64" bean. 24 hrs.

06/12/82
MIRU production rig. Tear out flow tree. Install pumping tree. RIH with pump & rods. Space well out. Fill tbg. and test to 350 psig. O.K. RDMO.

06/13/82
274 bbls. gross. 33.6% cut. 520# tbg/900# csg. 17/64" bean. 24 hrs.

06/14/82
472 bbls. gross. 50.8% cut. 490# tbg/950# csg. 17/64" bean. 24 hrs.

P-Rep. #288-345

10/5/82
MIRU production rig. Bled well down. Pumped 300 bbls. dead oil down casing to circulate out gas. Hung well off. Attempt to pull pump & rods. Pump stuck. Unable to free same. Close well in. SJD.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE #107 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21066 — HARRY E. HULL — DISTRICT SUPERINTENDENT

Harry E. Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

10/6/82

Bled well. Filled hole with 220 bbls. lease crude. Backed off rods. Spidered out with 182 rods. BS bottoms up. Removed tree. Installed & tested double hydraulic Shaffer. Built working platform. Pulled tubing wet up to balance of rods. Finished stripping out of hole with rods and tubing. MU exchange Baker Model "M" retrieving tool. Measured in hole to 3000'. SDFN.

10/7/82

Continued RIH with Baker retrieving tool. Tagged fill @ 7723'. Cleaned out to top of BP @ 7753'. BS hole clean. Released BP and POH with same. MU 4-5/8" economill and Baker 5-1/2" positive scraper. RIH. Rotated & cleaned out from 7760'-7765'. Hole taking large amount of fluid; tubing plugging off backscuttling. (Used ±500 bbls. oil.) Will try circulating direct.

10/8/82

Continue to backscuttle. Rotate mill. Hole taking fluid. Mill plugging off. Pulled up above perfs & changed out power swivel. Continued clean out attempt. Unable to get below 7770'. Mill & scraper hanging up, taking 95,000# to pull thru tight spot. Circulate hole clean. Lots of metal shavings in returns. POH. Lay down scraper. M.U. 4-5/8" economill and BS on tubing and RIH. Worked thru 7770'-7820'. Circulate hole clean. Pulling out of hole @ 6:00 a.m.

10/9/82

Continue POH with tubing, jars, & economill. RU Welex. Shot 4 (0.44") SSB II JH @ 7785', for WSO #1. POH with 4" gun. RIH with Baker "K-1" cement retainer and set same @ 7758' (top). POH. RD Welex. RU Hydrotest. MU stinger sub. Tested tbg. in @ 5000#. Tore out testers. Stabbed into retainer (@7761' by tbg. meas.). RU Dowell. Pulled out of retainer & displaced tbg. with 45 bbls. lease water. Stabbed into retainer. Breakdown with 35 cf fresh water. Broke from 3 cfm @ 3800# tbg/0# csg. to 3 cfm @ 1000# tbg/1000# csg. (Direct communication between WSO @ 7785' & bottom perf @ 7753'.) Pulled out of retainer. Mixed & pumped 7 sx (8 cf) "G" cement with 0.75% D-60 FLAC. Displaced with 30 cf fresh water + 191 cf lease water. Stabbed into retainer. Pumped additional 39 cf lease water to displace cement just out the WSO holes. (Full returns from csg. after stabbed in.) Total displacement 260 cf. C.I.P. @ 7:30 p.m. Pulled above liner. SDFN. W.O.C.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE #107 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21066 — HARRY E. HULL — DISTRICT SUPERINTENDENT

Harry E. Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

10/10/82

Lowered tbg. & tagged @ 7736'. Cleaned out what appeared to be green cement to top of retainer @ 7761' (+4 cf). Pulled out of retainer. RU Dowell. Displaced tbg. with 45 bbls. lease water. Breakdown with 5 bbls. fresh water, 1.75 BPM @ 2000# tbg/2000# csg. (Again, direct communication.) Mixed & pumped 7 sx (8 cf) "G" cement with 1.5% $CaCl_2$ and 0.75% D-60 FLAC. Displaced with 6 bbls. fresh water and 33 bbls. lease water. Stabbed into retainer & closed casing. Completed displacement at 0.3 BPM at 700# tbg/1150# csg. with 7 bbls. lease water. Total displacement 46 bbls. to WSO holes. C.I.P. 1:04 p.m. Pulled up 500' and backscuttled. Pulled above liner. SDFN. W.O.C.

10/11/82

RIH to Model "K-1" retainer. Displace tbg. with 45 bbls. lease water. Stab into retainer. Pump 5 bbls. fresh water for breakdown. Had direct tbg/csg. communication. Pulled up out of retainer. Mixed & pumped 50 sx "G" + 0.75% FLAC followed by fresh water. Stab into retainer. Tubing pressured up immediately. Total displacement 37.5 bbls. 12 cf of cement displaced out WSO holes. Max. pressure = 7000 psig. Pulled up out of retainer and BS out cement. POH. RU Welex. Ran in with Baker 5-1/2" BP & set @ 7525'. RIH with 4" csg. gun. Perforated interval 7490' with 4 (0.44") JSPF. RIH with Baker 5-1/2" fullbore on tbg. Set same @ 7253'. Spotted 1 sk sand on top of BP. Change well over to lease water. Pump 5 bbls. fresh water to establish breakdown. Broke down @ 2.75 BPM @ 3600 psig. Open unloader. Mix & pump 19 sx RFC & spot to bottom. Close unloader. Squeezed 17 sx cement into perforations. Final press. = 1500 psig. Shut well in under pressure for two hours. W.O.C. @ 6:00 a.m.

10/12/82

POH with fullbore packer. RU Welex. Shot 4 (0.44") SSB II jet holes @ 6700'. POH with 4" gun. Tore out Welex. RIH with fullbore & set packer @ 6466'. RU Dowell. Breakdown with 5 bbls. fresh water, 2.75 BPM @ 2900#. 10-minute SIP = 2000#. Opened unloader. Mixed & pumped 25 sx (40 cf) RFC cement. Displaced with 10 bbls. fresh water & 17 bbls. lease water. Closed unloader & pumped 13 bbls. lease water to clear tool. Staged in last 2 bbls. Total displacement 42 bbls. Estimated TOC @ 6650' & 33 cf cement out WSO holes. Max. press. = 3100# @ 2.75 BPM. Final pump-in press. = 2400# @ 0.3 BPM. SIP = 2200#. C.I.P. @ 4:00 p.m. W.O.C. 4 hours. Bled well. POH with fullbore. MU Baker 7" 23# positive scraper. Worked scraper to 750'. Trouble getting scraper to go in hole. POH. MU BS & jars and reran scraper. Beat scraper down to 866'. POH. MU spring-loaded 7" scraper. RIH to liner top @ 6:00 a.m.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE #107 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21066 — HARRY E. HULL DISTRICT SUPERINTENDENT

Harry E. Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

10/13/82
POH with Baker 7" scraper. MU Johnston tester on tbg. and RIH (500 ft. water cushion). Set packer @ 5617' with tail @ 5636'. Opened tool & tested for 1 hour. POH. Found 60' of fluid rise in tbg. Test approved by D.O.G. RIH with 4-3/4" bit. Tagged TOC @ 6617'. Drill out to 6710'. Pressure test WSO's to 1000 psig - o.k. Continued in hole and tagged TOC @ 7460'. Drill thru & fell out of cement @ 7516'. Test WSO's to 1000 psig - o.k. Cleaned out down to 7520' - sand returns. Clean well up. POH @ 6:00 a.m. Inferred from drillout that we got 26.5 cf cmt. out WSO #3 @ 6700', & 23.1 cf cmt. out WSO #2 @ 7490'.

10/14/82
Finish POH with 4-3/4" bit. RIH with Baker B.P. retrieving tool. Change over to lease oil. Clean out to top of B.P. Latch onto same. Equalize; pull B.P. loose. Backscuttle well cleaning gas from system. POH with B.P. RIH with STC & pump shoe. Stop @ 7542'. Backscuttle out fill. Unable to make hole. POH with STC. RIH with 4-3/4" bit. Drill out cement 7542'-7631'. Clean out to 7753'. Backscuttle hole clean as of 6:00 a.m.

10/15/82
Finish backscuttling hole clean. POH with 4-3/4" bit. MU 2-7/8" STC, TL shoe, & RIH. Land tbg. with shoe @ 7475'. Tail @ 7508'. RIH with rods & pump. Hung well on. Pressure to 300 psi. RDMO.

10/27/82
295 bbls. gross. 4.7% cut. 400# tbg/360# csg. 17/64" bean. 24 hrs.

10/28/82
300 bbls. gross. 5.0% cut. 580# tbg/380# csg. 17/64" bean. 24 hrs.

11/08/82
MIRU CPS. Bleed well down. Work stuck pump. Put 75 bbls. lease crude down csg. Pressure backside to 1000 psig. Pump worked up hole 2 jts. Backed off rods. Spider out 92 doubles, 1 single. Remove tree. Install mechanical gate. Built working floor. Unland tbg. RIH to top of fill @ 7644'. Lay down extra tbg. Strip out tbg. & rods. MU STC, run in hole to 4000'. SDFN.

11/09/82
Bleed well. RIH & tag fill @ 7644'. Rig to backscuttle. Install Guiberson stripper. Clean out sand fill to 7749'. Backscuttle hole clean. Lay down 8 jts. tbg. Pull 28 doubles. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE #107 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21066 — HARRY E. HULL — DISTRICT SUPERINTENDENT

Harry E. Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

11/10/82
Bleed well down. RIH. Tag @ 7749'. POH. Fill well with lease crude (85 bbls.). RU Welex. Perforate 4 (0.39") SSB II JHPF @ selected intervals: 7534', 7548', 7554', 7563', 7568', 7576', 7583', 7588', 7595', 7629', 7636', 7645', 7653', 7659', 7666', 7704', 7717', & 7724' (72 holes). Tagged fill @ 7729'. Could not perforate 7735' & 7741'. RD Welex. MU 2-7/8" STC, 1 jt. 2-7/8" tbg., 2-1/2" T/L shoe, RIH with tbg. Lay down 31 jts. 2-7/8" tbg. (excess). Land on donut. SDFN. Shoe @ 6750.9'. Tail @ 6781.9'.

11/11/82
Bleed well down. Remove & load out working floor. Remove BOPE. Install tree. Run new pump & rods. Space pump out. Pressure tbg. to 400 psig. RTP @ 7:00 p.m. RDMO.

12/22/82
MIRU SPS production rig. Bleed off well. Unable to bleed tbg. down. Bled csg. Pulled pump loose. Backscuttle tubing with lease oil. POH with rods & pump. Install BOPE & test. RIH & tag fill @ 7545'. Clean out to 7725'. Backscuttle hole clean. POH & measure tbg.

12/23/82
Continue measuring out of hole. MU Baker 5-1/2" 17# Model "C" bridge plug. RIH & set BP @ 7506'. Pulled up & spotted 1 sk sand above BP. PU to 6500'. Rigged equalizing line from VF #110 csg. to VF #107. Lowered fluid level to 1800', casing pressures equalized. POH with tbg. RU Welex. Perforated 4 (0.38") SSB II JHPF with 3-1/8" carrier @ 6752', 6760', 6771', 6787', 6924', 6942', 6951', 6957', 6966', 6976', 6984', 6991.5' 6998', 7011, 7055', 7064', 7074', 7079', 7087', 7095', 7123', 7134', 7165', 7236', 7242', 7250', 7256', 7262', 7271', 7310', 7402.5', 7411', 7470', 7477' (total of 136 holes). No pressure or fluid level response detected. Took 4 attempts to shoot last 5 selections. Tore out Welex. MU Baker retrieving head and RIH. Backscuttle over BP, latched onto same. (Tremendous amount of gas in returns.) POH as of 6:00 a.m.

12/24/82
Finished POH with BP. RIH with STC & PS. Landed with tail @ 6714'. Removed BOPE. Installed tree. RIH with rods & pump. Spaced well. RTP @ 5:30 p.m. RDMO.

12/25/82
218 bbls. gross. 12% cut. 650# tbg/1200# csg. 17/64" bean. 24 hrs.

12/26/82
218 bbls. gross. 12% cut. 610# tbg/1200# csg. 17/64" bean. 24 hrs.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION OJAI FIELD VENTURA COUNTY
WELL: VALEX FERNDALE #107 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21066 HARRY E. HULL DISTRICT SUPERINTENDENT

Harry E. Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

02/17/83
MIRU. POH with rods & pump. Install BOP & working platform. Unland tbg. & release packer. Pull up 14 doubles (868'). Tight hole? Unable to pull loose. Pump 20 bbls. lease crude down csg. with rig pump. Pressure to 800 psig. No returns. Work tbg. Tbg. did not come free. SDFN.

02/18/83
Unable to work tbg. free. R.U. Archer Reed. Open sleeve above packer. Tear out wireline unit. Backscuttle system free of gas. POH with tbg., dragging up to 35,000# over weight. Finish POH. All rubber missing off packer. M.U. 2-7/8" STC. RIH. Found fill or rubber @ 7658'. Backscuttle & chase same to 7742'. Tbg. plugging up. Pull up to 6504'. Close well in. SDFN.

02/19/83
Lowered tbg. from 6504' & tagged fill @ 7722'. POH. M.U. Cavins 3-1/16" hydrostatic bailer with 4" junk basket. RIH & tag fill @ 7673'. Surged tool to 7745'. Pull above perfs. Let set 1 hr. RIH to bottom (7745'). No fill. POH. Recovered 180' of sand & pieces of rubber. M.U. 4-1/2" swedge, jars, bumper sub, 4 3-1/8" drill collars. RIH. Work thru tight spot @ 7085' (required 4000# over to go thru, 8000# over to pull back thru tight spot). RIH to 7722'. Pull above liner. SDFN.

02/20/83
POH with 4-1/2" swedge and D. C.'s. M.U. Cavins 3-1/16" tbg. bailer with 4" junk basket. RIH. Tag fill @ 7722'. Surge tool to 7728'. Surge tool quit working. Pump 100 bbls. lease crude down csg. Tool still did not work. POH. Found basket straps broken & stuck under valve. M.U. exchange surge tool. RIH. Surge from 7728'-7745'. Pull above liner. SDFN.

02/21/83
POH with Cavins tbg. bailer. Found 67' of sand & rubber in tbg. M.U. Midway 4-5/8" swedge on 4 3-1/8" drill collars, bumper sub & jars. RIH & tag tight spot @ 7085'. Work thru same. Required 14,000# over weight to go thru. Continued RIH. Encountered tight spot @ 7542'. Required 8000# over weight to go thru. Continued RIH & tag bottom @ 7741'. Pull above liner top. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE #107 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21066 — HARRY E. HULL DISTRICT SUPERINTENDENT

Harry E. Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

02/22/83
Finish POH with swedge. RU Welex with full lubricator. Made feeler run with junk basket & 4.3" O.D. gauge ring. Stopped @ 7717'. POH. RIH with 3-1/8" gun. Stopped @ 7717'. POH. M.U. Baker K-1 retainer (4.3" O.D.) - stopped @ 7064', unable to go deeper. RD Welex. M.U. 4-3/4" swedge, 4 3-1/8" DC's, bumper sub & jars. Tag tight spot @ 6996'. Worked thru @ 40,000#. Jarred 4-5 times. Change of orders. POH. M.U. 4-5/8" swedge. RIH to liner top. SJD.

02/23/83
Continued RIH with 4-5/8" swedge. Slight wobble @ 7058'. Hit tight spot @ 7075'-7085'. Worked swedge through several times with 14,000# over going down and 18,000# over coming up. Continue RIH. Worked thru tight spot @ 7542'. 6,000# over going down, 8,000# coming up. Continue RIH. Tag fill @ 7720'. Pull up & work thru tight csg. 7085'-7075'. POH. M.U. Cavins 3-1/16" tbg. bailer with 4" junk basket. RIH. Tag fill @ 7720'. Surge tool to 7745'. POH. Recover 70' sand & rubber. RU Welex with full lubricator. RIH with feeler gauge (4.375" O.D.). Tight spot @ 7060'. POH. RD Welex. RIH with STC on tbg. SJD.

02/24/83
Finish RIH with STC. Tag fill @ 7730'. PU to 7728'. Pump 65 bbls. lease oil down tbg. RU B.J. Pump 30 cf fresh water. Mix & pump 25 sx "G" cement + 0.75% D-31. Displace with 10 cf fresh water followed by 224 cf lease water. RD B.J. Pull up above liner. Displace with 6 bbls. lease oil. POH. MU 4-1/2" bit & 4 3-1/8" drill collars. RIH. Tag cement @ 7581' (11 cf out perfs). RU power swivel. BS gas out of system, hole taking 65 bbls. Drill out cement 7581'-7714'. BS hole clean. POH. Lay down excess tbg, bit & drill collars. RU tbg. testers. MU STC & T/L PS. Testing in hole at 6:00 a.m.

02/25/83
Continue testing tbg. in hole @ 5000#. Land tbg. with tail @ 6521'. Remove BOPE. Install tree. RIH with pump & rods. Respace well. Fill & pressure tbg. to 300#. RDMO. RTP.

02/25/83
to Recovering load oil.
03/03/83

03/04/83
MIRU CPS. Bled well. POH with rods & pump. Removed tree. Installed BOPE. PU 37 jts. 2-7/8" tbg. Lowered tbg. & tagged @ 7714' (TOC). Started measuring out of hole with tbg. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE #107 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21066 — HARRY E. HULL — DISTRICT SUPERINTENDENT

Harry E. Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

03/05/83
Bled well. Continued measuring out of hole with tbg. RU Welex. RIH with 3-1/8" gun with centralizing buttons to 4" O.D. Unable to get below 7613'. POH. Removed centralizers & RIH. Spudded through 7613' restriction. Pick up @ 7673'. Unable to get deeper. Shot holes 7664'-7592' as detailed below. POH. RIH with 3-1/8" gun with 4" centralizing buttons, shot remainder of holes 7585'-7536'. Perforated, in summary, 4 (0.38") SSB II JHPF @ 7536', 7546', 7552', 7556', 7566', 7571', 7578', 7585', 7592', 7626', 7631', 7638', 7649', 7651', 7657', 7664', (64 holes). RD Welex. MU STC & T/L PS. RIH to 7714', no fill. Laid down excess tbg. & landed with tail @ 6524'. Removed BOPE. Installed tree. SDFN.

03/06/83
Bled well. Tested exchange pump. RIH with rods & pump. Spaced well. Filled tbg. & pressure-tested to 300#. RDMO. RTP @ 12:00 noon.

03/11/83
152 bbls. gross. 4% cut. 860# tbg/200# csg. 16/64" bean. 24 hrs.

03/12/83
146 bbls. gross. 12% cut. 1050# tbg/200# csg. 16/64" bean. 24 hrs.

08/17/83
MIRU. Unhung rods & removed head. Unable to bleed tbg. RU pump & tested lines to 1000 psig. Reverse circulate 290 bbls. of oil. Starting pressure 900 psig, ending pressure 100 psig. Install rod Reagan. POH with rods & pump, changing out worn rod boxes. MU & RIH with 1200' of 3/4" rods on sand line. Tagged fill @ 7617' (KB measurement). Remove production tree. Install & test 6-900 hydril gate. Built working platform. Rigged for tbg. SDFN.

08/18/83
Hauled generator to location. Picked tbg. off ground & tagged fill @ 7592'. Clean out fill from 7592'-7714' with rig pump. Circulate hole clean for 2 hrs. Layed down 6 jts. tbg. & POH measuring remainder of tbg. Measured, M.U., & RIH with 3 3-3/4" washover jts. & washover shoe. RIH with tbg. to 5610' (top of liner @ 5663').

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE #107 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21066 — HARRY E. HULL — DISTRICT SUPERINTENDENT

Harry E. Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

08/19/83
RIH with tbg. to 7714'. RU pump & pumped 130 bbls. down tbg. POH & layed down 32 jts. POH with remaining 115 stands & measured same. Layed down 3 jts. of washover pipe (3-3/4") & shoe. Remeasured & rearranged 2-7/8" wire wrapped screen. RIH with liner as directed, tagged bottom @ 7713'. Hung liner & set lead seal hanger. POH with tbg. as of 8:00 a.m. Hanger top @ 6678.69', shoe @ 7674.50', length 995.81'. Stainless steel wire wrapped screen 6750'-7673' at intervals as per program. (0.006" screen opening.)

08/20/83
Finish POH. Remove liner setting tool. Rig Hydrotest. Test tbg. in hole to 5000#. RD tester, tag liner hanger @ 6680'. Land tbg. tail @ 6622'. Remove floor & tbg. equipment. Remove BOP. Install production flange. RIH with exchange pump. Change 59 3/4" rod boxes. Space pump. Press. tbg. to 400#. On production @ 1:30 a.m. RDMO.

08/28/83
62 bbls. gross. 0.1% cut. 800# tbg/270# csg. 16/64" bean. 24 hrs.

08/29/83
48 bbls. gross. 0.1% cut. 280# tbg/200# csg. 16/64" bean. 24 hrs.

02-23-84
7:00 a.m. MIRU CPS. Bled down tbg. & csg. POH with rods & pump laying down same in doubles. Removed tree & installed double hydraulic BOPE. RU Fillmore Dewaxing. Hot oiled tbg. with 45 bbls. lease crude. Build working platform, rig for tbg. Unland tbg. & measure out of hole with same. Break off STC & PS. RU Loomis Testing. Make up Baker 5-1/2", 17# Model "R" double grip packer with large bore mandrel of 2.38". Tested in hole @ 5000#. String included 2 Expansion Joints (2700' & 4700' from bottom). Packer stopped @ estimated liner top tbg. measurement 5649'. Liner top is @ 5663' (drilling measurement), 5645' (wireline), 5648' (tag with 3-3/4" washpipe 8/18/83). Unable to work packer down hole. POH with packer. Rig down Loomis test. Found metal gouge marks on bottom of bell collar (O.D. = 3-11/16"). Appeared to set down on very sharp object. Stand by waiting on 4-1/16" O.D. impression block @ 7:00 a.m. this morning.

P. Rept. 284-18

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE #107 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21066 — HARRY E. HULL — DISTRICT SUPERINTENDENT

Harry E. Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

02-24-84

7:00 a.m. Made up 4-1/16" impression block. RIH on 2-7/8" tbg. Set down @ 5649'. POH. IB showed 2-7/8" slip insert to be lying on 5-1/2" liner top. (Slip insert disappeared 12/13/83 when well last entered). Stood by for & made up 4" magnet on sandline. Made an unsuccessful trip. M.U. 5-3/4" magnet with same results on trip. SDFN.

02-25-84

Made up AAA 5-1/2" Dumbo Grab & RIH on tbg. Position Grab over slip insert @ 5-1/2" liner top. Closed tool & POH. No recovery. Ran 5-3/4" Impression Block on sandline. IB showed impression of 5-1/2" liner top only. Made up 3-3/4" IB & RIH on sandline. Worked thru 5-1/2" liner top. IB set down @ 5900'. Picked up off-attempted to retag and continued in hole, tagged top of 2-7/8" liner top. POH. IB showed impression of slip insert, 5-1/2" liner top and 2-7/8" liner top. Turned Standard EUE 8 round 3-21/32" coupling down to 3-3/8" with bottom side beveled to 30 degrees angle (using coupling as fishing tool.) Ran in hole with coupling on sandline on stand of tbg. & bumper sub. Worked coupling @ 2-7/8" liner top. POH with no recovery - edges of coupling were ragged. No definite impression recognizable. RIH 4-5/8" IB. IB showed 5-1/2" liner top where worked thru & 2-7/8" liner top, no slip insert. Redressed 3-3/8" coupling & RIH on tbg. Work in top of 2-7/8" liner top @ 6681' (tbg. meas.) (actual depth 6679'). Made a total of 5' into liner hanger. Inside diameter of liner top is 3.531" & tapers to 3.437" ID in 5". POH with slip insert fish recovered in coupling. Shut job down for 2 hrs. Stood by & waited for hydrotest.

02-26-84

Start up job. RU Hydrotest. Made up 5-1/2" Model R-3 Packer. Test in hole @ 5000#. Expansion joints @ 2005' & 3972'. Tore out tester. Rigged Baker Wireline. Made drift run with 2.175 O.D. Tagged fill @ 7654', (TD is 7674'). Tore out Wireline. Pump & fill well with 190 bbls. lease crude. B.S. gas out of system. Pump 35 bbls. lease crude with 1% OFA-2 foaming agent. Set packer tail @ 6665' with 17,000# compression. Tested annulus to 1000# - o.k. Pump 14 bbls. lease oil down tbg., tbg. went on vacuum. Removed floor & BOPE. Build flow tree. R.U. Otis coiled tbg. & nitrogen. SJD.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION OJAI FIELD VENTURA COUNTY
WELL: VALEX FERNDALE #107 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21066 HARRY E. HULL DISTRICT SUPERINTENDENT

Harry E. Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

02-27-84

Start up job. RIH with Otis coiled tbg. Foamed wellbore clean from 7654' (wireline depth) to 7674' (coiled tbg. depth) (TD). Pull up to 6700'. Wait one hour. Run back to bottom, tag @ 7674', no fill. Total elapsed time 2-1/2 hrs. Pulled coiled tbg. out of hole. Remove and repair stripper head. Re-install head. SDFN.

02-28-84

Start report @ 7:00 a.m. RIH with Otis coiled tubing. Tag @ 7674' (coiled tbg. measurement). Showed no fill (TD - 7674'). Tear out Otis. RU Welex. Run 1-11/16" logging tool. Stopped @ 7641'. Logged 2-7/8" liner from bottom to top. Ran 2" O.D. feeler (2' length). Stopped @ 7650' and hung up. Worked free @ 7635'. POH. Run 1-3/8" feeler by 2'. Stopped @ 7637'. Tear out Welex. Shut down CPS rig. RU Baker Wireline. RIH with 1-3/4" bailer. Bailed and chased sand plug from 7639' to 7665'. Bailed clean. Run 1-3/4" impression block to 7665'. Showed metal surface and metal particles stuck in impression block. Wait one hr. RIH with 1-3/4" bailer. Same stopped @ 7638'. New effective depth - 7667' (based on Welex GR - CCL Log run (2/27/84). End report @ 7:00 a.m.

02-29-84

As of 7:00 a.m. Start up job. RIH with Archer Reed wireline bailer. Bail sand to 7643'. Pump 20 bbls. oil down tbg. at "0" psig with vacuum truck. Pump 40 bbls. oil down tbg. @ 1200 psig @ 2 BPM with rig pump. Bailer full of sand. POH & lay down bailer. Rig up Otis. RIH to 6500'. SDFN.

03-01-84

6:00 a.m. R.U. Otis coiled tbg. with N2 & oil foamer, cleaned out to 7690' coiled tbg. measurements. Pulled up to 6500', wait one hour & ran back to bottom. Coiled tbg. plugged. POH. Cut off 78' of tbg. plugged with sand intermittently. Rethreaded tbg. & ran in to 6500' & SJD @ 8:00 p.m. Used 72 bbls. oil, recovered 100 bbls. Foam rate = 1/4 BPM & 300 scf/m N2.

03-02-84

As of 6:00 a.m. Started up job using Otis coiled tbg. with N2 and oil foamer. Cleaned out to 7680' (coiled tbg. measurement). Spot 1250 gals. of B.J. "Allopack" Gel on bottom. Pulled coiled tbg. out of hole. R.U. Welex. Run 2" O.D. sidewinder 46' gun. Shot holes. Gun hanging up as pulled out of hole. Gun ports swelled out. Decided to break guns down to 20' guns. (Today Otis pumped 52 bbls. oil in hole. Recovered 107 bbls. = Net of 55 bbls. Bottom @ 7668' wireline measurement.)

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE #107 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21066 — HARRY E. HULL DISTRICT SUPERINTENDENT

Harry E. Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

03-03-84
Continue perfing with 2 - 0.36" Jet Holes at 7535', 7546', 7552', 7556', 7565', 7571', 7578', 7585', 7591',7619', 7623', 7631',7640', 7645', 7650', 7657'. Total of 32 holes. RD Welex, Moved CPS rig and pump out. RU Otis coiled tbg. SDFN. Found fill @ 7635 on last gun run (33').

03-04-84
Otis RIH with coiled tubing to 6500'. Established oil foam circulation. RIH washing to botttom ("7688"). Holding +-100 psi backpressure, circ. 1-1 1/2 hrs. on bottom, Returns cleaned up . Spotted 1000 gals. BJ "Allopack" gelled diesel on bottom. Purged coiled tubing with nitrogen after pulling above 6000' POH with coiled tubing. Used 50 BO, 24 bbls. gel, 90 mscf N2. Recovery 91 bbls.(net 17 bbls.) . Otis applied 1000 psi to casing. B.J. Hughes sand-packed inner liner. Pumped 7 bbls. gelled diesel, 94.8 bbls slurry (3500 gals. gelled diesel mixed with 105.5 cf of Acme resin-coated 20/40 sand at 3 ppg concentration), 5 bbls. gelled diesel, 7.6 bbls. filtered lease oil. Avg rate 1.6 BPM. Avg pressure 3650 psi. Max rate 3 BPM. Sandout at 5000 psi. 6-minute SIP 4650 psi. Sand in place 4:46 p.m. Closed well in. SDFN. Estimated + - 67 cf (6700#) sand out perfs, ± 38.5 cf (3850#) sand in wellbore, top of sand after settling at ± 6457'.

03-05-84
0 psi on well. Otis RIH with coiled tubing, circulating with lease oil. Brought up small amounts of suspended sand from tubing. Sat down on hard sand at 6260'. Cleaned out hard to 6302', unable to wash deeper. POH with coiled tubing. Pressured tubing to 4000 psi and closed well in. Purged coiled tubing with nitrogen. RDMO Otis. Revised estimate 57.5 cf sand out perfs and 48.0 cf in well bore (32.3 cf in inner liner). Left well shut in to allow resin coated sand to cure.

03-05-84
SHUT-IN FOR 7 DAYS..

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION OJAI FIELD VENTURA COUNTY
WELL: VALEX FERNDALE #107 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21066 HARRY E. HULL DISTRICT SUPERINTENDENT

Harry E. Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

03-13-84
MIRU Otis coiled tbg. unit and T-10 fluid pumper. MU 1-3/4" dynadrill and 2-1/4" mill. Surface-checked drill. RIH while circulating with oil. Tagged sand @ 6245. Drill ran sporadically. Pulled up and established good drill action. Cleaning out 50' - 60' at a time, and pulling back 30' - 40' in between. Making 6' - 7' per minute. Cleaned out to 6424'. While pulling back, tubing stuck @ 6398'. Worked loose @ 4,000# over pull and 5000 psi pump pressure. Pulled free to 6304'. Again lost circulation, tubing plugged & stuck. Worked loose @ 10,000# over pull and 6000 psi pump pressure. POH with DD and 2-1/4" mill. MU new DD and 1-15/16" mill. SDFN.

03-14-84
Otis started up job. RIH with DD and 1 - 15/16" mill on coiled tubing while circulating oil. Began staging in hole @ 6300' (clean out 25' then pull up and circulate for 20 minutes). Cleaned out to 6670'. Showed weight loss 6654' - 6662', acted like BHA in 5 - 1/2" casing interval. Let returns clean up at 6670'. Pulled up to 5000'. SDFN. (All measurements are coiled tubing measurements).

03-15-84
Otis started up job. Broke circulation and RIH from 5000'. Tagged @ 6665'. (Lost 5' of hole overnight.) Continued cleaning up 5 - 1/2" casing between packer and liner top (6665'- 6685'). Continued drilling. Ran into "hard" interval @ 6688'. Made 8' per hour 6688'-6695'.
(Could have been working into inner liner.) DD stalled out numerous times. Penetration rate increased gradually. Drilled out to 6865'. Average rate 43' per hour. DD failing. Cleaned up @ 6865. POH and changed DD and mill. (Bottom port washed out on mill.) Surface checked DD. RIH to 5000'. SDFN. Lost 7-3/4 BO today while drilling. 90% returns.

03-16-84
Otis started up job. RIH circulating from 5000'. Made several passes 6650' - 6690'. Continued RIH, tagged @ 6834'. (Lost 31' of hole.) Pulled back, stuck @ 6823'. Gained 1000 psi pump pressure but did not lose circulation. Worked tbg. up hole to 6814', unable to work farther. Stopped pumping, pulled tbg. free @ 4000# over-pull up to 6783'. Had 40' of movement 6823' - 6783'. Resumed pumping, tbg. pulled free. Pulled up and made passes 6650' - 6690', no restrictions noted. Circulated well clean, finding silty appearance of returns & yellow flakes of resin. (Suspect 20/40 sand pulverized by mill.) Recovered some gas also. RIH, cleaning out 25'

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE #107 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21066 — HARRY E. HULL — DISTRICT SUPERINTENDENT

Harry E. Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

03-16-84 (con't)
at a time, from 6834' to 6916'. No weight loss. Pulled up and made passes 6650' - 6690', no restrictions. RIH to 6900'. Mixed and pumped 4 bbls. oil containing 12 gals. of OFA-2 foamer. Pumped pill around, brought up no coarse returns. Continued cleaning out 25' at a time to 6978'. Cleaned up at 6978'. POH with Otis tbg. and BHA. RU Baker Production Service and RIH with 1-3/4" bailer. Stopped at 6425', worked to 6438'. POH, found bailer empty and dimpled on bottom, indicating bailer had been beaten on solid object. RIH with 1-1/2" bailer to 6439', again recovered empty and dimpled. Ran 1-1/2" impression block to 6439'. Picture resembled adjacent sides of a triangle. Ran 2nd IB, same impression. SDFN.

03-17-84
Otis started up job. Rigged pump to casing. Pressure tested to 1000 psi, o.k., no commumication to 2-7/8" tbg. RU Otis head. MU new DD, reran 1 - 15/16" mill. Surface-checked motor. o.k. RIH while circulating to 6390'. Shut off pump. Tagged @ 6443'. Pulled back and started up pump, having to mill through section 6443'-6445'. Continued in to 6455', no further restrictions. Pulled back, ran back in drifting same interval without pumping. Bottomed well up, no solid returns. Change of orders. POH with DD. RD Otis. MIRU CPS. Removed tree. Installed mechanical BOPE. Pulled packer loose, without resistance. RU pump and backscuttled bottoms up. Returns of balls of paper and slivers of wood, (approximately 2 cupfuls). POH, laid down packer, expansion jts. & bottom 15 jts. tbg. Bottom 160' of tbg. had solid sheet of hard but brittle sand inside on the high side. Determined that 6439' tbg. restriction was hard sand. MU 4-3/4" bit. RIH to 2000'. SDFN.

03-18-84
Started up job. Finished RIH with 4-3/4" bit. Rigged power swivel. Drilled out hard sand 6675'-6686' (tbg. measurement). Circulated well clean @ 2-7/8" liner top, recovered some sand, also metal shavings. POH with bit. MU Guiberson 5-1/2" x 2-7/8" Uni-packer VI and bell collar. (Bore through packer 2.375".) RIH with tbg. and set down on 2-7/8" liner top. Pulled up and landed on donut. Removed BOPE. Spaced well, set packer @ 6681' (5' above liner top), and landed in 15,000# tension. Pressure tested casing to 800 psi, o.k. Installed protector in tbg. hanger. Reinstalled BOPE. Installed valve on mud cross. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE #107 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21066 — HARRY E. HULL — DISTRICT SUPERINTENDENT

Harry E. Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

03-19-84

Spot tbg. bailer with 1-1/4" hydrill. Installed single hydraulic gate with 1-1/4" rams. Install PGR stripper cage. Build working platform. MU 2-5/16" O.D. mill. Measure & pick up 1-1/4" C.S. hydrill tbg., N-80, 3.02#/ft. Run in hole to 6677'. Rig power swivel, check rotation. RU pump & check circulating pressure - 1 BPM @ 2300#. Close well in. SJD. This a.m. tagged @ 6687' (pkr. tail @ 6681').

03-20-84

Started up job. Rigged Otis T-10 pump and standpipe. Rigged power swivel. Circulating 1 BPM @ 2500 psi. While circulating, had to rotate into liner top at 6686' (tubing measurement). Had light sand returns to 6824'. Then circulated down without sand returns and without rotating to 7057'. Started bringing back 20/40 sand returns. While idling swivel, washed out sand to 7427'. Circulated well clean. Pulled up to 6644'. Lost total of 42 BO today. SDFN.

03-21-84

Ran back to 7057' with 2-5/16" mill on 1-1/4" tbg. Continue washing out resin coated sand to 7683'. Bottomed well up @ 11:55 a.m. Well cleaned up @ 12:20 p.m. Circulated well for two additional hours, (lost 186 bbls. oil). Tore out Otis pump truck. POH & lay down 1-1/4" hydrill tbg. Tore down floor & removed BOPE. Rigged to unland 2-7/8" tbg. SJD. (This a.m. coming out of hole with packer).

03-22-84

Released Guiberson Uni-packer VI. Installed BOPE. Built floor & rigged for tbg. Lay down 9 jts. tbg. Pull out & break off packer. MU bell collar - one jt. tbg. - top lock pump shoe. RIH & land tbg. with tail @ 6397'. Remove floor & BOPE. Install tree. RU Baker Production Services. RIH with 1-3/4" bailer, tag bottom @ 7695', unable to make hole. POH with bailer. Found 3 tablespoons full of 50% flour sand & 50% resin coated 20/40. Rigged for rods. Pick up exchange pump. RIH with pump changing rod boxes as needed. Spaced well out. SJD.

03-23-84

Space well. Hang well on. Fill tbg. Press. to 500 psi. RDMO.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION OJAI FIELD VENTURA COUNTY
WELL: VALEX FERNDALE #107 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21066 HARRY E. HULL DISTRICT SUPERINTENDENT

Harry E. Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

03-24-84
to Recovering load oil.
04-19-84

04-20-84
28 bbls. gross. 4% cut. 180# tbg/csg. 16/64" bean. 12 hrs. production. 24 hrs. test.

04-21-84
38 bbls. gross. 2% cut. 140# tbg/csg. 16/64" bean. 21 hrs. production. 24 hrs. test.

04-22-84
38 bbls. gross. 10% cut. 150# tbg/cg. 16/64" bean. 22 hrs. production. 24 hrs. test.

04-23-84
38 bbls. gross. 10% cut. 140# tbg/csg. 16/64" bean. 24 hrs.

04-24-84
39 bbls. gross. 10% cut. 150# tbg/csg. 16/64" bean. 24 hrs.

04-25-84
38 bbls. gross. 11% cut. 150# tbg/csg. 16/64" bean. 24 hrs.

04-26-84
37 bbls. gross. 10% cut. 180# tbg/csg. 16/64" bean. 24 hrs.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 284-18

520 (field code)
12 (area code)
10 (new pool code)
10 (old pool code)

REPORT ON PROPOSED OPERATIONS

Harry Hull, Agent
Argo Petroleum Corporation
411 S. Brockwith Road
Santa Paula, CA 93060

Santa Paula, California
January 24, 1984

Your ____ proposal to alter casing well "Valex-Ferndale" 107, A.P.I. No. 111-21066, Section 16, T. 4N, R. 21W, S.B. B. & M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 1/13/84, received 1/17/84 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Hole fluid of sufficient quality and quantity shall be maintained in the hole to control any subsurface condition, and a reserve supply shall be on hand for emergencies.
2. Blowout prevention of at least DOC Class II 2M with a hydraulic actuating system shall be installed and maintained in operating condition at all times.
3. The division will monitor the monthly production of this well for a period of six months and if anomalous water production is indicated, remedial action will be ordered.
4. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.

Blanket Bond
MS:r

BAD Copy

M. G. MEHL, State Oil and Gas Supervisor

By
Murray W. Dosch, Deputy Supervisor

A copy of this report and the proposal must be posted at the well also prior to commencing operations

Records for work done under this permit are due within 30 days after the work has been completed or the operations have been suspended.

OG111 (Rev. 6/80)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

DIVISION OF OIL AND GAS
RECEIVED
JAN 17 1984
SANTA PAULA, CALIFORNIA

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
B B	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well No. Valex-Ferndale #107, API No. 111-21066, Sec. 16, T. 4N, R. 21W, S.B. B. & M., Silverthread Field, Ventura County.

The present condition of the well is as follows:

1. Total depth. 8275'

2. Complete casing record, including plugs and perforations:

9-5/8" (32.2#, H-40) cmt'd @ 816'.
7" (26#, K-55 & N-80) cmt'd @ 5804'.
5-1/2" (17#, N-80) hung at 5663', cmt'd @ 7872'.
Plugged back to 7680'. Jet perf'd at int. 6752' - 7753'.
2-7/8" wire-wrapped screen inner liner hung @ 6679' with shoe @ 7674'.
Screened @ int. 6750' - 7673'.

3. Present producing zone name Valex Zone in which well is to be recompleted Valex

4. Present zone pressure 1500 psia New zone pressure 1500 psia

5. Last produced 1-13-84 (Date) | 11 (Oil, B/D) | 0 (Water, B/D) | 35 (Gas, Mcf/D)

or

6. Last injected _____ (Date) | _____ (Water, B/D) | _____ (Gas, Mcf) | _____ (Surface pressure, psig.)

The proposed work is as follows:

1. Install and test Class II 2M BOPE.
2. Clean out inner liner to bottom.
3. Jet perforate 2-7/8" screen at int. 7535' - 7664'.
4. Backflow with nitrogen to remove fines behind screen.
5. Sand pack 2-7/8" inner liner with resin coated sand.
6. Drill out cured sand to bottom of inner liner.
7. Return well to production.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 411 S. Beckwith Road (Street)
Santa Paula, (City) Ca. (State) 93060 (Zip)
Telephone Number (805) 933-1321

Argo Petroleum Corporation (Name of Operator)
By Harry Hall (Name) 1-13-84 (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

10340-705 1-73 15M OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 283-61

REPORT ON PROPOSED OPERATIONS

520 (field code)
12 (area code)
10 (new pool code)
10 (old pool code)

Mr. Harry Hull, Agent
Argo Petroleum Corp.
P.O. Box CI
Ventura, CA 93002

Santa Paula, California
March 30, 1983

Your proposal to alter casing well "Valex-Ferndale" 107,
A.P.I. No. 111-21066, Section 16, T. 4N, R. 21W, SB B. & M.,
Ojai field, Silverthread area, Miocene pool,
Ventura County, dated 3/15/83, received 3/18/83 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment of at least DOG Class II 2M shall be installed and maintained in operating condition at all times.
2. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.

Blanket Bond
RH:b

M. G. MEFFERD, State Oil and Gas Supervisor

By Murray W. Bosch
Murray W. Bosch, Deputy Supervisor

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

OG111 (4/82/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

DIVISION OF OIL AND GAS
RECEIVED
MAR 18 1983
SANTA PAULA, CALIFORNIA

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
BB	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well No. Valex-Ferndale #107, API No. 111-21066, Sec. 16, T. 4N, R. 21W, SB B. & M., Silverthread Field, Ventura County.

The present condition of the well is as follows:

1. Total depth. 8275'

2. Complete casing record, including plugs and perforations:

   9-5/8" cmt'd @ 816' (32.3#, H-40)

   7" cmt'd @ 5804' (23#, K-55)

   5½" liner hung @ 5663', cmt'd @ 7872' (17#, N-80)
   CP'd @ 7785', 7490', 6700'. Baker cement retainer @ 7758'. Plugged back to 7680' (25 sx "G").

   4 (0.38") JHPF 6752'-7753' (328 holes).

3. Present producing zone name Valex Zone in which well is to be recompleted N/A

4. Present zone pressure 2000 psia New zone pressure N/A

5. Last produced Currently (Date) | 135 (Oil, B/D) | 4 (Water, B/D) | 39 (Gas, Mcf/D)

   or

6. Last injected _____ (Date) | _____ (Water, B/D) | _____ (Gas, Mcf) | _____ (Surface pressure, psig.)

The proposed work is as follows:

1. Install and test Class II 2M BOPE.
2. Clean out to 7680'.
3. Run 2 jts. 3½" tubing as feeler. Swedge 5½" casing if necessary.
4. Run 2-7/8" wire-wrapped screen inner liner. Hang liner at 6678'. (Screen across perforated intervals.)
5. Return well to production.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 411 S. Beckwith Rd. (Street)
Santa Paula (City) CA (State) 93060 (Zip)
Telephone Number (805) 933-1321

Argo Petroleum Corporation (Name of Operator)
By Harry Hall (Name) 3-15-83 (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

10340-705 1-73 15M ② OSP

FORM OG111(10/81/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 283-43

REPORT ON PROPOSED OPERATIONS

520 (field code)
12 (area code)
10 (new pool code)
10 (old pool code)

Mr. Harry Hull, Agent
Argo Petroleum Corp.
Box ~~De~~ CI
Ventura, CA 93002

Santa Paula, California
March 8, 1983

Your proposal to alter casing well "Valex-Ferndale" 107
A.P.I. No. 111-21066, Section 16, T. 4N, R. 21W, SB B. & M.,
Ojai field, Silverthread area, Miocene pool,
Ventura County, dated 2/25/83, received 2/28/83 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Hole fluid of sufficient quality and quantity shall be maintained in the hole to control any subsurface condition, and a reserve supply shall be on hand for emergencies.
2. Blowout prevention equipment of at least DOG Class II 2M shall be installed and maintained in operating condition at all times.
3. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.

Blanket Bond
MS:b

M. G. MEFFERD, State Oil and Gas Supervisor

By Murray W. Dosch, Deputy Supervisor

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

DIVISION OF OIL AND GAS
RECEIVED
FEB 28 1983
SANTA PAULA, CALIFORNIA

FOR DIVISION USE ONLY		
BOND	OGD114	OGD121
BB	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well No. Valex-Ferndale #107, API No. 111-21066, Sec. 16, T. 4N, R. 21W, SB B. & M., Silverthread Field, Ventura County.

The present condition of the well is as follows:

1. Total depth. 8275'

2. Complete casing record, including plugs and perforations:

9-5/8" cmt'd @ 816' (32.3#, H-40)

7" cmt'd @ 5804' (23#, K-55)

5 ½" liner hung @ 5663', cmt'd @ 7872' (17#, N-80)
CP'd @ 7785', 7490', 6700'. Baker cement retainer @ 7758'.

4 (0.38") JHPF 6752'-7753' (264 holes)

3. Present producing zone name Valex Zone in which well is to be recompleted N/A

4. Present zone pressure 2000 psia New zone pressure N/A

	(Date)	(Oil, B/D)	(Water, B/D)	(Gas, Mcf/D)
5. Last produced	Currently	62	128	40
or				
6. Last injected	(Date)	(Water, B/D)	(Gas, Mcf)	(Surface pressure, psig.)

The proposed work is as follows:

1. Install and test Class II 2M 3M BOPE.
2. Clean out to bottom, 7745'.
3. RIH with 4½" swedge to check casing condition.
4. Set Baker cement retainer @ 7674'.
5. Cement-squeeze perfs 7704'-7753'. (water source).
6. Return well to production.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 411 S. Beckwith Rd. (Street)
Santa Paula (City) CA (State) 93060 (Zip)
Telephone Number (805) 933-1321

Argo Petroleum Corporation (Name of Operator)
By Harry Hall (Name) 2-25-83 (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

OG107 (8-75—GSRI—15M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

No. T 282-223

DIVISION OF OIL AND GAS

Report on Operations

Mr. Harry Hull, Agent
Argo Petroleum Corporation
Box CI
Ventura, CA 93002

Santa Paula, Calif.
Nov. 2, 1982

Your operations at well "Valex-Ferndale" 107, API No. 111-21066,
Sec. 16, T4N, R.21W, SB B.& M. Ojai Field, in Ventura County,
were witnessed on 10/12/82. R. Rabel, representative of
the supervisor, was present from 1530 to 1630. There were also present Stan Brown
Argo Representative (engineer)
Present condition of well: 9 5/8" cem 816', 7" cem 5804', 5 1/2" cem 5663-7872', perf (at intervals) 7538-7753', perf 6700', 7490', 7785' WSO, T.D. 8275', float collar at 7820'.

The operations were performed for the purpose of demonstrating that no fluid has access to the well through the seal between the 5 1/2" and 7" casings.

DECISION:

DEMONSTRATING THAT NO FLUID HAS ACCESS TO THE WELL THROUGH THE SEAL BETWEEN THE 5 1/2" AND 7" CASINGS.

b

M. G. MEFFERD
State Oil and Gas Supervisor

By
Deputy Supervisor
Murray W. Dosch

OG109(12-80-15M)

FORM OG111(10/81/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 282-355

REPORT ON PROPOSED OPERATIONS

520 (field code)
12 (area code)
10 (new pool code)
10 (old pool code)

Mr. Harry Hull, Agent
Argo Petroleum Corporation
P.O. Box CI
Ventura, CA 93002

Santa Paula, California
Oct. 1, 1982

Your suppelementary proposal to drill well "Valex-Ferndale" 107,
A.P.I. No. 111-21066, Section 16, T. 4N, R. 21W, S.B. B. & M.,
Ojai field, Silverthread area, Miocene pool,
Ventura County, dated 9/28/82, received 9/29/82 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. In all other respects, the provisions set forth in our report No.P281-145 dated May 1, 1981 shall apply.
2. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.
3. THIS DIVISION SHALL BE NOTIFIED TO WITNESS A TEST AFTER CLEANING OUT BELOW THE TOP OF THE 5 1/2" casing to demonstrate that no fluid has access to the well from between the 7" and 5 1/2" casings.

Blanket Bond
RLH:b

M. G. MEFFERD, State Oil and Gas Supervisor

By Murray W. Dosch, Deputy Supervisor

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

Form OG123 (7/79)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

SUPPLEMENTARY NOTICE

DIVISION OF OIL AND GAS
RECEIVED
SEP 29 1982
SANTA PAULA, CALIFORNIA

FOR DIVISION USE ONLY			
BOND	FORMS		EDP WELL FILE
	OGD114	OGD121	
BB	—	✓	

DIVISION OF OIL AND GAS

Santa Paula Calif.

A notice to you dated 4-23, 19 82, stating the intention to

Drill (Drill, rework, abandon), Valex-Ferndale #107 (Well name and number), API No. 111-21066,

Sec. 16, T. 4N, R. 21W, S.B. B. & M., Silverthread Field,

Ventura County, should be amended because of changed conditions.

The present condition of the well is as follows:

Total depth : 8275'

Complete casing record including plugs and perforations:

9-5/8" @ 816 (cemented)
7" @ 5804 (cemented)
5-1/2" 5663' to 7882' (cemented)
Perforted @ intervals from 7538' - 7753'

We now propose

Run and cement 5-1/2" liner from 5663' - 7882'
as per our telephone conversation on 8-2-82

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 940 E. Santa Clara (Street)
Ventura, California 93001 (City) (State) (Zip)
Telephone Number (805) 653-5111

Argo Petroleum Corporation (Name of Operator)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)
By Harry E. Hull, District Superintendent (Name) (Date)
Signature Harry E. Hull 9-28-82

FORM OG111(10/81/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 282-345

REPORT ON PROPOSED OPERATIONS

520 (field code)
12 (area code)
10 (new pool code)
10 (old pool code)

Mr. Harry Hull, Agent
Argo Petroleum Corp.
Box CI
Ventura, CA 93002

Santa Paula, California
Sept. 27, 1982

Your proposal to alter casing well "Valex-Ferndale" 107,
A.P.I. No. 111-21066, Section 16, T. 4N, R. 21W, SeB. B. & M.,
Ojai field, Silverthread area, Miocene pool,
Ventura County, dated 9/20/82, received 9/22/82 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Hole fluid of sufficient quality and quantity shall be maintained in the hole to control any subsurface condition, and a reserve supply shall be on hand for emergencies.
2. Blowout prevention equipment of at least DOG Class II 3M, shall be installed and maintained in operating condition at all times.
3. The proposed bridge plug at 7515 will not fulfill the requirements for the abandonment of the lower portion of the hole without further consideration.
4. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.
5. THIS DIVISION SHALL BE NOTIFIED TO WITNESS A TEST OF THE 5 1/2" SHUT-OFF AT 6700'.

See T

Blanket Bond
RLH:b

M. G. MEFFERD, State Oil and Gas Supervisor

By Murray W. Dosch, Deputy Supervisor

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

DIVISION OF OIL AND GAS
RECEIVED
SEP 2 2 1982
SANTA PAULA, CALIFORNIA

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	OGD114	OGD121
B B	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well No. Valex-Ferndale #107, API No. 111-21066, Sec. 16, T. 4N, R. 21W, S.B. B. & M., Silverthread Field, Ventura County.

The present condition of the well is as follows:

1. Total depth.
   8275'
2. Complete casing record, including plugs and perforations:

   9-5/8" Cmt'd @ 816' (32.3#, H-40).
   7" cmt'd @ 5804' (23#, K-55 & N-80).
   5-1/2" hung at 5663' and cmt'd @ 7872' (17#, N-80).
   Perfs 7538' - 7753' (56 0.44" holes).
   Retrievable bridge plug set @ 7749'.

3. Present producing zone name Valex Zone in which well is to be recompleted Valex
4. Present zone pressure 2700 psia New zone pressure 2700 psia

	(Date)	(Oil, B/D)	(Water, B/D)	(Gas, Mcf/D)
5. Last produced	currently	191	103	137
or				
6. Last injected	(Date)	(Water, B/D)	(Gas, Mcf)	(Surface pressure, psig.)

The proposed work is as follows:

1. Install and test Class II 3M BOPE. Retrieve bridge plug.
2. Shoot, cement squeeze, drill out, and test 3 W.S.O.'S at 7785', 7490', 6700'.
3. Return existing zone to production for minimun of 2 weeks. Then run BHP survey.
4. Set retrievable bridge plug at 7515'. Perforate new zone 6752' - 7477' with 128 0.38" jet holes.
5. Test upper zone for minimum of 1 week. Then run BHP survey.
6. Comingle both zones or dually complete.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 940 E. Santa Clara Street (Street)
Ventura, California 93001 (City) (State) (Zip)
Telephone Number (805) 653-5111

Argo Petroleum Corporation (Name of Operator)
By Harry Hull (Name) 9-20-82 (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

Form OG100(7/79)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

API No. 111-21066

WELL SUMMARY REPORT

Operator: ARGO PETROLEUM CORPORATION		Well: "FERNDALE" #7			
Field: Silverthread Area Ojai Field	County: Ventura	Sec. 16	T. 4N	R. 21W	B.&M. SB

Location (Give surface location from property or section corner, street center line and/or California coordinates): 1077'S & 2922'E from NW corner Section 16, T4N-R21W (SB)

Elevation of ground above sea level: 1061'

Commenced drilling (date): 7/3/81

Completed drilling (date): 8/27/81

Commenced producing (date):

☐ Flowing ☐ Pumping ☐ Gas lift

Name of producing zone(s): L. Mohnian Sand

Total depth: (1st hole) 8275' (2nd) (3rd)

Present effective depth:

Junk: none

DIVISION OF OIL AND GAS RECEIVED JUL 16 1982 SANTA PAULA, CALIFORNIA

Depth measurements taken from top of: ☐ Derrick Floor ☐ Rotary Table ☒ Kelly Bushing
Which is 18.5' feet above ground

GEOLOGICAL MARKERS	DEPTH
U. Big Canyon Fault	5060'
L. Big Canyon Fault	5656'
Lime Unit	6656'

Formation and age at total depth: Lime Unit; L. Mohnian

	Clean Oil (bbl per day)	Gravity Clean Oil	Percent Water including emulsion	Gas (Mcf per day)	Tubing Pressure	Casing Pressure
Initial Production	202	29.3	6.0	53	720	240
Production After 30 days	274	29.3	7.4	125	600	0

CASING RECORD (Present Hole)

Size of Casing (API)	Top of Casing	Depth of Shoe	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Number of Sacks or Cubic Feet of Cement	Depth of Cementing (if through perforations)
9-5/8"	surface	816'	32.2#	H-40,ST&C 8RD	new	12¼"	490cf	shoe
7"	surface	5804'	26.0#	N-80&K-55,ST&C8RD	new	8-3/4"	1050cf	shoe
5½"	5663'	7872'	17.0#	N-80, ST&C 8RD	new	8-3/4"	1050cf	shoe

PERFORATED CASING (Size, top, bottom, perforated intervals, size and spacing of perforation and method.)

4 (1/2") JHPF @ 7538', 7550', 7561', 7573', 7580', 7590', 7613', 7634', 7647', 7661', 7722', 7733', 7745', 7753' 56 holes.

Was the well directionally drilled? If yes, show coordinates at total depth
☒ Yes ☐ No 1104.89'N & 498.95'E of surface location

Electrical log depths: DIL: 816'-8260'

Other surveys: FDC/CNL, Dipmeter, Mudlog, Directional Survey

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Name	Title	
Harry Hull	District Superintendent	
Address: 940 E. Santa Clara St.	City: Ventura	Zip Code: 93001
Telephone Number: (805) 653-5111	Signature: Harry Hull	Date: 7-2-82

SUBMIT IN DUPLICATE

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

DIVISION OF OIL AND GAS
RECEIVED
JUL 1 6 1982
SANTA PAULA, CALIFORNIA

Operator Argo Petroleum Corp. Field Silverthread County Ventura
Well Ferndale #7, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21066 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date ....., 19.....

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
7/1/81 to 7/2/81	MIRU Bawden Rig #22.
7/3/81	Finished rigging up. Drilled rat hole. Spudded in with 12¼" bit and navi-drill at 1500 hrs. Lost circulation at 40'; cured with Quikseal.
7/4/81	Navidrilled to 203'. POOH and layed down Navidrill. RIH and drilled 12¼" hole to 332'.
7/5/81 to 7/6/81	Drilled to 816'. Conditioned hole for casing. POOH and ran 20 jts. of new 9-5/8", 32.2#, H-40,ST&C 8RD casing with the guide shoe at 816' and one centralizer 10' above the shoe.(Casing: New - J.D. Rush). Rigged up BJ Cementers and cemented casing as follows: 70cf water, 390cf class 'G' + 4% Gel + 3% $CaCl_2$ followed by 100cf class 'G' + 2% $CaCl_2$. Displaced with 346cf mud. CIP at 1509 hrs. WOC 4½ hrs. Cut off casing.
7/7/81	Installed casing head (10"x3000psi) and BOPS. Test of BOPS witnessed and approved by DOG. Drilled cement from 754' to 816'. Drilled 8-3/4" hole to 899'.
7/8/81 to 7/11/81	Drilled to 3132'. POOH. Picked up Navidrill and navidrilled to 3300'.
7/12/81	Navidrilled to 3425'. POOH. Layed down Navidrill. Drilled to 3569'.
7/13/81 to 7/14/81	Drilled to 4472'. POOH to pickup Navidrill. Installed Mudlogger at 4500'.
7/15/81	Navidrilled to 4900'.
7/16/81	POOH. Layed down Navidrill. Changed BHA and drilled to 5208'. Increased mud weight to 85 pcf.
7/17/81	Conditioned mud. POOH, picked up Navidrill.
7/18/81 to 7/19/81	Rigged up Scientific Steering tool and Navidrilled to 5464'. POOH. Layed down Navidrill. Reamed 5354' to 5464'. Drilled to 5574'.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corp. Field Silverthread County Ventura
Well Ferndale #7, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21066 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date ....., 19.....

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
7/20/81 to 7/22/81	Drilled to 6375'. POOH. Layed down BHA and picked up core barrel with 8½" core head.
7/23/81	Cored 6". Stuck pipe. Worked pipe for 11 hrs. Rigged up Dia-Log and backed off fish at 6203'. Layed down BHA and picked up fishing tools.
7/24/81	RIH. Tagged top of fish at 6203'. Top of stuck pipe at 6202'. Worked pipe and spotted 50 Bbls oil. Continued to pump 1 Bbl/hr. of oil. Pipe free at 2105 hrs. Circulated hole clean of oil.
7/25/81	POOH. Made up new BHA. Screwed into fish and POOH. Layed down core barrel. Made up new BHA.
7/26/81 to 7/28/81	RIH. Reamed 6310' to 6375'. Drilled to 6966'. Conditioned mud for logs and wiped hole.
7/29/81	Circulated and POOH. Rigged up Schlumberger and ran logs as follows: DIL 816' - 6966' FF 4500' - 6927' BHC-Waveform 4500' - 6961' FDC/CNL 4500' - 6966' Gas shows. Ran drill pipe into hole and circulated out the gas. Continued logging as follows: Dipmeter 4500' - 6960' Rigged down Schlumberger. RIH and conditioned the mud.
7/31/81 to 8/1/81	Reamed hole from 6934' to 6966'. Drilled to 7175'. Conditioned hole for logs. POOH and rigged up Schlumberger. Logged well as follows: DIL 1750' - 7169' FDC/CNL 1750' - 7130' Rigged down Schlumberger and picked up BHA.
8/2/81 to 8/6/81	Drilled to 7855'. Conditioned hole and POOH for logs. Rigged up Schlumberger and logged as follows:

DIVISION OF OIL AND GAS
RECEIVED
JUL 16 1982
SANTA PAULA, CALIFORNIA

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corp. Field Silverthread County Ventura
Well Ferndale #7, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21066 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date ....., 19.....

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
	DIL 1000' - 7846' BHC-VDL/Waveform 5800' - 7844' Dipmeter 6500' - 7849' FDC/CNL 5800' - 7820'
8/7/81 to 8/13/81	Finished logging and rigged down Schlumberger. RIH. Drilled to 8275'. POOH and rigged up Schlumberger. Logged well as follows: DIL 6260' - 8260' Dipmeter 6265' - 8265' Rigged down Schlumberger. RIH with sidewall core tool.
8/14/81 to 8/15/81	Sidewall core tool stuck in hole. Stripped in on line, separated line at rope socket. POOH. No fish. RIH with sidewall hook and grapple. Conditioned hole.
8/16/81	RIH to 7817'. Encountered bridge. POOH and picked up BHA with mill. RIH.
8/17/81	Encountered junk at 7817'. Pushed junk to 7920'. Attempted a wiper trip. Pipe stuck at 7891'. Worked stuck pipe. Ran Dia-Log FP at 7164'. Attempted to back off - no good. Increased mud weight to 94-95pcf. Spotted 45 Bbls of weighted oil (100pcf). Worked pipe and continued pumping oil at 1 Bbl/hr.
8/18/81	Continued to work pipe. Pipe free at 2215'.
8/19/81	Circulated out oil and POOH to the top of the fish at 7900'. Conditioned hole for casing. POOH.
8/20/81	Layed down drill pipe. Ran casing as follows: Joints #1-58: 7",N-80, LT&C 8RD and joints #59-130: 7", K-55, LT&C 8RD. Casing stopped at 5804' - could not move up or down. Casing string included B&W guide shoe at 5804', B&W float collar at 5723', cement baskets at 5797', 5004' and 2825', two Antelope solidifiers per joint from 5790' to 3601', eight scratchers from 5615' to 5255' and fifteen centralizers, one per joint from 3556' to 2910'. (Casing: New) Rigged up BJ Cementers and cemented casing as follows: 100cf of mud sweep(95pcf) followed by 100cf 1:1 Diamix + 1cf/sack perlite + 4% Gel, followed by 1080cf of 1:1 Diamix + 4% Gel + 1% D-31 + 0.8% D-19 + 0.4% D-6. Displaced with 1310cf of mud. Bumped plug to 1500 psi. Float held. CIP at 2395 hrs. All casing 26#.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corp. Field Silverthread County Ventura
Well Ferndale #7, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21066 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date ....., 19.....

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address)
(805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
8/21/81 to 8/23/81	Landed 7" casing and nippled up BOPS. Layed down 4½" drill pipe and picked up 3½" drill pipe. RIH and tagged plug at 5714'. Drilled out to shoe at 5804'. RIH & drilled to 7887' and conditioned for 5½" casing.
8/24/81	POOH. Ran 56 jts. of 5½", 17#, N-80, LT&C 8RD casing with B&W guide shoe at 7872'. B&W float collar at 7790', centralizers on joints 2,3,4,5,6,7,8,9,11,13,15,17,19, 22,24,25,26,27,43,44,45,46,47 and 51, and a Barn Liner hanger at 5663'. (Casing: New NKK from Advance. A&A Inspection Spectralog V; API threads, drift, spec E.A.). Rigged up BJ Cementers and cemented casing as follows: 100cf of mud sweep (90pcf) followed by 100cf of 1:1 Diamix + 1cf/sack perlite + 4% Gel + 0.5%R-5, followed by 950cf 1:1 Diamix + 4% Gel + 1% D-31 + 0.8% D-19 + 0.45% R-5. Displaced with 521cf of mud. Bumped plug with 1800 psi; float held. CIP at 2215 hrs. Reversed out excess. POOH and ran in with bit and scraper. Top of cement at 3340'.
8/25/81	Cleaned hole. Drilled hard cement from 5503' to 5663'. POOH. Picked up 2-7/8" tubing and RIH. Drilled cement from 5663' to 5673'.
8/26/81	Drilled cement to 5886'. RIH to 7772'. Flushed casing with water. Rigged up Welex and ran Cement Bond Log. Tore out rig. Rig released at 0800 hrs. 8/26/81.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Ferndale #7, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21066 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date ....., 19.....

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address)
(805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	WELL COMPLETION HISTORY
9-2-81	MIRU prod. rig. Install BOPE. Spot & R.U Welltech pump & tank. Install shooting flange. R.U. Welex. Ran CBL, CCL, GRL 7748'-5000' & 3000'-2000' w/ 1000 psig on csg. Rig down Welex. RIH w/ sawtoothed collar & tbg.
9-3-81	Continue to P.U. tbg. Found fill @ 7762'. Rig pump & clean out fill 7762'-7770'. Changed over well to Ferndale crude (273 bbls). POH w/tbg. M.U. & RIH w/ GEO VANN csg. gun perforating assembly w/Model "R" double grip packer & vent assembly. Land tbg. w/gun bottom @ 7756'. Remove BOPE. Fill tbg. w/lease crude.
9-4-81	R.U. Welex. Ran Gamma Ray correlation log through tbg. Unlanded tbg. & spaced. Set Model "R" packer w/ 12,000# compression. Landed tbg. on donut, w/packer @ 7464'. Bottom of gun @ 7758' in position for perforating 4 (1/2") JHPF @ 7538', 7550', 7561', 7573', 7580', 7590', 7613', 7634', 7647', 7661', 7722', 7733', 7745', 7753', (total of 56 holes). Built tree & flowline. Tested tree to 2500 psig. GEO VANN dropped firing bar down tbg. Well pressure built to 375 psig in 10 minutes. Flowed well to tank through 8/64" bean. Tbg. press. 280 psig after 3 hrs. flow.
9-5-81	Well flowed 47 bbls. in 16 hrs., by 6 A.M. with 0.1% cut & trace sand. (45 bbls. to get "bottoms up") Tbg. press. 225 psig at 6 A.M., 180 psig at 1 P.M., 150 psig at 2:15 P.M., 40 psig at 5 P.M. All cuts were 0.1% with no sand. Well completely dead at 7 P.M. Flowed a total of 53 bbls. Shut in.
9-6-81	No. tbg. press. after overnight shut in. Removed tree. Installed BOPE. Unlanded tbg. & unset packer. Backscuttled tbg. clear, with dirty, muddy water. Returns out of tbg. (Suspect that water column built up in tbg. & killed well.) Unable to bleed well down. 400 psig on csg., 200 psig on tbg. Pumped total of 160 bbls. lease water down tbg. Well continued to flow out csg. Heavy gas returns. Closed well in, waiting on additional water for killing well.
9-7-81	Pumped additional 140 bbl. lease water down tbg. Hole changed over to lease water. Well killed. POH w/tbg., packer & GEO VANN gun assembly. All shots fired on gun assembly. M.U. STC., 2½ top lock PS, Page anchor & drain. RIH w/tbg. Tagged bottom @ 7770'. No fill. Pulled up & laid down 9 jts. tbg. Landed on donut w/tail @ 7483' & anchor @ 7166'. Removed BOPE & installed tree.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

DIVISION OF OIL AND GAS
RECEIVED
SANTA PAULA, CALIFORNIA

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Ferndale #7 Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21066 Name Harry Hull Title Dist. Supt.
(Person submitting report) (President, Secretary or Agent)
Date ....., 19.....

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (805) 653-5111
(Address) (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
9-8-81	Changed over hole to lease crude (260 bbls.). Tbg. & csg. press 373 psig after change over. Opened well to Baker tank on 8/64" choke. Flowed 12 bbls. after 3 hrs. 175# tbg/325# csg. Flowed total of 46 bbls. (4% cut).
9-9-81	Csg. press. 250 psig. Tbg. 0 psig. Rig up swab equipment. Well unloaded & started flowing. Installed 12/64" bean. Flowed 1/2 hr. Tbg. 625 psig/csg. 300 psig Changed to 10/64" bean. Flowed total of 118 bbls. in 24 hrs.
9-10-81	Loaded out tools. Moved out rig. Flowing through 10/64" bean. Tbg. press. 560 psig/csg. 300 psig. Made 146 bbls. gross. 6 bbls. net oil in 24 hours.
9-11-81	Changing to 12/64" bean. 121 bbl. gross. 4% cut @ well head. 300/590 csg/tbg. 33.2° API @ 102° F.
9-12-81	On 12/64" bean. 251 bbls. gross. 6% cut @ well head. 240/720 psi csg/tbg.
9-13-81	263 bbls. gross. 3% cut. 220 psi/720/psi. csg./tbg.
9-14-81	Well made 264 bbls. gross. 6% cut. 200 psi/700 psi, csg/tbg.

UNIVERSAL DIRECTIONAL DRILLING

16-4-21

Page 1 of 2

COMPLETION REPORT

111-21066

DIVISION OF OIL AND GAS
RECEIVED
FEB 1 - 1982
SANTA PAULA, CALIFORNIA

LOCATION Barker Ferndale

TIE-IN B "VALEX - Barker Ferndale" # 107

SURFACE LOCATION 2922'E 1077'S

K. B. ELEVATION 1061'

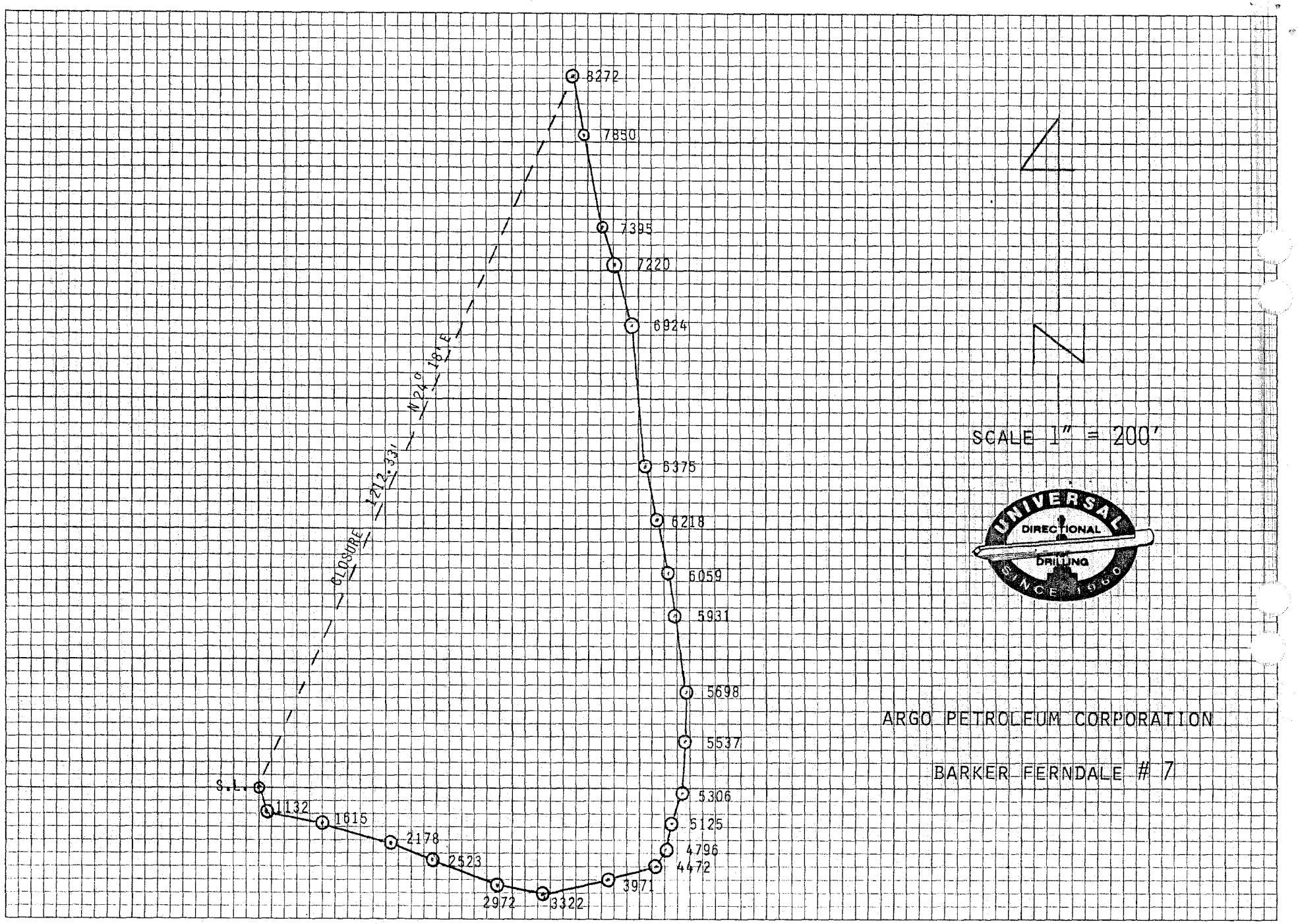
COMPANY Argo Petroleum Corporation

DATE 7-27-81

NO.	MEASURED DEPTH	COURSE LENGTH	DRIFT ANGLE	VERTICAL COURSE	VERTICAL DEPTH	COURSE DEVIATION	DRIFT DIRECTION	RECTANGULAR COORDINATES NORTH	SOUTH	EAST	WEST
1	180	180	1° 45	179 92	179 92	5 50	S 04 W		5 48		3
2	303	123	2° 15	122 91	302 82	4 83	S 09 E		10 26	37	
3	333	30	2° 15	29 98	332 80	1 18	S 08 E		11 42	54	
4	425	92	2° 30	91 91	424 71	4 01	S 05 E		15 42	89	
5	537	112	2° 00	111 93	536 64	3 91	S 15 E		19 19	1 90	
6	739	202	2° 00	201 88	738 52	7 05	S 16 E		25 97	3 84	
7	814	75	2° 00	74 95	813 47	2 62	S 13 E		28 52	4 43	
8	897	83	2° 30	82 92	896 39	3 62	S 22 E		31 88	5 79	
9	990	93	2° 30	92 91	989 31	4 06	S 07 E		35 90	6 28	
0	1068	78	4° 15	77 79	1067 09	5 78	S 59 E		38 88	11 23	
1	1132	64	6° 15	63 62	1130 71	6 97	S 75 E		40 69	17 96	
2	1194	62	8° 45	61 28	1191 99	9 43	S 76 E		46 96	27 12	
3	1258	64	9° 30	63 12	1255 11	10 56	S 76 E		45 53	37 37	
4	1323	65	10° 15	63 96	1319 07	11 57	S 80 E		47 53	48 76	
5	1425	102	10° 15	100 37	1419 45	18 15	S 79 E		50 99	66 57	
6	1488	63	10° 30	61 95	1481 39	11 48	S 79 E		53 18	77 84	
7	1615	127	10° 30	124 87	1606 27	23 14	S 78 E		57 99	100 48	
8	1767	152	10° 30	149 45	1755 72	27 70	S 76 E		64 70	127 36	
9	1983	216	11° 15	211 85	1967 57	42 14	S 74 E		76 31	167 87	
0	2178	195	11° 45	190 91	2158 48	39 71	S 72 E		88 58	205 63	
1	2335	157	12° 15	153 43	2311 91	33 31	S 71 E		99 43	237 13	
2	2523	188	12° 45	183 36	2495 27	41 49	S 70 E		113 62	276 12	
3	2682	159	13° 15	154 77	2650 04	36 44	S 70 E		126 08	310 36	
4	2811	129	13° 45	125 30	2775 34	30 66	S 69 E		137 07	338 99	
5	2972	161	14° 30	155 87	2931 22	40 31	S 68 E		152 17	376 36	
6	3129	157	15° 00	151 65	3082 87	40 63	S 69 E		166 73	414 30	
7	3193	64	12° 30	62 48	3145 35	13 85	S 74 E		170 55	427 61	
8	3260	67	11° 00	65 77	3211 12	12 78	S 85 E		171 67	440 35	
9	3322	62	10° 30	60 96	3272 08	11 30	N 83 E		170 29	451 56	
0	3385	63	9° 30	62 14	3334 22	10 40	N 69 E		166 55	461 27	
1	3499	114	9° 00	112 60	3446 81	17 83	N 72 E		161 05	428 23	
2	3562	63	8° 45	62 27	3509 08	9 58	N 72 E		158 00	487 35	
3	3686	124	9° 00	122 47	3631 55	19 40	N 74 E		152 74	505 99	
4	3814	128	9° 00	126 42	3757 98	20 02	N 74 E		147 22	525 24	
5	3971	157	9° 00	155 07	3913 04	24 56	N 76 E		141 28	549 07	
6	4129	158	9° 15	155 95	4068 99	25 40	N 77 E		135 57	573 82	
7	4316	187	9° 30	184 44	4253 42	30 86	N 79 E		129 68	604 12	
8	4472	156	9° 15	153 97	4407 40	25 08	N 80 E		125 33	628 81	
9	4511	39	7° 00	38 71	4446 10	4 75	N 74 E		124 02	633 38	
0	4542	31	6° 15	30 82	4476 92	3 37	N 66 E		122 64	636 46	
1	4574	32	5° 45	31 84	4508 76	3 21	N 55 E		120 80	639 08	
2	4606	32	5° 45	31 84	4540 60	3 21	N 42 E		118 42	641 23	
3	4636	30	5° 00	28 89	4570 48	2 61	N 27 E		116 09	642 42	
4	4668	32	5° 00	31 88	4602 36	2 79	N 13 E		113 37	643 05	
5	4700	32	3° 30	31 94	4634 30	1 95	N 05 W		111 43	642 88	
6	4731	31	4° 15	30 91	4665 22	2 30	N 05 W		109 14	642 68	
7	4796	65	6° 00	64 64	4729 86	6 79	N 02 W		102 35	642 44	
8	4828	32	6° 00	31 82	4761 69	3 34	N 02 W		99 01	642 32	

CLOSURE _____

K+E 10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

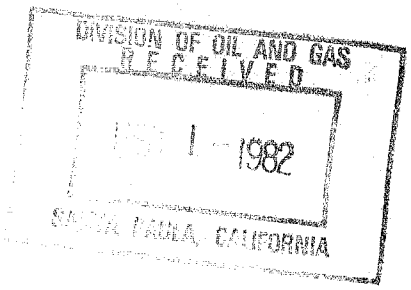


16-4-21

Core-Analysis Data
For
"VALEX - Ferndale" #7 107
Ojai
Ventura, California

CLI File #10080301-002167

111-21066



1250 E. PACIFICO, ANAHEIM, CALIFORNIA 92805 · 714/937-1094

CORE LABORATORIES, INC.

August 27, 1981

Argo Petroleum Corporation
940 E. Santa Clara
Ventura, CA 93001

Attention: Mr. Dick Berger

Subject: Core-Analysis Data
Ferndale #7
Ojai
Ventura, California
CLI File #10080301-002167

Gentlemen:

Percussion type sidewall core samples recovered from the subject well were submitted to our Anaheim, California laboratory for analysis. The results of these analyses are presented in the accompanying report with a general lithological description of the samples. The sample weights are also reported in order that these data may be taken into statistical account in evaluating the sampled intervals.

Sieve analyses was also requested for the indicated depths. The results of these analyses follow the sidewall data in tabular form with a plot of cumulative weight percentages.

We sincerely appreciate this opportunity to serve you and hope these data prove beneficial in the development of this reservoir.

Very truly yours,

CORE LABORATORIES, INC.

James A. Cusator/ek

James A. Cusator
Division Manager
California Professional Engineer
Reg. No. P-1176

JAC:ek

Enclosures

CORE LABORATORIES, INC. CORE LAB *Petroleum Reservoir Engineering*

10080301-

COMPANY Argo Petroleum Corp. DATE ON 8/03/81 FILE NO. 002167

WELL Ferndale #7 DATE OFF 8/14/81 ENGRS. DD, JW

FIELD Ojai FORMATION ELEV.

COUNTY Ventura STATE CA DRLG. FLD. Waterbase CORES Sidewall

LOCATION REMARKS

These analyses, opinions or interpretations are based on observations and material supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations as to the productivity, proper operation, or profitableness of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

DIVISION OF OIL AND GAS
RECEIVED
FEB 1 1982
SANTA BARBARA, CALIFORNIA

Side Wall Core Analysis Data

DEPTH, FEET	*PERM., Md.	POR., %	% POR. SAT. OIL	% POR. SAT. TOTAL WATER	O/W		smpl. wt.	°API	DESCRIPTION
5614	<.1	30.4	28.6	55.6	0.51		4		sltstn;dkbrn,shly,no stn,no flu
5687	<.1	31.8	16.2	63.5	0.26		4		same
5758	50	20.6	0.0	69.2	---		4		sd;tan vf-fgr,slty,no stn,no flu
5782	60	22.1	1.0	63.4	0.02		5		same
5832	10	26.4	13.3	56.7	0.24		5		sd;vf-fgr,vslty,shly,no stn,no flu
5894	<.1	26.4	25.0	56.3	0.44		2		sltstn;dkbrn,whlam,shly,no stn,no flu
5928	40	23.8	0.0	64.0	---		4		sd;tan,vf-fgr,slty,no stn,no flu
6008	40	20.4	2.4	48.8	0.05		4		sd;ltbrn,vf-fgr,slty,vlt stn,no vis flu
6062	40	23.0	2.0	44.0	0.05		4		same
6158	30	24.3	2.8	55.0	0.05		3		same
6220	30	27.8	1.3	65.8	0.02		3		same
6304	25	20.8	2.2	53.3	0.04		2		same
6342	20	27.7	1.1	57.5	0.02		3		sd;gry,vf-fgr,slty,vlt stn,no vis flu
6358	20	14.3	0.0	57.9	---		3		same
6381	35	22.9	1.0	56.6	0.02		4		sd;ltbrn,vf-fgr,slty,vlt stn,no vis flu
6390	35	23.8	0.0	62.5	---		3		same
6408	30	21.9	2.4	63.4	0.04		4		same
6435	40	21.6	0.0	54.5	---		2		same
6545	Shattered								---
6570	Insufficient Sample								---
6587	20	21.4	1.7	84.7	0.02		3		sd;ltbrn,vf-fgr,slty,vlt stn,no vis flu
6594	Mudshot								---
6645	10	26.0	0.0	50.0	---		5		sd;ltbrn,vf-fgr,slty,vlt stn,no vis flu
6770	20	27.2	16.9	57.7	0.29		5		same
6780	Mudshot								---
6814	20	25.4	0.0	72.9	---		4		sd;ltbrn,vf-fgr,slty,no stn,no flu
6846	20	18.5	0.0	55.0	---		2		same
6858	20	18.9	0.0	57.1	---		3		same
6878	1	23.1	3.6	71.4	0.05		2		clystn;dkbrn,slty,vfsd,no stn,no flu

CORE LABORATORIES, INC. CORE LAB *Petroleum Reservoir Engineering*

COMPANY	Argo Petroleum Corp.	DATE ON	8/03/81	FILE NO.	10080301-002167
WELL	Ferndale #7	DATE OFF	8/14/81	ENGRS.	DD, JW
FIELD	Ojai	FORMATION		ELEV.	
COUNTY	Ventura STATE CA	DRLG. FLD.	Waterbase	CORES	Sidewall
LOCATION		REMARKS			

These analyses, opinions or interpretations are based on observations and material supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations as to the productivity, proper operation, or profitableness of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

Side Wall Core Analysis Data

DEPTH, FEET	* PERM., Md.	POR., %	% POR. SAT. OIL	% POR. SAT. TOTAL WATER	O/W		smpl wt.	°API	DESCRIPTION
6894	25	22.3	3.7	77.8	0.05		3		sd;ltbrn,f-mgr,slcalc,slty,vlt stn,dull gld flu
6906	10	26.8	3.3	50.0	0.07		2		sd;ltbrn,vfgr,slty,vlt stn,no vis flu
6914	25	19.7	2.7	43.2	0.06		4		sd;tan,vf-fgr,slty,vlt stn,no vis flu
6924	Mudshot								---
6938	30	19.1	3.7	59.3	0.06		3		sd;ltbrn,vf-fgr,slty,vlt stn,dull gld flu
6946	Mudshot								---
6970	Empty								---
6962	Empty								---
6982	30	16.2	2.9	41.2	0.07		5		sd;ltbrn,vf-fgr,slty,vlt stn,dull gld flu
6990	30	17.0	6.3	31.3	0.20		2		same
7052	20	21.8	1.2	60.2	0.02		4		same
7074	10	23.0	3.4	61.0	0.06		5		sd;tan,vfgr,vslty,vlt stn,dull gld flu
7104	< .1	12.9	0.0	27.3	---		4		slstn;brn,no stn,no flu
7118	20	26.0	1.9	75.0	0.03		4		sd;brn,vf-fgr,vslty,vlt stn,dull gld flu
7132	Insufficient Sample								---
7170	10	19.9	0.0	74.1	---		6		sd;gry,vf-fgr,slty,no stn,no flu

*Indicates Permeability Determined Empirically

CL-511-1

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

CORE ANALYSIS RESULTS

Company Argo Petroleum Corp. Formation File 10080301-002167
Well Ferndale #7 Core Type Conventional Date Report 8/26/81
Field Ojai Drilling Fluid Waterbase Analysts DD,JW
County Ventura State CA Elev. Location

Lithological Abbreviations

SAND-SD SHALE-SH LIME-LM | DOLOMITE-DOL CHERT-CH GYPSUM-GYP | ANHYDRITE-ANHY CONGLOMERATE-CONG FOSSILIFEROUS-FOSS | SANDY-SDY SHALY-SHY LIMY-LMY | FINE-FN MEDIUM-MED COARSE-CSE | CRYSTALLINE-XLN GRAIN-GRN GRANULAR-GRNL | BROWN-BRN GRAY-GY VUGGY-VGY | FRACTURED-FRAC LAMINATION-LAM STYLOLITIC-STY | S. CHTLY-SL/ VERY-V/ W.TH-W/

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYS	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE: OIL	RESIDUAL SATURATION PER CENT PORE: TOTAL WATER	O/W	SAMPLE DESCRIPTION AND REMARKS
	6375	91.0	18.6	12.3	50.2	0.24	*ss;ltbrn,vf-fgr,slty,lt stn, gld flu

*Sample was dried out when submitted for analysis.

DIVISION OF OIL AND GAS
RECEIVED
SANTA PAULA, CALIFORNIA

These analyses, opinons or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operations, or profitableness of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

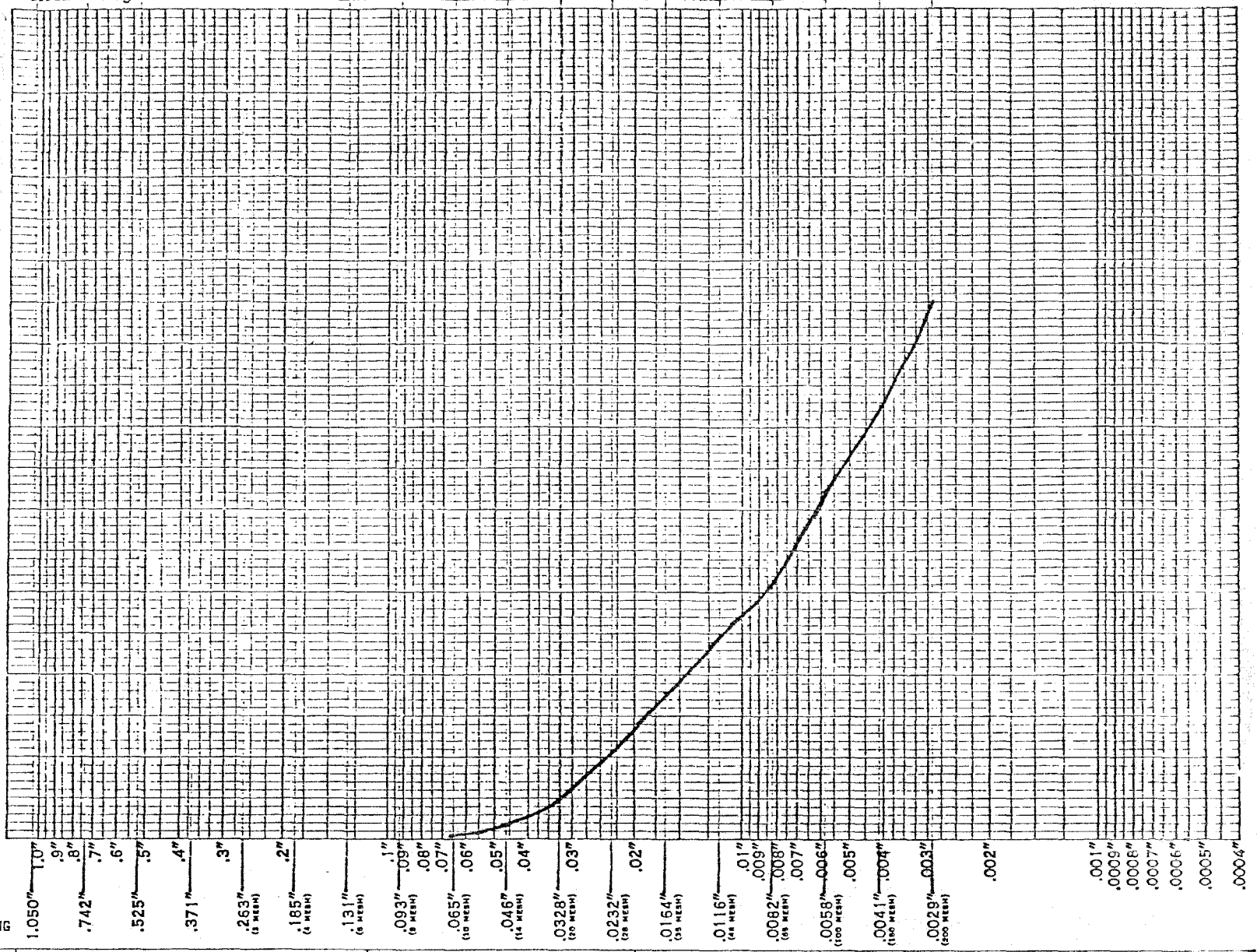
The [illegible] Standard Screen Sca[illegible]

Form No. L-4
Please mention above when ordering

Cumulative Logarithmic Diagram of Screen Analysis on Sample of Conventional Core

L-5

Name Argo Petroleum Co. Ferndale 7 Date 8/12/81

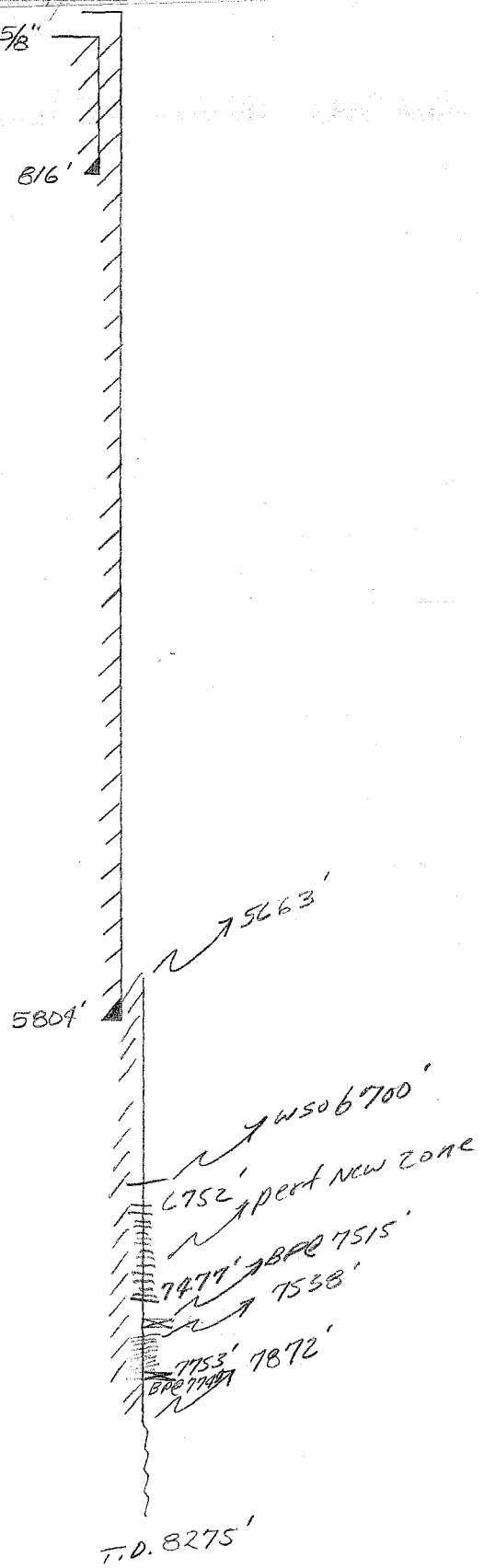


SCREEN SCALE RATIO 1.414

6375

Openings Inches	Openings Millimeters	Tyler Mesh	U. S. No.	Sample Weights	Per Cent	Per Cent Cumulative Weights	Sample Weights	Per Cent	Per Cent Cumulative Weights	Sample Weights	Per Cent	Per Cent Cumulative Weights
1.050	26.67											
.742	18.85											
.525	13.33											
.371	9.423											
.263	6.680	3										
.185	4.699	4	4									
.131	3.327	6	6									
.093	2.362	8	8									
.065	1.651	10	12	0.03	0.2	0.2						
.046	1.168	14	16	0.30	1.6	1.8						
.0328	.833	20	20	0.53	2.8	4.6						
.0232	.589	28	30	1.16	6.2	10.8						
.0164	.417	35	40	1.32	7.0	17.8						
.0116	.295	48	50	1.33	7.1	24.9						
.0082	.208	65	70	1.43	7.6	32.5						
.0058	.147	100	100	1.79	9.6	42.1						
.0041	.104	150	140	1.85	9.9	52.0						
.0029	.074	200	200	2.45	13.1	65.0						
.0029	.074	200	200	6.55	35.0	100.0						
			Totals,	18.74	100.0							

Argo Petroleum Corporation
"V. F." 107



FORM 157

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT ON PROPOSED CHANGE OF WELL DESIGNATION

Santa Paula, California

June 16, 1982

Mr. Harry E. Hull, Agent
Argo Petroleum Corporation
P.O. Box CI
Ventura, CA 93002

DEAR SIR:

Your request dated June 15, 1982, relative to change in designation of well(s) in Sec. 16, T. 4N, R 21W, SB B. & M., Ojai field, Ventura County, District No. 2, has been received; and in accordance with Section 3203, Public Resources Code, reading in part as follows:

> "* * * The number or designation by which any well heretofore drilled has been known, and the number or designation specified for any well in a notice filed as required by Section 3203, shall not be changed without first obtaining a written consent of the Supervisor."

the proposed change in designation is hereby authorized as follows:

From:	To:
"Ferndale" 7 (111-21066)	"Valex-Ferndale" 7 (111-21066)
"Ferndale" 9 (111-21105)	"Valex-Ferndale" 9 (111-21105)

Cons.Comm.

M. G. MEFFERD
~~JOHN F. MATTHEWS, JR.~~
State Oil and Gas Supervisor

By Murray W. Dosch
Murray W. Dosch, *Deputy Supervisor*

59810-708 1-72 5M ① OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

No. T 281-126

DIVISION OF OIL AND GAS

Report on Operations

Mr. Harry Hull, Agent
Argo Petroleum Corporation
940 E. Santa Clara
Ventura, CA 93001

Santa Paula
July 21, 1981

Calif.

Your operations at well "Ferndale" 7, API No. 111-21066, Sec. 16, T. 4N, R. 21W S.B., B.& M. Ojai Field, in Ventura County, were witnessed on 7/7/81. R. Mavia, representative of the supervisor, was present from 1745 to 1845. There were also present Guy Penick, rig supt.

Present condition of well: 9 5/8" cem. 816'. T.D. 816'.

The operations were performed for the purpose of testing the blowout prevention equipment and installation.

DECISION:

THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

AUG 14 1981
MTA - 5 Cuccana
Big Canyon Fault Zone
± 4900 - ± 5200'
Need 90# kept mud
or blow out
Below 5200 lower
pressure intervene
Sank sidewall gun
& core behind 7920
Couldn't Run 7" below 5504
Cemented AT THAT DEPTH
Program
Run 5" liner
7900' & lap on top 7"
DRL with 4¼" bit for
Drilled out

AUG 27 1981 TD 7900
5 Cuccana - MTA
Big Canyon Fault Zone
5050 ± High Pressure
5250 ± Need 96 #/cuft mud
Stuck 7" casing at
± 5200 cemented at that
depth
Ran & Cemented 5 1/2
5660 to 7900 &
Cemented to cement
top liner to 8 appx
In 5½ 163 sacks used
In Hole Tried not leaking
OIL Sands 5050 to 7900
Will complete all interval
5200 to 7900 only lower part at this
time NO

M. G. MEFFERD Supervising Petroleum Engineer
State Oil and Gas Supervisor

By John L. Hardoin MTA
Deputy Supervisor
John L. Hardoin

OG109 (10-78-GSRI-15M)

FORM OG111 (7/80)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 281-145

REPORT ON PROPOSED OPERATIONS

520 (field code)
12 (area code)
New 10 (pool code)

Mr. Harry Hull, Agent
~~Argo Petroleum Corporation~~
~~940 E. Santa Clara~~
~~Ventura, CA 93001~~

Santa Paula, California
May 1, 1981

Your proposal to drill well "Ferndale" 7,
A.P.I. No. 111-21066, Section 16, T. 4N, R. 21W, S.B. B. & M.,
Ojai field, Silverthread area, Miocene pool,
Ventura County, dated 4/23/81, received 4/29/81 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Sufficient cement shall be pumped back of the 9 5/8" casing to fill to the surface.
2. Hole fluid of sufficient quality and quantity shall be maintained in the hole to control any subsurface condition, and a reserve supply shall be on hand for emergencies.
3. Unlined sumps, if they contain harmful waters, shall not be located over fresh water bearing aquifers.
4. Any sump used during these operations shall be thoroughly cleaned and filled with earth as soon as operations are completed.
5. Blowout prevention equipment of at least DOG Class III 1M B shall be installed on the 9 5/8" casing and Class III 3M B on the 7" casing and maintained in operating condition at all times.
6. This office shall be consulted before placing any plugs or sidetracking any hole.
7. THIS DIVISION SHALL BE NOTIFIED TO WITNESS:
   a. A pressure test of the blowout prevention equipment before drilling below 800'.
   b. A production test of shut off within 30 days after completing the well.

12/24/81 MD Splice test not required

Blanket Bond
MD:b

M. G. MEFFERD, State Oil and Gas Supervisor

By John L. Hardoin
John L. Hardoin Deputy Supervisor

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS
RECEIVED
APR 29 1981
SANTA PAULA, CALIFORNIA

DIVISION OF OIL AND GAS
Notice of Intention to Drill New Well

C.E.Q.A. INFORMATION			
EXEMPT ☐ CLASS____	NEG. DEC. ☐ S.C.H. NO.____	E.I.R. ☒ S.C.H. NO. CUP 3344	DOCUMENT NOT REQUIRED BY LOCAL JURISDICTION ☐
See Reverse Side			

FOR DIVISION USE ONLY					
MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121
203	5-28-81	✓	66	✓	✓

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to commence drilling well FERNDALE #7107, API No. 111-21066 (Assigned by Division),

Sec. 16, T. 4N, R. 21W, S.B B. & M., SILVERTHREAD Area Ojai Field, VENTURA County.

Legal description of mineral-right lease, consisting of _____ acres, is as follows: _____ (Attach map or plat to scale)

PREVIOUSLY SUBMITTED

Do mineral and surface leases coincide? Yes X No _____ If answer is no, attach legal description of both surface and mineral leases, and map or plat to scale.

Location of well 2922 feet E (Direction) along section/property line and 1077 feet S (Direction)

at right angles to said line from the NW corner of section/~~property~~ 16 (Cross out one) or

Is this a critical well according to the definition on the reverse side of this form? Yes ☐ No ☒

If well is to be directionally drilled, show proposed coordinates (from surface location) at total depth:
735 feet E (Direction) and 360 feet N (Direction)

Elevation of ground above sea level 1061 feet.

All depth measurements taken from top of KB (Derrick Floor, Rotary Table, or Kelly Bushing) that is 18.5 feet above ground.

PROPOSED CASING PROGRAM

SIZE OF CASING INCHES API	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS	CALCULATED FILL BEHIND CASING
9 5/8	32.3	H-40	0	800	800	800 (toc surf)
7"	23# 26#	N-80	0	7000	7000	4500 (toc 2500')

(A complete drilling program is preferred and may be submitted in lieu of the above program.)

Intended zone(s) of completion Mohnian Sands (Name, depth, and expected pressure) Estimated total depth 7000

It is understood that if changes in this plan become necessary we are to notify you immediately.

Name of Operator	Type of Organization (Corporation, Partnership, Individual, etc.)	
Argo Petroleum Corporation	Corporation	
Address 940 E. Santa Clara	**City** Ventura, California	**Zip Code** 93001
Telephone Number (805) 648-2514 653-5111	**Name of Person Filing Notice** Harry Hull	**Signature** Harry Hull
		Date 4-23-81

This notice and indemnity or cash bond shall be filed, and approval given, before drilling begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

OG105 (10-78-GSRI-10M)

D ARTMENT OF CONSERVAT N
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
1000 S. Hill Rd, Suite 116 Ventura, CA 93003-4458
Phone:(805) 654-4761 Fax:(805) 654-4765

REPORT OF WELL ABANDONMENT

Ventura, California
September 17, 2013

Alan E. White
Vintage Production California LLC (V1370)
9600 Ming Avenue, Suite 300
Bakersfield, CA 93311

Your report of abandonment of well **"Valex-Ferndale" 209**, A.P.I. No. **111-21105**, Section **16**, T. **04N**, R. **21W**, **SB** B.&M., **Ojai** field, **Ventura** County, dated **8/27/2013**, received **8/27/2013**, has been examined in conjunction with records filed in this office. We have determined that all of the requirements of this Division have been fulfilled relative to plugging and abandonment of the well, removal of well equipment and junk, and filing of well records.

NOTE:
1. Surface plugging completed on 7/24/2013.

2. Site inspection made and approved on 8/2/2013.

Blanket Bond

Tim Kustic
State Oil and Gas Supervisor

By _____
Bruce Hesson
District Deputy

tkc

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

CHECK LIST-RECORDS RECEIVED AND WELL STATUS

Operator: **Vintage Production California LLC** WELL DESIGNATION **"Valex-Ferndale" 209**

API No. **11121105** SE **16** T: **4N** R.: **21W** , **SB** B. and M.

County: **Ventura** FIELD: **Ojai**

Type of Notice: **Abandonment** **Date** **2/26/2013** **Report Number:** **P213-0082**

RECORDS RECEIVED (ATTACH PAGES IF REQUIRED)

	Date	OK	NEED	Remarks
Well Summary (OG100)				
History (OG103)	8-27-13	✓		
E-Log				
Mud Log				
Dipmeter				
Directional				
Core and/or SWS				

NEW STATUS

DATE: _____

NOTICE OF RECORDS DUE

DATE: _____

DATE: _____

DATE: _____

DATE: _____

WELL STATUS INQUIRY

DATE: _____

DATE: _____

Well Stat

Change Required: _____

Change Done: _____

ABANDONMENTS/REABANDONMENTS/DRILLS/REDRILLS

CalWims Abandonment Form: _____ SURFACE INSPECTION NEEDED _____ COMPLETED 8-2-13 MD

Date and Inspector

FINAL LETTER NEEDED ✓ COMPLETED _____ Calwims DRILL/REDRILL Form _____

(Date)

ENGINEER'S CHECK LIST

T-REPORT(S) _____ OPERATOR'S NAME _____ WELL DESIGNATION _____ SIGNATURE _____

Calwims Location _____ Calwims ELEVATION: _____ CONFIDENTIAL RELEASE DATE: _____ PERMIT REQUIREMENTS MET _____

CLERICAL CHECK LIST

LOCATION CHANGE (OG165) _____ ELEVATION CHANGE (OG165) _____ RELEASE OF BOND (OG150) _____

REMARKS

RECORDS SCANNED: _____

(Date)

RECORDS APPROVED: 9-12-2013 BH

(Date and Engineer)

Modified OGD2

AOR Datbase _____

"VALLEY FERN DALE" 209
111-21105
08/02/2013 09:31

SUBMIT IN DUPLICATE
RESOURCES AGENCY OF CALIFORNIA
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES

Rec'd 08-27-13 DOGGR D2 Ventura

HISTORY OF OIL OR GAS WELL

Operator: Vintage Production California LLC **Field:** OJAI **County:** VENTURA
Well: Valex Ferndale 209 **Sec:** 16 **T:** 4N **R:** 21W **M.D.B. & M.**

API#: 04-111-21105 **Name:** Deborah Young for Denny Brown (Person submitting report) **Title:** Agent (President, Secretary, or Agent)

Signature: [signature] **Date** 08/27/2013

9600 Ming Ave. , Suite 300 , Bakersfield, CA 93311 (Address)

(661) 869-8000 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items such as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, and initial production data.

Abandonment

Work Type	Primary Reason	Secondary Reason	Start Date	End Date
ABANDONMENT	PLUG & ABANDON		07/22/2013	07/30/2013

7/21/2013 @06:00 **07/22/2013** @06:00

Shut down for the night.
Discussed planned operations and filled out required permits.
Held pre trip safety meeting for equipment move.
Move equipment from Maulhardt 5 to Valex Ferndale 209. Spotted Adler tanks at Hamp 60 for fresh water and returns.
Lunch
Cont to spot and set up equipment for abandonments.
Shut down for the night.

7/22/2013 @06:00 **07/23/2013** @06:00

Shut down for the night.
Discussed planned operations and filled out required permits.
Shut down for repairs and maintenance on all equipment.
RIH W/ CTU tag well @ 643. Call DOGGR Walt Beil. Pump 152 cubic feet of (Class G cement + 35% silica flour + additives) from 643 to 300 feet. Wash up CTU.

Shut down for the night.

7/23/2013 @06:00 **07/24/2013** @06:00

Discussed planned operations and filled out required permits.
RIH W/ CTU tag well @ 315. Call DOGGR Ernie Blevins. Pump abandonment mud from 315 to 30 foot. Pull CTU up to 30 foot. Pump 45 cubic feet of (Class G cement + 35% silica flour + additives) from 30 foot to surface. Wash up CTU.RDMO.
Shut down for the night.

7/28/2013 @06:00 **07/29/2013** @06:00

Shut down for the night.
Discussed planned operations and filled out required permits.
Dig out cellar and wellhead. Demo flowlines.
Lunch
Cut off wellhead. Back fill tomorrow and Restore location witnessed by Mark Davis.
Shut down for the night.

7/29/2013 @06:00 **07/30/2013** @06:00

Discussed planned operations and filled out required permits.
DOGGR witness cement to surface. Mark Davis. Weld on I.D. plate. Back fill cellar.
Lunch
Continued removing all cement and metal from location. Restore location. Job complete. DOGGR signed off. Mark Davis
Shut down for the night.

SUBMIT IN DUPLICATE
RESOURCES AGENCY OF CALIFORNIA
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES

Rec'd 08-27-13 DOGGR D2 Ventura

HISTORY OF OIL OR GAS WELL

Operator: Vintage Production California LLC **Field:** OJAI **County:** VENTURA
Well: Valex Ferndale 209 **Sec:** 16 **T:** 4N **R:** 21W **M.D.B. & M.**

New Holes

Wellbore No.	Hole Size (in)	Top MD (ft)	Btm MD (ft)	Start Date	End Date

New Casing/Liner Strings

Size	Assembly Name	Installed	Wellbore No	Top MD (ft)	Btm MD (ft)

New Perforated Intervals

Date Shot	Wellbore No.	Top MD (ft)	Btm MD (ft)	Length (ft)	SPF	Phasing (°)

DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
1000 S. Hill Rd, Suite 116 Ventura, CA 93003-4458
Phone:(805) 654-4761 Fax:(805) 654-4765

No. T213-0303

REPORT ON OPERATIONS

Alan E. White
Vintage Production California LLC (V1370)
9600 Ming Avenue, Suite 300
Bakersfield, CA 93311

Ventura, California
August 20, 2013

Your operations at well **"Valex-Ferndale" 209**, A.P.I. No. **111-21105**, Sec. **16**, T. **04N**, R. **21W**, **SB** B. & M., **Ojai** field, in **Ventura** County, were witnessed on **7/30/2013**. **Mark Davis**, a representative of the supervisor.

The operations were performed for the purpose of **plugging and abandonment**.

DECISION:

APPROVED

Tim Kustic
State Oil and Gas Supervisor

By _____
Bruce Hesson
District Deputy

MD/tkc
OG109

T213-0303
#1

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

CEMENTING/PLUGGING MEMO

Operator Vintage Production CA LLC Well No. "Valex-Ferndale" 209
API No. 111-21105 Sec. 16 T. 4N R. 21W SB B&M
Field Ojai , County Ventura . On 7-30-13 ,
(Mr.) ~~Ms.~~ Mark Davis representative of the supervisor, was present from _____ to _____ .
There were also present CTU #54 Craig Sanders

Casing record of well: 9 5/8" @ - 921' cmt'd; 7" @ - 8949' (cut & pulled from 1050');
5" liner 8841'-9589' cmt'd; Cmt plug @ 3055'; Cmt plug 1075'-659'
TD 9600'

The operations were performed for the purpose of:

PLUG & ABANDON

☒ The plugging/cementing operations as witnessed and reported are approved.

☐ The location and hardness of the cement plug @ _____ ' are approved.

Hole size: _____ " fr. _____ ' to _____ ', _____ " to _____ ' & _____ " to _____ '.

Casing				Cemented			Top of Fill		Squeezed Away	Final Pressure	Perforations
Size	Wt.	Top	Bottom	Date	MO-Depth	Volume	Annulus	Casing			

Casing/tubing recovered: _____ " Shot/cut at _____ ', _____ ', _____ ', Pulled fr. _____ ';
_____ " Shot/cut at _____ ', _____ ', _____ ', Pulled fr. _____ '.

Junk (in hole): _____

Hole fluid (bailed to) at _____ '. Witnessed by _____

Mudding	Date	bbls	Displaced	Poured	Fill	Engineer
	7-24-13	22 bbls	———	315'	30'	EB

C/O 643' 07-23-13

Cement Plugs		Placing	Placing Witnessed		Top Witnessed			
Date	~~Sx~~/cf	MO & Depth	Time	Engineer	Depth	Wt/Sample	Date & Time	Engineer
07-23-13	151 cu ft	643'	—	RPT'D	315'	CTU ATW	7/24/13 0735	EB
7-24-13	45 cu ft	30'	—	Rpt'd	SURFACE	VISUAL	7/24-13	RPT'D

OGD10 (9/97) Printed on recycled paper.

7-30-13 SURF INSP. OK MO

✓ SURFACE PLUG 7/30/13 OK MO

NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
1000 S. Hill Rd, Suite 116 Ventura, CA 93003 - 4458

PERMIT TO CONDUCT WELL OPERATIONS

No. P 213-0082

Old	New	
520	520	FIELD CODE
12	12	AREA CODE
10	10	POOL CODE

Ventura, California
March 7, 2013

Alan E. White, Agent
Vintage Production California LLC (V1370)
9600 Ming Avenue, Suite 300
Bakersfield, CA 93311

Your proposal to **Abandon** well **"Valex-Ferndale" 209**, A.P.I. No. **111-21105**, Section **16**, T. **04N**, R. **21W**, **SB** B. & M., **Ojai** field, **Silverthread** area, **Ventura** County, dated **2/26/2013**, received **2/27/2013** has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED:

1. Blowout prevention equipment, as defined by this Division's publication No. MO7, shall be installed and maintained in operating condition and meet the following minimum requirements: **Class II 2M**
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. A diligent effort shall be made to clean out to 659'.
4. All portions of the well not plugged with cement are filled with inert mud fluid having a minimum density of 72lbs.,cu. ft (9.6 Lbs/gal) and a minimum gel shear strength of 25lbs./100 sq. ft.
5. Well site restoration is completed with 60 days following the completion of plugging.
6. This office shall be contacted by phone prior to making any program changes and no changes are made without Division approval.
7. **THIS DIVISION SHALL BE NOTIFIED TO:**
   a. Inspect the installed blowout prevention equipment prior to commencing downhole operations.
   b. Witness the location and hardness of the cement plug at 500'.
   c. Witness the mudding operations.
   d. Witness the placing of the plug from 30' to surface.
   e. Witness the location and hardness of cement at surface, including all annular spaces after the wellhead has been cut off.
   f. Inspect the restored well site.

Tim Kustic
State Oil and Gas Supervisor

Blanket Bond Dated: 4/23/2003
cc:

Engineer Bruce Hesson
Office (805) 654-4761

By _____
Bruce Hesson, *District Deputy*

BH/bh

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended. Issuance of this permit does not affect the Operator's responsibility to comply with other applicable state, federal, and local laws, regulations, and ordinances.

OG111 (revised 6/2011)

NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

Rec'd 02-27-13 DOGGR D2 Ventura

FOR DIVISION USE ONLY		
	Forms	
Bond	~~OG114~~	OGD121
	CALWIMS ✓	1151 ✓

OK
530/12/10

NOTICE OF INTENTION TO ABANDON / RE-ABANDON WELL

P213-0082

Detailed instructions can be found at: www.conservation.ca.gov/dog

In compliance with Section 3229, Division 3, Public Resources Code, notice is hereby given that it is our intention to abandon ☒ / re-abandon ☐ (Check one) well "Valex-Ferndale" 209, API No. 04-111-21105,

Sec. 16, T. 4N, R. 21W, SB B.&M., Ojai Silverthread Field, Ventura County.

The complete casing record of the well (present hole), including plugs and perforations, is as follows: (Attach wellbore schematics diagram also.)

9 5/8", 32#, H40 Surface Csg cmt'd @ 921'.
7", 26#, N80 Prod. Csg cmt'd @ 8949'. Cut and pulled from 1050', TTOC @ Surface.
5",18#, N80 liner, Top @ 8841', Landed @ 9589'. Cmt @ 8841' to 9589'.
Perforated; 8480'-9522'; abandoned
7338'-7725'; abandoned.
3045'; gas test abandoned.

3162'
Cement; 3055'-~~3178~~'.
Cement; 659'-1075'.

The total depth is: 9600 feet. The effective depth is: 659 feet.

Present completion zone(s): Mohnian (Name). Present zone pressure: 1000 psi.

Oil or gas shows: _____ (Name and depth) feet. Depth to base of fresh water: ± 600' feet.

Top of uppermost hydrocarbon zone (which may be behind unperforated casing): ± 5400' (Depth of interval) feet.

Is this a critical well as defined in the California Code of Regulations, Title 14, Section 1720(a) (see next page)? Yes☐ No☒

The proposed work is as follows: (A complete program is preferred and may be attached.)

Clean out to 695'.

With mud from 695' to 30, place surface cement plug from 30' to surface.
Restore site.

The Division must be notified immediately of changes to the proposed operations. Failure to provide a true and accurate representation of the well and proposed operations may cause rescission of the permit.

Name of Operator			
Vintage Production California LLC			
Address: 9600 Ming Ave. Suite 300		City/State: Bakersfield, Ca.	Zip Code: 93311
Name of Person Filing Notice: Deborah Young for Alan E. White	Telephone Number: 661-869-8178	Signature: Deborah Young	Date: 2/26/2013
Individual to contact for technical questions: Geoff Kimler	Telephone Number: 661-340-8743	E-Mail Address: geoff_kimler@oxy.com	

This notice must be filed, and approval given, before plugging and abandonment operations begin. If operations have not commenced within one year of the Division's receipt of the notice, this notice will be considered cancelled.

Rec'd 02-27-13 DOGGR D2 Ventura

VINTAGE PRODUCTION CALIFORNIA, LLC

Ojai Field
Ventura Country, California
Valex-Ferndale 209 - P&A Program
February 19, 2013

Valex-Ferndale 209
P&A Program

Well Data:
API #: 04-111-21105
Location: Sec. 16-T4N-R21W SB B&M
Commenced Drilling: 9/01/81
Completed Drilling: 1/01/82
Ground Level: 1443'
Kelly Bushing: 1461'
All measurements are from KB; 18'
BFW @ ± 600 **Top of Hydrocarbon @** ± 5400'
TD @ 9600' (RD1) **ED @** 659' (RD1)

Casing: 9 5/8", 32#, H40 Surface Csg, Cmt'd @ 921'.
7", 26#, N80 Prod. Csg Cmt'd @ 8949'. Cut and pulled from 1050.
5", 18#, N80 liner, Top @ 8841', landed @ 9589'. Cemented.

Perforations: 5" Perf'd: 8480'-9522'; Abandoned
7" Perf'd: 7338'-7725'; Abandoned
7" Perf's: 3045'; Tested for gas, Abandoned.

Plugs: Cement plug @ 3055'. Cement plug @ 659'-1075'.

Tubing Detail: None.

Proposed Program:

Note: Contact the DOGGR representative to witness all procedural steps required to be witnessed (i.e.; clean-out depth, cement plug placement and hardness, perforating, mudding operations, surface plug and site restoration). All cement slurries and abandonment mud will conform to DOGGR specifications.

1. Make lease inspection and determine if tubing and packers are present. If necessary, MIRU a production hoist. Bleed well off. Circulate and kill well as necessary.

2. Install a back pressure valve. Remove tree and install a DOGGR Class II (2M) BOP. Pull and lay done tubing. **Do not initiate any downhole work until DOGGR has inspected BOPE.**

3. RIH with open-ended tubing and make diligent effort to clean out to 659', or deeper. **Notify DOGGR to witness clean-out depth.**

VINTAGE PRODUCTION CALIFORNIA, LLC

Ojai Field
Ventura Country, California
Valex-Ferndale 209 - P&A Program
February 19, 2013

4. Spot abandonment Mud from top of plug @ 659' up to 30'. Abandonment mud shall conform to DOGGR permit specifications – 76 lb/cft with a minimum gel strength of 26 lbs./100 sq ft. (Calculated Volume: 24 bbls). **Notify DOGGR to witness mud operation.**

5. Rig up cementers. Lay a Cement Plug (Class G Cmt + 35% Silica Flour + additives) from 30' to surface, (Calculated Volume + 10% excess: 8 cft.). **Notify DOGGR to witness.**

6. Fill all un-cemented annuli to a depth of at least 30' to 5' with cement. Dig outside the conductor casing 5' below ground level. Cut casings off 5' below ground level. Weld on a steel top plate with well identification, well name and API #. Remove cellars and pads. **Notify DOGGR to witness surface abandonment.**

7. Restore surface location to original grade.

VINTAGE PRODUCTION CALIFORNIA, LLC

Ojai Field
Ventura Country, California
Valex-Ferndale 209 - P&A Program
February 19, 2013

VINTAGE PETROLEUM LLC - CALIFORNIA

HAMP 60

Event: HISTORY
Event End: 6/25/1997 00:00
Sec. Reason:

Water Depth: 1,091.0ft
Datum: OrigKB @ 1,103.00ft (default)
API No.: 0411120570

Wellbore: ST 1
PBMD: 5,839.0ft
Btm TMD: 5,900.0ft
Spud Date: 9/21/1974 00:00
BH Coord X: 1,671,317.01usft
BH Coord Y: 340,853.49usft

Schematic (6/25/1997)

Casing Shoes (ft)

824.0

5,899.0

Openings Top/Btm/Type/Status

5,440.0ft, 5,441.0ft, PERFORATED, OPEN
5,444.0ft, 5,445.0ft, PERFORATED, OPEN
5,451.0ft, 5,452.0ft, PERFORATED, OPEN
5,460.0ft, 5,461.0ft, PERFORATED, OPEN
5,465.0ft, 5,466.0ft, PERFORATED, OPEN
5,470.0ft, 5,471.0ft, PERFORATED, OPEN
5,539.0ft, 5,540.0ft, PERFORATED, ISOLATED
5,549.0ft, 5,550.0ft, PERFORATED, ISOLATED
5,555.0ft, 5,555.0ft, PERFORATED, ISOLATED
5,568.0ft, 5,569.0ft, PERFORATED, ISOLATED
5,579.0ft, 5,580.0ft, PERFORATED, ISOLATED
5,594.0ft, 5,595.0ft, PERFORATED, ISOLATED
5,607.0ft, 5,608.0ft, PERFORATED, ISOLATED
5,619.0ft, 5,620.0ft, PERFORATED, ISOLATED
5,635.0ft, 5,636.0ft, PERFORATED, ISOLATED
5,641.0ft, 5,642.0ft, PERFORATED, ISOLATED
5,662.0ft, 5,663.0ft, PERFORATED, ISOLATED
5,670.0ft, 5,671.0ft, PERFORATED, ISOLATED
5,683.0ft, 5,684.0ft, PERFORATED, ISOLATED

PLUG BACK — Report Date: 6/16/1997 00:00

Component	Top MD (ft)	Btm MD (ft)
BP-DR	5,510.0	5,515.0

PLUG BACK — Report Date: 3/25/1997 00:00

Component	Top MD (ft)	Btm MD (ft)
CEMENT	5,839.0	5,900.0

SURFACE CASING — Report Date: 9/23/1974 00:00

Item	OD (in)	Grade	Wt. (ppf)	Top MD (ft)	Btm MD (ft)
CASING JOINT(S)	9 625	H-40	32 30	12 0	824 0

PRODUCTION CASING — Report Date: 10/11/1974 00:00

Item	OD (in)	Grade	Wt. (ppf)	Top MD (ft)	Btm MD (ft)
CASING JOINT(S)	7 000	K-55	23 00	12 0	5 912 0

PRODUCTION LINER — Report Date: 3/25/1997 00:00

Item	OD (in)	Grade	Wt. (ppf)	Top MD (ft)	Btm MD (ft)
CASING JOINT(S)	5 500	N-80	17 00	3 442 0	5 899 0

PROPERTY/WELL TRANSFER OR ACQUISTION

Seneca Resources Corporation (S2630)

to

Vintage Production California LLC (V1370)

Effective April 25, 2008

OPERATOR Seneca
WELL NO. "Valet Turndale" 20 G
MAP

INTENTION	Susp					
NOTICE DATED	2-19-91					
P-REPORT NUMBER	291-87					
CHECKED BY/DATE						
MAP LETTER DATED	5-2-92					
SYMBOL						

	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED
NOTICE												
HISTORY	4-192											
SUMMARY												
E-LOG												
MUD LOG												
DIPMETER												
DIRECTIONAL												
CORE/SWS												
CBL												

ENGINEERING CHECK

T-REPORTS						
OPERATOR'S NAME						
WELL NO.						
LOC & ELEV						
SIGNATURE						
SURFACE INSP.						
DRILL CARD						

RECORD'S COMPLETE _____ _____ _____ _____ _____ _____

FINAL LETTER _____ OK _____
MAILED _____
RELEASED BOND _____

INJECTION BOOK _____
IDLE WELL LIST _____
SURFACE INSP. CARD _____
DATE RELEASED FROM CONFIDENTIAL _____

REMARKS: _____

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

DIVISION OF OIL AND GAS
RECEIVED
APR 1 1992

SENECA RESOURCES CORPORATION — OJAI FIELD VENTURA COUNTY
WELL: "VALEX-FERNDALE 209 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21105 — JAMES A. BECK, GENERAL MANAGER

James A. Beck

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

2/19/91
Day 1. MIRU Oilwell. Bled well. Unland tbg. (dragging). Work up 30', lower & land tbg. on donut. Change out blind rams to 2-7/8". Work tbg. down 12'. Pull tbg. & work through tight spot. Pull 14 jts. Work pump shoe through tight spot est. 3303'. Tbg. pulled free. Continue POH. Found 2" API T/L shoe parted. SDFN.

2/20/91
Day 2. Change pipe rams to 2-7/8". MU 5-3/8" I.B. Measure, rabbit & PU 2-7/8" EU8 N-80 tbg. Set down with I.B. @ 3252' with 20,000 set down wt. Pull tbg. Block swedged to 5-1/4" with 1-7/8" wear mark. MU 4-3/8" I.B. Run tbg. Tag @ 3258' & drop to 3262' with 20,000# wt. Pull tbg. Block swedged to 3-3/4". Indicate top of fish. Possible casing part. Mud on I.B. Run 10 stds. Land tbg. on donut. SDFN.

2/21/91
Day 3. POH with kill string. MU 5-1/4" swedge, bumper sub, jars 4 4-3/4" DC's & accelerator. Run tools & tbg. Fill well with lease water (160 bbls). Tag tight spot @ 3252'. Work swedge thru & clean up. Drop to 3258'. Install PGSR rubber. Backscuttle . Work swedge @ 3258'. Circulate. Stop pump. Work swedge. Tools spongy 3258'-3260'. Circ. Pull tbg. & tools. LD DC's & tools. Close well in with donut. SDFN.

2/22/91
No activity.

2/23/91
Day 4. Open well. MU Robinson 7" pos. csg. scraper & RIH. Stop @ 3201', work to 3206'. POH & recover scraper. MU Baker K-1 drillable plug. RIH & set plug @ 3170'. POH with tbg. & tools. Break off setting tool. RIH with tbg. Fill well & press. test plug to 500 psi. RU Dowell. With tbg. tail @ 3169', pump 20 sks Class "G" cmt. & displace with 17 bbls. lease water. Pull tbg. to 3047'. Backscuttle out excess cmt. & gas, (1 hr). Pull tbg. to 2984'. Est. TOC @ 3070'. SDFN.

2/24/91
to No activity.
2/25/91

2/26/91
Day 5. Rig wt. indicator. Tag top of cement @ 3055'. **(Plug witnessed by Steve Mulqueen of DOG).** Pull tbg. to 3046'. Change well over to 9.7# mud. Problems with pump. Pull tbg. (1 jt. gaulded). Remove PGSR stripper. SDFN.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. T291- 60

REPORT ON OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
March 5, 1991

Your operations at well "Valex-Ferndale" 209, API No. 111-21105, Sec. 16, T. 4N, R. 21W, S.B.B.&M. Ojai Field, in Ventura County, were witnessed on 2/25/91. Steve Mulqueen, representative of the supervisor, was present from 0700 to 0900. There were also present Troy Kitchens.

Present condition of well: 9 5/8" cem 921'; 7" cem 8949', bad 3260' & 4465'; 5" cem 8841'-9598', perfs @ ints 7316'-7408', 7641'-7724' & 8480'-8570', junk below 3262'. TD 9600'. Retainer @ 3170', plugged w/cem 3170'-3055'.

The operations were performed for the purpose of witnessing the location and hardness of a cement plug placed at 3055'.

DECISION:

The plugging operations as witnessed and reported are approved.

ljg

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

OG109

DIVISION OF OIL AND GAS
Cementing/Plugging Memo

60

Operator SENECA RESOURCES CORP. Well No. "Valex-Ferndale" 209
API No. 111-21105 Sec. 16, T. 04N, R. 21W, SB B&M
Field OVAT, County VENTURA. On 2-25-91,
Mr. S. MULQUEEN, representative of the supervisor was present from 0700 to 0800.
There were also present TROY KITCHENS bad 3260' & 4465'
Casing record of well: 9 5/8" cem 921'; 7" cem 8949' 1.5" cem 8841'-9598', perfs @ inte 7316'-7408', 7641'-7724' & 8480'-8570', Junk below 3262'. TD 9600. Retainer @ 3170' plugged w/ cem
The operations were performed for the purpose of (D) (1) @ 3055'
3170'-3055'.

☒ The plugging/~~cementing~~ operations as witnessed and reported are approved.
☐ The location and hardness of the cement plug @_____' is approved.

Hole size:_____" fr._____' to_____', _____" to_____' & _____" to_____'

Casing				Cemented			Top of Fill		Squeezed Away	Final Press.	Perfs.
Size	Wt.	Top	Bottom	Date	MO-Depth	Volume	Annulus	Casing			

Casing/tubing recovered:_____" shot/cut at_____', _____', _____' pulled fr._____';
_____" shot/cut at_____', _____', _____' pulled fr._____'.
Junk (in hole): 2 3/8" TBG @ 3262'
Hole fluid (bailed to) at_____'. Witnessed by_____

Mudding	Date	Bbls.	Displaced	Poured	Fill	Engr.
CLAY-GEL 9.7 #/g	2-25-91	120	TBG @ 3055'	—		

BAD SPOTS 3260' & 4465'

Cement Plugs		Placing	Placing Witnessed		Top Witnessed			
Date	Sx./cf	MO & Depth	Time	Engr.	Depth	Wt/Sample	Date & Time	Engr.
2/63	20 SX	TBG @ 3170	—	REPORTED	3055'	10K#	2/25 0730	S. MULQUEEN
	(ABOVE ONLY)	RETAINER @ 3170						

OGD10 (10/85/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P291- 87
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
February 21, 1991

Your supplementary proposal to rework well "Valex-Ferndale" 209, A.P.I. No. 111-21105, Section 16, T. 4 N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 2/19/91, received 2/19/91, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOG Class II 2M requirements shall be installed and maintained in operating condition at all times.
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. A diligent effort shall be made to clean out the well to at least 3262'.
4. The well shall be plugged with cement from 3262' to 3162' and from top of 7" casing stub to 100' over stub.
5. The well shall be plugged with cement from 971' to 871'.
6. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.
7. THIS DIVISION SHALL BE NOTIFIED:
   a. To witness the location and hardness of the cement plug at 3162'.

Blanket Bond
SF:ljg

Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

DIVISION OF OIL AND GAS
SUPPLEMENTARY NOTICE

FOR DIVISION USE ONLY			
BOND	FORMS OGD114	FORMS OGD121	EDP WELL FILE
1/3	—	/	

DIVISION OF OIL AND GAS

Ventura Calif.

A notice to you dated January 23, 1991, stating the intention to

rework (Drill, rework, abandon), Valex-Ferndale 209 (Well name and number), API No. 111-21105,

Sec. 16, T. 4N, R. 21W, S.B. B. & M., Silverthread Field,

Ventura County, should be amended because of changed conditions.

The present condition of the well is as follows:

Total depth See Attached.

Complete casing record, including plugs and perforations (present hole)

See Attached.

DIVISION OF OIL AND GAS
RECEIVED
FEB 19 1991
VENTURA, CALIFORNIA

We now propose (in light of poor mechanical condition of well)

1. Run free point in 7" casing.
2. Spot cement plug at free point in 7".
3. Cut and pull 7" casing from top of cement.
4. Spot cement plug across 9-5/8" shoe at 921'.
5. Install cap flange with pressure gauge.

It is understood that if changes in this plan become necessary, we are to notify you immediately.

Address 725 E. Main Street, Suite 200

Santa Paula, California 93060

Telephone Number (805) 656-2445

Seneca Resources Corporation

Type of Organization Corporation

By James A. Beck (Name) 2/19/91 (Date)

Signature J A Beck

OG123 (3/88/DWRR/5M)

SENECA RESOURCES CORPORATION
FERNDALE #209 CASING DETAIL

DEPTH REFERENCE	:	KB is 18' above GL
TOTAL DEPTH	:	9600'
EFFECTIVE DEPTH	:	8808' with cement
CEMENT TOP	:	6100'
CASING DETAIL	:	9-5/8" (32.3 #, H-40) cmnt'd at 921'
		7" (23 & 26 # ,K & N) cmnt'd at 8949'
		5" (18 #, N-80) liner cemented at 9598' , hung at 8841', inneffective.
PERFORATIONS	:	4 (.44") jhpf @ 7316, 7321, 7329, 7334, 7338, 7339, 7345, 7355, 7364, 7370, 7375, 7376, 7384, 7385, 7393, 7407, & 7408'
		4 (.44") jhpf @ 7641, 7651, 7658, 7660, 7663, 7664, 7668, 7672, 7680, 7681, 7687, 7694, 7706, 7707, 7716, 7717, 7723, & 7724'
		4 (.44") jhpf @ 8480, 8488, 8495, 8505, 8513, 8520, 8540, 8549, 8560, & 8570'
BAD PIPE	:	3260' AND 4465'
FISH	:	2-7/8" TUBING AT 4435' AND 4550'

OPERATOR ARCO
ALEISE & NO "FERNDALE" 9-20
MAP 203

	( )	( )	( )	( )	( )	( )
INTENTION	DRILL	DRILL SUPPLEMENTAL				rework
NOTICE DATED	7-21-81	12-17-81				1-28-91
P-REPORT NUMBER	281-247	281-468				291-75
CHECKED BY/DATE		MS 11-1-82	OK to release can be released from cont.	release from cont.	MS 1-12-83	
MAP LETTER DATED		11-6-82				
SYMBOL						

	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED
NOTICE	7-23-81		12-21-81								1-30-91	
HISTORY	→		8-31-82									
SUMMARY	→		4-21-82									
IES/ELECTRIC LOG (DUAL INDUCTION SFL, DUAL INDUCT. COMP. LOG)	→		2-1-82									
DIRECTIONAL SURV	→		8-11-82									
CORE/SWS DESCRIP												
OTHER (MUD LOG (PADICK & JOLLIN) DIP; VARIABLE DENSITY, LITHO DENSITY, CONT. DIP)	→		2-1-82									
RECORDS COMPLETE			11-1-82	MS								

ENGINEERING CHECK

T-REPORTS
OPERATOR'S NAME
WELL DESIGNATION
LOC & ELEV
SIGNATURE
SURFACE INSPECTION
FINAL LETTER OK

CLERICAL CHECK

POSTED TO 121 170 MAILED FINAL LETTER MAILED
RELEASED BOND

REMARKS: NATURAL GAMMA RAY SPECTROSCOPE & BOREHOLE COMPENSATED SONIC LOG 2-1-82 rec'd MS 10-20-82

NEED DIL (2 copies) & FDC/CNL FF RUN 12/12/81 rec'd MS 10-20-82

" 1 copy Temp Log 12/14/81 rec'd 10-20-82

" 2 copy DIL FDC/CNL-GR, Dipmeter 12/23/81 rec'd 10-20-82

" 2 copy DIL 12/26/81 (1 copy) Sonic 12/26/81 rec'd 10-20-82

" 2 copy CBL & GRL 1 copy CCL & MSG log 1-13-82 rec'd MS 10-20-82

" 1 copy GRL, CCL log 4-10-82 rec'd 10-20-82

" Formation Factor rec'd MS 10-20-82

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P291- 75
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
February 1, 1991

Your proposal to rework well "Valex Ferndale" 209, A.P.I. No. 111-21105, Section 16, T. 4 N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 1/28/91, received 1/30/91, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOG Class II 2M requirements shall be installed and maintained in operating condition at all times.
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. Wire line operations are conducted through at least a 2M lubricator.
4. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.

Blanket Bond
SF:ljg

Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OGIII

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

DIVISION OF OIL AND GAS
RECEIVED
JAN 30 1991
VENTURA, CALIFORNIA

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	FORMS	
	OGD 114	OGD 121
33	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well Valex-Ferndale 209 (Well designation) ayar, API No. 111-21105

Sec. 16, T. 4N, R. 21W, SB B. & M., ~~Silverthread~~ Field, Ventura County.

The present condition of the well is as follows:

1. Total depth 9600'
   Effective Depth: 8808' cement retainer

2. Complete casing record, including plugs and perforations (present hole)

   See attached.

3. Present producing zone name Mohnian; Zone in which well is to be recompleted Mohnian

4. Present zone pressure 1800 psi; New zone pressure 1800 psi

5. Last produced May 1988 (Date) | 0 (Oil, B/D) | 0 (Water, B/D) | 0 (Gas, Mcf/D)
   (or)
   Last injected N/A (Date) | (Water, B/D) | (Gas, Mcf/D) | (Surface pressure, psig)

6. Is this a critical well according to the definition on the reverse side of this form? ☐ (Yes) ☒ (No)

The proposed work is as follows:

Repair casing damage and place well on production.

Note: If well is to be redrilled, show proposed new bottom-hole coordinates and true vertical depth.

It is understood that if changes in this plan become necessary, we are to notify you immediately.

Address 725 E. Main Street, Suite 200 (Street)
Santa Paula (City) CA. (State) 93060 (Zip)
Telephone Number (805) 656-2445

Seneca Resources Corporation (Name of Operator)
By James A. Beck (Name - Printed)
James A. Beck (Name - Signature) 1/23/91 (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

OG107 (8/87/DWRR/5M)

SENECA RESOURCES CORPORATION
FERNDALE #209 CASING DETAIL

DEPTH REFERENCE	:	KB is 18' above GL
TOTAL DEPTH	:	9600'
EFFECTIVE DEPTH	:	8808' with cement
CEMENT TOP	:	6100'
CASING DETAIL	:	9-5/8" (32.3 #, H-40) cmnt'd at 921'
		7" (23 & 26 # ,K & N) cmnt'd at 8949'
		5" (18 #, N-80) liner cemented at 9598' , hung at 8841', inneffective.
PERFORATIONS	:	4 (.44") jhpf @ 7316, 7321, 7329, 7334, 7338, 7339, 7345, 7355, 7364, 7370, 7375, 7376, 7384, 7385, 7393, 7407, & 7408'
		4 (.44") jhpf @ 7641, 7651, 7658, 7660, 7663, 7664, 7668, 7672, 7680, 7681, 7687, 7694, 7706, 7707, 7716, 7717, 7723, & 7724'
		4 (.44") jhpf @ 8480, 8488, 8495, 8505, 8513, 8520, 8540, 8549, 8560, & 8570'
BAD PIPE	:	3260' AND 4465'
FISH	:	2-7/8" TUBING AT 4435' AND 4550'

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF PROPERTY AND WELL TRANSFER

Field or county	District
Ojai	2
Former owner	**Date**
Argo Petroleum Corp.	Sept. 10, 1987

Name and location of well(s)

Sec. 16, T. 4N., R. 21W., SBB&M

"Barker-Ferndale" 1	(111-20423)	"Valex-Ferndale" 211	(111-21178)
"Barker-Ferndale" 2	(111-20604)	"Valex-Ferndale" 214	(111-21180)
"Barker-Ferndale" 3	(111-20609)	"Valex-Ferndale" 215	(111-21206)
"Barker-Ferndale" 4	(111-20685)	"Valex-Ferndale" 313	(111-21314)
"Barker-Ferndale" 5	(111-20702)	"Ferndale" 8	(111-20732)
"Barker-Ferndale" 6	(111-20730)		
"Valex-Ferndale" 107	(111-21066)		
"Valex-Ferndale" 110	(111-21163)		
"Valex-Ferndale" 209	(111-21105)		

Description of the land upon which the well(s) is (are) located

Date of transfer, sale, assignment, conveyance, or exchange	New owner	Type of organization
7-17-87	Seneca Resources Cprporatipn	Corp.
	Address: 511 16th St. Mall, Ste 300, Denver, CO 80202	Telephone No.: (303) 825-7401

Reported by
Seneca Resources Corp.

Confirmed by
Argo Petroleum Corp.

New operator new status (status abbreviation)	Request designation of agent
PA	
Old operator new status (status abbreviation)	**Remarks**
PA	

Deputy Supervisor: Patrick J. Kinnear

Signature: Patrick J. Kinnear

OPERATOR STATUS ABBREVIATIONS

PA – Producing Active
NPA – No Potential, Active
PI – Potential Inactive
NPI – No Potential, Inactive
Ab – Abandoned or No More Wells

FORM AND RECORD CHECK LIST

Form or record	Initials	Date	Form or record	Initials	Date
Form OGD121			Map and book		
Form ODG148			Notice to be cancelled		
New well cards			Bond status		
Well records			EDP files		
Electric logs					
Production reports					

****
*
****
BERGER *
****

SOLUTION

ETER

****

LISTING
*****

IRNIA

111- 21105

16-4N-21W

D NO. 6106

ONLY

. - 2 FT. STEP

EARCH ANGLE

DIVISION OF OIL AND GAS
RECEIVED
OCT 20 1982
SANTA PAULA, CALIFORNIA

BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST	QUAL. INDEX =A
11.3	141	9.4	9.7	D	
11.5	140	8.8	8.7	D	
11.6	140	8.4	8.1		
11.6	140	8.6	8.0	D	
11.7	139	8.6	8.0	D	
11.7	139	8.6	8.2	B	
11.7	140	8.6	8.2	D	
11.7	141	8.5	8.1	B	
11.7	141	8.5	8.0		
11.7	140	8.5	8.3		
11.7	140	8.5	8.4		
11.6	140	8.6	8.3		
11.6	140	8.6	8.3		
11.6	140	8.6	8.3	B	
11.6	140	8.6	8.3	D	
11.6	140	8.5	8.3		
11.5	140	8.5	8.3		
11.5	140	8.6	8.3	D	
11.4	140	8.6	8.3	D	
11.4	140	8.6	8.3		
11.4	140	8.6	8.3		
11.4	140	8.6	8.3		
11.4	140	8.6	8.4		
11.5	140	8.6	8.4	D	
11.4	140	8.5	8.4	B	
11.4	140	8.6	8.4	D	
11.4	140	8.6	8.4		
11.4	140	8.4	8.4		
11.4	139	8.5	8.4		
11.3	141	8.0	8.0	D	
11.3	142	6.8	7.1		
11.3	144	6.2	6.3		
11.3	146	6.1	6.2		
11.2	147	6.2	6.2	B	
11.1	144	6.3	6.2	B	
11.1	141	7.5	6.9		
11.0	140	8.6	7.5		
11.0	141	8.6	7.5		
10.9	141	8.2	7.6		
10.9	142	7.8	7.9		

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST
9032.0			10.9	142	7.7	7.6	
9034.0			10.9	143	7.3	6.9	
9036.0			10.9	143	7.0	6.8	
9038.0	63.2	6	10.9	142	7.0	6.7	B
9040.0	59.7	2	11.0	142	7.1	6.7	D
9042.0			11.0	142	7.0	6.8	
9044.0	55.2	4	11.0	141	6.8	6.8	D
9046.0			11.1	142	6.7	6.7	
9048.0			11.1	143	6.6	6.5	
9050.0			11.1	144	6.6	6.5	
9052.0	56.1	360	11.1	144	6.6	6.5	D
9054.0			11.1	144	6.7	6.5	
9056.0			11.1	144	6.7	6.5	
9058.0			11.1	144	6.9	6.3	
9060.0			11.1	144	7.0	6.3	
9062.0			11.1	145	6.8	6.4	
9064.0			11.1	144	6.7	6.3	
9066.0			11.1	144	6.8	6.8	
9068.0			11.1	145	6.9	7.2	
9070.0			11.1	144	7.0	6.9	
9072.0			11.1	144	6.9	6.6	
9074.0	47.2	356	11.2	144	6.7	6.5	D
9076.0	75.6	3	11.1	145	6.8	6.6	B
9078.0	76.6	2	11.1	145	6.8	6.5	B
9080.0	70.1	1	11.1	145	6.6	6.5	B
9082.0			11.2	145	6.4	6.5	
9084.0	52.1	353	11.2	145	6.4	6.7	D
9086.0	61.2	359	11.2	144	6.4	6.8	D
9088.0	48.4	355	11.3	145	6.3	6.8	D
9090.0	50.3	351	11.3	145	6.3	6.9	B
9092.0	60.3	360	11.3	145	6.4	7.0	B
9094.0	60.5	358	11.3	145	6.5	6.9	B
9096.0	57.5	358	11.3	146	6.6	6.7	B
9098.0	69.5	360	11.2	145	6.6	6.8	D
9100.0	65.4	356	11.2	146	6.4	6.8	D
9102.0	70.4	5	11.1	146	6.6	6.8	D
9104.0	67.4	4	11.2	145	6.7	6.7	D
9106.0			11.2	146	6.5	6.6	
9108.0			11.3	146	6.5	6.7	
9110.0			11.3	146	6.6	6.7	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST	QUAL. INDEX =A
9112.0			11.4	146	6.6	6.7		
9114.0	56.8	355	11.4	146	6.6	6.7	D	
9116.0			11.4	146	6.7	6.5		
9118.0			11.5	146	6.7	6.4		
9120.0	61.0	354	11.5	146	6.7	6.3	D	
9122.0	56.2	355	11.5	146	6.6	6.3	B	
9124.0	62.0	350	11.5	146	6.5	6.3	D	
9126.0			11.5	147	6.4	6.3		
9128.0	61.9	359	11.5	147	6.4	6.4	B	
9130.0	62.2	358	11.6	147	6.4	6.4	B	
9132.0			11.6	147	6.4	6.4		
9134.0			11.6	147	6.4	6.4		
9136.0	62.1	357	11.6	147	6.4	6.4	B	
9138.0	60.5	1	11.7	147	6.3	6.4	B	
9140.0			11.8	148	6.3	6.4		
9142.0	58.9	343	11.8	148	6.3	6.5	D	
9144.0	62.6	350	11.9	148	6.3	6.6	B	
9146.0	63.9	353	11.9	148	6.3	6.5	B	
9148.0	64.5	1	12.0	148	6.4	6.5	D	
9150.0			12.1	148	6.4	6.5		
9152.0	66.7	358	12.2	148	6.4	6.4	D	
9154.0			12.2	148	6.4	6.3		
9156.0	52.1	352	12.3	148	6.4	6.3	D	
9158.0			12.4	148	6.4	6.2		
9160.0			12.4	148	6.5	6.2		
9162.0	50.9	1	12.5	148	6.5	6.2	D	
9164.0	53.5	360	12.5	148	6.4	6.3	B	
9166.0			12.6	148	6.4	6.3		
9168.0	47.3	359	12.6	148	6.5	6.4	D	
9170.0			12.7	149	6.5	6.4		
9172.0	50.9	2	12.7	149	6.4	6.4	B	
9174.0	60.3	359	12.8	149	6.4	6.3	D	
9176.0			12.8	149	6.4	6.2		
9178.0			12.9	149	6.4	6.2		
9180.0			12.9	150	6.4	6.2		
9182.0			12.9	149	6.4	6.2		
9184.0			12.9	149	6.4	6.2		
9186.0			12.9	149	6.3	6.2		
9188.0			13.0	149	6.4	6.2		
9190.0	64.4	359	13.1	150	6.8	6.3	B	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST
9192.0			13.1	150	6.7	6.4	
9194.0			13.2	150	6.4	6.3	
9196.0			13.2	151	6.3	6.3	
9198.0	49.8	354	13.3	150	6.3	6.3	D
9200.0	55.0	349	13.3	150	6.3	6.3	B
9202.0	70.0	269	13.3	151	6.3	6.2	B
9204.0	57.8	353	13.4	151	6.4	6.2	D
9206.0	55.9	347	13.4	151	6.4	6.2	D
9208.0			13.5	151	6.4	6.3	
9210.0	70.3	268	13.6	151	6.4	6.3	D
9212.0			13.6	151	6.4	6.3	
9214.0			13.6	151	6.3	6.3	
9216.0			13.7	151	6.3	6.3	
9218.0	55.9	360	13.9	152	6.3	6.3	B
9220.0	59.9	347	13.9	152	6.3	6.2	B
9222.0	53.8	358	14.0	152	6.3	6.2	D
9224.0	41.9	350	14.1	152	6.4	6.2	B
9226.0			14.1	152	6.4	6.3	
9228.0	58.7	341	14.1	152	6.4	6.3	D
9230.0	46.9	350	14.2	152	6.3	6.3	D
9232.0	47.8	354	14.2	152	6.3	6.3	B
9234.0	46.0	343	14.3	152	6.3	6.3	A
9236.0			14.4	153	6.4	6.3	
9238.0			14.5	153	6.4	6.3	
9240.0	42.9	354	14.6	153	6.3	6.2	A
9242.0			14.7	153	6.4	6.2	
9244.0	52.0	355	14.8	152	6.4	6.2	A
9246.0	46.4	360	15.0	152	6.3	6.2	C
9248.0	51.0	353	15.1	151	6.3	6.2	A
9250.0	50.8	348	15.2	152	6.3	6.2	A
9252.0	47.0	1	15.3	152	6.3	6.2	A
9254.0	47.9	354	15.4	153	6.3	6.2	B
9256.0	50.4	344	15.5	153	6.3	6.2	B
9258.0	45.6	344	15.6	153	6.4	6.2	D
9260.0	44.4	353	15.6	153	6.4	6.2	D
9262.0	46.9	355	15.7	153	6.4	6.3	D
9264.0	55.1	356	15.8	153	6.4	6.3	D
9266.0			15.8	154	6.3	6.3	
9268.0			15.9	154	6.3	6.3	
9270.0	37.0	2	16.0	154	6.4	6.2	B

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST	QUAL. INDEX =A
9272.0	50.5	355	16.0	155	6.4	6.2	B	
9274.0	53.0	4	16.1	155	6.4	6.2	C	
9276.0	51.5	350	16.1	154	6.4	6.2	A	
9278.0	51.2	358	16.2	154	6.3	6.2	A	
9280.0	53.2	356	16.2	154	6.3	6.2	A	
9282.0	50.3	350	16.3	154	6.3	6.2	A	
9284.0	59.9	345	16.4	155	6.3	6.2	A	
9286.0	56.9	341	16.4	155	6.3	6.2	C	
9288.0	54.6	1	16.5	155	6.4	6.2	A	
9290.0	57.2	348	16.5	154	6.4	6.2	A	
9292.0	59.0	360	16.5	154	6.4	6.2	C	
9294.0	53.8	357	16.5	154	6.3	6.2	B	
9296.0	53.6	355	16.5	155	6.3	6.2	B	
9298.0	62.1	342	16.5	155	6.3	6.2	D	
9300.0			16.6	155	6.4	6.2		
9302.0			16.7	156	6.4	6.2		
9304.0	59.1	1	16.7	156	6.4	6.2	D	
9306.0	57.2	358	16.9	155	6.4	6.3	D	
9308.0	65.6	347	17.0	154	6.4	6.3	B	
9310.0			17.1	155	6.3	6.3		
9312.0			17.1	155	6.3	6.3		
9314.0			17.2	156	6.3	6.3		
9316.0	53.3	7	17.3	157	6.3	6.2	B	
9318.0	63.8	359	17.4	156	6.4	6.2	B	
9320.0	59.9	353	17.4	157	6.4	6.2	B	
9322.0	50.6	347	17.5	157	6.4	6.2	D	
9324.0	53.8	345	17.5	157	6.3	6.2	D	
9326.0	70.8	356	17.5	157	6.3	6.2	B	
9328.0	59.4	357	17.5	157	6.3	6.2	B	
9330.0	57.3	360	17.6	158	6.3	6.2	B	
9332.0	58.3	350	17.7	159	6.3	6.2	B	
9334.0			17.8	169	6.4	6.3		
9336.0	59.1	346	17.9	158	6.5	6.3	D	
9338.0	54.5	352	18.1	157	6.4	6.3	B	
9340.0	61.9	346	18.2	156	6.4	6.3	D	
9342.0	60.3	351	18.3	157	6.4	6.4	B	
9344.0	55.2	355	18.3	158	6.4	6.4	D	
9346.0	56.4	352	18.4	158	6.4	6.4	D	
9348.0	59.7	354	18.4	157	6.4	6.3	B	
9350.0	58.7	354	18.5	157	6.4	6.3	D	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST	QUAL. INDEX A
9352.0	52.6	357	18.5	157	6.4	6.3	D	
9354.0	55.3	355	18.6	157	6.4	6.3	D	
9356.0	52.4	3	18.6	158	6.4	6.3	B	
9358.0	54.4	354	18.7	158	6.4	6.3	D	
9360.0	46.9	360	18.8	159	6.4	6.3	D	
9362.0			18.8	158	6.4	6.3		
9364.0			18.9	157	6.4	6.3		
9366.0	48.2	10	19.0	157	6.4	6.3	D	
9368.0	50.8	352	19.1	157	6.4	6.3	D	
9370.0			19.1	158	6.4	6.3		
9372.0	78.0	293	19.2	158	6.4	6.3	B	
9374.0	55.8	360	19.2	158	6.4	6.3	A	
9376.0	56.2	354	19.2	158	6.4	6.3	A	
9378.0			19.2	158	6.4	6.2		
9380.0	54.8	358	19.2	157	6.4	6.2	A	
9382.0	58.1	354	19.3	157	6.4	6.2	A	
9384.0	55.4	348	19.4	158	6.4	6.2	A	
9386.0	55.6	358	19.4	158	6.4	6.2	A	
9388.0	53.8	6	19.5	158	6.4	6.2	A	
9390.0	57.2	346	19.6	159	6.4	6.2	A	
9392.0	62.3	352	19.7	159	6.3	6.2	A	
9394.0	57.4	346	19.8	158	6.3	6.2	D	
9396.0	56.7	346	19.8	158	6.3	6.2	D	
9398.0			19.9	159	6.2	6.2		
9400.0	63.3	353	20.0	159	6.3	6.2	D	
9402.0	56.4	3	20.0	159	6.4	6.2	B	
9404.0	58.9	2	20.0	159	6.3	6.2	D	
9406.0	55.2	353	20.1	158	6.3	6.2	F	
9408.0	51.5	4	20.2	158	6.3	6.1	B	
9410.0	60.2	345	20.3	159	6.3	6.1	D	
9412.0	55.5	360	20.3	160	6.3	6.2	D	

ARGO PETROLEUM FERNDALE #9 RD SUMMARY

DEPTH	DIP	DIP AZM	DEV	DEV AZM	DIAM 1-3	DIAM 2-4	QUAL
TOP							
8952.0	63.8	357.	11.3	141.	9.4	9.7	D
BOTTOM							
9412.0	55.5	360.	20.3	160.	6.3	6.2	D

Form OG100 (7/79)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
AUG 31 1982
SANTA PAULA, CALIFORNIA

API No. 111-21105

WELL SUMMARY REPORT

Operator	Well
ARGO PETROLEUM CORPORATION	VALEX-FERNDALE #209

Field	County	Sec.	T.	R.	B.&M.
Silverthread	Ventura	16	4N	21W	SB

Location (Give surface location from property or section corner, street center line and/or California coordinates)
1193'S and 4315'E from NW corner Section 16, T4N-R21W (SB)

Elevation of ground above sea level
1443'

Commenced drilling (date)
9/1/81

Completed drilling (date)
1/1/82

Commenced producing (date)

☐ Flowing ☐ Pumping
☐ Gas lift

Name of producing zone(s)
L. Mohnian Sd.

Total depth

(1st hole)	(2nd)	(3rd)
8925'	9600'	

Present effective depth
9555'

Junk
RFT tool and ±2000' wireline, Bit, sub, 2 DC, Stb, 1DC, Stb, (102.4') from 6685' to 6583'. Bent single, Stb, BS, Jars, 3 DC, Stb(247.87') from 6584' to 6336' - All in hole #1

Depth measurements taken from top of:
☐ Derrick Floor ☐ Rotary Table ☒ Kelly Bushing
Which is 18 feet above ground

GEOLOGICAL MARKERS	DEPTH
U. Big Canyon Fault	5416'
T. Mohnian Sd. & Sh.	6058'
T. Monterey Shale	9037'

Formation and age at total depth
Monterey; Miocene

	Clean Oil (bbl per day)	Gravity Clean Oil	Percent Water including emulsion	Gas (Mcf per day)	Tubing Pressure	Casing Pressure
Initial Production	204	41	80			
Production After 30 days						

CASING RECORD (Present Hole)

Size of Casing (API)	Top of Casing	Depth of Shoe	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Number of Sacks or Cubic Feet of Cement	Depth of Cementing (if through perforations)
9-5/8"	surface	921'	32.3#	H-40, ST&C	new	12¼"	373 ft^3	
7"	surface	8949'	23#&26#	K-55&N-80,LT&C	new/used	8-3/4"	1700 ft^3	
5"	8841'	9598'	18#	N-80, LT&C	new	6-1/8"	210 ft^3	

PERFORATED CASING (Size, top, bottom, perforated intervals, size and spacing of perforation and method.)

Was the well directionally drilled? If yes, show coordinates at total depth
☒ Yes ☐ No 826.29'N and 180.02'W of the surface location

Electrical log depths
DIL: 8575'-921', 8906'-8200', 8373'-5950', 8996'-5994', 9412'-8949'

Other surveys
(see history) 10/7/81, 10/16/81, 12/12/81, 12/23/81 and 12/26/81

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Name	Title
Harry Hull	District Superintendent

Address	City	Zip Code
940 E. Santa Clara Street	Ventura	93001

Telephone Number	Signature	Date
(805) 653-5111	Harry Hull	8-10-82

SUBMIT IN DUPLICATE

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corp. Field Silverthread County Ventura
Well Valex-Ferndale #209, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21105 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 8-10, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) / (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
8/31/81	Rig up Bawden Rig #22.
9/1/81	Finish rigging up. Spud well at 1600 hrs, 9/1/81. Drilled 12¼" hole to 127'.
9/2/81	Drilled to 767'.
9/3/81	Drilled to 921'. Circulated and conditioned mud for casing. POOH to run casing. Rigged up and ran 22 jts. of 9-5/8", 32.3#, H-40, ST&C casing with guide shoe at 921', baffle at 881' and one each centralizers on joints #1 & #2. (Casing: New, from B & B Yard). Rigged up Halliburton and cemented casing as follows: Pumped 50cf of water ahead, followed by 286 cf class 'G' cement + 4% Gel + 3% $CaCl_2$ and tail slurry of 87 cf class 'G' neat + 2% $CaCl_2$. Displaced with 372 cf mud. CIP at 2030 hrs, 9/3/81. Had 30 cf cement returns to surface. Cleaned out cellar and mud pits.
9/4/81	Installed casing head and pressure tested welds to 1200 psi. Nippled up the BOP. Tested blind rams, changed out sealing element in blind rams.
9/5/81	Retested blind rams to 1000 psi. OK. Repaired accumulator. RIH and tagged top of cement at 727'. Tested BOP. OK. Drilling out cement.
9/6/81	Finished drilling out cement and shoe. Drilled to 1430'.
9/7/81	Drilled to 2146'.
9/8/81	Drilled to 3055'. POOH to pick up navidrill and new bit.
9/9/81	RIH with navidrill. Navidrilled to 3552'.
9/10/81	Navidrilled to 3584'. POOH to pick up a "locked" drilling assembly. RIH and reamed from 3500' to 3584'. Drilled to 3884'.
9/11/81	Drilled to 4322'.
9/12/81	Drilled to 4690'. POOH to pick up navidrill. RIH and navidrilled to 4727'.
9/13/81	Navidrilled to 4898'. POOH with navidrill.
9/14/81	Layed down navidrill. Picked up "locked" drilling assembly. RIH and drilled to 5323'.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
AUG 31 1982
SANTA PAULA, CALIFORNIA

History of Oil or Gas Well

Operator Argo Petroleum Corp. Field Silverthread County Ventura
Well Valex-Ferndale #209, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21105 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 8-10, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
9/15/81	Drilled to 5477'. Tripped for BHA.
9/16/81	Changed the BHA. RIH and reamed from 5447' to 5477'. Drilled to 5719'. Tripped for bit change. Drilled to 5810'.
9/17/81	Drilled to 6025'. Tripped to change bit and BHA. Reamed from 5905' to 6025'. Drilled to 6108'.
9/18/81	Drilled to 6260'. Tripped for bit change. Drilled to 6430'.
9/19/81	Drilled to 6518'. Tripped for bit change and more severe dropping BHA. Drilled to 6584'.
9/20/81	Drilled to 6699'. Tripped for bit change.
9/21/81	Drilled to 6814'. Tripped for bit and more severe dropping BHA.
9/22/81 to 9/26/81	Drilled to 7552'.
9/27/81	Drilled to 7653'. Tripped for bit change. Left three cones in the hole. Made up bit and two junk subs and RIH. Drilled on junk and POOH.
9/28/81	MU junk basket and RIH. Worked junk into junk basket. POOH and recovered pieces of cone, metal and bearings. RIH and worked on junk.
9/29/81	POOH. No recovery in junk basket. MU new bit and junk basket. RIH. Drilled to 7728'. Tripped for bit change. Layed down junk basket. RIH.
9/30/81 to 10/1/81	Drilled to 8007'.
10/2/81	Drilled to 8112'. POOH to pick up navidrill and new bit. Navidrilled to 8132'.
10/3/81	Navidrilled to 8200'. POOH and layed down navidrill. MU new bit and dropping set up. RIH.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corp. Field Silverthread County Ventura
Well Valex-Ferndale #209, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21105 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 8-10, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
10/4/81 to 10/6/81	Drilled to 8550'.
10/7/81 to 10/8/81	Conditioned mud for logs. Made a wiper trip and POOH. Rigged up Schlumberger and logged well as follows: DIL/NGT 8575'-921'/8538'-500' LDT/CNL/GR 8572'-5000' Dipmeter 8572'-921' Rigged down Schlumberger and MU Navidrill assembly. Rigged up seeing eye tool and navidrilled to 8569'. POOH.
10/9/81	Finished POOH. Pulled tight at 8410', 8320', 8290' and from 3383'-3333'. Layed down navidrill. MU reaming BHA and RIH. Reamed from 2800' to 3657' and 8100' to 8569'. Circulated.
10/10/81	POOH. Picked up navidrill and changed BHA. RIH. Rigged up and ran seeing eye tool. Couldn't seat seeing eye tool. Tore out same. Circulated and POOH "wet". Unplugged bit and changed kick sub. RIH to shoe.
10/11/81	Finished RIH. Rigged up seeing eye tool and navidrilled to 8621'. Tripped for bit change. RIH.
10/12/81	Finished RIH. Rigged up eye tool and navidrilled to 8663'. Changed out bad eye tool. Navidrilled to 8700'. Tripped for bit change. RIH. Rigged up eye tool.
10/13/81	Navidrilled to 8771'. POOH and layed down navidrill and seeing eye tool. MU locked BHA and RIH. Reamed 8526' to 8771'.
10/14/81	Drilled to 8847'. Tripped for bit change.
10/15/81	Finished POOH. MU new bit and RIH. Reamed 3050' to 3800' and 8804' to 8844'. Drilled to 8890'.
10/16/81 to 10/17/81	Drilled to 8925'. Conditioned mud for logs and POOH. Rigged up Schlumberger and logged well as follows: DIL/Sonic 8906'-8200'/8872'-5000' VDL 8872'-921' RIH with RFT and couldn't get below 6400'. POOH with RFT and rigged down Schlumberger.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
AUG 31 1982
SANTA PAULA, CALIFORNIA

History of Oil or Gas Well

Operator Argo Petroleum Corp. Field Silverthread County Ventura
Well Valex-Ferndale #209 Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21105 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 8-10, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
10/17/81	continued MU drilling assembly and RIH. Reamed from 5859' to 6009' and 8723' to 8925'. Conditioned mud and wiped hole.
10/18/81	POOH to run RFT, Rigged up Schlumberger and RIH with RFT to 8855'. Tool stuck. MU overshot assembly and stripped over wire line. Hit bridge at 937'. MU Kelly and circulated through bridge. While stripping over, wire line parted at ±800'. POOH with ±800' of wire line. MU fishing spear assembly and RIH. Hole bridged over at 967'. POOH and layed down fishing spear assembly. MU bit and 3 drill collars. RIH.
10/19/81	Circulated thru bridge at 967'. RIH to 1035'. POOH. MU wire line spear assembly and RIH to 2074'. Couldn't get past 2074'. Chain out of hole wet. No recovery. RIH and worked spear assembly to 2102'. POOH with 12,000# excess drag. Pipe stuck at 965'. Backed off fish at 722'. Left in hole: 6 jts. H.W., cross over, B.S., jars, 2 crossovers and wire line spear. MU screw in sub assembly. RIH and screwed into fish at 722'. Jarred on fish. No success. Attempted to circulate. No success. Fish plugged.
10/20/81	Worked stuck pipe. Rigged up Dialog and ran free point. Fish free from surface to 922'. Attempted two back off shots. Re-ran free point and saw no change. On third attempt, backed off fish at 914'. Recovered 6 jts. HW, cross over, jars and 125' of wire line.
10/21/81	MU rope spear assembly and RIH to 910'. Worked spear to 915'. No contact with wire line. POOH. Layed down rope spear assembly. MU screw in assembly. RIH and engaged fish at 914'. Knocked fish out of casing down into open hole. Tried to shake wire line ball from fish. No success. Broke up wire line ball by rotating against shoe of surface casing. Chained out with fish and 5' of wire line. Layed down fishing tools.
10/22/81	MU rope spear fishing assembly and RIH to 940'. Worked spear and recovered 70' of wire line. Made two more runs with rope spear and recovered two large balls of wire line. Made three more runs with rope spear and recovered 375' of wire line. Layed down rope spear and made up circulating spear assembly. RIH to 2284'. No indication of wire line.
10/23/81	RIH with circulating spear assembly to 3674'. POOH and recovered 50' of wire line. RIH to 4130'. POOH. No recovery. RIH to 4275'. Recovered ±700' of wire line.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corp. Field Silverthread County Ventura
Well Valex-Ferndale #209, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21105 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 8-10, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
10/24/81	RIH to 4149' and recovered ±1000' of wire line. RIH. Circulated and washed to 4374'. POOH. No recovery. RIH. Circulated ans washed to 5706'.
10/25/81	Circulated out gas and oil cut mud. Conditioned mud. RIH to 6600'. POOH. Recovered ±200' of wire line. RIH to 6944'. Circulated. POOH.
10/26/81	Finished POOH. Recovered ±2500' of wire line. Clean fishing assembly. Total wire line recovered: ±5800'. RIH. Washed to 7855'. Circulated and POOH with 125,000# overpull. Lost overpull at 7580'. Finished POOH. No recovery. Grapple hooks were stripped off of spear. MU new spear and RIH to 7656'. POOH and recovered ±1000' of wire line.
10/27/81	RIH and worked spear from 7656' to 7676'. Chain out of hole. Recovered 10' of wire line. MU tubing spear and RIH. Unable to clean out past 7677'. POOH. No recovery. Landed tubing spear. MU bit and BHA and reamed from 6684' to 6730'. Couldn't circulate. Pipe stuck at 6730'.
10/28/81	Jarred on stuck pipe. Rigged up Dialog and ran free point. Pipe free at ±6610'. Attempted back off shot. No success. Applied torque for second backoff shot and pipe came free at 6583'. POOH. Left in hole: Bit, bit sub, 2 drill collars, STB, 1 drill collar, STB - overall length 102.4'. MU screw in sub fishing assembly and RIH.
10/29/81	Attempted to screw into fish at 6583'. No success. POOH. Layed down screw in sub and MU rope spear. RIH to 6508'. Hole tite - couldn't get past 6508'. POOH and layed down 84 jts. of bent drill pipe. Layed down rope spear assembly. Note: 1.65' of spear point broke off and was left in hole.
10/30/81	MU circulating spear on bent single of drill pipe. RIH and tagged fill at 6540'. Cleaned out to top of fish at 6583'. POOH. Layed down circulating spear and MU screw in sub assembly. RIH and tried to engage fish. No success. Threads on screw in sub flattened. MU overshot knuckle joint assembly and RIH.
10/31/81	Attempted to engage fish. No success. Layed down knuckle joint assembly. MU bent single assembly and hooked onto fish at 6583'. Jarred on fish. Jars failed. Worked stuck pipe. Rigged up Dialog and ran free point. Pipe free at 6504'.
11/1/81	MU Dialog perforating gun and shot 4 - ½" holes from 6567' to 6563'. Broke circulation. Circulated and worked stuck pipe.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corp. Field Silverthread County Ventura
Well Valex-Ferndale #209, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21105 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 8-10, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
11/2/81	Spotted 42 Bbls of oil base fluid thru perfs. 10 Bbls left in annulus and 30 Bbls. left inside drill pipe. Soaked stuck pipe. Moved fluid at a rate of 1 Bbl/hour.
11/3/81	Continued soaking stuck pipe. Rigged up Dialog and ran free point. Pipe was free at 6336'. Backed off pipe at 6336' on third attempt. POOH and found hole in drill pipe fourth stand down.
11/4/81	Finished POOH. Recovered 15 jts. HW, cross over sub, accelerator and cross over sub. Second fish left in hole: Bent single, STB, BS, jars, 3 drill collars, STB. Total length: 247.87'. MU bent single and cleaned out seating sub and RIH to 6336' and engaged fish. Rigged up B.J. Cementers and spotted 56 Bbls PS-300 thru perfs at 6567'. Spotted 27 Bbls in annulus and 29 Bbls in drill pipe. Soaked stuck pipe for 13 hrs.
11/5/81	Soaked stuck pipe for 14 hrs. Moved PS-300 1 Bbl/hour. Worked stuck pipe. No movement. Rigged up Dialog and ran free point. Pipe free at 6336'. Backed off at 6336'. Pulled to 6306'. Circulated and conditioned mud. RIH to 6328' with O.E.D.P. Rigged up B.J. Cementers and layed cement as follows: Mixed and pumped 200cf class 'G' + 20% sand, displaced with 460 cf mud. Cement in place at 2230 hrs. W.O. cement
11/6/81	POOH laying down drill pipe. Picked up last 3 singles with cat line. Sling broke and 3 singles dropped in hole. Inspected and picked up 3½" drill pipe.
11/7/81	Finished inspecting and picking up 3½" drill pipe. RIH to 5190'. Conditioned mud. RIH and tagged fish at 5896'. Rigged up B.J. Cementers and layed kickoff plug as follows: 25 cf water ahead, mixed and pumped 175 cf class 'G' + 20% sand. Displaced with 437 cf mud. Cement in place at 1340 hrs. POOH with O.E.D.P. Recovered 3 joint drill pipe fish. Fish was attached to bottom of O.E.D.P. MU BHA to clean out cement. RIH.
11/8/81	Finished RIH. Tagged top of cement at 5684'. Cleaned out cement from 5684' to 6061'. POOH and picked up navidrill assembly. RIH and reamed from 6031' to 6061'.
11/9/81	Navidrilled to 6187'. Tripped for new bit and navidrilled.
11/10/81	RIH and navidrilled to 6372'. POOH. Layed down navidrill and made up new bit and BHA. RIH and reamed from 6061' to 6372'.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corp. Field Silverthread County Ventura
Well Valex-Ferndale #209, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21105 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 8-10, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
11/11/81	Drilled to 6610'. Tripped for new bit.
11/12/81	RIH and tagged fill at 6275'. Reamed from 6275' to 6610'. Drilled to 6758'. Tripped for new bit.
11/13/81	Changed out gooseneck swivel, kelly and upper and lower kelly cocks. Picked up new kelly, swivel and 16 jts. of H.W. drill pipe. RIH and tagged fill at 6616'. Reamed from 6616' to 6758'. Drilled to 6850'.
11/14/81	Drilled to 6968'. Tripped for new bit. Reamed from 6908' to 6968'. Drilled to 6998'.
11/15/81	Drilled to 7129'. Tripped for navidrill and new bit. Replaced worn drill pipe rubbers. Rigged up seeing eye tool and navidrilled to 7172'.
11/16/81	Pulled eye tool and repaired kinked wire line. Navidrilled to 7192'. Tore out eye tool. POOH and layed down navidrill. Picked up new bit and BHA. RIH and reamed from 6930' to 7134'.
11/17/81	Reamed from 7134' to 7192'. Conditioned mud and reduced water loss. POOH. MU new bit and navidrill. Reamed from 7165' to 7192'. Rigged up seeing eye tool and navidrilled to 7243'. Rigged down seeing eye tool.
11/18/81	Tripped for new bit. Navidrilled to 7292'. POOH. Layed down navidrill. MU new bit and BHA. RIH.
11/19/81	Finished RIH. Reamed from 7192' to 7292'. Drilled to 7414'. Tripped for new bit.
11/20/81 to 11/25/81	RIH and drilled to 8403'.
11/26/81	Conditioned mud for logs and POOH. Rigged up schlumberger and logged well as follows: (Dual/Sonic 8373'-5950'/8399'-5950') ✓ Rigged down Schlumberger. MU bit and BHA. RIH and reamed from 8025' to 8403'. Drilled to 8419'.
11/27/81	Drilled to 8828'.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
AUG 31 1982
SANTA PAULA, CALIFORNIA

History of Oil or Gas Well

Operator Argo Petroleum Corp. Field Silverthread County Ventura
Well Valex-Ferndale #209, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21105 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 8-10, 1982

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
11/28/81	Drilled to 8956'. Started to trip for new bit. Main drive shaft broke after pulling 12 stands of drill pipe. Broke out drive shaft. Circulated. Attempted to turn drill pipe with casing tongs. No success. Waited on new drive shaft.
11/29/81	Waited on Jack shaft and circulated.
11/30/81	Waited on Jack shaft and circulated.
12/1/81	Waited on Jack shaft and circulated.
12/2/81	Waited on Jack shaft and circulated.
12/3/81	Waited on Jack shaft. Installed Jack shaft. Picked up Kelly and circulated. Stuck pipe. Spotted 63 Bbls of PS-300. Moved oil at 2 Bbls/hour from 7609' to surface.
12/4/81	Worked stuck pipe. Rigged up Dialog. Made two runs with Freepoint. Drill pipe stuck at 6282'.
12/5/81	Circulated and conditioned mud while working stuck pipe. Rigged up Dialog and made two runs. Backed off at 6212'. POOH and layed down 4½" drill pipe. Made up 6 drill collars and fishing tools and RIH. Screwed into fish. Bumped down. Fish free POOH. Picked up Kelly and circ. through tight spot at 3453'. LD 44 singles. Worked through tight hole from 3453' to 3050'
12/6/81	Circulated drill pipe through tight hole and layed down 11 jts. 4½" drill pipe. Continued POOH laying down fishing tools and collars. Rigged down Dialog and made up new bit #53. RIH.
12/7/81	RIH. Layed down bent drill pipe and picked up straight drill pipe. Reamed from 6511' to 7309'.
12/8/81	Reamed from 7309' to 8122'.
12/9/81	Reamed from 8122' to 8454'. POOH. Picked up Kelly and pumped out from 7566' to 6850' and continued to POOH.
12/10/81	Continued to POOH and made up new BHA and RIH. Picked up Kelly and reamed from 7133' to 8934'.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corp. Field Silverthread County Ventura
Well Valex-Ferndale #209, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21105 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 8-10, 1982

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
12/11/81	Continued reaming from 8934' to 8956'. Drilled to 8998'. POOH working pipe through tight spot from 8998'. Continued to POOH making up new BHA and RIH.
12/12/81	Continued RIH. Reamed from 8838' to 8998'. Circulated and conditioned mud. Wiped hole from 8998' to 8440'. Circulated & POOH. Rigged up Schlumberger and logged well as follows: DIL 8996' to 5944' FDC/CNL 8967' to 7641' FF 8967' to 7641' Rigged down Schlumberger. Made up new BHA and RIH.
12/13/81 to 12/14/81	Continued RIH and circulating and conditioning mud for casing. Wiped hole from 8988' to 8160'. POOH laying down 4½" drill pipe. Rigged up and ran 7" casing as follows: 33 jts. N-80, 26#, LT&C, 1 jt. N-80, 26#, LT&C Flag Joint, 16 jts. N-80, 26#, LT&C, 60 jts. K-55, 26#, LT&C, 50 jts., K-55, 23#, LT&C, 67 jts. K-55, 26#, LT&C, and 4 jts. K-55, 26# LT&C. B & W shoe at 8949' with float collar at 8910', with Turbo clamps (3 per jt.) on joints #7-#13, with Turbo-gen centralizers (1 per jt) on joints #1, #2, #6, #37 and regular centralizers(1 per joint) on joints #3-#5 and 1 every third joint on joints #37-#97. Rigged up B.J. Cementers and circulated no returns. Rigged up Dialog and ran Freepoint. Rigged up Dresser Atlas and ran Temperature log. Rigged up B.J. Cementers and circulated. Broke circulation. (Casing: 7", 26#, K-55 & N-80 New from Advance, 7", 23#, N-80 and 7" , 26#, N-80 Used from Asbury, 7", 26#, K-55 New from Argo-Barnett).
12/15/81 to 12/16/81	Cemented 7" casing as follows: Mixed and pumped 50 cf of 95# mudsweep, followed by 50 cf of scavenger slurry 1:1:4, 1 cf Perfalite. Mixed and pumped 1600 cf 1:1 Diamix + 2% Gel + 1% D-19 + 1% D-31 + 0.5% A-2 + 0.2% D-6 + 0.2% R-5 followed by 100 cf class 'G' neat + 3% R-5. Displaced with 2022 cf mud. CIP at 0455 hrs. 12/15/82. Bumped plug with 1800 psi and bled off 10 cf. Float held. Good circulation through out cement job. Landed casing in slips. Removed 10" 900 series BOPE and installed 6" 900 series BOPE. Tested BOPE to 1000#. Picked up 3½" drill pipe and Kelly and 6 drill collar.
12/17/81	Continued picking up 3½" drill pipe and BHA and RIH to 8881'.
12/18/81	Drilled out float at 8881'. Drilled out shoe at 8940'. Drilled ahead with 6-1/8" bit to 9020'. POOH. Changed BHA and picked up Navidrill and Navidrilled ahead to 9023'.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corp. Field Silverthread County Ventura
Well Valex-Ferndale #209, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21105 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 8-10, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
12/19/81	Continued to Navidrill to 9024'. POOH and changed Navidrill and bit. RIH. Navidrilled to 9047'.
12/20/81	Continued to Navidrill to 9109'. POOH laying down Navidrill. Changed BHA. RIH and reamed from 8991' to 9109'. Drilled ahead to 9114'.
12/21/81	Continued to drill to 9313'. Wiped hole from 9313' to 8990'. Drilled ahead to 9319'.
12/22/81	Continued to drill to 9335'. Tripped to change bit and BHA. Reamed from 9275' to 9335'. Drilled ahead to 9375'.
12/23/81	Continued to drill to 9412'. Wiped hole from 9412' to 8949'. POOH. Rigged up Schlumberger and logged well as follows: DIL-FDC 9412' to 8949' FDC/CNL-GR 9412' to 8949' Dipmeter 9412' to 8949'
12/24/81	Continued logging. Rigged down Schlumberger. RIH and drilled ahead to 9514'. POOH.
12/25/81	Continued to trip for bit change and drill ahead to 9600'. Circulated and wiped hole from 9600' to 8949'. POOH.
12/26/81	Continued to POOH. Rigged up Schlumberger and logged well as follows: DIL 9600' to casing shoe Sonic 9600' to casing shoe Rigged down Schlumberger. RIH and circulated for liner. POOH. Rigged up and ran 5" liner.
12/27/81	Continued to run 5" liner and made up hanger. Liner stopped at 7806'. Circulated and worked stuck liner. Released stuck liner. POOH.
12/28/81	Continued POOH with liner tools. Made up fishing tools and RIH. Top of fish at 7047'. Chain out of hole. Layed down 5" liner, made up BHA and RIH to 9600'. Circulated and conditioned mud.
12/29/81	POOH and rigged up and ran 5" liner(AMF inspected 19 jts. 5" liner - OK, API thread and drift inspection). Ran 19 jts. 5", N-80, 18#, LT&C with B&W Filtrol shoe at 9598'.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corp. Field Silverthread County Ventura
Well Valex-Ferndale #209, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21105 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 8-10, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
	Float collar at 9555' with regular centralizers on jts #1, #3, #5, #7, #9, #11, #13 & #15. Top liner at 8841'. (Liner: New NKK from Advance). Rigged up B.J. Cementers and cemented as follows: Mixed and pumped 20 cf caustic water followed by 20 cf water and 85 cf mud sweep, followed by 210 cf class 'G' cement + .03% R-5. Displaced with 405 cf mud. Bumped plug with 1800 psi. Bled back - float held. CIP at 1703 hrs. 12/29/82. Good circulation throughout cement job. Pulled out of liner. Circulated and POOH. Made up BHA and RIH.
12/30/81	Continued to RIH. Circulated and conditioned mud. Tested lap at 2000 psi for 15 min. POOH. Layed down 4-3/4" drill collars. Rigged up and ran 2½" tbg. tail. Changed over to salt water - 220 Bbls. Tubing at 9550'.
12/31/81	Continued to change over to salt water. Layed down 3½" drill pipe and 30 jts. of 2½" tubing.
1/1/82	Tore out BOPE. Stacked and installed well head. Released rig at 0800 hrs. 1/1/82.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
AUG 31 1982
SANTA PAULA, CALIFORNIA

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #209, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21105 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 8-10, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1-13-82	MIRU prod. rig. Bled well. 1/8" stream of flow after bled down. Installed pump & tank. Install Class III, 3 M BOPE. Pressure test to 1000 psig. D.O.G. witnessed. Ran Welex CBL, GRL, CCL & Msg. log 9563'-5300' w/ 1000 psig on csg. P.U. & measure in hole w/ 7" F.B. pkr. & 2 7/8" tbg. Set F.B. @ 7011'. Pressure tbg. to 2500 psig. Bled 100 psi in 15 min. Pressured backside to 1200 psig. Pressure held.
1-14-82	Released F.B. @ 7011'. RIH & set F.B. pkr. @ 8714'. Pressured backside to 1000 psig. Pressured tbg. to 4600 psig. Bled in 5 min. to 4150 psig, 10 min. 3750 psig. Release F.B. & POH. MU & RIH w/ Johnson tester. RIH & filled bottom 550' w/ 64# saltwater. Set pkr. @ 8724' w/ tail to 8741'. Opened tool for 1 hour flow. POH w/ tester. Recovered 650' net rise. IH 3781#, IF 276#, FF 776#, FH 3781#.
1-15-82	M.U. BAKER 7" 23# F.B. pkr & set @ 8714'. Pressured tbg. to 4500#, 1000# on backside. Bled tbg. to 2600# in 10 min. Replace top tbg. jt. w/ N-80 tbg. Rig up B.J. Cementers & pressure test lines to 9000#. Apply 2500# on backside. Pressured tbg to 5000#, bled to 3700# in 5 min. Pressured tbg. to 6000#, bled to 4400# in 5 min. Pressured tbg. to 7000#, bled to 5700# in 5 min. Bled well. R.U. Welex w/full lubricator & shot 4 holes thru tbg. @ 8960'. Reset F.B. @ 8807'. Rig B.J. cementers. Pressured backside to 2000#. Established breakdown @ 7.5 CFM, 4400 psig. Opened unloader. Mix & pump 500 sxs Class "G", 5 gallons retarder, 5 gallons friction reducer, followed by 204 c.f. freshwater. Close tool & apply 2000# to backside. Displace 46 c.f. Pressure increased 4600# to 6000#. Cement hit perfs and locked up. Bled well. Released F.B. & BS cement up tbg. Unable to pull F.B. loose. Worked F.B. up hole 120' w/ 35,000# drag. Continue out of hole. RIH w/ 6 1/8" bit & scraper. Tag cement @ 8807'. Rig power swivel & drill cement 8807'-8820'.
1-16-82	Continue drilling out cement to liner top @ 8841'. POH w/ 6 1/8" bit & scraper. RIH w/ 4 1/8" bit & scraper. Continue to drill out cement. 8841' - 8849'. Drill cement stringers 8849'-8972'. Pull above liner top & repair rig. RIH to 9565' & BS well clean. Pull above liner. Pressure csg. to 3000#. Pressure held ok for 15 min. Start to POH.
1-17-82	Finish POH w/ tbg. Lay down bit & scraper. RIH w/ Johnson tester & set pkr @ 8724', tail to 8741'. Open tester @ 1:30 P.M. Closed tester @ 3:35 P.M. IH 3718#, IF 210#, FF 210#, FH 3718#. POH & lay down tester. Net fluid rise 380'. (Probably obtained when tool was closed & reopened). Charts indicate dry test. RIH w/STC & tbg. to bottom. Changed over to 71 #/c.f., KCl water (360 bbls). POH w/ tbg. R.U. Dresser Atlas w/ full lubricator. Shot 4 (0.44") holes 9028'-9029'.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #209, Sec. 16, T4N, R 21W, SB B. & M.
A.P.I. No. 111-21105 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 8-10, 19 82

Signature Harry Hull

940 E. Santa Clara Street, Ventura, CA 93001 (Address)
(805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1-18-82	M.U. Johnson tester. RIH & set 5" pkr. @ 8913' tail to 8932'. Opened tool @ 12:41. Slight blow in bucket for 5 min., then dead. Release tool @ 2:00 P.M. POH w/tools. Found test tool unscrewed 1 jt. above pkr. Fluid recovery 60'. Dry test IH 4207#, IF 62.7#, FF 67.7#, FH 4219.6#. MU bumper sub & crossover sub. RIH & screw into fish. POH.Recovered all test tools. RIH w/STC & tbg.
1-19-82	Finish RIH w/OE tbg. Tag bottom @ 9565'. P.U. to 9530'. R.U. B.J. Hughes. Spot 1000 gallons acetic acid weighted to 75 pcf w/KCl, 4 gallons w/w surfactant, 10 gals. clay stab,20 gals cor.inhib.& 20# citric acid. Displace w/48 bbls. KCl fluid. POH w/tbg. MIRU Dresser Atlas. Perf'd w/3½" carrier guns 4 (0.44") JHPF - 9040'-9225', 9258'-9272', 9286'-9294', 9328'-9350', 9366'-9376', 9490'-9504', 9510'-9522'. RIH w/ STC & pump shoe to T.D. & BS acid. P.U. & land tbg. @ 8942'. Loaded out excess tbg. & removed BOPE.
1-20-82	Land tbg. on donut @ 8942'. Remove BOPE. Built production tree. RU swab equipment. Found fluid @ 100'. Swabbed fluid to 1500'. Shut down. Left line open to Baker tank overnight.
1-21-82	Tagged fluid @ 2075'. Swabbed fluid to 3100'. Starting to show signs of oil & gas. Swabbed to 5500'. Total fluid recovery to date 260 bbls. Total daily recovery 205 bbls.
1-22-82	Opened well. 0 psig on tbg. RIH w/swab. Tagged fluid @ 4200'. Recovered small amount of oil & gas. Continued swabbing fluid down to 7500'. Recovered a total of 112 bbls. fluid.
1-23-82	RIH w/swab. Tagged fluid @ 7300'. Recovered small amount of oil & gas. Swabbed fluid down to 8100'. Let set for 2 hours. RIH & tagged fluid @ 8100'. Let set for 2 hours. RIH & tagged fluid @ 7400'. Swab to 8100'. Let set 1 hour. Ran swab. Tagged fluid @ 8100'.
1-24-82	RIH w/swab. Tag fluid @ 7600'. Swab fluid to 8100'. Set for 2 hours. Tag fluid @ 7600'. Recovering oily, muddy water. Set for 2 hours. Tag fluid @ 7800'. Swab to 8100'. Set for 2 hours. Tag fluid @ 8100'.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #209, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21105 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 8-10, 19 82.

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1-25-82	RIH w/swab. Tag fluid @ 7200'. Swab fluid to 8100'. Let set for 2 hours then swab. Daily recovery 18 bbls. Rig down swab equipment. Remove prod. tree. Bled csg. Install BOPE. RU cir. pump. Fill hole w/380 bbls. 71#/c.f. KCl water. Circ. to remove gas for 2 hours. POH w/tbg. RIH w/ 5" csg. scraper to bottom.
1-26-82	Circulate well. POH w/csg. scraper. M.U. & RIH w/ 5" wash tool to 8756' & shut down.
1-27-82	Rigged BJ Hughes. Finished RIH w/Atlas. Push out suction wash tool to 9522'. Blanked tool. Washed perfs. 9522'-9040' w/ 8000 gallons clean-up acid (15% HCl w/1% J-32 w/w surfactant, 0.8% C-15 corrosion inhibitor, 1% J-38 anti-sludge, 0.2% J-4A clay stabilizer, 20#/1000 gallons Z-3 iron chelator, 1% J-7 cationic surfactant). Washed w/30 gallons/ft. Averaged 1 bbl/min.@ 1700 psig, fairly consistent throughout job. Acid control valve set @ 1600 psig. Pulled to 5000' in 7" csg. Attempted to squeeze acid into perfs, pumping KCl water down csg. Pressured csg. to 2000#, bled to 1850# in 15 min. Unable to squeeze away acid. Finished POH. Left bottom part of wash tool in hole (cup washer). M.U. Brown O.T. 2" spear, ext. BS, perf'd nipple on tbg. Tagged fish @ 9540'. B.S. 160 bbls. live acid out of hole.
1-28-82	Finished B.S. Acid latched onto fish @ 9540'. Worked fish loose. (Fish consists of 2 "up cups" from wash tool.) Swabbed out ± 50 bbls. as POH w/fish. Recovered all of fish. Well dead after out of hole. RIH w/STC & toplock P.S. on 2 3/8" x 2 7/8" tbg. Landed on donut @ 8943'. Refilled hole w/50 bbls. KCl water. Removed BOPE. Installed flow tree. Rigged swab equipment.
1-29-82	Rigged flow line. Fluid @ surface. Swab fluid level to 3700'. Recovered 98 bbls. KCl water.
1-30-82	RIH w/ swab & tagged fluid @ 3500'. Continue to swab fluid level down to 7400'. Recovering some oil, water, & heavy drilling mud. Daily fluid recovery 120 bbls. Cum. recovery 218 bbls.
1-31-82	No pressure on tbg. Ran swab, tagged fluid level @ 6850', recovered water to 8000'. Let well stand 2 hours. Tagged fluid @ 7500'. Swabbed to 8050', let stand 2 hours, continued to run swab every 2 hours, fluid @ 8050 each time. Daily recovery 25 bbls.; cum 243 bbls.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #209, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21105 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 8-10, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
2-1-82	0# tbg. press in A.M. Ran swab, tagged fluid level @ 7600'. Recovered colored water. Made swab run every 2 hours 6 A.M. - 3 P.M., from 8050'. Fluid level each time @ 7800'. Daily recovery 6 bbls, cum recovery 249 bbls. Removed swab equipment & flow tree. Installed Class III BOPE. Lowered tbg. to bottom @ 9565'. Filled hole w/ 3% NH_4Cl water, completed change-over w/360 bbls. POH w/tbg. Ran 9 jts. 2 3/8" tail, Baker 5" retrievamatic packer. Began testing in hole @ 6500 psig, w/ 2 3/8" & 2 7/8" tbg.
2-2-82	Continue testing tbg. in hole to 6500 psig.R/D hydrotest. Set Baker Retrievamatic @ 9035'.Apply 2300 psig to annulus.R.U.Halliburton, press. test lines to 6900psig.Estab. breakdown w/ NH_4 Cl water. 5 BPM @ 4000 psig. Pump 2000 gallons 15% HCl followed by 800 gallons 12-3 mud acid. Hydril valve started leaking. Shut pumps down. Max. press = 4400 psig. Avg. 3.8 BPM @ 4400 psig. Bled well down. Exchanged hydril valves. Displaced tbg. w/ 60 bbls. NH_4 Cl water. Final pump in pressure = 3200 psig. Close well in.
2-3-82	Start up job. Tbg. pressure 1400 psig. Pressure test Howco lines to 8300 psig. Start acid job & pump the following: 1200 gallons 15% HCl, 3200 gallons 12%/3% HCl-HF, 1000 gallons 15% HCl, 200 gallons Mantriseal "O". Avg. rate 5 BPM, avg. press. 4400 psig. 30% foam quality for the following: 1000 gallons 15% HCl, 2000 gallons 12%-3% HCl-HF, 1000 gallons 15% HCl, 200 gallons Matriseal "O". Avg. rate 4.5 BPM, avg. press. 5200 psig, max & final press. 5400 psig. 40% foam quality for the following: 1000 gallons 15% HCl, 2000 gallons 12%-3% HCl-HF, 1000 gallons 15% HCl, 200 gallons Matriseal "O". Avg. rate 5 BPM, avg. press. 5400 psig, max. press. 5700 psig. 50% foam quality for the following: 1000 gallons 15% HCl, 1000 gallons aromatic solvent, 95 bbls. 3% ammonium chloride displacement. Tbg. & csg. communicated at the start of the displacement. Csg. press. 3700 psig. Shut well in, tear out HOWCO, rig flow lines, open well up thru 10/64" bean, press. 4200 psig, 30 min. flow was 6 bbls, press. 3750 psig. Used beans from 12/64" to 24/64" until 8:00 A.M. Data varied from 6-26 bbls. per hour. Total volume recovered 250 bbls.
2-4-82	100# tbg/475# csg. Opened tbg. wide open. Tbg. headed & unloaded 13 bbls, then died. Total flow-back of 263 bbls. 1 hour after blowdown, well had slight blow. Rigged to swab. Csg. press. 525 psig. Tagged fluid level @ 1000'. Made 13 swab runs, final fluid level @ 4700'. 460 psig on csg. Swabbed 89 bbls. Total recovery of 352 bbls. Returns were oil-water-mud. Had 55,000 PPM chloride & 16 OHM-CM. Resistivity, Sample from first swab run. Average P_H 5.5-6. Left open overnight on 12/64" bean.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #209, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21105 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 8-10, 1982

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
2-5-82	800 psig on csg. Ran swab, tagged fluid level @ 650'. (Had 4050' rise in 13 hours). Made 23 swab runs. On last run tagged fluid level @ 3300', pulled from 5000', 700 psig on csg. Samples cutting 10% oil, water P_H 6. Oil gravity 19° API at 51° F., w/ 10% emulsion. Well would keep flowing 1-2 minutes, gassey after completion of each swab pulling. Explosimeter reading "100% combustible" gas returns, suggests natural gas. Communication w/csg. is suspected, (pkr leak). Daily recovery 151 bbls. cum recovery 503 bbls. Left well open on 12/64" bean overnight.
2-6-82	950 psig on csg. Ran swab, tagged fluid level @ 1900', (1400' rise in 13 hours). Made 22 swab runs. At 1:30 P.M. shot fluid level in csg. @ 5890', csg. press. 800 psig. (csg./tbg. communicating). Returns averaged 12% oil. Gassey follow up w/ 100% combustible reading. Oil sample gravity 21.5° API @ 74° F; & cut 0.1% mud, 0.4% free water, 8.0% emulsion, 91.5% oil. On last swab run tagged fluid @ 4000', pulled from 5500', w/700 psi on csg. Made 143 bbls., cum recovery 646 bbls. Left open on 12/64" bean overnight.
2-7-82	Well did not surface fluid overnight. Csg. press = 900 psig. Ran swab & tagged fluid @ 2200'. Made 21 swab runs pulling from 7100' on final run w/fluid level @ 5800'. Final csg. press. = 625 psig. Fluid approximately 30% oil. Oil has 8% emulsion, 19.8° API @ 76° F. Shot fluid level on csg. Found fluid level @ 6975'. Swabbed a total of 163 bbls. Total recovery to date 809 bbls.
2-8-82	Well fluid didn't surface overnight. Csg. press. 900 psig. Ran swab, tagged fluid @ 4200'. Made 22 swab runs. Last run tagged fluid @ 6500', pulling from 7500'. Recovered 134 bbls. Total to date 943 bbls. Final csg.press. 800 psig. Installed 12/64" bean & left well open to tank.
2-9-82	Start up job. Csg. press 950 psig. Tagged fluid @ 4500'. Cont. swabbing. 1st few runs 80% oil. After 8 runs down to 10% oil. After 12 runs fluid composition started changing. After 17 runs fluid level was 6000'. Csg. press. 840 psig. on 18th gun found fluid @ 2300'. On 19th run found fluid @ 2700'. Well started unloading gas. Place well on 18/64" bean. Tbg. press. 125 psig; csg. press. 630 psig. Well died 45 min. after placing on 18/64" bean. Tagged fluid @ 7000'. Final run fluid @ 6700'. Pulling from 8100', fluid was 56% oil. Final csg. press. 600 psig. Recovered 131 bbls. Total recovery to date 1074 bbls.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #209, Sec 16, T 4N, R 21W, S.B.B. & M.
A.P.I. No. 111-21105 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 8-10, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
2-10-82	Well did not surface overnight. Csg. press. 750 psig. Ran swab, tagged fluid level @ 5700'. Made 7 swab runs. Daily recovery 55 bbls., cum. recovery 1129 bbls. All returns 70% oil. Gassy follow-ups. Oil sample gravity 16.5° API @ 65° F & cut 30% water. On final swab run, tagged fluid @ 5800' & pulled from 7300'. Laid down swab. Bled csg. Circulated well around w/ lease water. Released retrievamatic packer. Lowered tbg. tail to 9565', no fill. Circulated well around. POH w/packer. Rubber elements appeared to be undamaged. MU Johnston 7" DST tool. RIH. Set Johnston packer @ 8830', w/bottom recorder @ 9029'.
2-11-82	Opened DST tool w/1100# csg. pressure. 1st flow 5 minutes, strong blow. Closed tool for 1 hr. shut in. (IHP 3898# - IFP 726# - FFP 992# - FSIP 3443# for 1st flow & shut in.). Opened tool for 2nd flow, 100 minutes, weakening blow. Closed tool for 4 hour shut in. (IFP 1232#-FFP 2432# - FSIP 3443# for 2nd flow & shut in). Opened tool for 3rd flow, 230 minutes, virtually no blow. (IFP 2252#-FFP 3253#-FHP-3873#). Released pkr. & POH w/tbg. Found 7350' fluid rise, all water (trace of oil). Took sample every 600', "gravity" of 8° API (salt water). Broke out Johnston DST tools. MU Baker 7" 26# Model "N" drillable B.P. on tbg. & RIH. Attempted to set plug @ 8810' w/o success.
2-12-82	RU & change well over to 71#/ft^3 KCl water. Attempt to set Model "N" BP - unable to do so. Start out of hole w/tbg. & BP set @ 6690'. Released from plug & POH. MU Baker plug plucker with junk basket & RIH. R.U. power swivel. Mill over outside of BP catching hold of same. POH w/plug. RU Welex. RIH w/Baker Model "S" drillable BP. Set BP @ 9035'.
2-13-82	RIH w/wireline set K-1 cement retainer. Set same @ 8880'. R/D Welex & RIH w/ tbg. & stab into retainer. RU Dowell. Establish breakdown with KCl water. 1.4 BPM @ 3000 psig while holding 500 psig on annulus. No evidence of communication thru liner lap. Pump 20 bbls. fresh water followed by 50 sx Class "G" neat + additives. Displace w/ 20 bbls. water. Final pump in pressure 3000 psig @ 1.4 BPM. Pull up 50' & BS well clean. Pressure test csg. to 2500 psig - o.k. POH. MU & run GEO VANN perforating gun assembly with a Model "R" pkr. Land tbg. w/tail @ 8574', packer @ 8402'. Remove BOP.
2-14-82	Rig to & pump 27 bbls. lease oil down tbg. RU Welex & run tie in log to set packer. Tear out Welex. Space well out & set Model "R" pkr w/11,000# compression. Packer @ 8403'. Install & test production tree to 2500 psig. Drop firing bar @ 2:15 PM. Open well up thru a 12/64" bean. No instant pressure, just a steady gas blow.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

DIVISION OF OIL AND GAS
RECEIVED
AUG 31 1982
SANTA PAULA, CALIFORNIA

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #209, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21105 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 8-10, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
2-14-82	(Continued from Page 17). Perf's 4(0.44") JSPF @ 8480', 8488', 8495', 8505', 8513', 8520', 8540', 8549', 8560', 8570'. Steady blow quit @ 3:15 P.M. Close well in for build-up. Pressure built up to 625 psig. Opened well up thru a 12/64" bean. From 4:10 'till 4:40 PM. Well flowed 8 bbls., tbg. press. 575#. At 5:10 P.M., 840# tbg. press. Well flowed 9 bbls. By 8:00 AM, the well had averaged 680# pr., 5 BOPH @ 31° API & 7% cut. Sand concentration averaged less than 0.5%. The well flowed 89 bbls.
2-15-82	Tear down prod. rig & clean up location. 20 hr. test on 12/64" bean. 104 bbls. oil, 33° API @ 60° F, 580# tbg. pr. 0# csg. pr.
2-16-82	24 hr. test on 14/64" bean. 138 bbls. oil gross, 33.4° API @ 60° F, 220 MCF/D. 440# tbg. pr; 280# csg. pr.
2-17-82	24 hr. test (2 hrs. on 14/64" bean, 22 hrs. on 16/64" bean). 134 bbls. gross 32.7° API @ 60° F. 360# csg. & tbg.
2-18-82	MIRU prod. rig. Spot pump & tie into csg. Tbg/csg. equal @ 360 psig. Pressure bled off annulus instantly. Pump 50 bbls. 72# KCl water down tbg. @ 1700 psig. Tbg. dead. Remove prod. tree. Install BOPE & test same. Release packer. Pull & measure tbg. Lay down packer & Vanngun. MU STC & 2½" TL PS on tbg. & RIH to 8603'. No fill. Pull up & lay down excess tbg. Land tbg. on donut w/tail @ 8434'.
2-19-82	Remove & load out equipment. Install prod. tree. Change over from 72 lb KCl water to lease crude (320 bbls). Flow well to Baker tank wide open 3 hrs. Ran swab 4 times. Lowered fluid level from surface to 800'. Pulled swab from 1800'. Well flowed & swabbed 25 bbls.
2-20-82	Tbg. pr. 0; csg. press. 200 psig. Run swab, fluid @ 300'. Swab well & lowered fluid level to 3800'. Pulled swab from 5500'. Shut down for night. Recovered 200 bbls. Appears to be all oil.
2-21-82	RIH w/swab. Locate fluid @ 3000'. Swabbed from 4500'. Well flowed 1 hour, then died. RIH w/swab; tag fluid @ 500'. Swabbed from 1500'. Flowed well to shaker tank. Put well down flowline w/ 200 psig tbg; 0 psig csg. Well unable to get into trap. Turn well to portable tank.
2-22-82	Flowed 83 bbls. total, by morning. 180# tbg., 150# csg. Laid down swab equipment.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #209, Sec. 16, T 4N, R 21W, S.B B. & M.
A.P.I. No. 111-21105 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 8-10, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
2-22-82	(Continued from Page 18). Moved out rig. Blew well down twice, heading recovery of 30-40% water cut for 2 hours. Continued to monitor flow on 24/64" bean through the night. Csg. pressure gradually increased from 200# to 400#, water cut steadily dropped from 13% to 0.1%.
2-23-82	40# tbg. press; 400# csg. press. At 6:30 A.M. cut 0.1%. Well made 17 bbls. in 3 hours, then died at 9:30 A.M. MIRU CPS at 4:00 P.M. Found 0# tbg/580# csg. Rigged swab equipment. Ran swab, tagged fluid @ 2600'. Made 1 swab run from 3600', had gas follow-up. Returned well to flowline on 24/64" bean and shut down for dark. Checked well at midnight, appeared dead, 0# tbg/700# csg.
2-24-82	0# tbg/775# csg. Ran swab. Tag fluid @ 600'. Swabbed 62 bbls. Swab from 6000'. Well started to flow. Shut in & installed 24/64" bean. Opened to Baker tank. At 4:00 P.M. 420# tbg/780# csg. At 4:30 installed 15/64" bean; 280# tbg/650# csg. Put to trap & tank battery. Shut down at 5:00 P.M. w/180# tbg/700# csg.
2-25-82	Bleed well down. Lay down swab equipment. 75# tbg/1100# csg. Remove tree, install B.O.P. Remove donut on tbg., lowered tbg. & tagged retainer @ 8880'. Spotted 12 sks of sand on top of retainer. Tagged sand @ 8804'. POH. Plug tested Baker 7" retrievamatic packer. Hydrotest 300' 2 7/8" tbg. on top of packer; unable to test N-80 tbg., hydrotest J-55 tbg. to 6000 psig. Continue to test tbg. into hole.
2-26-82	Finish measuring & rabbiting 3½" Buttress tbg. Ran 3 jts. 2 7/8" N-80 tbg. on top. Hydrotest tbg. in hole to 8000 psig. Remove hydrotest. Set Baker retrievamatic @ 8428'. Change pipe rams to 2 7/8". Hook up B.J. frac lines. Pressured annulus to 2000 psig.
2-27-82	RU steel line from csg. to rig pump. Pressure annulus to 2750 psig. Hook up B.J. and frac well. 1280 psig on tbg. open well to Baker tank. Well flowed 10 bbl/hr. for 2 hours. 1000 psig. on tbg. Hook flowline up to permanent 14/64" bean. On 14 hour test, well made 164 bbls. Cut 0.1%; 390 psig on tbg. Well averaging 11.7 bbl/hr. of 29.7° API @ 60° F oil.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #209, Sec. ....., T ....., R ....., B. & M.
A.P.I. No. 111-21105 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 8-10, 19 82

Signature Harry Hull

940 E. Santa Clara Street, Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
2-28-82	Well flowing thru 14/64" bean. Tbg. pressure 390 psig. Land tbg. on donut w/62,000 compression. Flowed 192 bbls. (24 hrs) @ 7:00 A.M. 340# tbg. press. Cut 20% H_2O w/ trace of sand. Total recovery since frac job 356 bbls.
3-1-82	Flowed through 14/64" bean. 101 bbls. (24 hours). Well-head cut varied between 7% & 28%. Produced fluid until 4:30 A.M. Well blowing gas 4:30 - 7:00 A.M. Press. this A.M. 470 psig.
3-2-82	425# tbg. press. Removed temporary flowline. Released Baker retrievamatic packer. Backscuttled well around & worked out gas. Pulled & laid down 3 jts, 2 7/8" N-80 & 93 jts. 3½" Buttress tbg. Fastline sheave in crown split in-two, waiting on rig repairs.
3-3-82	Rig repaired. Finished POH & laid down 3½" & 2 7/8" frac string, & Baker retrievamatic packer. MU STC, 2 jts. tail, TL PS on 2 7/8" tbg. & RIH. Tagged sand @ 8603'. (Perfs 8480'-8570'). Pulled up & landed w/tail @ 8405'.
3-4-82	Removed BOPE, well started flowing out csg. Rigged steel line to Baker tank. Flowed csg. on 14/64" bean. Installed prod. tree. Picked up & ran 1¼" pump on 150-3/4", 67-7/8", 57-1" rods. Spaced well, stroked & pressure tested to 300#. Hooked up tbg. & csg. to flowline.
3-5-82	Flowing to tank battery on 14/64" bean. 150# tbg/csg.
3-6-82	Began pumping at 4:00 P.M. Pumping unit went down at midnight. 160# tbg/csg. Made 59 bbls, in 24 hours. W/H cut 0.1%.
3-7-82	Flowed & pumped 54 bbls. W/H cut 99%. Csg/tbg. press. 190#. 14/64" bean. Pumped 14 hours. Down 10 hours due to compressor mechanical problems.
3-8-82	Pumped 116 bbls. 21½ hours. Pumping unit down 2½ hours. Gas rate 54 MCF/day. C.C. 99% w/trace of oil.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #209, Sec. 16, T 4N, R 21W, B. & M.
A.P.I. No. 111-21105 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 8-10, 19 82

Signature Harry Hull

940 E. Santa Clara Street, Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
3-9-82	Pumped & flowed 121 bbls. W/H cut 2.6%, composite cut 48%. Well pumped 13½ hrs. Well flowed 4 hours. 360# tbg/csg.
3-10-82	Pumped & flowed 184 bbls. Flowed 13 hours & pumped 11 hours. C.C. 14%. 240# tbg., 680# csg. Estimated gas rate 123 MCF/D.
3-11-82	24 hour test made 191 bbls; W/H cut 5%. C.C. 9%. 30.8° API @ 54° F. 250# tbg/ 840# csg.
3-12-82	24 hour test, well made 159 bbls. W/H cut 2%. C.C. 36.2% emulsion, 4% water. 260# tbg., 1060# csg.
3-13-82	Bleed down csg. Well made 29 bbls. in 12 hours. Tbg press/csg. press = 260 psig. on 12/64" bean.
3-14-82	23 hour test made 116 bbls. C.C. 10%. Down 1 hour to lower pump & change to 16/64" bean. Tbg/csg = 250 psig. 8 1/2 SPM x 152" stroke. Fluid level 151 jts. down or 4681' from surface.
3-15-82	Pumped & flowed 115 bbls. C.C. 0.2%. Tbg/csg. = 230 psig. Oil gravity 29.5° API @ 42° F. Pumping @ 8½ SPM & 152" stroke. Gas rate 137 MCF/D.
3-16-82	Flowed & pumped 109 bbls. C.C. 0.4%. Gravity 27.6° API @ 44° F. Tbg/csg = 230 psig. Gas rate 145 MCF/day.
3-17-82	Pumped 118 bbls. C.C. 2%. Gravity 28.5° @ 42° F. (corrected 29.7°). Fluid level 5103' from surface. 9 SPM. 23 hour test; down 1 hour to change sheave.
3-18-82	Pumped 114 bbls. 250# tbg/csg. 9 SPM. C.C. 20% (12% emulsion 8% water). Gravity 29.2° @ 32° F (corrected 31.1° API). Gas rate 146 MCF/D.
3-19-82	24 hour test. Pumped 107 bbls. W/H cut 70%. (5% water & 65% emulsion). C.C. 10%. Gravity 28.8° API @ 36° F. 250# tbg/csg.
3-20-82	24 hour test. 106 bbls. Pumped. W/H cut 70%. C.C. 8%. Gravity 28.8° API @ 40° F. 250# tbg/csg.
3-21-82	Well made 104 bbls. on 24 hr. test. C.C. 2.8%. Gravity 30.0° API @ 52° F. W/H cut 60%. 240# tbg/csg.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #209, Sec. 16, T 4N, R 21W., SB B. & M.
A.P.I. No. 111-21105 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 8-10, 19 82.

Signature Harry Hull

940 E. Santa Clara Street, Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
3-22-82	88 bbls. gross. 50.1% W/H cut. 220# tbg/csg. Gravity 29° @ 42° F. 16/64" choke. 20 hrs. on test. 24 hrs. on prod.
3-23-82	102 bbls. gross; 38% C.C.; 12% W/H cut. Gravity 29.0° @ 45° F. 16/64" bean. 210# tbg/csg. 24 hr. test.
3-24-82	102 bbls. gross. 24 hr. test. 16/64" bean. W.H cut 10%; C.C. 14%. 29.9° Gravity @ 60° F. 220# tbg/csg.
3-25-82	Gross 103 bbls; C.C. 13%. 220# tbg/csg. 16/64" bean. Gravity 29.0° @ 60° F. 24 hr. test.
4-6-82	MIRU prod. rig. Bleed down tbg. & csg. Attempt to unseat pump, unable to do so. Pumped 120 bbls. oil down csg. Could not work pump loose.
4-7-82	Pumped 260 bbls. oil down csg. Well continued to flow. Circulated well around. Backed off on rods. Stripped on rod regan. Pulled 120 rods. Tested BOPE. Continued stripping out.
4-8-82	Continue stripping out of hole w/tbg. & rods. MU 5 dbs. 3/4" rods. RIH w/sandline & 3/4" rods. Tag fill @ 8670'. POH w/sandline. No fill. RIH w/tbg. & STC on BTM. Clean fill 8670'-8748'. BS hole clean pulling tbg. Rig down 6 hrs. for repair.
4-9-82	POH w/tbg. RU Pengo wireline. RIH w/WL BP & set @ 8410'. Fill hole w/ lease crude & pressure test csg. to 2000 psig. Did not hold. MU B.P. retrieving tool & packer on tbg. & RIH. Set packer @ 8369'. Pressure annulus to 2000 psig. Did not hold. Unset packer, move in tbg. & latch plug. Strap out of hole. Tally showed plug found @ 8566'. RU Pengo wireline.
4-10-82	RIH w/GRL, CCL logging tool. Run correlation log strip. RIH w/wireline to set B.P. Set plug @ 8360'. Fill csg. & test to 1500 psig. O.K. MU Pengo perforating guns & Baker Model "R" packer on tbg. & RIH. RU Pengo wireline. Run GRL, CCL, NL to position guns. Set packer @ 7279'. Fill tbg. w/10 bbls. lease crude. Remove BOP. Install prod. tree.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

DIVISION OF OIL AND GAS
RECEIVED
AUG 31 1982
SANTA PAULA, CALIFORNIA

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #209, Sec. 16, T 4N, R 21W S.B. B. & M.
A.P.I. No. 111-21105 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 8-10, 19 82

Signature Harry Hull

940 E. Santa Clara Street, Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
4-11-82	Install exchange tree. Drop conductor bar, drop battery pack - no fire. Archer Reed fish battery pack out of hole. File down battery pack. Drop battery pack - no fire. Wait 30 minutes. RIH w/ Archer Reed & fish pack. Spudded down & fired guns. Well started flowing w/ 400 psig on tbg. Well flowed 6 bbls. in 1 hour 300 psig/tbg., 13/64" choke.
4-12-82	Flowed 15 bbls. in 10½ hours. (6:00 A.M.- 4:30 P.M.). No pressure on tbg/csg. 30° API @ 65° F. Cut 24% with a trace of sand.
4-13-82	Rig up Archer Reed, made run to open sleeve. Pressured annulus to 1000 psig, bled off pressure. Made 2nd run - sleeve did not open. Rig down Archer Reed. Remove prod. tree. Set & tested BOP. Rigged up working floor. Unset packer. Circulated & killed well. POH w/packer, laying down Pengo guns.
4-14-82	Finished laying down perforating guns. All shots fired. MU Pengo retrieving tool & MU Hampton circulation washer & measured in hole w/tbg. Washed perfs using rig pump, 4 bbls. per setting. Did not exceed 1800 psig. No rate measurement available; however, the same horsepower was applied at each setting. Broke down successfully 15 sets of perfs (out of 25 sets). Tool blanked properly throughout job. POH w/ wash tool.
4-15-82	Rigged up Welex. Perf'd 7724', 7717', 7706', 7681', 7664', 7660', 7407', 7385', 7775', & 7338' with 4(0.44") JSPF SSB II charges (select fire, 4" carrier). Rig down Welex. Made up STC, catcher, & drain. Measured tbg. in hole. Landed tbg. shoe @ 7307'. Laid down 29 jts. tbg. Electricity failure @ 1:00 A.M. shut down.
4-16-82	RIH w/ pump & rods. Return to production. On production 4:00 P.M. 14½ hour test. 158 bbls. Composite cut 85%, 0.1% sand. 120# tbg/csg.
4-17-82	24 hour test. 228 bbls. gross. Csg - vacuum, tbg. 180 psig. 60% wellhead cut, 0.1% sand.
4-19-82	140 psig tbg/csg. Made 169 bbls. in 24 hours. Composite cut 90% water, 24° API @ 70° F. Wellhead cut 40% water, 0.3% sand.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #209, Sec. 16, T 4N, R 21W, S.B.B. & M.
A.P.I. No. 111-21105 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 8-10, 1982.

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
4-20-82	140 psig tbg/csg. Made 126 bbls. in 24 hours. Composite cut 95% water, wellhead cut 90% water.
4-23-82	100 psig tbg/csg. Made 87 bbls. in 24 hours. Wellhead & composite cut 90% water.
4-24-82	Made 85 bbls. in 24 hours. 80% cut. 90 psig tbg/csg.
4-29-82	90 psig. tbg/csg. Made 68 bbls. in 24 hours. Cut 95%. Water for both composite & wellhead.
4-30-82	Pumped 66 bbls.95% cut. 90# csg/tbg.
5-1-82	90# csg/tbg. Pumped 62 bbls. 95% cut.
5-3-82	Pumped 63 bbls. in 24½ hours. 95% cut. 90# csg/tbg.
5-4-82	100# csg/tbg. Made 54 bbls. on 23½ hr. test. 95% cut.
5-5-82	Pumped 56 bbls. 98% cut. 100# csg/tbg.
5-6-82	Tbg/csg. 125/75. 24 hr. test. Made 54 bbls. 99% cut.
5-15-82	24 hr. test. Made 44 bbls. 95% cut. 90# csg/ tbg.
5-17-82	Made 41 bbls. in 24 hours. 95% composite cut. Well on 16/64" bean w/90 psig csg/tbg.
5-18-82	MIRU prod. rig. POH w/pump & rods. RU pump & tank. Pump 290 bbls. lease water in hole. Unable to establish circulation. Remove tree. Unland tbg. Found no tension on Baker tension anchor. Install BOPE. Measure out of hole. MU Pengo retrieving head on tbg. RIH to 2500'.
5-19-82	Finished RIH w/tbg. & retrieving head. Found Pengo Repeata II Packer @ 8371'. (Was set @ 8360', WL measurement). Established circulation w/lease water. Rotated & backed out brass screw-out plugs, 3.250" O.D. x 1.50", left in hole as fish.) Latched onto Repeata II packer. Pulled 45,000# over weight to release packer. POH w/packer. RIH w/tbg. & STC. Tagged fill @ 8683'. Backscuttled out sand to 8715'. Well making too much gas to continue cleanout at night. Pulled up to 7140'.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #209, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21105 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 8-10, 1982

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
5-20-82	RIH w/ 25 stands tbg. BS fill from 8715'-8808'. POH w/tbg. R.U. Schlumberger. Ran TDT log from 8804'-5400'. MU new BL shoe, anchor catcher & drain on tbg & RIH. Land tbg. on donut w/tail @ 8411'. Remove BOPE.
5-21-82	Bled well down. Set Baker tension anchor w/12,000# tension. Install tree. RIH w/ exchange pump & rods. Respace well. Pressure tbg. to 300 psig. Bled off slowly indicating high pressure tbg. leak. Hang well on.
5-22-82	Well made 204 bbls. in 24 hours. 220# csg/tbg. 80% composite cut. 11.1° API @ 64° F.
5-23-82	Well made 194 bbls. in 24 hours. 280# csg/tbg. 40% composite cut. 50% wellhead cut. 20.5° API @ 62° F. on 16/64" bean.
5-26-82	Pumped 189 bbls. 0.5% composite cut & gravity 33.5° API @ 58° F. 300# csg/tbg.
5-27-82	Pumped 191 bbls. Cut 45%. 310# csg/tbg.
5-28-82	Pumped 182 bbls. 50% cut. 270# csg/tbg.
5-29-82	Pumped 177 bbls. 45% cut. 290# csg/tbg.
5-30-82	Pumped 166 bbls. 45% cut. 250# tbg/csg.
5-31-82	Pumped 171 bbls. Cut 40%. 240# csg/tbg.
6-1-82	Pumped 167 bbls. 7.0% cut. Gravity 20.6° @ 52° F. 270# csg/tbg.

UNIVERSAL DIRECTIONAL DRILLING
COMPLETION REPORT

DIVISION OF OIL AND GAS
RECEIVED
AUG 11 1982
SANTA PAULA, CALIFORNIA

LOCATION Silverthread
WELL Ferndale #9-209
SURFACE LOCATION 1194S 4316 E
K. B. ELEVATION 1229'
DATE 9-9-81

COMPANY ARGO PETROLEUM CORPORATION

NO.	MEASURED DEPTH	DRIFT ANGLE	VERTICAL DEPTH	DRIFT DIRECTION	RECTANGULAR COORDINATES NORTH	SOUTH	EAST	WEST	REMARKS
1	126	0° 30	126 00	S 04 W		1 10		08	
2	276	0° 15	275 99	West		1 10		73	
3	546	0° 30	545 98	S 65 W		2 09		2 87	
4	757	0° 30	756 98	N 77 W		1 68		4 66	
5	1154	0° 45	1153 94	S 65 W		3 87		9 37	
6	1410	1° 15	1409 88	S 45 W		7 82		13 32	
7	1570	1° 15	1569 84	S 55 W		9 83		16 18	
8	1662	1° 15	1661 82	S 51 W		11 09		17 74	
9	1784	1° 15	1783 79	S 42 W		13 07		19 52	
10	1917	1° 30	1916 75	S 81 W		13 61		22 96	
11	2178	1° 00	2177 71	S 78 W		14 56		27 42	
12	2463	0° 45	2462 68	S 56 W		16 65		30 51	
13	2706	0° 45	2705 66	S 57 W		19 19		32 42	
14	3055	1° 30	3054 54	S 43 W		25 87		38 65	Mud Motor used fro
15	3099	3° 00	3098 48	S 71 W		26 62		40 83	
16	3131	3° 30	3130 42	West		26 62		42 78	3055 to 3584
17	3163	3° 45	3162 35	N 68 W		25 84		44 72	
18	3195	4° 15	3194 26	N 53 W		24 41		46 62	
19	3227	4° 15	3226 17	N 32 W		22 40		47 88	
20	3259	4° 30	3258 07	N 14 W		19 96		48 48	
21	3291	5° 45	3289 91	N 15 W		16 87		49 31	
22	3323	7° 00	3321 67	N 12 W		13 08		50 26	
23	3386	9° 30	3383 81	N 14 W		2 99		52 77	
24	3418	10° 30	3415 28	N 14 W	15 67			54 18	
25	3480	12° 15	3475 87	N 17 W	15 25			58 03	
26	3511	13° 15	3506 05	N 19 W	21 97			60 34	
27	3544	14° 30	3538 00	N 19 W	29 78			63 03	
28	3634	16° 15	3624 40	N 18 W	57 [illegible]			70 81	
29	3729	16° 30	3715 49	N 18 W	79 39			79 15	
30	3884	17° 15	3863 52	N 18 W	123 10			93 35	
31	4037	17° 45	4009 23	N 18 W	167 47			107 77	
32	4151	17° 00	4118 25	N 18 W	199 18			118 07	
33	4243	16° 00	4206 69	N 18 W	223 28			125 90	
34	4342	15° 00	4302 32	N 19 W	247 51			134 25	
35	4499	13° 30	4454 98	N 21 W	281 73			147 38	
36	4690	11° 30	4642 14	N 24 W	316 51			162 87	Mud Motor used
37	4770	11° 30	4720 54	N 13 W	332 05			166 46	
38	4803	12° 15	4752 79	N 09 W	338 97			167 55	from 4721 to 4938
39	4835	13° 15	4783 93	N 07 W	346 25			168 45	
40	4866	14° 15	4813 98	N 08 W	353 81			169 51	
41	4898	15° 00	4844 89	N 05 W	362 06			170 23	
42	4986	15° 30	4929 69	N 02 W	385 56			171 05	
43	5082	15° 45	5022 09	N 02 W	411 60			171 96	
44	5206	15° 45	5141 43	N 02 W	445 24			173 13	
45	5288	16° 30	5220 05	N 03 W	468 50			174 35	
46	5382	18° 15	5309 32	N 02 W	497 92			175 38	
47	5477	20° 00	5398 60	N 03 W	530 36			177 08	
48	5583	20° 30	5497 88	N 03 W	567 43			179 02	

CLOSURE _____ METHOD OF CALCULATION Tangential

UNIVERSAL
DIRECTIONAL DRILLING
COMPLETION REPORT

LOCATION Silverthread

WELL Ferndale # 9

SURFACE LOCATION

K. B. ELEVATION

COMPANY ARGO PETROLEUM CORPORATION

DATE 9-15-81

NO.	MEASURED DEPTH	DRIFT ANGLE	VERTICAL DEPTH	DRIFT DIRECTION	RECTANGULAR COORDINATES NORTH	SOUTH	EAST	WEST	REMARKS
49	5710	20° 30	5616 84	N 06 W	611 67			183 67	
50	5868	20° 45	5764 59	N 09 W	666 96			192 45	Redrilled from 6025'
51	6025	21° 30	5910 67	N 11 W	723 44			203 41	See Page 3
52	6156	22° 15	6031 91	N 13 W	771 77			214 57	
53	6249	22° 30	6117 83	N 14 W	806 30			223 18	
54	6408	22° 45	6264 46	N 15 W	865 69			239 09	
55	6505	23° 00	6353 75	N 16 W	902 13			249 54	
56	6557	22° 45	6401 70	N 17 W	921 36			255 42	
57	6646	21° 45	6484 37	N 17 W	952 90			265 06	
58	6740	21° 15	6571 98	N 18 W	985 30			275 59	
59	6870	19° 30	6694 52	N 18 W	1026 57			289 00	
69	6996	19° 15	6813 48	N 18 W	1066 08			301 84	
70	7094	18° 15	6906 55	N 21 W	1094 73			312 83	
71	7149	17° 15	6959 07	N 22 W	1109 85			318 94	
72	7248	16° 15	7054 12	N 22 W	1135 54			329 32	
73	7342	14° 45	7145 02	N 25 W	1157 23			339 44	
74	7466	13° 45	7265 47	N 25 W	1183 94			351 89	
75	7639	13° 15	7433 86	N 24 W	1220 16			368 02	
76	7778	12° 45	7569 43	N 25 W	1247 47			380 99	
77	7933	13° 30	7720 15	N 24 W	1281 02			395 71	
78	8079	13° 45	7861 97	N 24 W	1312 72			409 82	
79	8111	14° 30	7892 95	N 22 W	1320 15			412 82	Mud Motor used
80	8160	13° 45	7940 55	N 17 W	1331 29			416 23	
81	8258	13° 30	8035 84	N 20 W	1352 79			424 05	from 8111 to 8200
82	8290	13° 30	8066 96	N 19 W	1359 85			426 48	
83	8350	13° 15	8125 36	N 18 W	1372 93			430 73	
84	8417	12° 30	8190 77	N 19 W	1386 64			435 45	
85	8539	11° 15	8310 43	N 13 W	1409 83			440 80	Mud Motor used
86	8581	9° 15	8351 88	N 15 W	1416 35			442 55	
87	8623	7° 30	8393 52	N 14 W	1421 67			443 88	from 8553 to 8772
88	8660	6° 45	8430 26	N 13 W	1425 91			444 86	
89	8732	3° 15	8502 15	N 15 W	1429 85			445 91	
90	8817	2° 15	8587 08	N 20 W	1432 99			447 05	
91	8847	2° 00	8617 06	N 22 W	1434 03			447 45	
Est.	8925	2° 00	8695 01	N26 W	1436 47			448 64	

CLOSURE _____ METHOD OF CALCULATION _____

UNIVERSAL
DIRECTIONAL DRILLING
COMPLETION REPORT

LOCATION Silverthread

WELL Ferndale # 9 R.D.

SURFACE LOCATION 1194 S 4316 E

K. B. ELEVATION 1229'

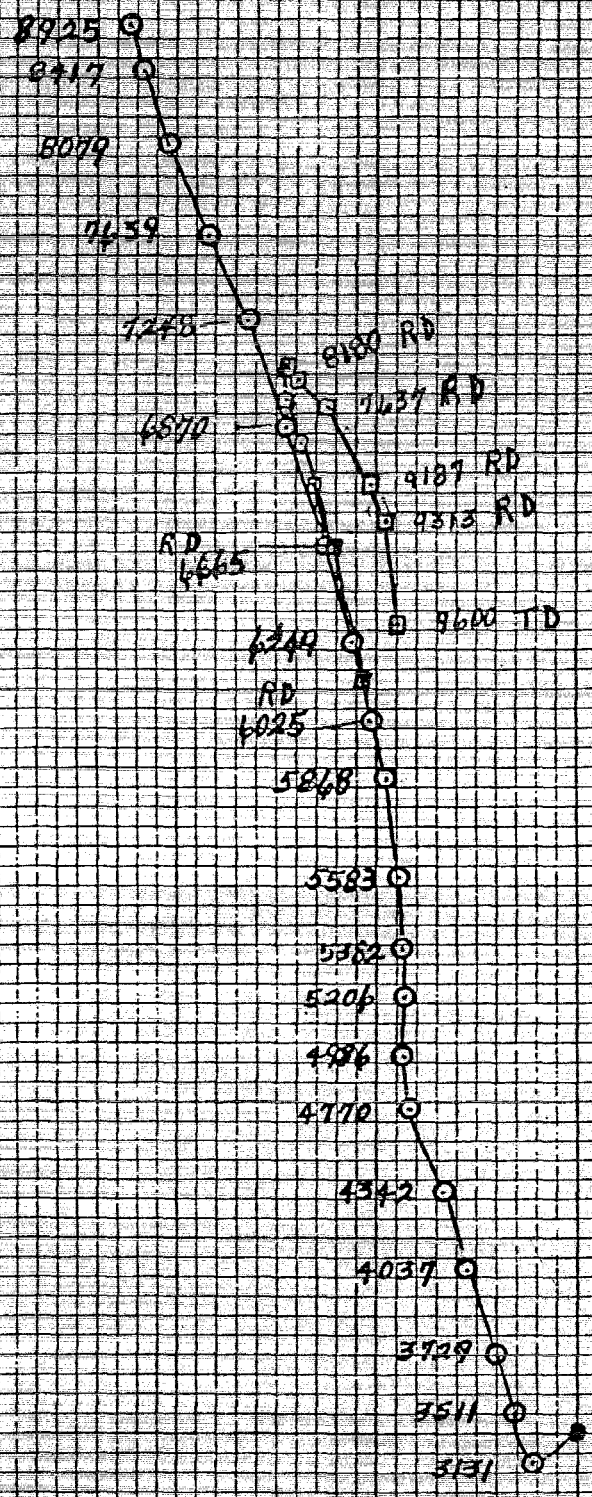
COMPANY ARGO PETROLEUM CORPORATION

DATE 11-8-81

NO.	MEASURED DEPTH	DRIFT ANGLE	VERTICAL DEPTH	DRIFT DIRECTION	RECTANGULAR COORDINATES NORTH	SOUTH	EAST	WEST	REMARKS
51	6025	21° 30	5910 67	N 11 W	723 44			203 41	
52	6117	21° 45	5996 12	N 13 W	756 66			211 08	
53	6147	21° 15	6024 08	N 13 W	767 25			213 52	
54	6209	20° 00	6082 34	N 15 W	787 73			219 01	
55	6302	18° 30	6170 54	N 13 W	816 49			225 65	
56	6443	15° 45	6306 24	N 12 W	853 92			233 61	
57	6538	14° 15	6398 32	N 12 W	876 80			238 47	
58	6665	12° 30	6522 31	N 14 W	903 47			245 12	
59	6758	12° 30	6613 10	N 14 W	923 00			249 99	
60	6843	11° 45	6696 32	N 14 W	939 80			254 18	
61	6968	10° 30	6819 23	N 16 W	961 69			260 46	
62	7096	11° 15	6944 77	N 17 W	985 57			267 76	
63	7147	11° 00	6994 83	N 19 W	994 77			270 93	
64	7208	10° 00	7054 91	N 17 W	1004 90			274 02	Mud Motor used
65	7257	8° 15	7103 40	N 12 W	1011 78			275 48	
66	7351	7° 15	7196 65	N 17 W	1023 13			278 95	from 7129 to 7292
67	7412	7° 15	7257 16	N 16 W	1030 53			281 07	
68	7508	6° 30	7352 54	N 22 W	1040 61			285 14	
69	7605	7° 15	7448 77	N 22 W	1051 96			289 73	
70	7637	7° 00	7480 53	N 22 W	1055 57			291 19	
71	7765	5° 45	7607 88	N 24 W	1067 29			296 40	
72	7894	5° 30	7736 29	N 20 W	1078 90			300 63	
73	8020	3° 30	7862 06	N 09 W	1086 50			301 84	
74	8180	2° 15	8021 93	N 57 E	1089 93			296 56	
75	8338	5° 15	8179 26	S 55 E	1081 63			284 72	
76	8403	6° 15	8243 89	S 53 E	1077 37			279 08	
77	8601	7° 45	8440 07	S 48 E	1059 51			259 23	
78	8762	8° 30	8599 30	S 42 E	1041 82			243 30	
79	8887	9° 30	8722 58	S 39 E	1025 79			230 32	
80	9187	12° 30	9015 47	S 25 E	966 94			202 88	
81	9313	16° 45	9136 31	S 19 E	933 21			191 26	
Est.	9600	22° 00	9402 41	S 06 E	826 29			180 02	

CLOSURE 845.67' N 12°17' W

METHOD OF CALCULATION Tangential



SCALE 1" = 200'

UNIVERSAL DIRECTIONAL DRILLING SINCE 1960

ARGO PETROLEUM
FERNDALE NO. 9
FERNDALE NO. 9 RD

FORM 157

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT ON PROPOSED CHANGE OF WELL DESIGNATION

Santa Paula, California

August 3, 1982

Mr. Harry Hull, Agent
Argo Petroleum Corporation
940 E. Santa Clara , P.O. Box CI
Ventura, CA 93001

DEAR SIR:

Your request dated 7/28/82, relative to change in designation of well(s) in Sec. 16, T. 4N, R 21W, S.B. B. & M., Ojai field, Ventura County, District No. 2, has been received; and in accordance with Section 3203, Public Resources Code, reading in part as follows:

> "* * * The number or designation by which any well heretofore drilled has been known, and the number or designation specified for any well in a notice filed as required by Section 3203, shall not be changed without first obtaining a written consent of the Supervisor."

the proposed change in designation is hereby authorized as follows:

FROM:	TO:
"Valex-Ferndale" 7	"Valex-Ferndale" 107 (111-21066)
"Valex-Ferndale" 10	"Valex-Ferndale" 110 (111-21163)
"Valex-Ferndale" 9 ✓	"Valex-Ferndale" 209 (111-21105)
"Valex-Ferndale" 11	"Valex-Ferndale" 211 (111-21178)

M. G. MEFFERD
JOHN E. MATTHEWS, JR.
State Oil and Gas Supervisor

By Murray W. Bosch
Murray W. Bosch, *Deputy Supervisor*

5961C-705 1-72 5M ⓘ OSP

FORM 157

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT ON PROPOSED CHANGE OF WELL DESIGNATION

Santa Paula, California

June 16, 1982

Mr. Harry E. Hull, Agent
Argo Petroleum Corporation
P.O. Box CI
Ventura, CA 93002

DEAR SIR:

Your request dated June 15, 1982, relative to change in designation of well(s) in Sec. 16, T. 4N, R 21W, SB B. & M., Ojai field, Ventura County, District No. 2, has been received;

and in accordance with Section 3203, Public Resources Code, reading in part as follows:

> "* * * The number or designation by which any well heretofore drilled has been known, and the number or designation specified for any well in a notice filed as required by Section 3203, shall not be changed without first obtaining a written consent of the Supervisor."

the proposed change in designation is hereby authorized as follows:

From:		To:	
"Ferndale" 7	(111-21066)	"Valex-Ferndale" 7	(111-21066)
"Ferndale" 9	(111-21105)	"Valex-Ferndale" 9	(111-21105)

Cons.Comm.

M. G. MEFFERD
~~JOHN F. MATTHEWS, JR.~~
State Oil and Gas Supervisor

By Murray W. Dosch
Murray W. Dosch, *Deputy Supervisor*

59610-705 1-72 5M ① OSP

DIVISION OF OIL AND GAS
RECEIVED
FEB 1 - 1982
SANTA PAULA, CALIFORNIA

SILVERTHREAD-FERNDALE RANCH

GEOLOGIC AND ENGINEERING REVIEW

December 1981

Argo Petroleum Corporation and Valex Petroleum, each fifty percent working-interest owners, have discovered what are believed to be substantial new reserves on their Ferndale Ranch Lease in the Silverthread Field, Ventura County, California. Ferndale No. 7, in September 1981, and more recently Ferndale No. 9, have penetrated and are producing from a formation described below, that is separate and distinct from, and not in communication with, any other formation which was producing in 1978. Argo and Valex hereby request that the Division of Oil and Gas (DOG) review the enclosed material and certify that the reservoir as described therein constitutes such a separate and distinct formation.

Enclosed are four structural sections and three structural maps which utilize all available information from the wells in the immediate area. In order to maintain structural continuity across the mapped area, these sections have been generalized somewhat. The structure maps utilize the Lower Mohnian "A" Sand as the datum in each projection.

Also enclosed are electric logs, an engineering evaluation, pressure-test results, and reserve estimates for Ferndale No. 4, which was spudded March 19, 1978 and drilled to a depth of 7486 feet, and Ferndale No. 7. Ferndale No. 4 was chosen because its reservoir characteristics and general geology are believed to be representative of those Ferndale wells completed above the formation into which Ferndale Nos. 7 and 9 have been completed.

The Silverthread structure is an east-plunging, sharply folded anticline, complicated by thrusting and cross-faulting. Over 1,000 feet of east plunge is evident in data obtained within mapped area. The strike of the trend is east-northeast.

In the western portion of the map area the "Lower Big Canyon" fault truncates the Lower Mohnian Sands and underlying shales. Eastward, the anticline plunges beneath this fault movement. The enclosed maps depict only the stratigraphic section below the "Lower Big Canyon" fault.

The Ferndale No. 7 was planned to test the deep north flank potential on the anticline. The well penetrated the anticlinal tip sands from 5,800 to 6,700 feet at which point the well faulted into younger sediment. The test was deepened to 8,266 feet but remained in the younger section above the Lower Mohnian Sands. On log analyses, two younger zones of interest were noted. The well was completed in the lowermost zone at the rate of approximately 300 barrels of oil daily.

The Ferndale No. 9 test was planned to intersect the total section in an eastward offset to the Ferndale No. 7. This well missed most of the anticlinal tip and penetrated only the younger interval above the Lower Mohnian Sands. The well was logged and plans were made to complete in several younger intervals. Mechanical problems ensued and the hole required plugging-back. A redrill in a more vertical angle penetrated another sequence of younger sands beneath the Lime Unit before encountering the Lower Mohnian Sands at 8,450 feet. A portion of the Lower Mohnian Sands appears to be water-saturated. These are the massive Lower Mohnian Sands not found in Ferndale No. 7 or the first Ferndale No. 9. At 9,050 feet, the well encountered fractured, cherty shales with increased oil and gas shows. The well was deepened to 9,600 feet and logged. Pipe has been set to total depth and preparations are being made to test.

The reservoirs being produced by Ferndale Nos. 4 and 7 are distinctly different in terms of reservoir pressure, formation permeability and producing characteristics. The observed data and calculations from two pressure buildups and a pressure drawdown survey indicates that the reservoir being producted by Ferndale No. 7 has an average reservoir pressure of 2,519 psia, considerably above the laboratory measured bubble point pressure of 2,040 psia. The reservoir being produced by Ferndale No. 4 is at an average pressure of 1,608 psia, which is below the bubble point.

The native rock permeability of the Ferndale No. 7 reservoir is more than 3,100 percent greater than the Ferndale No. 4 reservoir. A permeability value of 32md may be calculated from the two pressure buildups from Ferndale No. 7 and were in close agreement while the permeability calculated from the Ferndale No. 4 buildup was 0.1md. It was necessary to sand frac Ferndale No. 4 upon initial completion while Ferdale No. 7 produced naturally without stimulation.

The recoverable reserves that were calculated for Ferndale No. 7 were estimated to be 1.7mm STB. There was good agreement between the material balance and volumetric calculation. The Ferndale No. 4 reserves which are estimated to be 0.15mm STB are the result of the relatively low productivity of the Ferndale No. 4 reservoir. In comparing the intital production rates, Ferndale No. 4 was 34 bopd while Ferndale No. 7 was 190 bopd.

A reservoir shape and size which was calculated from the pressure drawdown test on Ferndale No. 7 indicated a reservoir width of approximately 348 feet by 1,000 feet or 348,028 ft^2. The mere size of this reservoir precludes the existence of Ferndale Nos. 4 and 7 being in the same reservoir.

OIL AND GAS
RECEIVED
FEB 1 - 1982
SANTA PAULA, CALIFORNIA

Deeper drilling at Ferndale Ranch has established the presence of several thrust faults beneath the "Big Canyon Fault". Specifically, Ferndale Nos. 7 and 9 are producing from a reservoir located beneath Fault "X" which is not in communication with any other producing reservoir. These lower thrusts exhibit the criteria for sealing of numerous reservoirs. Additional wells will be required to accurately project reserve potential and economic importance of this most interesting area.

Terry Griffith
Geologist

Steve Hoffman
Chief Petroleum Engineer

FORM OG111(10/81/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 281-468

REPORT ON PROPOSED OPERATIONS

520 (field code)
12 (area code)
10 (new pool code)
10 (old pool code)

Mr. Harry Hull, Agent
Argo Petroleum Corp.
P.O. Box CI
Ventura, CA 93002

Santa Paula, California
Dec. 28, 1981

Your supplementary proposal to drill well "Ferndale" 9,
A.P.I. No. 111-21105, Section 16, T. 4N, R. 21W, SB B. & M.,
Ojai field, Silverthread area, Miocene pool,
Ventura County, dated 12/17/81, received 12/21/81 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment of at least DOG Class III 5M B shall be installed on the 7" casing and maintained in operating condition at all times.
2. In all other respects, the provisions set forth in our report No.P281-247 dated July 27, 1981 shall apply.

MA - S. Current
Dec. 30 1981
Data & Logs -
interval, 8500 - 9600'
Indicate no Non
Associated Gas present,
on this Basic class III
Inj Base will be Adequate
to complete well

Blanket Bond
MD:b

M. G. MEFFERD, State Oil and Gas Supervisor

By John I. Hardoin
John I. Hardoin, Deputy Supervisor

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

SUPPLEMENTARY NOTICE

DIVISION OF OIL AND GAS
RECEIVED
DEC 21 1981
SANTA PAULA, CALIFORNIA

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
BB	—	✓

DIVISION OF OIL AND GAS

Santa Paula Calif.

A notice to you dated July 21, 19 81, stating the intention to

Drill (Drill, rework, abandon), Well No. Ferndale No. 9, API No. 111-21105,

Sec. 16, T. 4N, R. 21W, S.B. B. & M., Silverthread Field,

Ventura County, should be amended because of changed conditions.

The present condition of the well is as follows:

Total depth 8998'

Complete casing record including plugs and perforations:

16" cem. 42'

9-5/8" cem. 921'

7" cem. 8949'

We now propose

Drill to 9500'

Run and cement 5" liner from 8800' to 9500'.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 940 East Santa Clara Street (Street)
Ventura, California 93001 (City) (State) (Zip)
Telephone Number (805) 653-5111

Argo Petroleum Corporation (Name of Operator)
By Harry Hall (Name) 12-17-81 (Date)
Type of Organization Corp. (Corporation, Partnership, Individual, etc.)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

No. T 281-200

DIVISION OF OIL AND GAS

Report on Operations

Mr. Harry Hull, Agent
Argo Petroleum Corp.
Box CI
Ventura, CA 93002

Santa Paula, Calif.
Oct. 29, 1981

Your operations at well "Ferndale" 9, API No. 111-21105, Sec. 16, T. 4N R21W SB, B.& M. Ojai Field, in Ventura County, were witnessed on 9/6/81. F. Taylor, representative of the supervisor, was present from 1700 to 1900. There were also present Bill Belcher, Drilling Foreman

Present condition of well: 9 5/8" csg 921'.

The operations were performed for the purpose of testing the blowout prevention and installation.

DECISION:

THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

b

M. G. MEFFERD
State Oil and Gas Supervisor

By _____
Deputy Supervisor
John L. Hardoin

OG109 (6-77-GSRI-15M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF CORRECTION OR CANCELLATION

Santa Paula, California
Aug. 24, 1981

Mr. Harry Hull, Agent
Argo Petroleum Corporation
P.O. Box CI
Ventura, CA 93002

In accordance with your letter dated Aug.19, 1981

the following change pertaining to your well "Ferndale" 9 (111-21105),
Ojai field, Ventura County,
Sec. 16, T. 4N, R. 21W, S.B. B. & M., is being made in our records:

☒ The corrected location is Fr the NW cor of Sec 16, 1194Sly 4322'Ely

☐ The corrected elevation is

☐ Report No. , dated , has been corrected as follows:

☐ Your notice to (Drill, abandon, etc.) dated ,
and our report No. P , issued in answer thereto, are hereby cancelled inasmuch as the work will not be done. If you have a drilling bond on file covering this notice it will be returned. No request for such return is necessary.

☐ Other:

MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121
203	MS 9/8/81				

b

State Oil and Gas Supervisor

By John L. Hardoin, Deputy Supervisor

OG 165 (1-77-GSRI-3M)

FORM OG111(11/80/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

PW

No. P 281-242

REPORT ON PROPOSED OPERATIONS

520 (field code)
12 (area code)
10 (new pool code)
(old pool code)

Mr. Harry Hull, Agent
Arco Petroleum Corporatin
P.O. Box CI
Ventura, CA 93002

Santa Paula, California
July 27, 1981

Your proposal to drill, well "Ferndale" 9,
A.P.I. No. 111-21105, Section 16, T. 4N, R 21W, SB B. & M.,
Ojai field, Silverthread area, Miocene pool,
Ventura County, dated 7/28/81, received 7/23/81 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Sufficient cement shall be pumped back of the 9 5/8" casing to fill to the surface.
2. Unlined sumps, if they contain harmful waters, shall not be located over fresh water bearing aquifers.
3. Any sump used during these operations shall be thoroughly cleaned and filled with earth as soon as operations are completed.
4. Hole fluid of sufficient quality and quantity shall be maintained in the hole to control any subsurface condition, and a reserve supply shall be on hand for emergencies.
5. Blowout prevention equipment of at least DOG Class III 1M B shall be installed on the 9 5/8" casing and Class III 3M B on the 7" casing and maintained in operating condition at all times.
6. This office shall be consulted before placing any plugs or sidetracking any hole.
7. THIS DIVISION SHALL BE NOTIFIED TO WITNESS:
   a. A pressure test of the blowout prevention equipment before drilling below 800'.
   b. A production test of shut off within 30 days after completing the well.

Blanket Bond
MD:b

M. G. MEFFERD, State Oil and Gas Supervisor

By John L. Harrison, Deputy Supervisor

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

DIVISION OF OIL AND GAS
RECEIVED
JUL 23 1981
SANTA PAULA, CALIFORNIA

Form OG105 (8/80)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS
Notice of Intention to Drill New Well

C.E.Q.A. INFORMATION			
EXEMPT ☐ CLASS ____	NEG. DEC. ☐ S.C.H. NO. ____	E.I.R. ☒ S.C.H. NO. CUP 3344	DOCUMENT NOT REQUIRED BY LOCAL JURISDICTION ☐
See Reverse Side			

FOR DIVISION USE ONLY					
MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121
205 BH	7-24-81 BH	✓	BB	✓	✓

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to commence drilling well FERNDALE #9, API No. 111-21105 (Assigned by Division),

Sec. 16, T. 4N, R. 21W, S.B. B. & M., ~~SILVERTHREAD~~ OJAI Field, VENTURA County.

Legal description of mineral-right lease, consisting of ____ acres, is as follows: ____ (Attach map or plat to scale)

PREVIOUSLY SUBMITTED

Do mineral and surface leases coincide? Yes X No ____. If answer is no, attach legal description of both surface and mineral leases, and map or plat to scale.

Location of well ~~1327~~ 1194 feet S ly (Direction) along section / ~~property line~~ (Cross out one) and ~~4327~~ 4322 feet E ly (Direction)

at right angles to said line from the NW corner of section / ~~property~~ (Cross out one) 16 or

Is this a critical well according to the definition on the reverse side of this form? Yes ☐ No ☒

If well is to be directionally drilled, show proposed coordinates (from surface location) at total depth: 320 feet W (Direction) and 250 feet N (Direction)

Elevation of ground above sea level 1211 feet.

All depth measurements taken from top of KB (Derrick Floor, Rotary Table, or Kelly Bushing) that is 18 (1229) feet above ground.

PROPOSED CASING PROGRAM

SIZE OF CASING INCHES A.P.I.	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS	CALCULATED FILL BEHIND CASING (Linear Feet)
9 5/8"	32.3	H-40	0	800	800	800 (to surf)
7"	23# 26#	N-80	0	~~7000~~ 5000	~~7000~~ 5000	4500 (toc 3000')

July 29 MD 5 cement

(A complete drilling program is preferred and may be submitted in lieu of the above program.)

Intended zone(s) of completion Mohnian Sands 6400' 3000 p.s. (Name, depth, and expected pressure) Estimated total depth ~~7000~~ 5000

It is understood that if changes in this plan become necessary we are to notify you immediately.

Name of Operator	Type of Organization (Corporation, Partnership, Individual, etc.)	
Argo Petroleum Corporation	Corporation	
Address	**City**	**Zip Code**
940 E. Santa Clara	Ventura, California	93001
Telephone Number	**Name of Person Filing Notice**	**Signature** / **Date**
(805)648-2514	Harry Hull	Harry Hull / 7-21-81

This notice and indemnity or cash bond shall be filed, and approval given, before drilling begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

PROPERTY/WELL TRANSFER OR ACQUISTION

Seneca Resources Corporation (S2630)

to

Vintage Production California LLC (V1370)

Effective April 25, 2008

OPERATOR Amoco Arco Pet. Corp
WELL NO. "Vallex-Ferndale 110
MAP 203

INTENTION	Drill	Rework	Susp	Susp		
NOTICE DATED	2-18-82	7-12-89	-	-		
P-REPORT NUMBER	282-75	289-230	290-336	292-5		
CHECKED BY/DATE	MS 12-7-82					
MAP LETTER DATED	12-11-82					
SYMBOL						

	REC'D	NEED	REC'D	NEED	REC'd	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED
NOTICE	2-22-82		7-12-89		8-17-90							
HISTORY	11-29-82											
SUMMARY	11-29-82											
E-LOG	11-29-82											
MUD LOG	11-29-82											
DIPMETER	12-10-82 (1-14-83)											
DIRECTIONAL	11-29-82											
CORE/SWS												
CBL	11-29-82											
Den-Neu	11-29-82											
Prod 1150	2-18-83											
RECORDS COMPLETE	MJK	Florez										

ENGINEERING CHECK

T-REPORTS	✓					
OPERATOR'S NAME	✓					
WELL NO.	✓					
LOC & ELEV	✓					
SIGNATURE	✓					
SURFACE INSP.						
FINAL LETTER OK						

FINAL LETTER MAILED

REMARKS: release from conf status MS 4-16-84

RELEASED BOND

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES

REPORT OF CORRECTION OR CANCELLATION

Ventura, California
April 14, 1993

James A. Beck, Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

In accordance with our Permit to Conduct well Operations dated January 9, 1992
NOTE: This notice will be cancelled if work has not commenced prior to January 1, 1993.

the following change pertaining to your well "Valex-ferndale" 110
(Well Designation)

Ojai field, Ventura County,

Sec. 16, T. 4N, R. 21W, SB B.M., is being made in our records:

___ The corrected location is _____

_____

___ The corrected elevation is _____

___ Report No. _____, dated _____, has been

corrected as follows: _____

_____

_____

Your notice to rework _____ dated _____,
(Drill, abandon, etc.)
and our Report No. P 292-5___, issued in answer thereto, are hereby cancelled inasmuch as the work will not be done. If you have a drilling bond on file covering this notice it will be returned. No request for such return is necessary.

___Other: _____

_____

tkc

WILLIAM F. GUERARD, Jr.
Acting State oil and Gas Supervisor

By _____
Patrick J. Kinnear, Deputy Supervisor

OG165

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P292-5
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
January 9, 1992

Your supplementary proposal to rework well "Valex-Ferndale" 110, A.P.I. No. 111-21163, Section 16, T. 4 N., R. 21W, S.B. B.&M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated ----, received 12/17/91, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Requirements specified in permit No. P289-230 dated July 18, 1989 shall apply.

NOTE: This notice will be cancelled if work has not commenced prior to January 1, 1993.

Blanket Bond
SF:ljg

Engineer Steve Fields

Phone (805) 654-4761

K.F. HENDERSON, Acting Chief

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

DIVISION OF OIL AND GAS
RECEIVED
DEC 17 1991
VENTURA, CALIFORNIA

The Resources Agency of California
Department of Conservation
DIVISION OF OIL AND GAS

WELL STATUS INQUIRY

Ventura, California
December 9, 1991

Murdock M. Baker, Jr. Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

In a notice dated 8/17, 1990, you propose to rework well "Valex-Ferndale" 110 (111-21103)
Sec. 16, T. 4N, R. 21W, SBB.&M., Ojai
(Field or County)

Please indicate below, conditions or intentions regarding this proposed work and return the completed form to this office within 10 days.

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear, Deputy Supervisor

PC/tkc

___PROSOSED WORK HAS BEEN DONE. (If you check this space, please file the required well records on this work in duplicate within 60 days after work was completed.*)

___PROPOSED WORK IS IN PROGRESS AND SHOULD BE COMPLETED ABOUT _____,19____.

_x_PROPOSED WORK HAS NOT BEEN DONE, BUT WE STILL INTEND TO DO THE WORK.**

___SUPPLEMENTARY NOTICE (Form OG123) ATTACHED.

_X_PLEASE CONSIDER THIS FORM AS A SUPPLEMENTARY NOTICE.

___WE DO NOT INTEND TO DO THE PROPOSED WORK. Please cancel our notice to _____, dated _____,19____.

___OTHER: _____

James A. Beck
(Signature)

James A. Beck, Gen. Mgr. Exploration
(Name and Title)

*Division 3 of the Public Resources Code states in part:
Section 3215,...Well records shall be filed 60 days after completion or suspension of proposed work.

**Section 3203,...If operations have not commenced within one year of receipt of the notice, the notice will be considered cancelled. (To prevent cancellation, file a Supplementary Notice with the Division.)

OGD3

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P290- 336
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
September 6, 1990

Your supplementary proposal to rework well "Valex-Ferndale" 110, A.P.I. No. 111-21163, Section 16, T. 4 N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated ------, received 8/17/90, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Requirements specified in permit No. P289-230 dated 7/18/89 shall apply.

Blanket Bond
SF:ljg

Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By _____
Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

DIVISION OF OIL AND GAS
RECEIVED
AUG 28 1990
VENTURA, CALIFORNIA

The Resources Agency of California
Department of Conservation
DIVISION OF OIL AND GAS

RECEIVED
AUG 17 1990
SANTA PAULA

WELL STATUS INQUIRY

Ventura, California
August 14, 1990

Murdock M. Baker, Jr. Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

In a notice dated 7/12, 1989, you propose to rework well "Valex-Ferndale" 110 (111-21163)
Sec. 16, T. 4N, R. 21W, SBB.&M., Ojai
(Field or County)

Please indicate below, conditions or intentions regarding this proposed work and return the completed form to this office within 10 days.

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinhear, Deputy Supervisor

PC/tkc

___PROSOSED WORK HAS BEEN DONE. (If you check this space, please file the required well records on this work in duplicate within 60 days after work was completed.*)

___PROPOSED WORK IS IN PROGRESS AND SHOULD BE COMPLETED ABOUT _____,19____.

_X_PROPOSED WORK HAS NOT BEEN DONE, BUT WE STILL INTEND TO DO THE WORK.**

___SUPPLEMENTARY NOTICE (Form OG123) ATTACHED.

_✓_PLEASE CONSIDER THIS FORM AS A SUPPLEMENTARY NOTICE.

___WE DO NOT INTEND TO DO THE PROPOSED WORK. Please cancel our notice to _____, dated _____,19____.

___OTHER:_____

James A. Beck
(Signature)

James A. Beck, General Manager Operations
(Name and Title)

*Division 3 of the Public Resources Code states in part:
Section 3215,...Well records shall be filed 60 days after completion or suspension of proposed work.

**Section 3203,...If operations have not commenced within one year of receipt of the notice, the notice will be considered cancelled. (To prevent cancellation, file a Supplementary Notice with the Division.)

OGD3

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No.P 289-230
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
July 18, 1989

Your proposal to rework well "Valex-Ferndale" 110, A.P.I. No. 111-21163, Section 16, T. 4 N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 7/12/89, received 7/13/89, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOG Class II 2M requirements shall be installed and maintained in operating condition at all times.
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. Wire line operations are conducted through at least a 2M lubricator.
4. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.

Blanket Bond
SF:ljg

Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Linnear
Patrick J. Linnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

VISION OF OIL AND
RECEIVED
JUL 13 1989
VENTURA, CALIFORNIA

Notice of Intention to Rework Well

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	FORMS	
	OGD 114	OGD 121
BB.	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well Valex-Ferndale #110 (Well designation), API No. 111-21163

Sec. 16, T. 4N, R. 21W, S.B. B. & M., ~~Silverthread~~ ojai Field, Ventura County.

The present condition of the well is as follows:

1. Total depth 7771'

   Eff. Depth 7192' (top of fish).

2. Complete casing record, including plugs and perforations (present hole)

   SEE ATTACHED

3. Present producing zone name Mohnian ; Zone in which well is to be recompleted Mohnian

4. Present zone pressure 2100 psi ; New zone pressure 2100 psi

5. Last produced 5/89 (Date) 11 (Oil, B/D) 1 (Water, B/D) 50 (Gas, Mcf/D)

   (or)

   Last injected _____ (Date) _____ (Water, B/D) _____ (Gas, Mcf/D) _____ (Surface pressure, psig)

6. Is this a critical well according to the definition on the reverse side of this form? ☐ (Yes) ☒ (No)

The proposed work is as follows:

Cleanout to effective bottom and recomplete the zone from 7158'-7176'
E-Log measurement.

Note: If well is to be redrilled, show proposed new bottom-hole coordinates and true vertical depth.

It is understood that if changes in this plan become necessary, we are to notify you immediately.

Address 725 E. Main, Suite 200 (Street)

Santa Paula (City) CA. (State) 93060 (Zip)

Telephone Number (805) 656-2445

Seneca Resources Corporation (Name of Operator)

By Eric R. Wilson (Name-Printed)

Eric R. Wilson (Name-Signature) 7/12/89 (Date)

Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

OG107 (8/87/DWRR/5M)

NECA RESOURCES CORPORATION
VALEX-FERNDALE 110
CASING DETAIL

CASING DETAIL:	13-3/8" (48#, J-55) cmt'd at 720' with 945 cf.
	9-5/8" (36 & 40#, K-55 & N-80) cmt'd at 5026' with 1475 cf.
	7" (23 & 26#, K-55) cmt'd at 7760' with 900 cf.
	5" (18#, N-80 Security FJ) liner hung with Baker Lead Seal Hanger at 5299' and shoe at 6614'. One basket on bottom of last two joints. Slotted 5303' - 5379' (40 M, 12 rows - 2" slot with 6" centers).
PROD. PACKER:	Baker Retrieva-D set originally at 7100' but moved downhole during fishing operations. Packer is above 4-1/2" millout extension, over 4-1/2" to 2-7/8" crossover (14' below top of packer) over 3-1/8" mill. Original length of production packer assembly was 47.19'.
9/27/82 FISH:	Production Packer tail assembly. 4-1/2" x 2-7/8" crossover (milled off with 3-1/8" mill), over 2-7/8" x 2-3/8" crossover, over 2-3/8" x 2-1/16" crossover, over 30' of 2-1/16" tubing with chemical cut on bottom. Bottom tubing stopped at 7137', tubing plug at 7134'. After millout, 1-5/8" imp. block to 7188'.
4/28/82 FISH:	Bottom of tail assembly. 3' of 2-1/16" tubing was chemical cut. "R" profile nipple with "G" blanking plug in place 1' off bottom. Cut was made at 7144' originally with tail at 7147' originally.
7" CSG. DAMAGE:	5484'-5518', 5538'-5567', 5577'-5590', 5659'-5671', 5707'-5712', 6250'-6254', 6268'-6267', 6532'. All behind scab liner.
PERFORATIONS:	4 (0.44") JHPF IN UPPER GRAFE @ 5540', 5553', 5565', 5587', 5604', 5612.5', 5630', 5645', 5652.5', 5665' (40 holes from 5/30/82).
	4 (0.44") JHPF IN LOWER GRAFE @ 6231', 6242', 6250', 6421', 6435', 6450', 6477', 6485', 6505', 6512', 6523', 6544', 6554' (52 holes from 5/20/82).
	4 (0.44") JHPF IN VALEX SANDS @ 7188', 7194', 7201', 7206', 7212', 7218', 7237', 7242', 7248', 7334', 7342', 7350', 7354', 7360', 7368', 7381', 7384', 7402', 7405', 7408', 7412', 7420', 7427', 7432', 7437', 7443', 7450', 7456', 7495', 7500', 7504', 7522', 7528', 7533', 7539', 7542', 7544', 7548', 7551', 7554' (160 holes from 4/22/82).
	4 (0.50") JHPF WSO HOLES @ 5492', 5708', 6193', 6267', & 6409' from 5/15/82 all squeezed and tested 500-1000#.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF PROPERTY AND WELL TRANSFER

Field or county	District
Ojai	2
Former owner	**Date**
Argo Petroleum Corp.	Sept. 10, 1987

Name and location of well(s)

Sec. 16, T. 4N., R. 21W., SBB&M

"Barker-Ferndale" 1	(111-20423)	"Valex-Ferndale" 211	(111-21178)
"Barker-Ferndale" 2	(111-20604)	"Valex-Ferndale" 214	(111-21180)
"Barker-Ferndale" 3	(111-20609)	"Valex-Ferndale" 215	(111-21206)
"Barker-Ferndale" 4	(111-20685)	"Valex-Ferndale" 313	(111-21314)
"Barker-Ferndale" 5	(111-20702)	"Ferndale" 8	(111-20732)
"Barker-Ferndale" 6	(111-20730)		
"Valex-Ferndale" 107	(111-21066)		
"Valex-Ferndale" 110	(111-21163)		
"Valex-Ferndale" 209	(111-21105)		

Description of the land upon which the well(s) is (are) located

Date of transfer, sale, assignment, conveyance, or exchange	New owner	Type of organization
7-17-87	Seneca Resources Cprporatipn	Corp.
	Address: 511 16th St. Mall, Ste 300, Denver, CO 80202	Telephone No.: (303) 825-7401

Reported by: Seneca Resources Corp.

Confirmed by: Argo Petroleum Corp.

New operator new status (status abbreviation)	Request designation of agent
PA	
Old operator new status (status abbreviation)	**Remarks**
PA	

Deputy Supervisor: Patrick J. Kinnear

Signature: Patrick J. Kinnear

OPERATOR STATUS ABBREVIATIONS

PA – Producing Active
NPA – No Potential, Active
PI – Potential Inactive
NPI – No Potential, Inactive
Ab – Abandoned or No More Wells

FORM AND RECORD CHECK LIST

Form or record	Initials	Date	Form or record	Initials	Date
Form OGD121			Map and book		
Form ODG148			Notice to be cancelled		
New well cards			Bond status		
Well records			EDP files		
Electric logs					
Production reports					

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

No. T 283-30

DIVISION OF OIL AND GAS

Report on Operations

Mr. Harry Hull, Agent
Argo Petroleum Corp.
Box CI
Ventura, CA 93002

Santa Paula, Calif.
April 11, 1983

Your operations at well "Valex-Ferndale" 110, API No. 111-21163,
Sec. 16, T. 4N R. 21W, SB B.& M. Ojai Field, in Ventura County,
were witnessed on 2/18/83. R. Habel, representative of
the supervisor, was present from 0800 to 0830. There were also present Nick Ashton,

Present condition of well: 13 3/8" cem 720'; 9 5/8" cem 5026'; 7" cem 7760'; perf. 5540-5665', 6231-6554', and 7188-7554', perf 6409', 6267', 6193', 5708', and 5492' WSO, 5 1/2" security flush joint 5299-6614'. TD 7771', Effect depth 7669'.

The operations were performed for the purpose of demonstrating a water shut-off on the 7" casing by means of a production test.

DECISION:

THE 7" SHUT-OFF AT 5540' IS APPROVED.

M. G. MEFFERD
State Oil and Gas Supervisor

By
Murray T. Bosch
Deputy Supervisor

OG109(12-80-15M)

Form OG100 (7/79)

DOG

DIVISION OF OIL AND GAS
RECEIVED
NOV 29 1982
SANTA PAULA, CALIFORNIA

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

API No. 111-21163

WELL SUMMARY REPORT

Operator	Well				
ARGO PETROLEUM CORPORATION	VALEX-FERNDALE #110				
Field	**County**	**Sec.**	**T.**	**R.**	**B.&M.**
~~Silverthread~~ Ojai	Ventura	16	4N	21W	SB

Location (Give surface location from property or section corner, street center line and/or California coordinates)
1077'S and 2934'E from the NW corner of Section 16, T4N-R21W (SB)

Elevation of ground above sea level
1061'

Commenced drilling (date): 3/19/82
Completed drilling (date): 4/17/82
Commenced producing (date):

☒ Flowing ☐ Pumping
☐ Gas lift

Name of producing zone(s):
Upper Miocene

Total depth (1st hole)	(2nd)	(3rd)
7771'		

Present effective depth: 7669'

Junk: none

Depth measurements taken from top of:
☐ Derrick Floor ☐ Rotary Table ☒ Kelly Bushing
Which is 18 feet above ground

GEOLOGICAL MARKERS	DEPTH
T. Big Canyon Fault Zone	3850'
B. Big Canyon Fault Zone	4700'
Lower Mohnian Sands	7155'

Formation and age at total depth: Upper Miocene

	Clean Oil (bbl per day)	Gravity Clean Oil	Percent Water including emulsion	Gas (Mcf per day)	Tubing Pressure	Casing Pressure
Initial Production	262	31.1	1.0%	166	420	0
Production After 30 days	132	32.3	3.0%	68	320	320

CASING RECORD (Present Hole)

Size of Casing (API)	Top of Casing	Depth of Shoe	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Number of Sacks or Cubic Feet of Cement	Depth of Cementing (if through perforations)
13-3/8"	surface	720'	48#	J-55	New	17½"	945 cf	
9-5/8"	surface	5026'	36#	K-55	New	12¼"	1475 cf	
7"	surface	7760'	23#,26#	K-55,N-80	New	8-3/4"	900 cf	
5-1/2"	5299'	6614'	18#	Security Flush jt.	New	8-3/4"	-	-

PERFORATED CASING (Size, top, bottom, perforated intervals, size and spacing of perforation and method.)
7188'-7554', 6231'-6554', 5540'-5665' 4(0.44") JSPF

Was the well directionally drilled? If yes, show coordinates at total depth
☒ Yes ☐ No 708.01'N and 52.38'E of surface location

Electrical log depths: DIL: 4977'-684' and 7755'-5026'

Other surveys: FDC/CNL, GR, Dipmeter, Mudlog, Directional Survey + CBL, GRL, CCL & MSG

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Name	Title	
Harry Hull	District Superintendent	
Address	**City**	**Zip Code**
940 E. Santa Clara St.	Ventura, CA	93001
Telephone Number	**Signature**	**Date**
(805) 653-5111	Harry Hull	11-17-82

SUBMIT IN DUPLICATE

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

DIVISION OF OIL AND GAS
RECEIVED
NOV 29 1982
SANTA PAULA, CALIFORNIA

Operator Argo Petroleum Corp. Field Silverthread County Ventura
Well Valex-Ferndale #110, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21163 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date Oct. 29, 1982

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
3/16/82	MIRU Bawden Rig #27.
3/17/82	Delayed due to rain.
3/18/82	Continued rigging up.
3/19/82	Finished rigging up. MU navidrill and navidrilled rat hole. Navidrilled 12¼" hole to 69'. POOH laying down navidrill. MU bit and drilled 12½" hole to 125'.
3/20/82	Drilled to 449'.
3/21/82	Drilled to 730'. POOH. MU Grant hole opener and started to open 12½" hole to 17½" hole. Cement around conductor pipe cracked. Hole fluid communicating to cellar. Rigged up jet line to keep cellar cleaned out.
3/22/82	Finished rigging up jet line from cellar to shaker tank. Opened hole to 301'.
3/23/82	Opened hole to 730'. Circulated for casing. POOH. RU and ran shoe joint and second joint of casing to 40'. Stood back casing in derrick. MU 17½" hole opener and worked past boulders at 40' and 55'. Attempted to run casing. Casing stopped at 55'. W.O. 17½" stabilizer. MU 17½" hole opener and stabilizer. RIH. Reamed from 30' to 120'.
3/24/82	POOH. Layed down hole opener and stabilizer. RU and ran 18 jts. of 13-3/8", 48#, J-55, ST&C casing with B&W guide shoe at 720', 1 regular centralizer 10' above shoe and 1 regular centralizer on second joint. Cement basket at ±140. RU Dowell and cemented casing as follows: Pumped 50 cf water ahead, followed by 810 cf class 'G' + 2% gel + 3% $CaCl_2$, followed by 135 cf class 'G' neat + 3% $CaCl_2$. Dropped top plug and displaced with 600 cf mud. Good circulation throughout cement job. Cement returns to surface. CIP at 0715 hrs. WO cement. Cleaned out cellar. Cut off conductor and 13-3/8" casing. Welded on 13-3/8"x12", 900 series well head. Nippled up BOPS.
3/25/82	Finished nippling up BOPE. Tested blind rams to 1000 psi. Mu bit and RIH. Tested pipe rams, kill line and choke manifold to 1000 psi and annular preventer to 500 psi. DOG witnessed and approved. Tagged cement at 675'. Drilled out cement and shoe. Drilled to 793'. POOH. MU navidrill and bit and drilled mousehole. RIH and navidrilled to 880'.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corp. Field Silverthread County Ventura
Well Valex-Ferndale #110, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21163 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date Oct. 29, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
3/26/82	Navidrilled to 1386'. Tripped for BHA and layed down navidrill. RIH.
3/27/82 to 3/29/82	Finished RIH. Drilled to 3657'.
3/30/82	Drilled to 3930'. Circulated and conditioned mud. Raised mud weight from 77 pcf to 88 pcf. Drilled to 4045'.
3/31/82	Drilled to 4376'.
4/1/82	Drilled to 4546'. Lost 800 psi pump pressure and 10,000 lbs. weight. POOH. Fish left in hole: Bit, monel and 1 drill collar. Made up overshot and fishing tools and RIH. Latched onto fish and circulated. Chained out of hole with fish and layed down same.
4/2/82	Inspected drill collars and found 2 bad drill collars. Layed down bad drill collars. MU bit and RIH. Reamed from 4430' to 4546'. Drilled to 4842'. Tripped for new bit.
4/3/82	RIH and drilled to 5062'. Circulated and conditioned mud for logs. POOH. RU Schlumberger.
4/4/82 to 4/5/82	Schlumberger logged well as follows: DIL/Caliper 4977' to 684' FDC/CNL 4977' to 2920' Rigged down Schlumberger. RIH and conditioned mud for casing. RU and ran 135 jts. of 9-5/8", K-55, 36#, LT&C and 2 jts. of 9-5/8", 40#, N-80, LT&C casing on top with B&W guide shoe at 5026' and float collar at 4949'. One regular centralizer on joints #1, #2, #4, #6, #8, #10, #12, #14, #16 and #17-#31 and cement basket on joint #33 (±3800'). RU BJ Cementers and cemented as follows: 80 cf weighted mud sweep ahead, followed by 1275 cf of 1:1 Diamix A + 4% gel, followed by 200 cf class 'G' neat. Displaced with 2251 cf mud. Did not bump plug. Bled back 9 cf and float held. CIP at 0020 hrs. 4/5/82. Full circulation throughout cement job. Cleaned out cellar. Set 9-5/8" casing slips and landed casing with 100,000#. Cut off casing and installed 12",900x10",900 casing spool. Layed down 7-3/4" drill collars and 12¼" stabilizers. Picked up monel, 6¼" drill collars. Measured in hole and tagged cement at 4929'. Tested pipe rams, kill line and choke manifold to 1000 psi. Tested Hydril to 500 psi. Repaired mud cross. Test not witnessed by DOG.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corp Field Silverthread County Ventura
Well Valex-Ferndale #110, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21163 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date Oct. 29, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date

4/6/82 Repaired leak on mud cross. Drilled out float, cement and shoe. Drilled to 5538'. Drilling break from 5500' to 5538'. Increased mud weight from 74 pcf to 84 pcf. Drilled to 5665'.

4/7/82 Drilled to 5758'.. Tripped for navidrill. Navidrilled to 5913'.

4/8/82 Navidrilled to 6108'.

4/9/82 Navidrilled to 6140'. POOH laying down navidrill. MU bit and RIH. Reamed from 5735' to 6140'. Drilled to 6444'.

4/10/82 to 4/14/82 Drilled to 7771'.

4/15/82 Conditioned mud for logs. POOH. RU Schlumberger and logged well as follows:

DIL-SFL	7755' to 5026'
FDC/CNL-GR	7730' to 5026'

Rigged down Schlumberger. RIH and conditioned mud. POOH. Rigged up Schlumberger and logged as follows:

Dipmeter	7000' to 5026'

4/16/82 Finished running dipmeter. Rigged down Schlumberger. RIH and conditoned mud for casing. POOH laying down drill pipe and BHA.
RU and ran 199 jts of 7", 23# and 26#, N-80 and K-55, LT&C casing with differential shoe at 7760' and float collar at 7670' as follows:

Shoe	2.40'	@ 7760.22'
2 jts. 7", 26#, N-80, LT&C	86.00'	
Float collar	1.90'	Top@7669.92'
18 jts. 7", 26#, N-80, LT&C	777.56'	Top@6892.36'
63 jts. 7", 23#, N-80, LT&C	2461.90	Top@4430.46'
51 jts. 7", 23#, K-55, LT&C	2004.22'	Top@2426.24'
65 jts. 7", 23# N-80, LT&C	2426.24'	Surface
Total: 199 jts.		

Casing equipped with regular centralizers one per joint, on #1-#16, #48-#59, #71 and one every other joint on #18-#46 and one every third joint on #62-#70. Closed loop turbulators: 3 on jt. #3, 2 on jt. #4, and 5 on jt. #48.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corp. Field Silverthread County Ventura
Well Valex-Ferndale #110, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21163 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date Oct. 29, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
4/17/82	Finished running 7" casing. Laid down casing tools. RU Dowell and cmented casing as follows: Mixed and pumped 200 cf of spacer 3000 (91 pcf) followed by 900 cf self stress cement+ 0.2% de-foamer + 0.8% fluid loss additive. Displaced with 1714 cf mud. Bumped plug with 1750 psi. Bled back 10 cf and float held. CIP at 0537 hrs. 4/17/82. Good circulation throughout cement job. Rigged down Dowell and cleaned out cellar. Unflanged BOPE and landed 7" casing with 100,000#. Set out BOPE and nippled up tubing head. Tore out rig. Rig released at 1400 hrs. 4/17/82.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #110, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21163 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date October 29, 1982

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address)
(805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
4-23-82	MIRU prod. rig. Installed BOPE & tested to 2000 psig (DOG was notified but waived witnessing BOPE test.) Installed working platform. MU 6" bit & 7" 26# positive scraper. Measured, rabbitted, & picked up 2 7/8" J-55 EU tbg. Broke circulation @ 5000', 7000', & 7500'. Tagged top of cement @ 7669' (float collar). Circulated mud around. Pulled up two doubles.
4-24-82	Pressure tested csg to 500 psig. POH w/tbg, bit & scraper. Rigged Welex. Tagged float collar @ 7651'. Logged well 7643'-4340' under 500# csg. press. (CBL, GRL, CCL, MSG). RIH w/tbg. & STC. Backscuttled 100 bbls. Fresh water spacer, followed by 300 bbls. lease oil. Hauled ± 200 bbls. of displaced mud up to Ferndale #11. Pulled up two doubles.
4-25-82	Finished POH. Rigged Pengo perforators. Perf w/ 0.44" jets 7188', 7194', 7202', 7206', 7212', 7218', 7237', 7242', 7248', 7334', 7342', 7350', 7354', 7360', 7368', 7381', 7384', 7402', 7405', 7408', 7412', 7420', 7427', 7432', 7437', 7443', 7450', 7456', 7495', 7500', 7504', 7522', 7528', 7533', 7539', 7542', 7544', 7548', 7551', 7554' (160 holes). Wellhead had 400# at completion of perforating @ 8:00 P.M. 1250 psig, @ 10:00 P.M. 1450 psig.
4-27-82	Unlanded tbg. Tagged retrieva-D packer w/seal assembly @ 7091'. Spaced out tbg. & landed on donut w/13,000# compression on seal assembly. Rigged flow tree. Rigged Archer Reed. Ran pulling tool. Pressured tbg. to 1600 psig. Latched onto blanking plug in "R" nipple. Pulled loose w/equalizing pressure of 1490 psig. Pulled up, stopping after 35' of travel. Unable to get through 2 3/8" x 2 1/16" crossover, in tail below pkr. Reseated blanking plug. Had to work pulling tool through crossover. POH w/tools. Ran in w/pulling tool, spangler jars, & hydraulic jars (47.5' tool length overall. Max. O.D. of 1.44".) Ran in to crossover w/out restriction. Latched onto plug. Pulled up 35', stopped again. Jarred on plug. Latching dogs on pulling tool sheared off. POH. Ran 1 5/8" tool turned down to 1.44". Latched onto plug. Split the overshot on pulling tool.
4-28-82	1250 psig on well. MU 1.54" swage with spangler & hydraulic jars & sinker bars. RIH, found slight restriction @ crossover. POH. MU 1.56" swage. RIH, started swaging on crossover. Unable to swage through. POH & found marks covering swage, 2½" in length. RIH w/ 1.56" swage, cont'd swaging, unable to swage through. POH. MU pulling tool. RIH & latched onto blanking plug. Pulled off at each attempt. POH & adjusted tools. RIH, latched onto plug & pulled it loose. Pulled

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #110, Sec. 16, T 4N, R 21W., SB B. & M.
A.P.I. No. 111-21163 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 10-29, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
4-26-82	Set Retrieva "D" packer @ 7100'. R/D Pengo. Rig tbg. tools. RU hydrotest. Make up seal assembly & pump shoe. Tested in hole w/ 115 stands tbg. Landed on donut. R/D hydrotest.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #110, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21163 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date October 29, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address)
(805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
4-28-82	(Continued from Page 5). up to tight spot in crossover. Set back down to close hydraulic jars, sheared safety pin in pulling tool. Tore out Archer Reed. Rigged McCullough. RIH w/ 1 -7/16" chemical cutter. Pressured tbg. to 1500 psig. Made chemical cut @ 7144', 2' above blanking plug. Equalized pressure 1450 psig. Cutting tool stuck. Started flowing well to help release tools. Bled down to 600 psig in ± 3 minutes through ± 18/64" choke. Shut in well. Worked tools loose & POH. Tore out McCullough. Installed 10/64" bean in flowline.
4-30-82	Continued flowing well on 12/64" bean. Pruett RIH w/ surface readout tools on capillary tbg. @ 5:10 P.M. Hung tools @ 7050'. Began plotting bottom hole pressure @ 7:00 P.M. Well made 219 bbls. in 24 hrs. Surface pressure 530 psig, composite cut 0.2%, gravity 31.5° @ 60° F. 165 MCF/D. Cum. prod. 420 bbls. Making 9 bbls/hr.
5-1-82	Flowed 73 bbls. in 8 hours (7:45 A.M. - 4:05 P.M.), on 12/64" bean. Composite cut 0.2%, gravity 31.1° @ 60° F. Final flow pressure 520 psig surface. Shut in @ 4:05 P.M. for pressure buildup.
5-2-82	Shut in for buildup.
5-3-82	POH w/ capillary tbg. & pressure tool. RIH w/ 1¼" pressure bomb on wireline, making gradient stops. Unable to get below 7163', reported depth. (Suspect incomplete chemical cut @ 7144'. Blanking plug apparently did not fall to bottom.) POH w/pressure bombs. Found marks on bottom of sinker bar. RIH w/capillary tbg. & pressure tool, & hung @ 7050'. At 11:00 P.M. returned well to production, flowing on 12/64" bean. At 7:00 A.M. made 80 bbls. in 8 hours. Composite cut 0.1%, trace of sand. Gravity 31.8° @ 60° F. 209 MCF/D.
5-4-82	Well made 264 bbls. in 23½ hrs. @ 7:00 A.M. W/H cut 5.0% water; tr. sand. Composite 1.0% water; tr. sand; 31.5° API @ 60° F. 420 psig tubing press.
5-5-82	Well flowed 253 bbls. in 24 hrs. At 7:00 A.M. composite cut 2.0% tr. sand, gravity of 31.3° API @ 60° F.
5-6-82	440 psig tbg. 14/64" bean. Made 266 bbls. in 24 hrs., 0.8% cut, gravity 31.2° API @ 60° F.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #110, Sec. 16, T 4N, R 21W, S.B. B. & M.
A.P.I. No. 111-21163 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date Oct. 29, 1982.

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
5-7-82 thru 5-8-82	RU Archer Reed wireline. RIH w/sinker bar & tag cut @ 7146', crossover @ 7114'. POH. RIH w/bottom tbg. stop & set @ 7137'. POH. RIH w/tbg. plug & set @ 7134'. POH. RIH w/top tbg. stop. Unable to get through crossover. POH & check tools. RIH w/top tbg. stop. Unable to get through crossover. POH. File down top tbg. stop. RIH w/top tbg. stop. Tool stuck in crossover. Pull out of tool & POH. Left top tbg. stop in crossover @ 7114'.
5-9-82	Tbg. press. 80 psig. Bled off immediately. Remove flow tree & rig for tbg. Unlanded tbg. & pull seal assembly from Retrieva-D pkr. Tbg. started unloading due to over-balance in hole. Backscuttle well w/ 150 bbls. lease oil. Hole equalized. POH w/tbg. Broke off seal assembly. MU Baker D-1 retrievable latching packer plug. RIH & latched into Retrieva-D. Pull up 1 jt. & shut down.
5-10-82	Change well over w/ 260 bbls. lease water. Spotted 2 sx sand on top of packer plug. POH w/tbg. RU Welex w/ full lubricator. Ran CBL, CCL logs under 1000 psig from 7092'-5100'. R/D Welex. MU Baker 7" fullbore on tbg. & RIH. Set pkr @ 6028'. RU Pengo. Perforate using tbg. guns 6409' w/ 4-0.5" JSPF. Took 5 runs. R/D Pengo. RU Dowell. Pumped 14 bbls. fresh water for breakdown. Held 1000 psig on annulus. Breakdown 2 BPM @ 4000 psig. Bled off pressure. Open unloader. Mix & pump 25 sx RFC cement. Displace w/ 25 bbls. water. Close unloader. Apply 1000 psig to annulus. Cont. displacement. Pumped 43 bbls. total. Avg. 2 BPM @ 4000 psig. Final 1/2 BPM @ 4000 psig.
5-11-82	Released F.B. pkr. Pulled up & reset @ 6074'. Rigged Pengo. RIH w/ 1 11/16" thru tbg. gun. Shot 4 holes @ 6267'. Tore out Pengo. RU Dowell. Pumped 7 bbls. fresh water for breakdown. Held 800 psig on annulus. Breakdown 1 BPM @ 3900 psig. Bled off pressure. Opened unloader. Mixed & pumped ± 10 sx RFC cement, 1 BPM @ 4000 psig. Did not get circulation. R/D Dowell. Reversed out cement from tbg. Pumped 2 bbls. water down tbg- Full circulation. Mixed & pumped 25 sx RFC cement. Displaced w/ 22 bbls. fresh water. Closed unloader. Applied 800 psig to annulus. Completed displacement. Pumped 40.5 bbls. total. Avg. 0.8 BPM @ 3900 psig. Final 0.2 BPM @ 3700 psig. C.I.P. @ 11:46 A.M. 5 min. SIP 3300 psig. Held pressure & WOC 2 hours. Tbg/csg 1000 psig. Attempted to release fullbore. Unscrewed tbg. Tbg. parted in starting threads. Screwed back in. Attempted to safety F.B. w/out success. Finally beat F.B. loose. POH w/ wet string. Found 551' of cement in tbg. & F.B. MU 6 1/8" bit. Rigged hydrotest. Spidered tbg. & tested into hole @ 5000 psig. Tagged T.O.C. @ 6074'. Rigged out hydrotest.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #110, Sec. 16, T 4N, R 21W, S.B.B. & M.
A.P.I. No. 111-21163 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date October 29, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
5-12-82	RU power swivel & drill out cement 6068'-6120'. Ran to 6319'. Pressure tested squeeze to 1500 psig for 5 min - OK. POH. RU Welex. Shot 4 (0.44") JSPF @ 6267'. R/D Welex. RIH w/tbg. & Baker 7" F.B. Set pkr @ 6015'. RU swabbing equip. Wrong size BOP. Shut down.
5-13-82	Changed out lubricator head. Swabbed fluid from surface to 2545'. Waited 1 hour, tagged fluid @ 2445'. 100' rise in 2 7/8" tbg (0.58 bbls). Continued swabbing to 5850'. Waited 1 hour, tagged fluid @ 5745'. 105' fluid rise (0.61 bbls). Total recovery of 33 bbls. (water w/skim of oil, no gas). Tore out swab equip. RU Dowell. Applied 700 psig to annulus. Established breakdown w/ 53 cf water, 9 cf/m @ 3500 psig. Opened unloader. Mixed & pumped 25 sx (40 cf) RFC cement followed by 120 cf water. Closed unloader, applied 700 psig to annulus & continued displacement. Total displacement 225 cf. Calculated 13 cf cement out shot holes; theoretical TOC @ 6145'. Avg. 8 cf/m @ 3500 psig. Final (max.) 1 cf/m @ 4400 psig. Held pressure & WOC 2 hours. Found 1200 psig tbg/1000 psig csg. Bled off pressure. Released F.B. & POH. MU 6 1/8" bit. RIH, tagged cement @ 6134'. RU power swivel. Drilled out cement to 6230'. Pulled up to 5800'.
5-14-82	Finished POH w/tbg. Broke off bit. Filled hole. RU Pengo. Shot 4 1/2" holes @ 6193'. MU Baker 7" fullbore.RIH on tbg, set F.B. @ 5950'. Swab from surface to 5882'. Let set 1 hour. Ran swab, found no fluid rise, let set 1 hour. Ran swab, no fluid rise.
5-15-82	Ran swab to 5882', no fluid rise. RU Dowell. Fill hole w/lease water. Established breakdown @ 8½ cf/m @ 3900 psig w/ 54 cf fresh water. Open fullbore. Pump 10 cf to establish circulation. Pump 25 sx RFC. Displace w/ 119 cf water. Close F.B. Finish displacement. Total displacement 237½ cf, 8 cf/m @ 3900 psig avg. Final rate 1 cf/m @ 3700 psig. Close in under pressure for 2 hours. Open up w/tbg - 3000 psig/csg 1200 psig. Bled down. Open fullbore, change over to 80# clay based mud. (236 bbls). POH w/fullbore. RU Pengo. Shot 4½" holes @ 5708'. R/D Pengo. RIH w/ fullbore. Set F.B. @ 5450'.
5-16-82	Opened unloader. Displaced tbg w/ 32 bbls lease water. Closed unloader. RU swab equipment. Swab to 5350'. Recovered 31 bbls. Waited 1 hour. Tag fluid @ 5090'. R/D swab equip. Opened unloader. Displaced tbg w/ 177 cf of water. Closed unloader. Pumped 70 cf water for breakdown. 12 cf/m @ 2400 psig. Opened unloader.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #110, Sec. 16, T 4N, R 21W, S.B.B. & M.
A.P.I. No. 111-21163 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date October 29, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date

5-16-82 (Continued from Page 8)
Pumped 10 cf water followed by 40 sx RFC cement followed by 40 cf of water followed by 38 cf of 80# mud. Closed unloader. Applied 500 psig to annulus. Continued displacement. Attempted to stage cement away. Unable to get any pressure buildup. Total mud displacement 205 cf. Overdisplaced cement by 10 cf. C.I.P. @ 4:17 P.M. Final 0.7 cf/m @ 1450 psig. 5 min. pressure down to 1250 psig. WOC till A.M.

5-17-82 Open unloader. Displace tbg w/177 cf of fresh water. Close unloader. Establish breakdown w/ 70 cf of fresh water, 10 cf/min @ 2850 psig. Open unloader. Pump 10 cf fresh water followed by 64 cf RFC cement followed by 40 cf fresh water followed by 38 cf 80# mud. Close unloader. Start staging in cement.Final pump in 1/2 cf/min @ 3400 psig. 5 min. SIP 3250 psig. Total mud displacement of 185 cf. Standby for 3 hours. Tbg. press. 3000 psig/csg 250 psig. Release packer & POH. Fill hole w/mud. RU Pengo. RIH w/ csg gun & shot 4(0.44") JSPF @ 5492'. RIH w/tbg & packer. Set packer @ 5228'. Open unloader. Displace tbg w/30 bbls. lease water. RU swab equip.

5-18-82 225 psig on tbg. Bled down tbg. RU Dowell. Established breakdown w/70 cf fresh water; 10 cf/min @ 2950 psig. Open unloader. Pump 10 cf fresh water followed by 64 cf RFC cement followed by 73 cf of fresh water. Close unloader & continue displacement. Pressure annulus to 500 psig. Total displacement 218 cf. Final pump-in 0.7 cf/min @ 3150 psig. FSIP 3000 psig. WOC 3 hours. Release packer & POH. MU bit & scraper on tbg. Measure in hole.

5-19-82 Continued RIH w/bit & scraper. Drilled out cement & pressure tested as detailed below.

Drilled out cement	Stopped & pressure tested	Test of WSO holes @	Remarks
5474'-5507'	500# 10 min, OK	5492'	-
5507'-5565'	-	-	Fell out of cmt
5667'-5723'	500# 10 min, OK	5708'	-
5723'-5747'	-	-	" " " "
5937'-6208'	1000# 10 min, OK	6193'	Now drilling w/ muddy water

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #110, Sec. 16, T 4N, R 21W SB B. & M.
A.P.I. No. 111-21163 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date Oct. 29, 19 82

Signature Harry Hull

940 E. Santa Clara, Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date

(Continued from Page 9)

5-19-82

Drilled out cement	Stopped & pressure tested	Test of WSO holes @	Remarks
6208'-6225'	-	-	Fell out of cmt.
6235'-6282'	1000# 10 min, OK	6267'	-
6282'-6305'	-	-	Fell out of cmt.
6381'-6424'	1000# 10 min, OK	6409'	-
6424'-6473'	-	-	Fell out of cmt.

(Conditioned gelled mud, @ 5747', w/ water & chemicals, diluting same.) Fell out of cement @ 6473. Ran down & tagged sand plug (on Retrieva-D packer) @ 7090'. Changing over from muddy water to 72 pcf KCl water.

5-20-82

Finish changing over system to 72# gal KCl water. POH w/ tbg. Lay down 33 jts. RU Pengo w/full lubricator. RIH w/ 4" perforating gun w/ 5½" centralizer. Gun stopped @ 6600'. Work gun free & POH. Remove centralizer. RIH w/ gun. Gun showed 200# drag from 6650'-6400'. Perforate using 4(0.44") JSPF each of the following intervals: 6231', 6242', 6250', 6421', 6435', 6450', 6477', 6485', 6505', 6512', 6523', 6544', 6554', Total of 52 holes. POH w/ perforating gun. MU Baker Retrieva-D pkr & 4½" mill out extension & 1 jt. 2 3/8" tbg. & Model "R" profile nipple & bell collar on wireline. Placed Model "G" blanking plug in profile nipple after entire assembly w/ same. RIH & set Retrieva-D @ 6130'. R/D Pengo. MU seal assembly & 2½" TL shoe on tbg. & RIH. Tag packer @ 6127'.

5-21-82

Spaced out tbg. & landed same on donut w/ 16,000# on latch-in seal assembly. RU Archer Reed. RIH w/ "G" plug pulling tool. Could not get down to plug after 3 attempts. RIH w/ impression block. Block showed seal assembly not latched in. R/D Archer Reed. Unland tbg. Respace tbg. w/ seal assembly positioned inside packer. Install flow tree. RU Archer Reed. RIH & retrieve "G" blanking plug. 80 psig equalizing pressure. R/D Archer Reed. Opened well to tank. Well bled down immediately. RU swab equip. Commence swabbing. On third run, pulling from 1500'. T&T rig broke down. Installed 16/64" bean & left well open to tank.

5-22-82

Fluid level @ surface. Swab well to 5900'. Rig fouled up sand line. T&T rig down

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #110, Sec. 16, T 4N, R 21W, S.B B. & M.
A.P.I. No. 111-21163 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date Oct. 29, 1982.

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (805) 653-5111
(Address) (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
5-22-82	(Continued from Page 10) from 11:30 A.M. to 4:00 P.M. RIH & tag fluid @ 4024'. Continue swabbing. Within 5 runs fluid level came up to 1172'. RIH w/sinker bars & beat thru plug @ 1672'. RIH w/swab - unable to get cups thru plug. Left well open to tank.
5-23-82	RIH w/sinker bars & tagged mud bridge @ 1583'. Could not beat thru bridge. Remove tree. Unstabbed tbg from seal assembly. RU to backscuttle. Could not break circulation @ 1200 psig. Change well over to lease crude. Stab back into seal assembly w/ 20,000#. Pressure tested annulus - O.K. Install flow tree. 325 psig on tbg. Open well to tank. Pressure bled down immediately. Well flowing to tank on 20/64" bean. Turh well over to pumpers. Well died.
5-24-82	Ran swab, tagged fluid level @ 1400'. Pulled from 2000'. Installed 20/64" bean. Well flowed 2 hours (42 bbls), then died. Ran swab, tagged fluid level @ 1700'. Pulled from 3,000'. Well flowing @ 100 psig. Installed 12/64" bean. Blowing almost all gas. Turned well over to pumpers, monitored all night. Made no fluid production.
5-25-82	Tagged fluid level @ 600'. Made 5 swab runs. On last run tagged fluid @ 2300' & pulled from 5900'. Recovered total of 23 bbls. Returns of salt water w/skim of oil. Rigged Archer Reed. RIH w/ 1¼" bailer & tagged fill @ 6318' (236' above bottom perf @ 6554'). POH, recovered sample of weight material & silty sand. Rigged out Archer Reed. Rigged swab equip. Tagged fluid @ 3400' & pulled from 5900'. Recovered 4 bbls. Shut down.
5-26-82	RU Otis. RIH w/ 1" coiled tbg. Tagged fill @ 6318'. Using lease oil, cleaned out to 7090', (bottom Retrieva-D pkr). POH. Tore out Otis. RU flowline to Baker tank. Installed 12/64" bean.
5-27-82	50 psig on well. Bled off instantly. Ran swab, tagged fluid @ 126'. Swabbed to 4500'. Waited 1 hour. Ran swab, tagged fluid @ 2200'. Pulled from 3500'. Ran in again, found mud bridge @ 1200', unable to get deeper. Tore out swab. Back-scuttled out mud, using 60 bbls. oil. Stabbed back into packer. Pressure tested annulus to 500 psig, OK. Installed 12/64" bean. Closed in, shut down.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #110, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21163 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date Oct. 29, 1982

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
5-28-82	400 psig on well. Bled off quickly. Pulled seal assembly out of Retrieva-D pkr. Changed over to 71# KCl water. POH. MU Baker Retrieving tool. RIH w/tbg. & latched onto Retrieva-D. Released & POH w/pkr. RIH w/tbg, STC & PS. Landed on donut w/ tail @ 6130'.
5-29-82	Continued RIH, tagged fill @ 6505'. Backscuttled down to 6841', plugged tbg. Unable to clear. PU to 6176' (laid down 7 jts. full of mud). Broke circulation back-scuttling @ 1200 psig. Continued to clean out to 7083', getting returns of mud, sand & gravel. Backscuttled well clean. PU to 6117'. (Well trying to flow 1" stream).
5-30-82	Bled tbg. Ran in to 7038'. Backscuttled well around - no solids. PU & landed on donut w/ tail @ 6136'. Rigged flow tree, & flowline to Baker tank. Changed over to lease oil. Began flowing well @ 2:00 P.M.
5-31-82	Production testing
6-1-82	Production testing. Well died.
6-2-82	85 psig tbg/550 psig csg. Ran sample bailer w/ Archer Reed. Tag fill @ 7028'. Recovered mud & grit. Rig up swqb equip. Tag fluid @ 750', pull from 1000' on first run. Pull from 1100' on second run. Well started to flow. Installed 12/64" bean. Flowed 26 bbls.
6-3-82	50 psig tbg, 550 psig csg. Flowed 7 bbls. by 4:00 P.M. Opened tbg. & bled off. Made swab run, fluid @ 200'. Pulled swab from 500', 2" stream behind swab. Bled csg. off. Well died. Filled hole w/ lease oil, backscuttled around. Lower tbg. to 6725'. Backscuttled around. Pulled to 5299'.
6-4-82	Bled well down. Made up Hampton Perforation washer. RIH to 6554' & wash perfs from bottom to top. Perfs broke down from 1800-2500 psig. POH & lay down washer. RIH to 6136' w/tbg. Install tree.
6-5-82	Well dead.
6-6-82	Opened tbg. on 12/64" bean, well flowed 10 minutes, then died. RIH w/swab. Pulled from 1000'. Well strated flowing. Installed 20/64" bean. 185# on tbg. Flowed 46 bbls.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #110, Sec. 16, T 4N, R 21W SB B. & M.
A.P.I. No. 111-21163 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 10-29, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
6-7-82	Bled well. Ran swab. Tagged fluid level @ 600'. Pulled from 1600'. Flowed 40 bbls. in 4 hours on 30/64" & 12/64" settings. Backscuttled lease oil. Ran additional tbg. Tagged fill @ 7006'. BS clean. PU to 4000'. Spotted 3½" tbg. on location.
6-8-82	Finished POH w/tbg. Changed BOPE rams from 2 7/8" to 3½". Rigged Hydrotest. MU 7" 23# Baker Retrievamatic, & tested in hole @ 6000 psig w/ 3½" J-ff EU & 3½" N-80 Buttress tbg. Set pkr. @ 6037'. Pressure tested annulus to 1500 psig - OK.
6-9-82	Rig BJ frac equip. Set Baker Retrievamatic pkr @ 6037'. Pressured annulus to 1500 psig. Pumped 739 bbls. oil & 30,000# 20/40 & 2,500# 10/20 sand. Avg. rate 13.8 BPM, avg. press. 6650 psig, max. press. 7380 psig, F.G. 0.91 psi/ft (TVD), ISIP 3250 psig, FSIP 4330 psig, 15 min. SIP 3530 psig. Opened well @ 3:00 P.M. 2900 psig on tbg. 12/64" bean. Installed 8/64" bean @ 5:00 P.M. w/2250 psig on tbg. Recovered 162 bbls.
6-10 thru 6-13-82	Recovering load oil
6-14-82	Well flowing on 11/64" bean, w/ 150 psig on tbg. Closed in released Baker retrievamatic pkr. Backscuttled 120 bbls. lease oil to kill well. Tore out BJ frac head & lines. POH w/4000' of 3½" tbg., laying down same.
6-15-82	Unable to kill well w/lease oil. Pump 60 bbls. of 60# KCl water down tbg. Finish POH. MU STC & PS on 2 7/8" tbg. & RIH. Tag fill @ 6678'. Clean out, fill to 7026'. Pull up & land tbg w/tail @ 6150'.
6-16-82	300 psig on tbg & csg. Unable to kill by circ. w/oil. Spotted 60 bbls. 70# KCl down tbg. Removed BOPE & installed tree. PU & RIH w/ 2½ x 1½ x 20 x 22 RHA pump on 135 3/4" & 69 7/8" rods. Spaced & hung well on. Pressure-tested to 300 psig. Made 129 bbls. gross in 11 hours. C.C. 14%; W/H 34%.
6-17-82 to 6-21-82	Production testing.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #110, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21163 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 10-29, 19 82.

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
6-22-82	MIRU prod. rig. Bled well. Pull rods & pump. Surface check pump - OK. Made feeler run w/sandline. MU Pruett tandem pressure bombs on bottom of pump. RIH. Seat pump. Space well. Fill & pressure to 300 psig. RTP. Made 76 bbls. gross in 14 hrs. 24% cut, 200 psig tbg/500 psig csg.
6-23-82 thru 6-24-82	Production testing.
6-25-82	Shut well in for BHP test.
6-29-82	MIRU prod. rig. Unhung well. POH w/rods, pump & pressure bombs. RU H&H pump & tank. Backscuttled well around clearing gas from system. Removed production tree. Installed BOPE. Rig for tbg. Measure out of hole. PU & RIH w/Baker Model "C" BP. Set BP @ 6130'.
6-30-82	Spot 2 sx sand down tbg. Finish pumping sand in place w/ 25 bbls. lease oil. POH w/tbg. RU Pengo. Perf'd 4(0.44") JSPF @ 5540', 5553', 5565', 5587', 5604', 5612.5', 5630', 5645', 5652.5', 5665'. POH. MU Baker Retrieva-D pkr w/ 4½" mill out extension, crossed over to 1 jt. 2 3/8" tbg, 1.81" I.D., "R" profile nipple & bell collar. RIH on wireline & set pkr @ 5440'. R/D Pengo. RIH w/tbg. seal assembly. Land tbg. on donut w/stab in place @ 14,000# weight. Tore out tbg. tools, floor & BOPE. Installed production tree.
7-1-82	RU Archer Reed. RIH. Pull equalizing probe. RIH. Pull body of "G" blanking plug. Equalized press. 550 psig. Tore out Archer Reed. Opened well to trap. Pressure dropped from 550 psig to 100 psig. Opened well to Baker tanks. Turned well over to Production. Made 84 bbls. in 21 hrs.
7-2-82	RU Archer Reed. RIH w/impression block. Tag fill @ 5086'. POH. R/D Archer Reed. Made 7 bbls. gross in 7 hours.
7-3-82	Shut in, rig on well.
7-4-82	Shut in.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #110, Sec. 16, T 4N, R 21W S.B. & M.
A.P.I. No. 111-21163 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 10-29, 1982

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address)
(805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
7-5-82	RU Nowsco coil tbg. unit. RIH w/coil tbg.to 2700'. Lost circulation. POH. RIH & cleaned out to 5900'. Pull up to 5440'. Tbg. stuck - worked loose. Run back down & circ. hole clean. POH. RU flowline w/ 8/64" bean.
7-6-82	Remove flow tree. Unload tbg. Pull seal assembly out of Retrieva-D pkr. Lay down 2 jts. tbg. PU 2 jts. tbg. & stab into pkr. Install flow tree. RU Archer Reed wireline. RIH w/sample bailer. Tag fill @ 5921'. R/D Archer Reed. Remove tree. Pull seal assembly out. Lay down 2 jts. tbg. Land tbg. on donut. RIHw/ pump & rods. Press. tbg. to 300 psig. Hung well on. Well made 104 bbls. gross, 9.0% cut, 270 psig tbg/o psig csg. 9½ hours prod.
7-7-82	Made 110 bbls. gross. 3.0% cut. 100 psig tbg/csg. 23¼ hours.
7-8-82	MIRU prod. rig. Pull pump & rods. Pump was stuck open. Install BOPE. Secure well. 13 bbls. gross. 3.0% cut. 5½ hr. prod.
7-9-82	Shut in.
7-10-82	Bled well. Backscuttled well to remove gas. POH w/ tbg. Chg. BOPE rams to 3½". PU & RIH w/ 3½" tbg. Hydrotest tbg. in hole to 6000 psig. Set Baker Retrievamatic pkr @ 5344'. Pressured annulus to 2000 psig. Rigging up BJ Frac equip.
7-11-82	Pressure annulus to 2000 psig. Frac well as per program. Ball out: pumped 190 bbls. oil. Max. press. 8700 psig, avg. rate 20 BPM, avg. press. 7000 psig. Dropped 58 - 7/8" ball sealers. Overdisplaced by 30 bbls - little ball action. ISIP 3090 psig, F.G. 0.93 psi/ft @ MD. Pumped 50 bbls for flowmeter check. Frac: Max press 7940 psig. Avg. 20 BPM @ 7500 psig. Total oil used 861 bbls. Total sand used; 11,000# 10/20, 37,700# 20/40. FSIP 3220 psig, 15 min. SIP 2750 psig.
7-12-82 thru 7-15-82	Recovering load oil.
7-16-82 thru 7-21-82	Production testing.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #110, Sec. 16, T 4N, R 21W, S.B B. & M.
A.P.I. No. 111-21163 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 10-29, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
7-22-82	104 bbls. gross. 6.0% cut. 360 psi tbg/400 psig csg. 17 hrs. prod. Then shut in for BHP survey.
7-23-82	MIRU Otis endless tbg. unit, Halliburton pump truck, SPS pump tank. Run in w/ coil tag. Circ. from surface to 5637' before tagging fill. Cont. cleaning out hitting hard spot @ 5725'. Cont. cleaning out to 6010'. Cir. 40 bbls. on bottom. Pull up & make several passes thru perfs. 5540'-5670'. Circ. 90 more bbls - found fine sand in returns - pull out coil tbg. Tear out same & Halliburton. Final well press. 0 psig. Tear out BJ valve. Install 3½ full opening valve. Left well open to prod. line thru 15/64" choke.
7-24-82	MIRU prod. rig. Rig 3½" swab equip. Swab fluid level down to 3500'. No fluid entry. Fill tbg. w/lease oil. Ran Archer Reed sample bailer, found fill @ 4653'. Open by pass on retrievamatic. Unable to backscuttle @ 2000 psig. Unable to pump down tbg. @ 4500 psig. RU Otis coiled tbg. RIH. Tag fill @ 4918'.
7-25-82	Circulate fill from 8918'-5600'. (Detected slight bridge @ 4918'). Clean up well @ 5600'. Shut off pump. Continue in hole. Tag fill @ 5981'. Pull up to 5600' & cir. out of hole. Rig down Otis coiled tbg. Release Baker Retrievamatic - unable to do so @ 2000 psig. Unable to circulate @ 3500 psig. Worked tool free. Backscuttled well around - a lot of sand. Clean well up. Well started flowing. Pumped well around holding 800 psig back pressure - killing same. POH w/tbg - laying down same. Break off Baker pkr. Change ram blocks to 2 7/8". MU STC & PS on 2 7/8" tbg. RIH w/tbg. to 3000'.
7-26-82	Backscuttled well bottoms up. Finish picking up & running 2 7/8" tbg. Tag fill @ 5500'. Backscuttle & clean out flour sand, frac sand, & mud. Pull & up land tbg. w/ tail @ 5103'. Build tree. Hook up to Baker tank. Open well on 24/64" adjustable choke to tank w/ 170 psig on well. Turn well over to production.
7-27-82	RU swabbing equip. Made feeler run w/ sinker bars & tagged fill @ 5975'. Made swab run from 500'. Well started heading slowly to tank. Gradually choked back to 12/64" bean. 100 psig on well. To 30 min. readings for 6 hrs. max press. 325 psig, avg. press. 250 psig, avg. rate 4 bbls/hr. Cleaned & washed shaker tank. Installed 12/64" bean. Turned well over to production. Made 71 bbls. gross. 1.0% cut. 14 hr. prod.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #110, Sec. 16, T 4N, R 21W, S.B.B. & M.
A.P.I. No. 111-21163 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 10-29, 19 82

Signature Harry Hull

940 E. Santa Clara Street, Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
7-28-82 thru 7-30-82	Production testing.
7-31-82	Made 82 bbls. gross, 0.2% cut, 195 psig tbg., 19 hrs. prod. MIRU Archer Reed. Made feeler run w/ sample bailer. Tagged fill @ 5978'. Recovered flour sand & frac sand. (Btm. perf 5665', no additional fill since 7-27-82).
8-1-82	100 bbls. gross, 0.8% cut, 200 psig tbg/1100 psig csg, 24 hrs.
8-2-82	94 bbls. gross, 0.2% cut, 180 psig tbg/1200 psig csg, 24 hrs.
8-3-82	Laid down tbg out of derrick. Tore out swab equip. & SPS pump. Removed working platform. Prepared to rig down. Shut down. Well died during the day. Changed from 12/64" bean to 16/64" bean, flowing to Baker tank. RU Pruett wireline. Shut in well @ 6:20 P.M., ran BHP tool on capillary tbg. RIH to 5665', no fill. Pulled up to 5602'. Started pressure recorder @ 9:00 P.M. @ 9:15 P.M. returned to production - to Baker tank on 11/64" bean. Made 7 bbls. gross 0.4% cut. 21 hr. prod.
8-4-82	24 bbls. gross. 0.4% cut, 7¼ hrs. prod (BHP test). 1222' fluid over pump shoe depth.
8-5-82 thru 8-8-82	Shut in for buildup.
8-9-82	Pruett POH w/capillary tbg. & BHP tool. Waited on Amerada pressure bombs. RIH w/ bombs, making gradient stops @ 1000', 1500', 2000', 2500', 3000', 3500', 4500', 5000', 5500', 5600'. POH w/ bombs. R/D Pruett. Returned well to flow on 10/64" bean @ 5:50 P.M. Made 71 bbls. gross, 0.8% cut, 725 psig tbg/1400 psig csg, 10/64" 13 hrs. prod.
8-16-82	MIRU SPS. Pump 120 bbls. lease crude down tbg. Bled 1000 psig off backside (2000-950), to kill well. Removed BOPE. Installed prod. tree. RIH w/ pump & rods. Pressure test to 500 psig. Returned to production thru 14/64" bean.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #110, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21163 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 10-29, 19 82.

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (805) 653-5111
(Address) (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
8-17-82 thru 8-22-82	Production testing.
8-23-82	Unhung well. Blew down tbg. & csg. Pulled rods & pump. Removed production tree. Installed & tested BOPE. Changed over to 70-71# KCl water. Unlanded & lowered tbg. Tagged fill @ 5930'. Cleaned out to 5995', felt top of fish (Pruett BHP chamber). Circulated & backscuttled well clean. Began POH w/ tbg.
8-24-82	Finish POH w/ tbg. RU Mapco wireline. Ran 1¼" latching assembly w/ 4½" bell skirt. Stopped @ 5970'. POH - no recovery. Ran 2½" impression block, stopped @ 5970'. POH - no impression. Reran fishing tools, stopped @ 5970'. POH - no recovery. MU 5-3/4" impression block & RIH. Hit possible tight spot @ 5500'. Sat down @ 5970'. POH - very slight markings on side of impression block & no impression on bottom. Tore out Mapco. Ran 30 doubles tbg.
8-25-82	POH w/ tbg. MU 5 7/8" shoe on 1 jt. 5½" washpipe, w/ jars. Wire net inside shoe. RIH, stopped @ 5500'. Unable to work thru tight spot. POH. Found shoe bent in with metal impressions on bottom of 5 3/4" skirt. Also washpipe was bowed with 2 stripes running its length. RU Dia-Log. Ran minimum I.D.tool & picked up @ 5972'. Logged 5955'-4970'. Found out of round csg, restricted to 6-1/8" min. I.D. 5485'-5500', 5512'-5515', 5577'-5590', 5660'-5671', 5708'-5712'. Worst restriction is 5 15/16" @ 5587'. Tore out Dia-Log.
8-26-82	MU 5 3/4" shoe on 17' of 5½" washpipe, w/ jars 60' above washpipe. RIH, stopped @ 5510'. Unable to work through. POH, found scuff marks on sides of washpipe. Rigged Dia-Log to run caliper log. RIH, unable to trip logging tool. POH, found internal short. Waited on replacement tool. RIH w/ csg. profile caliper tool & picked up @ 5945'. Logged from 5922'-surface. Found ruptured csg. 5484'-5500' (severe, w/possible splits @ 5489' & 5495'), 5500'-5518', 5587' & 5612' (all shot holes), 5659' (probable split), 5665' (probable split @ btm set of shot holes), 5669' (probable split). Also probable hole @ 5707'. Tore out Dia-Log. Filled hole.
8-27-82	MU 5 7/8" swedge, bumper sub & jars, six 4 3/4" DC's & accelerator. RIH to 5390'. Conditioned KCl water w/ polymer to raise viscosity to 45. RIH & tag bad spot @ 5510'. Took 4000# over to go through - 8000# over to come back. Continue RIH gradually losing weight to 5618'. Took 8000# over to go through - 16,000# - 18,000# over to come back. Continue RIH picking up severe amount of drag. Stopped

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #110, Sec. 16, T 4N, R 21W SB B. & M.
A.P.I. No. 111-21163 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 10-29, 19 82.

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (806) 653-5111
(Address) (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
8-27-82	Continued from Page 18. completely @ 5702'. PU 25,000# over to move tbg. Worked through 20,000# over to 5722' (2 passes). 3rd pass could not get back through, required 35,000# to pull up. Could not get bump sub or jar action. POH, laid down DC's & swedge. MU 6" swedge, bumper sub & jars (4 3/4" O.D.), six 4½" DC's, 4 3/4" set of jars, two 4¼" DC's, 4 3/4" accelerator. RIH to 5306'.
8-28-82	Continue RIH. Tag bad spot @ 5500', worked through 8000# - 12,000# to 16,000# to come back. Continue RIH. At 5618' slight wobble on indicator. Tag bad spot @ 5662'. Start swedging on tight pipe 5662'-5672', 35,000# to come back. Continue RIH to 5896'. Backscuttled bottoms up. POH. Broke off 6" swedge. MU 6 1/8" swedge & RIH to bad spot @ 5500'. Worked through @ 4000#, 8000# to come back. Continue RIH. Slight wobble on indicator @ 5618'. Tag bad spot @ 5662'. Backscuttled (shale pieces). Start POH.
8-29-82	POH w/ DC's & tools. Left 6 1/8" swedge in hole. MU bumper sub & 4-4¼" DC's on jars. RIH & tag @ 5506', lost 5000# then fell through. Tag @ 5600', circulate & rotate on same. Trying to screw into swedge. Lost 20,000#'s wt then fell through. Tag @ 5675'. Circulate, rotate & screw into swedge. POH. MU 17' of 5½" washpipe w/ 5 3/4" shoe w/ wire fingers. Ran 2- 4¼" DC's, bumper sub, jars & 2 more 4¼" DC's. RIH & stop @ 5506'. Unable to go any deeper. POH. Lay down washpipe. MU 5 3/4" shoe w/ tungsten carbide bottom w/ finger grapple on 3½" buttress w/ jars, crossed over to 2 7/8" tbg. RIH to 4655'.
8-30-82	Continue RIH w/ 5 3/4" shoe & 1 jt 3½" buttress & 4¼" jars on 2 7/8" tbg. Tag fill @ 5925' (very tight running in). Backscuttled out fill to estimated top of fish @ 5995'. Continue in hole while B.S. fill. Fell through bridge @ 6035'. Continue & tag fill @ 6060'. Clean out to 6071'. BS hole clean gradually showing pump rate. POH. No recovery. Standby for & MU 5 3/4" shoe w/ wire mesh catcher, 1 jt 3½" buttress & 2 7/8" tbg jars on 2 7/8" tbg. RIH to 5389'. (All fill recovery was shale, rock & sand).

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #110, Sec. 16, T 4N, R 21W S.B. B. & M.
A.P.I. No. 111-21163 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 10-29, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
8-31-82	Continue in hole w/ 5 3/4" shoe w/ wire mesh catcher & 1 jt. 3½" Buttress & 2 7/8" tbg. jars on 2 7/8" tbg. Tagged fill @ 6060' & cleaned out to 6081'. RU Pruett wireline. RIH w/ 1¼" combination slips. Worked over fish. POH. Recovered BHP tool, sinker bar. R/D Pruett. POH w/tbg. Found estimated 100' of wadded up capillary tbg. in bottom of shoe. MU 6 1/8" swedge welded to bumper sub & 4¼" jars & 6¼" DC's & 4 3/4" jars & two 4¼" DC's & accelerator on 2 7/8" tbg. & RIH. Work through tight spots 5506'-5521'. (Pulling 45,000# over). RIH to 5700'. Back-scuttled well clean. Pull up to 4960'.
9-1-82	Continue RIH w/ 5 3/4" shoe on 1 jt. 3½" Buttress tbg. crossed over to 2 7/8" tbg. Clean out sand 6068'-6130'. RU Mapco Wireline. MU fishing tool on wireline & RIH. Latched onto fish & POH. Recovered bottom hole pressure recorder, sinker bar, rope socket, & 100' wireline. MU Baker retrieving tool, four 4¼" DC's, bumper sub & jars. RIH to top of bridge plug. Backscuttled hole clean. Latched onto bridge plug @ 6130' & POH. Part of bottom rubber on bridge plug missing. MU STC on 2 7/8" tbg. & RIH. Cleaned out sand bridges 6130'-7108'. Backscuttling hole clean @ 6:00 A.M.
9-2-82	Backscuttling hole clean. POH. RU McCullough w/ Sperry Sun gyro tool. Ran directional survey from 6900' - surface. Could not go below 6900'. Tear out McCullough & Sperry-Sun. MU STC on 2 7/8" tbg. & RIH. Tag fill @ 7090'. Install Guiberson stripper. Clean out fill 7090'-7105'. BS clean.
9-3-82	POH w/tbg. RU Dia-Log. Ran minimum ID & csg profile caliper logs 6910'-surface. R/D Dia-Log. MU Cavins 5½" hydrostatic bailer w/ jars on tbg. RIH, worked through tight spots 5506'-5668'. Ran down & tagged @ 7082'. Cleaned out to 7097'. Tool sticking on bottom. POH. Recovered sand & chunks of cement.
9-4-82	MU 6" x 10' washover shoe on 5 jts. of 5" washpipe, plus 6- 4 3/4" DC's, plus BS, jars, accelerator. RIH on 2 7/8" tbg. to 3200'. Well started flowing. Conditioned fluid & worked out gas. Continued RIH & worked through tight csg. 5538'-5567'. Worked through 6 times. Took 30,000# over weight to pull back through. Lst time down, washpipe parted @ tool joint above shoe. POH. MU 4 3/8" spear on last two 4-3/4" DC's, BS & jars. RIH to 5560'. Latched onto fish & worked same free. (Pulled 90,000# over weight to do so.). POH, recovered fish @ 6:00 A.M.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #110, Sec. 16, T 4N, R 21W, S.B. B. & M.
A.P.I. No. 111-21163 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 10-29, 1982

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
9-5-82	MU 6 1/16" string mill on two 4 3/4" DC's, jars, & 15' guide stripped below mill. RIH to 5500'. RU power swivel. Condition mud to 45 viscosity & add friction reducer to system. Milled 5504'-5509'. POH w/ string mill. Mill worn out. Lost two 1½" x 5" straps in hole.
9-6-82	MU new 6 1/16" string mill on jars plus two 4 ¼" DC's, w/ 2 7/8" x 15' guide jt. strapped on bottom of mill. RIH, continued milling 5509'-5512'. Stopped rotating & pushed mill down to 5674'. Unable to rotate & get deeper - mill worn out. POH. MU new 6 1/16" mill plus jars & two 4¼" DC's w/ 4¼" x 8' DC strapped on bottom. RIH, milled 5509'-5514'. Fell free. Ran down & started milling @ 5674'.
9-7-82	Continued milling on tight csg. @ 5674' for 2 hours, unable to make hole. Mill appeared to be worn out. POH. MU new string mill & RIH w/ same drilling assembly. Rotated mill thru bad csg. 5507'-5514', 6 times in 1 hour. Ran down to 5674', unable to make more hole. POH. Left in hole 4¼" API reg. crossover, 1.71' length (bottom of the pilot below mill). MU 6 1/16" 3 blade mill. RIH to 5676' & continued milling.
9-8-82	Continued milling 5676'-5678'. Unable to make more hole. POH. MU 6 1/8" swedge on eight 4¼" DC's & BS, jars, accelerator. RIH. Went freely through tight spot @ 5507'. Went thru tight spots @ 5611' & 5678'-5688', taking 16,000# weight to go thru & 32,000# to come back. Worked thru tight spots 6250'-6254' & 6268'-6276'. Unable to get thru tight spot @ 6532'. Jarred @ 100,000# to pull loose. Pulled up to 6500' & conditioned workover fluid. (Vis - 48, weight 68). POH. MU 6" swedge & tools. RIH.
9-9-82	Continue RIH w/ 6" swedge. Worked thru tight spot 6250'-6254', 15,000# over weight to go thru, 25,000# to come back. Slight drag @ 6532'. Located fill @ 6995'. Pulled up to 6950'. Conditioned workover fluid & POH. Laid down 6" swedge. MU 4 3/8" overshot on tbg. & RIH to 6995'. Clean out to top of fish @ 7025'. POH & recovered fish. Laid down fishing tool. Pick up hydrostatic bailer w/ 5½" shoe to 6532'. Unable to work thru @ 18,000#. Required 25,000# to free.
9-10-82	Continue to POH w/ Cavins surge tool. Remove & replace 5½" shoe w/ 4½" shoe. RIH with surge tool & 4½" shoe. Clean out sand 7025'-7055'. POH w/ surge tool, recovered 30' fine sand, pieces of rubber & one complete strap. RIH w/ hydrostatic bailer. Clean out sand fill 7055'-7127'. POH w/ bailer & recovered one 1¼" x 2" x 6" strap, many chunks of rubber & 300' of fine sand. RIH w/ hydrostatic bailer & clean out fill 7117'-7127'. Recovered 30' fine sand & 3 pieces of metal 1/4" x 1½". POH & lay down Cavins bailer.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #110, Sec. 16, T 4N, R 21W S.B. B. & M.
A.P.I. No. 111-21163 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 10-29, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
9-11-82	MU Baker Model "L" retrieving tool. RIH. Circulate & work over DR plug, POH w/ model "L" retrieving tool. No DR plug. RIH w/ new model "L" retrieving tool, workover & latch on to DR plug, unable to release DR plug, unable to release retrieving head. Entire packer assembly apparently moving. Worked from 7127'-7100'. Working 20,000 over & 20,000 under. Attempt to rotate tbg. to set & unset position on retrieving head, unable to do anything. RU Dia-Log to make chemical cut.
9-12-82	RIH w/ Dia-Log chemical cutter. Stopped @ 3599'. POH. Reset tool. RIH w/ chemical cutter. Stopped @ 7085'. Estimated top of retrieving head 7117' pipe measurement. POH. RU Archer Reed. RIH w/ sample bailer to 7074'. Unable to make hole. POH w/ sample bailer to 7074'. Unable to make hole. POH w/ bailer. Small amount of flour sand recovered. RIH w/ 1 3/4" impression block to 7074'. Showed to be stopping in tight tbg. RU Dia-Log. RIH & made chemical cut in tbg. @ 7073' (6' above tbg. collar). Cutter stuck. Worked free. POH w/ tbg. Tbg. hanging up every 30'. Taking 5000 - 10,000#'s to pull loose. Pull 25 dbls. Tbg. stopped @ 5517'. Unable to go up or down. Circulate bottoms up. RU Dia-Log to run free-point.
9-13-82	RU Dia-Log, well started flowing, change well over to 70# mud, 35 vis. RIH w/ Dia-Log, freepoint stopped @ 5465'. 100% free to 5460'. POH, made up string shot. RIH to 5432', fired string shot & backed off tbg. Tore out Dia-Log. POH w/tbg. MU 4 11/16" overshot w/ 3 21/32" grapple, w/ bumper sub, jars, six 4¼" DC's & accelerator. RIH to 5200'. Turn well over, working gas out of system. Work overshot over collar @ 5432'. Bump fish down hole. Pull 55,000# over wt. of tbg. & chemical cut came loose, POH. Retrieved 25' section of tbg. Chemical cut 1¼" from going all around. MU overshot w/ mill control 2 7/8" grapple. RIH, stop @ 5200', turn well over. Latched onto fish @ 5467'. Work up to 55,000# over wt. w/ jars. Fish came loose. POH.
9-14-82	Continue POH w/ fish. Retrieved 6' piece, 1 jt. of tbg., retrieving head, & DR plug. Fish entirely full of sand metal & rubber. MU Baker Retrieva-D seal assembly, 1 jt. tbg., tbg. jars, RU hydrotest, testing in hole @ 5000 psig.Tbg. tail stopped @ 5540'. Unable to find indications of stabbing into Retrieva-D. Unable to make more hole. Tore out Hydrotest. POH. Some light polish marks on seal assembly. MU 4½" impression block. RIH. Stopped @ 5504'. POH. Impression showed collapsed - snagged pipe. MU 6" swedge w/ bumper sub, jars, six 4¼" DC's, jars, two 4¼" DC's & accelerator. RIH. Tag bad spot @ 5504'. Estimate bad spot to be 5' long from swedging. Swedged 2 hours w/ 45,000# over wt. to pull swedge out of bad spot.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #110, Sec. 16, T 4N, R 21W S.B. & M.
A.P.I. No. 111-21163 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 10-29, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
9-15-82	Continued in w/ swedge from 5504'. Tight spot @ 5680'. Continue on in to 6258' (tight spot). 6534' tight spot. Tag top of fill @ 7005'. Attempt to backscuttle out fill, continuously plugging up tbg. Circulated out to 7032'. Clean well up. Work on tight spot @ 5504'. POH. Break down tools. Started picking up 5" security flush jt.liner.
9-16-82	Continued in hole running 5" security flush joint liner. Set hanger @ 5299' (tbg. measurement), tail @ 6614'. POH. Laid down extra 2 7/8" tbg. Laid down all DC & washpipe. Pick up & measure in hole w/ 80 jts. 2 3/8" tbg. w/ sawtooth on bottom jt. RIH w/ sawtooth cut on bottom jt. RIH w/ 2 7/8" tbg. to 3000'.
9-17-82	Continue RIH w/ 2 7/8" S.T. jt. on bottom. Located fill @ 7046'. Clean out to 7119'. Had trouble w/ SPS circulating pump, pull above liner top & repair pump. RIH to 7119'. Clean out to 7132'. Appeared to be inside Retrieva-D Pkr. for 5'. Unable to backscuttle. Continue circulating. Shut pump down. Start to POH w/ wet tbg. Sawtoothed joint rounded over, pushed in & full of sand. Run 45 double in hole & shut down.
9-18-82	POH with tbg. MU Cavins surge tool with 3½" O.D. basket with 2 7/8" x 14' stinger on bottom. RIH. Surge tool stopped at 7120'. (bottom of stinger). Clean out to 7134' (inside Retrieva-D). Pull up to 7000'. Circulate well around @ 4550' (circulating port depth). Finish POH. Found bottom 6 joints plugged with sand. RIH OE to 5200'.
9-19-82	Continue RIH. Tag fill at 7131'. Change system over to 71# KCl water. Clean out to 7136'. Finish changeover. POH. Lay down all 2 7/8" tbg. Stood back 25 stands 2 3/8" tbg. & lay down balance. Install 2 3/8" ram blocks. MU Baker Model "C" retrieving head, latch onto bridge plug & RIH to 1600'.
9-20-82	Set Baker bridge plug at 1600'. POH. Remove working platform & BOPE. Change wellhead to dual head. Install & test BOPE. Install working platform. RIH & release BP. POH. Lay down BP. RU hydrotest. MU Baker seal assembly & test into hole @ 5000#. Tag top of Retrieva-D @ 7118'. RD Hydrotest. Pull up 140' off bottom.
9-21-82	Attempt packer stab in. Tubing pressure test failed - casing held. Pulled out of packer. Backscuttled. Worked into packer. RU wireline. RIH w/ 1½" bailer to 7142' - Rec'd small amount of sand. RIH w/ 1¼" impression block to 7142'. RIH w/

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #110, Sec. 16, T 4N, R 21W S.B B. & M.
A.P.I. No. 111-21163 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 10-29, 19 82.

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
9-21-82	(Continued from Page 23). 1 3/4" Hydrostatic bailer to 7142' - no recovery. RD wireline. Reworked seal assembly into packer. Tubing pressure tested to 1000# & held. Pulled out of packer. Spaced well out - backscuttled bottoms up (light sand returns). Stabbed into packer. Landed same on donut w/15,000# compression. Pressured tubing to 1000# - held. Pulled seal assembly loose & pull above liner top.
9-22-82	Backscuttled well. Finish POH. Lay down seal assembly - bottom seals damaged. MU new seal assembly & start RIH. Orders changed. POH. Lay down assembly. MU Cavins 3½" surge tool. Tag top of packer at 7120' & fill at 7122'. CO to 7128'. Unable to go deeper. Pull up 60'. Circulate hole. Pull up to 4600'.
9-23-82	Circulate well. POH w/ surge tool - Rec'd pieces of strap & heavy wireline and 1 machine piece of metal. RIH w/surge tool - leave control valve off. Worked to 7128'. Put 2000# on the backside. Surged tool. Start POH.
9-24-82	Circulate hole. Continue POH w/surge tool. Rec'd Guiberson wire & metal. RIH w/ surge tools to 7120'. Worked to 7128'. Put 1700# on backside. Surged tools. POH & lay down tools. Rec'd wire & sand. Pick up production seal assembly & start RIH.
9-25-82	Circulate well around. Finish RIH & stab into Retrieva-D. Pressure test tubing to 1000#. RU Welex to run CCL. Unable to get below bottom "L" sleeve. Pull out of packer. Worked CCL to bottom. Pull up CCL & stab into packer. Top of packer @ 7117.5'. Tail of seal assembly @ 7119' (wireline measurements). Pressure test tbg - did not hold. POH & tore out Welex. POH w/ prod. string. Change rams to 2 7/8". Pick up 3 1/8" mill, 20' DC, bumper sub & jars. RIH on 2 3/8" tbg. to 1804'. PU & measure 2 7/8" tbg. RIH to 4000'.
9-26-82	Worked gas out of system. Continue RIH. Tag pkr top @ 7119'. Ran into pkr bore to 7123'. Conditioned hole fluid to 72#. RU power swivel. P/S malfunctioned. Pull up to 6500'.
9-27-82	Continue RIH w/ 3 1/8" junk mill. Tagged top of packer @ 7119'. Ran inside packer to 7123'. Circulate & condition hole fluid. Milled to 7133' in 30 min. Cuttings were metal, rubber & formation. Built mud weight to 73#/cf, vis 45. Started milling on 4½" x 2 7/8" K-over. Milled thru same in 4 hrs. time. Dropped down to 7150', found no restrictions. Circulate bottoms up - fluid severely gas cut.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #110, Sec. 16., T 4N., R 21W., S.B. & M.
A.P.I. No. 111-21163 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 10-29, 1982.

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
9-27-82	(Continued from Page 24) Pull up to 7110'. Unable to hold well down. Build mud weight w/ $CaCO_3$ to 73#/cf. POH, laying down 2 7/8" tbg. MU Baker seal assembly & start in hole w/ production string.
9-28-82	Continued RIH w/ seal assembly to 7085'. Circulated hole free of gas. MU & set Baker 7" Retrievamatic 30' from surface. Stacked weight out on same. Remove well head & BOPE. Repair wellhead & reinstall same. Pull out Retrievamatic & break out of string. Run back in & stab into Retrieva-D w/ 15,000# compression. Landed same on donut. Tested long string to 900 psig - O.K. RU Archer Reed & set tbg. plug @ 100'. PU latching sub. MU same on 2 3/8" tbg w/ 2" TL PS. RIH & tag parallel anchor @ 5191'.
9-29-82	Pulled up to 5140'. Circulated system free of gas. Spaced out short string. Baker J latch @ 5190'; 16,000# tension on anchor. Installed production tree. RU Archer Reed. Retrieve CW plug from long string @ 120'. RIH w/ 1 5/8" impression block. Stopped @ 7188'. Opened Baker "L" sliding sleeve. Changed system over to lease crude. Closed sleeve. Turn well to flowline on 16/64" bean.
9-30-82	Attempt to bleed down short string. Unable to do so, well flowing. Unable to run rods. RU to test trap. Long string made 249 bbls. gross, 1.0% cut, 380# tbg/csg., 16/64" bean, 24 hours. Short string made 69 bbls. gross, 40% cut, 140# tbg/0# csg., 14/64" bean, 24 hours.
10-1-82 thru 10-13-82	Production testing.
10-14-82	MIRU prod. rig. Bled off csg. & tbg. Pump 20 bbls. lease oil down tbg. to kill well. Run pump & rods (short string). Space well out.
10-15-82	Hang well on. RTP.
10-15-82	Presently production testing well.

UNIVERSAL DIRECTIONAL DRILLING
COMPLETION REPORT

DOG

LOCATION Silverthread
WELL Vale A - Ferndale #1-10
SURFACE LOCATION 1077'S 2934'E
K. B. ELEVATION 1078' 111-21163
DATE 4-8-82

COMPANY ARGO PETROLEUM CORPORATION

RECEIVED
NOV 29 1982
SANTA BARBARA, CALIFORNIA

NO	MEASURED DEPTH	DRIFT ANGLE	VERTICAL DEPTH	DRIFT DIRECTION	RECTANGULAR COORDINATES NORTH	SOUTH	EAST	WEST	REMARKS
1	123	0° 45	122 99	S 66 W		65		1 47	
2	245	1° 15	244 96	S 53 W		2 26		3 60	
3	365	1° 15	364 93	S 25 W		4 63		4 70	
4	469	1° 00	468 92	S 33 W		6 15		5 69	
5	590	0° 30	589 91	S 12 W		7 18		5 91	
6	712	0° 30	711 91	S 29 W		8 12		6 43	
7	793	0° 30	792 90	S 34 W		8 70		6 82	Mud Motor used fr
8	840	0° 45	839 90	N 84 E		8 64		6 21	793' to 1391'
9	870	1° 00	869 90	N 74 E		8 49		5 71	
10	900	1° 30	899 88	N 58 E		8 08		5 04	
11	933	2° 15	932 86	N 54 E		7 31		3 99	
12	964	3° 15	963 81	N 47 E		6 12		2 71	
13	994	4° 15	993 73	N 36 E		4 32		1 40	
14	1024	5° 00	1023 61	N 25 E		1 95		30	
15	1085	6° 00	1084 28	N 09 E	4 35		70		
16	1146	7° 45	1144 72	N 04 E	12 56		1 28		
17	1209	10° 15	1206 72	N 06 E	23 70		2 45		
18	1271	12° 45	1267 19	N 08 E	37 25		4 35		
19	1336	15° 15	1329 90	N 07 E	54 22		6 44		
20	1461	18° 30	1448 44	N 04 E	93 79		9 20		
21	1525	19° 45	1508 67	N 04 E	115 36		10 71		
22	1588	21° 00	1567 49	N 05 E	137 86		12 68		
23	1684	23° 15	1655 69	N 06 E	175 54		16 64		
24	1748	25° 15	1713 58	N 07 E	202 64		19 97		
25	1856	26° 00	1810 65	N 07 E	249 63		25 74		
26	1983	25° 30	1925 28	N 07 E	303 90		32 40		
27	2110	25° 15	2040 14	N 07 E	357 67		39 00		
28	2236	25° 00	2154 34	N 07 E	410 52		45 49		
29	2395	24° 45	2298 73	N 07 E	476 59		53 60		
30	2555	23° 45	2445 18	N 08 E	540 41		62 57		
31	2636	23° 45	2519 32	N 08 E	572 71		67 11		
32	2762	23° 45	2634 65	N 08 E	622 96		74 17		
33	2889	23° 15	677 67	N 07 E	673 23		80 35		
34	3016	23° 00	2868 02	N 07 E	722 48		86 39		
35	3176	23° 15	3015 03	N 07 E	785 17		94 09		
36	3269	23° 00	3100 64	N 07 E	821 23		98 52		
37	3396	22° 45	3217 76	N 06 E	870 08		103 65		
38	3522	22° 45	3333 95	N 06 E	918 54		108 75		
39	3650	22° 45	3452 00	N 06 E	967 77		113 42		
40	3778	24° 00	3568 93	N 06 E	1019 54		119 36		
41	3874	25° 15	3655 76	N 07 E	1060 19		124 85		
42	4004	27° 15	3771 33	N 08 E	1119 13		132 63		
43	4100	28° 45	3855 50	N 09 E	1164 74		139 86		
44	4187	27° 45	3932 49	N 10 E	1204 63		146 89		
45	4284	23° 45	4021 28	N 11 E	1242 98		154 35		
46	4376	21° 30	4106 88	N 12 E	1275 96		161 36		
47	4503	18° 45	4227 14	N 13 E	1315 74		170 54		
48	4627	14° 45	4347 05	N 14 E	1346 37		178 18		

CLOSURE _____

METHOD OF CALCULATION ~~Average~~ END PT.

UNIVERSAL DIRECTIONAL DRILLING
COMPLETION REPORT

LOCATION Silverthread

WELL Ferndale # 10

SURFACE LOCATION 1077' S 2934' E

K. B. ELEVATION 1078'

COMPANY ARGO PETROLEUM CORPORATION

DATE 4-8-82

NO	MEASURED DEPTH	DRIFT ANGLE	VERTICAL DEPTH	DRIFT DIRECTION	RECTANGULAR COORDINATES NORTH	SOUTH	EAST	WEST	REMARKS
49	4783	11° 30	4499 92	N 16 E	1376 27		186 75		
50	4943	9° 00	4657 95	N 17 E	1400 21		194 07		
51	5040	7° 15	4754 17	N 16 E	1411 97		197 44		
52	5130	6° 15	4843 64	N 17 E	1421 35		200 31		
53	5256	5° 45	4969 01	N 25 E	1432 79		205 64		
54	5413	5° 00	5125 41	N 21 E	1445 56		210 55		
55	5538	4° 15	5250 07	N 18 E	1454 37		213 41		
56	5665	5° 15	5376 53	N 18 E	1465 42		217 00		
57	5758	6° 00	5469 02	N 12 E	1474 93		219 02		Mud Motor used fr
58	5799	4° 15	5509 91	N 09 W	1477 93		218 15		5758 to 6134
59	5831	3° 00	5541 87	N 12 W	1479 57		218 20		
60	5862	1° 45	5572 85	N 20 W	1480 46		217 88		
61	5893	1° 15	5603 85	N 84 W	1480 57		217 21		
62	5925	2° 00	5635 83	S 54 W	1479 91		216 21		
63	5957	2° 45	5667 79	S 36 W	1478 67		215 40		
64	5989	3° 45	5699 72	S 14 W	1476 64		214 90		
65	6021	5° 15	5731 59	S 10 W	1473 75		214 39		
66	6052	6° 45	5762 57	S 08 W	1470 14		213 88		
67	6083	8° 15	5793 05	S 08 W	1465 74		213 27		
68	6218	13° 00	5924 59	S 15 W	1436 40		205 40		
69	6345	16° 45	6046 20	S 14 W	1400 89		196 55		
70	6473	19° 45	6166 67	S 12 W	1358 58		187 55		
71	6596	23° 00	6279 89	S 12 W	1311 57		177 56		
72	6719	25° 45	6390 68	S 11 W	1259 11		167 37		
73	6845	28° 00	6501 93	S 12 W	1201 25		155 07		
74	6975	28° 30	6616 18	S 12 W	1140 58		142 17		
75	7165	29° 30	6781 54	S 12 W	1049 06		122 72		
76	7354	31° 45	6942 26	S 12 W	951 78		102 04		
77	7579	34° 45	7127 13	S 12 W	826 33		75 88		
78	7777	37° 30	7284 21	S 11 W	708 01		52 38		

CLOSURE 709.94' N 4°13' E

METHOD OF CALCULATION END PT. Average

UNIVERSAL DIRECTIONAL DRILLING SINCE 1980

ARGO PETROLEUM CORPORATION

Ferndale # 10

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

No. T 282-61

DIVISION OF OIL AND GAS

Report on Operations

Mr. Harry Hull, Agent
Argo Petroleum Corp.
Box CI
Ventura, CA 93002

Santa Paula, Calif.
March 29, 1982

Your operations at well "Ferndale" 10, API No. 111-21163,
Sec. 16, T. 4N R. 21W SB B.& M. Ojai Field, in Ventura County,
were witnessed on 3/25/82. R. Habel, representative of
the supervisor, was present from 0830 to 1030. There were also present Harold Laughlin,
Pusher, Bawen Drilling
Present condition of well: 13 3/8" csm 720'. T.D. 730'.

The operations were performed for the purpose of testing the blowout prevention equipment and installation.

DECISION:

THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

b

M. G. MEFFERD
State Oil and Gas Supervisor

By
Deputy Supervisor

Murray W. Dosch

OG109(12-80-15M)

FORM OG111(10/81/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 282-75

REPORT ON PROPOSED OPERATIONS

520 (field code)
12 (area code)
10 (new pool code)
-- (old pool code)

Mr. Harry Hull, Agent
Argo Petroleum Corp.
P.O. Box CI
Ventura, CA 93002

Santa Paula, California
March 3, 1982

Your proposal to drill well "Ferndale" 10,
A.P.I. No. 111-21163, Section 16, T. 4N, R. 21W, SB B. & M.,
Ojai field, Silverthread area, Miocene pool,
Ventura County, dated 2/18/82, received 2/22/82 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Hole fluid of sufficient quality and quantity shall be maintained in the hole to control any subsurface condition, and a reserve supply shall be on hand for emergencies.
2. Any sump used during these operations shall be thoroughly cleaned and filled with earth as soon as operations are completed.
3. Unlined sumps, if they contain harmful waters, shall not be located over fresh water bearing aquifers.
4. Blowout prevention equipment of at least DOG Class III 1M B shall be installed on the 13 3/8" and Class III 3M B on the 9 5/8" & 7"casing, and maintained in operating condition at all times.
5. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.
6. THIS DIVISION SHALL BE NOTIFIED TO WITNESS:
   a. A pressure test of the blowout prevention equipment before drilling below 700'.
   b. A test after cleaning out below the top of the 5" casing to demonstrate that no fluid has access to the well from between the " and 5" casings.
   c. A production test of shut off within 30 days after completing the well.

Lap test is not necessary on the 7" & 5½ csg. The 5½" csg was used as a security flush joint & did not lap 7" shoe.

Blanket Bond
RLH:b

M. G. MEFFERD, State Oil and Gas Supervisor

By Murray W. Dosch, Deputy Supervisor

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

Form OG105 (8/80)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS
Notice of Intention to Drill New Well

RECEIVED
FEB 22 1982
SANTA PAULA, CALIFORNIA

C.E.Q.A. INFORMATION			
EXEMPT ☐ CLASS ____	NEG. DEC. ☐ S.C.H. NO. ____	E.I.R. ☒ S.C.H. NO. CUP 3344	DOCUMENT NOT REQUIRED BY LOCAL JURISDICTION ☐
See Reverse Side			

FOR DIVISION USE ONLY					
MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121
203	R&H 2-24-82	✓	bb	✓	✓

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to commence drilling well "FERNDALE" #10, API No. 111-21163 (Assigned by Division),

Sec. 16, T. 4N, R. 21W, S.B. B. & M., ~~Silverthread~~ Opai Field, Ventura County.

Legal description of mineral-right lease, consisting of _____ acres, is as follows: _____ (Attach map or plat to scale)

previously submitted

Do mineral and surface leases coincide? Yes X No _____. If answer is no, attach legal description of both surface and mineral leases, and map or plat to scale.

Location of well 2934 feet E (Direction) along section ~~property~~ line and 1077 feet S (Direction)

at right angles to said line from the NW corner of section ~~property~~ 16 (Cross out one) or

Is this a critical well according to the definition on the reverse side of this form? Yes ☐ No ☒

If well is to be directionally drilled, show proposed coordinates (from surface location) at total depth: 150' feet E (Direction) and 530' feet N (Direction)

Elevation of ground above sea level 1061 feet.

All depth measurements taken from top of ~~10~~ 1078 K.B. (Derrick Floor, Rotary Table, or Kelly Bushing) that is 17 feet above ground.

PROPOSED CASING PROGRAM

KB - 1078'

SIZE OF CASING INCHES API	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS	CALCULATED FILL BEHIND CASING (Linear Feet)
13 3/8"	48#	H-40	SURF	700	700	700 (to surf)
9 5/8"	36	K-55	SURF	6000	6000'	2500'
7" / 5"	23, 26 29/26	N-80/N-80	SURF/8300'	8500/9500	8500/9500	3000' / 1200'

(A complete drilling program is preferred and may be submitted in lieu of the above program.)

Intended zone(s) of completion Upper Miocene 7500', 8600' (Name, depth, and expected pressure) 3255 psi 3700 psi Estimated total depth 9500'

It is understood that if changes in this plan become necessary we are to notify you immediately.

Name of Operator	Type of Organization (Corporation, Partnership, Individual, etc.)	
Argo Petroleum Corporation	Corporation	
Address: 940 E. Santa Clara	City: Ventura	Zip Code: 93001
Telephone Number: (805)653-5111	Name of Person Filing Notice: Harry E. Hull	Signature: Harry E. Hull — Date: 2-18-82

This notice and indemnity or cash bond shall be filed, and approval given, before drilling begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

Information for compliance with the California Environmental Quality Act of 1970 (C.E.Q.A.).

If an environmental document has been prepared by the lead agency, please submit a copy of the document with this notice *or* supply the following information:

Lead Agency: Argo Petroleum Corporation

Lead Agency Contact Person: Harry E. Hull

Address: 940 E. Santa Clara

Ventura, California 93001

Phone: (805) 653-5111

FOR DIVISION USE ONLY
District review of environmental document (if applicable)? Yes ☐ No ☐
Remarks:

CRITICAL WELL

As defined in the California Administrative Code, Title 14, Section 1720(a), "Critical well" means a well within:

(1) 300 feet of the following:
(A) Any building intended for human occupancy that is not necessary to the operation of the well; or
(B) Any airport runway.
(2) 100 feet of the following:
(A) Any dedicated public street, highway, or nearest rail of an operating railway that is in general use;
(B) Any navigable body of water or watercourse perennially covered by water;
(C) Any public recreational facility such as a golf course, amusement park, picnic ground, campground, or any other area of periodic high-density population; or
(D) Any officially recognized wildlife preserve.

Exceptions or additions to this definition may be established by the supervisor upon his own judgment or upon written request of an operator. This written request shall contain justification for such an exception.

CALIFORNIA
DIVISION OF OIL AND GAS

Feb. 22, 1982

To: Harry Hull, Agent
~~Argo Petroleum Corporation~~
P.O. Box CI
Ventura, CA 93002

From: Div. of Oil and Gas
P.O.Box 67
Santa Paula, CA 93060

Subject: ☒ Request for confidential status dated 2/18, 19 82.

☐ Request for extension of confidential status dated _____, 19___.

☒ Subject request is approved

☐ Subject request is partially approved

☐ Subject request is denied.

Records approved for confidential status are:

WELL NAME AND NUMBER	FIELD OR COUNTY	DATE ON WHICH RECORDS WILL BECOME PUBLIC
"Ferndale" 10	Ojai Sec.16,T.4N.,R.21W SBB&M	Two Years after cessation of drilling operations.

Murray W. Dosch

cc: Petroleum Information Service
M.J. Systems

SEE REVERSE SIDE FOR RECORDS DENIED CONFIDENTIAL STATUS OR EXTENSION OF CONFIDENTIAL STATUS AND REMARKS.

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

CHECK LIST-RECORDS RECEIVED AND WELL STATUS

Operator: **Vintage Production California LLC** WELL DESIGNATION **"Valex-Ferndale" 211**

API No. **11121178** SE **16** T: **4N** R.: **21W** , **SB** B. and M.

County: **Ventura** FIELD: **Ojai**

Type of Notice: **Rework** **Date** **6/2/2014** **Report Number:** **P214-0177**

RECORDS RECEIVED (ATTACH PAGES IF REQUIRED)

	Date	OK	NEED	Remarks
Well Summary (OG100)				
History (OG103)	1-26-15	✓		
E-Log				
Mud Log				
Dipmeter				
Directional				
Core and/or SWS				

NEW STATUS

DATE: _____

NOTICE OF RECORDS DUE

DATE: _____

DATE: _____

DATE: _____

DATE: _____

WELL STATUS INQUIRY

DATE: _____

DATE: _____

Well Stat

Change Required: _____

Change Done: _____

ABANDONMENTS/REABANDONMENTS/DRILLS/REDRILLS

CalWims Abandonment Form: _____ SURFACE INSPECTION NEEDED _____ COMPLETED _____
Date and Inspector

FINAL LETTER NEEDED _____ COMPLETED _____ Calwims DRILL/REDRILL Form _____
(Date)

ENGINEER'S CHECK LIST

T-REPORT(S) _____ OPERATOR'S NAME _____ WELL DESIGNATION _____ SIGNATURE _____

Calwims Location _____ Calwims ELEVATION: _____ CONFIDENTIAL RELEASE DATE: _____ PERMIT REQUIREMENTS MET _____

CLERICAL CHECK LIST

LOCATION CHANGE (OG165) _____ ELEVATION CHANGE (OG165) _____ RELEASE OF BOND (OG150) _____

REMARKS

RECORDS SCANNED: _____
(Date)

RECORDS APPROVED: 2-13-2015 BDL
(Date and Engineer)

Modfied OGD2

AOR Datbase _____

SUBMIT IN DUPLICATE
RESOURCES AGENCY OF CALIFORNIA
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES

Rec'd 01-26-15 DOGGR D2 Ventura

HISTORY OF OIL OR GAS WELL

Operator: Vintage Production California LLC **Field:** OJAI **County:** VENTURA
Well: FERNDALE VF 211 **Sec:** 16 **T:** 4N **R:** 21W **M.D.B. & M.**

API#: 04-111-21178 **Name:** Deborah Young for Denny Brown (Person submitting report) **Title:** Agent (President, Secretary, or Agent)

Signature: [signature] **Date** 12/22/2014

9600 Ming Ave., Suite 300, Bakersfield, CA. 93311 (Address) (661) 869-8000 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items such as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, and initial production data.

Rework History

Work Type	Primary Reason	Secondary Reason	Start Date	End Date
RECOMPLETION	ADD PAY NEW ZONE	PERF	08/27/2014	09/12/2014

8/26/2014 @06:00 **08/27/2014** @06:00

Shut down for the night.

Crew travel from Ensign stage area to Ferndale VF 107

Crew load out mud pump at Ferndale VF 107

Pre trip for rig move from Ferndale VF 107 to Ferndale VF 211.

Move rig from Ferndale VF 107 to Ferndale VF 211. Set up dog house. Set up safety briefing area.

Drop rig mat and rig up hoist.

S.I.T.P. = 80 PSI
S.I.C.P. = 100 PSI
Bled down tubing to cellar.
L/D head and polish rod. Pump unit on upstroke.

Held a safety stand down with Kenny Olsen.

Lunch

Tubing pressure = 0 psi
Casing pressure = 100 psi
Function BOPE = Good.

Unseat pump start POOH w/ rod string encountered heavy wax on rods. RIH w/ rods leaving out (1) rod. P/U polish rod and secure well. Hot oil truck set up for Thursday morning.

Crew travel from Ferndale VF 211 to Ensign stage area.

Shut down for the night.

8/27/2014 @06:00 **08/28/2014** @06:00

Shut down for the night.

Crew travel from Ensign stage area to Ferndale VF 211.

Discussed planned operations and filled out required permits.

Held third party safety meeting with Thomco and Patriot pump 40 bbls hot oil down tubing. R/O Hot oil truck.

POOH w/ rods and pump. LD (10) 1" N-78, (18) 7/8 N-78, (46) 3/4 N-78, (2) 7/8 N-78 6-PER, Stood back the rest of the string. Pump looked good. Wilson to pick up.

Lunch

N/D prod tree. N/U BOP and Hydril. R/U work floor.

Crew travel from Ferndale VF 211 to Ensign stage area.

Shut down for the night.

8/28/2014 @06:00 **08/29/2014** @06:00

Shut down for the night.

Crew travel from Ensign stage area to Ferndale VF 211.

Discussed planned operations and filled out required permits.

HISTORY OF OIL OR GAS WELL

Operator: Vintage Production California LLC **Field:** OJAI **County:** VENTURA
Well: FERNDALE VF 211 **Sec:** 16 **T:** 4N **R:** 21W **M.D.B. & M.**

Tubing pressure = 0 psi
Casing Pressure = 100 psi
Accumulator Pre-charge pressure = 1000 psi
Initial Accumulator pressure = 3000 psi
Manifold Pressure = 1500 psi
Annular pressure = No Annular.
Time to Close Pipe Rams = 5 sec
Time to open Pipe rams = 5 sec
Time to close Annular Bop = No Annular
Final Accumulator Pressure = 2400 psi
Function test Bope =Good

POOH w/ tbg. Tubing detail as follows. (196) 2 7/8 EUE 8rd. J-55, (1) 2 7/8 tbg drain, (4) joints 2 7/8 tbg, (1) Hyd anchor 7", (20) joints, (1) seating nipple, (1) joint.

Lunch

P/U Weatherford scraper bumper sub with bit P/U (160) joints of 2 7/8 J-55 (NEW) RIH To 5005 ft. Secure well.

Crew travel from Ferndale VF 211 to Ensign stage area.

Shut down for the night.

8/29/2014 @06:00 **08/30/2014** @06:00

Shut down for the night.

Crew travel from Ensign stage area to Ferndale VF 211.

Discussed planned operations and filled out required permits.

Tubing pressure = 0 psi
Casing Pressure = 100 psi
Accumulator Pre-charge pressure = 1000 psi
Initial Accumulator pressure = 3000 psi
Manifold Pressure = 1500 psi
Annular pressure = No Annular.
Time to Close Pipe Rams = 5 sec
Time to open Pipe rams = 5 sec
Time to close Annular Bop = No Annular
Final Accumulator Pressure = 2400 psi
Function test Bope =Good

Held third party safety meeting with Weatherford change out set screws and packing on wellhead.

Cont RIH with Weatherford all weight scraper and bumper sub and 6" bit. To 5826 bad spot in casing. Went through while running scraper. Pulled out at 30K over string weight. Attempted to go back through bad spot with no luck.

Lunch

P/U King swivel and attempted to clear out obstruction with 6" drill bit with Oil country tongs with no luck. Tubing just torqued up. Laid down King swivel.

POOH w/ tubing and scraper. Double up hoist. Cont to POOH w/ tubing and scraper standing back in derrick. Stood back a total of (186) joints. Broke out and laid down scraper and bumper sub with 6" bit.

RIH with (40) joints of 2 7/8 EUE 8rd. J-55 tubing for kill string. Secure well for the night.

Crew travel from Ferndale VF 211 to Ensign stage area.

Shut down for the night.

8/30/2014 @06:00 **08/31/2014** @06:00

Shut down for the night.

Crew travel from Ensign stage area to Ferndale VF 211.

Discussed planned operations and filled out required permits.

HISTORY OF OIL OR GAS WELL

Operator: Vintage Production California LLC **Field:** OJAI **County:** VENTURA
Well: FERNDALE VF 211 **Sec:** 16 **T:** 4N **R:** 21W **M.D.B. & M.**

Tubing pressure = 0 psi
Casing Pressure = 0 psi
Accumulator Pre-charge pressure = 1000 psi
Initial Accumulator pressure = 3000 psi
Manifold Pressure = 1500 psi
Annular pressure = No Annular.
Time to Close Pipe Rams = 5 sec
Time to open Pipe rams = 5 sec
Time to close Annular Bop = No Annular
Final Accumulator Pressure = 2400 psi
Function test Bope =Good

POOH w/ (40) joints 2 7/8 J-55 8rd EUE tubing.

P/U Baker Hughes 6" IB RIH with tubing to 5826 and tag bad spot in casing. Set down with 8K on bad spot for impression.

Lunch

POOH w/ Baker Hughes 6" IB and tubing (187) joints of 2 7/8 EUE 8rd EUE. Inspect IB.

P/U Baker Hughes string mill 6", (4) 4 3/4 Drill collars, x-over to 2 7/8 tbg. RIH w/ 2 7/8 J-55 8rd EUE to top of bad spot @ 5826. Secure well for the night.

Crew travel from Ferndale VF 211 to Ensign stage area.

Shut down for the night.

8/31/2014 @06:00 **09/01/2014** @06:00

SDFN.

Discussed planned operations. Filled out required permits.

Tubing pressure = 0 psi
Casing Pressure = 0 psi
Accumulator Pre-charge pressure = 1000 psi
Initial Accumulator pressure = 3000 psi
Manifold Pressure = 1500 psi
Annular pressure = No Annular.
Time to Close Pipe Rams = 5 sec
Time to open Pipe rams = 5 sec
Time to close Annular Bop = No Annular
Final Accumulator Pressure = 2400 psi
Function test Bope =Good

Rig up power swivel. With tail at 5826'. Filled well with 205 Bbls of lease water reverse break circulation. Milled down 6" on the first 1.5 hours then stop making hole. Rig down power swivel.

Pulled out of the hole with tubing to 3000'.

SDFN.

9/1/2014 @06:00 **09/02/2014** @06:00

SDFN.

Discussed planned operations. Filled out required permits.

Tubing pressure = 0 psi
Casing Pressure = 0 psi
Accumulator Pre-charge pressure = 1000 psi
Initial Accumulator pressure = 3000 psi
Manifold Pressure = 1500 psi
Annular pressure = No Annular.
Time to Close Pipe Rams = 5 sec
Time to open Pipe rams = 5 sec
Time to close Annular Bop = No Annular
Final Accumulator Pressure = 2400 psi
Function test Bope =Good

Pulled out of the hole with tubing. Laid down 6" String mill.

Made up 5" Junk mill 4 4-3/4" Drill collars run in the hole with tubing to 5826' 2K# to push through and 2K # to pull through. Run in the hole with tubing to 7550' ok. Laid down extra tubing. Pulled tubing to 3800'.

SDFN.

9/2/2014 @06:00 **09/03/2014** @06:00

SDFN.

HISTORY OF OIL OR GAS WELL

Operator: Vintage Production California LLC **Field:** OJAI **County:** VENTURA
Well: FERNDALE VF 211 **Sec:** 16 **T:** 4N **R:** 21W **M.D.B. & M.**

Discussed planned operations. Filled out required permits.

Tubing pressure = 0 psi
Casing Pressure = 0 psi
Accumulator Pre-charge pressure = 1000 psi
Initial Accumulator pressure = 3000 psi
Manifold Pressure = 1500 psi
Annular pressure = No Annular.
Time to Close Pipe Rams = 5 sec
Time to open Pipe rams = 5 sec
Time to close Annular Bop = No Annular
Final Accumulator Pressure = 2400 psi
Function test Bope =Good

Pulled out of the hole with tubing from 3800'. Laid down drill collars and 5" Mill.

Move in rig up ACE tester plug test 6 jts. Pick up 9 3-3/8" 6HPF TCP guns. 204' from the radioactive sub to the top shot.

SDFN.

9/3/2014 @06:00 **09/04/2014** @06:00

SDFN.

Discussed planned operations. Filled out required permits.

Tubing pressure = 0 psi
Casing Pressure = 0 psi
Accumulator Pre-charge pressure = 1000 psi
Initial Accumulator pressure = 3000 psi
Manifold Pressure = 1500 psi
Annular pressure = 1200 psi
Time to Close Pipe Rams = 5 sec
Time to open Pipe rams = 5 sec
Time to close Annular Bop = 6 sec.
Final Accumulator Pressure = 2300 psi
Function test Bope =Good

Continue to run in the hole all tubing tested to 6000 psi ok. Rig down tester. Filled 2400' of tubing with lease water for 1000 psi under balance.

Held pre job meeting with Weatherford wire line. Move in rig up wire line. Correlate gun setting depth to logs from 05/24/1982 adjusted 9'. Rig down wire line. Set packer at 5750' with 10K # Compression. Filled casing with lease water pressure tested to 300 psi 10 minutes ok.

Drop bar fire guns perforate interval from 6720-6890 with 3-3/8" 6 HPF Guns. Slight blow after we fire guns then stop blowing.

SDFN.

9/4/2014 @06:00 **09/05/2014** @06:00

SDFN.

Discussed planned operations. Filled out required permits.

SITP=500 psi started flowing with choke at 13/64 20 Bbls on the first hour then average 3 to 5 Bbls per hour 95% oil and Pros to continue monitoring well through the weekend.

9/7/2014 @06:00 **09/08/2014** @06:00

Shut down for the night.

Crew travel from Ensign stage area to Ferndale VF 211.

Discussed planned operations and filled out required permits.

Tubing pressure = 0 psi
Casing Pressure = 240 psi
Accumulator Pre-charge pressure = 1000 psi
Initial Accumulator pressure = 3000 psi
Manifold Pressure = 1500 psi
Annular pressure = 1200 psi
Time to Close Pipe Rams = 5 sec
Time to open Pipe rams = 5 sec
Time to close Annular Bop = 6 sec.
Final Accumulator Pressure = 2300 psi
Function test Bope =Good

Held third party safety meeting with Weatherford packer hand. Unset packer. R/U Ensign mud pump and Weatherford safety equipment turn well over with lease water. Monitor gas. Kill pump disconnect hoses.

HISTORY OF OIL OR GAS WELL

Operator: Vintage Production California LLC **Field:** OJAI **County:** VENTURA
Well: FERNDALE VF 211 **Sec:** 16 **T:** 4N **R:** 21W **M.D.B. & M.**

Lunch

POOH w/ tbg and Weatherford TCP guns lying down. Check guns for misfires. Haul TCP guns back to Bakersfield. All guns fired no problems.

Held third party safety meeting with Excalibur wire line R/U lubricator RIH w/ sample bailer and tag well @ 7680. R/O wire line.

RIH w/ 20 joints of 2 7/8 EUE 8rd tubing for kill string.

Crew travel from Ferndale VF 211 to Ensign stage area.

Shut down for the night.

9/8/2014 @06:00 **09/09/2014** @06:00

Shut down for the night.

Crew travel from Ensign stage area to Ferndale VF 211.

Discussed planned operations and filled out required permits.

Tubing pressure = 0 psi
Casing Pressure = 0 psi
Accumulator Pre-charge pressure = 1000 psi
Initial Accumulator pressure = 3000 psi
Manifold Pressure = 1500 psi
Annular pressure = 1200 psi
Time to Close Pipe Rams = 5 sec
Time to open Pipe rams = 5 sec
Time to close Annular Bop = 6 sec.
Final Accumulator Pressure = 2300 psi
Function test Bope =Good

Un-land 7" hanger POOH w/ 20 joints of 2 7/8 EUE 8rd J-55 tubing.

Held third party safety meeting with Atlas crane remove tubing from racks and move Ensign wrangler from location to Rig up Ace testers.

Lunch

Held third party safety meeting with Ace testers R/U top and bottom sheaves with bar tools.

Plug tested (6) joints of 2 7/8 EUE 8rd J-55 tubing @ 6000 psi all tested good.

RIH with (1) 2 7/8 purge valve, (2) joints 2 7/8 J-55 tbg, (1) 4' 2 7/8 pup joint with d-2703 Desander, (1) 2 7/8 T/L pump shoe, (4) joints 2 7/8 tbg, (1) 5K Fike drain, (34) joints 2 7/8 tbg, Went to pick up Black Gold Hyd Anchor found that it was not for multiple size casings but only sized for 23# . Well has 29# on top, 23# middle, 26# on bottom. L/D Anchor contacted Black Gold. Their records indicate multiple size casing over site on Black Gold. Deliver new anchor in the morning. Secure well.

Crew travel from Ferndale VF 211 to Ensign stage area.

Shut down early Black Gold Anchor was incorrect. Casing is 29#, 26#, 23#. Anchor was built for 23#. Their records indicate multiple size casing. Talked to tech at Black Gold. Mix up on Black Gold.

Shut down for the night.

9/9/2014 @06:00 **09/10/2014** @06:00

Shut down for the night.

Crew travel from Ensign stage area to Ferndale VF 211.

Discussed planned operations and filled out required permits.

Tubing pressure = 0 psi
Casing Pressure = 0 psi
Accumulator Pre-charge pressure = 1000 psi
Initial Accumulator pressure = 3000 psi
Manifold Pressure = 1500 psi
Annular pressure = 1200 psi
Time to Close Pipe Rams = 5 sec
Time to open Pipe rams = 5 sec
Time to close Annular Bop = 6 sec.
Final Accumulator Pressure = 2300 psi
Function test Bope =Good

POOH w/ 20 joints of 2 7/8 EUE 8rd J-55 tubing and stand back in derrick.

Held third party safety meeting with Ace testers R/U testing equipment. P/U Correct Black Gold anchor for 23# to 29# casing. Start RIH testing to 6000 psi.

Lunch

Cont RIH testing tubing to 6000 psi. All tubing tested good. R/O Ace testers. BHA as follows. (1) Purge valve, (2) joints 2 7/8 tubing, (1) D-2703 Cavins desander, (1) 4 ft. sub, (1) Seating nipple, (11) joints 2 7/8 tubing, (1) Black Gold 7"23# - 29# Hyd anchor, (4) joints 2 7/8 tubing, (1) Fike 5K drain, (152) joints 2 7/8 tubing, (1) Double box bushing. R/O Ace testers.

HISTORY OF OIL OR GAS WELL

Operator: Vintage Production California LLC **Field:** OJAI **County:** VENTURA
Well: FERNDALE VF 211 **Sec:** 16 **T:** 4N **R:** 21W **M.D.B. & M.**

R/D work floor. N/D BOP.N/U Prod tree.

Tubing pressure = 0 psi
Casing pressure = 0 psi
Function test BOPE = Good.

RIH w/ rods from the derrick. POOH lying down due to design change. Secure well for the night.

Crew travel from Ferndale VF 211 to Ensign stage area.

Shut down for the night.

9/10/2014 @06:00 09/11/2014 @06:00

Shut down for the night.

Crew travel from Ensign stage area to Ferndale VF 211.

Discussed planned operations and filled out required permits.

Tubing pressure - 10 psi.
Casing pressure = 15 psi.
Function test BOPE = Good.

Held third party safety meeting with Atlas Crane P/U old rod string and load on trailer. Unload new rods from trailer.

Prep new rod string. Pick up new upsized pump. Pump was hard to scope in and out, Contacted Wilson pump. They picked up pump and replaced Martin wipers (34). Replaced with new 1 3/4 wipers. Pump works fine. P/U (88) 3/4 WHD slick

Lunch

Cont Picking up new rods off the ground. (70) 7/8 WHD, (62) 1" WHD. P/U New polish rod 1 1/2 x30. Fill tubing with 20 bbls lease water. Pump up with rig to 600 psi and held good. Held for 15 minutes. Hang head. Secure well.

Crew travel from Ferndale VF 211 to Ensign stage area.

Shut down for the night.

9/11/2014 @06:00 09/12/2014 @06:00

Shut down for the night.

Crew travel from Ensign stage area to Ferndale VF 211.

Discussed planned operations and filled out required permits.

Document no BOPE in use today.

Adjust and get head in proper working condition.

Space well out. Test well to 600 psi for lease operator to witness. Good test.

Drop guy wires and rig down hoist.

Lunch

Ensign 342 rig repairs welding up cracks on mast and draw works.

Pre trip for rig move from Ferndale VF 211 to Willy's 1.

Move rig from Ferndale VF 211 to Willy's 1.

Crew travel from Willy's 1 to Ensign stage area.

Shut down for the night.

New Holes

Wellbore No.	Hole Size (in)	Top MD (ft)	Btm MD (ft)	Start Date	End Date

New Casing/Liner Strings

Size	Assembly Name	Installed	Wellbore No	Top MD (ft)	Btm MD (ft)

SUBMIT IN DUPLICATE
RESOURCES AGENCY OF CALIFORNIA
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES

Rec'd 01-26-15 DOGGR D2 Ventura

HISTORY OF OIL OR GAS WELL

Operator: Vintage Production California LLC **Field:** OJAI **County:** VENTURA
Well: FERNDALE VF 211 **Sec:** 16 **T:** 4N **R:** 21W **M.D.B. & M.**

New Perforated Intervals

Date Shot	Wellbore No.	Top MD (ft)	Btm MD (ft)	Length (ft)	SPF	Phasing (°)
09/04/2014	00	6,720	6,890	170	6	60.00

Fish Junk left in Hole

Date	Wellbore No.	Type	Description	Top MD (ft)	Btm MD (ft)

NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
1000 S. Hill Rd, Suite 116 Ventura, CA 93003 - 4458

PERMIT TO CONDUCT WELL OPERATIONS

No. P 214-0177

Old	New
520	520
FIELD CODE	
12	12
AREA CODE	
10	10
POOL CODE	

Ventura, California
June 05, 2014

Denny Brown, Agent
Vintage Production California LLC (V1370)
9600 Ming Avenue, Suite 300
Bakersfield, CA 93311

Your proposal to **Rework** well **"Valex-Ferndale" 211**, A.P.I. No. **111-21178**, Section **16**, T. **04N**, R. **21W, SB** B. & M., **Ojai** field, **Silverthread** area, **Miocene** pool, **Ventura** County, dated **6/2/2014**, received **6/2/2014** has been examined in conjunction with records filed in this office. (Lat: **34.433437** Long: **-119.080636** Datum:**83**)

THE PROPOSAL IS APPROVED PROVIDED:

1. Blowout prevention equipment, as defined by this Division's publication No. M07, shall be installed and maintained in operating condition and meet the following minimum requirements:
   a. Class **II 3M or a 3M lubricator with wireline** on the **7"** casing.
2. Hole fluid of a quality and in sufficient quantity to control all subsurface conditions in order to prevent blowouts shall be used.
3. Blowout prevention practice drills are conducted at least weekly and recorded on the tour sheet. A practice drill may be required at the time of the test/inspection.
4. This office shall be contacted by phone prior to making any program changes and no changes are made without Division approval.
5. **THIS DIVISION SHALL BE NOTIFIED TO:**
   a. Inspect the installed blowout prevention equipment prior to commencing **rework** operations.

NOTE:

1. The base of the freshwater zone should be encountered above **600'.**
2. The Division recommends, as a minimum, that carbon monoxide monitoring equipment and a vent line be installed and maintained in operating condition during all extensive perforating operations.

Steven Bohlen
State Oil and Gas Supervisor

Blanket Bond Dated: 4/23/2003

Engineer Kris Gustafson
Office (805) 654-4761

By _____
Bruce Hesson, *District Deputy*

KG/kg

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended. Issuance of this permit does not affect the Operator's responsibility to comply with other applicable state, federal, and local laws, regulations, and ordinances.

OG111 (revised 6/2011)

NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

Rec'd 06-02-14 DOGGR D2 Ventura

FOR DIVISION USE ONLY		
	Forms	
Bond	~~OG111~~	OG121 ✓
	CAL WIMS ✓	1151 ✓

NOTICE OF INTENTION TO REWORK / REDRILL WELL

Detailed instructions can be found at: www.conservation.ca.gov/dog/ P214-0177

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework ☒ / redrill ☐ (Check one) well Ferndale VF 211, API No. 0411121178,

Sec. 16, T. 4N, R. 21W, SB B.&M., Ojai Field, Ventura County.

The complete casing record of the well (present hole), including plugs and perforations, is as follows: (Attach wellbore schematics diagram also.)

Surface Casing 13-3/8", J-55, 48# @ 681 ft. Cemented with 890 cf
Intermediate Casing: 9-5/8", N-80, 40# ft, ID=8.835", 0-5,825 ft. Cemented with1175cf.
Production casing 7", N-80, 29#, 0-88', ID=6.184" / 7", N-80, 23#, 88-2,890', ID=6.366"/7", K-55, 23#, 2,890-4,910, ID=6.366"/7", N-80, 23#, 4,910-6,756, ID=6.366"/7", N-80, 26 #, 6,756-7,879, ID=6.276"/7", N-80, 29#, 7,879-8,600, ID=6.184"
Liner 5", K-55, 18#, ID=4.276", 8,508-8,814 ft
Note: attached detail wellbore diagrams (actual and proposal)

The total depth is: 8860 feet. The effective depth is: 7760 feet.

Present completion zone(s): Mohnian (Name). Anticipated completion zone(s): Mohnian (Name).

Present zone pressure: 1600 psi. Anticipated/existing new zone pressure: ~1600 psi.

Is this a critical well as defined in the California Code of Regulations, Title 14, Section 1720(a) (see next page)? Yes☐ No☒

For redrilling or deepening only, is a California Environmental Quality Act (CEQA) document required by a local agency? Yes☐ No☒ If yes, see next page.

The proposed work is as follows: (A complete program is preferred and may be attached.)

Add. New perforations with TCP guns @ 6SPF (Mohnian formation) and return well to production.
See attached program with new Perforations details.

If well is to be redrilled or deepened, show proposed coordinates (from surface location) and true vertical depth at total depth: _____ feet _____ (Direction) and _____ feet _____ (Direction) Estimated true vertical depth: _____

Will the Field and/or Area change? Yes☐ No☒ If yes, specify New Field: _____ New Area: _____

The Division must be notified immediately of changes to the proposed operations. Failure to provide a true and accurate representation of the well and proposed operations may cause rescission of the permit.

Name of Operator			
Vintage Production California			
Address		City/State	Zip Code
9600 Ming Ave		Bakersfield, CA	93311
Name of Person Filing Notice	Telephone Number:	Signature	Date
Deborah Young for Denny Brown	661-869-8178		6/2/2014
Individual to contact for technical questions:	Telephone Number:	E-Mail Address:	
Marco Ramirez	661-869-8133	marco_ramirez@oxy.com	

This notice and an indemnity or cash bond must be filed, and approval given, before the workover begins. (See the reverse side for bonding information.) If operations have not commenced within one year of the Division's receipt of the notice, this notice will be considered cancelled.

INFORMATION FOR COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT OF 1970 (CEQA)

If an environmental document has been prepared by the lead agency, submit a copy of the ***Notice of Determination*** or ***Notice of Exemption*** with this notice. Please note that a CEQA determination by a local jurisdiction, if required, must be complete, or the Division may not issue a permit.

CRITICAL WELL DEFINITION

As defined in the California Code of Regulations, Title 14, Section 1720 (a), "Critical well" means a well within:

(1) 300 feet of the following:
  (A) Any building intended for human occupancy that is not necessary to the operation of the well; or
  (B) Any airport runway.
(2) 100 feet of the following:
  (A) Any dedicated public street, highway or the nearest rail of an operating railway that is in general use;
  (B) Any navigable body of water or watercourse perennially covered by water;
  (C) Any public recreational facility such as a golf course, amusement park, picnic ground, campground or any other area of periodic high-density population; or
  (D) Any officially recognized wildlife preserve.

WELL OPERATIONS REQUIRING BONDING

1. Drilling, redrilling, or deepening any well.
2. Milling out or removing a casing or liner.
3. Running and cementing casing or tubing.
4. Running and cementing liners and inner liners.
5. Perforating casing in a previously unperforated interval for production, injection, testing, observation, or cementing purposes.
6. Drilling out any type of permanent plug.
7. Reentering an abandoned well having no bond.

This form may be printed from the DOGGR website at www.conservation.ca.gov/dog/

Rec'd 06-02-14 DOGGR D2 Ventura

Vintage Production California LLC

A subsidiary of Occidental Petroleum Corporation

Well Operations Procedure

Ferndale VF 211

OJAI

South Team

Capital Workover – Add Perforations.

05/30/2014

Production Engineer:	Marco Ramirez	661 340 0382
Production Coordinator:	Steve Alexander	661 679 5081
Well Servicing Supervisor:	Kenneth Olson	805 830 3143

Project Data:

One Oxy	**xxxxxxx**
Total Budget:	$ 214,500
Expected Rates:	15 BOPD, 10 BWPD, 10 MCFPD
BOE/RIG DAY:	2

Well Data:

API #:	04-111-21178		
Datum:	KB		
KB to GL:	18'		
MD:	8,860'		
TVD:	8,389'		
PBMD:	7,760'	**Nature of Plug Back:**	sand @ 7,760' Fish @ 7,780'

Casing Data:

Surface Casing	13-3/8", J-55, 48# @ 681 ft. Cemented with 890 cf
Intermediate Casing:	9-5/8", N-80, 40# ft, ID=8.835", 0-5,825 ft. Cemented With 1,175 cf
Production casing	7", N-80, 29#, 0-88', ID=6.184" 7", N-80, 23#, 88-2,890', ID=6.366" 7", K-55, 23#, 2,890-4,910, ID=6.366" 7", N-80, 23#, 4,910-6,756, ID=6.366" 7", N-80, 26 #, 6,756-7,879, ID=6.276" 7", N-80, 29#, 7,879-8,600, ID=6.184"
Liner	5", K-55, 18#, ID=4.276", 8,508-8,814 ft

Vintage Production California LLC

A subsidiary of Occidental Petroleum Corporation

Well Operations Procedure

Perforations:

7,016-7,334	gross	
7,802-8,343	gross	Note: sand and fish @ 7780 ft.
8,590-8,813	slots	

Tubing Data: 2-7/8 Tubing J-55, 6.5#, ID=2.441"@ 6,888' with tubing anchor at 6,443'.

Wellhead: N/A

Objective: Add. New perforations (170 ft net) in Upper Mohnian

Current Status: Active Well.

Well History

- Ferndale VF 211 was drilled in 1982. Initially was completed in the Monterey shale with slotted liner from 8,590-8,813 ft. with a production of 28 BOPD with rod pump.
- In 1982 well was completed with perforations in the Argo sand from 7,802-8,343, that were hydraulically fractured, initial rate was 200 BOPD.
- In 1983 valex sand was perforated from 7,016 to 7,334 ft, and producing in commingled Monterey and Argo sands.
- In 1990 well was converted to Injector, water injection was performed in interval 7,802-8,343 ft
- In 1997 well was converted from injector to producer, during workover a fish was left in hole; Top of fish 7,780 ft. Well returned to production from 7,016-7,334 interval with 15 BOPD
- Last TD tag was in 2010 at 7,760 ft.
- Actual test is 6 BFPD, 4 BOPD,16 MCFPD on 05/08/2014

Permit Status: **requested**

Well Control:

- **Class BOPE:** Class II 3M as defined by DOGGR Manual M07.
  3M lubricator (when applicable).
- **Max reservoir pressure expected:**
  - 1600 psi at 7,510' MD (7,194' TVD) = .22 psi/ft
- **Maximum anticipated SITP (operating):**
  - SITP = Pore press gradient – well fluid gradient x depth TVD
  - Most likely SITP = (.22 psi/ft – .43 psi/ft) x 7,194' =-1,493 psi
  - Worst case SITP = (.22 psi/ft – .1 psi/ft) x 7,194' = 863 psi

Vintage Production California LLC

A subsidiary of Occidental Petroleum Corporation

Well Operations Procedure

- **Kill fluid requirements:**
  - If necessary ~8.3 ppg mud/fluid will be required to control well

Work Requirements, Long Lead Items and Contacts:

1. TCP guns will be provided by Weatherford (contact John Marler @ 661 910 8586).
2. TCP correlation will be provided by Weatherford (contact Jeff Anderson @ 661 599 4804).
3. Hydrotest flow line (contact John Lindgren @ 661 487 4193)
4. Tubular Goods will be provided by JD Rush (contact Paul Fahey @ 661 496 4820).

Job Procedure:

1. Perform pre-move in inspection.
2. Stop unit. Remove pumping unit
3. Set rig anchors and MIRU WO rig.
4. Conduct PJSM with all personnel on location covering any and all possible hazards. Fill out appropriate JSAs
5. Bleed well pressure off as necessary. Check for any H2S or LEL's present.
6. Kill well if is necessary using clean lease water.
7. Pull rods and insert pump.
8. ND well head. NU Class II 3M BOPE and pressure test.
9. POOH and lay down production tubing and pick up new 2-7/8", J-55,6.5# tubing.
10. Rig up bit and scraper for 7" casing, 29# (6.184" ID) with 2-7/8, J-55 tubing and RIH to 7,500 ft. If tag is above 7,500 ft clean sand to 7,500 ft. POOH, lay down scraper and bit
11. TCP Perforating Safety
    - Pre-Hookup Safety
      i. Upon arriving at location, check –in with OXY representative, discuss job procedures and verify materials.
      ii. Service Supervisor and crew to conduct location assessment.
      iii. After completing the location assessment, conduct Safety Meeting and complete JSA.
    - Safety Meeting should include:
      iv. All personnel on location must attend the safety meeting.
      v. Designation of a Safety Observer.
      vi. Emergency "what-if" scenarios and communications.
      vii. JSA – to be hand written and cover location and job specific issues.
      viii. Safe areas.
    - Rig Up Equipment – conduct Safety Huddles when appropriate.

Vintage Production California LLC

A subsidiary of Occidental Petroleum Corporation

Well Operations Procedure

12. Make up and RIH with TCP guns (bottom to top):
- Steel bull plug
- 3-3/8" Millennium 6 SPF TCP guns, 60° phasing – see attached perforation information. All charges to be 25 gram, 0.42" hole, 47" penetration.
- 3-3/8" safety spacer
- Mechanical firing head
- 2-7/8" 6.5# J-55 8rd EUE tubing (2 joints)
- 2-7/8 Magnum disc
- 2-7/8" 6.5# J-55 8rd EUE tubing (2 joints)
- 2-7/8 pup joint
- 7" CST packer @ +/- 6,568 ft
- 2-7/8 pup joint
- 2-7/8" 6.5# J-55 8rd EUE tubing (2 joints)
- RA tubing tag
- 2-7/8" 6.5# J-55 8rd EUE tubing to surface

Perforations: 6,720-6,890 (170 ft)

13. Continue RIH with TCP assembly. DO NOT EXCEED 200 FT/MIN WHEN RIH WITH TCP GUNS.

NOTE: LAY DOWN EXCESS TUBING

14. Fill 2-7/8 tubing with ~ 14 bls of clean lease water (approx. 2,400 ft of water cushion ,corresponds to +/- 1000 psi hydrostatic in tubing

15. Rig up wire line and make correlation using new GR log. (HAVE FULL SET OF PUP JOINTS ON LOCATION).Install pup joints if is necessary

16. Set 7" packer at ~6,568 ft. Note: Packer depth depends of field measurement of tubing and tools below the RA tubing tag depth.

17. Connect TIW (rated to 3M) on top of the tubing.

18. Install flow line to baker tank.

19. Pressure up back side to 300 psi and monitor for 10 minutes.

20. Drop 1.25" bar to open max differential vent and under-balance perforate proposed intervals. RECORD PRESSURE RESPONSE AFER DETONATION – BOTH ON TUBING AND BACKSIDE. Flow well back – RECORD FLOW VOLUMES AND FLUID COMPOSITION.

21. Kill well as necessary and release packer. POOH with tubing and TCP guns. Inspect TCP guns at surface ensuring that all perforations have detonated. LD guns and packer. Note: monitoring for CO2

Rec'd 06-02-14 DOGGR D2 Ventura

22. Tag TD for fill

23. Run production tubing equipment, and rod pump.

24. Install Rod pump well head

25. Start well and evaluate results.

WellBoreFerndale VF 211.xlsx

ProposalWellBoreFerndale VF 21....

PROPERTY/WELL TRANSFER OR ACQUISTION

Seneca Resources Corporation (S2630)

to

Vintage Production California LLC (V1370)

Effective April 25, 2008

OPERATOR Arco
WELL NO. Valley-Fernadale 211
MAP 203

INTENTION	Drill	Supp	alter Casing	rework	Convert to Inj	Convert to Producer
NOTICE DATED	4-16-82	6-4-82	9-19-84	11/3/89	1-19-90	10-8-97
P-REPORT NUMBER	282-139		284-218	289-421	290-138	297-382
CHECKED BY/DATE	RSH 1-27-83					
MAP LETTER DATED	1-29-83		N/C	NC		N/A
SYMBOL						

	REC'D	NEED	REC'D	NEED	REC'd	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED
NOTICE	4-19-82		6-8-82		7-20-84		11/6/89		1-11-90		10-15-97	
HISTORY	12-29-82				12-18-84		1/11/90		7/3/90		12-19-00	
SUMMARY	12-29-82				12-18-84							
E-LOG	12-29-82											
MUD LOG	12-29-82											
DIPMETER	12-29-82											
DIRECTIONAL	12-29-82											
CORE/SWS												
CBL	12-29-82											
Dens. Neu	12-29-82											
Waveform	12-29-82											
V. Den	12-29-82											
History, prod comp	3-20-84											
Summary and comp	3-20-84											
GAMMA Log							1/11/90					
B/A Subject (Ack 90)									7/16/90			
RECORDS COMPLETE	3-29-84				RSH 12-20-84		SF 1/25/90		SF			

ENGINEERING CHECK

T-REPORTS	no WSO					
OPERATOR'S NAME	✓					
WELL NO.	✓					
LOC & ELEV	✓					
SIGNATURE	✓					
SURFACE INSP.						
FINAL LETTER OK						

FINAL LETTER MAILED

REMARKS: [illegible]

RELEASED BOND

[illegible]

Well History - Ferndale 211 Page 1

9/27/97
Day 1. Rig up slickline truck. Make up and run 2.32 guage ring. Tag down at 4000'. Work through several spots to 5200'. Work through solid wall scale from 5200' to 6093', while injecting into well. SDFN

9/28/97
Day 2. Rig up slickline truck. MU and run 2.3 guage ring. Tag down at 6113'. . Work through solid wall scale from 6113' to 6244', while injecting into well. Unable to make hole. POOH. Make up 1 1/2" bailer. RIH. Stopped at 6244'. POOH and rig out slickline. Shut down until Monday A.M.

9/30/97
Day 3. RU acid truck, pump 50 bbls of 2% KCL water to clear tbg. Pump 1000 gals of 15% HCL w/ additives. Displace acid to the btm of tbg with KCL. Let acid soak for 1 hr. Pump 1 bbl every 5 min to displace acid out tubing tail. Displace acid out perforations with 50 bbls of 2% KCL water. Rig up slickline truck. Make up 2.3" O.D. guage ring and RIH. Stopped at 6807'. Unable to work down. POOH. MU 2.25" impression block. RIH, impression block stopped a at 6342'. POOH. MU and run 2.125" gauge ring. Guage ring stopped at 6390'. Unable to make hole. POOH. MU 1 1/2" bailer and RIH. Tag down at 6407'. Work down to 6538'. POOH w/ bailer and obtain a sample. Perform field test on material recovered with 15% HCL. Found material was not acid soluable. Rig out wireline. Shut down

10/2/97
Day 4. Rig up 1" coil tubing unit. MU 2 25" bit and Dyna-drill. RIH with coil tubing and tools. Tag down at 6493'. Clean out 2 7/8" tubing to tubing tail at 7804'. RIH to 7850'. Recipocate bit 2 times from 6000' to 7850'. Pump 5 bbl polymer sweep. Circulate well clean. Spot 5 bbls of polymer from tubing tail to 6900'. POOH with coil tubing. Rig out coil tubing unit. SDFN.

10/3/97
Day 5. Rig up slickline truck. Run 2.3" Guage ring to 7845'. POOH. Make up XX plug. RIH and land in profile @ 7845 (wireline Meas.) POOH w/ slickline. Pressure test plug to 1000 psi for 5 min. OK Rig out wireline. SDFN.

10/4/97
Day 6. MIRU. Remove Injection tree. Had to chisel off the end of one donut stud. Nipple up BOPE. Rig for tubing. Shut job down until Monday a.m.

10/7/97
RU Dialog, ran 2 1/8" chemical cutter. Tagged tubing plug at 7795'. Cut 2 7/8" tbg at 7780', leaving 15' stub above pkr. Pulled and measure tbg. Recovered 245 jts and 12.40' stub. (Cut looked clean)
RU tester. Make up pump shoe. Test in hole with 32 stands of tubing at 5000 psi. SDFN

10/8/97
Day 8. Continue testing in hole with tubing. Land tubing with tail at 7143'. Nipple down BOPE. Build production tree. Pick up 2 1/2" x 1 3/4" x 24' pump, 6 1 1/2" sinker bars, 92- new 3/4" D rods, 72 - new D rods, and 5 - new 1" D rods.
Page 2

10/9/97
Day 9. Continue picking up rods. Space well out. Fill tubing with KCL water. Pressure test tbg to 300 psi. RDMO. RWTP.
10/10/97 Day 9. Continue picking up rods. Space well out. Fill tubing with KCL water. Pressure test tbg to 300 psi. RDMO. RWTP.

10/11/97
Convert to rod pump.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

S 20 / T 2 / W F
10 06

~~SUPPLEMENTARY NOTICE~~

Rework Notice

FOR DIVISION USE ONLY		
BOND	FORMS 114	121
PB	✓	✓

DIVISION OF OIL AND GAS

Ventura Calif.

A notice to you dated October 8, 19 97, stating the intention to

Rework (Drill, rework, abandon), Well No. ~~Formerly 11~~ "Valex-Ferndale" 2-11, API No. 111-21178,

Sec. 16, T. 4N, R. 21W, SB B. & M., Ojai Field,

Ventura County, should be amended because of changed conditions.

S 16 / 96

The present condition of the well is as follows:

Total depth

8814'

Complete casing record including plugs and perforations:

See the attached for well details.

We now propose

See the attached for program details.

RECEIVED
OCT 15 1997
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES
VENTURA, CALIFORNIA

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address P.O. Box 630 (Street)

Santa Paula, CA 93061 (City) (State) (Zip)

Telephone Number 805-933-2217

Seneca Resources Corporation (Name of Operator)

By M. Nuss (Name) 10-08-97 (Date)

Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

Seneca Resources Corporation
Ferndale 211
Silverthread Field

Terminate Injection Into Argo Sands and RTP From Valex Sands

August 19, 1997
Revised September 16, 1997

Present Conditions:

TD: 8814' ETD: 8497' KB: 18'

Casing: 9-5/8", 36 & 40#, K-55 & N-80 cemented at 5825'

7", 23# - 29#, K-55 & N-80 cemented at 8600'

Liner: 5, 18#, K-55 hung at 8814', TLH at 8508'

Perforations: (Liner) 8813' - 8590' w/ 2" x 120M, 6" C, 2R, MCS.

(Argo Zones) 8342', 8336', 8324', 8308', 8264', 8249', 8232', 8220', 8210', 8170', 8166', 8154', 8147', 8103', 8088', 8073', 8014', 8000', 7990', 7982', 7942', 7920', 7906', 7896', 7861' w/ 4 JHPI - 100 Holes.
Frac'd in 3 stages, frac gradient .75 - .90 psi/ft.

(Valex Zones) 7339', 7334', 7331', 7327', 7325', 7321', 7310', 7158', 7144', 7135', 7124', 7108', 7090', 7052', 7042', 7027', 7016' w/ 4 JHPI - 68 Holes.
Frac'd in 2 stages, frac gradient .68 & 1.01 psi/ft.

Tubing Detail:

Top	18.00'	KB
Next	2.80'	Hanger and FN
"	7773.73	246 Jts. 2-7/8" Tbg.
"	.78'	2.31" Profile Nipple
Bottom	12.30'	Inflatable Packer
Total	7807.81'	

Current Status: Shut-in Waste Water Disposal Well. Top of fill during last injection profile survey - 8229'.

Casing Restrictions: 8014' - 8013', 7886' - 7885', 7870' - 7865', 7826' - 7820', 7022' - 7017', 5827' - 5817'

Proposed Program:

1. MIRU a wireline unit and set blanking plug in profile nipple at 7795'. Pressure test plug in profile nipple. Rig out wireline unit.

2. MIRU a production hoist, triplex circulating pump and 500 Bbl. portable storage tank. Bleed well off.

RECEIVED
OCT 15 1997
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES
VENTURA, CALIFORNIA

2. Remove production tree and install double ram hydraulic BOP.

3. Unland tubing, remove hanger and install a working pup joint. Rig up wireline unit and RIH with chemical tubing cutter. Cut tubing at 7780'. Rig out wireline unit. MOH with tubing.

4. Make up and test in hole with rod pumping BHA as directed by Seneca's well site supervisor and land with tail at 7150'±. Remove BOP and install production tree.

5. Run rods and pump, space, pressure test and hang well off. RDMO.

6. Install pumping unit and place well on production

7. Test well daily until directed otherwise.

Prepared by: _____

Approved by: _____

Approved by: _____

RECEIVED
OCT 15 1997
DIVISION OF OIL, GAS, AND
GEOTHERMAL RESOURCES
VENTURA, CALIFORNIA

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES
RBDMS- RECORDS ENTERED

COMPANY Seneca WELL NO. Velax-Ferndale 2II

API NO. 04-111-21178 SEC. 16, T. 4N, R. 21W, SB B.&M.

COUNTY Ventura FIELD Ojai

RBDMS DATA ENTERED: 10/16/97
(DATE)

BY: SAT
(NAME)

RBDMS DATA MUST BE UPDATED FOR ALL DATA THAT IS RECEIVED AFTER THE DATE INDICATED ABOVE.

WELL CONSTRUCTION DATA ONLY

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

No. T296-221

Report on Operations

Barry L. McMahan, Agent
Seneca Resources Corp.
P.O. Box 630
Santa Paula, CA 93060

Ventura, California
October 7, 1996

Your operations at well "Valex-Ferndale" 211, API No. 111-21178,
Sec. 16, T. 4N, R. 21W, S.B. B.&M. Ojai Field, in Ventura County,
were witnessed on 9-18-96. Steve Mulqueen, representative of
the supervisor, was present from 1200 to 1400. There were also present
Martin Chapman
Present condition of well: 13 3/8" cem 681'; 9 5/8" cem 5825'; 7" cem 8600', perf 5810',
perfs 7016'-7339' & 7861'-8342'; 5" ld 8508'-8814', perfs 8590'-8813'. TD 8860'.

The operations were performed for the purpose of demonstrating that the injected fluid is confined to strata below 7861'.

DECISION:

The Mechanical Integrity Test (MIT) is approved since it indicates that all of the injection fluid is confined to the formations below 7861' at this time.

William F. Guerard, Jr.
State Oil and Gas Supervisor

By Patrick J. Kinnear

Patrick J. Kinnear
Deputy Supervisor

OG109 (Modified 1993)

State of California
Department of Conservation
Division of Oil, Gas, and Geothermal Resources

No. T 296-22

MECHANICAL INTEGRITY TEST (MIT)

Operator: SENECA RESOURCES CORP. Well designation: "VALEX - FERNDALE" 2I1

Sec. 16, T. 4N, R. 21W, SB B.& M. API No.: 111-21178 Field: OVAI

County: VENTURA Witnessed/Reviewed on: 9-18-96.

STEVE MULQUEEN, representative of the supervisor, was present from 1200 to 1400.

Also present were: MARTIN CHAPMAN

Casing record of the well: 13 3/8" cem 681'; 9 5/8" cem 5825'; 7" cem 8600', perf 5810', perfs 7016'-7339' & 7861'-8342'; 5" ld 8508'-8814', perfs 8590'-8813'. TD 8860'.

The MIT was performed for the purpose of (D)(5) 7861'

☒ The MIT is approved since it indicates that all of the injection fluid is confined to the formations below 7861 feet at this time.

☐ The MIT is not approved due to the following reasons: (specify)

1500

Well: "VALEX FERNDALE" 21 Date: 9-18-96 Time: 1030

Observed rate: 180 B/D Meter rate: _____ B/D Fluid level: 0 feet

Injection pressure: 1100 psi MASP: _____ Pick-up depth: 8229 feet

Initial annulus pressure: SLIGHT BLOW psi Pressure after bleed-off: 0 psi

Casing vented during test (Y/N): Y Survey company: _____

SPINNER COUNTS

DEPTH	COUNTS	RATE	DEPTH	COUNTS	RATE

COMMENTS: KB 18'
TEMP 7700' - 8229'

TRACER CASING AND TUBING RATE CHECKS

Background log: 7700 to 7900

	Interval	Time (sec.)	Rate (B/D)	
TBG	100' - 109 (9)	17	180	COMMENTS: OK
TBG	7700' - 7750 (50)	150	166	
CSG	7816' - 7825 (9)	81	360	INACCURACY IN CASING, OK

TOP PERFORATION CHECK

Top perforation depth: 7861 Wait at: 7825 for 300 seconds Beads: (Y/N) —

Casing shoe at: _____ WSO holes at: _____ Arrival time: *Calculated* — *Actual* —

	LOG FROM	TO	SLUG @	LOG FROM	TO	SLUG @	COMMENTS: OK
DN	7825	7900	7856				
UP	7900	7810	7870				
DN	7810	7900	7890				

PACKER CHECK

Packer at: 7807' Wait at: 7750 for 300 seconds Beads: (Y/N) —

Tubing tail at: 7807 Tubing size: 2 7/8 2nd Packer at: — Mandrel: —

	LOG FROM	TO	SLUG @	LOG FROM	TO	SLUG @	COMMENTS: OK
DN	7750	7850	7815				
UP	7850	7700	7820				

COMMENTS: 7" csg, perfs 7861' - 8342'

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No.T292-122

REPORT ON OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
July 21, 1992

Your operations at well "Valex-Ferndale" 211, API No. 111-21178, Sec. 16, T. 4N, R. 21W, S.B.B.&M. Ojai Field, in Ventura County, were witnessed on 7/16/92. Pete Wygle, representative of the supervisor, was present from 1430 to 1530. There were also present B. Wright, Operator's Representative.

Present condition of well: 13 3/8" cem 681'; 9 5/8" cem 5825'; 7" cem 8600', perf 5810', 7016'-7339' & 7861'-8342'; 5" ld 8508'-8814', perf 8590'-8813'. TD 8860'.

The operations were performed for the purpose of demonstrating that the injection fluid is confined to strata below 7861'.

DECISION:

The injection survey is approved since it indicates that all of the injection fluid is confined to the formations below 7861' at this time.

tkc

K.P. HENDERSON, Acting Chief

By _____
Patrick J. Kinnear
Deputy Supervisor

OG109

State of California
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

8F

No. T 122

INJECTION (M.I.T.) SURVEY

Operator: Seneca Res Corp Well Designation: "Valex Ferndale" 211

Sec. 16, T. 4N R. 21W SB B.&M. A.P.I. No.: 111-21178 Field: Ojai

County: Ventura Witnessed on (date): 7-16-92 . P. Wygle,

representative of the Supervisor, was present from 1430 to 1530.

Also present: B. Wright, operator's rep

Casing record of well: 13 3/8" cem 681'; 9 5/8" cem 5825'; 7" cem 8600', perf 5810', 7016'-7339' & 7861'-8342'; 5" ld 8508'-8814', perf 8590'-8813'. TD 8860'.

The injection survey was performed for the purpose of (6) 7861'

[X] The injection survey is approved since it indicates that all of the injection fluid is confined to the formations below 7861' feet at this time.

[ ] The injection survey is not approved due to the following reasons: (specify)

Note:

OGD6 (DWRR/11/88/5M)

M.I.T. DATA SHEET

Well: Seneca "Valex-Ferndale" 211 Date: 6-17-92 Time: 1430-1530

Observed Rate: 810 B/D Meter Rate: 670 B/D

Injection Pressure: 500 psi MASP: _____ psi Pick-up Depth: 8258 feet

Initial Annulus Pressure: 20 psi Pressure After Bleed-off: 0 psi

Casing Vented During Test (Y/N): Y

SPINNER COUNTS

DEPTH	COUNTS	RATE (B/D)	DEPTH	COUNTS	RATE (B/D)	COMMENTS:

R. A. T. CASING RATE CHECKS

INTERVAL	TIME (sec.)	RATE (B/D)	COMMENTS:

R. A. T. TUBING RATE CHECKS

INTERVAL	TIME (sec.)	RATE (B/D)	COMMENTS:

Background Log: From _____ to _____ Comments: _____

TOP PERFORATION CHECK

Top perforation at: 7861 Wait at: 7840 for 180 seconds Beads: (Y/N) N

Casing shoe at: 8600 WSO holes/CP at: holes @ 5810

Log	Up	from	7860	to	7810	slug at _____ COMMENTS:
Log	up	from	7950	to	7810	slug at _____
Log		from		to		slug at _____
Log		from		to		slug at _____

PACKER CHECK

Packer at: 7807 Wait at: 7750 for 180 seconds

Tubing tail at: 7807 Tubing size: 2 3/8 2nd packer at: — Mandrel: _____

Log	Up	from	7810	to	7650	slug at _____ COMMENTS:
Log		from		to		slug at _____
Log		from		to		slug at _____
Log		from		to		slug at _____

Survey Company: Flo Log Wireline Technician: _____

Remarks: _____

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No.T290- 239

REPORT ON OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
July 23, 1990

Your operations at well "Valex-Ferndale" 211, API No. 111-21178, Sec. 16, T. 4N, R. 21W, S.B.B.&M. Ojai Field, in Ventura County, were witnessed on 7/16/90. Pam Ceccarelli, representative of the supervisor, was present from 1700 to 1730. There were also present J. Kiser.

Present condition of well: 13 3/8" cem 681'; 9 5/8" cem 5825'; 7" cem 8600', perfs 7016'-7339' & 7861'-8342'; 5" ld 8508'-8814', perfs @ 8590'-8813'. TD 8860'.

The operations were performed for the purpose of demonstrating that the injected fluid is confined to strata below 7861'.

DECISION:

The injection survey is approved since it indicates that all of the injection fluid is confined to the formations below 7861' at this time.

ljg

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

OG109

State of California
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. T 239

INJECTION (M.I.T.) SURVEY

Operator: Seneca Well Designation: "Valex-Ferndale" 211

Sec. 16, T. 4, R. 21, SB B.&M. A.P.I. No.: 111-21178 Field: Ojai

County: Ventura Witnessed on (date): 7/16/90. Pam Ceccarelli,

representative of the Supervisor, was present from 1700 to 1730.

Also present: J. Kiser

Casing record of well: 13 3/8" cem 681'; 9 5/8" cem 5825'; 7" cem 8600'
perfs 7016'-7339' + 7861'-8342'; 5" Ld 8508'-8814', perfs
@ 8590'-8812', TD 8860'.

The injection survey was performed for the purpose of (D) (5) ~~7016~~ 7861'

☒ The injection survey is approved since it indicates that all of the injection fluid is confined to the formations below ~~7016~~ 7861 feet at this time.

☐ The injection survey is not approved due to the following reasons: (specify)

Note:

M.I.T. DATA SHEET

Well: "Valex-Ferndale" 211 Date: 7/16/90 Time: _____

Observed Rate: 715 B/D Meter Rate: 695 - 725 B/D

Injection Pressure: 550 psi MASP: _____ psi Pick-up Depth: 8259 feet

Initial Annulus Pressure: 0 psi Pressure After Bleed-off: _____ psi

Casing Vented During Test (Y/N): Y

SPINNER COUNTS

DEPTH	COUNTS	RATE (B/D)	DEPTH	COUNTS	RATE (B/D)

COMMENTS: Static Temp run - well S/I over 24 hrs. F/L 370' - broke after packer - 38% below PV (270 b/d)

R. A. T. CASING RATE CHECKS

INTERVAL	TIME (sec.)	RATE (B/D)	COMMENTS:

R. A. T. TUBING RATE CHECKS

INTERVAL	TIME (sec.)	RATE (B/D)	COMMENTS:
			715 b/d 7680'-7780'

Background Log: From 7900 to 7700 Comments: _____

TOP PERFORATION CHECK

Top perforation at: 78__ Wait at: 7860 for _____ seconds Beads: (Y/N) N

Casing shoe at: _____ WSO holes/CP at: 5810'

Log	up 5X	from 7860	to 7840	slug at		COMMENTS:
Log	up	from 7930	to 7750	slug at		OK
Log		from	to	slug at		
Log		from	to	slug at		

PACKER CHECK

Packer at: 7807 Wait at: _____ for _____ seconds

Tubing tail at: _____ Tubing size: _____ 2nd packer at: _____ Mandrel: _____

Log	up 2X	from	to 7680	slug at		COMMENTS:
Log		from	to	slug at		
Log		from	to	slug at		OK
Log		from	to	slug at		

Survey Company: Flolog Wireline Technician: _____

Remarks: _____

Seneca Resources Corporation
a National Fuel Gas System company

DIVISION OF OIL AND GAS
RECEIVED
JUL 5 1990
VENTURA, CALIFORNIA

July 3, 1990

Steve Fields
Division of Oil & Gas
6401 Telephone Road, Suite 240
Ventura, California 93003

Valex-Ferndale 211 Waterflood Project:

Dear Steve:

I'm writing in reference to the Ferndale #211 Waterflood Project, operated by Seneca.

After production testing, prior to the conversion of the well, it was determined that the dual injection production plan as permitted would not be economical. At that point, I received a verbal okay from your office to continue the project as an injection well only for the purpose of a waterflood.

The purpose of this letter is to confirm, in writing, the status of the project as an injection well for the purpose of an waterflood. Hopefully, this letter will clear up any misunderstandings between our respective accounting groups.

Sincerely,

A. Carl Isaac
Production Engineer

ACI:csf

DIVISION OF OIL AND GAS
RECEIVED
JUL 3 1990
VENTURA, CALIFORNIA

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SESPE FIELD VENTURA COUNTY
WELL: "VALEX-FERNDALE 211 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21178 JAMES A. BECK, GENERAL MANAGER OPERATIONS

James A. Beck

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

4/3/90
Day 1. MIRU Signal. POH with rods. Make feeler run. Tag @ 8329'. Pull & LD feeler. SDFN.

4/4/90
Day 2. Bled csg. (approx. 1-1/2 hrs.). Install BOPE & floor. Measure out with tbg. Con't POH with tbg. MU 7" 29# pos. scraper & RIH to 3600'±. SDFN.

4/5/90
Day 3. Bled well. Continue down with scraper. Set down @ 8274'. Approx. 8000 psi pick off. LD extra tbg. POH with scraper. Casing filled @ 150 bbls. lease water. Leave 10 stds. in hole for kill string. SDFN.

4/6/90
Day 4. POH with kill string & LD scraper. RU A&F Testers. Plug test bottom std. MU guide shoe, Baker Model "R" pkr., X-nipple (2-7/8" x 2.31). Test pipe in hole @ 5000 psi. Packer stopped @ 5821'. RO tester. POH with tbg. Found damage to gauge rings on pkr. SDFN.

4/7/90
Day 5. RU A&F Testers. Plug test bottom std. MU guide shoe, Baker Model "R" pkr. with gauge rings turned down to 5.85" & x-nipple. Test in hole @ 5000 psi. Packer stopped @ 5821'. Set down. POH with pkr. Ring gauge & cone damaged. Order out scraper set to 5.968". MU & RIH. Scraper stopped @ 5821'. Pull to 5760'. SDFN.

4/8/90
Day 6. POH with scraper. SDFN.

4/9/90
No activity.

4/10/90
Day 7. Pull kill string. PU 5-1/2" x 5' shoe & MU on BS. RIH. Stopped @ 5817'. Set down approx. 2000 psi. POH. LD tools. Run kill string. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SESPE FIELD VENTURA COUNTY
WELL: "VALEX-FERNDALE 211 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21178 JAMES A. BECK, GENERAL MANAGER OPERATIONS

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445
****

4/11/90
Day 8. Pull kill string. RU A&F Testers. Plug test btm. std. & profile nipple. MU pkr. & test in hole @ 5000 psi. Run pkr. to 6949.79'. RO tester. Fill hole with approx. 30 bbls. water. Drop ball. Pumped total of 200 bbls. Pump down tbg. & press. to 1000 psi. Hook up tester to tbg. & press. to 2400 psi. Pkr. set, tbg. on vacuum. Fill csg. with approx. 70 bbls. Press. to 500 psi for 15 min, held. Release pkr. & lower tbg. to 7077'. POH with tbg. LD pkr. Run kill string. SDFN.

4/12/90
No activity.

4/13/90
Day 9. Pull kill string. RU tester. Plug test bottom std. & profile nipple. MU pkr. & guide shoe. Test in hole @ 5000 psi. Continue in slowly. Land on donut @ 7807.81' with element @ 7804'. RD tester. Begin displacement. Pkr. fluid on backside. Get circulation @ approx. 130 bbls. Pump 230 bbls. Pump down tbg. until on vacuum. Drop ball & let seat. Fill tbg. & set pkr. Pressure to 2400 psi & blow ball out. Pump remainder fluid down csg. Load out equipment. Remove floor & BOE. Install safety valve on donut & close in. SDFN.

4/14/90
Day 10. Break down return line to Baker tank. Load out equipment. Clean location. Leave safety valve in donut as instructed. RDMO.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P290- 138
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

WATERFLOOD/PRODUCER

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
March 28, 1990

Your proposal to convert to injection well "Valex-Ferndale" 211, A.P.I. No. 111-21178, Section 16, T. 4 N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 1/11/90, received 1/11/90, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOG Class II 2M requirements shall be installed and maintained in operating condition at all times.
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. Requirements specified in our approval of the waterflood project dated March 27, 1990 shall apply.
4. A pressure test is conducted to demonstrate the mechanical integrity of the 7" casing.
5. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.
6. THIS DIVISION SHALL BE NOTIFIED:
   a. To witness a pressure test of the 7" casing.
   b. To witness an injection profile survey within three months after injection has commenced.

Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

NOTE:

1. This well is proposed to be a dual injector and producer.
2. The water to be injected tests approximately 22,000 mg/l TDS and is water produced from neighboring wells.
3. The water is to be injected into the ~~Angel~~ Miocene/Monterey zone which extends from 7861' to 8814' and contains a mixture of oil and water. The formation water tests approximately 22,000 mg/l TDS.
4. This permit was held in abeyance pending approval of the waterflood project.

Blanket Bond
SF:ljg

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	FORMS	
	OGD 114	OGD 121
33	V	V

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well "Valley" Ferndale 211, API No. 111-21178
(Well designation)

Sec. 16, T. 4N, R. 21W, SB B. & M., Silverthread Field, Ventura County.

The present condition of the well is as follows:

1. Total depth
   8860'

2. Complete casing record, including plugs and perforations (present hole)

   See attached.

DIVISION OF OIL AND GAS
RECEIVED
JAN 11 1990
VENTURA, CALIFORNIA

3. Present producing zone name Mohnian ; Zone in which well is to be recompleted N/A

4. Present zone pressure 1500 psi ; New zone pressure N/A

5. Last produced 11/89 (Date) | 30 (Oil, B/D) | 150 (Water, B/D) | 35 (Gas, Mcf/D)
   (or)
   Last injected N/A (Date) | (Water, B/D) | (Gas, Mcf/D) | (Surface pressure, psig)

6. Is this a critical well according to the definition on the reverse side of this form? ☐ (Yes) ☒ (No)

The proposed work is as follows:

RIH with injection packer to 7900' to inject below 7900'. RIH with production string to produce above 7900'.
Place well on as a dual injector-producer.

Note: If well is to be redrilled, show proposed new bottom-hole coordinates and true vertical depth.

It is understood that if changes in this plan become necessary, we are to notify you immediately.

Address 725 E. Main St., Suite 200 (Street)
Santa Paula (City) CA. (State) 93060 (Zip)
Telephone Number (805) 656-2445

Seneca Resources Corporation (Name of Operator)
By James A. Beck (Name Printed)
James A. Beck (Name—Signature) 1/11/90 (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

OG107 (8/87/DWRR/5M)

SENECA RESOURCES CORPORATION
FERNDALE 211 CASING DETAIL

CASING DETAIL : 13-3/8" (48.00 #, J-55) cmnt'd at 681' with 890 cf.

9-5/8" (36 & 40 #,K-55 & N-80) cmnt'd at 5825' with 1175 cf.

7" cmnt'd at 8600' with 630 cf. in 8-3/4" open-hole.

Detail :

	29 # N-80	8600 - 7879'
	26 # N-80	7879 - 6756'
*	23 # N-80	6756 - 4910'
	23 # K-55	4910 - 2890'
	23 # N-80	2890 - 88'
	29 # N-80	88 - Surface

LINER DETAIL : 5-1/2" (18.00 #,K-55) with hanger top at 8508', shoe at 8814', 0.12" slots (120 mesh, 12-6-2) 8590-8813' and hung in 6-1/8" open hole in Monterrey Shale.

PERFORATIONS : 4 x .38" JHPF 7016, 7027, 7042, 7052, 7090, 7108, 7124, 7135, 7144, 7158, 7310, 7321, 7325, 7327, 7331, 7334, and 7339' (Total of 68 holes from 9/82 in Valex Zone)

4 x .50" JHPF 7861, 7879, 7906, 7920, 7942, 7982, 7990, 8000, 8014, 8073, 8088, 8103, 8147, 8154, 8166, 8170, 8210, 8220, 8232, 8249, 8264, 8308, 8324, 8336, and 8342' (Total of 100 holes from 7/82 in Argo Zone)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

Ventura, California
January 26 1990

ck M. Baker, Jr. Agent
:a Resources Corp.
E. Main St., Ste. 200
. Box 630
ıta Paula, CA. 93060

have received your notice dated January 11 1990, of Intention to Convert to Waterflood, "Valex-Ferndale" 211
(Well name and number)

Sec. 16, T. 4N, R. 21W, S.B. B.&M.

Your notice cannot be answered until a waterflood project is approved by this Division. The project approval process may take at least 45 days and will include the opportunity for the general public to comment on the project.

Until such project approval is given, no injection operations are permitted on this well.

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kennedy
Deputy Supervisor SAF

OG113

...SION OF OIL AND
RECEIVED
JAN 11 1990
...NTURA, CALIFORNI

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION
WELL: "VALEX-FERNDALE 211
A.P.I. #111-21178

SESPE FIELD VENTURA COUNTY
SEC. 16, T4N, R21W, SBB&M
ERIC R. WILSON, DIVISION ENGINEER

Eric Wilson 1/10

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

12/6/89

Day 1. MIRU Oilwell. Bled tbg. Pull rods & pump. Bled csg. Remove wellhead & tree. Install Homco mechanical gate. Put out load guys. Rig for tbg. Haul 3 jts. 2-7/8" EU8 from rack. Unland tbg. & pull to anchor. SDFN.

12/7/89

Day 2. Bled well. Finish pulling tbg. Make up Robinson 7" csg. scraper & RIH to 6990'. Pull tbg. Make up Baker K-1 ret. plug & set @ 6900'. Pull tbg. to 6886'. Plumb pump to well & line to Reagen tank. Change well over to treated lease water. Press. csg. to 2700#. Hold for 5 min. Bled press. SDFN.

12/8/89

Day 3. Pull tbg. Stand back 92 stds. LD 33 extra jts. 2-7/8". RU Halliburton Logging. Run GR-CCL log. Perf well with 4 (0.44") JHPF @ 5810'. Rig pump. Open 9-5/8" valve. Press. csg. to 2200#. Small amount of mud returns from 9-5/8". Indicated communication between 7" & 9-5/8". RO Halliburton. RU A&F Testers. Standby for Engineering instructions. Unable to get Baker cmt. retainer. RO testers. SDFN.

12/9/89

Day 4. Pump into well with rig pump. Small amount of mud returns thru 9-5/8". Pressure well to 3000 psi, slow bled. Pump total 2 bbls. lease water. Bled press. Make up Baker 7" fullbore pkr. RIH to 40', set pkr. RU B.J. pump truck & pump 17 bbls. lease water @ 4000 psi. Final press. @ 1/2 BPM. (Abort squeeze, and consequently the recompletion) Bled csg. Rig mud pump to 9-5/8" & press. to 1500#, slow bled. RO B.J. Make up 6-1/8" rock bit. Measure & PU (6) 3-1/2" DC's. Run bit, collars & tbg. to 5768'. SDFN.

12/10/89

Day 5. Measure & PU tbg. to 6880'. Strip on PGSR stripper. RU pump & power swivel. Drill out BP @ 6900'. Rapid fluid loss when dropped thru plug. RO power swivel. Pull tbg. & collars. LD (6) 3-1/2" DC's. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION
WELL: "VALEX-FERNDALE 211
A.P.I. #111-21178

SESPE FIELD VENTURA COUNTY
SEC. 16, T4N, R21W, SBB&M
ERIC R. WILSON, DIVISION ENGINEER

EW 1/10

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

12/11/89
Day 6. Bled well. RU A&F Testers. Make up setting tool for Baker Model "S" ret. plug. Make up new ring in 2-1/2" API T/L shoe. Test tbg. to 5000#. RO testers. Haul, measure, PU & run extra tbg. Trouble setting plug, set plug @ 7594'. Pull & LD extra tbg. & land tbg. on donut with shoe @ 6891' & tail @ 6928'. RO platform & remove BOE. Bolt on wellhead. Make up tree. SDFN.

12/12/89
Day 7. Unable to run pump due to wind. Haul good & junk tbg. to pipe rack. Clean & load out pump & BOE. Shut down due to wind.

12/13/89
Day 8. Bled tbg. Check & run exchange pump & rods. Respace well. Seat pump. Fill tbg. with lease water & pressure to 350#. RWTP. RDMO.

12/28/89
Day 1. MIRU Oilwell. Bled tbg. Rig for rods. Pump stuck. Work loose. Pull pump & rods. Unable to close csg. valve. Bled csg. Haul 24 jts. 2-7/8" EU8 tbg. to location. Unbolt wellhead & remove tree. Install Homco mechanical gate. Rig hose from csg. to flowline. Put out wind guys. SDFN.

12/29/89
Day 2. Bled well. Unland tbg. Measure, rabbit & PU 2-7/8" EU8 tbg. Tag fill @ 7526'. Pull tbg. to 7500'. Install Homco PGSR stripper. Rig pump to backscuttle. Fill well with 230 bbls. lease water. Circulate out gas. Clean out sand 7526' to plug @ 7594'. Circulate well clean. Trouble releasing plug. Pull tbg. & plug to 6400'. SDFN.
Note: Used 70 bbls. water to clean out sand. Total water in well = 300 bbls. Tbg. went on vacuum when plug released (small amount).

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION
WELL: "VALEX-FERNDALE 211
A.P.I. #111-21178

SESPE FIELD VENTURA COUNTY
SEC. 16, T4N, R21W, SBB&M
ERIC R. WILSON, DIVISION ENGINEER

EW 1/10

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

12/30/89

Day 3. Bled well. Pull tbg. & plug. Plug hanging up. Pull with indicator hooked up. LD plug & retrieving tool. Run 1 jt. 2-7/8", 2-1/2" API T/L shoe & tbg. Haul extra tbg. from Ferndale pipe rack. Land tbg. on donut. RO working floor & remove BOPE. Change out casing valves. Unland tbg. Remove donut. MU off-set flange. Land tbg. on flange with shoe @ 7766' & tail @ 7794'. Make up tree. Note: Used 28 jts. 2-7/8" tbg. from rack (874.71'). SDFN.

12/31/89

Day 4. Bled tbg. Check & run exchange pump & rods. PU extra rods. Respace well, seat pump & fill tbg. with lease water. Hang well on. Press. to 300 psi. Plumb in casing & flowline. Clean & load out equipment. RWTP. RDMO.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P289-421
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
November 8, 1989

Your proposal to rework well "Valex-Ferndale" 211, A.P.I. No. 111-21178, Section 16, T. 4N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 11/3/89, received 11/6/89, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOG Class II 2M requirements shall be installed and maintained in operating condition at all times.
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. Wire line operations are conducted through at least a 2M lubricator.
4. The proposed bridge plug at 6900' does not fulfill the requirements for abandonment of the lower portion of the well.
5. The Division will monitor the monthly production of this well for a period of six months and if anomalous water production is indicated, remedial action well be required.
6. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.

Blanket Bond
b

Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

RECEIVED
NOV 6 1989
VENTURA, CALIFORNIA

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	FORMS	
	OGD 114	OGD 121
BB	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well ~~AVF #211~~ Valex-Ferndale 211 (Well designation), API No. 111-21178

Sec. 16, T. 4N, R. 21W, S.B. B. & M., Silverthread Field, Ventura County.

The present condition of the well is as follows:

1. Total depth 8860'

2. Complete casing record, including plugs and perforations (present hole)

   See Attached.

3. Present producing zone name Argo Sand Valex Sand; Zone in which well is to be recompleted Big Canyon F.Z.

4. Present zone pressure 1500 psi; New zone pressure 2100 psi

5. Last produced 10/89 (Date) | 16 (Oil, B/D) | 100 (Water, B/D) | 60 (Gas, Mcf/D)

   (or)

   Last injected _____ (Date) | _____ (Water, B/D) | _____ (Gas, Mcf/D) | _____ (Surface pressure, psig)

6. Is this a critical well according to the definition on the reverse side of this form? ☐ (Yes) ☒ (No)

The proposed work is as follows:

Set drillable plug @ 6900'.
Cement squeeze at 5250' - (4952' TVD) & 5820' (5579' TVD)
Perforate 5500' - 5370' (5240' - 5120' TVD)
Put on production.

Note: If well is to be redrilled, show proposed new bottom-hole coordinates and true vertical depth.

It is understood that if changes in this plan become necessary, we are to notify you immediately.

Address 725 E. Main, #200 (Street)
Santa Paula, California 93060 (City) (State) (Zip)
Telephone Number (805) 656-2445

Seneca Resources Corporation (Name of Operator)
By Eric R. Wilson (Name - Printed)
Eric R. Wilson 11/3 (Name - Signature) (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

OG107 (8/87/DWRR/5M)

SION OF OIL AN
RECEIVED
NOV 6 1989
ENTURA, CALIFORNI

SENECA RESOURCES CORPORATION
FERNDALE 211 CASING DETAIL

CASING DETAIL : 13-3/8" (48.00 #, J-55) cmnt'd at 681' with 890 cf.

9-5/8" (36 & 40 #,K-55 & N-80) cmnt'd at 5825' with 1175 cf.

7" cmnt'd at 8600' with 630 cf. in 8-3/4" open-hole.

Detail :

29 # N-80	8600	- 7879'
26 # N-80	7879	- 6756'
* 23 # N-80	6756	- 4910'
23 # K-55	4910	- 2890'
23 # N-80	2890	- 88'
29 # N-80	88	- Surface

LINER DETAIL : 5-1/2" (18.00 #,K-55) with hanger top at 8508', shoe at 8814', 0.12" slots (120 mesh, 12-6-2) 8590-8813' and hung in 6-1/8" open hole in Monterrey Shale.

PERFORATIONS : 4 x .38" JHPF 7016, 7027, 7042, 7052, 7090, 7108, 7124, 7135, 7144, 7158, 7310, 7321, 7325, 7327, 7331, 7334, and 7339' (Total of 68 holes from 9/82 in Valex Zone)

4 x .50" JHPF 7861, 7879, 7906, 7920, 7942, 7982, 7990, 8000, 8014, 8073, 8088, 8103, 8147, 8154, 8166, 8170, 8210, 8220, 8232, 8249, 8264, 8308, 8324, 8336, and 8342' (Total of 100 holes from 7/82 in Argo Zone)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF PROPERTY AND WELL TRANSFER

Field or county	District
Ojai	2
Former owner	**Date**
Argo Petroleum Corp.	Sept. 10, 1987

Name and location of well(s)

Sec. 16, T. 4N., R. 21W., SBB&M

"Barker-Ferndale" 1	(111-20423)	"Valex-Ferndale" 211	(111-21178)
"Barker-Ferndale" 2	(111-20604)	"Valex-Ferndale" 214	(111-21180)
"Barker-Ferndale" 3	(111-20609)	"Valex-Ferndale" 215	(111-21206)
"Barker-Ferndale" 4	(111-20685)	"Valex-Ferndale" 313	(111-21314)
"Barker-Ferndale" 5	(111-20702)	"Ferndale" 8	(111-20732)
"Barker-Ferndale" 6	(111-20730)		
"Valex-Ferndale" 107	(111-21066)		
"Valex-Ferndale" 110	(111-21163)		
"Valex-Ferndale" 209	(111-21105)		

Description of the land upon which the well(s) is (are) located

Date of transfer, sale, assignment, conveyance, or exchange	New owner / Address	Type of organization / Telephone No.
7-17-87	Seneca Resources Cprporatipn 511 16th St. Mall, Ste 300 Denver, CO 80202	Corp. (303) 825-7401

Reported by
Seneca Resources Corp.

Confirmed by
Argo Petroleum Corp.

New operator new status (status abbreviation)	Request designation of agent
PA	
Old operator new status (status abbreviation)	**Remarks**
PA	

Deputy Supervisor
Patrick J. Kinnear

Signature
Patrick J. Kinnear

OPERATOR STATUS ABBREVIATIONS

PA – Producing Active
NPA – No Potential, Active
PI – Potential Inactive
NPI – No Potential, Inactive
Ab – Abandoned or No More Wells

FORM AND RECORD CHECK LIST

Form or record	Initials	Date	Form or record	Initials	Date
Form OGD121			Map and book		
Form ODG148			Notice to be cancelled		
New well cards			Bond status		
Well records			EDP files		
Electric logs					
Production reports					

Form OG100 (7/79)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

API No. 111-21178

WELL SUMMARY REPORT

Operator: Argo Petroleum Corporation		Well: Valex-Ferndale #211			
Field: ~~Silverthread~~ Ojai	County: Ventura	Sec. 16	T. 4N	R. 21W	B.&M. S.B.
Location (Give surface location from property or section corner, street center line and/or California coordinates): 1211' S'ly & 4341' E'ly from NW corner of Sec. 16		Elevation of ground above sea level: 1443'			

Commenced drilling (date): 4/21/82
Completed drilling (date): 6/4/82
Commenced producing (date): 6/18/82
[X] Flowing [ ] Pumping [ ] Gas lift
Name of producing zone(s): Argo Sand, Valex Sand, Monterey Shale

Total depth: (1st hole) 8860' | (2nd) | (3rd)
Present effective depth: 8813'
Junk: None

Depth measurements taken from top of: [ ] Derrick Floor [ ] Rotary Table [XX] Kelly Bushing
Which is 18 feet above ground

GEOLOGICAL MARKERS	DEPTH
U. Big Canyon Fault Zone	4799'
T. Mohnian Sands & Shales	5642'
T. Monterey Shale	8462'

Formation and age at total depth:

DIVISION OF OIL AND GAS
RECEIVED
DEC 18 1984
SANTA PAULA, CALIFORNIA

	Clean Oil (bbl per day)	Gravity Clean Oil	Percent Water including emulsion	Gas (Mcf per day)	Tubing Pressure	Casing Pressure
Initial Production	48	28.4	3%	44	110	80
Production After 30 days	252	31.9	6%	311	630	1500

CASING RECORD (Present Hole)

Size of Casing (API)	Top of Casing	Depth of Shoe	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Number of Sacks or Cubic Feet of Cement	Depth of Cementing (if through perforations)
13-3/8"	Surface	681'	48#	J-55, ST&C	New	17-1/2"	890 cf	--
9-5/8"	Surface	5825'	36# & 40#	N-80&K-55, LT&C	New	12-1/4"	1175 cf	--
7"	Surface	8600'	(See History)		New	8-3/4"	630 cf	--
5"	8508'	8814'	18#	K-55	New	6-1/8"	None	--

PERFORATED CASING (Size, top, bottom, perforated intervals, size and spacing of perforation and method.)
4 (0.44") JHPF 7861'-8342' & 7016'-7334'. 4 (0.375") JHPF @ 7321', 7327', 7331', 7339' (16 holes)
Slots in 5" from 8600'-8813' (120 mesh, 12 row, 6" centers, 2" radials)

Was the well directionally drilled? If yes, show coordinates at total depth
[X] Yes [ ] No 255.75' N and 529.20' W from surface location.

Electrical log depths: DIL: 5840'-681', 8596'-5825' and 8814'-8600'

Other surveys: FDC/CNL, Dipmeter, VDL, GR, LDT, Mudlog, Directional Survey + GRL, CCL & MSG

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Name	Title	
Harry E. Hull	District Superintendent	
Address: 411 S. Beckwith Road	City: Santa Paula	Zip Code: 93060
Telephone Number: (805) 933-1321	Signature: Harry E. Hull	Date: 12-7-84

SUBMIT IN DUPLICATE

DIVISION OF OIL & GAS
RECEIVED
OCT 18 1984
SANTA PAULA, CALIFORNIA

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARCO PETROLEUM CORPORATION
WELL: VALEX-FERNDALE #211
A.P.I. #111-21178

SILVERTHREAD FIELD VENTURA COUNTY
SEC. 16, T4N, R21W, SBB&M
HARRY E. HULL DISTRICT SUPERINTENDENT

Harry E. Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

★ ★

09/18/84
MIRU SPS. Rig up circulating pump. Bled well down. Unhang same. Unable to work pump loose. Back off rods. Spider out of hole with 94 dbls. (84 - 1", 85 - 7/8", 19 - 3/4"). Remove production tree. Install hydraulic BOP. Fill annulus with 210 BO. Unable to backscuttle thru stuck pump with 1000 psig. Pump down tbg., blow pressure drain. Build floor, rig for tbg. Unland tbg. Close well in. SDFN.

09/19/84
POH with tbg. Strip out remaining rods. Found bottom 14 jts. of tbg. plugged with drilling mud (top 11 jts.) and silt (bottom 3 jts). MU Tri-State overshot (6.062" O.D. x 5.625" ID) with modified catcher on bumper sub. RIH with same. SDFN.

09/20/84
Continued in hole with tbg. Pick up additional tbg. and tag fill @ 8263'. Install stripper, rig pump system, fill hole with lease oil. Backscuttle well free of gas and 20 bbls. of muddy water. Clean well out from 8263' - 8410'. Brought up silt, flour sand and siltstone rocks (bee-bee size). Worked overshot over plug from 8410' - 8417'. All indications showed plug working into overshot (increased pump pressure, sticking on bottom). POH with tbg. and overshot. Recovered only small pieces of rubber & broken slips. Bowl of overshot showed scarring on bottom edge indicating broken pieces of iron preventing overshot from going over plug. Fill hole with oil. SDFN.

09/21/84
M.U. overshot with borium edged scalloped bottom on bumper sub and Cavin's surge tool. RIH. Tag bottom @ 8397' (sand). R.U. power swivel. Rotate and surge tool. Cleaned out sand to plug at 8417' with 3000 psig hydrostatic. Reset tool. Rotated on top of plug and chased same to 8425'. Surge tool again with 3000 psig hydrostatic. Tubing stuck. Beat loose @ 40,000# over weight. POH with tbg. and tools. Recover 150' of sand inside tbg., several chunks of slips in catch basket. Found bowl of overshot collapsed. Lay down all tools. Fill hole with oil. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION
WELL: VALEX-FERNDALE #211
A.P.I. #111-21178

SILVERTHREAD FIELD
SEC. 16, T4N, R21W, SBB&M
HARRY E. HULL DISTRICT SUPERINTENDENT

VENTURA COUNTY

Harry E. Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

★ ★

09/22/84

Make up 6" O.D. x 4" I.D. wash shoe with 3-5/8" and 3-1/2" catchers on junk sub & bumper sub. Run in hole on tbg. Tag down @ 8412'. Rig to and backscuttle & rotate. Chasing partial plug down to 8481'. Unable to make further hole. Pull out of hole with B.H.A. Found partial plug stuck in bottom of shoe. Remove same. Run back in hole to 2500' with same B.H.A. SJD.

09/23/84

Continue in hole with B.H.A. Backscuttle and mill on bottom plug @ 8481'. Chase same to liner top @ 8522' (tbg. measurement). Rotate on same until plug would spin free. Well blew in. Backscuttle for two hrs. until system was free of gas. POH with B.H.A. Recovered broken slips & rubber. Make up and run in hole with 5-7/8" x 3-3/4" overshot & bumper sub to 6900'. Close well in. SJD.

09/24/84

Bled well down. Continue in hole to 8500'. Rig to & fill well with lease oil. Backscuttle system free of gas. Set down on remains of plug @ 8522'. Backscuttle well clean. POH with B.H.A. *NOTE: BHA hanging up in csg. collars. Had to work tbg. to 30-40,000# over weight the majority of the way out. Recovered remainder of plug. Lay down BHA. Rig up Baker Production Service. Run in hole with 1-1/2" bailer. Tag down @ 8834' (wireline measurement). Actual E.D. 8813'. Tear out slick line. Run in hole with 1600' of excess tbg. Close well in. Load out power swivel. SJD.

09/25/84

POH and lay down excess tbg. R.U. Hydrotest. Tested production string in hole at 5000 psig. Landed tbg. with tail at 6963'and PS at 6899', anchor at 6454' with drain at 6390'. Tore out tube test. Load out tbg. tools. Removed BOPE. Install production tree. Loaded out pump. SJD.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — SILVERTHREAD FIELD — VENTURA COUNTY
WELL: VALEX-FERNDALE #211 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21178 — HARRY E. HULL — DISTRICT SUPERINTENDENT

Harry E. Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

★ ★

09/26/84

Drove to location and opened well. Pumped 25 bbls. Ferndale crude oil down well. Picked up new pump with stinger. RIH spidering rods. Replaced 21 - 7/8" rod boxes. Seated pump. Layed down extra 1" rods. Filled tbg. and pressured to 250#. Held o.k. Hung well on. RDMO. Loaded out tools.

Rod count: 1" - 59
7/8" - 84
3/4" - 84
Subs - (2) - 8'

10/03/84

283 bbls. gross. 38% cut. 330# tbg/360# csg. 18/64" bean. 24 hrs. test & production.

10/04/84

278 bbls. gross. 50% cut. 330# tbg/360# csg. 18/64" bean. 24 hrs. test & production.

10/05/84

274 bbls. gross. 50% cut. 330# tbg/360# csg. 18/64" bean. 24 hrs. test & production.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 284-248

520'
(field code)
12
(area code)
10
(new pool code)
--
(old pool code)

REPORT ON PROPOSED OPERATIONS

Harry Hull, Agent
Argo Petroleum Corporation
411 South Beckwith Road
Santa Paula, CA 93060

Santa Paula, California
July 27, 1984

Your proposal to alter casing well "Valex-Ferndale" 211,
A.P.I. No. 111-21178, Section 16, T. 4N, R. 21, S.B. B. & M.,
Ojai field, Silverthread area, Miocene pool,
Ventura County, dated 7/19/84, received 7/20/84 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Hole fluid of sufficient quality and quantity shall be maintained in the hole to control any subsurface condition, and a reserve supply shall be on hand for emergencies.
2. Blowout prevention equipment of at least DOG Class II 2M with a hydraulic actuating system shall be installed and maintained in operating condition at all times.
3. The division will monitor the monthly production of this well for a period of six months and if anomalous water production is indicated, remedial action will be ordered.
4. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.

Blanket Bond
MS:ljg

M. G. MEFFERD, State Oil and Gas Supervisor

By _____
Deputy Supervisor

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

DIVISION OF OIL AND GAS
RECEIVED
JUL 20 1984
SANTA PAULA, CALIFORNIA

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
BB	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well No. Valex-Ferndale #211, API No. 111-21178,

Sec. 16, T. 4N, R. 21W, S.B B. & M., Silverthread Field, Ventura County.

The present condition of the well is as follows:

1. Total depth. 8860'. Present effective depth 8410'.

2. Complete casing record, including plugs and perforations:

13-3/8" cemented at 681' (48#, J-55).
9-5/8" cemented at 5825' (36 & 40#, K-55 and N-80).
7" cemented at 8600' (23-26-29#, K-55 and N-80).
Perfs: 7016'- 7339' (Total of 68 0.38" jet holes).
7861' - 8342' (Total of 100 0.50" jet holes).
Bridge plugs: Baker drillable BP's at 8410'and 8460'.
5" liner hung at 8508', shoe at 8814' (18#, K-55).
Perfs: 0.120" slots (12-6-2) 8590' - 8813'.

3. Present producing zone name Valex & Argo Sands Zone in which well is to be recompleted Reopen Monterey

4. Present zone pressure 2000 New zone pressure 2000

	(Date)	(Oil, B/D)	(Water, B/D)	(Gas, Mcf/D)
5. Last produced	7-9-84 presently	110	75	180
or				
6. Last injected	(Date)	(Water, B/D)	(Gas, Mcf)	(Surface pressure, psig.)

The proposed work is as follows:

1. Install and test BOPE per D.O.G. requirements.
2. Mill out and retrieve the bridge plugs at 8410' and 8460'.
3. Clean out 5" liner if necessary.
4. Perforate additional interval 8505' - 8583' (Total of 36 0.38" jet holes).
5. Return well to production.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 411 South Beckwith Road (Street)
Santa Paula, California 93060 (City) (State) (Zip)
Telephone Number (805) 933-1321

Argo Petroleum Corporation (Name of Operator)
By Harry Hull (Name) 7-19-84 (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

Form OG100 (7/79)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
MAR 20 1984
SANTA PAULA, CALIFORNIA

API No. 111-21178

WELL SUMMARY REPORT

Operator	Well				
ARGO PETROLEUM CORPORATION	VALEX-FERNDALE #211				
Field	**County**	**Sec.**	**T.**	**R.**	**B.&M.**
Silverthread	Ventura	16	4N	21W	SB

Location (Give surface location from property or section corner, street center line and/or California coordinates)
1211' S'ly and 4341' E'ly from NW corner Section 16, T4N, R21W (SB)

Elevation of ground above sea level
1443'

Commenced drilling (date)
4/21/82

Completed drilling (date)
6/4/82

Commenced producing (date)
6/18/82

☒ Flowing ☒ Pumping
☐ Gas lift

Name of producing zone(s)
Valex Sand
Argo Sand

Total depth

(1st hole)	(2nd)	(3rd)
8860'		

Present effective depth
8410'

Junk
None

Depth measurements taken from top of:
☐ Derrick Floor ☐ Rotary Table ☒ Kelly Bushing
Which is 18 feet above ground

GEOLOGICAL MARKERS	DEPTH
U. Big Canyon Fault Zone	4799'
T. Mohnian Sands & Shales	5642'
T. Monterey Shale	8462'
TOP of Valex 7016	

Formation and age of total depth
TOP of ARGO 7860

	Clean Oil (bbl per day)	Gravity Clean Oil	Percent Water including emulsion	Gas (Mcf per day)	Tubing Pressure	Casing Pressure
Initial Production	48	28.4	3%	44	110	80
Production After 30 days	252	31.9	6%	311	630	1500

CASING RECORD (Present Hole)

Size of Casing (API)	Top of Casing	Depth of Shoe	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Number of Sacks or Cubic Feet of Cement	Depth of Cementing (if through perforations)
13-3/8"	Surface	681'	48#	J-55, ST&C	New	17½"	890 cf	-
9-5/8"	Surface	5825'	36# &40#	N-80&K-55, LT&C	New	12¼	1175 cf	-
7"	Surface	8600'	(See History)		New	8-3/4"	630 cf	-
5"	8508'	8814'	18#	K-55	New	6-1/8"	None	-

PERFORATED CASING (Size, top, bottom, perforated intervals, size and spacing of perforation and method.)
4(0.44") JHPF 7861'-8342' & 7016' - 7334' 4(0.375") JHPF @ 7321',7327', 7331', 7339' (16 holes)
Slots in 5" from 8600'-8813' (120 mesh, 12 row, 6" centers, 2" radials)

Was the well directionally drilled? If yes, show coordinates at total depth
☒ Yes ☐ No 255.75' N and 529.20' W from surface location.

Electrical log depths
DIL: 5840'-681', 8596'-5825' and 8814'-8600'

Other surveys
FDC/CNL, Dipmeter, VDL, GR, LDT, Mudlog, Directional Survey + GRL, CCL & MSG

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Name	Title	
Harry E. Hull	District Superintendent	
Address	**City**	**Zip Code**
411 S. Beckwith Road	Ventura, Ca.	93060
Telephone Number	**Signature**	**Date**
(805) 933-1321	Harry E. Hull	3-16-84

SUBMIT IN DUPLICATE

DIVISION OF OIL AND GAS
RECEIVED
MAR 20 1984
SANTA PAULA, CALIFORNIA

DIVISION OF OIL & GAS

HISTORY OF OIL & GAS WELL

OPERATOR: Argo Petroleum Corporation FIELD: Silverthread COUNTY: Ventura
WELL: Valex-Ferndale #211 SEC. 16, T4N, R21W, SBB&M
A.P.I. NO: 111-21178 NAME: Harry E. Hull TITLE: Dist. Supt.
DATE: March 15, 1984
SIGNATURE: Harry E. Hull

411 South Beckwith Road, Santa Paula, Ca. 93060 (805) 933-1321

03-24-83
RU Archer Reed to long string. RIH with tandem pressure bombs & hung @ 7300'. Well still producing. (Stylus engaged 3:00 p.m. Bombs on bottom @ 3:45 p.m.)

03-25-83
Archer Reed pulled pressure bombs from long string. MU Model "RGZ" blanking plug and tamdem pressure bombs. Engaged Stylus @ 3:23 p.m. Shut in long string and short string @ 3:55 p.m. RIH to 1.81" I.D. "R" nipple @ 7405' (7387' by Volan log). Set plug and sheared off @ 5:00 p.m. POH with wireline. At 5:30 p.m., opened short string. Left long string closed. RD Archer Reed.

03-26-83
150 psig on long & short strings. Pumped lease water down long string. Short string went on vacuum. Pumped 25 bbls. @ 0 psig. Rigged to short string. Pump 5 bbls. and both sides (long & short) pressured to 1000 psig. Bled off long string, short string went to 0 immediately. Pressured both strings to 1000 psig, pressure bled off showly. Shut in long string, left short string open over night. (No production).

03-27-83
250 psig on long & short strings. RU Archer Reed to long string. Fished equalizing prong (pulled loose @ 12:13 p.m.). POH with same. RIH to fish blanking plug and pressure bombs. Attempted to fish on 3 different runs, unable to pull plug loose on any run. Able to latch into plug, jarred, but plug never came loose. SDFN. Shut both strings in.

03-28-83
Run in hole with Archer Reed's oversize probe and overshot. Latch on to blanking plug. Unable to pull same @ 1,300 lbs. - unable to shear tools - working on same. Lubricator folded in half. Stand by for stringer crane and new lubricator. Using crane, strip off old lubricator and install new one. Continue working on plug. Unable to pull on shear. Drop line cutter. Cut line off of rope socket. Run in, fish out cutter. Tear out Archer Reed. NOTE: Applied pressure to long string to help equalize plug. Pressure range from 800 psi to 0 psi.

03-29-83

MIRU Mappco Wireline. Run in with overshot, jars, etc. Latch onto Archer Reed's tools jarring on same. At 2300 lbs., split skirt. Made 2 more attempts before recovering tools. Did not recover blanking plug & pressure bombs. Stand-by for orders. Tore out Mappco.

03-30-83

MIRU SPS. Bled both tubing strings. Worked stuck pump loose. POH & laid down rods & pump. Removed tree. On underside of tree, found seal subs cut out badly on both sides. Installed & tested BOPE. Built working platform. Unland short string. Closed in.

03-31-83

Started up job. Pulled & laid down short string. Unlanded long string, unable to pull same @ 37,000# over weight. RU Archer Reed. RIH and shifted "L" sliding sleeve @ 7349'. Unable to tell if sleeve shifted. Began POH with wireline, tools hung up in "L"sliding sleeve @ 6937', unable to tell if upper sheeve shifted. POH. Pressured tbg. to 1500 psig, unable to break circulation. **Broke circulation backscuttling @ 800 psig. Turned system over to lease oil. Recovered approximately 200 bbls. of water. Unable to pull long string. RU Gearhart Wireline. RIH with freepoint tool. Found tubing free @ 7313' (stuck 7313'-7355'). POH. RIH with chemical cutter and cut tubing @ 7262', 2' above EU8RD collar. Tubing came free after cut, as of 6:00 a.m.
**Reversed circulation.

04-01-83

As of 6:00 a.m. Tear out Gearhart. Circulate bottoms up. POH, laying down 2-3/8" buttress, Baker dual packer, & blast joints. MU 5-1/2" shoe on 4 jts. of 5-1/2" wash pipe with bumper sub and jars. PU and RIH with 3-1/2" tbg. Tag fill @ 7322'. Finish washing over fish, tag @ 7370'. Clean well up. Start out of hole with tbg. @ 6:00 a.m.

04-02-83

Finish POH & lay down wash pipe. Make up 5-1/2" O.D. overshot, bumper subs & jars. RIH. Latch onto fish @ 7262'. Pulled seal assembly free. POH. Lay down fish. Make up Baker packer pulling tool with bumper sub & jars. RIH. Stab in and pull loose. POH. Recovered Retrieva-D packer. RU Welex. Set Model "S" BP @ 7492'. Perforated 4 (0.38") SSB II JHPF @ 7321', 7327', 7331', 7339' (16 holes). RD Welex. MU retrievamatic packer on 3-1/2" frac string.

04-03-83

Finish RIH. Set Baker retrievamatic packer @ 7196' with 25,000# compression. RU Dowell. ISIP: 2250#. F.G.: 0.68 psi/ft. Average rate: 19 BPM. Average pressure: 7300#. Maximum pressure: 7470#. SIP: 3100#. 15 min. SIP 490#. Total oil 352 bbls. 100 mesh: 7000#. 20/40: 14,000.

04-04-83

Rig up Archer Reed. Feeler run tagged sand @ 7380;. POH. Rig up Dowell to pump sand plug. 1st sand plug. 24 bbls. 5 ppg 20/40 sand. 58 bbls. flush. Max pressure: 5500# @ 5 BPM. Final rate: 2 BPM. FSIP: 3200#. 45 min. SIP: 450#. Rig up wireline. Tag fill @ 7310'. 2nd sand plug. 14 bbls. 5 ppg 20/40 sand. 58 bbls. flush. Max. press: 5520# @ 5 BPM. Final rate: 2 BPM @ 4520#. FSIP: 3900#. 30 min. SIP: 1400#. 70 min. SIP: 900#. Rig up wireline Tag sand @ 7310'. Total oil used: 176 bbls.. Release packer, POH. Rig up Welex. Set 7" 26# wireline retrievable BP @ 7205'. POH. Left Baker setting sleeve in hole. Make up 5-3/4" O.D. overshot with 4-3/8" grapple. RIH on wireline.

04-05-83

Make up 5-3/4" overshot, 4-3/8" grapple, and bumper sub. RIH on tbg. Workover fish @ 7202'. Backscuttle well around (sand & gas). POH. Recovered fish. Make up 7" 26# retrievamatic packer. RIH. Set packer @ 6892' with tbg. on donut. Close well in.

04-06-83

Rig up Dowell to frac. ISIP: 4500#. F.G. 1.01 psi/ft. Avg. rate: 20 BPM. Avg. press: 7500#. Max. press: 8840#. FSIP: 4000#. 15 min. SIP: 3050#. Total oil: 674 bbls. Sand: 35,000 lbs. 20/40. All oil except flush contained 15# adomite per 1000 gals. Close well in.

04-07-83

Started up job. (Well flowing to Baker tank, 450# tbg.) RDMO.

04-24-83

MIRU SPS. R.U. blowout equipment. Install working platform. Open bypass on Baker packer. Backscuttle system bottoms up with oil. Released packer and POH, laying down entire 3-1/2" frac string. Change out blowout equipment & tbg. equipment from 3-1/2" to 2-7/8". M.U. Baker retrieving head. Measure & pick up 2-7/8" tbg. to 4000'.

04-25-83
Bled well. Finish picking up 2-7/8" tbg. with retrieving tool. RIH & tag fill @ 7049'. Rig up to backscuttle. Unable to make hole. Rig up power swivel & CO to 7205'. Latch onto and retrieve BP - lost 30 bbls. POH. Rubbers on BP worn off. Make up 6" concave mill. RIH to 6000'.

04-26-83
Continue RIH with mill. Tag fill @ 7279'. Unable to CO. Rig up power swivel. CO to bridge plug @ 7492'. Milled plug - chased same to 8410'. Unable to make additional hole. Pull up & BS clean. Pull up to 6900'.

04-27-83
Circulate gas out of system. POH. Tore out power swivel. Rig up tube test. Make up STC & T/L PS. Test tbg. into hole @ 5000#. Land on donut with tail @ 6928', PS @ 6896'. Tore out tube test. Remove BOPE. Installed tree. Rigged flowline from #214. Equalized pressure recovering 45 bbls.

04-28-83
0# tbg. 550# csg. Equalized gas from #214. Flowed 13 bbls. Fluid level @ surface. Swabbed to 2700'. Swabbed 43 bbls. (total recovery: 101 bbls.). Flowing @ 12:20 p.m. on 22/64" bean.

04-29-83
Rig down & move out.

05-05-83
RU Archer Reed. RIH with sample bailer. Tagged fill @ 8400'. (bottom perf @ 8342'.) Sample showed water and flour sand. Tore out Archer Reed.

05-06-83
Started up job. Moved SPS rig from VF #215 to VF #211. Bled casing down from 1700# to 1050#. Pumped 37 bbls. lease oil down tubing. Removed flow tree. Installed production tree. RIH with 2-1/2" x 2-3/4" x 20' x 24' RHA T/L pump on 160 7/8" and 68 1" rods. (picked up rods from #215 in doubles off the ground.) Filled tubing and tested to 350#. RTP @ 6:00 p.m. RDMO. Moved rig to VF #214.

05-07-83
236 bbls. gross. 35% cut. 410# tbg/520# csg. 16/64" bean. 24 hrs.

05-08-83
266 bbls. gross. 30% cut. 430# tbg/520# csg. 16/64" bean. 24 hrs.

ARGO PETROLEUM CORPORATION
WELL HISTORY - VALEX-FERNDALE #211
SILVERTHREAD LEASE
PAGE 5

05-09-83
259 bbls. gross. 32% cut. 420# tbg/500# csg. 16/64" bean. 24 hrs.

05-10-83
255 bbls. gross. 30% cut. 420# tbg/520# csg. 16/64" bean 24 hrs

05-11-83
217 bbls. gross. 32% cut. 420# tbg/500# csg. 16/64" bean. 24 hrs.

05-12-83
258 bbls. gross. 28% cut. 420# tbg/500# csg. 16/64" bean. 24 hrs.

05-13-83
254 bbls. gross. 28% cut. 420# tbg/500# csg. 16/64" bean. 24 hrs.

05-14-83
258 bbls. gross. 25% cut. 440# tbg/550# csg. 16/64" bean. 24 hrs.

APPROVED BY: Harry E. Hull DATE: 3-16-84
Harry E. Hull, District Superintendent

Form OG100 (7/79)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

DOG

API No. 111-21178

WELL SUMMARY REPORT

Operator	Well				
ARGO PETROLEUM CORPORATION	VALEX-FERNDALE #211				
Field	**County**	**Sec.**	**T.**	**R.**	**B.&M.**
~~Silverthread~~ Ojai	Ventura	16	4N	21W	SB

Location (Give surface location from property or section corner, street center line and/or California coordinates)
1211' S'ly and 4341' E'ly from NW corner Section 16, T4N-R21W (SB)

Elevation of ground above sea level
1443'

Commenced drilling (date): 4/21/82
Completed drilling (date): 6/4/82
Commenced producing (date):

[X] Flowing [ ] Pumping
[ ] Gas lift

Name of producing zone(s):
Valex Sand
Argo Sand

Total depth (1st hole)	(2nd)	(3rd)
8860'		

Present effective depth: 8814'

Junk: None

Depth measurements taken from top of:
[ ] Derrick Floor [ ] Rotary Table [XX] Kelly Bushing
Which is 18 feet above ground

GEOLOGICAL MARKERS	DEPTH
U. Big Canyon Fault Zone	4799'
T. Mohnian Sands & Shales	5642'
T. Monterey Shale	8462'

DIVISION OF OIL AND GAS
RECEIVED
DEC 29 1982
SANTA PAULA, CALIFORNIA

Formation and age at total depth: Monterey; Miocene

	Clean Oil (bbl per day)	Gravity Clean Oil	Percent Water including emulsion	Gas (Mcf per day)	Tubing Pressure	Casing Pressure
Initial Production						
Production After 30 days						

CASING RECORD (Present Hole)

Size of Casing (API)	Top of Casing	Depth of Shoe	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Number of Sacks or Cubic Feet of Cement	Depth of Cementing (if through perforations)
13-3/8"	surface	681'	48#	J-55, ST&C	New	17½"	890 cf	
9-5/8"	surface	5825'	36#&40#	N-80&K-55,LT&C	New	12¼"	1175 cf	
7"	surface	8600'	(See	History)	New	8-3/4"	630 cf	
5"	8508'	8814'	18#	K-55	New	6-1/8"	none	

PERFORATED CASING (Size, top, bottom, perforated intervals, size and spacing of perforation and method.)
4(0.44") JHPF 7861'-8342' & 7016'-7334'
Slots in 5" from 8600'-8813' (120 mesh, 12 row, 6" centers, 2" radials)

Was the well directionally drilled? If yes, show coordinates at total depth
[X] Yes [ ] No 255.75'N and 529.20'W from surface location

Electrical log depths
DIL: 5840'-681', 8596'-5825' and 8814'-8600'

Other surveys
FDC/CNL, Dipmeter, VDL, GR, LDT, Mudlog, Directional Survey + GRL, CCL & MSG

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Name	Title	
Harry Hull	District Superintendent	
Address	**City**	**Zip Code**
940 E. Santa Clara Street	Ventura, CA	93001
Telephone Number	**Signature**	**Date**
(805) 653-5111	Harry Hull	12-21-22

SUBMIT IN DUPLICATE

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

DIVISION OF OIL AND GAS
RECEIVED
DEC 29 1982
SANTA PAULA, CALIFORNIA

Operator Argo Petroleum Corp. Field Silverthread County Ventura
Well Valex-Ferndale #211, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21178 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 12-17, 1982

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
4/19/82 to 4/20/82	MIRU Bawden #27.
4/21/82	Finished rigging up Bawden #27. Spud well at 1900 hrs. Drilled 12¼" hole to 122'. Lost circulation (±200 Bbls mud). Built mud volume.
4/22/82	Unplugged flow line and replaced flow line jet. Drilled 12¼" hole to 363'. POOH and layed down 12¼" drilling BHA. MU 17½" bit and drilled to 89'.
4/23/82	Drilled 17½" hole to 685'. Circulated for casing.
4/24/82	POOH to run casing. Welded on shoe. RU and ran casing as follows: Ran 17 jts. of 13-3/8", 48#, J-55, 8RD, ST&C casing with guide shoe at 681', baffle plate at 658' and one regular centralizer on shoe joint and 2nd joint. Cement basket placed at ±197'. RU Dowell and circulated casing. Found bell spring broken in cementing head. Removed bell spring and changed out bottom plug. Cemented casing as follows: Pumped 50 cf water ahead, followed by 750 cf class 'G' + 2% gel + 3% $CaCl_2$ followed by tail of 140 cf class 'G' + 3% $CaCl_2$. Displaced with 595 cf mud. Did not bump plug with 3% over displacement. Partial returns. Trace cement returns. CIP at 0900 hrs. Found cement to surface when bull plug removed from conductor pipe. Cut off conductor and 13-3/8" casing. Welded on 13-3/8"x12", 900 series well head and tested with 1000 psi. Nippled up BOPS and lines.
4/25/82	Finished nippling up BOPS and lines. Tested blind rams to 1000 psi. MU drilling BHA and RIH. Tested pipe rams, kill line, choke manifold to 1000 psi and Hydril to 500 psi. DOG witnessed and approved. Drilled out cement, baffle and shoe. Drilled to 793'. Tripped for navidrill assembly.
4/26/82	MU navidrill assembly and RIH. Navidrilled to 1408'. Tripped for drilling BHA and layed down navidrill. Changed BHA to locked up set up.
4/27/82 to 5/6/82	Drilled and surveyed to 5655'.
5/7/82	Drilled to 5850'. Made 15 stand wiper trip and conditioned mud for logs. Measured out of hole. Rigged up Schlumberger and logged as follows:

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corp. Field Silverthread County Ventura
Well Valex-Ferndale #211, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21178 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 12-17, 19 82.

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date

DIL 5840' to 681'
FDC/CNL 5800' to 3930'

Rigged down Schlumberger.

5/8/82 MU bit and RIH. Circulated for casing. POOH. Rigged up and ran casing as follows: 158 jts. of 9-5/8", 36#, K-55, LT&C and 2 jts. of 9-5/8", 40#, N-80, LT&C on top and 1 shoe joint of 9-5/8", 40#, N-80 with guide shoe at 5825', float collat at 5761' and one regular centralizer on joints #1-#29. Cement basket placed on joint #30 (±4700').
RU BJ Cementers and cemented casing as follows: Pumped 80 cf of 95 pcf mud sweep ahead, followed by 975 cf of 1:1 poz + 4% gel + 0.2% R-5 + 0.2% D-6 followed by tail of 200 cf class 'G' neat + 0.2% R-5 and displaced with 2604 cf mud. Bumped plug with 1100 psi. Bled back 10 cf and float held. CIP at 2230 hrs. Good circulation throughout cement job.

5/9/82 Unflanged BOPS and raised same. Landed 9-5/8" casing in casing slips and cut off casing. Installed packing. Nippled up casing head spool and BOPS. Tested blind rams and choke manifold with 1000 psi. MU 8-3/4" drilling assembly and RIH. Tested pipe rams and upper kelly cock to 1000 psi and Hydril to 500 psi. DOG did not witness test. RIH and tagged float collar at 5760'. Drilled out cement.

5/10/82 Drilled out cement and shoe at 5825'. Drilled to 6148'. Tripped for bit change.

5/11/82 RIH and reamed from 5825' to 6148'. POOH for dynadrilling assembly. Rigged up steering tool and RIH. Dynadrilled with steering tool to 6327'.

5/12/82 Dynadrilled to 6378'. POOH. Tight hole from 6289' to 6055'. Layed down dynadrill and monel. MU reaming BHA and bit and reamed from 5884' to 6378'. Circulated and POOH.

5/13/82 Finished POOH. Picked up dynadrill and monel and RIH. Rigged up steering tool. Tool would not seat. Attempted to seat tool three times. No success. POOH. Changed out steering tool company and kick sub and RIH. Dynadrilled with steering tool to 6547'.

5/14/82 Dynadrilled to 6643'. Pulled steering tool. POOH and layed down dynadrill. MU Build Angle BHA and RIH. Reamed from 5912' to 6643'. Drilled to 6744'.

5/15/82 Drilled to 6851'. POOH for new bit. RIH and reamed from 6732' to 6851'. Drilled to 7102'. POOH for new bit.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corp. Field Silverthread County Ventura
Well Valex-Ferndale #211, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21178 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 12-17, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date

5/16/82 Finished POOH. RIH and reamed from 6966' to 7102'. Drilled to 7392'.

5/17/82 Drilled to 7642'. POOH to change bit.

5/18/82 Finished trip. Drilled to 7720'. Chained out of hole. RIH to shoe. Repaired rotary drive for 3 hours.

5/19/82 Repaired rotary drive shaft - 24 hours.

5/20/82 Stage in hole. Reamed from 7650' to 7720'. Drilled to 7920'.

5/21/82 to 5/23/82 Drilled to 8596'.

5/24/82 Circulated and wiped hole. Measured out of hole for logs. RU Schlumberger and logged as follows:

DIL-FDC/CNL	5825' to 8596'
Dipmeter	5825' to 8596'

Rigged down Schlumberger. RIH and reamed from 8504' to 8596'. Circulated and conditioned mud for casing.

5/25/82 POOH laying down drill pipe. Layed down Havi-wate, drill collars and stabilizers. RU and ran 7" casing as follows: 205 jts. of 7", 23#, 26# and 29#, K-55 and N-80, LT&C casing with Filtrol shoe at 8600' and float collar at 8509'. Casing equipped with one regular centralizer per joint on jts. #1-#4, #51-#60 and one dual turbine centralizer per joint on jts. #5-#17, #30-#36, #38, #40-#50 and one regular centralizer every other joint from jts. #19-#29. Flag joint from 6153' to 6183'.
7" casing detail:

Shoe	1.60'	@	8600.06'
2 jts. 29#, N-80, LT&C	87.74'		
Float collar	2.00'	@	8508.72'
14 jts. 29#, N-80, LT&C	629.97'	Top @	7878.75'
28 jts. 26#, N-80, LT&C	1122.85'	Top @	6755.90'
46 jts. 23#, N-80, LT&C	1845.65'	Top @	4910.25'
48 jts. 23#, K-55, LT&C	2020.03'	Top @	2890.22'
65 jts. 23#, N-80, LT&C	2802.54'	Top @	87.68'
2 jts. 29#, N-80, LT&C	89.38'		
Tubing depth: (shoe)			8600.06'

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corp. Field Silverthread County Ventura
Well Valex-Ferndale #211, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21178 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 12-17, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
5/26/82	Circulated casing. RU Dowell and cemented casing as follows: Mixed and pumped 200 cf spacer 3000 mud sweep (87 pcf) followed by 100 cf scavenger slurry (94 pcf) followed by 630 cf self stress cement + 1% D-60 + 0.2% D-46. Displaced with 1894 cf mud and bumped plug with 500 psi over final pumping pressure. Bled back 8 cf and floats held. CIP at 0320 hrs 5/26/82. Good circulation throughout cement job. Unflanged BOPS and lines. Landed 7" casing with 120,000#. Flanged up 6", 1500 series tubing head and tested with 3000 psi. Set in and flanged up 6", 1500 series mud cross, double shaffer and Hydril. Landed 4½" kelly and picked up 3½" kelly. Tested blind rams and choke line to 1000 psi. Flanges leaked on choke line.
5/27/82	MU 3½" kelly and bushings. Rewelded choke line flanges and retested choke line. Measured and picked up 4-3/4" drill collars and 3½" Hevi-wate and 3½" drill pipe. RIH. Tested pipe rams to 1500 psi and Hydril to 1000 psi. DOG did not witness. Drilled out float collar, cement and shoe. Drilled 6-1/8" hole to 8618'.
5/28/82	Drilled to 8623'. POOH to shoe. Cleaned mud pits. Filled pits with 64 pcf lease water. Drilled to 8628'. Circulated bottoms up. Shut well in. No shut in pressures. Circulated out water and filled pits with 64 pcf polymer. Changed well over to polymer. Drilled to 8639'. Circulated and built polymer weight.
5/29/82	Finished building polymer weight to 66 pcf. Pulled to shoe and reduced liner sizes in pump. Circulated and built polymer weight to 68 pcf. Measured out of hole. MU bit and BHA and drilled to 8678'.
5/30/82	Circulated. POOH for bit and Baker mud motor. RIH and reamed from 8654' to 8678'. Drilled with mud motor to 8765'.
5/31/82	Drilled with mud motor to 8795'. Bit trip. RIH and drilled with mud motor to 8824'. Tripped to replace Baker mud motor. MU new mud motor.
6/1/82	RIH and drilled with Baker mud motor to 8854'. POOH and MU drilling assembly. RIH and reamed from 8824' to 8854'. Drilled to 8860'. Worked pipe. Hole packing off. Pulled to shoe and built polymer weight to 72 pcf.
6/2/82	RIH slow and reamed from 8824' to 8860'. Hole still packing off. Reamed at 8825' and pipe stuck. Jarred pipe loose and pulled to shoe. Circulated. RIH and tagged fill at 8812'. POOH to run logs. RU Schlumberger and logged well as follows:

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corp. Field Silverthread County Ventura
Well Valex-Ferndale #211, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21178 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 12-17, 1982

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93301 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date

DIL-Sonic	POOH due to tool failure
Sonic-VDL	8814' to 8600'
DIL/GR	8814' to 8600'
LDT-CNL-GR	8814' tp 8600'

6/3/82 Finished running logs. Rigged down Schlumberger. RIH and reamed from 8764' to 8816'. Circulated. Pulled to shoe. RIH and tagged fill at 8814'. POOH for liner. RU and ran 5" liner as follows:

6 jts. 5", 18#, K-55, LT&C, TDC slotted	223.05'	Top @ 8590.58'
2 jts. 5", 18#, K-55, LT&C, TDC blank	79.11'	Top @ 8511.47'
Liner hanger	3.47'	Top @ 8508.00'

(Note: Slot detail: 120 mesh, 12 row, 6" centers, 2" radials.)

Hung liner with top at 8508' and bottom of liner at 8814'. Layed down 3½" drill pipe and Hevi-wate.

6/4/82 Layed down kelly, drill collars and loaded out same. RU to run 2-7/8" and 2-3/8" tubing. Measured and ran 2-7/8" and 2-3/8" tubing as follows:

Saw tooth collar	0.45'	
1 jt. 2-3/8"	31.59'	
2" top lock shoe	0.65'	
11 jts. 2-3/8",4.7#, J-55, EUE	347.49'	
Cross over 2-7/8"x2-3/8"	1.00'	
2 jts. 2-7/8", 6.5#, J-55, EUE	63.28'	
2½" toplock shoe	0.65'	
253 jts. 2-7/8", 6.5#, J-55, EUE	8006.89'	
2-7/8" Donut and nipple	1.80'	
	8453.80'	mat
K.B. tablehead	18.00'	
STC Depth	8467.25'	K.B.

Nippled down BOPS. Installed production tree and flow lines to Baker tank. Started to change well over from polymer to lease oil.

6/5/82 Finished changing over to lease oil. Shut well in. Pressure built to 850 psi. Flowed well to Baker tank. Rig shut down from 0600 hrs 6/5/82 to 2400 hrs 6/5/82 for college graduation services.

6/6/82 Rig shut down 0000 hrs 6/6/82 to 0900 hrs 6/6/82. Cleaned mud tanks. Rig released at 1500 hrs. 6/6/82.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #211, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21178 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 12-17, 1982

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address)

(805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
6-7-82	Flowed 36 bbls. gross, cut ranged from 0.1% - 40.%, gravity went from 29.0° - 12.0°.
6-8-82	Flowed 41 bbls. gross, cut ranged from 0.1% - 8.0%, gravity went from 26.1° - 28.3°. Had 500 psig shut in pressure @ 6:00 P.M. (flowed 77 bbls. in 13 hrs.total rec.). Will swab well in.
6-9-82	MIRU prod. rig. RU swab equip. RIH & tag fluid @ 1630'. Pull swab from 2700'. Well came in flowing, then died.
6-10-82	RIH w/ swab. Tagged fluid level @ 2300'. Pulled from 3300'. Flowed @ 6 bbls/hr. for 4 hours on 24/64" bean, then died. Slugged tbg. w/ 40 bbls. lease water mixed w/ 2 qts. AC-48S. Removed 5000 psi production tree. Installed 5000 psi flange w/ 3" line pipe pin looking up. Built production tree. Worked w/ Ventura Crane to remove 3 light plants & skid mounts. Spotted flatbed w/ rods. PU pump & rods, RIH w/ same. (pump is 2½ x 1 3/4 x 20 x 24, API TL on bottom. Rod count 108 3/4" EL, 80 7/8" EL, 79 1" EL.) Well made 39 bbls. gross.
6- 12-82 to 6-16-82	Production testing.
6-16-82	MIRU prod. rig. Bled well. Pulled rods & pump.
6-17-82	Tbg. 100#/csg. 150#. Bled tbg. Ran 10 doubles of rods on S.L., tagged @ 8814', no fill. POH w/ feeler. PU new 1¼" pump. RIH w/ pump & rods. Spaced well. Filled & pressured tbg. to 300 psig, using lease water. Hung well on. Well pumped 50 bbls. in 15 hrs., cut 50%.
6-18-82	Through 6-21-82 production testing.
6-22-82	MIRU prod. rig w/ circulating pump & tank. Pull rods & pump. Fill hole w/ 300 bbls. lease oil & backscuttle to remove gas. Remove production tree. Install Class II BOP w/ 3' spacer tool. RU for tbg. Unland donut. Lower tbg. Tag fill @ 8821'. Measure tbg. out of hole.
6-23-82	Continue POH w/ tbg. RU Hydrotest. Test 2 3/8" tbg. to 4500 psig, 2 7/8" tbg. to 6000 psig. Tested thru Baker retrievamatic. Baker retrievamatic @ 8394'. Tbg. tail @ 8750'. Tore out hydrotest. Set retrievamatic w/ 22,000# compression. RU

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #211, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21178 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 12-17, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date

6-23-82 (Continued from Page 6)

Halliburton. Halliburton unable to get pressure test on lines.

6-24-82 Halliburton pressure tested lines to 8250 psig. Applied 1500 psig to backside during job. Breakdown at 4.8 BPM & 4950 psig. ISIP 3200 psig. Pumped the following fluids:

Fluid Composition	Foam Quality %
1000 gals. acid	0
200 gals. diverter	0
2500 gals. acid	50
200 gals. diverter	50
2500 gals. acid	65
200 gals. diverter	65
2500 gals. acid	70
500 gals. solvent	70
35 bbls. 3% NH_4 Cl	70
15 bbls. 3% NH_4 Cl	60

Total: 8500 gals. 15% HCl w/ additives. Additives/1000 gals. include: 7 gals. PEN-5, 5 gals. HAI-75, 7½ gals. AS-5, 50 gals. MUSOL A, 20# citric acid, 10 gals. CLA-STA II. Total N_2 used: 474,800 SCF. Max. press. 5050 psig. Avg. press. 5500 psig. Avg. foam rate: 5 BPM. Final pump pressure: 5850 psig. 5 min. SIP: 4950 psig. Bled thru Halliburton steel lines from 4950 psig to 2600 psig. Shut in. R/D Halliburton. Rigged flow tree. Opened well on 16/64" bean, 3900 psig. Turned well over to Production Dept. Recovered 82 bbls. before well died. (all acid water).

6-25-82 0 psig tbg. Bled csg. Remove flow tree. Unland tbg. & released retrievamatic. Lowered tbg. w/ tail @ 8800'. Backscuttled well w/ 90 bbls. lease oil. Well started flowing. Backscuttled well around holding 300 psig back pressure - killing same. POH w/ tbg. lay down retrievamatic. MU new 2" bottom loc shoe. RIH w/ tbg. Tail @ 8468'. Remove floor & tbg. tools. Remove BOPE. Install production tree.

6-26-82 0 psig. tbg. PU & RIH w/ acid pump. Seated pump. Space well out. Hung well on. Built an additional flowline. 16/64" bean. Pressure to 300 psig. RTP.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #211, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21178 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 12-17, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (805) 653-5111
(Address) (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
6-27-82	Production testing.
6-28-82	MIRU prod. rig. Unhung well. Found rods stacking out. Pulled pump loose. Lay down polished rod. Check spacing. Respaced well. Hung back on. Pressured to 500 psig.
6-29-82	Production testing.
6-30-82	MIRU prod. rig. POH w/ rods & pump. RIH w/ exchange pump & rods. Seated pump. Fill & pressure to 300 psig. Left unit pumping.
7-1-82	Through 7-5-82 production testing.
7-6-82	Work pump off seat. POH w/ rods & pump. Remove prod. tree. Install BOP & working platform. Hook up rig pump. Fill hole w/ 330 bbls. lease oil. POH w/ tbg. RU Welex w/ full lubricator, set Baker drillable cast iron plug @ 8460'. Bond log well as per program w/ 1000 psig csg. pressure. R/D Welex. MU 2 7/8" STC. RIH.
7-7-82	Continue RIH w/ STC to 8400'. Spot 1½ sx sand down tbg. POH. RU Pengo w/ full lubricator & perf'd the following intervals: 4(0.44") JHPF 7861', 7896', 7906', 7920', 7942', 7982', 7990', 8000', 8014', 8073', 8088', 8103', 8147', 8154', 8166', 8170', 8210', 8220', 8232', 8249', 8264', 8308', 8324', 8336', 8342'. Surface pressure increased to 500 psig. RIH w/ Baker Retrieva-D packer w/ 4½" millout extension crossed over to 1 jt. 2 3/8" tbg, w/ 1.81" I.D. "R" profile nipple w/ "G" blanking plug in place, & bell collar on bottom. Set packer @ 7760'. "R" nipple @ 7803'. R/D Pengo. MU Baker seal assembly & top lock shoe & RIH. Tag retrieva-D, spaced well out, & stab into same w/ tbg. Landed on donut, 12,000# compression on seal assembly. Pressure backside to 500 psig. Tore out tools, working floor, & BOPE. Install tree. RU Archer Reed. RIH & pull equalizing prong. Well equalized pressure: 540 psig. RIH attempting to retrieve body of "G" blanking plug.
7-8-82	Continue trying to pull "G" plug. Unable to do so. Made two runs w/ hydrostatic bailer. Unable to open bailer. Pressure tbg. to 2000 psig - unable to pump through "G" plug. RU McCullough. RIH w/ thru tbg. perforating gun. Shot eight 3/8" holes from 7808'-7805' & 7803'-7802'. R/D McCullough. Turn well over to Production Dept. Well made 77 bbls. gross. 1.0% cut in 11½ hrs.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #211, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21178 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 12-17, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
7-9-82 thru 7-14-82	Production testing.
7-15-82	MIRU prod. rig. RU Archer Reed. Set tbg. stop @ 97'. Removed tree. Installed BOPE. Pulled tbg. stop. Unlanded tbg. & pulled seal assembly out of retrieva-D packer. Changed over to 71 pcf KCl water. POH. MU retrieving tool & RIH w/ tbg. to 7600'.
7-16-82	Ran in & latched onto Retrieva-D packer. Pulled packer loose & POH w/ same. Made feeler run w/ S.L., tagged @ 8460' (depth of BP). No fill. RU Pengo. RIH w/Pengo Repeata II prod. packer equipped w/ 4½" millout extension, over 1 jt. 2 3/8" EU tbg., over Otis "X" landing nipple. (blanking plug not run in place.) Set packer w/ top @ 7450', & bottom of tail @ 7494'. Tore out Pengo. MU Pengo seal assembly. Pressured csg. to 500 psig, held ok. Pulled seal assembly out of packer & prepared for changeover.
7-17-82	Changed over to lease oil, using 300 bbls. Well began flowing. RU Archer Reed. RIH w/ tbg. plug & set @ 107'. Installed tree. Pulled tbg. plug. Eqalized pressure 140 psig. Tore out Archer Reed. Opened well to Baker tank on 18/64" bean, getting 1/2" stream. RU swab equip. Made 6 swab runs. Pulled from 2000'. Recovered total of 20 bbls. Waited 1 hr. & tagged fluid @ 1200'. Had 800' (4.5 bbl) fluid rise. Left well open to tank on 18/64" bean.
7-18-82	RIH w/ swab. Tag fluid @ 350'. Swab to 3000'. Quit swabbing @ 2:00 PM @ 3:00 PM fluid surfaced. Install 20/64" bean. Flowed 47 bbls. in 4 hrs. Installed 18/64" bean.
7-19-82 thru 7-23-82	Production testing.
7-24-82	MIRU Triangle. Ran noise & temp log 8400'-7600'. Perfs @ 7861', 7982', 7990', 8000', 8014', 8073', 8088', 8103', 8166', 8210', 8249', 8264', 8308', 8324', & 8336' are open. Perfs @ 7920', 8147', 8154', 8170', 8220', 8232', & 8342' are not open. Perfs @ 7879', 7906', & 7942' are partially open, according to log interpretation.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #211, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21178 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 12-17, 1982

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
8-1-82	Finish changing system over to 71# KCl water. Pull tbg, laid down Baker packer and Otis sliding sleeve. RU Welex. RIH w/ Baker 7" 29# retrievable B.P. Plug set down on fill @ 8150'. POH w/ plug. RIH w/ OE tbg. Tagged fill @ 8147'. Backscuttled out fill to 8267'. Backscuttled well for 1 hours @ 8267', 7 BPM. POH w/ tbg. RU Welex. Set Baker B.P. @ 8190'. MU Baker 7" 29# retrievamatic packer. RIH w/ tbg.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #211, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21178 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 12-17, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (805) 653-5111
(Address) (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
7-25-82	Production testing.
7-26-82	MIRU prod. rig. RU Archer Reed & set tbg. plug @ 150'. Tore out tree. Install BOPE. Rigged up for tbg, pump & tank. Pull seal assembly out of Pengo packer. Filled csg. & backscuttled well around w/ lease oil. Changed well over to KCl water. Measured tbg. out of hole. MU Pengo retrieving tool. RIH to 7450'. Latched onto packer, POH & laid down same. MU Hampton circulation washer tool & RIH.
7-27-82	Washed perforations from 7861'-8342'. Perfs @ 7920', 8000', 8088', 8103', 8232', 8249', 8342' are open (7 of 25 sets). Dropped bar & circulated. Pulled up tbg. to 7450'.
7-28-82	Bled well down. POH w/ 2 7/8" tbg. Change rams for 3½" tbg. MU Baker 7", 29# Retrievamatic & 3½" Otis sliding sleeve. Pick up 3921' 3½" tbg.
7-29-82	Bled well. Finished RIH w/ 3½" tbg. & Baker retrievamatic packer to 8113'. Changed over to lease oil.
7-30-82	Lowered retrievamatic packer to 8199', & set packer w/ 20,000# compression on pkr. RU Dowell. Sand frac'd 8210'-8342' interval as per Stage I of frac program. Cut job short after 2.5# sand was pumped (approaching screenout conditions), and pumped flush. Left well shut in 6 hours. Bled well. Unable to pull packer loose @ 120,000# (40,000# over). Unable to break circulation down tbg. @ 2000 psig. RU Archer Reed. Unable to get Otis shifting tool into 3½" tbg., stopped 6' down. Made feeler run, tagged fill @ 7973' (226' above pkr).
7-31-82	RU Otis coiled tbg. RIH w/ coiled tbg. Change-over tbg. to KCl water.Clean out fill from 7973'-8250'.POH w/coiled tbg.R/D Otis. Worked pkr loose.Change well over to 71# KCl water. POH w/ 3½" tbg.
8- 2-82	Finished RIH w/ Baker retrievamatic pkr. Changed over to lese oil. Set packer @ 8040'. Pressured csg. to 2000 psig. RU Dowell. Checked pumps & repaired same (damaged by sand). Sand frac'd 8073'-8170' interval as per Stage II of frac program. Left well shut in 6 hours. Bled well. Worked pkr. loose. Changed over to 71# KCl water.
8-3-82	Pulled tbg. & pkr. RU Welex. Made feeler run, tagged fill @ 8070'. Ran Baker wireline set retrievable BP, set plug @ 8050'. MU Baker retrievamatic pkr on tbg. RIH to 7802'. Changed over to lease oil.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #211, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21178 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 12-17, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address)
(805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
8-4-82	Set retrievamatic pkr @ 7802'. RU Dowell. Sand frac'd 7861'-8014' interval as per Stage III of frac program. Left well shut in 6 hours. Bled well. Released packer. Changed over to 70# KCl water. Well still flowing thru tbg. Circulated for 1 hour, killing well. Changed pipe rams from 3½" to 2 7/8".
8-5-82	MU Baker retrieving tool on tbg. & RIH. Tagged fill @ 7922'. BS out fill to 8050'. Latched onto B.P., pulled & laid down same. MU retrieving tool on tbg. & RIH. Found fill @ 8070'. BS out fill to 8190'. Latched onto BP, POH.
8-6-82	POH w/ B.P. MU STC & PS on 2 7/8" tbg. & RIH. Tagged fill @ 8265'. Clean out sand to 8460'. BS hole clean for 2 hrs. Pulled & laid down excess tbg. Landed tbg. w/ tail @ 7817'. Removed BOP. Installed prod. tree. Change over well to lease crude. Opened well to tank. Well flowed 25 bbls. in 1 hr w/ no pressure.
8-7-82	RU swab equip. Swabbed 70 bbls. oil & water. Well started flowing w/ 200 psig on tbg. Opened well to trap on 11/64" bean. Turned well over to Prod. Dept.
8-8-82 thru 9-8-82	Production testing.
9-9-82	MIRU prod. rig. Pumped 410 bbls 72# KCl water down csg. Unable to change well over. Pumped 50 bbls. down tbg.
9-10-82	Bled well. Installed BOPE & tested. Pumped 75 bbls. 75# KCl down csg. Pulled 75 doubles 2 7/8" tbg.
9-11-82	Bled down & finished pulling tbg. RU Welex. Perf'd 7016'-7334'. MU & ran bit w/ 7" positive scraper to 8460'. Found no fill. POH & laid down tbg.
9-12-82	Bled well down. Laid down 235 jts. 2 7/8" tbg. Left 1100' of 2 7/8" tbg. in derrick. RU Welex. Ran Baker Retrieva-D 7" 29# packer, set @ 7355' w/ profile nipple @ 7387'. MU Baker retrievable BP on wireline. Set plug @ 1050'. Remove BOP. Chg. tbg. head to dual head. Install BOP & test same. MU Baker retrieving tool on tbg. Ran tool to 1050'. Released BP.
9-13-82	Bled well. Laid down 34 jts. 2 7/8" tbg & BP. Changed pipe rams & BP to 2 3/8". RU Hydrotest. Test long string in hole w/ Retrieva-D on bottom.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #211, Sec. 16, T4N, R 21W, SB B. & M.
A.P.I. No. 111-21178 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 12-17, 19 82

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
9-14-82	Bled well down, finish testing long string in hole @ 5000 psig. Spaced out long string & stabbed into Retrieva-D packer w/ seal assembly landed on donut. Presssure on csg. side 300 psig. Install Hydril, RU Archer Reed. Set Otis tbg. plug @ 200' in long string. MU 2" TL PS, tested 53 jts. 2 3/8" tbg. in hole. Well started to flow thru csg.
9-15-82	RU Archer Reed. Pull hydrotest tools into lubricator. Lay down test tools & kill well w/ 72# KCl water. Finished running short string 2 3/8" in hole. Space out & latch in Baker AL-5 hydraulic packer. Landed short string on donut. RU Archer Reed. Set tbg. plug in short string @ 193'. Prepare to install & test tree.
9-16-82	Installed dual tree. Tested tree & split donuts to 3000 psig. RU Archer Reed to long string. Pulled tbg. plug. Set standing valve in Model "L" sliding sleeve below AL-5 packer. Applied 2000# to long string to set packer. Pulled standing valve. Pressured csg. to 1000 psig, packer holding. RU Archer Reed to short string & pulled tbg. plug. R/D Archer Reed. Loaded out equip. R/D SPS & move rig to side of location. Pulled Baker prod. services swabbing rig up the hill.
9-17-82	Swabbing.
9-18-82	Swabbing short string.
9-19-82	Swabbing short string.
9-20-82 to 9-21-82	Production testing.
9-22-82	RU Otis coiled tbg. RIH to 7150' & change over hole w/ crude oil mixing w/ 1% solution of Block Buster surfactant. POH w/ coiled tbg. Hook up Dowell pump truck & squeeze 34 bbls. crude oil w/ surfactant @ 3500 psig. Surface press. at a rate of 1-2 BPM.
9-23-82 thru 9-27-82	Production testing.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #211 Sec 16, T 4N, R 21 W, SB B. & M.
A.P.I. No. 111-21178 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 12-17, 1982.

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
9-28-82	MIRU prod. rig. Attempt to bleed well down. Unable to do so. Pump 10 bbls. lease water w/ AC-48S down tbg. Pull rods to part, 17 jts. down. MU fishing tool. Attempt to RIH. Well blew fishing tool out of hole. Pump 10 bbls. lease water w/ AC-48S down tbg. Well blew water out of hole. Pump 10 bbls. lease water down csg. Bled tbg. to tank. RIH w/ fishing tool to fish & work over same. Pull rods to fish & replace rod. POH w/ pump plunger. Stuck open. Seat O.K. PU new pump & RIH. Well blew in w/ 30 doubles out. Bled to tank for 30 min. Continued RIH. Well blew in on last single. Closed in. Bled tbg. for 30 min. Hange well on & respaced. Test tbg. to 200 psig. Lay rig down. Move off.
9-29-82 to 10-2-82	(Short) - MIRU prod. rig. Attempt to pull pump & rods. Pump stuck. Work same free & POH. Pump sanded up. MU 1 15/16" mill on 7/8" rod. Run in & mill on back pressure valve threads in wellhead. POH. RU Archer Reed. RIH w/ sample bailer to 7282' (bottom perf @ 7334'). POH. Bailer full of fine flour sand.
10-3-82	(Short string). MU Pruett 1¼" tandem bombs on exchange pump & RIH. Hung well on. Space out. RTP.
10-4-82	Shut short string in for BHP test.
10-4-82 thru 10-13-82	Production testing long string w/ short string shut in for build-up.
10-13-82	Short string RTP.
10-14-82 thru 10-15-82	Production testing.
10-16-82	RIH w/ pump & rods. Hang well on. Space out.
10-17-82 thru 10-24-82	Production testing.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #211, Sec. 16, T4N, R 21W SB B. & M.
A.P.I. No. 111-21178 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 12-17, 1982

Signature Harry Hull

940 E. Santa Clara St., Ventura, CA 93001 (Address) (805) 653-5111 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
10-25-82	RU Archer Reed on long string. RIH w/ 1½" sample bailer. Tagged fill @ 8408'. Recovered fine sand. R/D Archer Reed.
10-26-82 thru 10-29-82	Production testing.

UNIVERSAL DIRECTIONAL DRILLING

D06

Page 1 of 2

COMPLETION REPORT

DEC 2 9 1982

LOCAT Silverthread
WELL Vale, Ferndale #211 111-21178
SURFACE LOCATION 1211' S 4340' E
K. B. ELEVATION 1460'
DATE 6-1-82

COMPANY ARCO PETROLEUM CORPORATION

SANTA PAULA, CALIFORNIA

NO	MEASURED DEPTH	DRIFT ANGLE	VERTICAL DEPTH	DRIFT DIRECTION	RECTANGULAR COORDINATES NORTH	SOUTH	EAST	WEST	REMARKS
1	138	1°30	137 95	S 74 W		1 00		3 47	
2	258	1°45	257 90	S 85 W		1 32		7 12	
3	363	1°45	362 85	S 84 W		1 65		10 31	
4	494	2°45	493 70	S 77 W		3 06		16 44	
5	685	2°45	684 48	S 88 W		3 38		25 59	
6	793	2°30	792 39	West		3 38		30 31	
7	810	1°45	809 37	S 79 W		3 48		30 81	
8	840	0°15	839 37	N 86 W		3 47		30 95	
9	871	0°45	870 36	N 45 E		3 19		30 66	
10	901	1°30	900 35	N 71 E		2 93		29 92	
11	932	2°45	931 32	N 73 E		2 50		28 49	
12	962	3°15	961 27	N 62 E		1 70		26 99	
13	993	4°45	992 16	N 67 E		69		24 63	
14	1023	5°00	1022 05	N 53 E	88			22 54	
15	1054	4°15	1052 96	N 43 E	2 56			20 97	
16	1114	5°00	1112 73	N 15 E	7 61			19 62	
17	1176	5°45	1174 42	N 06 W	13 79			20 27	
18	1240	6°45	1237 98	N 25 W	20 61			23 45	
19	1272	7°45	1269 69	N 33 W	24 22			25 80	
20	1304	8°45	1301 31	N 31 W	28 40			28 31	
21	1336	10°15	1332 80	N 31 W	33 28			31 24	
22	1368	11°30	1364 16	N 33 W	38 63			34 71	
23	1467	14°15	1460 12	N 33 W	59 07			47 99	
24	1591	16°15	1579 16	N 34 W	87 83			67 39	
25	1717	19°00	1698 30	N 34 W	121 84			90 33	
26	1875	22°15	1844 53	N 33 W	172 02			122 91	
27	2004	23°30	1962 85	N 33 W	215 16			150 83	
28	2129	24°00	2077 03	N 33 W	257 80			178 62	
29	2285	25°00	2218 41	N 31 W	314 31			212 57	
30	2381	25°30	2305 06	N 30 W	350 10			233 24	
31	2477	26°00	2391 34	N 29 W	386 91			253 64	
32	2569	25°30	2474 38	N 30 W	421 21			273 44	
33	2697	25°00	2590 39	N 32 W	467 08			302 11	
34	2820	24°00	2702 75	N 32 W	509 51			328 62	
35	2975	22°45	2845 70	N 33 W	559 78			361 27	
36	3133	21°30	2992 70	N 33 W	608 34			392 81	
37	3268	21°30	3118 31	N 32 W	650 30			419 03	
38	3427	22°00	3265 73	N 32 W	700 82			450 59	
39	3585	22°30	3411 70	N 32 W	752 09			482 63	
40	3742	23°00	3556 22	N 31 W	804 67			514 22	
41	3931	23°30	3729 55	N 31 W	869 27			553 04	
42	4117	24°00	3899 46	N 30 W	934 79			590 86	
43	4212	24°30	3985 91	N 30 W	968 90			610 56	
44	4329	22°00	4094 39	N 31 W	1006 47			633 13	
45	4486	18°30	4243 28	N 33 W	1048 25			660 27	
46	4609	15°15	4361 95	N 34 W	1075 07			678 36	
47	4739	14°15	4487 95	N 33 W	1101 91			695 79	
48	4894	12°15	4639 42	N 33 W	1129 49			713 70	

CLOSURE _____

METHOD OF CALCULATION _____

UNIVERSAL
DIRECTIONAL DRILLING
COMPLETION REPORT

LOCATI(Silverthread

WELL Ferndale # 11

SURFACE LOCATION 1211' S 4340' E

K. B. ELEVATION 1460'

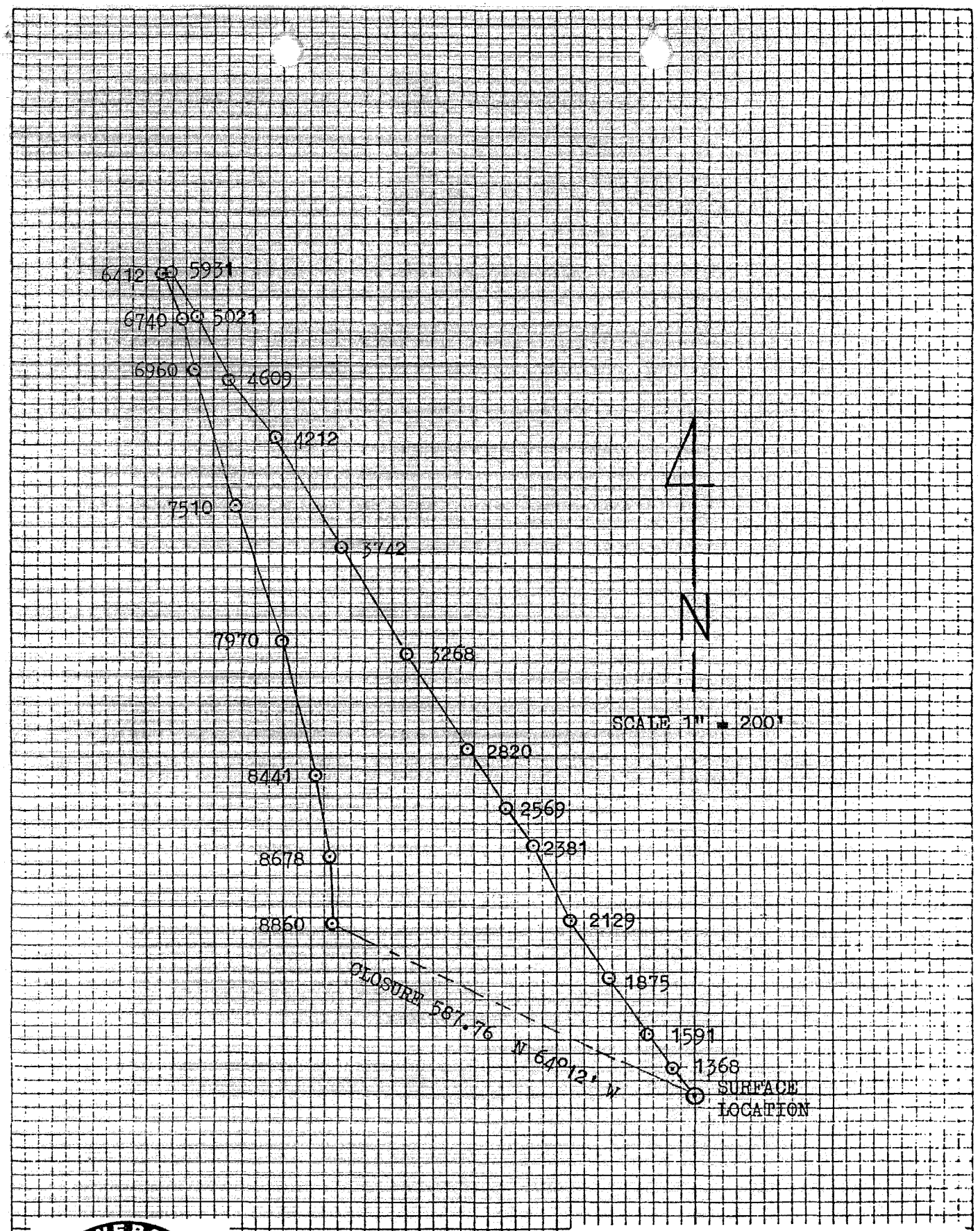
COMPANY ARGO PETROLEUM CORPORATION

DATE 6-1-82

NO.	MEASURED DEPTH	DRIFT ANGLE	VERTICAL DEPTH	DRIFT DIRECTION	RECTANGULAR COORDINATES NORTH	SOUTH	EAST	WEST	REMARKS
49	5021	10°30	4764 29	N 32 W	1149 12			725 96	
50	5147	9°15	4888 65	N 32 W	1166 30			736 69	
51	5307	7°00	5047 46	N 30 W	1183 18			746 44	
52	5464	5°00	5203 86	N 26 W	1195 48			752 48	
53	5591	4°00	5330 55	N 27 W	1203 38			756 46	
54	5718	3°15	5457 35	N 33 W	1209 41			760 39	
55	5840	2°45	5579 21	N 31 W	1214 43			763 40	
56	5931	1°45	5670 16	N 27 W	1216 91			764 66	
57	6055	2°15	5794 07	N 15 W	1221 61			765 92	
58	6148	2°00	5887 01	N 26 W	1224 53			767 34	
59	6192	1°00	5931 00	S 86 W	1224 48			768 00	
60	6287	3°45	6025 80	S 19 W	1218 60			770 13	
61	6338	5°00	6076 61	S 17 W	1214 35			771 43	
62	6412	6°30	6150 13	S 01 E	1205 98			771 28	
63	6507	8°30	6244 09	S 26 E	1193 36			765 13	
64	6603	11°30	6338 16	S 23 E	1175 74			757 65	
65	6740	14°45	6470 64	S 17 E	1142 39			747 35	
66	6836	17°45	6562 07	S 15 E	1114 12			739 87	
67	6960	20°00	6678 60	S 16 E	1073 35			728 18	
68	7054	21°15	6766 21	S 16 E	1040 60			718 79	
69	7165	22°15	6868 94	S 17 E	1000 40			706 50	
70	7323	22°30	7014 91	S 16 E	942 28			689 84	
71	7510	23°45	7186 08	S 17 E	870 26			667 82	
72	7642	26°30	7304 21	S 19 E	814 57			648 64	
73	7720	28°15	7372 92	S 19 E	779 66			636 62	
74	7812	29°00	7453 38	S 19 E	737 49			622 10	
75	7970	27°00	7594 16	S 18 E	669 27			599 94	
76	8124	24°30	7734 30	S 13 E	607 05			585 57	
77	8281	25°00	7876 59	S 15 E	542 96			568 40	
78	8441	27°00	8019 15	S 13 E	472 18			552 06	
79	8596	31°30	8151 31	S 11 E	392 68			536 60	
80	8678	31°00	8221 60	S 07 E	350 77			531 46	
81	8740	31°30	8274 46	S 04 E	318 45			529 20	
Est.	8860	31°30	8376 78	South	255 75			529 20	

CLOSURE 587.76' N64°12'W

METHOD OF CALCULATION Tangential



UNIVERSAL DIRECTIONAL DRILLING SINCE 1960

ARGO PETROLEUM CORPORATION

Ferndale # 11

FORM 157

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT ON PROPOSED CHANGE OF WELL DESIGNATION

Santa Paula, California

August 3, 1982

Mr. Harry Hull, Agent
Argo Petroleum Corporation
940 E. Santa Clara , P.O. Box CI
Ventura, CA 93001

DEAR SIR:

Your request dated 7/28/82, relative to change in designation of well(s) in Sec. 16, T. 4N, R 21W, S.B. B. & M., Ojai field, Ventura County, District No. 2, has been received; and in accordance with Section 3203, Public Resources Code, reading in part as follows:

> "* * * The number or designation by which any well heretofore drilled has been known, and the number or designation specified for any well in a notice filed as required by Section 3203, shall not be changed without first obtaining a written consent of the Supervisor."

the proposed change in designation is hereby authorized as follows:

FROM:	TO:
"Valex-Ferndale" 7	"Valex-Ferndale" 107 (111-21066)
"Valex-Ferndale" 10	"Valex-Ferndale" 110 (111-21163)
"Valex-Ferndale" 9	"Valex-Ferndale" 209 (111-21105)
"Valex-Ferndale" 11	"Valex-Ferndale" 211 (111-21178)

COP ✓

M. G. MEFFERD
~~JOHN E. MATTHEWS, JR.~~
State Oil and Gas Supervisor

By Murray W. Bosch
Murray W. Bosch, *Deputy Supervisor*

55610-705 1-72 8M ⓘ OSP

FORM OG111(10/81/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 282-199

REPORT ON PROPOSED OPERATIONS

520 (field code)
12 (area code)
10 (new pool code)
10 (old pool code)

Mr. Harry Hull, Agent
Argo Petroleum Corporation
Box CI
Ventura, CA 93002

Santa Paula, California
June 11, 1982

Your supplementary proposal to drill well "Valex-Ferndale" 11,
A.P.I. No. 111-21178, Section 16, T. 4N, R. 21W, SB B. & M.,
Ojai field, Silverthread area, Miocene pool,
Ventura County, dated 6/4/82, received 6/8/82 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. In all other respects, the provisions set forth in our report No.P282-139 dated April 22, 1982 shall apply.
2. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.

Rig Released 6-5-82
Request records 8-5-82

Blanket Bond
RLH:b

M. G. MEFFERD, State Oil and Gas Supervisor

By Murray W. Dosch, Deputy Supervisor

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

Form OG123 (7/79)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

SUPPLEMENTARY NOTICE

DIVISION OF OIL AND GAS
RECEIVED
JUN 8 1982
SANTA PAULA, CALIFORNIA

FOR DIVISION USE ONLY			
BOND	FORMS		EDP WELL FILE
	OGD114	OGD121	
BB	—	✓	

DIVISION OF OIL AND GAS

Santa Paula Calif.

A notice to you dated April 16, 1982, stating the intention to

Drill (Drill, rework, abandon), Valex-Ferndale #11 (Well name and number), API No. 111-21178,

Sec. 16, T. 4N, R. 21W, S.B. B. & M., Ojai Field,

Ventura County, should be amended because of changed conditions.

The present condition of the well is as follows:

Total depth 8860'

Complete casing record including plugs and perforations:

13 3/8" cemented @ 681'

9 5/8" cemented @ 5825'

7" cemented @ 8600'

We now propose

1. Change 5" cemented liner to a 5" slotted liner to be landed from ±8500' to ±8860'.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 940 E. Santa Clara Avenue (Street)
Ventura, California 93001 (City) (State) (Zip)
Telephone Number (805) 653-5111

Argo Petroleum Corporation (Name of Operator)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)
By Harry E. Hull (Name) 6-4-82 (Date)
Signature Harry E. Hull

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

No. T 282-118

DIVISION OF OIL AND GAS

Report on Operations

Mr. Harry Hull, Agent
Argo Petroleum Corporation
Box CI
Ventura, CA 93002

Santa Paula, Calif.
May 27, 1982

Your operations at well "Valex-Ferndale" 11, API No. 111-21178
Sec. 16, T. 4N, R. 21W, SB B.& M. Ojai Field, in Ventura County,
were witnessed on 4/24/82. R. Habel, representative of
the supervisor, was present from 1200 to 1400. There were also present Harold Laughlin,
Contractor's Pusher
Present condition of well: 13 3/8" cem 681'. T.D. 681'.

The operations were performed for the purpose of testing the blowout prevention equipment and installation.

DECISION:

THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

b

M. C. MEFFERD
State Oil and Gas Supervisor

By Murray W. Dosch
Deputy Supervisor

Murray W. Dosch

OG109(12-80-15M)

FORM 157

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT ON PROPOSED CHANGE OF WELL DESIGNATION

Santa Paula, California

April 23, 1982

Mr. Harry Hull, Agent
Argo Petroleum Corp.
P.O. Box CI
Ventura, CA 93002

DEAR SIR:

Your request dated April 21, 1982, relative to change in designation of well(s) in Sec. 16, T. 4N, R. 21W, S.B. B. & M., Ojai field, Ventura County, District No. 2, has been received; and in accordance with Section 3203, Public Resources Code, reading in part as follows:

> "* * * The number or designation by which any well heretofore drilled has been known, and the number or designation specified for any well in a notice filed as required by Section 3203, shall not be changed without first obtaining a written consent of the Supervisor."

the proposed change in designation is hereby authorized as follows:

From:		To:	
"Ferndale" 10	(111-21163)	"Valex-Ferndale" 10	(111-21163)
"Ferndale" 11	(111-21178)	"Valex-Ferndale" 11	(111-21178)

Cons.Comm.
b

M. G. MEFFERD
~~JOHN F. MATTHEWS, JR.~~
State Oil and Gas Supervisor

By Murray W. Dosch
Murray W. Dosch, *Deputy Supervisor*

59810-705 1-72 5M ① OSP

FORM OG111(10/81/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 282-139-

REPORT ON PROPOSED OPERATIONS

520 (field code)
12 (area code)
10 (new pool code)
-- (old pool code)

Mr. Harry Hull, Agent
Argo Petroleum Corporation
P.O. Box CI
Ventura, CA 93002

Santa Paula, California
April 22, 1982

Your proposal to drill well "Ferndale" 11,
A.P.I. No. 111-21178, Section 16, T. 4N, R. 21W SB B. & M.,
Ojai field, Silverthread area, Miocene pool,
Ventura County, dated 4/16/82, received 4/19/82 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Hole fluid of sufficient quality and quantity shall be maintained in the hole to control any subsurface condition, and a reserve supply shall be on hand for emergencies.
2. Unlined sumps, if they contain harmful waters, shall not be located over fresh water bearing aquifers.
3. Any sump used during these operations shall be thoroughly cleaned and filled with earth as soon as operations are completed.
4. Blowout prevention equipment of at least DOG Class III 1M B shall be installed on the 13 3/8" and Class III 3M B shall be installed on the 9 5/8" and 7" casings and maintained in operating condition at all times.
5. This office shall be consulted before placing any plugs or sidetracking any hole.
6. The spacing provisions of Section 3606 shall be followed.
7. A subsurface directional survey shall be made.
8. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.
9. THIS DIVISION SHALL BE NOTIFIED TO WITNESS:
   a. A pressure test of the blowout prevention equipment before drilling below 700'.
   b. A test after cleaning out below the top of the 5" casing to demonstrate that no fluid has access to the well from between the 7" and 5" casings.
   c. A test of the 5" shut-off above the zone to be produced.

Blanket Bond
RLH:b

a) No lap test required — see 'R' report 282-139
Liner top was not estimated
b) Ran slotted liner — will monitor prod after 6 mo.

M. G. MEFFERD, State Oil and Gas Supervisor

By Murray W. Dosch
Murray W. Dosch, Deputy Supervisor

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

Form OG105 (8/80)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS
Notice of Intention to Drill New Well

DIVISION OF OIL AND GAS
RECEIVED
19
APR 16 1982
SANTA PAULA, CALIFORNIA

C.E.Q.A. INFORMATION			
EXEMPT ☐ CLASS ____	NEG. DEC. ☐ S.C.H. NO. ____	E.I.R. XX S.C.H. NO. CUP 3344	DOCUMENT NOT REQUIRED BY LOCAL JURISDICTION ☐
See Reverse Side			

FOR DIVISION USE ONLY					
MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121
203	4 24 82	✓	62	✓	✓

3606 Prospect
BFW
Unk. Marine Sed. & Surf.

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to commence drilling well "Ferndale" 11, API No. 111-21178 (Assigned by Division),

Sec. 16, T. 4N, R. 21W, S.B B. & M., (Ojai Field Silverthread Area) Field, Ventura County.

Legal description of mineral-right lease, consisting of _____ acres, is as follows: _____ (Attach map or plat to scale)

Previously submitted

Do mineral and surface leases coincide? Yes X No _____. If answer is no, attach legal description of both surface and mineral leases, and map or plat to scale.

Location of well 1193 / 1211 feet Southerly (Direction) along section ~~property~~ line (Cross out one) and 4346 / 4341 feet Easterly (Direction)

at right angles to said line from the NW corner of section ~~property~~ 16 (Cross out one) or

Is this a critical well according to the definition on the reverse side of this form? Yes ☐ No XX

If well is to be directionally drilled, show proposed coordinates (from surface location) at total depth: 225 / 276 feet E (Direction) and 100 / 529 feet N (Direction)

Elevation of ground above sea level 1443 / 1467 feet.

All depth measurements taken from top of KB (Derrick Floor, Rotary Table, or Kelly Bushing) that is 18 feet above ground.

PROPOSED CASING PROGRAM

SIZE OF CASING INCHES API	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS	CALCULATED FILL BEHIND CASING (Linear Feet)
13 3/8"	48#	H-40	Surf	700	700	700 (to surf)
9 5/8"	36#	K-55	Surf	6000	6000	2500
7" / 5"	23, 26 / 18	N-80 / N-80	Surf/8600	8800/9500	8800/9500	3000' / 700'

(A complete drilling program is preferred and may be submitted in lieu of the above program.)

Intended zone(s) of completion: 8500 3600 psi. Upper Miocene 8900 3800 psi. (Name, depth, and expected pressure) Estimated total depth 9500'

It is understood that if changes in this plan become necessary we are to notify you immediately.

Name of Operator	Type of Organization (Corporation, Partnership, Individual, etc.)	
Argo Petroleum Corporation	Corporation	
Address	**City**	**Zip Code**
940 E. Santa Clara	Ventura	93001
Telephone Number	**Name of Person Filing Notice**	**Signature** / **Date**
(805)653-5111	Harry E. Hull	Harry E. Hull / 4-16-82

This notice and indemnity or cash bond shall be filed, and approval given, before drilling begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

Information for compliance with the California Environmental Quality Act of 1970 (C.E.Q.A.).

If an environmental document has been prepared by the lead agency, please submit a copy of the document with this notice *or* supply the following information:

Lead Agency: ~~Argo Petroleum Corporation~~ Ventura Co. Planning Commission

Lead Agency Contact Person: ~~Harry E. Hull~~

Address: ~~940 E. Santa Clara~~

~~Ventura, Ca. 93001~~

Phone: (805) 653-5111

FOR DIVISION USE ONLY
District review of environmental document (if applicable)? Yes ☐ No ☐
Remarks:

CRITICAL WELL

As defined in the California Administrative Code, Title 14, Section 1720(a), "Critical well" means a well within:

(1) 300 feet of the following:
(A) Any building intended for human occupancy that is not necessary to the operation of the well; or
(B) Any airport runway.
(2) 100 feet of the following:
(A) Any dedicated public street, highway, or nearest rail of an operating railway that is in general use;
(B) Any navigable body of water or watercourse perennially covered by water;
(C) Any public recreational facility such as a golf course, amusement park, picnic ground, campground, or any other area of periodic high-density population; or
(D) Any officially recognized wildlife preserve.

Exceptions or additions to this definition may be established by the supervisor upon his own judgment or upon written request of an operator. This written request shall contain justification for such an exception.

CALIFORNIA
DIVISION OF OIL AND GAS

April 17, 1984

To: Mr. Harry Hull, Agent
Argo Petroleum Corporation
411 S. Beckwith Rd.
Santa Paula, CA 93060

From: Div. of Oil and Gas
P.O. Box 67
Santa Paula, CA 93060

Subject: ☐ Request for confidential status dated _____, 19___.

☒ Request for extension of confidential status dated Apr. 13, 19 84.

☒ Subject request is approved

☐ Subject request is partially approved

☐ Subject request is denied.

Records approved for confidential status are:

WELL NAME AND NUMBER	FIELD OR COUNTY	DATE ON WHICH RECORDS WILL BECOME PUBLIC
"Valex-Ferndale" 211	Ojai Sec.16,T.4N.,R.21W. SBB&M	Dec.6,1984 - First Extension

Murray W. Dosch
District Deputy

cc: Petroleum Information Service
M.J. Systems

SEE REVERSE SIDE FOR RECORDS DENIED CONFIDENTIAL STATUS OR EXTENSION OF CONFIDENTIAL STATUS AND REMARKS.

OD181 (3-79-DWRR-2M)

CALIFORNIA
DIVISION OF OIL AND GAS

April 19, 1982

To: Mr. Harry Hull, Agent
Argo Petroleum Corporation
P.O. Box CI
Ventura, CA 93002

From: Div. of Oil and Gas
Box 67
Santa Paula, CA 93060

Subject: ☒ Request for confidential status dated 4/16, 19 82.

☐ Request for extension of confidential status dated _____, 19___.

☒ Subject request is approved

☐ Subject request is partially approved

☐ Subject request is denied.

Records approved for confidential status are:

WELL NAME AND NUMBER	FIELD OR COUNTY	DATE ON WHICH RECORDS WILL BECOME PUBLIC
"Ferndale" 11	Ojai Sec.16,T.4N.,R.21W. SBB&M	Two years after cessation of drilling operations.

Murray W. Dosch
District Deputy

cc: Petroleum Information Service
M.J. Systems

SEE REVERSE SIDE FOR RECORDS DENIED CONFIDENTIAL STATUS OR EXTENSION OF CONFIDENTIAL STATUS AND REMARKS.

OG181 (3-79-DWRR-2M)

PROPERTY/WELL TRANSFER OR ACQUISTION

Seneca Resources Corporation (S2630)

to

Vintage Production California LLC (V1370)

Effective April 25, 2008

OPERATOR Argo Pet Corp
WELL NO. Valix-Ferndale 214
MAP 282

INTENTION	Drill					
NOTICE DATED						
P-REPORT NUMBER	282-160					
CHECKED BY/DATE	[illegible] 3-29-83					
MAP LETTER DATED	3-29-83					
SYMBOL						

	REC'D	NEED	REC'D	NEED	REC'd	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED
NOTICE	5-3-82											
HISTORY	4-26-83											
SUMMARY	4-26-83											
E-LOG	4-26-83											
MUD LOG	4-26-83											
DIPMETER												
DIRECTIONAL	4-26-83											
CORE/SWS												
CBL	4-26-83											
MicroSeismogram-CBL	4-26-83											
TDT (Thermal Decay Time)	4-26-83											
FDC CNL-GR	4-26-83											
RECORDS COMPLETE	5-10-83	MF										

ENGINEERING CHECK

T-REPORTS						
OPERATOR'S NAME						
WELL NO.						
LOC & ELEV						
SIGNATURE						
SURFACE INSP.						
FINAL LETTER OK						

FINAL LETTER MAILED

REMARKS: Watch for Rush to put on approved

RELEASED BOND

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF PROPERTY AND WELL TRANSFER

Field or county	District
Ojai	2
Former owner	**Date**
Argo Petroleum Corp.	Sept. 10, 1987

Name and location of well(s)

Sec. 16, T. 4N., R. 21W., SBB&M

"Barker-Ferndale" 1	(111-20423)	"Valex-Ferndale" 211	(111-21178)
"Barker-Ferndale" 2	(111-20604)	"Valex-Ferndale" 214	(111-21180)
"Barker-Ferndale" 3	(111-20609)	"Valex-Ferndale" 215	(111-21206)
"Barker-Ferndale" 4	(111-20685)	"Valex-Ferndale" 313	(111-21314)
"Barker-Ferndale" 5	(111-20702)	"Ferndale" 8	(111-20732)
"Barker-Ferndale" 6	(111-20730)		
"Valex-Ferndale" 107	(111-21066)		
"Valex-Ferndale" 110	(111-21163)		
"Valex-Ferndale" 209	(111-21105)		

Description of the land upon which the well(s) is (are) located

Date of transfer, sale, assignment, conveyance, or exchange	New owner	Type of organization
7-17-87	Seneca Resources Cprporatipn	Corp.
	Address: 511 16th St. Mall, Ste 300, Denver, CO 80202	Telephone No.: (303) 825-7401

Reported by: Seneca Resources Corp.

Confirmed by: Argo Petroleum Corp.

New operator new status (status abbreviation)	Request designation of agent
PA	
Old operator new status (status abbreviation)	**Remarks**
PA	

Deputy Supervisor	Signature
Patrick J. Kinnear	Patrick J. Kinnear

OPERATOR STATUS ABBREVIATIONS

PA – Producing Active
NPA – No Potential, Active
PI – Potential Inactive
NPI – No Potential, Inactive
Ab – Abandoned or No More Wells

FORM AND RECORD CHECK LIST

Form or record	Initials	Date	Form or record	Initials	Date
Form OGD121			Map and book		
Form ODG148			Notice to be cancelled		
New well cards			Bond status		
Well records			EDP files		
Electric logs					
Production reports					

Form OG 110 (7779)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
APR 26 1983
SANTA PAULA, CALIFORNIA

API No. 111-21180

WELL SUMMARY REPORT

Operator	Well				
Argo Petroleum Corporation	Valex-Ferndale #214				
Field	**County**	**Sec.**	**T.**	**R.**	**B.&M.**
Ojai, Silverthread Area	Ventura	16	4N	21W	S.B.

Location (Give surface location from property or section corner, street center line and/or California coordinates)
1228' Southerly & 4365' Easterly from the NW corner of Sec. 16

Elevation of ground above sea level
1443'

Commenced drilling (date)
8-17-82

Completed drilling (date)
10-09-82

Commenced producing (date)
1-25-83

☐ Flowing ☒ Pumping
☐ Gas lift

Name of producing zone(s)
Valex Sand
Argo Sand

Total depth

(1st hole)	(2nd)	(3rd)
7962'	9454'	

Present effective depth
9398' (Float Collar)

Junk
Itemized list of Fish left in hole #1 from 7950' to 7425' is in History for September 21, 1982.
(Attached)

Depth measurements taken from top of:
☐ Derrick Floor ☐ Rotary Table ☒ Kelly Bushing
Which is 22 feet above ground

GEOLOGICAL MARKERS	DEPTH
Upper Big Canyon Fault	4470'
Lower Big Canyon Fault	5412'
Top Monterey Shale	8712'

Formation and age at total depth
Argo SD - Monian

	Clean Oil (bbl per day)	Gravity Clean Oil	Percent Water including emulsion	Gas (Mcf per day)	Tubing Pressure	Casing Pressure
Initial Production	48	30.5	20%	128	200	200
Production After 30 days	42	30.4	30%	111	170	170

CASING RECORD (Present Hole)

Size of Casing (API)	Top of Casing	Depth of Shoe	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Number of Sacks or Cubic Feet of Cement	Depth of Cementing (if through perforations)
13-3/8"	Surface	725'	48#	H-40, ST&C	New	17-1/2"	1025 CF	---
9-5/8"	Surface	5886'	36# 40#	K-55, LT&C N-80, LT&C	New	12-1/4"	1300 CF	
7"	Surface	9444'	26#	N-80, LT&C	New	8-3/4"	855 CF	CP'd 8611' - 8613' and 8632' - 8650'

PERFORATED CASING (Size, top, bottom, perforated intervals, size and spacing of perforation and method.)
9386' - 8956' 4 (0.38") JHPF at int. Ineffective, below BP at 8910'.
8650' - 8300' 4 (0.38") JHPF at int. (Cmt'd off below 8596')

Was the well directionally drilled? If yes, show coordinates at total depth
☒ Yes ☐ No 91.25' South and 272.16' West of Surface

Electrical log depths
DIL-GR 9444' to 725'

Other surveys
FDC-CNL, Mud Log, Directional Survey

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Name	Title		
Harry E. Hull	District Superintendent		
Address	**City**	**Zip Code**	
411 S. Beckwith	Santa Paula	93060	
Telephone Number	**Signature**	**Date**	
(805) 933-1321	Harry E. Hull	1-13-83	

SUBMIT IN DUPLICATE

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

DIVISION OF OIL AND GAS
RECEIVED
APR 26 1983
SANTA PAULA, CALIFORNIA

Operator Argo Petroleum Corporation Field Ojai County Ventura
Well Valex-Ferndale #214, Sec. 16, T 4N, R 21W., S.B. & M.
A.P.I. No. 111-21180 Name Harry E. Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date January 10, , 19 83

Signature Harry E. Hull

940 E. Santa Clara, Ventura, California 93001 (805) 653-5111
(Address) (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
8-17-82	MIRU Richerson Rig #1. Rig on operating rate at 2300 hours. Mix spud mud.
8-18-82	Mix spud mud. Spud at 0500 hours. Drilled 12-1/4" hole to 237'. POOH and pick up 17-1/2" bit.
8-19-82	Open 12-1/4" hole to 17-1/2" to 237'. Drilled 17-1/2" to 597'.
8-20-82	Drilled 725'. POOH. Move STB to above bit. RIH. Condition mud for casing. POOH. Ran 19 joints, 13-3/8", 48#, H-40, casing (jts. 1-17 ST&C, jt. 18 ST&C pin by butt box, jt. 19 butt). Ran B&W guide shoe at 725', baffle plate at 708', 1 centralizer on shoe joint, 1 centralizer middle third joint. Dowell pumped 50cf water, 900cf Class "G" + 2% Gel + 2% $CaCl_2$, followed by 125cf Class G + 3% $CaCl_2$. Displaced with 645cf mud. Did not bump. Shut in. CIP at 1655 hours, partial returns, 430cf cement returns.
8-21-82	Tagged plug with wireline at 725'. Cut off casing. Welded on 13-5/8", 3000# casing head. Tested welds to 1500 psi. Nipple up BOPS.
8-22-82	RIH with 12-1/4" BHA. Tagged plug at 722'. Tested BOPS to 1000 psi (Hydril to 500 psi). Test witnessed and approved by D.O.G. Drilled to 836'. Trip for dynadrill. Dynadrilled 836' to 1220'. POOH.
8-23-82 to 8-29-82	Make up BHA. Drilled 12-1/4" from 1220' to 5110', (Installed mud logger at 1969').
8-30-82 to 8-31-82	Drilled to 5115'. Trip for dynadrill. Dynadrilled from 5115' to 5460'. Trip for BHA.
9-01-82 to -02-82	RIH. Reamed 5028' to 5460'. Drilled 5460' to 5896'. Circulate for logs.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Ojai County Ventura
Well Valex-Ferndale #214, Sec. 16, T 4N, R 21W, S.B. B. & M.
A.P.I. No. 111-21180 Name Harry E. Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date January 10, 1983

Signature Harry C. Hull

940 E. Santa Clara, Ventura, California 93001 (805) 653-5111
(Address) (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date

10-05-82 Cut line and rigged up to strip over. Stripped over line with 5-3/4" overshot and 3-3/4" grapple. Latched logging tool, pulled wireline out of rope socket with T Bar. Spooled up line. Chain out with fish, (recovered all tools). Make up clean out BHA. RIH.

10-06-82 Driller hit crown - Repair same (19 hrs.). Finish RIH to 9454' (no fill). Condition mud.

10-07-82 Wipe hole to shoe. RIH to TD and condition mud for casing. POOH laying down drillpipe and BHA. Rig to run 7" casing. Ran 7 joints casing. Casing stopped due to excessive drag caused by centralizers. Lay down casing and remove centralizers.

10-08-82 Wait on different centralizers. Ran 7" casing as follows:

9444' = Float shoe
1 jt. 7", 26#, N-80, LT&C
9398' = Diff. fill float collar
15 jts. 7", 26#, N-80, LT&C
1 Creighton csg, adjuster 7", 26#, N-80, LT&C
17 jts. 7", 26#, N-80, LT&C
1 Creighton csg. adjuster 7", 26#, N-80, LT&C
18 jts. 7", 26#, N-80, LT&C
1 Creighton csg. adjuster 7", 26#, N-80, LT&C
165 jts. 7", 26#, N-80, LT&C

Installed 2 Dual Turbo centralizers on jt. #1. Installed 1 Dual turbocentralizer on each of jts. 2 through 11, 18 through 28, and 37 through 47. Installed 1 regular centralizer on each of jts. 12 through 16, 29 through 34, 36, 48, 50, 52, odd numbered jts. 55 through 83 and jt. 84. Installed turbolater wall scratchers, 2 on jt. 1, 3 on jt. 18, 1 on jt. 19, 3 on jt. 37 and 1 on jt. 38.

Rigged up Dowell and cemented casing as follows:

Pumped 225 cf (85 ppcf)spacer 3000; 100 cf scavenger; 855 cf self stress +1.2% fluid loss + .2% defoam. Displaced with 2083 cf water. Bumped plug. Float failed. Pressure to 500 psi over final disp. pressure and shut in. CIP at 1550 hrs. Full circulation throughout job. WOC and cellar work.

10-09-82 WOC. Lift BOPE. Set 7" in slips with 120,000#. Cut off 7" and tear out BOPE. Installed 11", 3000# by 7-1/16", 5000# dual tbg. head and test same. Rig Released at 10:00 hrs, 10-09-82

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Ojai County Ventura
Well Valex-Ferndale #214, Sec. 16, T 4N, R 21W, S.B.B. & M.
A.P.I. No. 111-21180 Name Harry E. Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date April 7, 19 83.

Signature Harry E. Hull

411 S. Beckwith Rd. Santa Paula, CA. 93060 (Address) (805) 933-1321 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
10-14-82	MIRU Prod. Rig. Install BOP. MU 6 1/8" BIT. Measure, Pickup, Drift 2 7/8" TBG in hole.
10-15-82	Continued Measuring in hole & PU 2 7/8" TBG. Tagged Fill @ 9386'. RU power swivel. Clean out fill & drilled thru F.C. @ 9391'. Continued drilling out cement to 9411'. BS hole clean. Change well over to lease crude. Measure out of hole.
10-16-82	Lay down 20 Jts. 2 7/8" TBG. Stand by for Vann Guns. Unable to anchor centralizers to guns.
10-17-82	PU Geo Vann assembly (Vann Guns, firing head, release sub, Baker "R" packer, vent assembly and Baker Model "L" sliding sleeve). RIH w/4900' oil cushion. Land TBG RU Welex. Ran Gamma Ray Neutron CCL. R/D Welex. Adjust TBG to match wireline measurements. Set packer @ 8874' w/12,000# compression. Test annulus to 1000 psig. Remove BOP. Install tree. Tested tree to 3500 psig. Fired Vann Guns. Perf'd 4(0.375") JHPF 8956' - 9394' (total of 124 holes). Blew gas then. Oil returns @ 1:00a.m.. Put to trap on 16/64" bean. TBG press. 140 psig. Flowed 6 Bbls. in 1st hour.
10-18-82	Well flowing. Clean & load out equipment.
10-19-82	Through 10-20-82 Production testing.
10-21-82	RU Archer-Reed. RIH & open sliding sleeves @ 8872'. Change well over to lease water. Install BOP. Pull packer loose. POH laying down TBG. All guns fired. MU Baker 7" scraper & RIH.
10-22-82	Finish RIH w/7", 26# positive scraper & bumper sub to 9408'. POH. MU Baker Model "C" BP & fullbore. RIH. Set BP @ 9390'. Pull up & set fullbore @ 8870'. RU swab equipment. Leave well open to tank.
10-23-82	Swab to 4500'. No fluid entry. Release fullbore. Ran down to retrieve B.P. Pull up & reset BP @ 9190'. Set fullbore @ 9050'. Swab from 3300' getting 1000' fluid rise each trip. All water. 74 Bbls.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Ojai County Ventura
Well Valex-Ferndale #214, Sec. 16, T 4N, R 21W S.B. B. & M.
A.P.I. No. 111-21180 Name Harry E. Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date April 7, 1983

Signature Harry E. Hull

411 S. Beckwith Rd. Santa Paula, CA. 93060 (Address) (805) 933-1321 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
11-14-82	1000 psig on well. First fluid: 1% cut (0.1% mud). Gravity 30.8° API @ 56° F. Well flowed 25 Bbls. from 7:45 A.M. - 10:15 A.M.. Swabbed well. Tagged fluid @ 1000'. Made 4 runs from 4200'. Well flowed 1 Bbl. Swabbed well (8 additional runs). Pulling from a maximum depth of 5500', 75 Bbls. recovered. 3:00P.M. 40% cut (0.5% Mud), 21.5° AP at 82°F.
11-15-82	1000 psig on TBG. Bled well down to 40 psig. Well started flowing.. The first sample had a cut of 1.5%, 31° API @ 56° F. Well flowed 20 Bbls. Started swabbing. Tagged fluid @ 2400'. Swabbed to 5000' @ 2:00 P.M. had 95% cut, 0.2% mud w/13.5° API @ approximately 85° F. Recovered 59 Bbls. Tore out swab equipment. Filled TBG. Released retrievamatic; Ran down to 8675'. Changed over to 72# KCl water. Pulled up to 8150' & set packer.
11-16-82	Released packer. BS gas w/ KCl water. Reset packer @ 8515' W/ 20,000# compression. RU Otis coiled TBG. unit & Halliburton. RIH w/ 1" to 8650'. Change over system to N_2. Recovered 75 Bbls. fluid. S.I. 2 7/8" TBG. N_2 pump-in 500 SCF/min @ 38 psig (0.4BPM @ 2300 psig wellhead pressure). Refill CSG w/25 Bbls. Pumped 1500 gals MCA (15% HCl w/3% Morflo II surfactant, 0.4% HAI-75 corrosion inhibitor, 1.5% AB-5 Anti sludge, 10% Musol A mutual solvent) Down 1" as follows: Pump 300 Gals. Acid 40% foam quality, ¼ BPM @ 4400 psig. Shut down for leak. Pump 200 Gals. acid - 0.4 BPM @ 4400 psig, pumped 1000 Gals. acid (75 Gals) 10 Ft.) while raising 1" TBG. 8650' - 8525'. Alternated pumping straight acid & foamed acid (± 50% foam quality). As acid pumper lost prime when pumping foam (0.1 BPM @ 4500 psig.). Able to pump acid 0.4 BPM @ 4500 psig. CSG. pressure built to 1400 psig, then CSG. valve shut in. Probably communication. Well head pressure built slowly to 3600 psig. Purged 1" TBG. w/ 20 MSCF N_2 while lowering TBG. to 8650' & pulling back up to 8500'. Pumped 65 MCF N_2 down 2 7/8" & 1" @ 2,000 SCF/min. Final WHP @ 4200 psig. Total N_2 displacement 85 MCF. Rig for flowback to Baker tank. Opened well to tank @ 3:30 P.M. Blew down in 10 mins., Began making small heads of fluid. Lower 1" to 8650' & began backflowing w/N_2 @ 3:45 P.M.. POH w/ 1". Close well in @ 4:50 P.M.. Recovered 68 Bbls. fluid. Last sample from backflow 90% cut, PH 1.2. Used total of 153 MCF N_2. Tore out Otis & Halliburton.
11-17-82	850 psig. TBG/CSG. Bled TBG down. RIH w/ swab. Tag fluid @ 600'. Swab well down to 800'. Recovered 35 Bbls. KCl water. CSG. Pressure dropped to 650 psig. Communication between CSG. & TBG. Laid down swab equipment. Release retrievamatic. Lower same to 8660'. Backscuttled Btms up. Pull up & reset retrievamatic @ 8140'. Pressure test 7" to 1000 psig for 5 min. O.K. Rig to swab. Swab & lower

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Ojai County Ventura
Well Valex-Ferndale #214, Sec. 16, T 4N, R 21W S.B. B. & M.
A.P.I. No. 111-21180 Name Harry E. Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date April 7, , 19 83.

Signature Harry E. Hull

411 S. Beckwith Rd. Santa Paula, CA. 93060 (Address) (805) 933-1321 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
11-17-82 (cont.)	fluid level to 1900'. Recovered 21 Bbls. KCl water.
11-18-82	Found 100 psig on TBG. Repressured CSG. to 500 psig. Bled TBG. Tagged fluid @ 650'. Salinity 104,000 PPM PH 6.6. Swabbed & recovered 156 Bbls. trace of oil and gas. Average fluid level 2400'. Maximum swab depth 3800'. Last fluid 19,000 PPM & PH 6.5..
11-19-82	300 psig on TBG. Bled well. Flowed 1 Bbl. RIH w/swab. Tagged fluid @ 600'. Swabbed fluid to 3800' - pulling from 5000'. (199 Bbls recovered, w/ trace oil). Last 6 runs recovered black water. 99% cut. Last 4 runs had gas follow ups.
11-20-82	300 psig. on TBG. Bled well. RIH w/ swab. Tag fluid @ 600'. Swabbed to 3300' - Pulling from 4300'. Recovered 97 Bbls.
11-21-82	Swabbed well then shut well in & waited on orders.
11-22-82	400 psig. on TBG. Bled same down w/ no fluid returns. Open by-pass on Baker packer @ 8146'. Change over to lease water from KCl water. Unset packer, RIH. Stopped @ 8648'. Unable to go any deeper. POH. Lay down packer. RIH w/ BP-retrieving tool. BS & clean out. Fill 8652' to top of BP @ 8680'. Release BP pull up & hit tight spot @ 8648'. Unable to work BP thru tight spot @ 30,000# over TBG weight. RIH w/ BP, released same @ 8669'. POH w/ TBG.
11-23-82	POH w/ TBG & lay down BP retrieving head. RU Welex w/ full lubricator. RIH w/ 5.75" OD gauge ring & junk basket to 8639'. POH. MU & RIH w/ Baker K-1 cement. Retainer. Set retainer w/ top @ 8618! R/D Welex. RU Hydrotest. MU Baker retainer Stinger & test in hole to 5000 psig. Space TBG in retainer. Apply 500 psig to annulus. Established breakdown of 18 CFM @ 4000 psig (15 CF volume). Annulus pressure built to 1100 psig. Performed 2nd. breakdown w/ 500 psig on annulus. Pumped 50 CF lease water, 16 CFM @ 3000 psig. Annulus increased to 1750 psig. Attempted to pull stab-in free. Stab-in assembly stuck. Rotated TBG & pulled 24,000# over weight of TBG to free stab in assembly.
11-24-82	Stab into retainer. Squeezed 40 cf Class "G" cement @ 3 cf/min @ 2200 psig. CSG increased to 2200 psig. Direct communication. Overdisplaced by 7 cf. Pull out of retainer. BS TBG. clean (20 cf cement in returns). WOC. Second Squeeze: Breakdown: 15 cf/min. @ 4000 psig. Held 2000 psig on CSG. Squeezed 40 cf of Class "G"

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleumo Corporation Field Ojai County Ventura
Well Valex-Ferndale #214, Sec. 16, T 4N, R 21W S.B. B. & M.
A.P.I. No. 111-21180 Name Harry E. Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date April 7, 19 83.

Signature Harry E. Hull

411 S. Beckwith Rd. Santa Paula, CA. 93060 (Address) (805) 933-1321 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
11-24-82 (cont.)	cement + 0.75% FLA @ 1 cf/min @ 4500 psig. No communication. Pulled out of retainer. Backscuttled out 16 cf cement. Estimate 17 cf of cement out perfs.
11-25-82	Shut down for Thanksgiving.
11-26-82	POH. Lay down stinger. RU Welex. Set Baker retrievable BP @ 8348'. Perf'd 4 JHPF @ 8284'. Tore out Welex. RIH w/ STC on 2 7/8" TBG. RU Dowell. Spot 12 sacks sand on BP. Pull up & wait on sand to settle. Lower TBG. & Tag sand @ 8291'. Pull up to 8288'. B5 TBG. clean. POH. MU fullbore & RIH to 7400'.
11-27-82	Set Baker Fullbore @ 8072'. RU Dowell. Breakdown 1.5 BPM @ 4000 psig. Opened unloader. Pumped 30 cf fresh water, 40 cf RFC cement, 30 cf fresh water, 212 cf lease water. Closed unloader. TBG. pressure went to 5000 psig. immediately. Released fullbore. BS out cement. POH. MU 6 1/8" Bit. RIH, tagged cement @ 8080'. RU power swivel. Cleaned out cement to 8140'. Continued in hole & BS sand to BP @ 8345'. POH. MU Baker Retrieving head.
11-28-82	RIH w/ Baker retrieving tool. Backscuttle over & retrieve BP @ 8345'. POH. Lay down tools. MU 2 7/8" STC & TL PS. RIH. Tag cement @ 8616'. Pull up & land TBG. w/ tail @ 8229'. Remove BOPE. Install production tree. RU swab equipment.
11-29-82	Found 0 psig on well. Fluid level @ surface. Swabbed well down to 3400'. Last pull from 4400'. Recovered 152 Bbls. water (same gas toward the end of swabbing). Tore out swab equipment. Removed flow tree. Built production tree. PU & ran 2 ½" x 1 3/4" x 20 x 24 pump on 190 - 7/8" & 80 - 1" rods. Spaced well. Filled TBG & tested to 300 psig.
11-30-82	Respaced well. Pressure test to 500 psig.
12-10-82	MIRU prod. rig. Bled well down. POH w/ rods & pump. Made feeler run w/ sandline, tag fill @ 8616'. MU exchg pump. RIH w/ pump & rods. Change orders. POH w/ rods & pump. Remove prod. tree. Install BOPE.
12-11-82	Bled well off. Unland & lower TBG. Tag fill @ 8608'. Change system over to lease crude. Clean out fill 8608' - 8616'. BS clean. POH. Rig Welex. RIH. Shot 8 ½" holes 8611' - 8613'. RIH. Set Baker 7" 26# K-1 cement retainer @ 8600'. Tear out Welex. Made up Baker Stab-in assembly. RIH to top of perfs @ 8300'.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Ojai County Ventura
Well Valex-Ferndale #214, Sec. 16, T 4N, R 21W, S.B. B. & M.
A.P.I. No. 111-21180 Name Harry E. Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date April 7, 19 83

Signature Harry E. Hull

411 S. Beckwith Rd. Santa Paula, CA. 93060 (Address) (805) 933-1321 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
12-12-82	Lower TBG. Space out to cement retainer @ 8600'. RU Dowell. Perform cement squeeze. Breakdown - Pumped 8.5 Bbls. Lease water @ 2.5 BPM, TBG 3500 psig, annulus 3500 psig. Direct communication. Pumped 3 Bbls fresh water, 4.5 Blbs. cement w/ 0.75% Flac, 3 Bbls. fresh water, then 46 Bbls. lease water @ 2 BPM, TBG. 3500 psig. CSG 3200 psig. Squeeze failed. Overdisplace perfs. Unstab from retainer. Backscuttle well around BS out 4-5 Bbls. cement. Pull TBG. above perfs. WO C 8 hours. RIH & Stab into retainer, RU Dowell. Perform cement squeeze. Brekadown - Pumped 9 Bbls. lease water @ 3 BPM, 3250 psig. TBG, 3300 psig. annulus. Direct communication. Pumped 3 Bbls. Fresh water, then 47 Bbls. Lease water @ 1 BPM, 3000 psig TBG, 3300 psig annulus. Unstab from retainer. Backscuttle out 3 Bbls. of cement. Circulate well around thoroughly. Pull above perfs.
12-13-82	Lower TBG, Tag T.O.C. @ 8596', four feet above top of retainer, backscuttle, unable to get any deeper. POH. Lay down stinger sub. MU 6 1/8" BIT, RIH to 5500'. Change of orders. POH. Break off BIT. MU Baker fullbore. RIH. Set fullbore @ 8515'. Rig swab equipment.
12-14-82	Swabbed fluid to 7500'. Recovered 41 Bbls. oil. Wait one hour. RIH w/ swab. Tag fluid @ 7500' - no fluid entry. POH. Tore out swab equipment RU Dowell. Fill TBG. TBG INJECTION TEST: 2 BPM @ 5800 psig. CSG INJECTION TEST: 3 ½ BPM @ 3700 psig. Tore out Dowell. Release fullbore & POH. RIH w/ TBG to 3000'.
12-15-82	POH. RU Welex. Perf'd 4 JHPF @ 8528', 8536', 8555', 8568', 8575'. Tore out Welex. Install 3" BOPE. MU Baker 7" retrievamatic, on 3½" TBG. Set packer @ 8518'.
12-16-82	Frac'd 8528' - 8588' interval. Prepad 75 Bbls, ISIP 4200 psig., Frac gradient 0.87 psi/ft, Max press. 9000 psig, Avg. press. 8700 psig, Avg. rate 15 BPM, Max. rate 18 BPM, SIP 7500 psig, 15 min SIP 5800 psig. Used 22,600# 100 mesh & 20,000# 20/40. Used 791 Bbls. oil. Max. sand concentration of 2#/gal.
12-17-82	1350 psig on TBG. 100 psig on CSG. Bled well down. Flowed back 28 Bbls. Break off frac head. Pull up & set packer @ 8100'. Install frac head. Pressure test annulus to 2000 psig. O.K. Pump 15 Bbls. Lease crude down TBG - TBG clear.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Ojai County Ventura
Well Valex-Ferndale #214, Sec. 16, T 4N, R 21W, S.B.B. & M.
A.P.I. No. 111-21180 Name Harry E. Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date April 7, 19 83.

Signature Harry E. Hull

411 S. Beckwith Rd., Santa Paula, CA. 93060 (Address) (805) 933-1321 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
12-18-82	Sand Frac. 8300' - 8503' interval. ISIP 4600 psig, Frac. Gradient 0.91 psi/ft, Avg. Press. 8700 psig, Max. Press. 9100 psig, Avg. rate 17.5 BPM. Total oil used 1419 Bbls. Total Sand used 35,000# 100 mesh, 100,000# 20/40 sand. Shut in overnight.
12-19-82	1000 psig on TBG. Opened on 12/64" bean. Flowed 20 Bbls. 80 psig. on TBG. Changed bean to 10/64". 300 psig. on TBG. Bean plugged. Changed bean to 14/64". Recovered 96 Bbls. as of 1:00 P.M. By 8:00 A.M. (next day) recovered 165 Bbls. cutting 0 - 2%.
12-20-82 to 1- 1-83	Production Testing.
1-2-83	MIRU prod. rig. Release Baker retrievamatic packer. Backscuttle & kill well w/ lease oil. POH, laying down 3½" frac string on trailer. MU STC, 2½" API TL shoe picking up 2 7/8" TBG off the ground. RIH.
1-3-93	PU 2 7/8" TBG in doubles off ground. Tag fill @ 8349'. BS frac sand to 8596'. Circulate hole clean. Pull up & land TBG. @ 8204'. Strip off BOPE. Install production tree. Rig for rods. Pick up & hung 1" rods in derrick.

UNIVERSAL DIRECTIONAL DRILLING
COMPLETION REPORT

DIVISION OF OIL AND GAS
RECEIVED
APR 26 1983
SANTA PAULA, CALIFORNIA

LOCATION Silverthread
WELL Valex-Ferndale # 214
SURFACE LOCATION 1228' S 4365' E
K. B. ELEVATION 1463'
COMPANY ARCO PETROLEUM CORPORATION
DATE 10-6-82

NO	MEASURED DEPTH	DRIFT ANGLE	VERTICAL DEPTH	DRIFT DIRECTION	RECTANGULAR COORDINATES NORTH	SOUTH	EAST	WEST	REMARKS
1	171	0 30	170 99	S 36 W		1 21		88	
2	322	1 15	321 96	N 26 W	1 75			2 32	
3	475	1 30	474 91	N 44 W	4 63			5 10	
4	597	1 45	596 85	N 64 W	6 27			8 45	
5	725	2 30	724 73	N 44 W	10 28			12 33	
6	836	2 30	835 62	N 55 W	13 06			16 30	Mud motor used fro
7	889	2 45	888 56	N 18 W	15 48			17 08	836' to 1220'.
8	950	4 30	949 37	N 12 W	20 16			18 08	
9	1011	6 30	1009 98	N 07 W	27 02			18 92	
10	1072	8 30	1070 31	N 03 W	36 02			19 39	
11	1134	11 00	1131 17	N 03 W	47 84			20 01	
12	1165	12 15	1161 47	N 03 W	54 40			20 35	
13	1311	15 45	1301 98	N 07 W	93 74			20 35	
14	1406	18 00	1392 34	N 07 W	122 98			28 76	
15	1531	21 00	1509 03	N 07 W	167 34			34 22	
16	1654	24 15	1621 17	N 07 W	217 48			40 37	
17	1716	26 15	1676 78	N 06 W	244 75			43 24	
18	1810	26 15	1761 09	N 06 W	286 10			47 59	
19	1965	26 30	1899 80	N 06 W	354 88			54 81	
20	2146	26 15	2062 14	N 06 W	434 50			63 18	
21	2331	26 00	2228 41	N 04 W	515 40			68 84	
22	2483	26 30	2364 44	N 06 W	582 85			75 92	
23	2669	26 30	2530 90	N 06 W	665 39			84 60	
24	2855	26 30	2697 36	N 04 W	748 18			90 39	
25	3041	27 15	2862 71	N 07 W	832 71			100 77	
26	3239	27 30	3038 34	N 06 W	923 63			110 32	
27	3426	28 30	3202 68	N 04 W	1012 64			116 55	
28	3613	29 30	3365 43	N 05 W	1104 38			124 58	
29	3800	30 15	3526 97	N 05 W	1198 22			132 78	
30	3958	31 00	3662 40	N 08 W	1278 81			144 11	
31	4044	30 15	3736 69	N 06 W	1321 89			148 63	
32	4165	30 30	3840 95	N 10 W	1382 37			159 30	
33	4228	30 15	3895 37	N 07 W	1413 87			163 17	
34	4322	29 45	3976 98	N 07 W	1460 17			168 85	
35	4435	28 30	4076 29	N 08 W	1513 56			176 36	
36	4556	26 00	4185 04	N 05 W	1566 40			180 98	
37	4712	23 00	4328 64	N 07 W	1626 90			188 41	
38	4833	20 00	4442 34	N 07 W	1667 98			193 45	
39	4990	18 30	4591 23	N 05 W	1717 61			197 79	
40	5115	16 30	4711 08	N 04 W	1753 02			200 27	
41	5175	14 30	4769 17	N 03 W	1768 02			201 06	
42	5205	13 00	4798 40	N 03 W	1774 76			201 41	
43	5235	11 45	4827 77	N 03 W	1780 86			201 73	
44	5266	10 30	4858 25	N 03 W	1786 50			202 03	Mud motor used fr
45	5298	9 30	4889 82	N 01 W	1791 78			202 12	5115' to 5464'.
46	5330	8 30	4921 46	N 01 E	1796 51			202 04	
47	5362	7 30	4953 19	N 03 E	1800 68			201 82	
48	5393	6 45	4983 98	N 03 E	1804 32			201 63	

DIVISION OF OIL AND GAS
APR 26 1983
SANTA PAULA, CALIFORNIA

CLOSURE _____ METHOD OF CALCULATION Tangential

UNIVERSAL
DIRECTIONAL DRILLING
COMPLETION REPORT

LOCATION Silverthread

WELL Valex-Ferndale # 214

SURFACE LOCATION 1228' S 4365' E

K. B. ELEVATION 1463'

COMPANY ARGO PETROLEUM CORPORATION

DATE 10-6-82

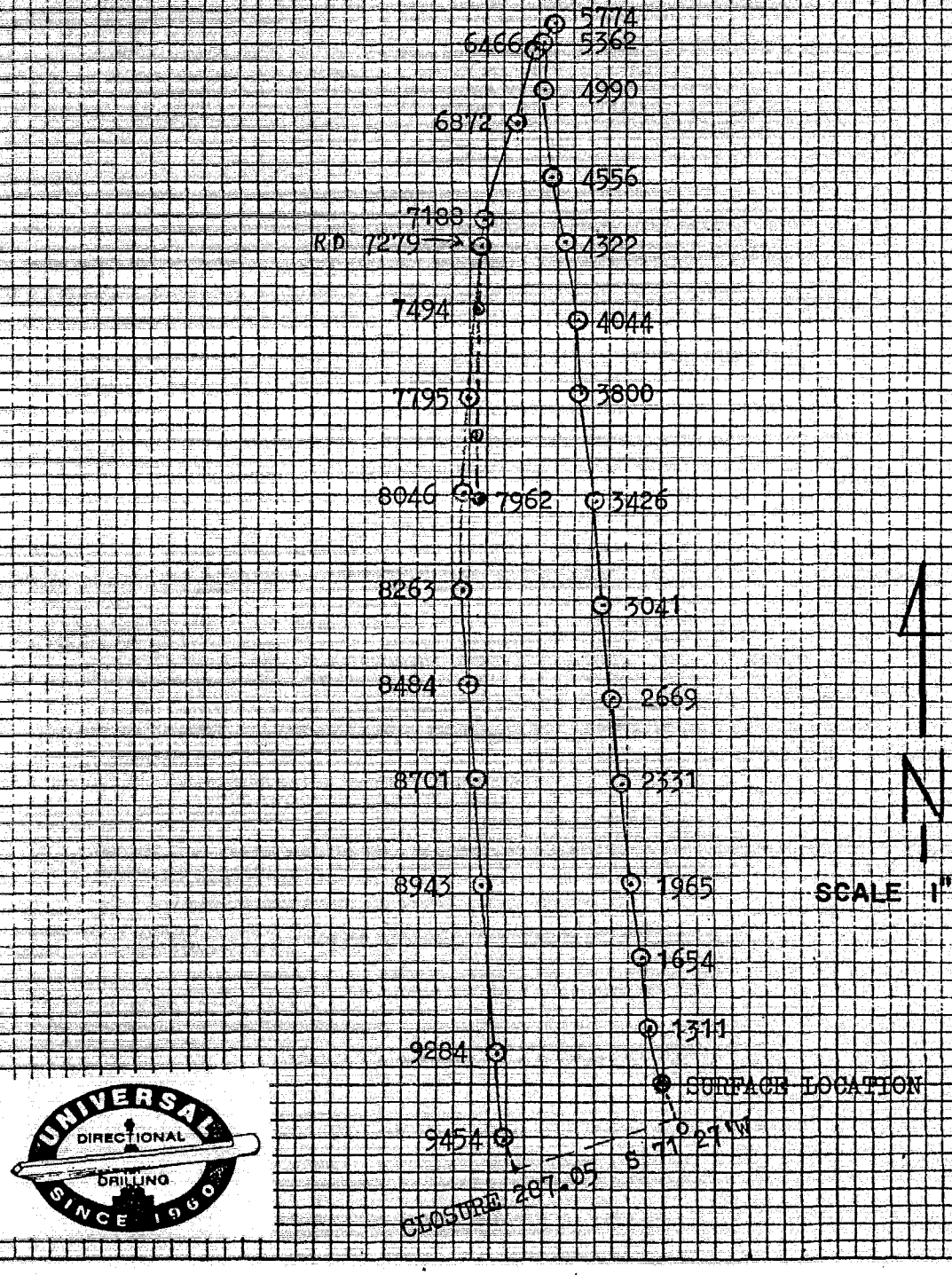
NO.	MEASURED DEPTH	DRIFT ANGLE	VERTICAL DEPTH	DRIFT DIRECTION	RECTANGULAR COORDINATES NORTH	SOUTH	EAST	WEST	REMARKS
49	5497	6 30	5087 31	N 02 E	1816 09			201 22	
50	5648	5 15	5237 67	N 05 E	1829 85			200 01	
51	5774	3 45	5363 40	N 15 E	1837 81			197 88	
52	5896	2 30	5485 29	N 04 E	1843 12			197 51	
53	5982	3 15	5571 15	N 07 E	1847 96			196 91	Mud motor used fro
54	6034	1 00	5623 14	N 07 E	1848 86			196 80	5982' to 6262'.
55	6085	1 00	5674 13	S 68 W	1848 53			197 63	
56	6147	3 00	5736 05	S 27 W	1845 64			199 10	
57	6209	5 45	5797 74	S 20 W	1839 80			201 22	
58	6343	8 30	5930 26	S 21 W	1821 31			208 32	
59	6466	13 00	6050 11	S 16 W	1794 71			215 95	
60	6624	19 15	6199 37	S 15 W	1744 39			229 36	
61	6750	23 15	6315 14	S 14 W	1696 13			241 39	
62	6872	25 45	6425 02	S 16 W	1645 18			256 00	
63	6961	26 15	6504 84	S 17 W	1607 54			267 51	
64	7086	29 30	6613 64	S 17 W	1548 68			285 51	
65	7188	31 30	6700 61	S 17 W	1497 71			301 09	Mud motor used fro
66	7248	31 30	6751 76	S 11 W	1466 94			307 07	7163' to 7319'.
67	7279	30 30	6778 47	S 09 W	1451 40			309 53	
68	7337	29 45	6828 83	S 05 W	1422 90			313 54	
69	7367	29 45	6854 87	S 05 W	1408 07			314 83	
70	7429	28 15	6909 49	S 05 W	1378 83			317 39	
71	7524	27 45	6993 56	S 05 W	1334 77			321 25	
72	7671	31 15	7119 23	S 04 W	1258 69			326 56	
73	7795	35 15	7220 49	S 04 W	1187 30			331 55	
74	7889	38 45	7293 80	S 03 W	1128 55			334 63	
75	8046	43 45	7407 21	S 03 W	1020 13			340 32	
76	8186	48 45	7499 52	S 01 W	914 89			342 15	
77	8263	49 45	7549 27	S 02 E	856 15			340 10	
78	8355	50 00	7608 41	S 03 E	785 77			336 41	
79	8484	47 45	7695 14	S 03 E	690 42			331 41	
80	8575	48 00	7756 03	S 04 E	622 95			326 69	
81	8701	46 45	7842 37	S 04 E	531 40			320 29	
82	8791	48 00	7902 59	S 03 E	464 61			316 79	
83	8943	52 30	7995 12	S 04 E	344 32			308 46	
84	9068	55 30	8065 84	S 04 E	241 45			301 28	
85	9284	59 30	8175 47	S 05 E	56 15			285 06	
86	9454	60 30	8259 18	S 05 E		91 25		272 16	

CLOSURE 287.05 S 71° 27' W

METHOD OF CALCULATION Tangential

ARGO PETROLEUM CORPORATION

Valex-Ferndale # 214



UNIVERSAL DIRECTIONAL DRILLING SINCE 1960

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

No. T 282-195

DIVISION OF OIL AND GAS

Report on Operations

Mr. Harry Hull, Agent
Argo Petroleum Corp.
Box CI
Ventura, CA 93002

Santa Paula, Calif.
Sept. 21, 1982

Your operations at well "Valex-Ferndale" 214, API No. 111-21180
Sec. 16, T. 4N, R. 21W, SB B.& M. Ojai Field, in Ventura County,
were witnessed on 9/22/82. 0030 to 0230. R. Mauser representative of
the supervisor, was present from _____ to _____. There were also present _____

Present condition of well: 13 3/8" cem 725'. T.D. 725'. (standing cemented)

The operations were performed for the purpose of testing the blowout prevention equipment and installation.

DECISION:

THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

b

Spud 10 1982
MD - 5" Diamond
Conditions
Top Vaq Zone 7450'
Bottom 7900
2 Fish in Hole Reinforced,
Stabilizers, Drill pipe Undisturbed
etc 7460 & 1st Fish
7850 & Jnk Fish which
7603 is Screwed into
Fish Fish
TD 7962
Dip of Beds
7503 30°
7900 48°
Proceed Slowly in open Notice.
In Clean out Trips for Fish
with 1" pipe to 7545,
Start off & Recover Fish to TRNT
Depth of Trip 7545' to 7460'
Redrill

H. C. MEFFERD
State Oil and Gas Supervisor

By _____
Murray W. Brown, Deputy Supervisor

OG109(12-80-15M)

Richardson Drlg.

DIVISION OF OIL AND GAS
BLOWOUT PREVENTION EQUIPMENT Test

T 195

Operator Argo Petroleum Corp. Well "Valex-Ferndale" 2-14 Field Ojai County Ventura

VISITS:	Date	Engineer	Time	Operator's Rep.	Title
1st	8-22-82	R. Hauser	0030 to 0230	L. Applegate	D.F.
2nd			to		

Casing record of well: 13 3/8" cem. 725' T.D. 725' (Standing Cemented)

OPERATION: ~~Testing~~ (~~inspecting~~) the blowout prevention equipment and installation.
DECISION: The blowout prevention equipment and installation are approved.

Proposed Well Opns: Borehole MPSP: psi
Hole size: 17 1/2" fr. Surf ' to Shoe ', 12 1/4" to ' & " to '

REQUIRED BOPE CLASS: III 14B

CASING RECORD (BOPE ANCHOR STRING ONLY)					Cement Details	Top of Cement	
Size	Weight(s)	Grade (s)	Shoe at	CP at		Casing	Annulus
13 3/8	72 #	H-40	725'		900 cf "G" 2% gel 2% CaCl & followed by 125 cf "G"		Surf

BOP STACK							a	b	a/b	TEST DATA			
API Symb.	Ram Sz.	Mfr.	Model or Type	Size In.	Press. Rtg.	Date Last Overhaul	Gal. to Close	Rec.Time Min.	Calc.GPM Output	psi Drop to Close	Secs.to Close	Test Date	Test Press
		H	Bag		3M							8-22	
		Cam	PRams		5M							"	
		"	BRams		"					Company		8-22	1500

ACTUATING SYSTEM

Accum.Unit(s) Wkg.Press. 3000 psi
Total Rated Pump Output gpm
Distance From Well Bore ft.

	Mfr.	Accum. Cap.	Precharge
1	Koomey	80 gal.	1500 psi
2		gal.	Pneu psi

CONTROL STATIONS	Elec.	Hyd.
✓ Manif. at accum.unit		✓
✓ Remote at Drlr's stn.	✓	
Other:		

EMERG. BACKUP SYST.	Press.	Wkg.Fl.
✓ N2 Cyl No: 6 Tpe:	1 —	gal
Other:	2 —	gal
	3 —	gal
	4 —	gal
	5 —	gal
	6 —	gal

AUXILIARY EQUIPMENT

	No.	Sz. (in)	Rated Press.	Connections Weld	Flan.	Thrd.
✓ Fill-Up Line	X	X	X	X	X	X
✓ Kill Line	X					
✓ Control Valve(s)	2	X				
✓ Check Valve(s)		X				
✓ Auxil. Pump Connec.	X	X				
✓ Choke Line	X					
✓ Control Valve(s)	2	X				
✓ Pressure Gauge	X	X	X			X
✓ Adjustable Choke(s)						
✓ Bleed Line	X	X	X			X
✓ Upper Kelly Cock	X	X	X	X	X	X
✓ Lower Kelly Cock	X	X	X	X	X	X
✓ Standpipe Valve	X	X	X	X	X	X
✓ Standpipe Pressure Ga.	X	X	X	X	X	X
Pipe Safety Valve	X	X	X	X	X	X
✓ Internal Preventer	X	X	X	X	X	X

HOLE FLUID MONITORING EQUIPMENT	Alarm Aud.	Alarm Vis.	Class
Calibrated Mud Pit			A
✓ Pit Level Indicator	✓	✓	B
✓ Pump Stroke Counter		✓	B
✓ Pit Level Recorder		✓	C
✓ Flow Sensor	✓	✓	C
Mud Totalizer			C
Calibrated Trip Tank			C
Other:			

REMARKS: (A) Numerous leaks in accumulator hydraulic lines (A)

Hole Fluid Type	Weight	Storage-Pits

FORM 157

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT ON PROPOSED CHANGE OF WELL DESIGNATION

Santa Paula, California

July 20, 1982

Mr. Harry Hull, Agent
Argo Petroleum Corporation
Box CI
Ventura, CA 93002

DEAR SIR:

Your request dated July 14, 1982, relative to change in designation of well(s) in Sec. 16, T. 4N, R. 21W, SB B. & M., Ojai field, Ventura County, District No. 2, has been received; and in accordance with Section 3203, Public Resources Code, reading in part as follows:

> "* * * The number or designation by which any well heretofore drilled has been known, and the number or designation specified for any well in a notice filed as required by Section 3203, shall not be changed without first obtaining a written consent of the Supervisor."

the proposed change in designation is hereby authorized as follows:

From:	To:
"Ferndale" 12 (111-21180)	"Valex-Ferndale" 214 (111-21180)

b

M. G. MEFFERD
~~JOHN F. MATTHEWS, JR.~~
State Oil and Gas Supervisor

By Murray W. Dosch
Murray W. Dosch, *Deputy Supervisor*

59810-708 1-72 5M ⓘ OSP

FORM OG111(10/81/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 282-160

REPORT ON PROPOSED OPERATIONS

520 (field code)
12= (area code)
10 (new pool code)
-- (old pool code)

Mr. Harry Hull, Agent
Argo Petroleum Corporation
Box CI
Ventura, CA 93002

Santa Paula, California
May 7, 1982

Your proposal to drill well "Ferndale" 12,
A.P.I. No. 111-21180, Section 16, T. 4N, R. 21W, SB B. & M.,
Ojai field, Silverthread area, Miocene pool,
Ventura County, dated ---, received 5/3/82 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Hole fluid of sufficient quality and quantity shall be maintained in the hole to control any subsurface condition, and a reserve supply shall be on hand for emergencies.
2. Unlined sumps, if they contain harmful waters, shall not be located over fresh water bearing aquifers.
3. Any sump used during these operations shall be thoroughly cleaned and filled with earth as soon as operations are completed.
4. Blowout prevention equipment of at least DOG Class III 1M B shall be installed on the 13 3/8" and Class III 3M B shall be installed on the 9 5/8" and 7" casings and maintained in operating condition at all times.
5. This office shall be consulted before placing any plugs or sidetracking any hole.
6. ~~The spacing provisions of Section 3606 shall be followed.~~
7. ~~A subsurface directional survey shall be made.~~
8. The division will monitor the monthly production of this well for a period of six months and if anomalous water production is indicated, remedical action will be ordered.
9. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.
10. THIS DIVISION SHALL BE NOTIFIED TO WITNESS A PRESSURE TEST OF THE BLOWOUT PREVENTION EQUIPMENT BEFORE DRILLING BELOW 700'.

10-27-82
Steve Hoffman/RLH. Lower zone making all water. will abd with bridge plug.

Blanket Bond
RLH:B

M. G. MEFFERD, State Oil and Gas Supervisor

By Robert L. Hauser
for Murray W. Dosch, Deputy Supervisor R.L.H.

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

Form OG105 (8/80)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS
Notice of Intention to Drill New Well

DIVISION OF OIL AND GAS
RECEIVED
DEC 3 1982
SANTA PAULA, CALIFORNIA

3606

D

BFW
4000'

C.E.Q.A. INFORMATION			
EXEMPT ☐	NEG. DEC. ☐	E.I.R. XX	DOCUMENT NOT REQUIRED BY LOCAL JURISDICTION ☐
CLASS ____	S.C.H. NO. ____	S.C.H. NO. CUP 3344	
See Reverse Side			

FOR DIVISION USE ONLY					
MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121
7.03	5-6-84	✓	✓	✓	✓

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to commence drilling well Ferndale #12, API No. 111-21180 (Assigned by Division),

Sec. 16, T. 4N, R. 21W, S.B. B. & M., Silverthread Area Ojai Field, Ventura County.

Legal description of mineral-right lease, consisting of _____ acres, is as follows: _____ (Attach map or plat to scale)

Previously submitted

Do mineral and surface leases coincide? Yes X No _____. If answer is no, attach legal description of both surface and mineral leases, and map or plat to scale.

Location of well 1228 feet Southerly (Direction) along section ~~XXXXXXXX~~ property (Cross out one) line and 4365 feet Easterly (Direction)

at right angles to said line from the NW corner of section ~~XXXXXXXX~~ property (Cross out one) 16 or

Is this a critical well according to the definition on the reverse side of this form? Yes ☐ No ☐

If well is to be directionally drilled, show proposed coordinates (from surface location) at total depth: ~~1100~~ 390 feet W (Direction) and ~~20~~ 65 feet S (Direction)

Elevation of ground above sea level 1443 feet.

All depth measurements taken from top of 1461 K.B. (Derrick Floor, Rotary Table, or Kelly Bushing) that is 18 feet above ground.

PROPOSED CASING PROGRAM

SIZE OF CASING INCHES API	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS	CALCULATED FILL BEHIND CASING (Linear Feet)
13 3/8"	48#	H-40	Surf.	700'	700'	700 (to surf)
9 5/8"	36#	K-55	Surf.	6000'	6000'	2500'
7"/5" Slotted	23.26/15	N-80/K-55	Surf/8600	8800/9500	8800/NA	3000'/NA

(A complete drilling program is preferred and may be submitted in lieu of the above program.)

Intended zone(s) of completion: 8500 3600 psi. Upper Miocene 8900 3800 psi. (Name, depth, and expected pressure) Estimated total depth 9500'

It is understood that if changes in this plan become necessary we are to notify you immediately.

Name of Operator	Type of Organization (Corporation, Partnership, Individual, etc.)	
Argo Petroleum Corporation	Corporation	
Address	City	Zip Code
940 E. Santa Clara	Ventura	93001
Telephone Number	Name of Person Filing Notice	Signature / Date
(805) 653-5111	Harry Hull	Harry Hull

This notice and indemnity or cash bond shall be filed, and approval given, before drilling begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

PROPERTY/WELL TRANSFER OR ACQUISTION

Seneca Resources Corporation (S2630)

to

Vintage Production California LLC (V1370)

Effective April 25, 2008

OPERATOR Arco
WELL NO. Valley-Turnbladt 215
MAP 203

INTENTION	Drill	Rework				
NOTICE DATED	9-21-82	3/17/00				
P-REPORT NUMBER	282-327	200-75				
CHECKED BY/DATE						
MAP LETTER DATED	9-18-82					
SYMBOL	◎	N/C				

	REC'D	NEED	REC'D	NEED	REC'd	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED
NOTICE	9-15-82		3/17/00									
HISTORY	5-20-83		5-13-02									
SUMMARY	5-20-83											
E-LOG	5-20-83											
MUD LOG	5-20-83											
DIPMETER (arrow plot)	5-20-83											
DIRECTIONAL	5-20-83											
CORE/SWS	5-24-83											
CBL	5-20-83											
DIP-cluster Listing	5-20-83											
FDC-CNL-GR	5-20-83											
EPT	5-20-83											
RECORDS COMPLETE	7-7-83	MF	5-13-02	SM								

ENGINEERING CHECK

T-REPORTS	✓	✓				
OPERATOR'S NAME	✓	✓				
WELL NO.	✓	✓				
LOC & ELEV	✓	✓				
SIGNATURE	✓	✓				
SURFACE INSP.						
FINAL LETTER OK						

FINAL LETTER MAILED _____

REMARKS: _____ RELEASED BOND _____

Release for Confidential per MS

Seneca Resources Corp. – Ferndale 215 History

Ferndale 215 - Fish - 3-28-2000
Day 1. MIRU. Bled well, pulled 21 1" rods, ND tree, unlanded tbg, pull @ 69,000#. Pulled tbg up to 104,000#, landed tbg on donut. Pulled tbg up to 71,000#. Rotated tbg to right, all turns came back. Landed tbg on donut, MU 2 1/2" mouse trap overshot. Ran 35 1" rods, unable to get tool over fish. Pulled rods. SDFN.

Ferndale 215 - Fish - 3-29-2000
Day 2. Bled well, had mouse trap ID cut down to 1 7/8" MU & ran tool, unable to get over fish, had mouse trap ID cut to 1 15/16", MU & ran tool, locked onto fish. Pulled rods to 26,000, backed off & pulled rods, found rods backed off at top of mouse trap. MU 2 1/2" X 1 1/2" over shot, ran rods, latched onto fish, found rods backed off. Pulled rods, LD overshot & mouse trap. Found rods backed off @ 7/8" & 3/4" x-over box, MU 2 1/2" X 1 1/2" overshot. Ran rods, latch onto fish, found rods backed off. Pulled rods, LD overshot, pulled 14 3/4"rods. SDFN.

Ferndale 215 - Fish - 3-30-2000
Day 3. Bled well, cut 2 1/2" over shot out of jt 2 7/8" tbg. MU overshot w/ 1 3/8" slips. Ran rods, changed out worn 3/4" boxes. Latch onto fish, unable to work pump free. Backed off, found rods backed off, 8 rods above overshot. MU & ran 2 1/2 X 1 5/8 over shot, latch onto fish, found rods backed off. Pull & LD both rods & overshot. Unland tbg, rotate tbg to right, unable to open "R" drain, landed tbg. MU 2 1/2" x 1 3/8" slip type overshot. Ran rods, changed out worn 3/4" boxes, latch onto fish, backed off rods. POOH. SDFN.

Ferndale 215 - Fish - 3-31-2000
Day 4. Bled well, found rods backed off, 30 3/4" rods above overshot. Unland tbg, removed donut, worked tbg down hole, tbg freed up. Rotated tbg to right, "R" drain opened, landed tbg on donut, install BOPE, pulling tbg. SDFN.

Ferndale 215 - Fish - 4-03-2000
Day 5. Bled well, cont pulling tbg to rods, stripped out rods & tbg, found 25' of sand over pump, cleaned out gas anchor. MU 2 dbls 3/4" rods on sandline, tag down @ 8310'. MU new 2 1/2" solid T/L pump shoe, test tbg in hole @ 5000 psi, landed tbg on donut. SDFN.

Ferndale 215 - Fish - 4-05-2000
Day 6. Bled tbg, ND BOPE, NU tree, stroke tested exchange pump, spidering rods in hole, changing out worn rods, replaced 13 3/4" , 3 7/8" & added 9 1" rods, and changed out 121 3/4", 44 7/8", & 20 1" boxes. Spaced out & seat pump. SDFN.

RECEIVED
MAY 13 2002
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES
VENTURA, CALIFORNIA

SENECA RESOURCES CORP.
"VALEX - FERNDALE" 215
111 - 21206
16 - 4 - 21
OJAI FIELD

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

No. P200-75

PERMIT TO CONDUCT WELL OPERATIONS

520 (field code)
12 (area code)
10 (new pool code)
10 (old pool code)

Barry McMahan
Seneca Resources Corporation
2131 Mars Court
Bakersfield, California 93308

Ventura, California
March 21, 2000

Your proposal to rework well "Ferndale" 215,
A.P.I. No. 111-21206 Sec. 16, T. 4N, R. 21W, SB B.&M.,
Ojai field, Silverthread area, Miocene pool
Ventura County, dated 3/17/00 received 3/17/00 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOGGR Class II 2M requiements is installed and maintained in operating condition at all times.
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.

Super Blanket Bond
SAF:sf

Engineer Steven A. Fields

Phone (805) 654-4761

WILLIAM F. GUERARD, JR., State Oil and Gas Supervisor

By _____
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

OG111 (6/96/GSR/5M) Printed on recycled paper.

RESOURCE AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

This notice and indemnity or cash bond shall be filed, and approval given, befor rework is begins. If operations have not commenced within one year of reciept of this notice, this notice will be considered cancelled.

RECEIVED
MAR 17 2000
GEOTHERMAL RESOURCES
VENTURA, CALIFORNIA

FOR DIVISION USE ONLY		
BOND	FORMS	
	OGD114	OGD121
SBB	✓	✓

DIVISION OF OIL AND GAS

In section 3203, Division 3, compliance with Public Resources Code, notice is hereby given that it is our intention to rework well Ferndale 215 (Well designation) API No. 111-21206

Sec. 16 , T 4N , R 21W SBB &M., Ojai Field, Ventura County

The present condition of the well is as follows:

1. Total depth: 9312' ETD: 8358'
2. Complete casing record, including plugs and perforations (present hole)

13-3/8", surface, shoe @ 723', 48#, ST&C
9 5/8", surface, shoe @ 6293', 40#, LT&C
7", surface, shoe @ 9086', 26#, LT&C
Retrievable Bridge Plug @ 8358 Cmt Retainer @ 8535'

4 (0.38") JHPF 7706'-7918
4 (0.38") JHPF 8306'-8345', 8427'-8459', 8471'-8531'
Cp'd @ 8359'-8361', 8408'-8410', & attempted @ 8543'-8545'.

3. Present producing zone name Valex - Argo ; Zone in which well is to be recompleted N/A
4. Present zone pressure 1100 est. ; New zone pressure _____
5. Last produced 6/1/1998 (Date) 8 (Oil, B/D) 3 (Water, B/D) 25 (Gas, Mcf/D)

(or)

5. Last injected _____ (Date) _____ (Water, B/D) _____ (Gas, Mcf/D) ☐ ☐ _____ (Surface pressure, psig)
6. Is this a critical well according to the definition on the reverse side of this form? NO

The proposed work is as follows:

See the attached procedure.

Note: If well is to be redrilled, show proposed new bottom-hole cordinates and true vertical depth.

It is understood that if changes in this plan become necessary, we are to notify you immediatly.

Address **250 So. Hallock Dr., P.O. Box 630** (Street)

Santa Paula, CA 93061 (City) (State) (Zip)

Telephone Number **805-933-2217**

Seneca Resources Corporation (Name of Operator)

By **Fariba M. Neese, Supervising Engineer**

F. M. Neese (Name-signature) 3/17/2000 (Date)

Type of Organization **Corporation** (Corporation, Partnership, Individual, etc)

OG107 (8/87DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF PROPERTY AND WELL TRANSFER

Field or county	District
Ojai	2
Former owner	**Date**
Argo Petroleum Corp.	Sept. 10, 1987

Name and location of well(s)

Sec. 16, T. 4N., R. 21W., SBB&M

"Barker-Ferndale" 1	(111-20423)	"Valex-Ferndale" 211	(111-21178)
"Barker-Ferndale" 2	(111-20604)	"Valex-Ferndale" 214	(111-21180)
"Barker-Ferndale" 3	(111-20609)	"Valex-Ferndale" 215	(111-21206)
"Barker-Ferndale" 4	(111-20685)	"Valex-Ferndale" 313	(111-21314)
"Barker-Ferndale" 5	(111-20702)	"Ferndale" 8	(111-20732)
"Barker-Ferndale" 6	(111-20730)		
"Valex-Ferndale" 107	(111-21066)		
"Valex-Ferndale" 110	(111-21163)		
"Valex-Ferndale" 209	(111-21105)		

Description of the land upon which the well(s) is (are) located

Date of transfer, sale, assignment, conveyance, or exchange	New owner	Type of organization
7-17-87	Seneca Resources Cprporatipn	Corp.
	Address: 511 16th St. Mall, Ste 300, Denver, CO 80202	Telephone No.: (303) 825-7401

Reported by
Seneca Resources Corp.

Confirmed by
Argo Petroleum Corp.

New operator new status (status abbreviation)	Request designation of agent
PA	
Old operator new status (status abbreviation)	**Remarks**
PA	

Deputy Supervisor: Patrick J. Kinnear

Signature: Patrick J. Kinnear

OPERATOR STATUS ABBREVIATIONS

PA – Producing Active
NPA – No Potential, Active
PI – Potential Inactive
NPI – No Potential, Inactive
Ab – Abandoned or No More Wells

FORM AND RECORD CHECK LIST

Form or record	Initials	Date	Form or record	Initials	Date
Form OGD121			Map and book		
Form ODG148			Notice to be cancelled		
New well cards			Bond status		
Well records			EDP files		
Electric logs					
Production reports					

ESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

REPORT OF CORRECTION OR CANCELLATION

Ventura California

April 7, 1987

Harry Hull, Agent
Argo Petroleum Corp.
411 S. Beckwith Rd.
Santa Paula, CA 93060

In accordance with Sec. 2303, Division 3 of the Public Resources Code requiring that proposed operations commencing within one year.

the following change pertaining to your well "Valex-Ferndale" 215 (Well designation),

Ojai field, Ventura County,

Sec. 16, T. 4N, R. 21W, S.B. B. & M., is being made in our records:

☐ The corrected location is _____

☐ The corrected elevation is _____

☐ Report No. _____, dated _____, has been corrected as follows: _____

☒ Your notice to rework (Drill, abandon, etc.) dated 1/20/86, and our report No. P 286-47, issued in answer thereto, are hereby cancelled inasmuch as the work will not be done. If you have a drilling bond on file covering this notice it will be returned. No request for such return is necessary.

☐ Other: _____

MAP	MAP BOOK	CARDS	BOND	EDP	FORMS 114	FORMS 121
						✓

M. G. Mefferd
State Oil and Gas Supervisor

By Michael Stettner
Acting Deputy Supervisor
Michael Stettner

OG165 (9/84/DWRR/3M)

The Resources Agency of California
Department of Conservation

DIVISION OF OIL AND GAS

WELL STATUS INQUIRY

Ventura, Calif.

January 27, 1987

To: Harry Hull, Agent
ARGO PETROLEUM CORP.
411 S. Beckwith Rd.
Santa Paula, CA 93060

In a notice dated Jan. 20 19 86, you propose to rework well "Valex-Ferndale" 215 111-21206
Sec. 16, T. 4N, R. 21W, S.B. B. & M., Ojai (Field or County)

Please indicate below conditions or intentions regarding this proposed work and return the completed form to this office within 10 days.

____ THIS WORK HAS BEEN DONE. If you check this space, please file the required well records on this work in duplicate within 60 days after work was completed.

____ THIS WORK IS IN PROGRESS AND SHOULD BE COMPLETED ABOUT _____ 19 ___.

____ THIS WORK HAS NOT BEEN DONE, BUT WE STILL INTEND TO DO THE WORK.* Please give details. _____

_____

____ WE DO NOT INTEND TO DO THIS WORK. Please cancel our notice to _____, dated _____ 19 ___.

Signature _____

(Bonds on file covering canceled notices will be returned.)

____ OTHER: _____

_____

NOTE: Division 3 of the Public Resources Code states in part:
Section 3215, ...Well records shall be filed 60 days after completion or suspension of proposed work.

*Section 3203, ...If operations have not commenced within one year of receipt of the notice, the notice will be considered canceled. (To prevent cancelation, file a Supplementary Notice with the division.)

M. G. MEFFERD
State Oil and Gas Supervisor

mep

By Murray W. Dosch
Murray W. Dosch
Deputy Supervisor

OGD3 (1/84/DWRR/1M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 286-47

PERMIT TO CONDUCT WELL OPERATIONS

520 (field code)
12 (area code)
10 (new pool code)
10 (old pool code)

Harry Hull, Agent
Argo Petroleum Corporation
411 S. Beckwith Road
Santa Paula, CA93060

Ventura, California
January 29, 1986

Your proposal to rework well "Valex-Ferndale" 215,
A.P.I. No. 111-21206, Section 16, T. 4N, R. 21W, S.B. B. & M.,
Ojai field, Silverthread area, Miocene pool,
Ventura County, dated 1/20/86, received 1/22/86 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Hole fluid of sufficient quality and quantity shall be maintained in the hole to control any subsurface condition, and a reserve supply shall be on hand for emergencies.
2. Blowout prevention equipment of at least DOG Class II 2M shall be installed and maintained in operating condition at all times.
3. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.

Blanket Bond
MS:ljg

Engineer Michael Stettner

Phone (805) 654-4761

M. G. MEFFERD, State Oil and Gas Supervisor

By _____
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

OG111 (3/85/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

DIVISION OF OIL AND GAS
RECEIVED
JAN 22 1986
SANTA PAULA, CALIFORNIA

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	OGD114	OGD121
83	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well No. Valex-Ferndale #215, API No. 111-21206,
Sec. 16, T. 4N, R. 21W, S.B. B. & M., Ojai Field, Ventura County.

The present condition of the well is as follows:

1. Total depth. 9312'

2. Complete casing record, including plugs and perforations:
   13-3/8" (48#, H-40) cmt'd @ 723'.
   9-5/8" (36# & 40#, K-55 & N-80) cmt'd @ 6293'.
   7" (26#, N-80) cmt'd @ 9086'.
   Retrievable bridge plug @ 8358'. Cement retainer @ 8535'.
   4 (0.38") JH at intervals 7706'-7918'.
   4 (0.38") JHPF 8306'-8345', 8427'-8459', 8471'-8531'.
   CP'd @ 8359'-8361', 8408'-8410', & attempted @ 8543'-8545'.

3. Present producing zone name Valex & Argo Zone in which well is to be recompleted Valex

4. Present zone pressure 1500 (presently producing) New zone pressure 2200

5. Last produced 1-9-86 (Date) | 23 (Oil, B/D) | 6 (Water, B/D) | 36 (Gas, Mcf/D)

   or

6. Last injected _____ (Date) | _____ (Water, B/D) | _____ (Gas, Mcf) | _____ (Surface pressure, psig.)

The proposed work is as follows:

1. Install and test BOPE.
   Set retrievable bridge plug @ 7680'. Perforate 7454'-7530'. Production test.
2. If sand is produced: Install and test BOPE. Sand frac. Production test.
3. Install and test BOPE. Set retrievable bridge plug @ 7290'.
   Perforate 6991'-7230'. Production test.
4. If sand is produced: Install and test BOPE. Sand frac. Production test.
5. As directed, retrieve all new bridge plugs, plus possibly the BP @ 8358'.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 411 S. Beckwith Road (Street)
Santa Paula, Ca. (City) (State) 93060 (Zip)

Telephone Number (805) 659-0640

Argo Petroleum Corporation (Name of Operator)

By Harry Hull (Name) 1-20-86 (Date)

Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

DOG

DIVISION OF OIL AND GAS
RECEIVED
JUN 24 1983
SANTA PAULA, CALIFORNIA

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

Company Argo Petroleum Corp. Formation Monterey Page 1 of 1
Well Valex Ferndale 215 Cores Conventional File 10-0803-01-002402
Field Ojai Drilling Fluid Water Base Mud Date Report 12/14/82
County Ventura State CA Elevation 1463' KB Analysts DD
Location 16-4N-21W Remarks Monterey Core Analysis Method

CORE ANALYSIS RESULTS

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYS HORIZONTAL	PERMEABILITY MILLIDARCYS VERTICAL	POROSITY PERCENT	RESIDUAL SATURATION OIL % PORE	RESIDUAL SATURATION TOTAL WATER % PORE	O/W	REMARKS
Core #1; Cut 8384-14; Recovered 8384-94								
1	8384-85	12.1	*	27.4	9.4	77.4	0.12	sst;brn,vfgr,vslty,lt stn,no vis flu
2	8385-86	9.7	20	25.8	7.9	65.5	0.12	same
3	8386-87	11.8	*	30.3	8.0	76.2	0.10	sst;brn,vfgr,vslty,lt stn,spty gld flu
4	8387-88	84	24	28.6	12.2	61.4	0.20	same
5	8388-89	33	8.8	26.8	10.2	58.3	0.17	same
6	8389-90	4.9	24	19.3	16.5	55.1	0.30	sst;brn,vfgr,vslty,calc,lt stn, spty vdg flu
7	8390-91	8.5	13.7	23.1	14.7	65.4	0.22	sst;brn,vfgr,vslty,scalc,lt stn, spty vdg flu
8	8391-92	7.1	*	14.1	5.6	68.4	0.08	same
9	8392-93	11.5	0.13	23.6	7.2	64.8	0.11	sltst;brn,vfgrsd,scalc,lt stn, spty vdg flu
10	8393-94	0.79	*	23.0	11.0	61.5	0.18	same

*Parting along vertical fracture planes - sample unsuitable for analysis.

These analyses, opinions or interpretations are based on observations and materials supplied by the client to

Form OG100 (7/79)

DOG

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

API No. 111-21206

WELL SUMMARY REPORT

OIL AND GAS
MAY 20 1983
SANTA PAULA, CALIFORNIA

Operator	Well				
ARGO PETROLEUM CORPORATION	VALEX-FERNDALE # 215				
Field	**County**	**Sec.**	**T.**	**R.**	**B.&M.**
Ojai, Silverthread Area	Ventura	16	4N	21W	S.B.

Location (Give surface location from property or section line and/or street center line and/or California coordinates)
1245' S'ly and 4390' E'ly from the NW corner of Section 16

Elevation of ground above sea level
1443'

Commenced drilling (date)	Total depth			Depth measurements taken from top of:
10-13-82	(1st hole)	(2nd)	(3rd)	☐ Derrick Floor ☐ Rotary Table ☒ Kelly Bushing
Completed drilling (date)	9312'			Which is 22 feet above ground
11-24-82	Present effective depth: 9002' (Float collar)			
Commenced producing (date)	Junk: BIT, SUB, STB, 1-DC, STB, 2-DC, STB, 1 JT HWDP. Top at 9148', Bottom at 9288'.			
12-20-82				
☐ Flowing ☒ Pumping ☐ Gas lift				
Name of producing zone(s): Valex Sand, Argo Sand				

GEOLOGICAL MARKERS	DEPTH
Upper Big Canyon Fault	4918'
Lower Big Canyon Fault	5843'
Top Monterey Shale	8584'

Formation and age at total depth: Argo Sand - Mohnian

	Clean Oil (bbl per day)	Gravity Clean Oil	Percent Water including emulsion	Gas (Mcf per day)	Tubing Pressure	Casing Pressure
Initial Production	14	31.0	80.0	54	150	150
Production After 30 days	26	30.2	50.0	80	150	680

CASING RECORD (Present Hole)

Size of Casing (API)	Top of Casing	Depth of Shoe	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Number of Sacks or Cubic Feet of Cement	Depth of Cementing (if through perforations)
13 3/8"	Surface	723'	48#	H-40 ST & C	New	17½	Primary 685 cf	* See below
9 5/8"	Surface	6293'	36# 40#	K-55 LT & C N-80 LT & C	New	12¼	1865 cf	--
7"	Surface	9086'	26#	N-80 LT & C and Butt	New	8 3/4	513 cf	--

* Bradenhead SQZ shoe with 14 cf (10-17-82). SQZ 27 cf thru 8 holes 709' to 707' (10-18-82)

PERFORATED CASING (Size, top, bottom, perforated intervals, size and spacing of perforation and method.)

4 (0.38') JHPF 8306'-8345', 8427'-8459', 8471'-8531', 8543'-8545'.

Was the well directionally drilled? If yes, show coordinates at total depth
☒ Yes ☐ No 280.30' North and 266.96' East of surface

Electrical log depths
DIL-GR 9309' to 720'

Other surveys
FDC/CNL, Dipmeter, EPT, Mudlog, Directional Survey, Core Description

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Name	Title	
Harry E. Hull	District Superintendent	
Address	**City**	**Zip Code**
411 S. Beckwith Rd.	Santa Paula	93060
Telephone Number	**Signature**	**Date**
(805) 933-1321	Harry Hull	5-12-83

SUBMIT IN DUPLICATE

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
MAY 20 1983
SANTA PAULA, CALIFORNIA

History of Oil or Gas Well

Operator Argo Petroleum Corp. Field Ojai, Silverthread Area County Ventura
Well Valex-Ferndale #215, Sec. 16, T 4N, R 21 W., S.B.B. & M.
A.P.I. No. 111-21206 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 5-12, 19 83.

Signature Harry Hull

411 S. Beckwith Rd., Santa Paula, CA 93060 (Address) (805) 933-1321 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
10/12/82	MIRU Richerson Rig #1 From #214
10/13/82	Mix spud mud. Rig on operating rate at 0600 hrs, 10/13/82. Drilled rat hole with dynadrill. Make up 12¼" BHA.
10/14/82	Drilled 12¼" hole to 197'. Trip and change to 17½" BHA. Opened 12¼" hole to 17½". Drilled 17½" hole from 197' to 603'.
10/15/82	Drilled 17½" hole to 730'. POOH. Move STB to above bit. RIH. Condition mud for casing. POOH. Ran 18 joints, 13 3/8", 48#, H-40, ST & C casing with B & W guide shoe at 723', baffle plate at 682' and centralizers on joints 1 and 2. Dowell pumped 50 cf water, 558 cf class 'G' + 2% gel + 2% $CaCl_2$ + .02% D-46 followed by 127 cf class 'G' + 2% $CaCl_2$. Displaced with 665 cf mud. Plug did not bump. CIP at 1700 hrs. Good returns throughout job. Had 210 cf cement returns. (Displacement was 4.3% over casing volume to shoe). Rig down cementers. Cut off conductor and 13 3/8" casing.
10/16/82	Installed 13 5/8", 3000# casing head. Tested weld to 1000psi. Installed BOPS. Attempt to test blind rams. Pumping away at 600 psi. RIH with slick BHA to 679'. Pressured to 250 psi and lost pressure. Ran in shoe at 723' and pressured to 800 psi. Lost pressure (indications that shoe insert blew off). Ran in to 730' and circulated. POOH.
10/17/82	Attempt BOP test with test plug. Plug did not hold. Drop 13 3/8" top plug and push to 729'. Drill plugs and junk to 767' POOH. Ran Welex cement bond log. Ran in to 767' with OEDP. Dowell pumped and balanced 182 cf class 'G' + 3% $CaCl_2$. Pulled to 409' and squeezed away 14 cf. CIP at 2100 hrs. Shut in for 1 hour. POOH.
10/18/82	WOC 6 hours. Pressure tested casing and CSO to 1000 psi. RIH to TOC at 566'. Tested casing, rams, hydrill, all lines and kelly cocks to 1000 psi. Test witnessed and approved by the D.O.G.. Drilled cement to 710'. Circulate clean and change hole over to water. Welex shot 8 holes 707' to 709'.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corp. Field Ojai, Silverthread Area County Ventura
Well Valex-Ferndale #215, Sec. 16, T 4N, R 21 W., S.B B. & M.
A.P.I. No. 111-21206 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 5-12, 19 83.

Signature Harry Hull

411 S. Beckwith Rd., Santa Paula, CA 93060 (Address) (805) 933-1321 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
10/18/82 (cont.)	Dowell established breakdown of perfs. With OEDP at 710', pumped and balanced 50 cf class 'G' + 1% $CaCl_2$. Pulled 3 stands and squeezed away 27 cf. WOC.
10/19/82	Cleaned out cement from 678' to 725'. Trip for Navidrill and drilled 12¼" hole to 1128'. Trip for BHA.RIH.
10/20/82 to 10/23/82	Drilled to 4529' (installed mud logger at 2608').
10/24/82	Built mud weight from 68 ppcf to 86 ppcf while drilling (prior to drilling fault zone). Drilled from 4529' to 4720'.
10/25/82 to 10/27/82	Drilled from 4770' to 5347'. Condition gas cut mud and build weight to 90 ppcf. Drill to 5371'. Circulate through choke and build weight to 92 ppcf. Drilled to 5404'.
10/28/82	Conditioned mud and built weight to 94 ppcf. Trip to change BHA. Reamed from 5212' to 5404' (40' fill). Conditioned mud and drilled to 5504'.
10/29/82 to 11/1/82	Drilled from 5504' to 6300'. Conditioned mud for logs for 8 hours. Wipe hole to 4420' (hole tite from 5510' to 6300'). Condition mud for 8 hours.
11/2/82	Condition mud for 10 hours. POOH for logs. Rigged up Schlumberger and logged as follows: DIL-GR 6284' to 720' FDC-CNL 6284' to 720'
11/3/82	RIH to 6230' (broke circ. at 2100' and 4500' because pipe would not fall). Reamed from 6230' to 6300'. Condition mud for 10 hours. Wipe hole to 5365'. Condition mud for 4 hours. POOH and rig to run casing.
11/4/82	Rigged up and ran 174 joints 9 5/8" casing as follows: Joints 1 - 172: 9 5/8", 36#, K-55, LT & C Joints 173 - 174: 9 5/8", 40#, N-80, LT & C

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Field Ojai, Silverthread Area County Ventura
Well Valex-Ferndale #215, Sec. 16, T 4N, R 21 W, S.B.B. & M.
A.P.I. No. 111-21206 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 5-12, 19 83.

Signature Harry Hull

411 S. Beckwith Rd., Santa Paula, CA 93060 (805) 933-1321
(Address) (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
11/4/82 (cont.)	Ran hydro-differential float shoe at 6293' and hydro-differential float collar at 6217'. Ran one centralizer on joints 1, 2, 3, every second joint from # 5 to 51 and one per joint on 52, 53, and 54. Rigged up BJ. Pumped 100 cf of 96 ppcf weighted mud sweep, 1565 cf 1:1 Diamix + 2% gel and 300 cf class 'G' neat. Displaced with 2780 cf 68 ppcf mud. Plug did not bump. Floats did not hold. Shut in with 1200 psi (pressure due to different hydrostatic pressures). Closed annular preventer to avoid gas migration. No pressure on annulus after 3 ¼ hours. CIP at 1145 hours. Had good mud returns throughout job. Remove BOPS. Land 9 5/8" casing with 115,000#. Installed 13 5/8", 3000# by 11", 3000# casing spool.
11/5/82	Nipple up BOPS. Test CSO to 1500 psi. Run in and test pipe rams, lines and valves. Drill cement from 6105' to 6279'. Test casing to 1000 psi. Built mud weight to 73 ppcf and drilled to 6365'. (The lime base mud used to drill to 6300' was disposed of due to excessive hole problems and treating costs. The rest of the hole was drilled with lignosulfonate mud).
11/6/82 to 11/8/82	Drilled 8 3/4" hole to 6375'. Trip for Dynadrill. Drilled with Scientific Steering tool and side entry sub from 6375' to 6981' (3 bit runs). Trip for building BHA. Reamed from 6350' to 6981'.
11/9/82 to 11/10/82	Drilled to 7478'. Trip for Dynadrill. Dynadrilled with steering tool to 7521'.
11/11/82	Dynadrill failed at 7521'. Trip to Change DD. Dynadrilled to 7673'. Trip for BHA.
11/12/82 to 11/15/82	Reamed from 7521' to 7673'. Drilled to 8384'. Trip for core barrel. Made up Argo owned diamond core bit on Reese standard 6 7/8" core barrel. Cut 4 3/8" core from 8384'.
11/16/82	Continued coring to 8414' (30'). Pulled out with core barrel (hole tight at 8001, took 2 hours to work and jar through tight spot). Lay down core barrel and recovered 10' of 30' cut. RIH with BHA and reamed from 8384' to 8414'. Drilled to 8525'.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corp. Field Silverthread Area, Ojai, County Ventura
Well Valex-Ferndale #215, Sec. 16, T 4N, R 21 W., S.B.B. & M.
A.P.I. No. 111-21206 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 5-12, 1983

Signature Harry Hull

411 S. Beckwith Rd., Santa Paula, CA 93060 (Address) (805) 933-1321 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date

11/17/82 to 11/19/82 — Drilled to 9312'. POOH and rigged up loggers.

11/20/82 — Logged with Schlumberger as follows:

DIL-FDC-CNL	9309' to 6280'
EPT	* 8662' to 6280'

* EPT log stopped at 8694'

RIH with clean out assembly. Reamed from 9136' to 9288'. Pipe stuck at 9288'. Jarred pipe for 6 hours. Rigged up Dia log.

11/21/82 — Attempted back off at 9148' with string shot. Pipe backed off at 8800'. Screw fish back together and attempted back off at 9148' with string shot #2, no good. Ran shot #3 in hole. While working torque down to fire shot #3, pipe backed off at 9148'. Rig down Dia log and chain out.

No attempt was made to recover the fish.

Fish left in hole from 9288' to 9148':
BIT, SUB, STB, 1-DC, STB, 2-DC, STB & 1 joint HWDP.

Rigged up Schlumberger and logged as follows:

Dipmeter	9088' to 6280'

Rigged down loggers and made up BHA.

11/22/82 — RIH to 9100' (no hole problems). Circulate.Wipe hole to 9 5/8" casing shoe. RIH and condition mud for casing. POOH laying down drill pipe. Rig to run casing.

11/23/82 — Ran 7" casing as follows:

9086'	=	Float Shoe 1 Jt. 7", 29#, N-80, LT & C 1 Jt. 7", 26#, N-80, LT & C
9002'	=	Float Collar

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corp. Field Ojai, Silverthread Area County Ventura
Well Valex-Ferndale #215, Sec. 16, T 4N, R 21 W., S.B.B. & M.
A.P.I. No. 111-21206 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 5-12, 19 83.

Signature Harry Hull

411 S. Beckwith Rd., Santa Paula, CA 93060 (Address) (805) 933-1321 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date

11/23/82 (cont.)

(9002' - Float Collar (cont.)

1 Jt. 7", 26#, N-80, LT & C
1 Jt. 7", 26#, N-80, LT & C pin x Butt Box
6 Jts. 7", 26#, N-80, Butt
1 Jt. 7", 26#, N-80, Butt pin x LT & C Box
33 Jts. 7", 26#, N-80, LT & C

7291' - 7278' 7", 26#, N-80, LT & C, Flag joint
182 Jts. 7", 26#, N-80, LT & C
Total of 226 Joints plus flag joint.

Ran 2 turbo centralizers per joint on joints 1-4, 13-23 & 27-37. Ran 2 regular centralizers per joint on joints 39 & 40. One regular centralizer per joint on 5-12, 24-26 & 41-66. Ram two loop turbolators per joint on 1,2,12,13,26 & 27.

Dowell cemented as follows:

Pumped 200 cf spacer 3000, 100 cf G,gel, poz scavenger, 513 cf self stress cement + 1.2% D-46. Displaced with 345 Bbls water. Bumped plug with 500 psi over find displacement pressure. Worked casing throughout job. Floats held. CIP at 1310 hours. Had good circulation throughout job.

Land 7" casing in spool with 140,000#. Nipple down BOPS.

11/24/82 Install 11", 3000# x 7 1/16", 5000# dual tubing head and test to 3000 psi.

Released rig at 0400 hours.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #215, Sec. 16., T4N., R21W., SB. B. & M.
A.P.I. No. 111-21206 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 5-12, 1983

Signature Harry Hull

411 S. Beckwith Rd., Santa Paula, CA 93060 (Address)
(805) 933-1321 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
12-4-82	MIRU SPS. Install BOPE. RU Welex. Ran bond logs 8907'-6200'. MU 7" 26# positive scraper & 6 1/8" bit. Measure, PU & drift 2 7/8" tbg. RIH to 8291'. Pull up to 8915'. Change over to lease oil.
12-5-82	POH. PU GEO VANN guns. RIH & set Baker packer after running Welex logs for tie in. Packer set @ 8230'. Land tbg. Test csg. to 600#. Remove BOP. Install tree.
12-6-82	Dropped bar to perforate 4(0.375") JHPF 8306'-8345', 8427'-8459', 8471'-8531'. Open well to tank on 12/64". Light-moderate blow. RU swab equipment. Tag FL @ 1720' (4080' rise). Swabbed to 2300' - hit mud bridge. Broke through, blew @ 4 bbls. thick mud to cellar. Swab to 6300'. Recovered 40 bbls. (at 12 bbls. recovery - 2% mud 27.8° API @ 77° F. After breaking thru bridge, 50% mud. At 27 bbls. turned to muddy water with good gas followups.)
12-7-82	800# tbg. Bled down @ 1 bbl. Ran swab FL @ 2000'. Swab to 7500'. Getting 30 - 50% oil & 10-15% mud solids. Total recovery for day 75 bbls.
12-8-82	900# tbg. Bled down @ 2 bbls. FL @ 2800'. Swab to 7500'. 500'-600' rise every 1/2 hr. @ 65% oil. Salinity: 5500 ppm @ 5400', 5700 ppm @ 7000'. Recovery 66½ bbls. for day. Tore out swab equipment. Fill tbg. w/ lease oil. Remove tree. Install BOPE. Release packer & POH. All shots fired. MU STC & T/L PS. RIH.
12-9-82	BS bottoms up @ 8921'. Recovered cement, sand, shale & rubber. Pull up and land tbg. w/ tail @ 8290', PS @ 8257'. Remove BOPE. Install tree. RU swab equipment.
12-10-82	460# tbg. Bled well @ 7 bbls. Swab to 2800'. Rec. 144 bbls. Tore out swab equipment. Remove flow tree. Install production tree. RIH w/ 2½ x 1 3/4 x 20 x 24 pump & rods. Space well out, fill & pressure tbg. to 500#.
12-11-82 to 12-26-82	Pump-tested. Avg. 65 BFPD, 80% cut, 150# tbg/csg.
12-27-82	MIRU SPS. Bled tbg. Work pump loose. POH w/rods & pump. Remove tree. Install & test BOP. Lower tbg. to 8630' - no fill. Fill hole w/ 270 bbls. lease water. BS bottoms up. Start pulling & measuring tbg.
12-28-82	Finish POH. RU Welex. Perf 8 (0.44") holes 8543'-8545'. RIH & set Baker K-1 retainer @ 8535'. Test tbg. into hole at 5000#. Space tbg. in retainer. RU

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #215, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21206 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 5-12, 1983.

Signature Harry Hull

411 S. Beckwith Rd., Santa Paula, CA 93060 (Address) (805) 933-1321 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
12-28-82	(Cont'd from Page 6). Dowell. Put 1500# on csg. Pressure tbg. to 6000# - no breakdown. Aborted cement job. Pull tbg. to 8403'. Spot 27 sxs sand to bottom. Pull up to 7400'. Tag sand @ 8449'. Reset tbg. @ 8403'. Spot 7 sks sand. Tag sand @ 8444'.
12-29-82	Finish spotting sand plug w/ top @ 8417'. BS hole clean. POH. RU Welex. Perf 8 (.44") holes 8408'-8410'. RIH & set retainer @ 8380'. RIH & stab into retainer. Establish breakdown w/ 6½ bbls. fresh water @ 0.75 BPM, 3200# (3000# on csg). Direct communication w/ upper perfs. Mix & pump 25 sks "G" + 0.75% D-60 (fluid loss). Displaced w/ 3 bbls. lease water & 45 bbls. lease water. Cement at perfs (1.3 BPM, 2800#). Final disp. 0.2 BPM, 3700#. Estimate 20 cf cement out perfs, 3 cf in casing above retainer). POH. RU Welex. Shoot 8(0.44") holes 8359'-8361'. Set retainer @ 8350'.
12-30-82	RIH to retainer. RU Dowell. Displaced tbg. w/ 49 bbls. lease water. Stab into retainer. Apply 1000# to csg. Establish breakdown w/ 5½ bbls. fresh water 0.5 BPM, 3700#. At P_t = 1700#, communication w/ upper perfs. Work loose from retainer. BS out cement chips. Stab into retainer. Mix & pump 25 sks "G" + 0.75% D-60, disp w/ 5 bbls. fresh water & 41 bbls. lease water. Cement at perfs (1 BPM @ 4000#). Final displacement 0.4BPM @ 4750#. Estimate 13 cf cement out perfs, 14 cf in csg. above retainer. Pull out of retainer. BS out cement. POH. MU 6 1/8" bit. RIH to 8000'.
1-2-83	Continue RIH. RU power swivel. Drill out cement from 8338'-8357'. (top of retainer - tbg. measurements). Drill out 2/3 of retainer, bit plugging, recovered bit teeth. Start POH. Inner bearing on main drum of drawworks failed.
1-3-83	Repairing rig.
1-5-83	Drill out cement retainer @ 8350'. Drill out cement to retainer @ 8380'. Drill out retainer & cement to 8417'. CO sand to 8535'. BS well clean. POH. Lay down 2 7/8" tbg. Install 3½" hydraulic single gate BOP. MU Baker 7" retrievamatic packer.
1-6-83	PU 3½" frac string & RIH to 8363'. Change over to lease oil. Set packer @ 8363'.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #215, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21206 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 5-12, 19 83.

Signature Harry Hull

411 S. Beckwith Rd., Santa Paula 93060 (Address)

(805) 933-13-21 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1-7-83	Reset packer @ 8361'. RU Dowell for frac of 8427'-8531' interval. Breakdown: 14 BPM, 7290# (2800# csg). ISIP: 3860# F.G.: 0.83. Csg. pressure built to 4830#. Communication around packer. Lower packer to 8392'. Average rate: 17 BPM @ 8900#. Max. pressure: 10,070#. Fire on #3 turbine, shut down 1 truck. Rate dropped to 15 BPM & screened out at 10,070#. Tbg. bled off rapidly. Start back up w/ 2 E-heads pumping. Avg. rate: 17 BPM @ 3300#. Max: 3870#. Leak in discharge line - shut down. 3 out of 4 pump trucks failed. 39,500# 20/40 sand to formation (8,800# in tbg). 55,000# 100 mesh to formation. 1,313 BO used. FSIP: 3070#. Flow back 60 bbls. frac oil. Remove frac head; install tree. RTP.
1-10-83	RU Otis coiled tbg. unit. RIH to 2029'. Kink developed in tbg. POH. RD for repairs.
1-11-83	RU Otis. RIH circulating. Tag sand bridges @ 2710' & 7880'. CO to 8400'. Rec. frac sand & shale pieces (as large as 1¼" diameter) after circulating @ 8400' for 1½ hrs. Otis blew hole in tbg. on reel. POH & RD. Remove tree. Open bypass on packer. BS oil around, tremendous amounts of sand & shale. Release packer & worked same free. POH while csg. flowing.
1-12-83	RU Welex. RIH w/7" retrievable BP. Tag fill @ 8394'. Set plug @ 8375'. RIH w/ 3½" frac string & retrievamatic packer. Set packer @ 8095'. MU Dowell frac head.
1-13-83	Frac 8306'-8345' interval. Breakdown: 16 BPM, 9300#. ISIP: 6200#. F.G.: 1.12. Avg. rage & pressure: 19 BPM, 9300#. Max. pressure: 9800#. 15 min. SIP: 5070#. Sand: 17,500# 100 mesh, 33,700# 20/40. 575 bbl. oil used.
1-16-83	Open bypass on retrievamatic packer. BS gas out of system. Work packer loose. POH. Lay down frac string. MU retrieving head. RIH. Tag sand @ 8150'.
1-17-83	Work gas out of system. CO sand to 8375'. Latch BP. Pull up to 7640'. Unable to POH. Well flowing. Land tbg. on donut. Install tree.
1-26-83	BS & bring up 45 bbls. mud & water. Unable to kill well w/ 900# back pressure.

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Argo Petroleum Corporation Field Silverthread County Ventura
Well Valex-Ferndale #215, Sec. 16, T 4N, R 21W, SB B. & M.
A.P.I. No. 111-21206 Name Harry Hull (Person submitting report) Title Dist. Supt. (President, Secretary or Agent)
Date 5-12, 19 83

Signature Harry Hull

411 S. Beckwith Rd., Santa Paula, CA 93060 (Address) (805) 933-1321 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1-27-83	BS & killed well. POH w/tbg. & removed B.P. MU STC & 2 7/8" T/L PS. RIH & tag fill @ 8413'. (perfs 8306'-8531'). Pull up to 8094'.
1-28-83	Lower tbg. & CO fill (frac sand, shale chunks) to 8535'. Pull up & land tbg. w/tail @ 8200'. Remove BOPE. Install tree. RIH w/pump & rods. Space & hung on. Pressure to 500#. RTP. RDMO.
2-11-83	Unable to work pump loose. Bled well. Fill csg. w/lease oil & pressured to 1400#. Unable to break circulation. Remove tree. Install & test BOPE. Strip out rods & tbg.
2-12-83	3 jts. above pump full of sand & mud. MU 2 7/8" STC and TL PS. RIH. Tag fill @ 8438' (perfs 8306'-8531'). BS clean to cement retainer @ 8535'. Sand, mud & shale in returns. PU & land w/tail @ 8200'. Remove BOP. Install tree.
2-13-83	RIH w/pump & rods. Change of orders. Stack rods out on bottom. Remove tree. Install BOPE. Pull & raise tbg. 7 jts. (220'). Remove BOP. Install tree. Respace rods. Fill tbg. & pressure to 300#. RTP. RDMO. Tbg. landed @ 7980' w/ KB.

DO NOT SEND TO D.O.G.

FRAC DETAIL FOR VALEX-FERNDALE #215

STAGE I: Argo Sands, Interval 8427'-8531'.

STAGE	BBLS. OIL	#/GAL SAND	#'S SAND	ATR
Prepad	50	0	0	50
ISIP	--	--	--	--
Pad	89	0	0	139
Pad w/100 mesh	75	1	3,200	217.2
Pad w/100 mesh	150	2	12,600	379.8
Pad w/100 mesh	311	3	39,200	730
Pad	89	0	0	819
Oil & Sand	65	1	2,700	886.7
Oil & Sand	155	2	13,000	1054.7
Oil & Sand	116	3	14,600	1185.3
Screenout-shut down	--	--	--	--
Pad	84	0	0	1269.3
Oil & Sand	71	3	9,000	1349.3
Oil & Sand	53	4	9,000	1411.3
Flush	5	0	0	1416.3
Total	1,313		55,000 # 100 mesh 48,300# 20/40	

Packer @ 8361'. Breakdown: 14 BPM, 7290# (2800# csg). ISIP: 3860#. F.G.: 0.83. Csg. pressure built to 4830#, communication around packer. Lower packer to 8392'. Avg. rate: 17 BPM @ 8900#. Max. pressure: 10,070#. Fire on #3 turbine, shut down 1 truck. Rate dropped to 15 BPM & screened out at 10,070#. Tbg. bled off rapidly. Start back up w/ 2 E-Heads pumping. Avg. rate: 17 BPM @ 3300#. Max: 3870#. Leak in discharge line - shut down. 3 out of 4 pump trucks failed. 39,500# 20/40 sand to formation (8,800# in tbg). 55,000# 100 mesh to formation. 1,313 BO used. FSIP: 3070#.

DO NO SEND TO D.O.G.

FRAC DETAIL FOR VALEX-FERNDALE #215

STAGE II: Argo Sands, Interval 8306'-8345'.

STAGE	BBLS. OIL	#/GAL SAND	#'S SAND	ATR
Prepad	50	0	0	50
ISIP	--	--	--	--
Pad	25	0	0	75
Pad w/100 mesh	24	1	1,000	100
Pad w/100 mesh	48	2	4,000	152
Pad w/ 100 mesh	100	3	12,500	264.5
Pad	25	0	0	289.5
Oil & Sand	28	1	1,200	318.7
Oil & Sand	65	2	5,400	389.1
Oil & Sand	93	3	11,700	493.8
Oil & Sand	59	4	9,900	562.7
Oil & Sand	26	5	5,500	594.2
Flush	82	0	0	676.2
Total	625		17,500# 100 mesh 33,700# 20/40	

Prepad 50 bbls. Breakdown 16 BPM @ 9300 psig. ISIP = 6200 psig. FG = 1.12 psi/ft. Avg. rate = 19 BPM. Avg. press = 9300 psig. Max. press = 9800 psig. Max. rate = 20 BPM. 15-minute SIP = 5070 psig. Sand used = 17,500# of 100 mesh and 33,700# of 20/40 mesh. Oil used = 575 bbls., not including prepad.

UNIVERSAL DIRECTIONAL DRILLING
COMPLETION REPORT

DOG

LOCAT[illegible] Silverthread

WELL Valex-Ferndale # 215

SURFACE LOCATION 1245' S 4390' E

K. B. ELEVATION 1463'

111-21206

COMPANY ARGO PETROLEUM CORPORATION

DATE 11-16-82

NO.	MEASURED DEPTH	DRIFT ANGLE	VERTICAL DEPTH	DRIFT DIRECTION	RECTANGULAR COORDINATES NORTH	SOUTH	EAST	WEST	REMARKS
1	161	0 45	160 99	S 07 E		2 09	26		
2	383	0 30	382 98	S 15 W		3 96		24	
3	564	1 45	563 89	S 55 W		7 13		4 77	Mud Motor used
4	730	2 30	729 74	S 55 W		11 29		10 70	from 730' to 1128'
5	756	2 30	755 71	S 84 W		11 41		11 83	
6	816	3 00	815 63	N 46 W		9 22		14 09	
7	877	4 30	876 44	N 15 W		4 60		15 33	
8	937	6 00	936 11	N 05 E	1 65			14 78	
9	997	7 45	995 57	N 01 E	9 74			14 64	
10	1027	9 00	1025 20	N 02 E	14 43			14 48	
11	1058	10 15	1055 70	N 03 E	19 94			14 19	
12	1088	11 30	1085 10	N 03 E	25 91			13 88	
13	1179	14 15	1173 30	N 05 E	48 23			11 92	
14	1300	17 30	1288 70	N 07 E	84 34			7 49	
15	1426	21 30	1405 93	N 07 E	130 18			1 86	
16	1550	25 00	1518 31	N 06 E	182 29		3 62		
17	1682	25 30	1637 45	N 06 E	238 81		9 56		
18	1900	24 30	1835 82	N 04 E	328 99		15 86		
19	2087	22 45	2008 28	N 05 E	401 03		22 17		
20	2303	22 30	2207 84	N 03 E	483 58		26 49		
21	2519	21 30	2408 81	N 02 E	562 69		29 25		
22	2608	21 45	2491 47	N 02 E	595 65		30 41		
23	2775	22 00	2646 31	N 03 E	658 12		33 68		
24	2961	22 30	2818 15	N 02 E	729 26		36 16		
25	3176	23 15	3015 69	North	814 13		36 16		
26	3394	23 30	3215 61	North	901 06		36 16		
27	3605	23 45	3408 74	N 01 E	986 02		37 65		
28	3822	23 45	3607 36	N 01 E	1073 41		39 17		
29	4039	23 45	3805 99	North	1160 81		39 17		
30	4258	24 15	4005 66	North	1250 75		39 17		
31	4403	23 15	4138 89	North	1307 99		39 17		
32	4629	22 30	4347 68	N 04 W	1394 27		33 14		
33	4806	22 15	4511 50	N 04 W	1461 12		28 46		
34	4964	20 15	4659 73	N 05 W	1515 61		23 70		
35	5151	17 45	4837 83	N 06 W	1572 30		17 74		
36	5342	17 30	5019 99	N 12 W	1628 48		5 80		
37	5495	14 30	5168 12	N 11 W	1666 09			1 51	
38	5648	11 15	5318 18	N 11 W	1695 39			7 21	
39	5804	9 00	5472 26	N 11 W	1719 34			11 86	
40	5959	6 15	5626 34	N 22 W	1734 99			18 18	
41	6113	5 00	5779 75	N 27 W	1746 95			24 28	
42	6300	3 30	5966 40	N 27 W	1757 12			29 46	
43	6375	3 15	6041 28	N 28 W	1760 88			31 45	
44	6454	0 30	6120 28	S 89 E	1760 86			30 76	
45	6515	2 30	6181 22	S 24 E	1758 43			29 68	
46	6546	3 75	6212 15	S 08 E	1756 42			29 40	
47	6609	6 00	6274 81	S 04 E	1749 85			28 94	
48	6675	7 00	6340 32	S 06 E	1741 85			28 10	

CLOSURE _____

METHOD OF CALCULATION _____

DIVISION OF OIL AND GAS
RECEIVED
MAY 2 0 1983
SANTA PAULA, CALIFORNIA

UNIVERSAL
DIRECTIONAL DRILLING
COMPLETION REPORT

LOCATION Silverthread

WELL Valex-Terndale # 215

SURFACE LOCATION 1245' S 4390' E

K. B. ELEVATION 1463'

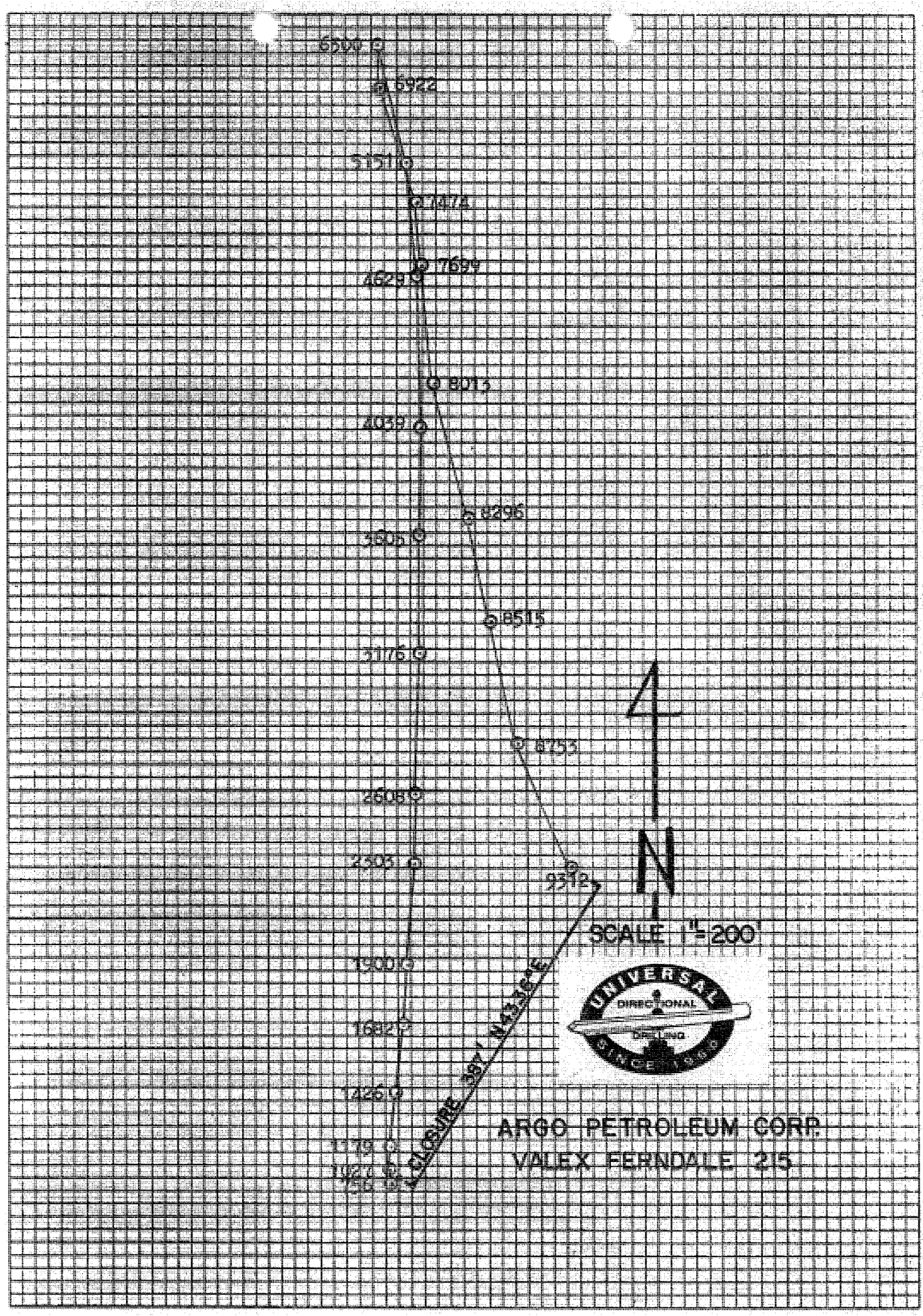
COMPANY ARGO PETROLEUM CORPORATION

DATE 11-16-82

NO.	MEASURED DEPTH	DRIFT ANGLE	VERTICAL DEPTH	DRIFT DIRECTION	RECTANGULAR COORDINATES NORTH	SOUTH	EAST	WEST	REMARKS
49	6736	8° 45	6400 61	S 06 E	1732 62			27 13	
50	6796	11 00	6459 50	South	1721 18			27 13	
51	6861	12 45	6522 90	S 07 E	1706 94			25 38	
52	6922	13 30	6582 22	S 10 E	1692 91			22 91	
53	6955	14 00	6614 24	S 11 E	1685 08			21 38	
54	7047	15 15	6703 00	S 14 E	1661 59			15 53	
55	7168	19 15	6817 23	S 16 E	1623 25			4 54	
56	7289	21 30	6929 82	S 17 E	1580 84		8 44		
57	7414	24 30	7043 56	S 16 E	1531 02		22 72		
58	7474	25 00	7097 94	S 16 E	1506 64		29 72		
59	7538	25 30	7155 71	S 11 E	1479 58		34 97		
60	7600	25 30	7211 67	S 05 E	1453 00		37 30		
61	7699	27 30	7299 48	S 01 E	1407 30		38 10		
62	7857	33 15	7431 61	S 04 E	1320 88		44 14		
63	8013	38 45	7553 28	S 09 E	1224 44		59 42		
64	8197	47 30	7677 58	S 14 E	1092 81		92 94		
65	8296	48 30	7743 18	S 14 E	1020 86		110 17		
66	8384	47 45	7802 35	S 12 E	957 15		124 42		
67	8515	49 00	7888 29	S 12 E	860 44		144 98		
68	8610	51 00	7948 08	S 12 E	788 23		160 33		
69	8753	53 00	8034 14	S 12 E	676 52		184 07		
70	8847	52 30	8091 36	S 11 E	603 31		198 30		
71	9312	38 00	8418 73	S 12 E	280 30		266 96		

CLOSURE 387.09' N 43°36' S

METHOD OF CALCULATION Tangential


6500
6922
7131
7478
7699
8013
8296
8515
8753
9312
7629
7426
7179
6920
6672
6423
6176
5927
5680
5433
5186
4939
4692
4445
4198
3951
3705
3458
3211
2964
2717
2470
2223
1976
1729
1482
1235
988
741
494
247
0
N
SCALE 1"=200'
UNIVERSAL
DIRECTIONAL
DRILLING
GEOSERVICES
ARGO PETROLEUM CORP.
VALEX FERNDALE 215

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

No. T 282-226

DIVISION OF OIL AND GAS

Report on Operations

Mr. Harry Hull, Agent
Argo Petroleum Corp.
Box CI
Ventura, CA 93002

Santa Paula, Calif.
Nov. 4, 1982

Your operations at well "Valex-Ferndale" 215, API No. 111-21206,
Sec. 16, T. 4N, R. 21W SB B.& M. Ojai Field, in Ventura County,
were witnessed on 10/27/82. R. Habel, representative of
the supervisor, was present from 0600 to 0800. There were also present Mr. Richerson, Pusher
Present condition of well: 13 3/8" csm 722'. T.D. 730'.

The operations were performed for the purpose of testing the blowout prevention equipment and installation.

DECISION:

THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

b

M. G. MEFFERD
State Oil and Gas Supervisor

By
Deputy Supervisor
Murray W. Bosch

OG109(12-80-15M)

FORM OG111(10/81/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 282-327

REPORT ON PROPOSED OPERATIONS

520 (field code)
12 (area code)
10 (new pool code)
-- (old pool code)

Mr. Harry Hull, Agent
Argo Petroleum Corporation
Box CI
Ventura, CA 93002

Santa Paula, California
Sept. 21, 1982

Your proposal to drill well "Valex-Ferndale" 215, A.P.I. No. 111-21206, Section 16, T. 4N, R. 21W, S.B. B. & M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 9/14/82, received 9/15/82 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Hole fluid of sufficient quality and quantity shall be maintained in the hole to control any subsurface condition, and a reserve supply shall be on hand for emergencies.
2. Unlined sumps, if they contain harmful waters, shall not be located over fresh water bearing aquifers.
3. Any sump used during these operations shall be thoroughly cleaned and filled with earth as soon as operations are completed.
4. Blowout prevention equipment of at least DOG Class III 1M shall be installed on the 13 3/8" casing and Class III 3M B shall be installed on the 9 5/8" and 7" casings and maintained in operating condition at all times.
5. This office shall be consulted before placing any plugs or sidetracking any hole.
6. The division will monitor the monthly production of this well for a period of six months and if anomalous water production is indicated, remedial action will be ordered.
7. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.
8. THIS DIVISION SHALL BE NOTIFIED TO WITNESS A PRESSURE TEST OF THE BLOWOUT PREVENTION EQUIPMENT BEFORE DRILLING BELOW 700'.

Blanket Bond
RLH:b

M. G. MEFFERD, State Oil and Gas Supervisor

By Murray W. Bosch
Murray W. Bosch, Deputy Supervisor

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

Form OG105 (8/80)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS
Notice of Intention to Drill New Well

DIVISION OF OIL AND GAS
RECEIVED
SEP 15 1982
SANTA PAULA, CALIFORNIA

C.E.Q.A. INFORMATION			
EXEMPT ☐	NEG. DEC. ☐	E.I.R. ☒	DOCUMENT NOT REQUIRED BY LOCAL JURISDICTION ☐
CLASS	S.C.H. NO.	S.C.H. NO. CUP 3344	
See Reverse Side			

FOR DIVISION USE ONLY					
MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121
203	9/13 [illegible]	✓	66	✓	✓

No spacing

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to commence drilling well "Valex-Ferndale" #215, API No. 111-21206 (Assigned by Division),

Sec. 16, T. 4N, R. 21 12W, S.B. B. & M., ~~Silverthread~~ Ojai Field, Ventura County.

Legal description of mineral-right lease, consisting of _____ acres, is as follows: _____ (Attach map or plat to scale)

Previously submitted

Do mineral and surface leases coincide? Yes X No _____. If answer is no, attach legal description of both surface and mineral leases, and map or plat to scale.

Location of well 1245 feet Southerly (Direction) along section / ~~property line~~ (Cross out one) and 4390 feet Easterly (Direction)

at right angles to said line from the NW corner of section / ~~property~~ (Cross out one) 16 or

Is this a critical well according to the definition on the reverse side of this form? Yes ☐ No ☒

If well is to be directionally drilled, show proposed coordinates (from surface location) at total depth: 250 280 feet North (Direction) and 200 267 feet East (Direction)

Elevation of ground above sea level 1443 feet.

All depth measurements taken from top of ~~1443~~ 20 1465 K.B. (Derrick Floor, Rotary Table, or Kelly Bushing) that is ~~20~~ 22 feet above ground.

PROPOSED CASING PROGRAM

SIZE OF CASING INCHES API	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS	CALCULATED FILL BEHIND CASING (Linear Feet)
13-3/8"	48#	H-40	Surf	700'	700'	700' (to surf)
9-5/8"	36#	K-55	Surf	6000'	6000'	2500'
7"	26# 29#	N-80	Surf	9500'	9500'	3000'

(A complete drilling program is preferred and may be submitted in lieu of the above program.)

Intended zone(s) of completion: Upper Miocene 7500' 3200 psi. 8500' 3600 psi. (Name, depth, and expected pressure) Estimated total depth 9500'

It is understood that if changes in this plan become necessary we are to notify you immediately.

Name of Operator	Type of Organization (Corporation, Partnership, Individual, etc.)	
Argo Petroleum Corporation	Corporation	
Address	**City**	**Zip Code**
940 E. Santa Clara	Ventura	93001
Telephone Number	**Name of Person Filing Notice**	**Signature** / **Date**
(805)653-5111	Harry E. Hull	Harry E. Hull / 9-14-82

This notice and indemnity or cash bond shall be filed, and approval given, before drilling begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

D ARTMENT OF CONSERVAT N
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
1000 S. Hill Rd, Suite 116 Ventura, CA 93003-4458
Phone:(805) 654-4761 Fax:(805) 654-4765

REPORT OF WELL ABANDONMENT

Ventura, California
October 07, 2014

Denny Brown
Vintage Production California LLC (V1370)
9600 Ming Avenue, Suite 300
Bakersfield, CA 93311

Your report of abandonment of well **"Valex-Ferndale" 313**, A.P.I. No. **111-21314**, Section **16**, T. **04N**, R. **21W**, **SB** B.&M., **Ojai** field, **Ventura** County, dated **9/11/2014**, received **9/12/2014**, has been examined in conjunction with records filed in this office. We have determined that all of the requirements of this Division have been fulfilled relative to plugging and abandonment of the well, removal of well equipment and junk, and filing of well records.

NOTE:
1. Surface plugging completed on 6/30/2014.

2. Site inspection made and approved on 9/16/2014.

Blanket Bond

Steven Bohlen
State Oil and Gas Supervisor

By _____
Bruce Hesson
District Deputy

tkc

OG159

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

CHECK LIST-RECORDS RECEIVED AND WELL STATUS

Operator: **Vintage Production California LLC** WELL DESIGNATION **"Valex-Ferndale" 313**

API No. **11121314** SE **16** T: **4N** R.: **21W** , **SB** B. and M.

County: **Ventura** FIELD: **Ojai**

Type of Notice: **Abandonment** **Date** **10/8/2013** **Report Number:** **P213-0373**.

RECORDS RECEIVED (ATTACH PAGES IF REQUIRED)

	Date	OK	NEED	Remarks
Well Summary (OG100)				
History (OG103)	9-12-14			
E-Log				
Mud Log				
Dipmeter				
Directional				
Core and/or SWS				

NEW STATUS

DATE: _____

NOTICE OF RECORDS DUE

DATE: _____

DATE: _____

DATE: _____

DATE: _____

WELL STATUS INQUIRY

DATE: _____

DATE: _____

Well Stat

Change Required: Yes

Change Done: TKC 10.7.14

ABANDONMENTS/REABANDONMENTS/DRILLS/REDRILLS

CalWims Abandonment Form: _____ SURFACE INSPECTION NEEDED _____ COMPLETED 9-16-2014 *Date and Inspector*

FINAL LETTER NEEDED Yes COMPLETED 10.7.14 *(Date)* Calwims DRILL/REDRILL Form _____

ENGINEER'S CHECK LIST

T-REPORT(S) _____ OPERATOR'S NAME _____ WELL DESIGNATION _____ SIGNATURE _____

Calwims Location _____ Calwims ELEVATION: _____ CONFIDENTIAL RELEASE DATE: _____ PERMIT REQUIREMENTS MET _____

CLERICAL CHECK LIST

LOCATION CHANGE (OG165) _____ ELEVATION CHANGE (OG165) _____ RELEASE OF BOND (OG150) _____

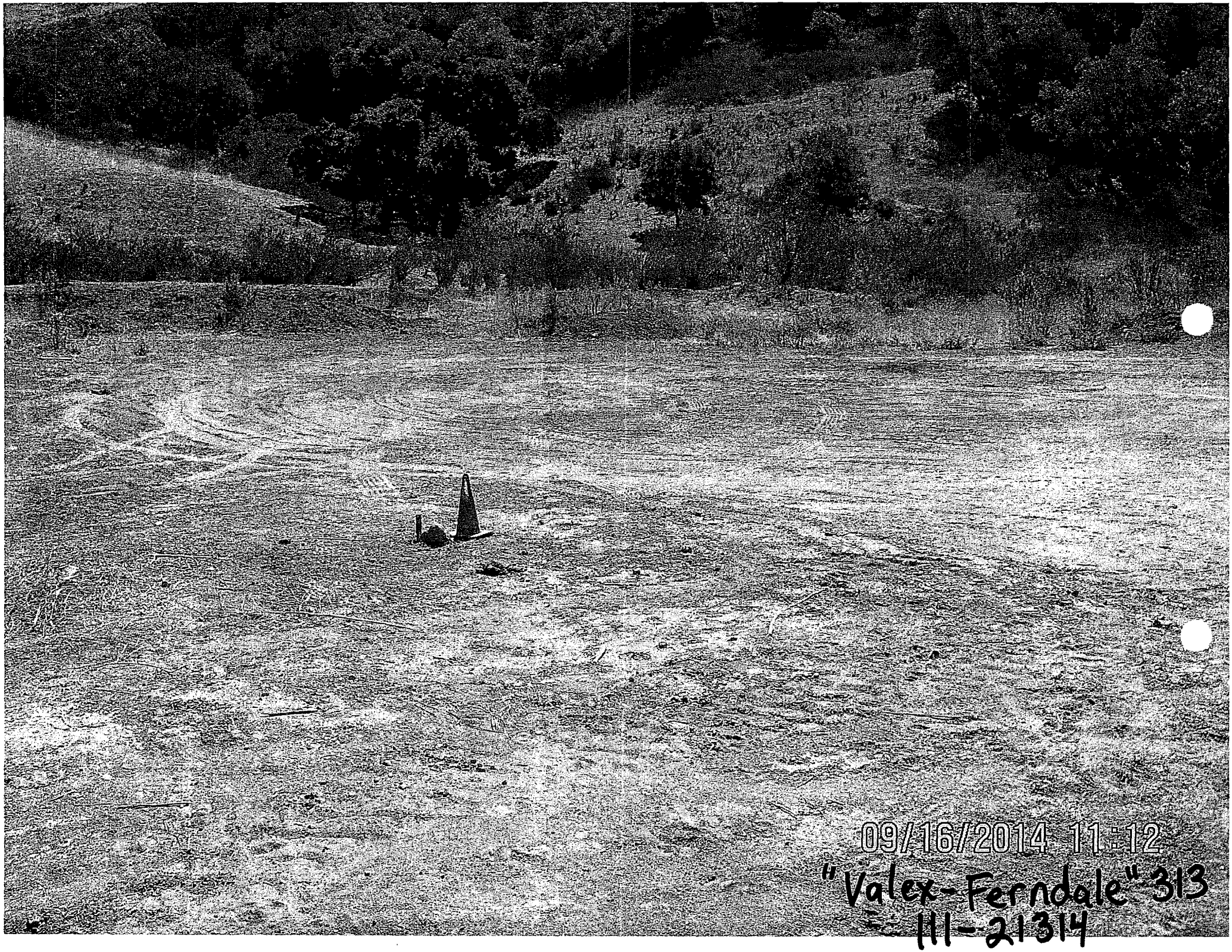
REMARKS

RECORDS SCANNED: _____ (Date)

RECORDS APPROVED: 9-22-2014 BH (Date and Engineer)

Modified OGD2

AOR Database _____


09/16/2014 11:12
"Valex-Ferndale" 313
111-21314

SUBMIT IN DUPLICATE
RESOURCES AGENCY OF CALIFORNIA
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES

Rec'd 09-12-14 DOGGR D2 Ventura

HISTORY OF OIL OR GAS WELL

Operator: Vintage Production California LLC **Field:** OJAI **County:** VENTURA
Well: Valex-Ferndale 313 **Sec:** 16 **T:** 4N **R:** 21W **M.D.B. & M.**

API#: 04-111-21314 **Name:** Deborah Young for Denny Brown (Person submitting report) **Title:** Agent (President, Secretary, or Agent)

Signature: [signature] **Date** 09/11/2014

9600 Ming Ave., Suite 300, Bakersfield, CA. 93311 (Address) (661) 869-8000 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items such as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, and initial production data.

Well Abandonment

Work Type	Primary Reason	Secondary Reason	Start Date	End Date
ABANDONMENT	PLUG & ABANDON		04/24/2014	06/30/2014

4/23/2014 @06:00 **04/24/2014** @06:00

Shut down for the night.

Attend Vintage safety meeting in Santa Paula at Garmans.

Discussed planned operations and filled out required permits.

Drop rig mat and rig up hoist.

Held third party safety with Patriot. Fill tubing. R/O Vac truck. L/D head.

Unseat pump and L/D polish rod and jewelry.

Lunch

Tubing pressure = 10 psi.
Casing pressure = 70 psi.
Function test BOPE = Good.

POOH W/ rods and pump lying down. Laid down 1 = 1 1/2 x 30 ft. polish rod, 2 = 7/8 x 4 rod subs, 78 = 1" slick N-97,78 = 7/8 slick N-97, 97 = 3/4 slick N-97, 1 = 1.75 rod pump. Pump was standing full of fluid. Send rods in for inspection.

Cleanup and N/D head bolts. All very tight and rusty. Break out top flange and install lifting nipple and TIW valve.

Shut down for the night.

4/24/2014 @06:00 **04/25/2014** @06:00

Shut down for the night.

Discussed planned operations and filled out required permits.

N/U BOP and function test. Contact DOGGR. Kris Gustafson. Waived. test. R/U work floor.

Tubing Pressure = 0 psi.
Casing Pressure = 0 psi.
Accumulator Pre-Charge Pressure = 1100 psi.
Initial Accumulator Pressure = 3000 psi.
Manifold Pressure = 1500 psi.
Annular Pressure = No Annular Preventer Installed.
Time to close pipe rams = 3 sec.
Time to open pipe rams = 2 sec.
Time to close Annular BOP = No Annular Preventer Installed.
Final Accumulator Pressure = 2650 psi.
Function Test BOPE = Good

Start POOH w/ 2 7/8 EUE 8rd tubing. POOH standing back a total of 40 stands.

Lunch

Cont POOH w/ tbg. A total of 241 joints of 2 7/8 EUE 8rd. N-80, 1 = Hyd anchor, 1 = R drain, 1 = T/L shoe. RIH w/ 20 joint kill string. Secure well for the weekend.

Crew travel from Ferndale 313 to Bakersfield.

Shut down for the night.

4/27/2014 @06:00 **04/28/2014** @06:00

HISTORY OF OIL OR GAS WELL

Operator: Vintage Production California LLC **Field:** OJAI **County:** VENTURA
Well: Valex-Ferndale 313 **Sec:** 16 **T:** 4N **R:** 21W **M.D.B. & M.**

Shut down for the night.

Crew travel from Bakersfield to Ferndale 313.

Discussed planned operations and filled out required permits.

Tubing Pressure = 0 psi.
Casing Pressure = 0 psi.
Accumulator Pre-Charge Pressure = 1100 psi.
Initial Accumulator Pressure = 3000 psi.
Manifold Pressure = 1500 psi.
Annular Pressure = No Annular Preventer Installed.
Time to close pipe rams = 3 sec.
Time to open pipe rams = 2 sec.
Time to close Annular BOP = No Annular Preventer Installed.
Final Accumulator Pressure = 2650 psi.
Function Test BOPE = Good

POOH w/ 2 7/8 kill string. Stand back in the derrick.

Held third party safety meeting with Baker Tech. P/U Retrieving tool. RIH w/ tubing from derrick ran a total of 60 stands.

Lunch

Cont RIH w/ tubing and retrieving tool RIH with a total of 210 joints. Secure well for the night.

Shut down for the night.

4/28/2014 @06:00 **04/29/2014** @06:00

Shut down for the night.

Discussed planned operations and filled out required permits.

Tubing Pressure = 0 psi.
Casing Pressure = 0 psi.
Accumulator Pre-Charge Pressure = 1100 psi.
Initial Accumulator Pressure = 3000 psi.
Manifold Pressure = 1500 psi.
Annular Pressure = No Annular Preventer Installed.
Time to close pipe rams = 3 sec.
Time to open pipe rams = 2 sec.
Time to close Annular BOP = No Annular Preventer Installed.
Final Accumulator Pressure = 2650 psi.
Function Test BOPE = Good

L/D swivel and POOH W/ 5 Stands.

Rig broke down Hyd pump went out. Called for a mechanic. Replaced pump. Got back running.

Cont POOH w/ tubing pulled another 5 stands. Rig broke down again.

Hyd pump went out again.

Shut down for the night.

4/29/2014 @06:00 **04/30/2014** @06:00

Shut down for the night.

Discussed planned operations and filled out required permits.

Tubing Pressure = 0 psi.
Casing Pressure = 0 psi.
Accumulator Pre-Charge Pressure = 1100 psi.
Initial Accumulator Pressure = 3000 psi.
Manifold Pressure = 1500 psi.
Annular Pressure = No Annular Preventer Installed.
Time to close pipe rams = 3 sec.
Time to open pipe rams = 2 sec.
Time to close Annular BOP = No Annular Preventer Installed.
Final Accumulator Pressure = 2650 psi.
Function Test BOPE = Good

Replace Hyd pump.

Cont POOH w/ tubing and retrieving tool L/D tool. P/U 4 1/2 bit.

HISTORY OF OIL OR GAS WELL

Operator: Vintage Production California LLC **Field:** OJAI **County:** VENTURA
Well: Valex-Ferndale 313 **Sec:** 16 **T:** 4N **R:** 21W **M.D.B. & M.**

Lunch

Waiting on Baker Hughes to deliver correct dog collar.

P/U 4 1/2 premium drill bit and 4 - 3 1/8 Baker Hughes drill collars. RIH W/ tubing to top of fill @ 7472. P/U power swivel. Secure well for the night.

Shut down for the night.

4/30/2014 @06:00 **05/01/2014** @06:00

Shut down for the night.

Discussed planned operations and filled out required permits.

Tubing Pressure = 0 psi.
Casing Pressure = 0 psi.
Accumulator Pre-Charge Pressure = 1100 psi.
Initial Accumulator Pressure = 3000 psi.
Manifold Pressure = 1500 psi.
Annular Pressure = No Annular Preventer Installed.
Time to close pipe rams = 3 sec.
Time to open pipe rams = 2 sec.
Time to close Annular BOP = No Annular Preventer Installed.
Final Accumulator Pressure = 2650 psi.
Function Test BOPE = Good

Cont drilling out fill with 4 1/2 drill bit and collars only made 6 in. Shut down power swivel.

Lunch

Attempt injection rate with MMI mud pump 3 bbls of lease water right to 1000 psi bleed off to 500 psi in two minutes. Holding @ 500 psi.

Single out rig start POOH w/ tubing and bit to inspect. POOH left 30 stands in the hole plus 4 drill collars and 4 1/2 bit. Secure well.

Shut down for the night.

5/1/2014 @06:00 **05/02/2014** @06:00

Shut down for the night.

Discussed planned operations and filled out required permits.

Tubing Pressure = 0 psi.
Casing Pressure = 0 psi.
Accumulator Pre-Charge Pressure = 1100 psi.
Initial Accumulator Pressure = 3000 psi.
Manifold Pressure = 1500 psi.
Annular Pressure = No Annular Preventer Installed.
Time to close pipe rams = 3 sec.
Time to open pipe rams = 2 sec.
Time to close Annular BOP = No Annular Preventer Installed.
Final Accumulator Pressure = 2650 psi.
Function Test BOPE = Good

Cont POOH w/ tubing and collars 4 1/2 bit. Bit is missing cones. only 10 hours use.

Lunch

RIH W/ 20 joint kill string. Land on donut. Contact DOGGR Kris Gustafson about bad casing and sent him pics of bit. Will talk it over with Bruce Hesson. Secure well. Crew shut down for the weekend.

Crew travel from Femdale VF 313 to Bakersfield.

Shut down for the night.

5/4/2014 @06:00 **05/05/2014** @06:00

Shut down for the night.

Crew travel from Bakersfield to Femdale VF 313.

Discussed planned operations and filled out required permits.

HISTORY OF OIL OR GAS WELL

Operator: Vintage Production California LLC **Field:** OJAI **County:** VENTURA
Well: Valex-Ferndale 313 **Sec:** 16 **T:** 4N **R:** 21W **M.D.B. & M.**

Tubing Pressure = 0 psi.
Casing Pressure = 0 psi.
Accumulator Pre-Charge Pressure = 1100 psi.
Initial Accumulator Pressure = 3000 psi.
Manifold Pressure = 1500 psi.
Annular Pressure = No Annular Preventer Installed.
Time to close pipe rams = 3 sec.
Time to open pipe rams = 2 sec.
Time to close Annular BOP = No Annular Preventer Installed.
Final Accumulator Pressure = 2650 psi.
Function Test BOPE = Good

Down waiting on orders.

Shut down for the night.

5/5/2014 @06:00 **05/06/2014** @06:00

Shut down for the night.

Discussed planned operations and filled out required permits.

Tubing Pressure = 0 psi.
Casing Pressure = 0 psi.
Accumulator Pre-Charge Pressure = 1100 psi.
Initial Accumulator Pressure = 3000 psi.
Manifold Pressure = 1500 psi.
Annular Pressure = No Annular Preventer Installed.
Time to close pipe rams = 3 sec.
Time to open pipe rams = 2 sec.
Time to close Annular BOP = No Annular Preventer Installed.
Final Accumulator Pressure = 2650 psi.
Function Test BOPE = Good

POOH w/ 20 joint kill string and 4 = 3 1/2 Baker Hughes drill collars. P/U and make up Baker Hughes string mill 4 1/2 .

Lunch

RIH w/ tubing from derrick to top of bad casing @ 7470. P/U power swivel start drilling on casing with string mill to no avail. Nothing seen over shaker. Pumping @ 3.5 BPM at 450 psi. Pull above bad casing 300 feet. Secure well.

Crew travel from Ferndale VF 313 to Bakersfield.

Shut down for the night.

5/11/2014 @06:00 **05/12/2014** @06:00

Shut down for the night.

Crew travel from Bakersfield to Ferndale VF 313.

Discussed planned operations and filled out required permits.

Tubing Pressure = 0 psi.
Casing Pressure = 0 psi.
Accumulator Pre-Charge Pressure = 1100 psi.
Initial Accumulator Pressure = 3000 psi.
Manifold Pressure = 1500 psi.
Annular Pressure = No Annular Preventer Installed.
Time to close pipe rams = 3 sec.
Time to open pipe rams = 2 sec.
Time to close Annular BOP = No Annular Preventer Installed.
Final Accumulator Pressure = 2650 psi.
Function Test BOPE = Good

Load out MMI mud pump. And MMI power swivel.

RIH w/ 8 joints in the derrick. Start POOH w/ tubing 2 7/8 N-80 EUE 8rd. lying down. Lay down a total of 162 joints for the day. Secure well for the night.

Shut down for the night.

5/12/2014 @06:00 **05/13/2014** @06:00

Shut down for the night.

HISTORY OF OIL OR GAS WELL

Operator: Vintage Production California LLC **Field:** OJAI **County:** VENTURA
Well: Valex-Ferndale 313 **Sec:** 16 **T:** 4N **R:** 21W **M.D.B. & M.**

Discussed planned operations and filled out required permits.

Tubing Pressure = 0 psi.
Casing Pressure = 0 psi.
Accumulator Pre-Charge Pressure = 1100 psi.
Initial Accumulator Pressure = 3000 psi.
Manifold Pressure = 1500 psi.
Annular Pressure = No Annular Preventer Installed.
Time to close pipe rams = 3 sec.
Time to open pipe rams = 2 sec.
Time to close Annular BOP = No Annular Preventer Installed.
Final Accumulator Pressure = 2650 psi.
Function Test BOPE = Good

Cont POOH w/ 2 7/8 EUE 8rd tubing laid down a total of 70 joints and 4 = 3 1/2 Baker Hughes drill collars. 1 = Baker Hughes string mill.

Lunch

Load out tubing tools. R/D work floor. N/D BOP.N/U Tree. Prepped for MMI CTU.

Drop guy wires and rig down hoist.

Pre trip for rig move to Edwards 17.

Move rig from Ferndale VF 313 to Edwards 17.

Shut down for the night.

6/11/2014 @06:00 **06/12/2014** @06:00

Shut down for the night.

Lunch

Discussed planned operations and filled out required permits.

Rig up MMI CTU and equipment.

Tubing pressure = 20 psi.
Casing pressure = 30 psi
Function test BOPE = Good.

RIH W/ MMI CTU and stack out on liner top @ 6730. POOH w/ coil and cut off bad 1 1/2 coil 3 feet. Cut and bend coil to re enter liner top. RIH with no problems to 7470.

Mix and pump 75 cubic feet of class G cement + 35% silica flour + additives from 7470 to ETOC @ 6970. Displace coil and wash up. POOH w/ coil and secure well. R/U MMI W/L shoot perf from 595 to 600. R/O MMI W/L.

Shut down for the night.

6/12/2014 @06:00 **06/13/2014** @06:00

Shut down for the night.

Discussed planned operations and filled out required permits.

Tubing pressure = 0 psi.
Casing pressure = 0 psi.
Function test BOPE = Good.

RIH W/ MMI CTU and tag well @ 6970. DOGGR waived tag. Kris Gustafson. Mix and pump 160 cubic feet of class G cement +35% silica flour + additives from 7066 to ETOC @ 6300. Displace and wash up coil. POOH w/ coil and secure well.

Rig out MMI CTU and equipment.

Move MMI CTU from Ferndale VF 313 to Ferndale 2.

Shut down for the night.

6/18/2014 @06:00 **06/19/2014** @06:00

Shut down for the night.

Discussed planned operations and filled out required permits

Tubing pressure = 0 psi.
Casing pressure = 0 psi.
Function test BOPE = Good.

RIH W/ MMI CTU tag well @ 6380. DOGGR Dave Ortiz witnessed tag. Mix and pump 220 bbls of abandonment mud from 6380 to 600 feet. Displace coil. Mix 35 cubic feet of class G cement + 35% silica flour + additives from 600 feet to surface displace coil and wash up. POOH w/ coil.

Shut down for the night.

HISTORY OF OIL OR GAS WELL

Operator: Vintage Production California LLC **Field:** OJAI **County:** VENTURA
Well: Valex-Ferndale 313 **Sec:** 16 **T:** 4N **R:** 21W **M.D.B. & M.**

6/24/2014 @06:00 **06/25/2014 @06:00**

Discussed JSA's.
Cut off well head, Cut off well head, Welded top plate. cleaned up all scrap metal. Hauled off excess contaminated dirt. Brought in 2 loads of clean dirt.
Shut down for night.

6/26/2014 @06:00 **06/27/2014 @06:00**

Shut down for night
Discussed JSA, LOTO & job operations. Made all paperwork
Spotted CTU
Topped off annulus with 50 cubic feet . G with 35% sillica flour . Washed up equipment .
Secured well & location
Shut down for night.

6/29/2014 @06:00 **06/30/2014 @06:00**

DOGGR inspected top plug. Welded top plate and back filled. Well completed. Final inspection done by Mark Davis DOGGR.

New Holes

Wellbore No.	Hole Size (in)	Top MD (ft)	Btm MD (ft)	Start Date	End Date

New Casing/Liner Strings

Size	Assembly Name	Installed	Wellbore No	Top MD (ft)	Btm MD (ft)

New Perforated Intervals

Date Shot	Wellbore No.	Top MD (ft)	Btm MD (ft)	Length (ft)	SPF	Phasing (°)
06/12/2014	00	595	600	5	4	90.00

Status of the particular flowline is unknown. However it is standard practice to remove flow lines from well location back to production header. The lines are cut, drained, flushed and removed. Surface restoration was verified by DOGGR representative Mark Davis.

DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
1000 S. Hill Rd, Suite 116 Ventura, CA 93003-4458
Phone:(805) 654-4761 Fax:(805) 654-4765

No. T214-0270

REPORT ON OPERATIONS

Denny Brown
Vintage Production California LLC (V1370)
9600 Ming Avenue, Suite 300
Bakersfield, CA 93311

Ventura, California
July 11, 2014

Your operations at well **"Valex-Ferndale" 313**, A.P.I. No. **111-21314**, Sec. **16**, T. **04N**, R. **21W**, **SB** B. & M., **Ojai** field, in **Ventura** County, were witnessed on **6/30/2014** by , a representative of the supervisor.

The operations were performed for the purpose of **plugging and abandonment**.

DECISION:

APPROVED

Steven Bohlen
State Oil and Gas Supervisor

By _____
Bruce Hesson
District Deputy

/tkc
OG109

T 2N-21W

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

CEMENTING/PLUGGING MEMO

Operator VINTAGE PROD. CALIF LLC Well No. "VALEX-FERNDALE" 313

API No. 111-21314 Sec. 16 T. 4N R. 21W SB B&M

Field OJAI , County VENTURA . On 6-30-14 ,

Mr. / ~~Ms.~~ C. Knight representative of the supervisor, was present from 0900 to 0930 .

There were also present Richard Floro w/MMI

Casing record of well:

The operations were performed for the purpose of:

PLUG & ABANDON

☒ The plugging/cementing operations as witnessed and reported are approved.

☐ The location and hardness of the cement plug @ _____ ' are approved.

Hole size: _____ " fr. _____ ' to _____ ', _____ " to _____ ' & _____ " to _____ '

Casing				Cemented			Top of Fill		Squeezed Away	Final Pressure	Perforations
Size	Wt.	Top	Bottom	Date	MO-Depth	Volume	Annulus	Casing			
5½"	20#	6730'	8195'	6-12-14	7066'	62CF			12CF		
											595-600

Casing/tubing recovered: _____ " Shot/cut at _____ ', _____ ', _____ ', Pulled fr. _____ ';

_____ " Shot/cut at _____ ', _____ ', _____ ', Pulled fr. _____ '.

Junk (in hole): _____

Hole fluid (bailed to) at _____ '. Witnessed by _____

Mudding	Date	bbls	Displaced	Poured	Fill	Engineer
10.0	6-19-14	227bbls	6380'	—	600'	D.O.

CIO 7470' E.B. capped 6-12-14

Cement Plugs		Placing	Placing Witnessed		Top Witnessed			
Date	Sx/cf	MO & Depth	Time	Engineer	Depth	Wt/Sample	Date & Time	Engineer
6-12-14	62	7470'	—	RPTD	7066	ATW	6-13-14	RPTD.
6-13-14	150	7066	—	RPTD	6380	ATW	14:30 6-15-14	D.O.
6-19-14	236	600'	—	RPTD	surface	returns	6-19-14	RPTD
6-30-14	50.	poured from surface	—	RPTD	surface	visual	6-30-14	CK/KG

TURAL RESOURCES AGENCY OF CALIFOR
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
1000 S. Hill Rd, Suite 116 Ventura, CA 93003 - 4458

PERMIT TO CONDUCT WELL OPERATIONS

No. P 213-0373

Old	New	
520	520	FIELD CODE
12	12	AREA CODE
10	10	POOL CODE

Ventura, California
October 21, 2013

Alan E. White, Agent
Vintage Production California LLC (V1370)
9600 Ming Avenue, Suite 300
Bakersfield, CA 93311

Your proposal to **Abandon** well **"Valex-Ferndale" 313**, A.P.I. No. **111-21314**, Section **16**, T. **04N**, R. **21W**, **SB** B. & M., **Ojai** field, **Silverthread** area, **Miocene** pool, **Ventura** County, dated **10/8/2013**, received **10/8/2013** has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED:

1. Blowout prevention equipment, as defined by this Division's publication No. MO7, shall be installed and maintained in operating condition and meet the following minimum requirements: **Class II 2M**
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. A diligent effort shall be made to clean out to 8,054'
4. **The well shall be perforated at the base of freshwater from 595'-600'.**
5. All portions of the well not plugged with cement are filled with inert mud fluid having a minimum density of 72lbs.,cu. ft (9.6 Lbs/gal) and a minimum gel shear strength of 25lbs./100 sq. ft.
6. Well site restoration shall be completed within 60 days following the completion of plugging.
7. This office shall be contacted by phone prior to making any program changes and no changes are made without Division approval.
8. **THIS DIVISION SHALL BE NOTIFIED TO:**
   a. Inspect the installed blowout prevention equipment prior to commencing abandonment operations.
   b. Witness the location and hardness of the cement plug at 6,630'.
   c. Witness the mudding operations.
   d. Witness the placing of the cement plug from 600' to surface.
   e. Witness the location and hardness of cement at surface, including all annular spaces after the wellhead has been cut off. If necessary, fill the annulus with cement from 30' to surface.
   f. Inspect the restored well site.

Tim Kustic
State Oil and Gas Supervisor

Blanket Bond Dated: 4/23/2003

Engineer Bruce Hesson
Office (805) 654-4761

By _____
Bruce Hesson, *District Deputy*

BH/bh

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended. Issuance of this permit does not affect the Operator's responsibility to comply with other applicable state, federal, and local laws, regulations, and ordinances.

NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

Rec'd 10-08-13 DOGGR D2 Ventura

FOR DIVISION USE ONLY		
	Forms	
Bond	~~OGD114~~	OGD121 ✓
	CALWIMS	1151 ✓

520/12/10
OE

NOTICE OF INTENTION TO ABANDON / RE-ABANDON WELL

Detailed instructions can be found at: www.conservation.ca.gov/dog

SILVERTHREAD Area Miocene "10" P213-0373

In compliance with Section 3229, Division 3, Public Resources Code, notice is hereby given that it is our intention to abandon ☒ / re-abandon ☐ (Check one) well "Valex-Ferndale" 313, API No. 04-111-21314,

Sec. 16, T. 4N, R. 21W, SB B.&M., Ojai Field, Ventura County.

The complete casing record of the well (present hole), including plugs and perforations, is as follows: (Attach wellbore schematics diagram also.)

13 3/8", 48#, J55 Surface Csg cmt'd @ 712'.
9 5/8", 36#, K55 Prod. Csg cmt'd @ 6538'.
7", 23#, N80, 21'-6452'. tie back bowl, 7 5/8", 33.7# N80, 6457' - 6895'.
5", 20#, N80, liner, Top @ 6730', Landed @ 8195'.
Perforated; 7545'-8054';

Bridge Plug @ 7780' ✓

The total depth is: 8195 feet. The effective depth is: 7780 ✓ feet.

Present completion zone(s): Mohnian (Name). Present zone pressure: 1000 psi.

Oil or gas shows: _____ (Name and depth) feet. Depth to base of fresh water: ± 600' ✓ feet.

Top of uppermost hydrocarbon zone (which may be behind unperforated casing): ± 1600' (Depth of interval) feet.

Is this a critical well as defined in the California Code of Regulations, Title 14, Section 1720(a) (see next page)? Yes☐ No☒

The proposed work is as follows: (A complete program is preferred and may be attached.)

Pull rods and tubing. Pull bridge plug at 7780'. ✓
Circulate Clean to 8054'.
Place 1500' bottom cement plug from 8054' up to 6630'.
Perforate 7" casing from 595' to 600' with 4 JHPF. ✓
With mud from 6630' to 600', place surface cement plug from 600' to surface. ✓ Fill annulus to -30'.
Restore site.

The Division must be notified immediately of changes to the proposed operations. Failure to provide a true and accurate representation of the well and proposed operations may cause rescission of the permit.

Name of Operator			
Vintage Production California LLC			
Address: 9600 Ming Ave. Suite 300		City/State: Bakersfield, Ca.	Zip Code: 93311
Name of Person Filing Notice: Deborah Young for Denny Brown	Telephone Number: 661-869-8178	Signature	Date: 10/08/2013
Individual to contact for technical questions: Geoff Kimler	Telephone Number: 661-340-8743	E-Mail Address: geoff_kimler@oxy.com	

This notice must be filed, and approval given, before plugging and abandonment operations begin. If operations have not commenced within one year of the Division's receipt of the notice, this notice will be considered cancelled.

CRITICAL WELL DEFINITION

As defined in the California Code of Regulations, Title 14, Section 1720 (a), "Critical well" means a well within:

(1) 300 feet of the following:
  (A) Any building intended for human occupancy that is not necessary to the operation of the well; or
  (B) Any airport runway.
(2) 100 feet of the following:
  (A) Any dedicated public street, highway or the nearest rail of an operating railway that is in general use;
  (B) Any navigable body of water or watercourse perennially covered by water;
  (C) Any public recreational facility such as a golf course, amusement park, picnic ground, campground or any other area of periodic high-density population; or
  (D) Any officially recognized wildlife preserve.

This form may be printed from the DOGGR website at www.conservation.ca.gov/dog/

Rec'd 10-08-13 DOGGR D2 Ventura

VINTAGE PRODUCTION CALIFORNIA, LLC

Ojai Field
Ventura Country, California
Ferndale VF 313 - P&A Program
August 31, 2013

Ferndale VF 313
P&A Program

Well Data:
API #: 04-111-21314
Location: Sec. 16-T4N-R21W SB B&M
Commenced Drilling: 10/20/84
Completed Drilling: 01/05/85
Ground Level: 1179'
Kelly Bushing: 1200'
All measurements are from KB; 21'
BFW @ ± 600 **Top of Hydrocarbon @** ± 1600'
TD @ 8195' **ED @** 7941'

Casing: 13 3/8", 48#, J55 Surface Csg, Cmt'd @ 712'.
9 5/8", 36#, K55 Prod. Csg Cmt'd @ 6538'.
7", 23#,N80, 31' to 6452'.Tie back Receptacle to;
7 5/8", 33.7#, N80, 6457' to 6895'. Cemented @ 6895'.
5.5", 20#, N80 Prod liner, Top @ 6730', landed @ 8195'.

Perforations: 7545' to 8054'.

Plugs: 5 ½" lock set Bridge plug @ 7780'. Set March, 2000.

Tubing Detail: 2 7/8" to 7475'. Rods and pump

Proposed Program:

Note: Contact the DOGGR representative to witness all procedural steps required to be witnessed (i.e.; clean-out depth, cement plug placement and hardness, perforating, mudding operations, surface plug and site restoration). All cement slurries and abandonment mud will conform to DOGGR specifications.

1. Make lease inspection and determine if tubing and packers are present. Remove pumping unit, pedestal and flowlines. MIRU a production hoist. Bleed well off. Circulate and kill well as necessary.

2. Install a back pressure valve. Remove tree and install a DOGGR Class II (2M) BOP. Pull and lay done tubing. **Do not initiate any downhole work until DOGGR has inspected BOPE.**

VINTAGE PRODUCTION CALIFORNIA, LLC

Ojai Field
Ventura Country, California
Ferndale VF 313 - P&A Program
August 31, 2013

3. With additional tubing (retrieving tool may still be on bottom of tubing string) attempt to run down and latch on to bridge plug. Pull and lay down tubing and bridge plug. If unsuccessful pull out and run in with new retrieving tool.

4. MIRU CTU or stand pulling unit. RIH with open-ended tubing and make diligent effort to clean out to 8054', or deeper. **Notify DOGGR to witness clean-out depth.**

5. Rig up cementers. Lay a Cement Plug (Class G Cmt + 35% Silica Flour + additives) from 8054' up to 6630', (Calculated Volume + 50% excess of perf'd interval: 265 cft.). Place plugs in three stages as needed.

6. RIH and tag plug at or above 6630', re-cement if necessary. **Notify DOGGR to witness tag.**

7. MIRU wireline perforating truck. Perforate 7" casing with 4, 0.5" dia JHPF, from 595' to 600'.

8. Spot abandonment Mud from top of plug @ 6630' up to 600'. Abandonment mud shall conform to DOGGR permit specifications – 76 lb/cft with a minimum gel strength of 26 lbs./100 sq ft. (Calculated Volume: 240 bbls). **Notify DOGGR to witness mud operation.**

9. Rig up cementers. Lay a Cement Plug (Class G Cmt + 35% Silica Flour + additives) from 600' to surface, (Calculated Volume + 10% excess: 26 cft.). **Notify DOGGR to witness.**

10. Fill all un-cemented annuli to a depth of at least 30' to 5' with cement. Dig outside the conductor casing 7' below ground level. Cut casings off 5' below ground level. Weld on a steel top plate with well identification, well name and API #. Remove cellars and pads. **Notify DOGGR to witness surface abandonment.**

11. Restore surface location to original grade within 60 days. **DOGGR to make final inspection.**

Rec'd 10-08-13 DOGGR D2 Ventura

VINTAGE PRODUCTION CALIFORNIA, LLC

Ojai Field
Ventura Country, California
Ferndale VF 313 - P&A Program
August 31, 2013

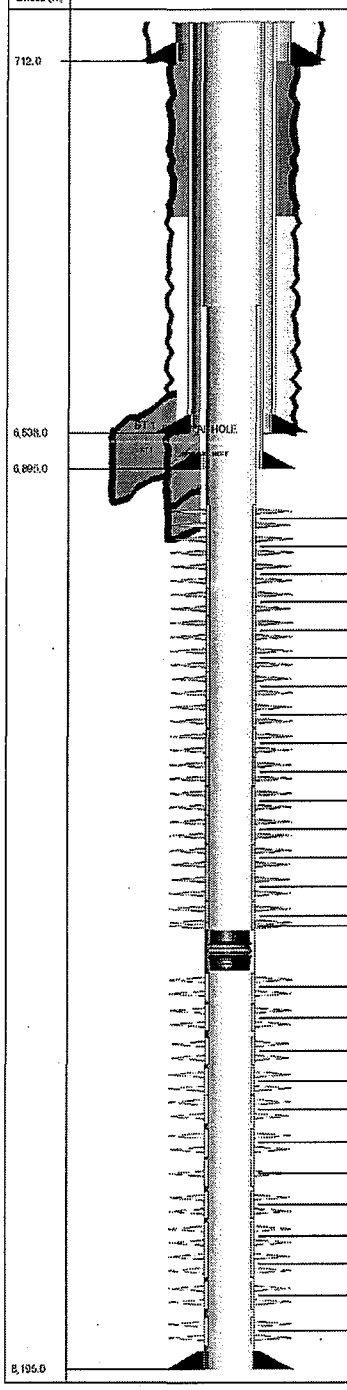
VINTAGE PETROLEUM LLC - CALIFORNIA

FERNDALE VF 313

Event: DEVDRILLING
Event End: 6/6/2000 00:00
Sec. Reason:

Water Depth: 1,179.0ft
Datum: Original KB @ 1,200.00ft (default)
API No.: 0411121314

Wellbore: ST3
PBMD:
Btm TMD:
Spud Date: 10/20/1984 00:00
BH Coord X:
BH Coord Y:



Openings Top/Btm/Type/Status

7,545.0ft, 7,545.5ft, PERFORATED, OPEN
7,547.5ft, 7,549.0ft, PERFORATED, OPEN
7,550.0ft, 7,556.5ft, PERFORATED, OPEN
7,570.0ft, 7,570.5ft, PERFORATED, OPEN
7,583.0ft, 7,583.5ft, PERFORATED, OPEN
7,588.5ft, 7,589.0ft, PERFORATED, OPEN
7,600.0ft, 7,604.5ft, PERFORATED, OPEN
7,614.0ft, 7,618.0ft, PERFORATED, OPEN
7,637.0ft, 7,637.5ft, PERFORATED, OPEN
7,656.5ft, 7,657.0ft, PERFORATED, OPEN
7,677.0ft, 7,677.5ft, PERFORATED, OPEN
7,695.0ft, 7,695.5ft, PERFORATED, OPEN
7,718.5ft, 7,719.0ft, PERFORATED, OPEN
7,744.0ft, 7,744.5ft, PERFORATED, OPEN
7,703.0ft, 7,771.0ft, PERFORATED, SQUEEZED
7,770.5ft, 7,771.0ft, PERFORATED, OPEN
7,801.0ft, 7,801.5ft, PERFORATED, ISOLATED
7,820.0ft, 7,820.5ft, PERFORATED, ISOLATED
7,855.0ft, 7,855.5ft, PERFORATED, ISOLATED
7,873.0ft, 7,873.5ft, PERFORATED, ISOLATED
7,875.5ft, 7,876.0ft, PERFORATED, ISOLATED
7,910.0ft, 7,910.5ft, PERFORATED, ISOLATED
7,950.0ft, 7,950.5ft, PERFORATED, ISOLATED
7,954.0ft, 7,954.5ft, PERFORATED, ISOLATED
7,977.0ft, 7,977.5ft, PERFORATED, ISOLATED
7,980.0ft, 7,980.5ft, PERFORATED, ISOLATED
8,004.0ft, 8,004.5ft, PERFORATED, ISOLATED
8,052.0ft, 8,051.0ft, PERFORATED, ISOLATED

PLUG BACK Report Date: 3/25/2000 00:00

Component	Top MD (ft)	Btm MD (ft)
BRP	7,780.0	7,783.0

SURFACE CASING Report Date: 10/22/1984 00:00

Item	OD (in)	Grade	Wt. (ppf)	Top MD (ft)	Btm MD (ft)
CASING JOINT(S)	13.375	J-55	48.00	21.0	712.0

PRODUCTION CASING Report Date: 11/12/1984 00:00

Item	OD (in)	Grade	Wt. (ppf)	Top MD (ft)	Btm MD (ft)
CASING JOINT(S)	9.625	K-55	36.00	21.0	6,538.0

PRODUCTION CASING Report Date: 12/20/1984 00:00

Item	OD (in)	Grade	Wt. (ppf)	Top MD (ft)	Btm MD (ft)
Casing	7.000		23.00	21.0	6,452.0
TIE BACK RECEPTACLE			29.70	6,452.0	6,457.0
Casing	7.625		33.70	6,457.0	6,895.0

PRODUCTION LINER Report Date: 1/5/1985 00:00

Item	OD (in)	Grade	Wt. (ppf)	Top MD (ft)	Btm MD (ft)
CASING HANGER	6.765	N-80	20.00	6,730.0	6,733.0
Casing	5.500	N-80	20.00	6,733.0	8,195.0

PROPERTY/WELL TRANSFER OR ACQUISTION

Seneca Resources Corporation (S2630)

to

Vintage Production California LLC (V1370)

Effective April 25, 2008

ERATOR Argo/Petrol.
WELL NO. "Valley-Ferndale" 3/3
MAP

INTENTION	drill	Supp drill	rework			
NOTICE DATED	9/10/84	12-20-84	3/17/00			
P-REPORT NUMBER	284-304	285-01	200-79			
CHECKED BY/DATE	pmc 7/29/85	pmc 7/26/85	AA 4-17-00			
MAP LETTER DATED		pmc 5/1/86				
SYMBOL	●	●				

	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED
NOTICE	9/10/84		12/27/84		3/17/00							
HISTORY	7/23/85		7/23/85		4-17-00							
SUMMARY	7/23/85		7/23/85									
E-LOG (2"+5")	7/23/85											
MUD LOG	7/23/85											
DIPMETER (5")	7/23/85											
DIRECTIONAL	9/23/85											
CORE/SWS												
CBL (5")	7/23/85		7/23/85									
Comp. Acousticlog	7/23/85											
CDNL	9/23/85											
6 Mth prod.			5/1/86 *									

ENGINEERING CHECK

T--REPORTS	✓	✓				
OPERATOR'S NAME	✓	✓				
WELL NO.	✓	✓				
LOC & ELEV	✓	✓				
SIGNATURE	✓	✓				
SURFACE INSP.						
DRILL CARD						

RECORD'S COMPLETE _____ pmc 5/1/86 AA 4-18-00 _____ _____ _____

FINAL LETTER _____ OK _____
MAILED _____
RELEASED BOND _____

INJECTION BOOK _____
IDLE WELL LIST _____
SURFACE INSP. CARD _____

REMARKS: 1985 -
* Good Prod. = average of 24 o/o cut
Release from conf status MS 8/19/87

ISION OF OIL, GAS, AND GEOTHERM RESOURCES
HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION
WELL: FERNDALE 313
API #: 111-21314

SIVERTHREAD FIELD, VENTURA COUNTY
SEC16, T4N, R21W, SBB&M
FARIBA M. NEESE - SUPERVISING ENGINEER

P.O. BOX 630, SANTA PAULA, CALIFORNIA, 93061 (805) 933-2217

****

3-21-2000
Day 1. MIRU. Bled tbg, pulled pump loose, LD subs & 1" rods. SDFN.

3-22-2000
Day 2. HO tbg w/ 35 bbls, F/L w/ 15 bbls. Pulled rods & pump. Installed BOPE, measuring OOH. SDFN.

3-23-2000
Day 3. Bled well, cont meas tbg OOH. MU bumper sub & 5 1/2" - 20# csg srcaper. Meas & PU tbg, tagged down @ 7941' w/ scraper. SDFN.

3-24-2000
Day 4. LD bumper sub & 5 1/2" scraper, MU setting tool & 5 1/2" lockset BP. Started to stab tool in hole, BP fell off retrieving tool down hole. MU 2 1/2" solid T/L pump shoe, tested tbg @ 5000 psi to top liner @ 7630'. Tagged down on plug, unable to get bridge inside liner top. Pulled & LD plug & retrieving tool, MU new retrieving tool. SDFN.

3-25-2000
Day 5. Bled well, MU 5 1/2" BP, ran tbg, set BP @ 7780'. Pulled tbg up & landed on donut w/ tail @ 7541', ND BOPE, NU tree. Stroke tested exchange pump, RIH w/ rods, changed out 27 3/4", 5 7/8", & 13 1" worn boxes. Spaced & seat pump, fill & press to 300 psi. SDFN.

3-26-2000
Day 6. Hung well on. RDMO.

APR 17 2000
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES
VENTURA, CALIFORNIA

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

No. P200-74

PERMIT TO CONDUCT WELL OPERATIONS

520 (field code)
12 (area code)
10 (new pool code)
10 (old pool code)

Barry McMahan
Seneca Resources Corporation
2131 Mars Court
Bakersfield, California 93308

Ventura, California
March 21, 2000

Your proposal to rework well "Ferndale" 313,
A.P.I. No. 111-21314-02 Sec. 16, T. 4N, R. 21W, SB B.&M.,
Ojai field, Silverthread area, Miocene pool
Ventura County, dated 3/17/00 received 3/17/00 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOGGR Class II 2M requiements is installed and maintained in operating condition at all times.
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. The proposed bridge plug at 7780± ' does not fulfill the requirements for the abandonment of the lower portion of the well.
4. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.

Super Blanket Bond
SAF:sf

Engineer Steven A. Fields

Phone (805) 654-4761

WILLIAM F. GUERARD, JR., State Oil and Gas Supervisor

By _____
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

OG111 (6/96/GSR/5M) Printed on recycled paper.

RESOURCE AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

This notice and indemnity or cash bond shall be filed, and approval given, befor rework is begins. If operations have not commenced within one year of reciept of this notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	FORMS	
	OGD114	OGD121
SBB	✓	✓

RECEIVED
MAR 17 2000
GEOTHERMAL RESOURCES
VENTURA, CALIFORNIA

DIVISION OF OIL AND GAS

In section 3203, Division 3, compliance with Public Resources Code, notice is hereby given that it is our intention to rework well Ferndale 313 (*Well designation*) API No. 111-21314 -02

Sec. 16, T 4N, R 21W SBB &M., Ojai Field, Ventura County.

The present condition of the well is as follows:

1. Total depth 8540' ETD:8032' (cmt. Retainer)

2. Complete casing record, including plugs and perforations (present hole)

13-3/8", surface, shoe @ 712', 48#, ST&C
9 5/8", surface, shoe @ 6538', 40#, LT&C
7", surface, shoe @ 6450', 29#, LT&C
7 5/8", 6450'-6895', 23, 26, 29, & 33.7#, LT&C
5 ½", 6730'-8195', 20#, LT&C
4 (0.44") JHPF 7820'-8004' (32 holes) – 4 (0.44") JHPF 7547.5-7770.5' (20 holes) –
Reperfed 4 (0.44") JHPF 7545'-7980' (48 holes)

3. Present producing zone name Argo ; Zone in which well is to be recompleted N/A

4. Present zone pressure 1100 est. ; New zone pressure _____

5. Last produced

Current	3	150	50
Date)	*(Oil, B/D)*	*(Water, B/D)*	*(Gas, Mcf/D)*

(or)

5. Last injected

_____	_____	_____ ☐ ☐	_____
(Date)	*(Water, B/D)*	*(Gas, Mcf/D)*	*(Surface pressure, psig)*

6. Is this a critical well according to the definition on the reverse side of this form? NO

The proposed work is as follows:

See the attached procedure.

Note: If well is to be redrilled, show proposed new bottom-hole cordinates and true vertical depth.

It is understood that if changes in this plan become necessary, we are to notify you immediatly.

Address **250 So. Hallock Dr., P.O. Box 630** (*Street*)

Santa Paula, CA 93061 (*City*) (*State*) (*Zip*)

Telephone Number **805-933-2217**

Seneca Resources Corporation (*Name of Operator*)

By **Fariba M. Neese, Supervising Engineer**

F. M. Neese (*Name-signature*) 3/17/2000 (*Date*)

Type of Organization **Corporation** (*Corporation, Partnership, Individual, etc.*)

OG107 (8/87DWRR/5M)

Seneca Resources Corporation
Ferndale 313
Ojai Field /Ferndale Lease

Set Bridge Plug to Isolate Excess Water Production

Date: 03/09/00

Present Conditions:

TD: 8540' ETD: 8032' KB: 21'

Casing:

9 5/8", 40#, K-55 & N-80 cemented at 6538'
7", 23, 26, 29#, tieback string 0' to 6450'
7 5/8", 33.7#, N-80 6450' to 6895'
5 ½", 20#, N-80 Liner from 6730' to 8195'

Perforations:

7545', 7547', 7556', 7570', 7583',7588', 7604', 7637', 7656', 7677', 7695', 7718', 7744', 7770', 7801', 7820', 7855', 7873', 7875', 7910', 7930', 7954', 7977', 7980', 8004'.

Tubing Detail: as of 3/99 work:

21.00'	KB
1.38'	Donut & Fatigue Nipple
7068.00'	232 Jts. 2-7/8" J-55 Tbg.
2.45'	Page R Drain
64.22'	2 Jts. 2-7/8" J-55 Tbg.
2.40'	Page Hyd Anchor
449.25'	14 Jts. 2-7/8" J-55 Tbg.
0.60'	2 ½ T/L Pump Shoe
31.7'	1 Jt. 2-7/8" J-55 w/stc

Current Status:

Well currently producing +/- 150 BFPD at high (99%) water cut.

Argo
Petroleum
Corporation

DIVISION OF OIL AND GAS
RECEIVED
DEC 11 1986
VENTURA, CALIFORNIA

411 South Beckwith Road
Santa Paula, California 93060
Telephone (805) 933-1321
(805) 659-0640
(805) 524-2656

Corporate Office:
1661 Lincoln Blvd., Suite 400
Santa Monica, California 90404
Telephone (213) 452-8676
Cable – Argpetro
Telex – 182027

December 10, 1986

Mr. Murray W. Dosch
Division of Oil & Gas
6401 Telephone Road, Suite 240
Ventura, California 93003

RE: CONTINUED CONFIDENTIAL STATUS
VALEX-FERNDALE #313

Dear Mr. Dosch:

Argo hereby requests continued confidential status on the subject well due to the delay in getting approval for the modification to our CUP-3344 and also our Land Department has informed me there is Trend acerage open in the vicinity of this lease.

Thank you for your consideration in this matter.

Sincerely,

Harry Hull

Harry E. Hull
District Superintendent

HEH/csf

cc: Cecil Basenberg
Dan Pasquini
Dennis Bird

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF PROPERTY AND WELL TRANSFER

Field or county	District
Ojai	2
Former owner	**Date**
Argo Petroleum Corp.	Sept. 10, 1987

Name and location of well(s)

Sec. 16, T. 4N., R. 21W., SBB&M

"Barker-Ferndale" 1	(111-20423)	"Valex-Ferndale" 211	(111-21178)
"Barker-Ferndale" 2	(111-20604)	"Valex-Ferndale" 214	(111-21180)
"Barker-Ferndale" 3	(111-20609)	"Valex-Ferndale" 215	(111-21206)
"Barker-Ferndale" 4	(111-20685)	"Valex-Ferndale" 313	(111-21314)
"Barker-Ferndale" 5	(111-20702)	"Ferndale" 8	(111-20732)
"Barker-Ferndale" 6	(111-20730)		
"Valex-Ferndale" 107	(111-21066)		
"Valex-Ferndale" 110	(111-21163)		
"Valex-Ferndale" 209	(111-21105)		

Description of the land upon which the well(s) is (are) located

Date of transfer, sale, assignment, conveyance, or exchange	New owner	Type of organization
7-17-87	Seneca Resources Cprporatipn	Corp.
	Address: 511 16th St. Mall, Ste 300, Denver, CO 80202	Telephone No.: (303) 825-7401

Reported by
Seneca Resources Corp.

Confirmed by
Argo Petroleum Corp.

New operator new status (status abbreviation)	Request designation of agent
PA	
Old operator new status (status abbreviation)	**Remarks**
PA	

Deputy Supervisor: Patrick J. Kinnear

Signature: Patrick J. Kinnear

OPERATOR STATUS ABBREVIATIONS

PA – Producing Active
NPA – No Potential, Active
PI – Potential Inactive
NPI – No Potential, Inactive
Ab – Abandoned or No More Wells

FORM AND RECORD CHECK LIST

Form or record	Initials	Date	Form or record	Initials	Date
Form OGD121			Map and book		
Form ODG148			Notice to be cancelled		
New well cards			Bond status		
Well records			EDP files		
Electric logs					
Production reports					

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

API No. 111-21314

WELL SUMMARY REPORT

Operator	Well				
Argo Petroleum Corporation	Valex-Ferndale 313				
Field	**County**	**Sec.**	**T.**	**R.**	**B.&M.**
Ojai-Silverthread Area	Ventura	16	4N	21W	S.B.

Location (Give surface location from property or section corner, street center line and/or California coordinates)
2755'S and 4033' E from the NW corner, Section 16, T4N, R 21W

Elevation of ground above sea level
1179'

Commenced drilling (date)
10/20/84

Completed drilling (date)
1/11/85

Commenced producing (date)
2/18/85
☒ Flowing ☐ Pumping
☐ Gas lift

Name of producing zone(s)
Mohnian

Total depth

(1st hole)	(2nd)	(3rd)
7178'	6826'	7079'

Present effective depth: 8032' (4th) 8540'

Junk
SEE:"Details of fish left in hole" on page 16 of history

Depth measurements taken from top of:
☒ Derrick Floor ☐ Rotary Table ☐ Kelly Bushing
Which is 26' feet above ground

GEOLOGICAL MARKERS	DEPTH
Base of Relizian	4681'
Top Mohnian	6513'

Formation and age at total depth
Mohnian Sand Mohnian Age

	Clean Oil (bbl per day)	Gravity Clean Oil	Percent Water including emulsion	Gas (Mcf per day)	Tubing Pressure	Casing Pressure
Initial Production	101	29.8	10	103	360	1410
Production After 30 days	114	29.8	20	322	370	685

CASING RECORD (Present Hole)

Size of Casing (API)	Top of Casing	Depth of Shoe	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Number of Sacks or Cubic Feet of Cement	Depth of Cementing (if through perforations)
13 3/8"	surface	712'	48#	J-55 ST&C	new	17 1/2"	750 CF	———
9 5/8"	surface	6538'	36#&40#	K-55 & N-80 LT&C & Butt	new	12 1/4"	950 CF	———
7"	surface	6450'	23,26&29#	N-80 LT&C	new	(tieback)	40 CF	6459'(in7-5/8"
7 5/8"	6450'	6895'	33,7#	N-80 LT&C	new	8 3/4"	240 CF	
5 1/2"	8195'	6730'	20#	N-80 LT&C	new	8"	359 CF	8152'-8150' 8054'-8052' 7771'-7769' 7680'-7618'

PERFORATED CASING (Size, top, bottom, perforated intervals, size and spacing of perforation and method.)
4 (0.44") JHPF 7820'-8004' (32 holes), 4 (0.44") JHPF 7547.5'-7770.5' (20 holes)
Reperf 4 (0.44") JHPF 7545'-7980' (48 holes).

DIVISION OF OIL AND GAS
RECEIVED
AUG 23 1985
SANTA PAULA, CALIFORNIA

Was the well directionally drilled? If yes, show coordinates at total depth
☒ Yes ☐ No 2424' North and 794' West of Surface

Electrical log depths
DIL-GR: 712'-6550', 6538'-6918', 6900'-8540.'

Other surveys
AVL Sonic; Density-Neutron; Dipmeter; Mud log;Directional Survey; CBL-CCL-GR (4)

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Name	Title	
Harry E. Hull	District Superintendent	
Address	**City**	**Zip Code**
411 S. Beckwith Road	Santa Paula, Ca.	93060
Telephone Number	**Signature**	**Date**
(805) 933-1321	Harry Hull	7-18-85

SUBMIT IN DUPLICATE

OG100 (6/81/GSR1/5M)

STATE OF CALIFORNIA-RESOURCES AGENCY
GEORGE DEUKMEJIAN, *Governor*

DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS
6401 TELEPHONE ROAD, SUITE 240
VENTURA, CALIFORNIA 93003-4458
(805) 654-4761

December 19, 1986

Mr. Harry Hull
District Superintendent
Argo Petroleum Corporation
411 South Beckwith Road
Santa Paula, CA 93060

Dear Harry:

Your request to extend the confidential status of well "Valex-Ferndale" 313, API No. 111-21314, Ojai field is granted. The new confidential release date is July 11, 1987.

If you have any questions regarding this matter, please contact me.

Merry Christmas!

Sincerely,

Michael Stettner
Acting Deputy Supervisor

MS:mep

DIVISION OF OIL AND GAS
RECEIVED
JUL 23 1985
SANTA PAULA, CALIFORNIA

DIVISION OF OIL AND GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE 313 — SEC. 16, T4N, R21W, SBB&M
A.P.I.# 111-21314 — HARRY E. HULL DISTRICT SUPT.

Harry Hull

411 S. BECKWITH RD. SANTA PAULA, CA. 93060 (805) 933-1321

* *

10-20-84

MIRU MONTGOMERY RIG #2. RIG ON OPERATING RATE AT 23:00 HRS, 10-20-84. MIX MUD.

00

10-21-84

MIX MUD, INSTALL FLOWLINE AND MAKE UP BHA. SPUD WELL AT 05:00 HRS 10-21-84. DRILL 12 1/4" HOLE TO 193'. TRIP FOR 17 1/2" BIT AND BHA. OPEN HOLE TO 193' AND DRILL TO 702'. DRILLING.

10-22-84

DRILLED TO 712'. WIPED HOLE TO SURFACE.

RIGGED UP AND RAN 20 JTS, 13 3/8", 48#, J-55, ST&C CASING WITH GUIDE SHOE AT 712' AND INSERT FLOAT AT 672'. RIGGED UP DOWELL AND PUMPED: 5 BBLS WATER; 600 CF CLASS "G" WITH 2% GEL AND 3% CACL2; 150 CF CLASS "G" WITH 3% CACL2. DROPPED TOP PLUG AND DISPLACED WITH 534 CF MUD. BUMPED PLUG, FLOAT FAILED, SHUT IN CASING.

CUT OFF CONDUCTOR AND CASING, INSTALLED 13 5/8" CASING HEAD AND TESTED WELDS TO 1000 PSI. NIPPLING UP BOPE.

10-23-84

FINISHED NIPPLING UP BOPE. TESTED RAMS AND LINES TO 1000 PSI AND ANNULAR TO 800 PSI FOR DOG. DRILLED OUT CEMENT FROM 666' TO SHOE AT 712'. DRILLED TO 759'. TRIPPING FOR LOCKED BHA.

10-24-84

DRILLED TO 1191'. TRIP FOR DYNADRILL. DD TO 1353'. TRIP TO INSPECT KICK SUB. DYNADRILLING AT 1531'.

10-25-84

DYNADRILLED TO 1565'. TRIP FOR BIT AND 1 3/4 DEGREE KICK SUB. DYNADRILLED TO 1943'. TRIPPING.

DIVISION OF OIL AND GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE 313 — SEC. 16, T4N, R21W, SBB&M
A.P.I.# 111-21314 — HARRY E. HULL DISTRICT SUPT.

Harry Hull

411 S. BECKWITH RD. SANTA PAULA, CA. 93060 (805) 933-1321

* *

10-26-84

TRIP FOR BHA. REAMED DYNADRILL RUN. DRILLED TO 2042'. TRIP FOR DYNADRILL. DD TO 2210'.

10-27-84

DYNADRILLED TO 2308'. BIT TRIP. DD TO 2523'.

10-28-84

DYNADRILLED TO 2558'. TRIP FOR BUILDING BHA. REAMED DD RUN. DRILLED TO 2846'. TRIPPING FOR LOCKED BHA.

10-29-84

FINISH TRIP FOR BHA. DRILLED TO 3045'. BIT TRIP. DRILLING AT 3181'.

10-30-84

DRILLED TO 3281'. TRIP FOR DYNADRILL. DYNADRILLED WITH STEERING TOOL TO 3398'. RIG DOWN STEERING TOOL.

10-31-84

TRIP FOR BHA. REAMED DYNADRILL RUN. DRILLED TO 3676'. TRIP FOR STRONGER BUILDING BHA. DRILLING AT 3724'.

11-1-84

DRILLED TO 4063'. WIPER TRIP. DRILLING AT 4343'.

11-2-84

DRILLED TO 4498'. TRIP FOR BIT AND BHA. DRILLING AT 4636'.

11-3-84

POOH. REPAIR GENERATORS. FINISH TRIP FOR DYNADRILL. REPAIR DRAW-WORKS. DYNADRILL 4636' TO 4641'. CONDITION THICK MUD.

DIVISION OF OIL AND GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE 313 — SEC. 16, T4N, R21W, SBB&M
A.P.I.# 111-21314 — HARRY E. HULL DISTRICT SUPT.

Harry Hull

411 S. BECKWITH RD. SANTA PAULA, CA. 93060 (805) 933-1321

* *

11-4-84

FINISHED CONDITIONING MUD. DYNADRILLED FROM 4641' TO 4908'. RIG DOWN STEERING TOOL. POOH.

11-5-84

TRIP FOR BHA AND REAMED DYNADRILL RUN. DRILLED TO 4993'. MAIN GENERATOR WENT DOWN. PULL TO SHOE, REPAIR GENERATOR AND RIH. DOWN 12 1/2 HOURS.

11-6-84

DRILLED FROM 4993' TO 5538'. CONDITIONING MUD.

11-7-84

CONDITIONED MUD AND WEIGHTED UP. DRILLED TO 5740'. TRIPPING FOR BIT.

11-8-84

FINISHED RIH AND CONDITIONED MUD. DRILLING AT 6241'.

11-9-84

DRILLED TO 6319'. TRIP FOR LOCKED BHA. (RIG REPAIR 4 1/2 HRS). REAMED 6230' TO 6319'. SURVEY AT 6273'. DRILLING AT 6364'.

11-10-84

DRILLED TO 6536'. RIG POWER WENT DOWN 10 HRS. WORK PIPE LOOSE. DRILLED TO 6550'. WIPED HOLE 20 STDS AND CONDITIONED MUD FOR LOGS.

11-11-84

CONDITION MUD FOR LOGS. WAIT ON LOGGERS. RIGGED UP WELEX AND LOGGED AS FOLLOWS:

DIL-GR 6550' TO 712'. ✓

DIVISION OF OIL AND GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE 313 — SEC. 16, T4N, R21W, SBB&M
A.P.I.# 111-21314 — HARRY E. HULL DISTRICT SUPT.

411 S. BECKWITH RD. SANTA PAULA, CA. 93060 (805) 933-1321

* *

11-11-84 (CONT)

STAGED IN HOLE AND CONDITIONED MUD FOR CASING. POOH TO RUN CASING.

FORMATION TOPS:

MONTEREY SHALE - 2095
SISAR FAULT - REPETTO- 4680
UPPER BIG CANYON - 6110
LOWER BIG CANYON - 6511 (?)

11-12-84

FINISH POOH. RIGGED UP AND RAN 167 JTS, 9 5/8",CASING AS FOLLOWS:

FLOAT SHOE	6538'
1 JT 40# N-80 LT&C	
FLOAT COLLAR	6496'
44 JTS 40# N-80 LT&C	
53 JTS 36# K-55 LT&C	
1 JT 36# K-55 LT&C PIN X BUTT BOX	
28 JTS 36# K-55 BUTT	
40 JTS 40# N-80 BUTT	

RAN ONE TURBO CENT PER JT FOR THE FIRST 5 JTS AND ONE REGULAR PER JT FOR THE NEXT TEN JTS.

RIGGED UP HALLIBURTON AND CIRCULATED CASING.

11-13-84

CEMENTED CASING AS FOLLOWS:
20 BBLS 95 PPCF MUD SWEEP; BOTTOM PLUG; 700 CF CLASS G 50:50 POZ WITH 4% GEL, .2% RETARDER AND .2% DEFOAMER; 250 CF CLASS G WITH .2% RETARDER; TOP PLUG. DISPLACED WITH 2723 CF MUD AT 8-9 BBLS/MIN. BUMP PLUG WITH 1400 PSI. FLOATS FAILED. SHUT IN CASING. C.I.P. AT 02:30 HRS, 11-13-84.

DIVISION OF OIL AND GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE 313 — SEC. 16, T4N, R21W, SBB&M
A.P.I.# 111-21314 — HARRY E. HULL DISTRICT SUPT.

Harry Hull

411 S. BECKWITH RD. SANTA PAULA, CA. 93060 (805) 933-1321

* *

11-13-84 (CONT)

CLEANED CELLAR AND NIPPLED DOWN BOPE. LANDED 9 5/8" CASING WITH 115,000#. INSTALLED CASING SPOOL AND BOPE. TESTED BLIND RAMS AND CASING TO 1000 PSI. RIG SHUT DOWN AT 18:00 HRS, 11-13-84 TO REPLACE GENERATOR #1.

11-14-84

WAITING ON AC GENERATOR.

11-15-84

REPAIRING RIG.

11-16-84

FINISHED RIG REPAIRS (TOTAL OF 72 HOURS DOWNTIME). STAGED IN HOLE TO 6416'. TESTED BOPE TO 1000 PSI FOR DOG. RIH AND DRILL CEMENT FROM 6472' TO 6533'. CONDITION MUD.

11-17-84

CONDITIONED MUD. DRILLED OUT SHOE AT 6538'. DRILLED TO 6677'. TRIP FOR DYNADRILL. RIG UP STEERING TOOL AND DYNADRILL TO 6700'.

11-18-84

DYNADRILLED TO 6728'. BUILT MUD WEIGHT TO 77 PPCF. DYNADRILLED TO 6818'.

11-19-84

RIH. CLEAN OUT FILL FROM 6538' TO 6790'. COULD NOT MAKE ANY PROGRESS WITH DYNADRILL. TRIP FOR BHA. CLEANED OUT FILL 6644' TO 6818' AND BUILT WT TO 80 PPCF. DRILLING AT 6922'.

DIVISION OF OIL AND GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE 313 — SEC. 16, T4N, R21W, SBB&M
A.P.I.# 111-21314 — HARRY E. HULL DISTRICT SUPT.

Harry Hull

411 S. BECKWITH RD. SANTA PAULA, CA. 93060 (805) 933-1321

* *

11-20-84

DRILLED TO 6969'. TIGHT HOLE. REAMED OUT OF HOLE. CONDITIONED MUD, REAMED TO 6969' AND SURVEYED. TRIP FOR BHA CHANGE. DRILLING AT 7075'.

11-21-84

DRILLED TO 7187'. TRIP FOR BHA. PIPE STUCK AT 7043' GOING IN HOLE. CIRCULATE AND JAR ON STUCK PIPE.

11-22-84

WORKED STUCK PIPE. PUMPED WATER TO BIT AND BLEAD BACK TO REDUCE HYDROSTATIC. JAR PIPE. CIRCULATE OUT WATER AND JAR STUCK PIPE. RIG UP DIALOG AND FREEPOINT AT 6810' (TOP STAB). BACK OFF AT 6431' (INSIDE 9 5/8" CASING) AND TRIP FOR TESTER.

11-23-84

SET TESTER AND OPENED VALVE. SLIGHT BLOW 10 MINUTES. PULLED PACKER LOOSE. JARRED FISH - NO GOOD. ATTEMPTED MANUAL BACKOFF AT SAFETY JT BELOW PACKER. POOH. BACKED OFF IN BYPASS ABOVE PACKER. MADE UP OVERSHOT, RIH, LATCH FISH AND ATTEMPT BACKOFF. WOULD NOT BACKOFF. RIG UP DIALOG AND ATTEMPT BACKOFF BELOW PACKER.

11-24-84

BACKED OFF AT 6431'. RIGGED DOWN DIALOG. CHAIN OUT. RECOVERED PACKER AND TOOLS. PICK UP SCREW IN SUB, ACC, JARS, BS AND 6 DC. RIH AND SCREW INTO FISH. CIRCULATE AND REDUCE MUD WT. TO 76 PPCF. PUMP 53 BBLS OF 76 PPCF BLACK MAGIC. PUMPED 7 BBLS OUTSIDE LEAVING 43 BBLS INSIDE. PUMPING 2 BBLS BLACK MAGIC PER HOUR AND JARRING ON FISH.

11-25-84

JAR ON FISH AND MOVE OIL 2 BBLS PER HR. FOR 12 HRS. LET BLACK MAGIC SOAK AND JAR FISH NEXT 12 HRS.

DIVISION OF OIL AND GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE 313 — SEC. 16, T4N, R21W, SBB&M
A.P.I.# 111-21314 — HARRY E. HULL DISTRICT SUPT.

Harry Hull

411 S. BECKWITH RD. SANTA PAULA, CA. 93060 (805) 933-1321

* *

11-26-84

RIG UP DIALOG. FREEPOINT AND BACKOFF AT 6729' (TOP OF DRILLING JARS). POOH. MAKE UP FISHING TOOLS. RIH. SCREW INTO FISH AND JAR. JARRING ON FISH.

11-27-84

JARRED ON FISH. DRILLPIPE PARTED AT 4882'. POOH. RIH WITH FISHING TOOLS AND JAR ON FISH. RAN DIALOG FREEPOINT AND BACKED OFF AT 6963'. POOH. LAY DOWN FISHING TOOLS AND PARTIAL FISH.

11-28-84

MADE UP FISHING TOOLS AND SCREW INTO FISH AT 6957'. JAR ON FISH WITHOUT SUCCESS. RIG UP DIALOG AND RIH WITH SPUD BAR. SPUD BAR STUCK AT 6690'. PULLED OUT OF ROPE SOCKET AND FISHED BAR WITH OVERSHOT AND JARS. RECOVERED BAR.

11-29-84

RAN FREEPOINT. DRILLSTRING PARTED. RIG DOWN DIALOG. CHAIN OUT. LEFT FISHING TOOLS, 2 JTS HWDP AND PIN END OF HWDP IN HOLE. RIH WITH OVERSHOT. COULD NOT LOCATE TOP OF FISH. TRIP FOR KNUCKLE JOINT. COULD NOT LATCH FISH. PULL 22 STANDS, WELL STARTED FLOWING. RIH TO SHOE. BUILD MUD WT FROM 72 PPCF TO 74 PPCF. CONDITION MUD.

11-30-84

RAISED MUD WT TO 75 PPCF. TRIP TO CHANGE OVERSHOT FROM 6 1/2" TO 6 3/8" GRAPPLE. COULD NOT LATCH FISH. TRIP FOR NEW OVERSHOT AND JET SUB. ATTEMPTING TO LATCH FISH.

12-1-84

ATTEMPT TO WORK OVER FISH WITH NO SUCCESS. POOH. LOAD OUT FISHING TOOLS. RIH WITH OEDP TO 6680'. DOWELL PUMPED 258 CF CLASS G WITH 20% SAND. DISPLACED WITH 109 BBLS. CIP AT 16:00 HRS, 12-1-84. PULL 29 STDS AND WOC. RIH AND TAG TOC AT 6480'. TRIP FOR BHA.

DIVISION OF OIL AND GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE 313 — SEC. 16, T4N, R21W, SBB&M
A.P.I.# 111-21314 — HARRY E. HULL DISTRICT SUPT.

Harry Hull

411 S. BECKWITH RD. SANTA PAULA, CA. 93060 (805) 933-1321

* *

12-2-84

RIH TO 3985'. SHUT RIG DOWN FOR REPAIRS AT 02:00 HRS, 12-2-84.

12-3-84

FINISH RIG REPAIRS (DOWN 35 HOURS). PULL TO HWDP. MEASURE IN HOLE. DRILL CEMENT FROM 6480' TO 6565'. MEASURE OUT. PICK UP DYNADRILL. RIH AND RIG STEERING TOOL. DYNADRILLING AT 6570'. -01

12-4-84

DYNADRILLED FROM 6570' TO 6777'. TRIPPING FOR DRILLING BHA.

12-5-84

RIH. REAMED DD RUN FROM 6538' TO 6777'. DRILLED TO 6826'. PULLED UP TO MAKE CONNECTION AND PIPE STUCK AT 6806'. WORK PIPE. RIG UP DIALOG AND BACK OFF AT 6765'. POOH. FISH LEFT IN HOLE: BIT, STB, LEAD COLLAR, MONEL.

12-6-84

MADE UP FISHING TOOLS. RIH. TOOLS STOPPED AT 6745' (TOP OF FISH AT 6765'). TRY TO CIRCULATE TOOLS TO TOP OF FISH. HOLE PACKED OFF. WORK FISHING TOOLS LOOSE AND POOH. MADE UP BIT AND RIH. REAMED 6538' TO 6646'. PIPE STUCK. WORK LOOSE. PULL TO SHOE. BUILD VIS TO 90. REAMED 6538' TO 6720'.

12-7-84

CLEANED OUT TO TOP OF FISH WITH BIT. TRIP TO SHOE TO CHECK FOR FILL. NO FILL. TRIP FOR WASHPIPE. TAG FILL AT 6742' (23' OF FILL). CLEANED OUT FILL. WASHOVER FISH 3' TO 6768'. WASHPIPE PACKED OFF. PULLED AND JARRED UP TO 6744'. STILL PACKED OFF. JAR ON WASHPIPE (REGAINED CIRCULATION AFTER 2 HRS). RIG UP DIALOG. ATTEMPT TO JAR LOOSE WITH SHOT AT 6743' TO 6750' AND 300,000# PULL. NO GOOD. ATTEMPT BACK OFF AT JOINT IN WASHPIPE AT 6731'. NO GOOD.

DIVISION OF OIL AND GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE 313 — SEC. 16, T4N, R21W, SBB&M
A.P.I.# 111-21314 — HARRY E. HULL DISTRICT SUPT.

411 S. BECKWITH RD. SANTA PAULA, CA. 93060 (805) 933-1321

* *

12-8-84

DIALOG ATTEMPTED BACKOFF AT 6702' (DRIVE SUB) - NO GOOD (SHOT FAILED TO FIRE). ATTEMPT BACKOFF AT 6702'. SHOT FIRED. NO BACKOFF. WORK PIPE. SPOTTED 30 BBLS OF 75 PPCF OIL BASE MUD AROUND FISH (15 BBLS OUTSIDE; 15 BBLS INSIDE). MOVING OIL 2 BBLS EVERY OTHER HOUR.

12-9-84

MOVED OIL AND JARRED STUCK WASH PIPE. PUMPED WATER DOWN DRILLPIPE AND BLEAD BACK TO REDUCE HYDROSTATIC. NO GOOD. RAN FREEPOINT. SHOWED DRILL COLLARS BECOMING STUCK. PULLED FREEPOINT. WORKED PIPE AND CIRCULATED. JARS STARTED TO WORK. RAN FREEPOINT AND ATTEMPT BACKOFF AT 6700' - NO GOOD. ATTEMPTED BACKOFF AT 6686'. GOT BACKOFF. POOH. LOAD OUT TOOLS. RIH WITH OPEN ENDED DRILLPIPE. TAG FILL AT 6628' (58' FILL) AND CLEAN OUT TO 6684'. HOLE FALLING IN. PULL TO SHOE AND CONDITION MUD.

12-10-84

CONDITIONED MUD. PLUGGED FROM 6684' WITH 258 CF CLASS G WITH 20% SAND. TRIP FOR BIT. CIRC AT 6508' AND WAIT ON CEMENT FOR TOTAL SET TIME OF 12 HRS. FOUND FIRM TOP OF CEMENT AT 6531'. CIRC AND WOC AND BAD WEATHER.

12-11-84

HAULED OFF KCL MUD AND CHANGED OVER TO LIGNOSULFONATE MUD. CONDITIONED MUD. DRILLED CEMENT FROM 6531' TO 6600'.

12-12-84

CIRC AT T.O.C. (6600'). TRIP FOR DYNADRILL AND STEERING TOOL. DYNADRILL TO 6643'. HOLE PACKED OFF AND STUCK DD. JARRED DD LOOSE. TRIP FOR BHA. RIH TO SHOE AND BUILD MUD WEIGHT.

DIVISION OF OIL AND GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE 313 — SEC. 16, T4N, R21W, SBB&M
A.P.I.# 111-21314 — HARRY E. HULL DISTRICT SUPT.

411 S. BECKWITH RD. SANTA PAULA, CA. 93060 (805) 933-1321

* *

12-13-84

FINISHED BUILDING MUD WT. TO 80 PPCF. FOUR ATTEMPTS TO CLEAN OUT TO 6643' RESULTED IN RUNNING SHALE AND TIGHT HOLE. BUILT WT. TO 87 PPCF. CLEANED OUT TO 6643'. HOLE STILL TIGHT. BUILT WT. TO 90 PPCF AND DRILLED TO 6707'. (HOLE ACTING MUCH BETTER).

12-14-84

DRILLED TO 6786'. TRIP FOR DYNADRILL AND STEERING TOOL. DYNADRILLING AT 6880'.

12-15-84

DYNADRILLED TO 6942'. POOH. INSPECT ALL TOOLS WITH MAGNETIC PARTICLE. RIH. REAM 6702' TO 6942'. DRILLING AT 7040'.

12-16-84

DRILL TO 7042'. TRIP FOR BIT. HIT BRIDGE AT 6660'. CLEANED OUT TO 6690'. RUNNING SHALE. BUILD VIS TO 120 AND WT TO 92 PPCF. CLEAN OUT BRIDGE. RIH. REAM 6976' TO 7042'. DRILLED TO 7079'. RIG POWER WENT DOWN FOR 3 MINUTES. PIPE STUCK. JARRING STUCK PIPE.

12-17-84

RAN FREEPOINT. BACKED OFF AT 7058' AND POOH. LEFT IN HOLE: BIT, 2-STB, LEAD COLLAR, STB. RIH WITH SCREW IN SUB AND FISHING TOOLS. SCREW IN AND JAR FISH ONE HOUR. STRING PARTED. POOH. ACCELERATOR PARTED LEAVING IN ADDITION: SCREW IN SUB, BUMPER SUB, JARS, SUB, DC, STB, 2DC, SUB, BOTTOM 8' OF ACC. RIH WITH OVERSHOT AND FISHING TOOLS. WORKED OVER FISH. OVERSHOT WOULD NOT HOLD. TRIP FOR DIFFERENT OVERSHOT.

12-18-84

RAN OVERSHOT AND EXTENSION. LATCHED FISH. JARS AND BUMPER SUB BELOW WOULD NOT MOVE. DIALOG BACKED OFF AT 6948' (ON TOP OF JUNK INSIDE ACC.). POOH. LEFT 6' OF OVERSHOT AROUND ACC. RIH TO 6935' WITH BIT AND CONDITION MUD FOR LOGS. POOH.

DIVISION OF OIL AND GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE 313 — SEC. 16, T4N, R21W, SBB&M
A.P.I.# 111-21314 — HARRY E. HULL DISTRICT SUPT.

Harry Hull

411 S. BECKWITH RD. SANTA PAULA, CA. 93060 (805) 933-1321

* *

12-19-84

POOH. RIG UP WELEX AND LOGGED AS FOLLOWS:

DIL-GR	6918' TO 6538'
AVL-SONIC	6918' TO 6538'

RIH AND CEMENT THROUGH OEDP AT 6934' WITH 70 CF CLASS G WITH 20% SAND. TRIP FOR BIT. TAG TOC AT 6738'. CIRC.

12-20-84

DRILLED CEMENT 6738' TO 6895'. RIG REPAIR 3 3/4 HRS. POOH. RAN 7 5/8", 33.7#, N-80, LT&C TDC LINER AS FOLLOWS:

FLOAT SHOE	6895'
1 JT	
FLOAT COLLAR	6858'
1 JT	
PLUG CATCHER INSERT	6816'
9 JTS	
TIE-BACK SLEEVE	6457'-6452'
HANGER	6452'-6450'

RAN 1 CENTRALIZER ON EACH OF THE FIRST 7 JTS

RIH WITH LINER.

12-21-84

FINISHED RUNNING LINER. RIGGED UP HALLIBURTON AND CEMENTED AS FOLLOWS:

PUMPED 28 CF CAUSTIC WATER; 20 CF WATER; 40 CF CLASS G WITH .75% HALAD 322 AND .25% NFP MIXED AT 13.5 PPG; 200 CF CLASS G WITH .75% HALAD 322 AND .25% NFP MIXED AT 15.8 PPG. DISPLACED WITH 550 CF MUD TO SHEAR LINER WIPER PLUG AND AN ADDITIONAL 90 CF MUD TO BUMP PLUG (640 CF TOTAL). BUMPED PLUG AT 2400 PSI. C.I.P. AT 06:45 HRS, 12-21-84.

DIVISION OF OIL AND GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE 313 — SEC. 16, T4N, R21W, SBB&M
A.P.I.# 111-21314 — HARRY E. HULL DISTRICT SUPT.

Harry Hull

411 S. BECKWITH RD. SANTA PAULA, CA. 93060 (805) 933-1321

* *

12-21-84 (CONT)

RIG DOWN CMT HEAD AND PULL 24 STDS. CIRC TO CLEAR TOOLS. POOH. RIH WITH 8 1/2" BIT TO LOCATE TOC - NO CEMENT FOUND. ELECTRICIANS SURVEY AND EVALUATE RIG POWER FOR 2 1/2 HRS. POOH. RIH WITH 6 3/4" BIT. DRILLED CEMENT FROM 6662' TO 6815' (PLUG CATCHER). PULLED TO 6425' AND TESTED LAP TO 1500 PSI - O.K.

12-22-84

BIT WOULD NOT DRILL PLUGS AND PLUG CATCHER. TRIP FOR MILL AND CHANGE 2 AC RELAYS. MILL UP CATCHER AT 6816', CEMENT, FLOAT COLLAR AT 6858' AND CEMENT TO 6885' (10' ABOVE SHOE). CIRCULATE AND REDUCE MUD WT TO 75 PPCF. MEASURE 3 1/2" TOOLS AND CHANGE LINERS IN #1 PUMP TO 5". PULLING OUT LAYING DOWN EXCESS 5" DRILLPIPE.

12-23-84

PICK UP 3 1/2" DRILLPIPE AND BHA. ELECTRICIANS EXAMINED ALL AC AND DC RIG COMPONENTS - ALL WORKING O.K. RIH TO 6419' AND CIRC BOTTOMS UP. SHUT DOWN FOR XMAS, 20:00 HRS, 12-23-84.

12-24-84

SHUT DOWN FOR XMAS

12-25-84

SHUT DOWN FOR XMAS

12-26-84

START UP RIG AT 08:00 HRS, 12-26-84. RIH TO 6885'. DRILL CMT AND SHOE AT 6895'. DRILL CMT TO 6900'. TRIP FOR DYNADRILL AND DD TO 6974'.

12-27-84

DYNADRILL TO 7058'. TRIP FOR BHA. REAM DD RUN FROM 6900' TO 7058'. DRILLING AT 7200'.

DIVISION OF OIL AND GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE 313 — SEC. 16, T4N, R21W, SBB&M
A.P.I.# 111-21314 — HARRY E. HULL DISTRICT SUPT.

411 S. BECKWITH RD. SANTA PAULA, CA. 93060 (805) 933-1321

* *

12-28-84

DRILLED TO 7251'. WIPED HOLE. DRILLED TO 7410'. WIPED HOLE. DRILLED TO 7525'. WIPED HOLE. REAMED TIGHT HOLE FROM 7212' TO 7525' (REAMED SMOOTH - TOOK VERY SLIGHT WEIGHT). DRILLING AT 7555'.

12-29-84

DRILLED TO 7627'. POOH (TIGHT SPOT AT 7337'). RIH AND REAMED FROM 7100' TO 7627' - O.K. DRILLING AT 7778'.

12-30-84

DRILLED TO 7809'. WIPED HOLE. DRILLED TO 8025'. WIPED HOLE. DRILLING AT 8352'.

12-31-84

DRILLED TO 8361'. BIT TRIP. DRILLED TO 8540'. WIPED HOLE AND REAMED FROM 7238' TO 7634'. RIH AND CIRC FOR LOGS.

1-1-85

POOH TO LOG. RIGGED UP WELEX AND LOGGED AS FOLLOWS:

DIL-GR	8540' TO 6900'
FDC-CNL	8540' TO 6900'
DIPMETER	8540' TO 6900'

RIH WITH UNDER-REAMER. STOPPED AT TOP OF LINER. POOH TO EXAMINE TOOL.

1-2-85

FINISH TRIP TO INSPECT UNDER-REAMER (ARMS WERE CATCHING TOP OF LINER). RIH TO 6900'. OPEN HOLE TO 8" FROM 6900' TO 7464'.

DIVISION OF OIL AND GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE 313 — SEC. 16, T4N, R21W, SBB&M
A.P.I.# 111-21314 — HARRY E. HULL DISTRICT SUPT.

Harry Hull

411 S. BECKWITH RD. SANTA PAULA, CA. 93060 (805) 933-1321

* *

1-3-85

OPENED HOLE TO 8" TO 7558'. TRIP FOR URMR #2. OPENED HOLE TO 7835'. POOH FOR URMR #3.

1-4-85

RIH. OPEN HOLE TO 8" FROM 7835' TO 8200'. CONDITION MUD. POOH TO PICK UP LINER.

1-5-84

RAN 5 1/2", 20#, N-80, BUTT TDC LINER AS FOLLOWS:

FLOAT SHOE	8195'
1 JT	
FLOAT COLLAR	8154'
36 JTS	
HANGER	6733' TO 6730'

RAN 1 CENTRALIZER ON EACH OF THE FIRST 36 JTS

RIH WITH LINER. RAN DIALOG COLLAR LOCATOR.

RIGGED UP HALLIBURTON AND CEMENTED LINER AS FOLLOWS:
20 BBLS WATER: 20 BBLS SUPER FLUSH: 10 BBLS WATER: 350 CF CLASS G WITH 5% KCL, 1% HALAD 322, .25% DEFOAMER AND .1% HR7. DROPPED DRILLPIPE DART AND DISPLACED WITH 775 CF MUD. DID NOT PICK UP LINER WIPER PLUG - DID NOT BUMP. C.I.P. AT 15:45 HRS, 1-5-84. TRIP FOR 6 3/4" BIT. FOUND DRILLPIPE DART IN BOTTOM OF 5" DP.

1-6-84

DRILLED CEMENT FROM 6587' TO 6730'. CONDITIONED MUD. PRESSURE TESTED LAP TO 1500 PSI. TRIP FOR W.S.O. TEST TOOLS. SET PACKER AT 6660' AND TAIL AT 6682'. OPENED TOOL. HAD SLIGHT BLOW THROUGHOUT TEST. RELEASED PACKER. CHAIN OUT TO TOP OF FLUID. HAD 10' FLUID RISE. CHARTS EXAMINED AND TEST APPROVED BY DOG. PICK UP 2 7/8" DRILLPIPE AND RIH.

DIVISION OF OIL AND GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE 313 — SEC. 16, T4N, R21W, SBB&M
A.P.I.# 111-21314 — HARRY E. HULL DISTRICT SUPT.

411 S. BECKWITH RD. SANTA PAULA, CA. 93060 (805) 933-1321

* *

1-7-84

DRILLED CEMENT FROM 6730' TO 6787'. RIH TO FLOAT COLLAR AT 8152' - NO CEMENT. RAN BOND LOG (POOR BONDING BELOW 7550'). SHOT 4 JPF 8150'-8152' AND 7614'-7616'. TRIP FOR PERMANENT CEMENT RETAINER.

1-8-84

SET CEMENT RETAINER AT 8125'. CIRCULATE ABOVE RETAINER. STAB IN AND ESTABLISH COMMUNICATION BETWEEN SETS OF HOLES. RIGGED UP HALLIBURTON AND CEMENTED AS FOLLOWS:
PUMPED 20 BBLS WATER; 20 BBLS SUPER FLUSH; 10 BBLS WATER; 150 CF CLASS G WITH 5% KCL, 1% HALAD 322, .25% DEFOAMER AND .1% HR7. DROPPED DRILLPIPE PLUG AND DISPLACED WITH 607 CF. C.I.P. AT 09:15 HRS, 1-8-84. TRIP FOR MILL. TAG TOC AT 7492'. DRILLED CEMENT TO 7910' (SHOULD HAVE RUN OUT OF CEMENT AT +/- 7616'). RIH TO RETAINER AT 8125'. CIRC.

1-9-84

POOH. LAY DOWN 2 7/8" DRILLPIPE. RAN WELEX BOND LOG. MADE UP 7" TIE BACK SEALS ON DRILLPIPE AND RAN IN HOLE. SET SEALS IN HANGER. SEALS WOULD NOT TEST. MEASURE OUT. LAYING DOWN DRILLPIPE.

1-10-84

FINISHED LAYING DOWN DP. RAN 7" LT&C CASING WITH TIE BACK SEAL AS FOLLOWS:

TIE BACK SEAL ASSEMBLY	6457' TO 6450'
12 JTS 29# N-80	
50 JTS 26# N-80	
55 JTS 23# N-80	
39 JTS 26# N-80	
2 JTS 29# N-80	

LANDED 7" CASING WITH 20,000# ON SEAL ASSEMBLY AND HUNG CASING IN HEAD WITH 110,000# ON SLIPS. REMOVING BOPE.

DIVISION OF OIL AND GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE 313 — SEC. 16, T4N, R21W, SBB&M
A.P.I.# 111-21314 — HARRY E. HULL DISTRICT SUPT.

Harry Hull

411 S. BECKWITH RD. SANTA PAULA, CA. 93060 (805) 933-1321

* *

1-11-85

FINISHED NIPPLING DOWN BOPE. INSTALLED TUBING HEAD. CLEANED PITS.

RELEASED RIG, 22:00 HRS, 1-11-85.

* *

DETAILS OF FISH LEFT IN HOLE

FISH #1: T.D. 7178'; BOTTOM 7043'; TOP 6675'; CEMENTED 12-1-84

FISH: BIT, STAB, LEAD DC, STAB, MONEL, 1-DC, SCREW-IN SUB, BUMPER SUB, JARS, SUB, 3-DC, STAB, 3-DC, STAB, SUB, ACCEL, SUB, 2 JTS HWDP, BOTTOM 3' OF 1 JT HWDP.

FISH #2: T.D. 6826'; BOTTOM 6806'; TOP 6686'; CEMENTED 12-10-84

FISH: BIT, STAB, LEAD DC, MONEL, WASHPIPE SHOE, WASHPIPE, DRIVE SUB, JARS, SUB, STAB. (INSIDE WASHPIPE-LEFT THE J-TOOL AND 2 SUBS).

FISH #3: T.D. 7079'; BOTTOM 7079'; TOP 6937'; CEMENTED 12-19-84

FISH: BIT, STAB, STAB, LEAD DC, STAB, SCREW-IN SUB, BUMPER SUB, JARS, SUB, 1-DC, STAB, 2-DC, SUB, BOTTOM 1/2 OF THE ACCEL. (AROUND THE OUTSIDE OF THE ACCEL, AND BELOW THE TOP OF THE FISH - GUIDE, GRAPPLE AND 1-EXTENSION).

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION OJAI FIELD VENTURA COUNTY
WELL: VALEX FERNDALE #313 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21314 HARRY E. HULL DISTRICT SUPERINTENDENT

Harry Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

1/17/85
MIRU SPS. Unload pump system, BOPE & tbg. SJD. Will continue rigging up this a.m.

1/18/85
Rig pump & tank. Remove tbg. head. Install BOPE. Rig for tbg. M.U. Baker 5-1/2" 20# positive scraper. Measure & PU 2-7/8" tbg. Run approximately 4700' in hole. Found fluid level @ 200'. SDFN.

1/19/85
Continue measure & RIH with tbg. Scraper stopped @ 6771' (liner top 6730' - 5-1/2"). Unable to work thru. Wait on power swivel. RU power swivel. Rotate thru obstruction. Continue in hole, chasing obstruction to 8124' (K-1 retainer @ 8125'). Change well over to treated lease water. Had formation returns during change over. 7" x 9-5/8" annulus communicated with 5-1/2". Pumped down tbg., took returns thru 7" x 9-5/8" @ surface. Formation returns constant. Unable to clean formation returns up. (Unknown volume of returns). Pull scraper to 6198'. SDFN.

1/20/85
Wellhead pressure = 50# tbg/75# csg. Clean mud pits and storage tanks. RIH with scraper to E.D. 8120'. Backscuttle out fill to 8124' with formation returns. Backscuttle 200 bbls. around system. Formation returns cleaned up to light traces. Pull scraper to 6198'. Close in tbg., circulate down 7" csg. Took returns out 7" x 9-5/8". Pump 225 bbls. Well had formation returns on bottoms up, then cleaned up. (7" x 9-5/8" volume 219 bbls.). Pull scraper to 2485'. SDFN.

1/21/85
Wellhead pressure = 0# psig tbg/50# psig csg. Finished POH with tbg. & scraper. RU Welex. RIH with CBL-CCL (for bond log #3). Unable to get in liner. POH & remove one set of centralizers. RIH & log from 8126' - 6600' under 1000 psig pressure. Found some bonding at 8126'-8120', 7900'-7785', 7680'-7618', and 7550'-6680'. Lay down logging tools. RIH with 4" guns. Shoot 4 1/2" JHPF @ 8052'-8054'. (8 holes total). RIH with 5-1/2" 20# Halliburton E-Z Drill Retainer with 9" x 2" solid aluminum guide welded to bottom. Set same @ 8032'. RD Welex. Run 2000' of tbg. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION OJAI FIELD VENTURA COUNTY
WELL: VALEX FERNDALE #313 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21314 HARRY E. HULL DISTRICT SUPERINTENDENT

Harry Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

1/22/85

POH with 2000' tbg. Rig Loomis Tubing Testers. M.U. Howco stinger sub. Tested tbg. in hole @ 6500 psig. Stab into retainer. Tear out tester. Pull out of retainer, spaced well out. B.S. tbg. free of pipe dope. Rig Dowell. Establish breakdown of 1.25 BPM @ 3400 psig. Pulled out of retainer, pulled out of 5-1/2" liner. Closed well in. SJD.

1/23/85

RIH to retainer & stab-in tool. Prepared to cement shot holes at 8052'-8054'. Pumped 6.5 cf fresh water, followed by 50 sx (57.5 cf) "G" + 1.0% D-60 FLA + 0.3% D-13 retarder, followed by 10 cf fresh water, followed by 180 cf treated lease water. Stabbed into retainer. Began squeezing. With 210 cf displacement (i.e. 2 cf cement out shot holes), pumping 3 cfm at 3500#. Continued pumping at 3500# with decreasing rate. Pump stalled out at 225 cf displacement, 3500#. Applied 1000# to csg. & 4000# to tbg. Holding 4000#. Increased csg. pressure to 1500# and tbg. pressure to 4400#. Holding 4400#. Final displacement 227 cf total. CIP at 9:37 a.m. Estimate 15.7 cf cement out holes considering compressibility. Pulled out of retainer and stopped 15' above same, to BS hole clean. Recovered +34 cf cement slurry from tubing. POH with tubing. RU Welex. RIH with 4" gun & perforated 8 (0.50") JH 7769'-7771'. RD Welex. MU Baker 5-1/2" 20# fullbore packer with 2-3/8" stinger below. RIH. Set fullbore @ 7648' (packing element @ 7642'). RU Dowell to cement squeeze 7769'-7771' holes. Pressured tbg. to 3500#. Bled to 2300# in 2 minutes. Reattempted breakdown with 45 cf fresh water. 9 cfm @ 4300#. Relaxed tool. Pumped 25 sx (28.75 cf) "G" + 1.0% D-60 FLA + 0.3% D-13 retarder. Followed with 10 cf fresh water and 196 cf lease water. Closed fullbore packoff. Applied 1500# to csg. Began squeezing. With 240 cf displacement (i.e. 3 cf cement out holes), pumping 10 cfm @ 5000#. Shut down with 259 cf total displacement. 3-minute SIP 3000#. Let pressure bleed off to formation until reached 2000#. Relaxed tool & BS hole clean, holding approximately 1500# backpressure on returns. Got back approximately 3 cf cement slurry. Closed fullbore. Applied 1500# to csg. Repressured tubing to 4000# with 5-1/2 cf water. 2-min. SIP 3300#. Repressured tbg. to 4000#. Total displacement of 7 cf. CIP @ 6:43 p.m. 5-min. SIP 3700#. Considering 2 parts of job together, less compressibility: Estimated total displacement of 259 cf. Est. TOC @ 7713'. Est. 21.9 cf cement out holes. Considering cement returns and final squeeze: Est. TOC @ 7676' and est. 14.3 cf cement out holes. Closed well in at head. SDFN. This a.m. 2100# tbg/650# csg.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION OJAI FIELD VENTURA COUNTY
WELL: VALEX FERNDALE #313 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21314 HARRY E. HULL DISTRICT SUPERINTENDENT

Harry Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

1/24/85

Tbg. press. 2100 psi, csg. 650 psi. Bled well off. Released fullbore. Reset fullbore @ 7549' to test previously cemented WSO holes @ 7618'-7620'. Pressured down tbg. to 2000 psi - no rate; one minute SIP = 1800 psi. Pressured csg. to 2000 psi, no rate; one-minute SIP = 1725 psi. Bled off pressure. Released fullbore. Reset fullbore @ 7434'. Due to response to pressure test, rigged Dowell and attempted to breakdown WSO holes @ 7618'-7620'. Apply 1500 psi to csg. Pressured down tbg. 4500 psi @ 4.0 cfm, & put 3 bbls. away. With 4 bbls. away, had 2.8 cfm @ 4750 psi. With 5 bbls. away, pressured out @ 5000 psi and no rate. 1-min. SIP 3300#. Decided to forego squeezing holes at 7618'-7620'. Released fullbore and pulled out of hole. MU STC. RIH with tbg. and hung tail @ 6476' (tbg. measurement). Attempted to establish communication between 7" csg. and 9-5/8" x 7" annulus, through the holes in 7-5/8" hanger at 6459'. Applied 2000# to 7" with no returns out csg/csg annulus. Applied 1000# to csg/csg annulus with no returns out 7" csg. Waited 20 minutes. Closed csg. and established breakdown with 21 cf lease water: 6 cfm at 1700#. 1-min. SIP 1450#. 30-min. SIP 1000#. Bled well, getting back 12 cf. Left 9-5/8" x 7" annulus open for entire cementing operation. Cemented holes at 6459' as follows. Opened csg. Spotted 10 cf fresh water, followed by 35 sx (40.25 cf) "G" + 1.0% D-60 FLA + 0.3% D-13 retarder. Displaced with 10 cf fresh water and 185 cf lease water. Full returns. Pulled tbg. to 6086'. (Est. TOC at 6283'.) BS hole clean. Recovered approx. 6 cf cement from tubing. Closed csg. Refilled hole with 5 cf lease water. Began downsqueezing. Applied 2000#, using 8 cf (essentially equal to fluid compression -- very minute amt. of cement out holes). 2-min SIP 1900#. Pressured to 2500#, bringing total squeeze to 14-1/2 cf. Considering fluid compression, calculated 3.6 cf cement moved out holes @ 6459' (and/or moved down csg. toward the 7618'-7620' holes). 5-min. SIP 2350#. Repressured to 2500#. CIP at 6:27 p.m. Closed in well. Secured 9-5/8" x 7" annulus. (No returns out annulus during cementing operation.) Est. TOC at 6360'. SDFN. This a.m. 650# on well.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION OJAI FIELD VENTURA COUNTY
WELL: VALEX FERNDALE #313 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21314 HARRY E. HULL DISTRICT SUPERINTENDENT

Harry Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

1/25/85

650# on well. POH with tbg. M.U. 6-1/8" bit with 4 3-1/8" drill collars. RIH. No weight loss to 6532'. (Cemented holes at 6459'.) Pulled to 6476'. BS bottoms up. Brought up contaminated cement. RIH to 6500' & BS out more "grey water". RIH to top of 5-1/2" liner @ 6730' and BS out some cement slurry. Tested csg. to 2000#. 2-1/2 minutes into test, pressure dropped immediately to 700#. Communicated with 9-5/8" x 7" annulus. Pumped down tbg. taking returns through csg/csg. annulus till bottoms up. POH with bit. MU Baker 7" fullbore packer. RIH and set packer @ 6126'. Applied 1500# to csg. Holding pressure. Closed csg/csg. annulus and pressured tbg. to 1400#. 2-min. SIP 1350#. Opened csg/csg. annulus. Prepared to recement holes at 6459'. Circulated the following down tbg. with full returns out csg/csg. annulus: 200 bbls. treated lease water mixed with 2 gals. Baker Magnacide 407 (corrosion inhibitor/bacteriocide/oxygen scavenger); 10 cf fresh water; 35 sx (40.25 cf) "G" neat cement; 10 cf fresh water, 223 cf treated lease water. Shut down and let cement equalize. Well equalized with 242 cf total displacement behind cement. Estimated 110' of cement in 7" csg. and in 9-5/8" x 7" annulus, with TOC at 6349' in each. Closed tbg. and applied 1000# to csg/csg. annulus. Closed csg/csg. annulus and applied 1500# to tbg. using 2 cf lease water. (Compression only.) 10-min. SIP 1500# on both tbg. and csg/csg. annulus. CIP at 10:00 p.m. SDFN. This a.m.: 300# tbg., 1400# on 7" csg., 1350# on csg/csg. annulus.

1/26/85

Tbg. press. 300 psi. 7" x 2-7/8" annulus 1350 psi. 9-5/8" x 7" annulus 1350 psi. Bled well off. Release fullbore. POH with same. RIH with 6-1/8" bit & 4 3-1/8" drill collars. Tag top of cement @ 6310'. Drill out green cement to & fall out of same @ 6459'. Drill speed 4.5' per minute. Clean well up. Press. test 9-5/8" x 7" annulus to 1500 psi for 15 min. Test positive. Press. 7" csg. to 2000 psi., 15 min. test positive. Check top of liner with 6-1/8" bit @ 6730'. B.S. clean. POH with BHA. Change bit to 4-5/8". RIH. Tag down @ 7589'. Rig swivel. Break thru bridge & BS out approx. 6 bbls. cement. Continue in B.S. & well clean to 7653'. Press. test holes @ 7620' to 2000 psi for 15 min. Test positive. Continue in hole . Tag cement @ 7665'. Drill out green cement to & fall out @ 7767'. Continue in hole. Cement @ 7993'. Drill out to Howco Ret. @ 8032'. End report @ 0600 hrs.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION OJAI FIELD VENTURA COUNTY
WELL: VALEX FERNDALE #313 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21314 HARRY E. HULL DISTRICT SUPERINTENDENT

Harry Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

1/27/85
Clean well up. Press. test holes @ 7769'-7771' to 2000 psi for 15 min. Test positive. POH. Stand back BHA. Rig Welex & run CBL, CCL. (Bond log #4.) Repeat section from 8030'-7400'. CBL malfunctioned. POH. Change CBL. Malfunctioned twice more. Change out & log under 1000 psi from 8030'-6300'. Tear out Welex. Made up Baker 5-1/2" 20# scraper. Run in to 8032'. Change well over to filtered lease oil. POH. Install single Hydraulic 6 x 5000 gate with 3-1/2" ram blocks. RU Welex. Wait on daylight to perf.

1/28/85
Perf the following intervals with 2 (0.35") SSB II JH @ 7820', 7855', 7873', 7910', 7930', 7954', 7977', & 8004'. Tear out Welex. RU Loomis Tester. Make up Baker 5-1/2" 20# Retrievamatic with stinger & test the following frac string in hole: 2-7/8" J-55 6.5# EUE 32 jts. test @ 6500 psi 3-1/2" N-80 9.2# Butt. 145 jts. test @ 9000 psi 3-1/2 L-80 10.3# Hydril 69 jts. test @ 9000 psi. Set Retrievamatic @ 7704.91' with tbg. hanger below 3-1/2" ram blocks. Pressure test casing to 2000 psi. Test positive. NOTE: Packer set with 23,000# compression. Close well in. SJD.

1/29/85
Finish rigging up Halliburton. Sand frac'd while holding 2000 psi backup on annulus as follows: Breakdown 13.7 BPM @ 7170 psi, ISIP = 3200 psi, F.G. = 0.78, estimate holes open 3-1/2, avg. rate = 19 BPM, avg. press. = 7550 psi., max. rate = 21 BPM, max press. = 8260 psi, FSIP = 2850 psi. 5 min. SIP = 1600 psi. 15 min. SIP = 1000 psi. Total oil used = 752 bbls. Total prop used = 35,500#. (15,500 lbs. 20/40 mesh Ottawa sand, 10,000 lbs. 20/40 mesh Interprop, 10,000 lbs. 12/20 mesh Interprop.) Estimate 31,700 lbs. of frac sand in formation. Tear out Halliburton. Rig bleed down lines. Open well up after 3 hrs. of being shut-in, 400 psi on well. Open on 12/64" choke. Taking 15 minute readings, established 5 bbl/hr rate, took 90 minutes & 15 bbls. to establish. Turned well over to Production Department.
From 3:00 p.m. (1/28/85) to 5:00 a.m. (1/29/85) well averaged 4 bbl./hr. Average tbg. press. = 257# thru 6/64" choke. Rate started dropping, changed to 9/64" choke. Maintained 5 bbl/hr. till 7:00 this a.m. Total recovery = 86 bbls.

1/30/85
127 bbls. gross. 1.0 B/S. 350# tbg/0 csg. 13/64" bean. 18-1/4 hrs. Flowing - no pumping unit.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION OJAI FIELD VENTURA COUNTY
WELL: VALEX FERNDALE #313 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21314 HARRY E. HULL DISTRICT SUPERINTENDENT

Harry Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

1/31/85

132 bbls. gross. 0.5% w/h cut. 280# tbg/0 csg. 13/64" bean. 24 hrs. Flowing. Gravity = 31.5 @ 42 degrees.
Total oil used = 752 378 bbls. load oil to recover to date.

2/5/85

89 bbls. gross. 10% cut. No pressures. 12/64" bean. 15 hrs. 0.2 B.S.

Well press. 700#. Closed well in. RU Pruett. RIH with 1-1/2" sample bailer. Tag down @ 7055'. Unable to make hole. POH with bailer, no sample. RIH with 1-1/2" impression block. Tag down @ 7055'. POH. Unable to discern light markings on I.B. RIH with 1-1/2" sample bailer with knuckle jt. immediately above. Tag down @ 7055'. Unable to make hole. POH. Recovered frac sand. MU 1-5/8" bailer with load tube. Tag down @ 7055', unable to make hole. POH. Recovered some frac sand. Rigged to & pumped down tbg. 28 bbls. lease oil. Press. to 3000#. RIH with 1-5/8" bailer, tagged down @ 7300'. Unable to make hole. POH. Recovered frac sand. Changed pressure gauge on tbg. from 3000# to 5000#. Well press. 2000#. Pump 3 bbls. Pressured out @ 4500# while maintaining 1000# on backside. RIH with 1-5/8" bailer, tagged down @ 7300'. Unable to make hole. POH. Tear out Pruett. Rig well to flow. Well press. 2000#. Bled well off thru 6/64" adjustable choke to 1000#. Opened well up to flowline on 12/64" choke. Turned well over to Production Department.

2/6/85

Well press. 500#. Closed well in & RU Otis 1" coiled tbg. Filled tbg. with approximately 22 bbls. oil. RIH with coiled tbg. while circulating with oil and holding 700# back pressure. Tag down @ 7700' (inside packer bore). Circulated and chased bridge to 8008'. (Btm. perf @ 8004'.) Pulled coiled tbg. tail to 6800', bridge followed tbg. tail up hole. Chased bridge back to 8008'. Circulate on bottom for 75 minutes. Circulate tbg. out of hole, no major solid returns. Tore out Otis coiled tbg. Well pressure holding @ 250# tbg. with tbg. shut-in. Pick up and relax Retrievamatic. Pumped down 7" x 3-1/2" annulus @ 600#, established circulation for approx. 30 seconds. Packer locked up. Unable to regain circulation. Attempt to release tool, unable to do so. Dragged Retrievamatic up out of liner. Hung tail @ 6713', (liner top is @ 6730'). Rig to B.S. tbg. clean. Recovered approx. 0.1 c.f of frac sand. Closed well in. Pressure remained @ 0#.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION OJAI FIELD VENTURA COUNTY
WELL: VALEX FERNDALE #313 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21314 HARRY E. HULL DISTRICT SUPERINTENDENT

Harry Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

2/7/85

75# tbg/0 csg. Backscuttle system free of gas. POH with Retrievamatic. RIH with STC to 6955'. Stop & backscuttle system free of gas. Continue in hole to 7656'. Backscuttle bottoms up, had severe gas returns. Hold 800 psig backpressure, choke gas out of system. Clean out frac sand to 7781'. Well not cleaning up between connections, appears to be running frac sand. Continue backscuttling, holding 800 psig backpressure, choke sand & gas from system. Pull tail to 7415'. Land tbg. on donut. Close well in. SDFN.

2/8/85

Well press. 100# (no gas). B.S. bottoms up. Ran back in hole to 7740'. Rig to & change system over to 72 lb/cf KCl water treated with AC48S. Continue in hole and tag sand @ 7775'. B.S. out frac sand to 8024'. Cleaned well up. POH with tbg. M.U. Baker 5-1/2" 20# Model "C" bridge plug. RIH & set same @ 7795'. Press. test CP holes @ 7769'-7771' to 2000# for 15 minutes. No bleed off. Rig to & changed system over to filtered lease crude. Spot 1 sk 20 mesh sand on bridge plug. Start POH with tbg. as of 6:00 a.m.

2/9/85

0600 hrs. Finish pulling out of hole. Break off ret. head. Rig up Welex to perf the following with estimated fluid level @ 620' from surface. Shoot 4 (0.35") SSB II JH @ 7547.5', 7588.5', 7656.7', 7718.5', & 7770.5'. Total of 20 holes, Sandcal log depths. Fill hole. Tear out Welex. Rig up Loomis Testers. Make up Baker 5-1/2" 20# x 2-7/8" large bore Retrievamatic. Test same & 19 jts. 2-7/8" J-55 @ 6500 psi, 145 jts. 3-1/2" Butt. N-80 to 9,000 psi, & 69 jts. 3-1/2" Hydril L-80 to 9000 psi. Unable to find 3-1/2" Hydril pin x 3-1/2" 8rd box x-over. Pull back out of hole to Butt. tbg. Found 3-1/2" Hydril pin screwed into 3-1/2" Butt. collar. Replace x-over. Test 50 jts. Hydril back in hole. Unable to test remainder due to malfunctioning tools. Tore out Loomis. Finish running in hole. Set Retrievamatic @ 7272' (packoff) with 38,000# wt. with hanger in place. Test 3-1/2" x 7" annulus to 2,000 psi. Test o.k. Start rigging up Halliburton to frac Stage II @ 0600 hrs.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE #313 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21314 — HARRY E. HULL — DISTRICT SUPERINTENDENT

Harry Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

2/10/85

0600 hrs. Finish rigging Halliburton. Attempt breakdown with 20 bbls. Problem with instrumentation. Repaired same. Sand frac Stage II as the following: Breakdown 15 BPM @ 7700 psi, ISIP 2850 psi, F.G. 0.75 psi/ft., est. holes open 3.9, avg. press. 7950 (+) psi., avg. rate 16.5 BPM, max. press. 8100 psi., max. rate 17.2 BPM., FSIP 3,430 psi., 5 min. = 3400 psi., 15 min. = 3530 psi. Total oil 745 bbls. Used 17,800# 20/40 Ottawa sand, 10,700# 20/40 Interprop, and 10,000# 12/20 Interprop. Total PROP used 38,500#, on formation 34,500#. Max. back up press. on 3-1/2" x 7" annulus approx. 2,000 psi. Total displacement 63 bbls. Close well in. Release Howco. SJD.

2/11/85

Well press. 570 psi. Rig Pruett Wireline. Run in hole with 1-1/2" sample bailer. Tag fill @ 7557'. (Top perf 7547'.) Tear out Pruett. Bailer recovered frac sand. Unland tbg. & relax Retrievamatic. Backscuttle system free of gas while maintaining 250 psi. backpressure. Release Retrievamatic. Start change over to 72#/c.f. KCl. Lost fluid end on pump. Overhaul same. Finish change over. Pull & lay down 3-1/2" Hydril & 3-1/2" Buttress. Stand back 2-7/8" tbg. Break off Retrievamatic. M.U Model "C" retrieving head. Measure in hole with 2-7/8" tbg. to 6697'. SJD. (Dropping wt. back from 71 to 69.)

2/12/85

Hole standing full. Backscuttle system to remove gas, losing estimated 15% of returns. Condition fluid, lighten KCl water to 69 lb. per c.f. Continue in hole with tbg., tag sand @ 7530'. Backscuttle out sand to bridge plug @ 7795'. Pump rate 2-1/2 BPM with no noticable fluid loss during cleanout. Fluid becoming gas cut, average weight 67 lbs. per c.f. Backscuttle hole clean, release & POH with bridge plug. RIH with STC, tag fill @ 8008'. Clean out fill to cement retainer @ 8024'. Clean well up. Pull tail to 7394'. SDFN. Average fluid weight 65 lbs. per c.f.

2/13/85

Well on light vacuum. RIH to 8024'. Rig to and change system over to lease crude. P.U. & lay down excess tbg. Land tbg. on suspension plug (donut) with tail @ 7402'. PS @ 6890'. Remove tbg. equipment, floor & BOP. Install flow tree. Well flowing 1" stream into cellar. R.U. flow line. Turn well over to Production Department. (Made 51 bbls. in 14 hrs.) Well quit flowing @ 6:00 a.m. (2/13/85). Rig to swab. Open flow line, well flowing on 14/64" bean. Did not swab. No tbg. or csg. guages (will be installed).

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION OJAI FIELD VENTURA COUNTY
WELL: VALEX FERNDALE #313 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21314 HARRY E. HULL DISTRICT SUPERINTENDENT

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

2/14/85
Start report @ 6:00 a.m. Well dead. Casing press. 115 psi. Rig up swab equipment. Open well to swab. Well started heading to cellar. Opened well to Baker tank. Regulated well to 6-8 bbls/hr. average to attempt to clean well up. While well flowing, loaded out rental equipment & pump system. Avg. well press. during 9 hrs. of flow time = 205 psi. Total recovery for 9 hrs. = 85 bbls. Turned well over to Production Department.
As of 7:30 this a.m.:
193 bbls. gross. 380# tbg/csg. vacuum. 14/64" bean. 12% cut with trace of sediments. 22-1/2 hrs. production.

2/15/85
186 bbls. gross. 18% cut. (comp. off trap) 410# tbg. 13/64" bean. 24 hrs. production. 25-1/4 hrs. test. Test - part potter & part tank. Gravity 28.0 @ 50 degrees. Change from 14/64" to 13/64" bean @ 3:00 p.m. (2/14/85).

2/20/85
Lay down swab equipment. Rig down. Load out pump, tank & equipment. Release rig. RDMO.

94 bbls. gross. 16% cut. 330# tbg/1340# csg. 13/64" bean. 24 hrs. Changed from 12/64" to 13/64" bean @ 5:30 p.m.

2/22/85
MIRU Baker Production Services. 360# tbg/1425# csg. Close well in. RIH with 1-1/2" sample bailer on slick line. Tag down @ 8051' (wireline measurement). Actual T.D. = 8032'. Tear out Wireline. Recovered small sample of wax, frac sand & formation sand. Total shut in time = 50 minutes. 625# tbg/1425# csg. Open up to flowline. Release Wireline Services.

100 bbls. gross. 10% cut. 300# tbg/1480# csg. shut. 13/64" bean. 23 hrs.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE #313 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21314 — HARRY E. HULL — DISTRICT SUPERINTENDENT

Harry Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

2/23/85

RU Flo-Log. RIH with logging tools. Unable to get below 7880'. Worked and dropped through to pickup at 8025'±. (E.D. 8032'. Perfs 7547'-8004'.) Capacitance tool not working properly. POH with tools. Lost 7 (3" x 4" triangular) thin petals off basket. Some tar on outside of tools. RIH with logging tools. Temperature, tracer and capacitance surveys indicated 100% of fluid entering @ 7954' perforations. Slight temperature anomaly @ 7770' perforations, but these perfs do not seem to be contributing. No evidence of migration. Shut in well @ 3:30 p.m. Waited 1 hour. 650# tbg. Ran surveys finding no evidence of migration. Left well shut in overnight.

34 bbls. gross. N/S. 13/64" bean. On 7 hrs. Off 17 hrs. F.L = 926.30' fluid over tail, 1480#.

2/24/85

At 8:00 a.m. 1380# tbg/1560# csg. (16-1/2 hrs. shut in). Flo-Log RIH with logging tools. Surveys indicated no migration. Saw top of oil column @ 5230'. Calculated BHSIP of 2600 psig. At 9:30 a.m. 1410# tbg. Opened well on existing 13/64" bean. Re-surveyed with same 100% entry @ 7954'. At 10:45 a.m., changed bean to 17/64". Surveys again showed all fluid entering @ 7954'. RD Flo-Log. Left well flowing on 17/64" bean. Production monitored as follows:

TIME	PRESSURE TBG/CSG	BBLS. MADE	RATE BBLS/HR.	W/H CUT	BEAN	REMARKS
9:30 a.m.	1410/1560	-	-	-	13/64"	Opened well.
10:45 a.m.	450/1500	N/A	N/A	N/A	17/64"	Bean change @ 10:45
11:30 a.m.	400#/1500	12	"6"	N/A	17/64"	
12:30 p.m.	380/1500	7	7	N/A	17/64"	
1:30 p.m.	350/1500	8	8	N/A	17/64"	
2:30 p.m.	440/1500	14	14	0.1% tr.sed.	17/64"	
3:30 p.m.	440/1500	10	10	N/A	13/64"	Bean change @ 3:30
4:30	490/1500	5	5	0.1% tr. sed.	13/64"	
8:30 p.m. 2/24/85	460/1500	23	5.75	0.1%	13/64"	
7:00 a.m.	600/1560	54	5.1	1.0% tr. sed.	13/64	
		133 bbls.				

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION OJAI FIELD VENTURA COUNTY
WELL: VALEX FERNDALE #313 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21314 HARRY E. HULL DISTRICT SUPERINTENDENT

Harry Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

2/25/85
Wellhead leaking between 6-1500 flanges. Repair same. RU Dowell. Pumped 350 bbls. oil down tbg. as detailed below. Used 32 7/8" balls with 3/4" nylon core which are 1.2 specific gravity. (Vol. to top perf 46 bbls., to btm. perf 53 bbls.) Open tbg. up on 13/64" choke. Release Dowell. Production after pump-in: 192 bbls. gross. 25% cut. 530# tbg/1560# csg. 13/64" bean. 17 hrs. production. 25 hrs. test.

BBLS. OIL PUMPED	BPM	TBG. PRESS.	CSG. PRESS.	REMARKS
0	-	730	1575	Shut in press.
185	N/A	N/A	N/A	Fill hole w/185 bbls.
0	2	1900	2650	Establish rate & press. Drop 12 balls.
34	2	2050	2800	@ 34 bbl decr. to 1 BPM.
40	1	1950	2700	@ 40 bbl incr. to 2 BPM.
45	2	2050	2800	
60	2	2225	2925	
65	2	2225	2980	@ 65 bbl. shut down for 15 min.
	0	1600		15 min. SIP.
"0"	1.5	2200	3000	Drop 20 balls & resume pumping.
43	2	2300	3000	@ 43 bbl incr. to 2 BPM.
47	2	2375	3000	
50	2	2400	3050	
55	1.5	2400	3050	
70	1.5	2420	3100	
80	1.25	2420	3100	
100	1	2300	3100	@ 100 bbl. shut down.
	0	1900	2600	15 min. SIP.
				Open well on 13/64" bean

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE #313 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21314 — HARRY E. HULL — DISTRICT SUPERINTENDENT

Harry Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

2/26/85

Time	Tbg. Press.	Csg. Press.	Bbls. Made	Bbls/hr. Rate	Cut	Bean
8:00 a.m.	530	1560	-	-	N/A	13/64"
11:00 a.m.	460	1500	21	7	30% w/h	13/64"
				(FL 1756' fluid over shoe)		
1:00 p.m.	440	1450	13	6.5	25% w/h	13/64"
2:00 p.m.	420	1400	6	6	N/S	13/64"
3:00 p.m.	400	1380	6	6	2.0% comp.	13/64"
				(2.0% comp. cut 8 a.m. - 3 p.m.)		
4:45 p.m.	440	1390	N/A	N/A	N/A	14/64"
						(Change bean)
7:45 p.m.	410	1350	19	6.3	0.1% w/h	14/64"
2/26/85						
6:30 a.m.	340	1300	64	5.95	N/A	14/64"
8:00 a.m.	330	1300	N/A	N/A	2.5% comp.	14/64"
			148 bbls. gross			

2/28/85

23 bbls. gross. 16% cut. 16/64" bean. 4 hrs. Rig moved on. MIRU SPS. Spot & RU circulating pump & tank. Unload BOP. Pump 190 bbls. lease oil down tbg., while taking gas returns thru flowline. When returns to oil, returns circulated to rig pump. Turn system over holding 500 psig backpressure. Unable to balance well. Immediate shut-in on tbg. 175 psig. SDFN.

3/1/85

Well pressure 250 psig (tbg. & csg.). Circulate system around while holding 800 psig backpressure. Well flowing, but controllable. Remove tree. Install BOP. While building floor & installing tbg. equipment, continued to circulate well. Shut down pump. Unland tbg. PU additional tbg. Tag fill @ 8010'. Backscuttle out diverting balls, clean out to 8024' (E.D by tbg.). Clean well up with 500 psig backpressure. Well flowing, POH with tbg. Break off STC. MU 1.81" "R" nipple with 1.76" no-go on straddle washer with "L" sleeve and T/L pump shoe. RIH with tbg. to 6710'. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION OJAI FIELD VENTURA COUNTY
WELL: VALEX FERNDALE #313 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21314 HARRY E. HULL DISTRICT SUPERINTENDENT

Harry Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

3/2/85

Backscuttle system to remove gas. RU Pruett Wireline. Set tbg. plug 94' from surface. Tear out Wireline. Continue in hole with tbg. Hang tail @ 7990'. RU Wireline & pull tbg. plug. RIH with 1.81" G blanking plug, set same in "R" nipple. Pump 47 bbls. lease oil treated with 10% mutual solvent & 5% Toluene. Run in with shifting tool & close 1.87" Baker "L" sleeve. Shifting tool hung in sleeve. Jar same loose. POH. Found metal dog missing from shift tool. Tear out Wireline. Lower tbg. tail to 8012' (center of cups @ 8002'). Tbg. became hydrostatically stuck at this point. Unable to pull same @ 45,000# over weight. RU Wireline. Run in hole with three-prong grapple to fish missing dog. Misrun. Run in with Bowen 1-5/8" x 1-3/4" close-catch. Misrun. Run in with 1-3/4" magnet. Misrun. Run back with Bowen close-catch. Misrun. Close well in. Tear out Wireline. SJD.

3/3/85

Well pressure 225 psi. Backscuttle system free of gas. RU Dia-Log. Taking two runs due to misfire. Run in hole with 1-3/4" perf gun with CCL, & perf 2-3/8" pup jt. above blanking plug, which equalized the differential pressure across BHA. Tear out Dia-Log. Pull BHA up to 7960'. RU Pruett Wireline. RIH & open Baker "L" sleeve. Tear out slickline. Close well in. SJD.

3/4/85

Well press. 200 psi. Circulate system free of gas while holding 700 psi backpressure. POH with BHA. Repair same. Run back in hole to 6710'. Well flowing constantly during trip. SJD.

3/5/85

Circulate system holding 700# backpressure. RU Pruett Wireline. Set tbg. plug 94' from surface. RIH with tbg. to 7980' (center of cups). RU Pruett & pull tbg. plug. Pump 47 bbls. lease oil with 10% mutual solvent and 5% Toluene. Rig Pruett. Run in with Baker shifting tool. First attempt to shift sleeve unsuccessful, second attempt shifting tool hung up in "L" sleeve, unable to jar out of sleeve, drop line cutter. Severed slick line @ rope socket. Run in & fish line cutter. RIH with grapple, spangler jars and hydraulic jars. Catch hold of fish, jarred same loose & POH. Recovered 100% of fish. MU Otis shifting tool. RIH and attempt to shift "L" sleeve. MU modified Baker shifting tool. RIH and close sleeve. Tear out Wireline. Pump down tbg. & pressure out @ 2000# testing "L" sleeve. SJD.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE #313 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21314 — HARRY E. HULL DISTRICT SUPERINTENDENT

Harry Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

3/6/85

Casing press. 400#. Lowered wash tool & blanked out @ 2500# below perfs. Unable to breakdown perfs @ 8004' & 7977' @ 2500#. Holes @ 7954' broke down @ 0.53 BPM @ 1950#. Holes 7930' broke down @ 1.02 BPM @ 2250#, pump away 8 bbls. final rate was 0.53 BPM @ 2250#. Unable to breakdown perfs @ 7910' & 7873' @ 2500#. (Tool pulling weight 7895'-7875'.) While attempting to breakdown perfs @ 7855' noted 0.8 BPM rate @ 2300#, csg. press. showed communication. Pulled tool up to blank pipe @ 7835' and attempted to blank tool - unsuccessfully. Pulled up to 7795' & reattempted to blank tool - unsuccessfully. Lowered tool to 7819'. Tool apparently differentially stuck due to gas cut annulus. Rigged Pruett Wireline. RIH with pulling tool for "G" blanking plug. Unable to latch onto plug. POH. Found crumpled sheet metal in grapple of tool. Made one additional unsuccessful attempt to retrieve plug. POH. Retrieving tool showed signs of sand fill. Made 2 runs with Baker shifting tool. Shifted "L" sleeve to open position. Tool remained differentially stuck. RIH with 1-1/2" bailer. Bailed sand off of blanking plug. Run back in hole with pulling tool for blanking plug. While attempting to pull plug, grapple jarred off of fishing neck. (Unable to pull equalizing probe loose.) SJD.

3/7/85

RU McCullough. RIH & tie into BHA. Shot 3 (0.35") deflecting bullets in 2-3/8" pup jt. above blanking plug. Tear ot McCullough. Circulate system through "L" sleeve holding 700# backpressure to remove gas from system. POH with BHA. MU Hampton circulation wash tool with slide valve, knockout valve, 2-3/8" "L" sleeve, & P.S. on 2-7/8" tbg. RIH to 6710'. SJD.

3/8/85

Hold 700 psig backpressure, circulate system to remove gas. Continued in hole with bottom hole assembly to 7940'. RU Dowell. Pump 47 bbls. lease oil, treated with 10% mutual solvent and 5% Tolune. Blank tool out @ 3500 psig. Pull up and wash perfs as follows:

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION OJAI FIELD VENTURA COUNTY
WELL: VALEX FERNDALE #313 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21314 HARRY E. HULL DISTRICT SUPERINTENDENT

Harry Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

3/8/85 (con't)

FIRST STAGE PERFS (2-0.35")	BREAKDOWN (BPM)	PRESSURE (PSIG)
7930	1	3000
Pump 8 bbls.	Final rate 0.5	3000
7910	0.5	3300
Pump 8 bbls.	Final rate 0.5	3300
7873	Blanked out	3500
7855	" "	3500
7820	" "	3500
SECOND STAGE:		
7770.5	1	3500
Pump 8 bbls.	Final rate .75	3500
7718.5	Blanked out	3500
7656.5	" "	3500
7588.5	" "	3500
7547.5	" "	3500

Pull up and hang BHA @ 7515'. RD Dowell. Backscuttle treated oil out of tbg. Circulate system to remove gas with 700 psig backpressure. Pull BHA to 6700'. SDFN.

3/9/85

Run BHA in to 7,960'. Circulate system holding 700 psi backpressure. POH with BHA. RU Welex. Taking seven gun runs, due to misfires. Perforate the following: 4 (0.41") SSBII JH at 7980', 7875-1/2, 7801', 7744', 7695', 7677', 7637', 7604', 7583', 7570', 7556', & 7545'. Total of 48 holes. Make up Baker 5-1/2" 20# Retrieva-D packer with mill out extension, (2) 6' 2-3/8" pup jts. & 1.81" R-nipple with "G" blanking plug on wireline. RIH. Unable to get past 7,545'. POH. Close well in. Tear out Welex. Well pressure 225 psi. SJD.

3/10/85

Well pressure 225 psi. Make up 4-1/2" O.D. washshoe with catch finger & Atlas 5-1/2" 20# positive scraper on tbg. RIH. Tag fill @ 7991'. Clean out to 8024' E.D. (tbg. measurement). POH. Recover several substantial size pieces of rubber. RU Welex. RIH with Baker Retrieva-D with mill out extension, (2) 2-3/8" pup jts. & 1.81" "R" nipple. Set same with top at 7780'. Tail @ 7807'. Tear out Welex. Make up latch in seal assembly, locator sub, 1.87" L-sleeve & pump shoe. Measure in hole with tbg. to 6900'. SJD.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION OJAI FIELD VENTURA COUNTY
WELL: VALEX FERNDALE #313 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21314 HARRY E. HULL DISTRICT SUPERINTENDENT

Harry Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

3/11/85

Backscuttle well & remove gas from system. Continue measuring in hole with tbg. Latch into packer top @ 7780'. Pressure test seal assembly to 2000 psi. Release latch-in. Space out tbg. string. Latch back into packer with seal assembly. With tbg. hanger in place 10,000# weight on seal assembly. Retest seal assmebly to 2000 psi. Remove floor, BOPE & install production tree. Clean & load out tbg. equipment while flowing well to pump tank @ 7 bbls./hr. at "0" pressure. After recovering 27 bbls., tbg. pressure 200 psi on 11/64" adj. choke. Turn well over to Production Department. 1700 hrs.: well flowing to tank farm on 13/64" choke @ 380 psi. RDMO.

105 bbls. gross. 24% w/h cut. 5% comp. cut. 350# tbg/300# csg. on pkr. 11/64" bean. 16 hrs. test & production. Change to 13/64" bean this a.m. Gravity 33.0 @ 58 degrees.

3/12/85

Break out pump system. Wash out circulating tank. Load out BOP. Clean location. Left rig standing. SJD.
This a.m.: 158 bbls. gross. 35% comp. cut. 500# tbg/300# csg. on pkr. 13/64" bean. 24 hrs.

3/26/85

MIRU Pruett. MU tandem pressure bombs (3100# & 2975#, 24 hrs.). RIH making 5 min. flowing gradient stops at 1000', 2000', 3000', 4000', 5000', 5500', 6000', 6500', 7000', 7500', 7902'. Found pickup at 8024'. (E.D. 8032' Welex, 8024' tbg. meas. Perfs 7801' - 8004'.) Hung bombs at 7902' at 10:20 a.m., for flowing pressure survey (multi-rate). Pruett SJD. Flowed well at different rates as given below. At 4:45 a.m. began POH with bombs making 5 min. flowing gradient stops as above. MU tandem pressure bombs (4150# & 5000#, 36 hr.). RIH & hung bombs at 7902' at 8:14 a.m. Shut in well at 8:19 a.m. for 24 hrs. buildup survey. Pruett SJD.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE #313 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21314 — HARRY E. HULL — DISTRICT SUPERINTENDENT

Harry Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

3/26/85 (con't)

TIME	TBG/CSG PRESS.	WH CUT	BBLS. MADE	BBL/HR RATE	REMARKS
7:30 a.m.			"0"		Start daily test.
10:20 a.m.	680/370				Pruett bombs hung.
3:00 p.m.	650/370	18%	36	4.8	Change from 13/64" to 14/64" bean.
9:00 p.m.	640/370	22%	32	5.3	Change to 15/64" bean.
3/26/85					
4:45 a.m.					Pruett began pulling bombs.
7:30 a.m.	630/370	22%	60	5.7	End daily test. Change to 13/64" bean.
8:14 a.m.					Pruett bombs rerun & hung.
8:19 a.m.					Shut in for 24 hr. buildup survey.

3/27/85
4 bbls. gross. 1700# tbg/370# csg. 13/64" bean. Shut in 8:00 a.m. (Tues. 3/26/85) for bottom hole pressure survey.

3/28/85
55 bbls. gross. 3% cut. 480# tbg/370# csg. 11/64" bean. 18-1/2 hrs. production. Down for pressure survey & bean change. Pruett began pulling pressure bombs @ 8:50 a.m. RWTP @ approximately 1:00 p.m.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE #313 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21314 — HARRY E. HULL — DISTRICT SUPERINTENDENT

Harry Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

4/4/85

33 bbls. gross. N/S. No pressure. Rig workover. 6-1/2 hrs. test. RU Baker Production Service. Run RZG blanking plug. Seat same in "R" nipple. Bled tbg. from 850 psi to 400 psi. Slowly building pressure indicating blanking plug leaking. Run in with shifting tool and open "L" sleeve. Tear out Baker. Spot pump and tank. Unload BOPE and accumulator. Rig mat and generator. SPS MIRU at 17:30 hrs. Pump 48 bbls. lease oil down tbg. Remove tree. Install BOPE. Rig floor and tbg. equipment. SJD.

4/5/85

Circulate system free of gas. Unland tbg. Release snap latch seal assembly. POH with same. Make up Model "F" latching plug on Model "L" retrieving tool. RIH with same. Latch into Retrieva-D packer & release from same. Well flowing approx. 1/4" stream. Pull up, lay down excess tbg. Land same with tail @ 7478' & shoe @ 7443'. (Top perf @ 7545'). Load out tbg. equipment. Remove floor. Remove BOP. Install production tree. Rig swab equipment. SJD. Left well open to Baker tank thru 12/64" choke.

This a.m. 59 bbls. gross. 30% w/h cut. Tr. sed. 420# tbg/0# csg. 12/64" bean. 14 hrs. test & production.

4/6/85

SPS on well. Well flowing with 430 psi at 5 B/hr. rate. Tear out swab equipment, pump & tank. RDMO.

This a.m. 97 bbls. gross. 3% w/h cut. 330# tbg/csg. vac. 12/64" bean. 152 cum. to date.

4/7/85

63 bbls. gross. 4% cut. 0.1% w/h cut. 230# tbg/340# csg. 12/64" bean. 2.6 B/hr. This a.m. bypassing trap. Will go to 13 choke. Will try blowdown into Baker tank.

4/8/85

45 bbls. gross. 6% cut. 180# tbg/600# csg. 14/64" bean. 24 hrs. production. 23-1/2 hrs. test. (Change from 13 to 14/64" bean. @ 3:30 p.m. 4/7/85.)

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE #313 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21314 — HARRY E. HULL DISTRICT SUPERINTENDENT

Harry Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

4/19/85

2 bbls. gross. N/S. 2 hrs. production.
MIRU SPS. Spotted pump tank. Bled well down. RU pump. Filled well with lease oil. Circulated gas out of system. Removed tree. Installed BOPE. SDFN.

4/20/85

7:30 start up job. Circulate well through choke to free gas in system. Unland tbg. Lower tbg. & tag Retrieva-D packer @ 7780' (no fill). POH. Make up Hampton 5-1/2" 20# circulation washer with 5' cup spacing. RIH to 7482'. Close in well. Shut down @ 5:30 p.m.

4/21/85

6:00 a.m. start up job. Rig B.J. pump tank & stand pipe. Lower circulating washer to bottom perf @ 7770'. Breaking down perfs per the table below. Tool failed on last 3 sets of perfs to wash. Circulate well to free gas. POH. Found bad "0" rings in slide valve of washtool. Change out circulating washer. RIH to 7400'. Close well in. SJD.

PERFS AT	INITIAL PUMP-IN (BPM) @ (psi)	FINAL PUMP-IN (BPM @ (psi)	BBLS. PUMPED	1-MINUTE SI (psi)
7770.5'	Old perfs	.46 @ 3300	6.6	1700 (1-1/2 min.)
7744'	.13 @ 3550	0 @ 3650	2.5	3350
7718.5	0 @ 3500	0 @ 3600	1.6	3500
	Old perfs. Didn't break before either.			
7695'		.25 @ 3500	2.8	3000
7677'	.33 @ 3450	.72 @ 1400	4.8	400
	Broke down & communicated to perfs above.			
7656.7'	0 @ 3550	0 @ 3550	2.2	3000
	Old perfs. Bled over 4 bbls. after.			
7637'	.38 @ 3450	.56 @ 1500	6.4	500
	Broke down & communicated to perfs above.			
7604'		.32 @ 3600	4.7	3250
	Communicated to perfs above.			
7588.5'		.30 @ 3550	2.4	3000
	Old perfs. Began communicating @ ±2400#.			
7583'	1.08 @ 2800	.48 @ 3600	5.9	2700
	Communicated to perfs above. But built press.			
7570'	0 @ 3500	1.32 @ 1700	5.7	200
	Tool probably failed on this setting. Sharp drop from 3500 to 1100# with full communication.			
7556'	1+ @ 300	.88 @ 750	4.5	0
	Full communication @ 300#. No good.			
7545'	Full communication @ 500#. No good.			

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: VALEX FERNDALE #313 — SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21314 — HARRY E. HULL — DISTRICT SUPERINTENDENT

Harry Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

4/22/85

6:00 a.m. start up job. Lower wash tool to perf @ 7570'. Rig B.J. pump. Wash perfs per the table below. Tear out B.J. Lower wash tool to 7760' & circulate well to free gas in system. POH. Lay down Hampton washer. Make up Baker "L" retrieving tool with 2-1/2" API T/L shoe 1 jt. above & RIH. Land tbg. @ 7478'.

53 bbls. gross. 0.2% w/h cut. 400# tbg/0 csg. 12/64" bean. 13 hrs. test & production. In potter tank.

PERFS AT	INITIAL PUMP-IN (BPM) @ (psi)	FINAL PUMP-IN (BPM @ (psi)	BBLS. PUMPED	1-MINUTE SI (psi)
7570'	1.36 @ 2150	1.80 @ 2200	6.2	200
	Communicated to perfs above.			
7556'	0 @ 3600	0 @ 3660	1.1	3300
	Slight communication to perfs above.			
7545' & 7547.5'	0 @ 3600	0 @ 3600	.8	3450 (2-min) 3350 (4-min)
	No communication.			

4/23/85

7:00 a.m. Start up job. Clean shaker pit. Tear out pump & tank. Lay down mast. Load out H&H BOE & equipment. RDMO 10:00 a.m.

126 bbls. gross. 10% cut. 0.2% mud & sand. 400# tbg/0 csg. 12/64" bean. 24 hrs.

4/30/85

MIRU. RU pump. Bled tbg. & csg. Pump lease oil down tbg. & kill well. Remove production tree. Install BOE. Test same. O.K. Build working floor. Unland tbg. Tally & RIH with 2-7/8" tbg. Tag fill @ 7766'. Install Guiberson & power swivel. Circulate & clean out fill to Retrieva-D packer at 7780'. Latch onto "F" plug in packer & unset from packer. Backscuttle gas out of hole. Began POH with "F" plug and extra tbg. Land on donut till a.m.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION OJAI FIELD VENTURA COUNTY
WELL: VALEX FERNDALE #313 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21314 HARRY E. HULL DISTRICT SUPERINTENDENT

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

5/1/85
Service equipment. Bleed tbg. & csg. Remove cage. Hook up pump lines. Turn well over. Lays dead. POH with tbg. Lay down 5-1/2" Baker retrieving tool & "F" latching plug with stinger. M.U. 2-7/8" beveled collar, 1 jt. 2-7/8" tbg., & T/L pump shoe. RIH with tbg. from derrick. Land on donut. (K.B. meas. 7475.46'). Load out tbg. equipment & working floor. Remove BOPE. Install production tree & nipple up. RU Baker Wireline. Attempted to catch blanking valve. No luck. RIH with Baker sand bailer. Clean off sand from valve. Recovered piece of rubber approximately 3" long & 1-1/2" wide. Ran in with retrieving tool, no luck. Reran bailer, hangs up. Pull free. Rerun catching tool, catch & pull blanking valve. Ran in with tools trying to catch Baker 1.81" RZG blanking plug, no luck. Change tools. Reran, no luck. Try again, could not catch. Close well in @ 12:00 midnight.

5/2/85
Start up job @ 6:30 a.m. Service equipment. Slight blow on tbg. Dead in 1/2 min. Casing press. 35#. Baker Wireline continued trying to retrieve blanking plug. Found sand above blanking plug. RIH with bailer. Recovered flour sand & small pieces of rubber. Run hydrostatic bailer twice. Attempted to clean off top of plug. Could not get retrieving tool to lock over neck. Ran in hole with 3/8" homemade spear. Work into top of tool. Did not recover anything. Reran retrieving tool with extra sinker bar. Beat down 1/2 hr. Catch plug. Work plug out. POH with plug. Rig out Baker Wireline. Open well to Baker tank on 12/64" bean @ 6:30 p.m. Tbg. has slight blow. Csg. 40# psi. Secure rig @ EOT.

This a.m.: 77 bbls. gross. 0.1% w/h cut. 540# tbg/0# csg. shut. 12/64" bean. 12 hrs. test & production. In test trap 3 hrs. In Baker tank 9 hrs.

5/3/85
140 bbls. gross. 12% cut. 480# tbg/780# csg. 12/64" bean. 24 hrs.

5/4/85
132 bbls. gross. 16% cut. 490# tbg/1100# csg. 12/64" bean. 24 hrs.

5/5/85
126 bbls. gross. 16% cut. 480# tbg/1360# csg. 12/64" bean. 24 hrs.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

ARGO PETROLEUM CORPORATION OJAI FIELD VENTURA COUNTY
WELL: VALEX FERNDALE #313 SEC. 16, T4N, R21W, SBB&M
A.P.I. #111-21314 HARRY E. HULL DISTRICT SUPERINTENDENT

Harry Hull

411 S. BECKWITH ROAD SANTA PAULA, CA. 93060 (805) 933-1321

* *

5/6/85
123 bbls. gross. 18% cut. 450# tbg/1550# csg. 12/64" bean. 24 hrs.

5/7/85
117 bbls. gross. 20% cut. 450# tbg/1700# csg. 12/64" bean. 24 hrs.

5/8/85
134 bbls. gross. 30% cut. 640# tbg/1600# csg. 12/64" bean. 24 hrs.

5/9/85
134 bbls. gross. 30% cut. 650# tbg/1575# csg. 12/64" bean. 24 hrs.

5/10/85
128 bbls. gross. 28% cut. 640# tbg/1550# csg. 12/64" bean. 24 hrs.

111-2131 16-4-21 DOG-

UNIVERSAL DIRECTIONAL DRILLING COMPANY

OIL COMPANY: ARGO PETROLEUM CORPORATION
FIELD: SILVERTHREAD
WELL NAME: FERNDALE 313
METHOD OF CALCULATION: AVERAGE

PAGE:
DATE: OCTOBER 1984

RECEIVED
JUL 23 1985
DIVISION OF OIL AND GAS
SANTA PAULA, CALIFORNIA

STA	TMD	ANG	DIR	CLG	TVD	SEC	COORDINATES		DL
1	222	0.25	S65W	222	222.00	-0.08	0.20S	0.44W	0.1
2	496	1.00	S28W	274	495.98	-1.48	2.26S	2.61W	0.3
3	711	1.75	S27W	215	710.92	-5.24	6.84S	4.99W	0.3
4	968	2.50	S28W	257	967.74	-12.19	15.29S	9.39W	0.2
5	1191	2.75	S28W	223	1190.51	-19.58	24.31S	14.18W	0.1
6	1207	3.00	S30W	16	1206.49	-20.16	25.01S	14.57W	1.6
7	1238	3.00	S31W	31	1237.45	-21.28	26.41S	15.40W	0.1
8	1270	4.50	S19W	32	1269.38	-22.87	28.31S	16.28W	5.2
9	1301	5.00	S16W	31	1300.27	-25.02	30.75S	17.05W	1.6
10	1325	6.00	S18W	24	1324.16	-26.95	32.95S	17.73W	4.2
11	1355	5.25	S19W	30	1354.02	-29.39	35.74S	18.66W	2.5
12	1386	4.75	S19W	31	1384.90	-31.61	38.30S	19.54W	1.6
13	1421	4.25	S18W	35	1419.79	-33.88	40.90S	20.41W	1.4
14	1449	3.75	S18W	28	1447.72	-35.51	42.76S	21.01W	1.7
15	1481	3.25	S21W	32	1479.66	-37.11	44.60S	21.67W	1.6
16	1522	3.00	S21W	41	1520.60	-38.90	46.69S	22.47W	0.6
17	1545	3.50	S14W	23	1543.57	-39.99	47.93S	22.86W	2.7
18	1576	2.50	S03W	31	1574.52	-41.47	49.53S	23.10W	3.7
19	1607	1.50	S37W	31	1605.50	-42.35	50.55S	23.47W	4.8
20	1639	0.75	N72W	32	1637.50	-42.37	50.74S	24.07W	4.5
21	1671	2.00	N65W	32	1669.49	-41.91	50.46S	24.78W	3.9
22	1703	2.50	S89W	32	1701.46	-41.33	50.20S	26.01W	3.5
23	1736	3.25	S87W	33	1734.42	-40.94	50.26S	27.66W	2.2
24	1764	3.50	N78W	28	1762.37	-40.37	50.13S	29.31W	3.2
25	1792	3.75	N61W	28	1790.32	-39.32	49.51S	30.97W	3.9
26	1829	4.00	N45W	37	1827.23	-37.34	48.00S	32.96W	2.9
27	1861	4.50	N38W	32	1859.15	-35.20	46.23S	34.53W	2.2
28	1891	4.50	N51W	30	1889.05	-33.14	44.55S	36.18W	3.4
29	2001	3.00	N15W	110	1998.82	-26.28	38.51S	40.10W	2.4
30	2048	3.25	N17W	47	2045.75	-23.71	36.05S	40.81W	0.5
31	2076	4.00	N13W	28	2073.69	-21.94	34.34S	41.27W	2.8
32	2116	4.50	N05W	40	2113.58	-19.00	31.41S	41.73W	1.9
33	2138	5.00	N06W	22	2135.51	-17.21	29.60S	41.91W	2.3
34	2171	5.75	N05W	33	2168.36	-14.16	26.52S	42.20W	2.2
35	2201	6.25	N08W	30	2198.20	-11.07	23.41S	42.56W	1.9

UNIVERSAL DIRECTIONAL DRILLING COMPANY

OIL COMPANY: ARGO PETROLEUM CORPORATION PAGE: 2
FIELD: SILVERTHREAD DATE: OCTOBER 1984
WELL NAME: FERNDALE 313
METHOD OF CALCULATION: AVERAGE

STA	TMD	ANG	DIR	CLG	TVD	SEC	COORDINATES		DL
36	2231	7.25	N09W	30	2227.99	-7.57	19.92S	43.08W	3.3
37	2263	8.25	N08W	32	2259.70	-3.29	15.65S	43.72W	3.1
38	2294	9.00	N04W	31	2290.35	1.30	11.03S	44.20W	3.1
39	2324	9.75	N06W	30	2319.95	6.10	6.16S	44.63W	2.7
40	2355	10.25	N03W	31	2350.47	11.38	0.79S	45.05W	2.3
41	2387	10.50	N03W	32	2381.95	17.01	4.96N	45.35W	0.7
42	2420	11.00	N02W	33	2414.37	23.00	11.11N	45.62W	1.6
43	2451	10.50	NORTH	31	2444.83	28.59	16.89N	45.72W	2.
44	2481	10.50	N04E	30	2474.33	33.80	22.36N	45.53W	2.4
45	2510	10.50	N04E	29	2502.84	38.78	27.63N	45.16W	0.0
46	2558	9.50	N04E	48	2550.11	46.63	35.94N	44.58W	2.0
47	2614	9.00	N01E	56	2605.38	55.19	44.94N	44.19W	1.2
48	2672	9.50	N01E	58	2662.63	64.12	54.26N	44.02W	0.8
49	2732	10.50	N01W	60	2721.72	74.15	64.68N	44.02W	1.7
50	2804	12.00	N01W	72	2792.33	87.74	78.72N	44.27W	2.0
51	2902	12.50	N02W	98	2888.10	107.91	99.51N	44.81W	0.5
52	2994	13.75	N05W	92	2977.70	128.33	120.36N	46.09W	1.5
53	3050	12.50	N05W	56	3032.24	140.83	133.03N	47.20W	2.2
54	3143	11.50	N05W	93	3123.20	159.83	152.29N	48.88W	1.0
55	3235	11.00	N06W	92	3213.44	177.50	170.16N	50.60W	0.5
56	3288	10.50	N05W	53	3265.51	187.23	180.00N	51.55W	1.0
57	3354	10.75	N05E	66	3330.37	198.95	192.17N	51.55W	2.8
58	3388	11.00	N10E	34	3363.76	204.85	198.53N	50.71W	2.8
59	3511	10.00	N09E	123	3484.70	225.14	220.63N	47.01W	0.8
60	3636	8.50	N10E	125	3608.08	243.33	240.45N	43.70W	1.2
61	3760	8.75	N12E	124	3730.68	259.95	258.70N	40.15W	0.3
62	3854	9.50	N13E	94	3823.49	273.10	273.26N	36.92W	0.8
63	3976	10.50	N11E	122	3943.63	291.86	293.98N	32.52W	0.8
64	4099	13.50	N10E	123	4063.95	314.82	319.13N	27.86W	2.4
65	4224	16.50	N10E	125	4184.69	343.99	350.99N	22.24W	2.4
66	4379	19.00	N09E	155	4332.31	386.76	397.59N	14.44W	1.6
67	4473	21.50	N07E	94	4420.50	416.57	429.81N	9.91W	2.7
68	4543	23.00	N06E	70	4485.29	441.12	456.15N	6.91W	2.21
69	4601	24.00	N06E	58	4538.47	462.62	479.15N	4.50W	1.72
70	4703	23.25	N01W	102	4631.93	501.46	519.98N	2.71W	2.92

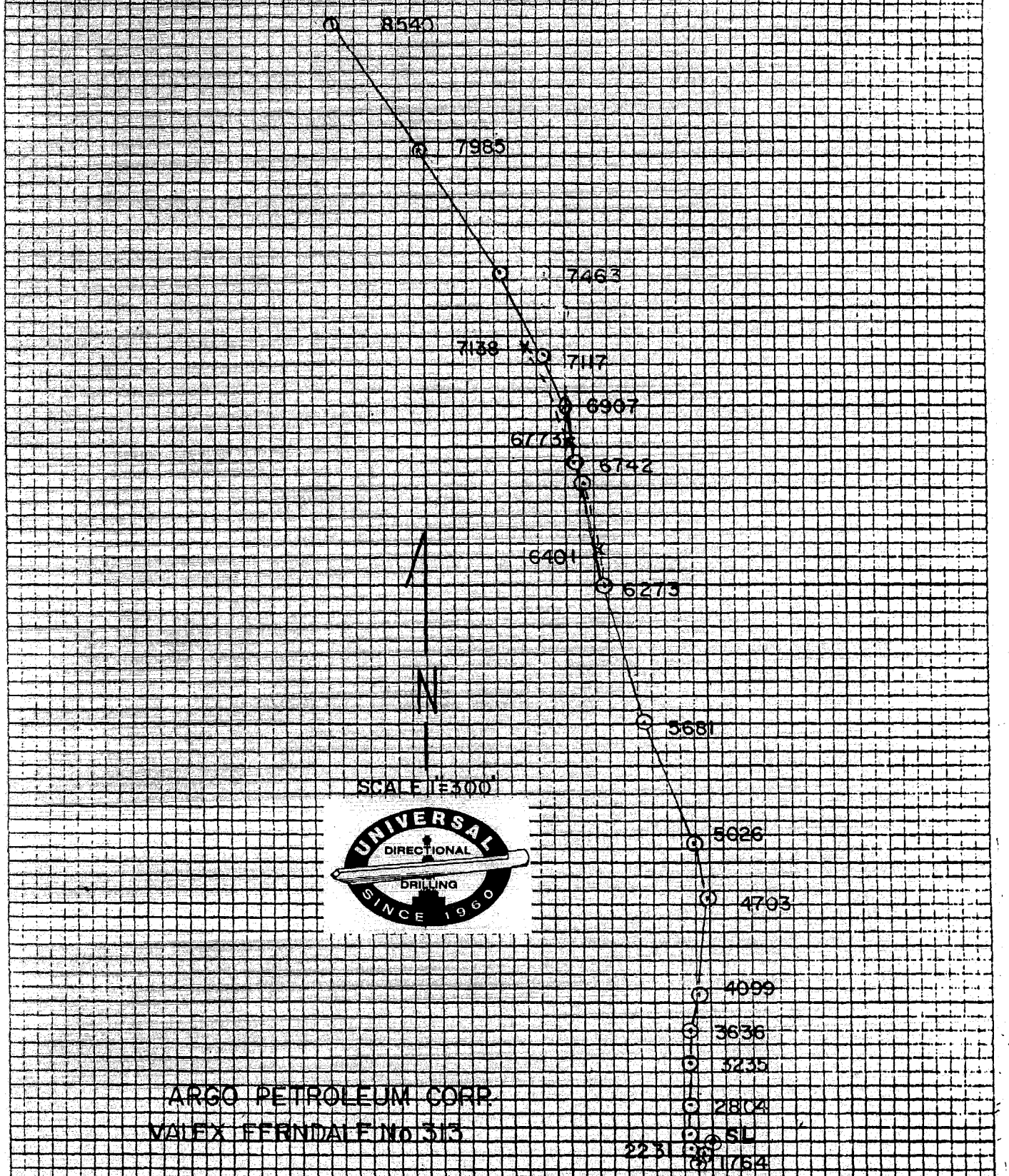
UNIVERSAL DIRECTIONAL DRILLING COMPANY

OIL COMPANY: ARGO PETROLEUM CORPORATION PAGE: 3
FIELD: SILVERTHREAD DATE: OCTOBER 1984
WELL NAME: FERNDALE 313
METHOD OF CALCULATION: AVERAGE

STA	TMD	ANG	DIR	CLG	TVD	SEC	COORDINATES		DL
* 71	4771	22.75	N07W	68	4694.52	527.49	546.49N	4.57W	3.6
72	4831	22.75	N13W	60	4749.85	550.58	569.34N	8.59W	3.9
73	4868	22.75	N19W	37	4783.97	564.88	583.09N	12.54W	6.4
74	4902	22.50	N18W	34	4815.36	577.95	595.50N	16.69W	1.3
75	5026	23.25	N21W	124	4929.61	626.04	640.93N	32.78W	1.1
76	5244	24.50	N22W	218	5128.95	713.81	723.03N	65.12W	0.6
77	5370	25.50	N22W	126	5243.15	766.73	772.40N	85.06W	0.7
78	5502	27.00	N21W	132	5361.53	824.81	826.72N	106.46W	1.1
79	5618	27.75	N19W	116	5464.54	878.00	876.84N	124.70W	1.0
80	5681	27.75	N19W	63	5520.30	907.28	904.58N	134.25W	0.0
81	5807	28.75	N18W	126	5631.29	966.84	961.13N	153.18W	0.8
82	5964	31.00	N17W	157	5767.43	1045.00	1035.72N	176.69W	1.4
83	6149	33.50	N15W	185	5923.89	1143.72	1130.61N	203.90W	1.4
84	6273	37.25	N12W	124	6024.99	1215.46	1200.42N	220.66W	3.3
85	6401	38.00	N12W	128	6126.37	1293.44	1276.85N	236.91W	0.5
86	6647	42.25	N12W	246	6314.47	1451.66	1431.92N	269.87W	1.7
87	6724	40.00	N15W	77	6372.48	1502.27	1481.17N	281.69W	4.0
88	6773	38.25	N18W	49	6410.49	1533.18	1510.81N	290.48W	5.5
89	6821	37.75	N22W	48	6448.31	1562.65	1538.58N	300.58W	5.6
90	6882	37.50	N26W	61	6496.63	1599.49	1572.60N	315.73W	4.3
91	6906	37.75	N26W	24	6515.64	1613.91	1585.77N	322.15W	1.0
92	7005	37.00	N26W	99	6594.31	1673.02	1639.79N	348.50W	0.7
93	7071	36.00	N26W	66	6647.36	1711.64	1675.07N	365.71W	1.5
94	7138	34.50	N26W	67	6702.08	1749.68	1709.83N	382.66W	2.2

* Dailey Directional Service

* TMD 7187 w/fish from 6675 to 7043. K.O.P. for ST#1 6565.


8540
7985
7463
7138
7117
6907
6773
6742
6401
6273
5681
5026
4703
4099
3636
3235
2804
SU
2231
1764
N
SCALE 1"=300'
UNIVERSAL
DIRECTIONAL
DRILLING
SINCE 1960
ARGO PETROLEUM CORP.
VALFX FERNDALE No 313

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

No. T 285--30

DIVISION OF OIL AND GAS

Report on Operations

Harry Hull, Agent
Argo Petroleum Corp.
411 S. Beckwith Rd.
Santa Paula, CA 93060

Santa Paula, Calif.
Feb. 5, 1985

Your operations at well "Valex-Ferndale" 313, API No. 111-21314,
Sec. 16, T. 4N R. 21W SB B.& M. Ojai Field, in Ventura County,
were witnessed on 1/7/85. S. Mulqueen, representative of
the supervisor, was present from 0800 to 0900. There were also present Jake Johns

Present condition of well: 20" cem 55'; 13 3/8" cem 710'; 9 5/8" cem 6538'; 7 5/8" cem 6450-6895'; 5 1/2" cem 6730-8195'. TD present hole 8540'.

The operations were performed for the purpose of demonstrating that no fluid has access to the well through the seal between the 7 5/8" and 5 1/2" casings.

DECISION:

THE OPERATIONS AS REPORTED AND WITNESSED ARE APPROVED AS INDICATING THAT NO FLUID HAS ACCESS TO THE WELL THROUGH THE SEAL BETWEEN THE 7 5/8" AND 5 1/2" CASINGS.

b

M. G. MEFFERD

Murray W. Dosch

OG109 (9/83/GSR1/15M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 85-285-01

PERMIT TO CONDUCT WELL OPERATIONS

520 (field code)
12 (area code)
10 (new pool code)
-- (old pool code)

Harry Hull, Agent
Argo Petroleum Corporation
411 S. Beckwith Road
Santa Paula, Ca 93060

Santa Paula, California
January 3, 1985

Your supplementary proposal to drill well "Valex-Ferndale" 313, A.P.I. No. 111-21314, Section 16, T. 4N, R. 21W, S.B. B. & M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 12/20/84, received 12/27/84 has been examined in conjunction with records filed in this office.

THE PROPOSAL, COVERING REDRILL OPERATIONS, IS APPROVED ACCORDING TO PRIOR AGREEMEMT PROVIDED THAT:

1. The provisions set forth in our report No. 284-308 dated September 12, 1984 shall apply.
2. THIS DIVISION SHALL BE NOTIFIED:
   1. TO WITNESS a test after cleaning out below the top of the 5 1/2" casing to demonstrate that no fluid has access to the well from between the 7 5/8" and 5 1/2" casings. ✓

Blanket Bond
MS:ljg

Engineer Michael Stettner

Phone (805) 525-2105

M. G. MEFFERD, State Oil and Gas Supervisor

By _____
Deputy Supervisor

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

OG111 (9/83/GSR1/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

SUPPLEMENTARY NOTICE

DIVISION OF OIL AND GAS
RECEIVED
DEC 27 1984
SANTA PAULA, CALIFORNIA

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
136	—	✓

DIVISION OF OIL AND GAS

Santa Paula Calif.

A notice to you dated September 10, 1984, stating the intention to

Drill (Drill, rework, abandon), Well No. Valex-Ferndale #313, API No. 111-21314,

Sec. 16, T. 4N, R. 21W, S.B. B. & M., Ojai Field,

Ventura County, should be amended because of changed conditions.

The present condition of the well is as follows:

Total depth 7079'

Complete casing record including plugs and perforations:

13 3/8" at 712'
9 5/8" at 6538'

Hole #1: T.D. 7187'. Fish 7043'-6675'. Plug 6680'-6538' (shoe).

Hole #2: T.D. 6826'. Fish 6806'-6686'. Plug 6684'-6538' (shoe).

Hole #3: T.D. 7079'. Fish 7079'-6937'. Plug 6934'-6895'.

We now propose (As per conversation with Mike Stetner this date)

1. Run and cement 7 5/8" liner from 6895' to 6450'.
2. Pressure test liner lap to 1500 PSI with 86PPCF mud.
3. Drill 6 3/4" hole to T.D. (9000').
4. Run and cement 5 1/2" liner 9000' to 6795'.
5. Pressure test liner lap to 1500 PSI.
6. Run 7" tie back from 7 5/8" liner top at 6450' to surface.
7. Release rig.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 411 S. Beckwith Rd. (Street)

Santa Paula (City) CA. (State) 93060 (Zip)

Telephone Number 805 933-1321

Argo Petroleum Corporation (Name of Operator)

By Harry E. Hull (Name) by [signature] 12/20/84 (Date)

Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

No. T 284-248

DIVISION OF OIL AND GAS

Report on Operations

Harry Hull, Agent
Argo Petroleum Corp.
411 S. Beckwith Rd.
Santa Paula, CA 93060

Santa Paula, Calif.
Nov. 26, 1984

Your operations at well "Valex-Ferndale" 313, API No. 111-21314,
Sec. 16, T. 4N, R. 21W, SB B.& M., Ojai Field, in Ventura County,
were witnessed on 11/16/84. M. Kratovil, representative of
the supervisor, was present from 2130 to 0200. There were also present Carl Ratliff
and Ted Nielson, Company rep.
Present condition of well: 20" cem 55'; 13 3/8" cem 710'; 9 5/8" cem 6538'. TD 6550'.

The operations were performed for the purpose of testing the blowout prevention equipment and installation.

DECISION:

THE BLOWOUT PREVENTION EQUIPMENT AND ITS INSTALLATION ON THE 9 5/8" CASING ARE APPROVED.

"Deficiencies noted and to be corrected:

b

MS/ Bill Melcher 12/20/84

Original hole TD 7187 fish from 6675-7043'
RD #1 TD 6826 KO 6538 fish 6606-6626'
RD #2 TD 7079 KO 6600 fish 6937-7079

Proposed
Set 7 5/8" csg from 6438-6690'
Drill 6 1/4" hole from 6690

M. G. MEFFERD

Murray W. Dosch

OG109 (9/83/GSR1/15M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

No. T 284-239

DIVISION OF OIL AND GAS

Report on Operations

Mr. Harry Hull, Agent
Argo Petroleum Corp.
411 S. Beckwith Rd.
Santa Paula, CA 93060

Santa Paula, Calif.
Nov. 14, 1984

Your operations at well "Valex-Ferndale" 313, API No. 111-21314
Sec. 16, T. 4N R. 21W SB B.& M. Ojai Field, in Ventura County,
were witnessed on 10/23/84. M. Kratovil, representative of
the supervisor, was present from 2200 to 0200. There were also present Melvin Land
and Ted Nielson, Argo Reps.
Present condition of well: 20" cem 55';10 3/4" cem 710'. TD 710'.

The operations were performed for the purpose of testing the blowout prevention equipment and installation.

DECISION:

THE BLOWOUT PREVENTION EQUIPMENT AND ITS INSTALLATION ON THE 10 3/4" CASING ARE APPROVED.

b

M. G. MEFFERD

Murray W. Dosch

OG109 (9/83/GSR1/15M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 284-308

PERMIT TO CONDUCT WELL OPERATIONS

520 (field code)
12 (area code)
10 (new pool code)
-- (old pool code)

Harry Hull, Agent
Argo Petroleum Corporation
411 S. Beckwith Road
Santa Paula, CA 93060

Santa Paula, California
September 12, 1984

Your proposal to drill well "Valex-Ferndale" 313,
A.P.I. No. 11-21314, Section 16, T. 4N, R. 21W, S.B. B. & M.,
Ojai field, Silverthread area, Miocene pool,
Ventura County, dated 9/10/84, received 9/10/84 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Sufficient cement shall be used to fill the annular space to at least 500 feet above oil and gas zones and anomalous pressure intervals and to at least 100 feet above the base of the freshwater zone.
2. Hole fluid of sufficient quality and quantity shall be maintained in the hole to control any subsurface condition, and a reserve supply shall be on hand for emergencies.
3. Unlined sumps, if they contain harmful waters, shall not be located over fresh water bearing aquifers.
4. Any sump used during these operations shall be thoroughly cleaned and filled with earth as soon as operations are completed.
5. Blowout prevention equipment of at least DOG Class III IM A shall be installed on the 13 3/8" and DOG Class III 3M B shall be installed on the 9 5/8" casing and maintained in operating condition at all times.
6. This office shall be consulted before placing any plugs or sidetracking any hole.
7. Any time gas is to be flared or blown, prior permission must be obtained from this Division.
8. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.
9. THIS DIVISION SHALL BE NOTIFIED:
   a. To WITNESS a pressure test of the blowout prevention equipment before drilling below 700'. ✓
   b. TO WITNESS a pressure test of the blowout prevention equipment before drilling below 6,500'. ✓
   c. TO WITNESS a test of the 7" shut-off above the zone to be produced.

RH / Ted Nelson 12-1-84
Argo has fish in hole with top at 6675'. Argo will will place a plug from 6675 - 6538'. This plug will also act as a kick off plug. No witness required.

Blanket Bond
MS:ljg
Engineer Michael Stettner MK - Jim Hubbert 12-10-84
Phone (805) 525-2105

NEW FISH IN HOLE 6826 - 6686. WILL PLUG BACK TO SHOE 6538 AND RE DRILL. KICK OFF PLUG DOES NOT NEED TO BE WITNESSED.

M. G. MEFFERD, State Oil and Gas Supervisor
By E. Hobel
Deputy Supervisor

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

OG111 (9/83/GSR1/5M)

Confidential

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS
Notice of Intention to Drill New Well

DIVISION OF OIL AND GAS
RECEIVED
SEP 10 1984
SANTA PAULA, CALIFORNIA

C.E.Q.A. INFORMATION			
EXEMPT ☐ CLASS____	NEG. DEC. ☐ S.C.H. NO.____	E.I.R. ☒ S.C.H. NO. CUP 3344	DOCUMENT NOT REQUIRED BY LOCAL JURISDICTION ☐
See Reverse Side			

FOR DIVISION USE ONLY					
MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121
203	Index	✓	313	✓	✓

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to commence drilling well "Valex-Ferndale" #313, API No. 111-21314 (Assigned by Division),

Sec. 16, T. 4N, R. 21W, S.B B. & M., ~~Silverthread~~ Ojai Field, Ventura County.

Legal description of mineral-right lease, consisting of _____ acres, is as follows: _____ (Attach map or plat to scale)

Previously Submitted

Exp.

Do mineral and surface leases coincide? Yes X No _____. If answer is no, attach legal description of both surface and mineral leases, and map or plat to scale.

Location of well 2755 feet South (Direction) along section/~~property~~ line (Cross out one) and 4049' feet East (Direction)

at right angles to said line from the Northwest corner of section/~~property~~ 16 (Cross out one) or

Is this a critical well according to the definition on the reverse side of this form? Yes ☐ No ☒

If well is to be directionally drilled, show proposed coordinates (from surface location) at total depth: 2,650 feet North (Direction) and 800 feet West (Direction)

Elevation of ground above sea level 1,179' feet.

All depth measurements taken from top of ~~1200~~ 21 K.B. (Derrick Floor, Rotary Table, or Kelly Bushing) that is 21 feet above ground.

PROPOSED CASING PROGRAM

SIZE OF CASING INCHES API	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS	CALCULATED FILL BEHIND CASING (Linear Feet)
13 3/8	48#	H-40 ST&C	surface	700'	700'	700'
9 5/8	36#	K-55 LT&C	surface	6,500'	6,500'	2,500'
7"	26#	N-80 LT&C	surface	9,000'	9,000'	2,500'

(A complete drilling program is preferred and may be submitted in lieu of the above program.)

Intended zone(s) of completion Lower Mohnain, 7950'VD, 3,200 PSI (Name, depth, and expected pressure) Estimated total depth 9,000'

It is understood that if changes in this plan become necessary we are to notify you immediately.

Name of Operator	Type of Organization (Corporation, Partnership, Individual, etc.)	
Argo Petroleum Corporation	Corporation	
Address	**City**	**Zip Code**
411 South Beckwith Rd.	Santa Paula	93060
Telephone Number / **Name of Person Filing Notice**	**Signature**	**Date**
933-1321 / Harry Hull	Harry Hull	9/10/84

This notice and indemnity or cash bond shall be filed, and approval given, before drilling begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

OG105 (3/82/GSR1/10M)

Information for compliance with the California Environmental Quality Act of 1970 (C.E.Q.A.).

If an environmental document has been prepared by the lead agency, please submit a copy of the document with this notice *or* supply the following information:

Lead Agency: Ventura County Planning Division

Lead Agency Contact Person: Dennis Hawkins

Address: 800 South Victoria Ave.
Ventura, CA. 93009

Phone: ( ) (805) 654-2492

FOR DIVISION USE ONLY

District review of environmental document (if applicable)? Yes ☐ No ☐

Remarks:

CRITICAL WELL

As defined in the California Administrative Code, Title 14, Section 1720(a), "Critical well" means a well within:

(1) 300 feet of the following:
(A) Any building intended for human occupancy that is not necessary to the operation of the well; or
(B) Any airport runway.
(2) 100 feet of the following:
(A) Any dedicated public street, highway, or nearest rail of an operating railway that is in general use;
(B) Any navigable body of water or watercourse perennially covered by water;
(C) Any public recreational facility such as a golf course, amusement park, picnic ground, campground, or any other area of periodic high-density population; or
(D) Any officially recognized wildlife preserve.

Exceptions or additions to this definition may be established by the supervisor upon his own judgment or upon written request of an operator. This written request shall contain justification for such an exception.

PROPERTY/WELL TRANSFER OR ACQUISTION

Seneca Resources Corporation (S2630)

to

Vintage Production California LLC (V1370)

Effective April 25, 2008

OPERATOR Seneca
WELL NO. "Fundale" 712
MAP

	Drill	Supp	Rwork	Rework	Rwork	Supp.
INTENTION NOTICE DATED	2-10-88	"	—	←	1-28-91	—
P-REPORT NUMBER	288-114	289-126	290-251	290-275	291-74	292-100
CHECKED BY/DATE				SM 1-4-2001		
MAP LETTER DATED				1-6-2001		
SYMBOL				●		

	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED
NOTICE	2-11-88		4-24-89		6-13-90		6-21-90				4-1-92	
HISTORY	—		3-5-90		8/2/91		2-5-91					
SUMMARY	—		3-5-90									
E-LOG (2"+5")	3-5-90											
MUD LOG	3-5-90											
DIPMETER (COMPUTED)	3-5-90											
DIRECTIONAL	3-5-90											
CORE/SWS	7/3/90											
CBL (WF)	3-5-90											
DUAL LATEROLOG 2"+5"	3-5-90											
DENSITY/NEUT.	3-5-90											
FORMATION TESTER	3-5-90											
DIP (RAW DATA)	3-5-90											
DIPMETER (ARROW)	3-5-90											
DUAL LATEROLOG 2"+5"	3-5-90											
CBL (VDL)												

ENGINEERING CHECK

T-REPORTS						
OPERATOR'S NAME						
WELL NO.						
LOC & ELEV						
SIGNATURE						
SURFACE INSP.						
DRILL CARD						
RECORD'S COMPLETE	BH 7/6/90	—	DH 2/5/91	JMC		

FINAL LETTER OK
MAILED
RELEASED BOND

INJECTION BOOK
IDLE WELL LIST
SURFACE INSP. CARD

REMARKS:

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES

REPORT OF CORRECTION OR CANCELLATION

Ventura, California
June 29, 1993

James A. Beck, Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

In accordance with Public Resources Code Section 3203 - If operations have not commenced within one year of receipt of the notice, the notice will be considered cancelled.

the following change pertaining to your well "Ferndale" 712
(Well Designation)

Ojai **field,** Ventura **County,**

Sec. 9, **T.** 4N, **R.** 21W, SB B.M., **is being made in our records:**

___ **The corrected location is** _____

_____

___ **The corrected elevation is** _____

___ **Report No.** _____, **dated** _____, **has been corrected as follows:** _____

_____

_____

Your notice to rework dated January 28, 1991,
(Drill, abandon, etc.)
and our Report No. P 291-74, issued in answer thereto, are hereby cancelled inasmuch as the work will not be done. If you have a drilling bond on file covering this notice it will be returned. No request for such return is necessary.

___Other: _____

_____

tkc

WILLIAM F. GUERARD, Jr.
Acting State oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear, Deputy Supervisor

OG165

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P292-100
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
April 21, 1992

Your supplementary proposal to rework well "Ferndale" 712, A.P.I. No. 111-21492, Section 9, T. 4N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated -----, received 4/1/92, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Requirements specified in permit No. P291-74, dated Feb. 1, 1991 shall apply.

NOTE: IN THE EVENT THAT THE PROPOSED WORK HAS NOT BEEN DONE BY April 21, 1992 THEN THIS "PERMIT TO CONDUCT WELL OPERATIONS" WILL BE CANCELLED.

Blanket Bond
SF:tkc

Engineer Steve Fields

Phone (805) 654-4761

K.P. HENDERSON, Acting Chief

By Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

121 ✓

DIVISION OF OIL AND GAS
RECEIVED
APR 1 1992
VENTURA CALIFORNIA

The Resources Agency of California
Department of Conservation
DIVISION OF OIL AND GAS

WELL STATUS INQUIRY

Ventura, California
March 11, 1992

Murdock M. Baker, Jr. Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

In a notice dated 1/28, 1991, you propose to rework well "Ferndale" 712 (111-21492)
Sec. 9, T. 4N, R. 21W, SBB.&M., Ojai
(Field or County)

Please indicate below, conditions or intentions regarding this proposed work and return the completed form to this office within 10 days.

K.P. HENDERSON, Acting Chief
By Patrick J. Kinnear
Patrick J. Kinnear, Deputy Supervisor

SPM/tkc

___PROSOSED WORK HAS BEEN DONE. (If you check this space, please file the required well records on this work in duplicate within 60 days after work was completed.*)

___PROPOSED WORK IS IN PROGRESS AND SHOULD BE COMPLETED ABOUT _____,19____.

X PROPOSED WORK HAS NOT BEEN DONE, BUT WE STILL INTEND TO DO THE WORK.**

X SUPPLEMENTARY NOTICE (Form OG123) ATTACHED.

X PLEASE CONSIDER THIS FORM AS A SUPPLEMENTARY NOTICE.

___WE DO NOT INTEND TO DO THE PROPOSED WORK. Please cancel our notice to _____, dated _____,19____.

___OTHER: _____

James A. Beck
(Signature)

James A. Beck, Exploration Manager
(Name and Title)

*Division 3 of the Public Resources Code states in part:
Section 3215,...Well records shall be filed 60 days after completion or suspension of proposed work.

**Section 3203,...If operations have not commenced within one year of receipt of the notice, the notice will be considered cancelled. (To prevent cancellation, file a Supplementary Notice with the Division.)

OG103

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P291- 74
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
February 1, 1991

Your proposal to rework well "Ferndale" 712, A.P.I. No. 111-21492, Section 9, T. 4 N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 1/28/91, received 1/30/91, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOG Class II 2M requirements shall be installed and maintained in operating condition at all times.
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. Wire line operations are conducted through at least a 2M lubricator.
4. The Division will monitor the monthly production of this well for a period of six months and if anomalous water production is indicated, remedial action well be required.
5. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.

Blanket Bond
SF:ljg

Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

DIVISION OF OIL AND GAS
RECEIVED
JAN 30 1991
VENTURA, CALIFORNIA

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	FORMS	
	OGD114	OGD121
93	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well Ferndale 712 (Well designation), API No. 111-21492

Sec. 9, T. 4N, R. 21W, SB B. & M., ~~Silverthread~~ Ojai Field, Ventura County.

The present condition of the well is as follows:

1. Total depth

   See Attached

2. Complete casing record, including plugs and perforations (present hole)

   See Attached

3. Present producing zone name Mohnian ; Zone in which well is to be recompleted Mohnian

4. Present zone pressure 1000 ; New zone pressure 2200

5. Last produced 1/91 (Date) | 1 (Oil, B/D) | 5 (Water, B/D) | 5 (Gas, Mcf/D)

   (or)

   Last injected N/A (Date) | (Water, B/D) | (Gas, Mcf/D) | (Surface pressure, psig)

6. Is this a critical well according to the definition on the reverse side of this form? ☐ (Yes) ☒ (No)

The proposed work is as follows:

Remove bridge plug @ 2950' and ~~4260'~~. This BP was already removed 6/13/90 per Carl Isaacs/pc 7/26/91.

Perf 4072' - 4084'.

Note: If well is to be redrilled, show proposed new bottom-hole coordinates and true vertical depth.

It is understood that if changes in this plan become necessary, we are to notify you immediately.

Address 725 E. Main St., Ste. 200 (Street)

Santa Paula (City) CA. (State) 93060 (Zip)

Telephone Number (805) 656-2445

Seneca Resources Corporation (Name of Operator)

By James A. Beck (Name-Printed)

James A. Beck (Name-Signature) 1/28/91 (Date)

Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

OG107 (8/87/DWRR/5M)

SENECA RESOURCES CORPORATION
FERNDALE 712 CASING DETAIL

DEPTH REFERENCE	:	KB is 30' above GL
TOTAL DEPTH	:	5001.00' Drilled Depth
TOTAL CSG DEPTH	:	5001.00' Float Shoe
EFFECTIVE DEPTH	:	2950' Drillable Plug
CASING DETAIL	:	13-3/8" (54.5 #,J&K-55, ST&C) cmnt'd at 895'. Did not bump plug. Float did not hold. 7 " (26#, N-80, and 35# P-110, LT&C) cmnt'd at 5001'. Bumped plug. Float held. Casing - Jts 1-110, 35 #, P-110 100-127, 26 #, N-80 Short Jts. - 3378.8 - 3406.1', 27.25' 3692.4 - 3722.4', 30.06' 4024.6 - 4051.4', 26.76'
PERFORATIONS	:	UBCFZ 5(.5") jhpf, 60 degree, from 4104' to 4194' with 5" tcp guns. LBCFZ 5(.5") jhpf, 60 degree, from 4277' to 4370' with 5" tcp guns.
CASING PLUGS	:	4260' Drillable Plug 2950' Drillable Plug

DIVISION OF OIL AND GAS
RECEIVED
FEB 5 1991
VENTURA, CALIFORNIA

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 712 SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-21492 JAMES A. BECK, GENERAL MANAGER

James A. Beck

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445
****

8/29/90
Day 1. MIRU WellTech. Bled well. POH with 130 3/4" rods. RU Otis Wireline. Run piano wire feeler & tag down @ 4536'. RU Homco mud pump. Clean out tank, manifold & pump lines. RU McMahan's Dewaxing. Hot oil tbg. with 30 bbls. Remove tree & install 5000 psi Hyd. BOPE. SDFN.

8/30/90
Day 2. Circulate well bottoms up. Circulate out oil & gas. Took 115 bbls. to fill well. Unland tbg. & LD 129 jts. 2-3/8" N-80 tbg. RO tbg. equipment & floor. Attempt to fill well with 26 bbls. lease oil. Well would not fill. Close well in. RDMO.

8/31/90
to No activity.
9/4/90

9/5/90
Day 3. RU Halliburton Logging Service with mast truck. Test lubricator to 1000 psi. Run Baker Model "S" drillable BP & set @ 2950'. Fill hole with 91 bbls. lease crude. Test csg. & BP to 2000 psi - OK. Perforate 4 (0.44") JHPF @ 2571', 2582', 2601', 2622', 2637', 2655', 2663', 2673', 2705', 2740' & 2772' (44 holes). Slight flow back. No press. increase. RO HLS. Remove Hydril. Secure well.

9/6/90
Day 4. 700 psi on well. Open well to tank thru 8/64". Bled well to 0 psi. Install isolation tool. Halliburton had mechanical problems. Shut well in.

9/7/90
Day 5. 600 psi on well. Install Halliburton isolation tool. Rig to frac. Unable to get tool to hold. Remove tool. Install cap flange. Open well to pressure recorder.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 712 SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-21492 JAMES A. BECK, GENERAL MANAGER

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445
****

9/8/90
Day 6. Install wellhead isolation tool & test - OK. RU Halliburton to frac Stage II as per program. Interval 2571'-2772'. 44 holes. Frac fluid = Super "E". Prepad #1 = 71 bbls. oil. ISIP = 1520#, 5 min. = 1335#, frac grad. = .96. Prepad #2 = 71 bbls. of Super "E". ISIP = 1610#, frac grad. = .99. Breakdown = 30 BPM @ 2050 psi. 5 min. SIP = 1420#. Max rate = 39, avg. rate = 34, max. press. = 2260#, avg. press. = 2100. Avg. conc. = 6 ppg, max. conc. = 8 ppg. Total oil pumped = 1382 bbls., total gel pumped = 514 bbls. FSIP = 1750#, 5 min. = 1711#, 10 min. = 1700#. Total sand = 53,000# resin coated 20/40 & 144,000# Ottowa 20/40. Tailed in with 53,000# 20/40 resin coated sand. Remove isolation tool. Install cap flange. Open well to chart press. recorder.

9/9/90
to No activity.
9/10/90

9/11/90
Day 7. RU Otis slickline unit. (1100 psi on well). RIH & tag top of sand @ 2850'. (Perfs 2571'-2772'); (BP @ 2950') RO Otis. Plumb well to test tank. SDFN.

9/12/90
to No activity.
9/17/90

9/18/90
Day 8. MIRU WellTech. RU SWS snubbing unit. SDFN.
Note: Otis piano wire feeler tagged fill @ 2809'. SDFN.

9/19/90
Day 9. MU mule shoe collar + 1 jt. 2-3/8" tbg. + 2" API T/L shoe + 8 pup jts. + Otis profile nipple with tbg. plug. PU & snub in hole with tbg. to 487'. Circ. well thru tbg., plug leaking. RU Otis. Retrieve plug & replace. RO Otis. PU & snub in with 2-3/8" tbg. to 2200'. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 712 SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-21492 JAMES A. BECK, GENERAL MANAGER

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445
****

9/20/90
Day 10. Run back in hole with tbg. Tag fill @ 2763'. Clean out frac sand to 2936'. Circulate well clean (2 hrs.). PU & LD 18 jts. 2-3/8" tbg. & land @ 2402'. RO snubbing unit. Remove BOPE & install tree. RU Otis piano wire. RIH & retrieve tbg. plug. Open well to flow on 7/64" choke. SJD.

9/21/90
Day 11. Load out equipment. RDMO.

9/22/90
to No activity.
9/24/90

9/25/90
Haul 2-7/8" tbg. back to rack. Load out Homco equipment. Flush pump lines. RD pump & manifold. Clean location.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P290- 275
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
July 5, 1990

Your proposal to rework well "Ferndale" 712, A.P.I. No. 111-21492, Section 9, T. 4 N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Lower Miocene pool, Ventura County, dated ---, received 6/21/90, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOG Class II 2M requirements shall be installed and maintained in operating condition at all times.
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. Wire line operations are conducted through at least a 2M lubricator.
4. Any sump used during these operations shall be thoroughly cleaned and filled with earth as soon as operations are completed.
5. The Division will monitor the monthly production of this well for a period of six months and if anomalous water production is indicated, remedial action well be required.

Blanket Bond
SF:ljg

Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

DIVISION OF OIL AND GAS
RECEIVED
JUN 21 1990
VENTURA, CALIFORNIA

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	FORMS	
	OGD 114	OGD 121
33	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well Ferndale 712 (Well designation), API No. 111-21492

Sec. 9, T. 4N, R. 21W SB B. & M., Silverthread Field, Ventura County.

The present condition of the well is as follows:

1. Total depth 5001'

2. Complete casing record, including plugs and perforations (present hole)

   See attached

3. Present producing zone name Mohnian- BCFZ; Zone in which well is to be recompleted _____

4. Present zone pressure 1000 psi; New zone pressure 1000 psi

5. Last produced 6/1/90 (Date) | 25 (Oil, B/D) | 1 (Water, B/D) | 50 (Gas, Mcf/D)

   (or)

   Last injected --- (Date) | --- (Water, B/D) | --- (Gas, Mcf/D) | --- (Surface pressure, psig)

6. Is this a critical well according to the definition on the reverse side of this form? ☐ (Yes) ☒ (No)

The proposed work is as follows:

Set BP @ 2850'. Perforate with 4" casing guns and frac the zone from 2500'-2800' in two stages. Clean out to 2850' and place well on production.

Note: If well is to be redrilled, show proposed new bottom-hole coordinates and true vertical depth.

It is understood that if changes in this plan become necessary, we are to notify you immediately.

Address 725 E. Main St., Suite 200 (Street)

Santa Paula (City) CA. (State) 93061 (Zip)

Telephone Number (805) 656-2445

Seneca Resources Corporation (Name of Operator)

By James A. Beck (Name-Printed)

James A Beck (Name-Signature) (Date)

Type of Organization _____ (Corporation, Partnership, Individual, etc.)

OG107 (8/87/DWRR/5M)

#2

SENECA RESOURCES CORPORATION
FERNDALE #712 CASING DETAIL

DEPTH REFERENCE	:	KB is 30' above GL
TOTAL DEPTH	:	5001.00' Drilled Depth
TOTAL CSG DEPTH	:	5001.00' Float Shoe
EFFECTIVE DEPTH	:	4920.20' Float Collar
CASING DETAIL	:	13-3/8" (54.5 #, J&K-55, ST&C) cmnt'd at 895' with 20 bbls mudflush ahead followed by 977 cf "G" cement + 2% CaCl2, displaced with 132 bbls mud. Did not bump plug. Float did not hold.
		7 " (26#, N-80, and 35# P-110, LT&C) cmnt'd at 5001' with 50 bbls. CW-100 flush ahead, followed by 300 sx 13.8 ppg lead, followed by 830 sx 15.2 ppg tail, displaced with 176 bbls. FW. Bumped plug. Float held.
		Casing - Jts 1-110, 35 #, P-110 100-127, 26 #, N-80
		Short Jts. - 3378.8 - 3406.1', 27.25' 3692.4 - 3722.4', 30.06' 4024.6 - 4051.4', 26.76'
PERFORATIONS	:	Upper Big Canyon Fault Zone 5(.5") jhpf, 60 degree, from 4104' to 4194' with 5" tubing-conveyed guns.
		Lower Big Canyon Fault Zone 5(.5") jhpf, 60 degree, from 4277' to 4370' with 5" tubing-conveyed guns.

DIVISION OF OIL AND GAS
RECEIVED
AUG 2 1991
VENTURA, CALIFORNIA

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION
WELL: "FERNDALE 712"
A.P.I. #111-21492

SILVERTHREAD FIELD, VENTURA COUNTY
SEC. 9, T4N, R21W, SBB&M
JAMES A. BECK, MANAGER OPERATIONS

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

5/26/90
Day 1. Shut well in. RU Otis. Make feeler run, WLM 3,995'. RIH with 120 hr. & 144 hr. clocks on BHP instruments. Unable to release from soft-set. POOH. Repaired tool. Refit & reset BHP instruments & RIH. Released from soft-set. POOH. Well open to pressure gauge & chart only. To return for tool retrieval on 5-29 a.m.

5/27/90
to No activity
5/29/90

5/30/90
Day 2. RU Otis for tool retrieval. Bled well. RIH & retrieve BHP instruments. POOH. Secure well. Shut in. Release Otis @ 1300 hrs.

6/11/90
Day 1. MIRU Signal. Spotted pump. Rigging up pump lines.

6/12/90
Day 2. Finish rigging up pump & tank. Bled csg. Filled tbg. with oil. Remove tree & install BOPE. Release Lok-set pkr. Fill hole with 55 bbls. Circ. well around. Pull tbg. & LD pkr. MU 5-7/8" bit on two 4-1/2" DC's. Ran to top perf. Closed well in. Left tbg. open to flowline.

6/13/90
Day 3. Bled well. Fill hole with 63 bbls. oil. Circulate well around. PU 2-3/8" tbg. & tag fill @ 4190'. RU power swivel. Backscuttle out to top of plug @ 4260'. Drill out plug. Ran tbg. to top of fill @ 4543'. Pull & LD extra tbg. SDFN.

6/14/90
Day 4. Bled well. Fill well with 43 bbls. oil. Circulate well around. Pull tbg. & LD drill collars. MU 2" API T/L shoe & 3400 "B" Drain. Ran tbg. Land with tail @ 4000.92' Remove BOPE. Load out equipment. Changed & installed production tree. Rig for rods. Test pump. PU 130 3/4" rods. Space well & fill & press. test to 300 psi. Clamped off polish rod. SDFN.

6/15/90
Day 5. LD mast. Clean & load out equipment. RDMO.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P290- 251
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
June 18, 1990

Your proposal to rework well "Ferndale" 712, A.P.I. No. 111-21492, Section 9, T. 4 N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Lower Miocene pool, Ventura County, dated ----, received 6/13/90, has been examined in conjunction with records filed in this office.

THE PROPOSED OPERATION COVERING WORK ALREADY COMPLETED IS APPROVED.

Blanket Bond
SFljg

Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear SAP
Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

DIVISION OF OIL AND GAS
RECEIVED
JUN 13 1990
VENTURA, CALIFORNIA

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	FORMS	
	OGD 114	OGD 121
73	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well Ferndale 712 (Well designation), API No. 111-21492

Sec. 9, T. 4N, R. 21W, SB B. & M., Silverthread Field, Ventura County.

The present condition of the well is as follows:

1. Total depth 5001'
   Eff. depth 4260' BP
2. Complete casing record, including plugs and perforations (present hole)

   See attached

3. Present producing zone name Mohnian - BCFZ; Zone in which well is to be recompleted N/A
4. Present zone pressure 1000 psi; New zone pressure 1000 psi
5. Last produced 6/1/90 (Date) | 25 (Oil, B/D) | 1 (Water, B/D) | 50 (Gas, Mcf/D)

   (or)

   Last injected --- (Date) | ---- (Water, B/D) | ---- (Gas, Mcf/D) | ---- (Surface pressure, psig)
6. Is this a critical well according to the definition on the reverse side of this form? ☐ (Yes) ☒ (No)

The proposed work is as follows:

Drill out BP @ 4260'. Place well on production.

Note: If well is to be redrilled, show proposed new bottom-hole coordinates and true vertical depth.

It is understood that if changes in this plan become necessary, we are to notify you immediately.

Address 725 E. Main St., Suite 200 (Street)
Santa Paula, CA. 93061 (City) (State) (Zip)
Telephone Number (805) 656-2445

Seneca Resources Corporation (Name of Operator)
By James A. Beck (Name-Printed)
James A. Beck (Name-Signature) (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

OG107 (8/87/DWRR/5M)

SENECA RESOURCES CORPORATION
FERNDALE #712 CASING DETAIL

DEPTH REFERENCE	:	KB is 30' above GL
TOTAL DEPTH	:	5001.00' Drilled Depth
TOTAL CSG DEPTH	:	5001.00' Float Shoe
EFFECTIVE DEPTH	:	4920.20' Float Collar
CASING DETAIL	:	13-3/8" (54.5 #, J&K-55, ST&C) cmnt'd at 895' with 20 bbls mudflush ahead followed by 977 cf "G" cement + 2% CaCl2, displaced with 132 bbls mud. Did not bump plug. Float did not hold.
		7 " (26#, N-80, and 35# P-110, LT&C) cmnt'd at 5001' with 50 bbls. CW-100 flush ahead, followed by 300 sx 13.8 ppg lead, followed by 830 sx 15.2 ppg tail, displaced with 176 bbls. FW. Bumped plug. Float held.
		Casing - Jts 1-110, 35 #, P-110 100-127, 26 #, N-80
		Short Jts. - 3378.8 - 3406.1', 27.25' 3692.4 - 3722.4', 30.06' 4024.6 - 4051.4', 26.76'
PERFORATIONS	:	Upper Big Canyon Fault Zone 5(.5") jhpf, 60 degree, from 4104' to 4194' with 5" tubing-conveyed guns.
		Lower Big Canyon Fault Zone 5(.5") jhpf, 60 degree, from 4277' to 4370' with 5" tubing-conveyed guns.
BRIDGE PLUG	:	4260'

DOG

GOODE CORE ANALYSIS SERVICE

Company: Seneca Resources Corp.
Well: "Ferndale" #712
Field: Ojai
County,St: Ventura, Ca

Location: Sec 9-4N-21W
Elevation: 1172'KB
Drlg Fluid: Waterbase

File No.: 89348
Date: 1\2\1990
Core Type: Sidewall

DIVISION OF OIL AND GAS
RECEIVED
JUL 3 1990
VENTURA, CALIFORNIA

Sample ber	Depth Feet	Perm Ka md	Por %P.V.	Residual Sat. Percent Pore Oil	Residual Sat. Percent Pore Water	O/W Ratio	Total Liquid	Grain Den	Description
1	2521.0	5.3	18.9	0.2	60.7	0.00	60.9	2.68 *	Sd gy vfgr vslty vcalc lstrk stn vdgld flu
2	2571.0	50.0	28.4	12.8	64.9	0.20	77.7	**	Sd gy-tan bvfgr vslty lstrk stn vdgld flu
3	2589.0	75.0	26.5	12.6	71.2	0.18	83.7	**	Sd tan vfgr vslty lstn vdgld flu
4	2606.0	100.0	20.9	11.4	80.9	0.14	92.3	**	Same
5	2616.0	71.2	20.4	11.2	42.8	0.26	54.1	2.69 *	Sd tan vf-fgr slty slt lam lstn vdgld flu
6	2638.0	150.0	22.4	17.1	57.8	0.30	74.9	**	Same
7	2662.0	75.0	20.3	11.0	38.2	0.29	49.1	**	Same
8	2718.0	50.0	21.1	3.7	60.8	0.06	64.5	**	Same gy-tan
9	2740.0	30.0	20.8	9.0	64.4	0.14	73.4	**	Sd gy-tan vfgr vslty slt mlam lstrk stn vdgld flu
10	2774.0	50.0	32.0	5.4	55.1	0.10	60.5	**	Sd gy-tan vf-fgr slty lstn vdgld flu
11	2999.0	30.0	19.3	12.8	65.0	0.20	77.8	**	Same
12	3163.0	25.2	33.7	0.0	94.8	0.00	94.8	2.66 *	Sd gy vfgr vslty cly no stn no flu
13	3174.0	51.9	32.2	0.0	88.7	0.00	88.7	2.66 *	Same
14	3206.0	27.1	31.7	0.0	89.9	0.00	89.9	2.65 *	Sd gy-tan vfgr vslty sl alm cly no stn no flu
15	3224.0	23.4	33.8	0.0	94.7	0.00	94.7	2.66 *	Sd gy vfgr vslty no stn no flu
16	3254.0	10.0	31.1	0.0	70.3	0.00	70.3	**	Sd gy vfgr vslty cly lam no stn no flu
17	3306.0	31.8	31.1	0.0	89.7	0.00	89.7	2.63 *	Sd gy-tan vfgr vslty cly lam no stn no flu
18	3502.0	9.7	28.7	6.2	79.6	0.08	85.9	2.63 *	Sd tan vfgr vslty vcly lsp stn vdgld flu
19	3516.0	17.4	29.8	6.6	67.7	0.10	74.3	2.66 *	Sd tan vf-fgr slty cly incl lstn vdgld flu
20	3572.0	7.8	28.9	2.5	77.5	0.03	80.0	2.63 *	Sd tan vfgr vslty shly lam lstrk stn vdgld flu

GOODE CORE ANALYSIS SERVICE

Company: Seneca Resources Corp.
Well: "Ferndale" #712
Field: Ojai
County,St: Ventura, Ca

Location: Sec 9-4N-21W
Elevation: 1172'KB
Drlg Fluid: Waterbase

File No.: 89348
Date: 1\2\1990
Core Type: Sidewall

Sample Number	Depth Feet	Perm Ka md	Por %P.V.	Residual Sat. Percent Pore Oil	Residual Sat. Percent Pore Water	O/W Ratio	Total Liquid	Grain Den	Description
21	3578.0	11.3	27.9	1.5	89.0	0.02	90.5	2.62 *	Same/ cly lam
22	3588.0	5.4	27.7	0.9	75.1	0.01	76.0	2.66 *	Sd tan vfgr vslty no stn vdsp gld flu
23	3752.0	11.3	26.1	0.2	71.5	0.00	71.7	2.62 *	Same
24	3813.0	13.4	25.6	0.4	67.1	0.01	67.5	2.58 *	Slt tan sh lam vfgr sd lam lstn vdgld flu
25	3852.0	12.1	26.2	1.1	64.7	0.02	65.8	2.60 *	Slt brn shly no stn vdsp gld flu
26	3886.0	10.0	29.2	14.8	55.1	0.27	69.9	**	Sd tan-brn vfgr shly lam frac lstrk stn vdgld flu
27	3914.0	20.7	25.2	0.8	60.6	0.01	61.4	2.64 *	Sd tan-brn vfgr shly lam frac no stn vdgld flu
28	3933.0	5.0	34.2	19.9	48.7	0.41	68.6	**	Same
29	4056.0	10.7	29.0	5.9	63.3	0.09	69.2	2.66 *	Slt tan/sdy shly lam lsp stn vdgld flu
30	4078.0	11.4	27.6	4.9	74.2	0.07	79.1	2.61 *	Sd tan-brn vfgr shly lam frac no stn vdgld flu
31	4093.0	17.0	23.6	2.9	79.9	0.04	82.7	2.59 *	Same
32	4108.0	26.4	30.0	8.1	61.9	0.13	70.0	2.63 *	Sd tan vfgr vslty cly lam lstn vdgld flu
33	4116.0	52.2	24.3	11.7	57.4	0.20	69.1	2.64 *	Sd tan vf-cgr slty lstn vdgld flu
34	4122.0	75.0	32.5	5.8	53.3	0.11	59.1	**	Sd tan vf-mgr slty lstn vdgld flu
35	4127.0	29.2	25.0	4.0	80.4	0.05	84.4	2.63 *	Sd tan vf-fgr slty lstn vdgld flu
36	4144.0	150.0	22.7	24.6	59.1	0.42	83.7	**	Sd tan-brn vf-cgr slty mstn vdgld flu
37	4158.0	18.8	20.7	0.6	81.9	0.01	82.5	2.61 *	Slt tan shly lsp stn vdgld flu
38	4170.0	75.0	26.2	16.2	48.4	0.33	64.6	**	Sd tan vf-mgr slty lstn vdgld flu
39	4177.0	47.2	25.4	4.4	68.7	0.06	73.1	2.66 *	Same
40	4181.0	200.0	29.7	15.4	55.9	0.28	71.3	**	Sd tan vf-cgr slty mstn vdgld flu

GOODE CORE ANALYSIS SERVICE

Company: Seneca Resources Corp.
Well: "Ferndale" #712
Field: Ojai
County,St: Ventura, Ca

Location: Sec 9-4N-21W
Elevation: 1172'KB
Drlg Fluid: Waterbase

File No.: 89348
Date: 1\2\1990
Core Type: Sidewall

Sample Number	Depth Feet	Perm Ka md	Por %P.V.	Residual Sat. Percent Pore Oil	Residual Sat. Percent Pore Water	O/W Ratio	Total Liquid	Grain Den		Description
41	4190.0	75.0	22.9	14.1	75.3	0.19	89.5		**	Sd tan vf-fgr slty mstn vdgld flu
42	4212.0	16.4	29.1	9.7	74.7	0.13	84.4	2.59	*	Sd tan vfgr vslty shly lam lstrk stn vdgld flu
43	4224.0	9.8	28.3	3.5	75.7	0.05	79.1	2.62	*	Sd ltan vfgr vslty cly lsnt vdgld flu
44	4283.0	5.0	28.9	18.8	58.5	0.32	77.3		**	Slt tan-brn/sdy lam lstrk stn vdgld flu
45	4457.0	<1.0	35.2	22.4	62.1	0.36	84.5		**	Slt brn shly no stn no flu
46	4474.0	22.5	30.2	33.8	47.6	0.71	81.4	2.60	*	Sd brn vfgr slty mstn vdgld flu
47	4648.0	17.2	33.5	16.7	62.0	0.27	78.6	2.51	*	Slt tan-brn/vfgr sd lam mstrk stn vdgld flu
48	4680.0	F/86.0	25.7	6.3	75.2	0.08	81.5	2.63	*	Slt dgy-tan shly lsp stn vdgld flu

GOODE CORE ANALYSIS SERVICE

Company: Seneca Resources Corp.
Well: "Ferndale" #712
Field: Ojai
County,St: Ventura, Ca

Location: Sec 9-4N-21W
Elevation: 1172'KB
Drlg Fluid: Waterbase

File No.: 89348
Date: 1\6\1990
Core Type: Sidewall

CORE ANALYSIS PROCEDURES AND CONDITIONS

	Procedure (*)	Procedure (**)	Procedure (***)
Sampling Meth:	Percussion	Percussion	
Drill Coolant:	N/A	N/A	
Jacket Material:	Lead Sleeve	N/A	
Seat Conditions:	Chilled	N/A	
Seat Pressure:	700 psig	N/A	
Saturation Meth:	Dean Stark/Toluene	Retort	
Extraction Meth:	Centrifuge	N/A	
Solvent(s) Used:	Toluene		
Drying Cond:	235 Degrees F/Gravity	N/A	
Pore Vol Meth:	Boyle's Law Helium	Summation of Fluids	
Confining Press:	300 Psig	N/A	
Grain Vol Meth:	Boyle's Law Helium	Bulk-Fluids	
Bulk Vol Meth:	Pore Vol+Grain Vol	Mercury Displacement	
Perm Meth:	Air	Empirical	
Confining Press:	300 Psig	N/A	

Oil Density Use 0.90 gms/cc

GOODE CORE ANALYSIS COMPANY

Seneca Resources Corp.
WELL: "Ferndale" #712
FIELD: Ojai

FILE NO: 89348
DEPTH: 2589
SAMPLE ID: Sidewall

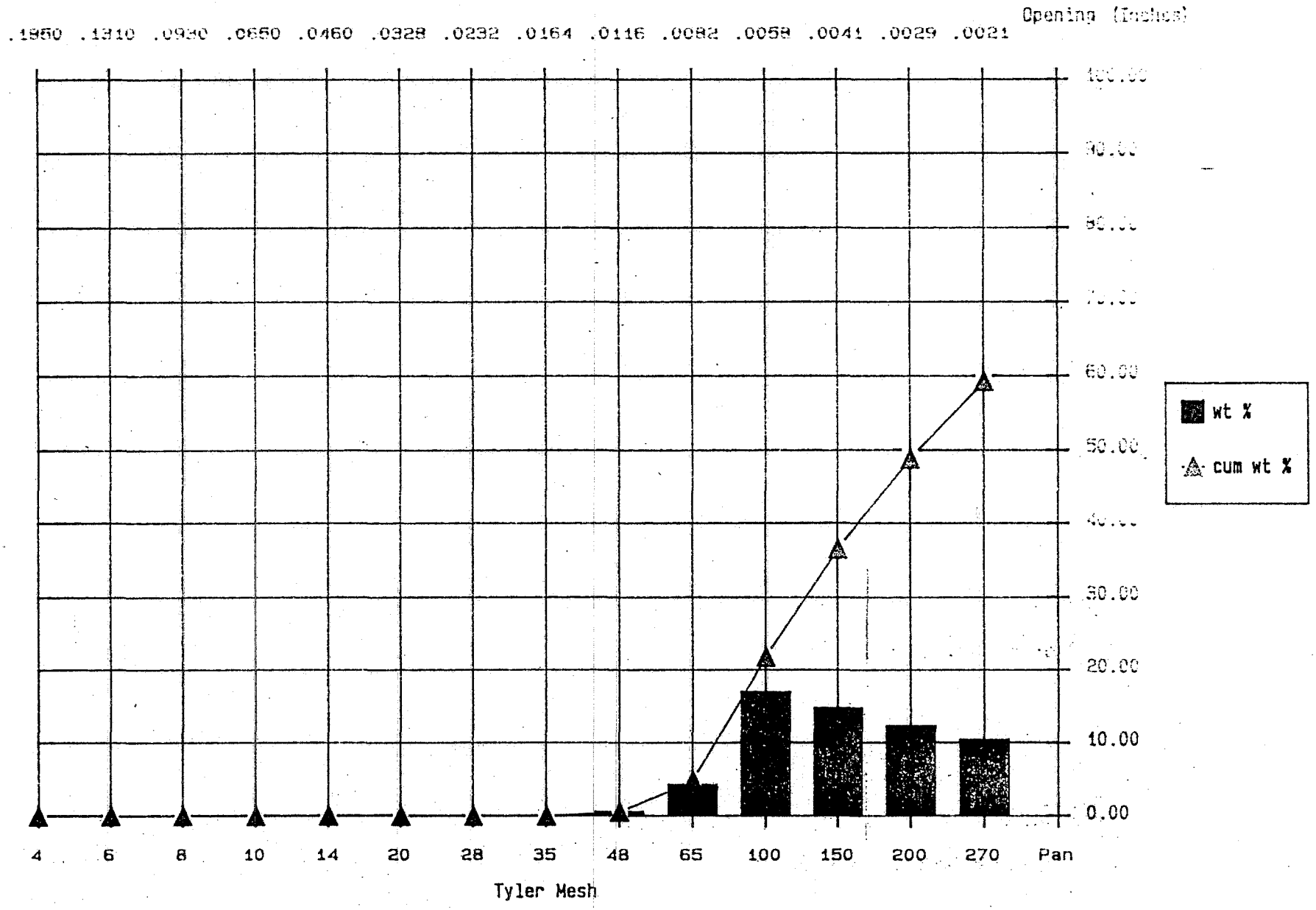
Sieve Analysis Tabular Data

Tyler Mesh	Opening Inches	Sample Weight	Percent Total	Cumulative % Weight	Percent Passed	Opening Inches
4	0.1850	0.00	00.00	00.00	10	0.0075
6	0.1310	0.00	00.00	00.00	20	0.0060
8	0.0930	0.00	00.00	00.00	30	0.0048
10	0.0650	0.00	00.00	00.00	40	0.0038
14	0.0460	0.00	00.00	00.00	50	0.0028
20	0.0328	0.00	00.00	00.00	60	**
28	0.0232	0.00	00.00	00.00	70	**
35	0.0164	0.00	00.00	00.00	80	**
48	0.0116	0.02	00.56	00.56	90	**
65	0.0082	0.11	04.24	04.80		
100	0.0058	0.45	16.93	21.73		
150	0.0041	0.39	14.79	36.52		
200	0.0029	0.33	12.27	48.80		
270	0.0021	0.28	10.40	59.20		
Pan		1.09	40.80	100.00		
	Totals	2.66	100.0			

Seneca Resources Corp.
WELL: "Ferndale" #712
FIELD: Ojai

SIEVE ANALYSIS

FILE NO: 89348
DEPTH: 2589
SAMPLE ID: Sidewall



GOODE CORE ANALYSIS COMPANY

Seneca Resources Corp.
WELL: "Ferndale" #712
FIELD: Ojai

FILE NO: 89348
DEPTH: 2616
SAMPLE ID: Sidewall

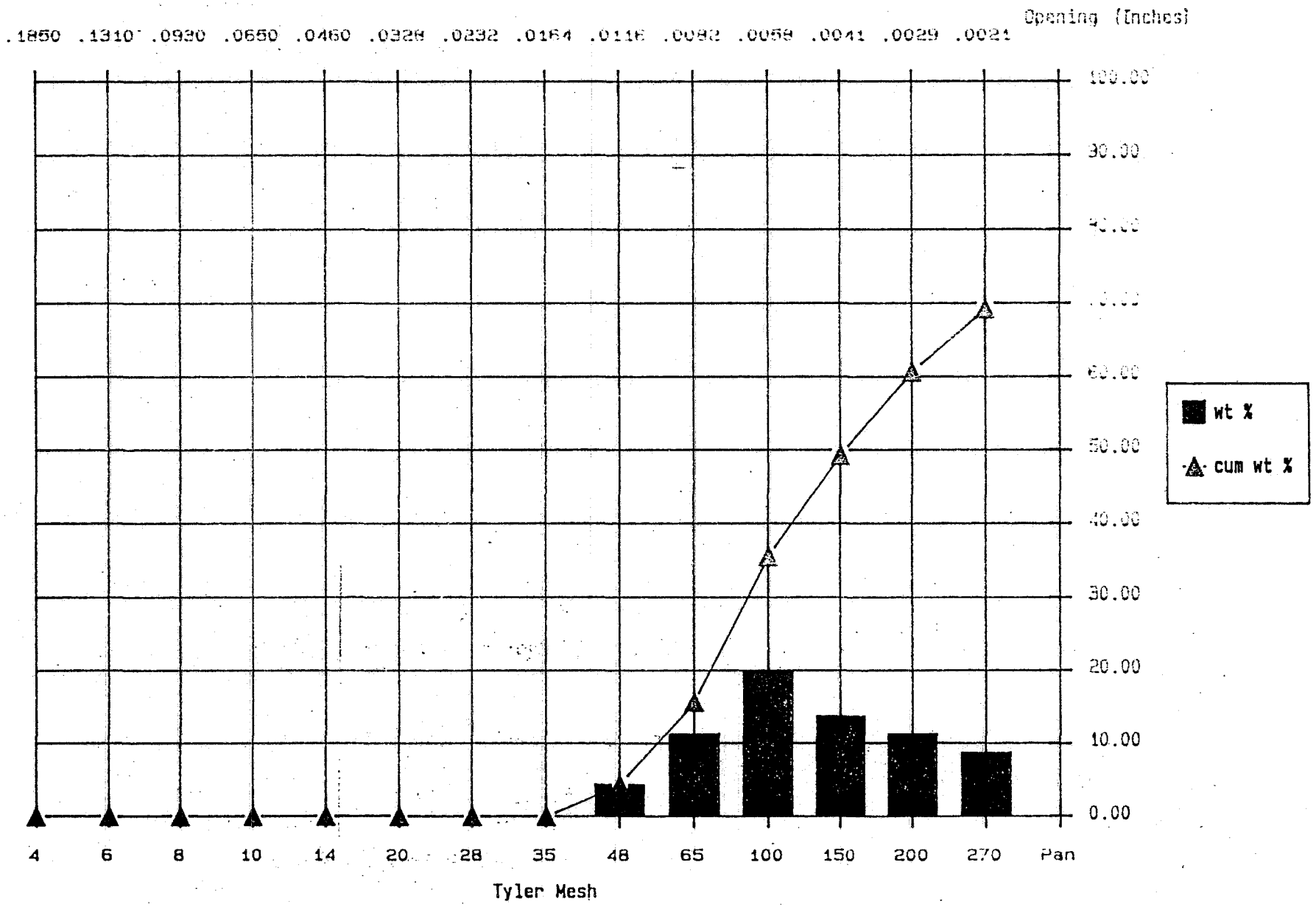
Sieve Analysis Tabular Data

Tyler Mesh	Opening Inches	Sample Weight	Percent Total	Cumulative % Weight	Percent Passed	Opening Inches
4	0.1850	0.00	00.00	00.00	10	0.0099
6	0.1310	0.00	00.00	00.00	20	0.0077
8	0.0930	0.00	00.00	00.00	30	0.0065
10	0.0650	0.00	00.00	00.00	40	0.0052
14	0.0460	0.00	00.00	00.00	50	0.0040
20	0.0328	0.00	00.00	00.00	60	0.0030
28	0.0232	0.00	00.00	00.00	70	**
35	0.0164	0.00	00.00	00.00	80	**
48	0.0116	0.49	04.36	04.36	90	**
65	0.0082	1.26	11.28	15.64		
100	0.0058	2.22	19.85	35.49		
150	0.0041	1.54	13.77	49.26		
200	0.0029	1.26	11.27	60.53		
270	0.0021	0.97	08.66	69.19		
Pan		3.45	30.81	100.00		
	Totals	11.19	100.0			

Seneca Resources Corp.
WELL: "Ferndale" #712
FIELD: Ojai

SIEVE ANALYSIS

FILE NO: 89348
DEPTH: 2616
SAMPLE ID: Sidewall



GOODE CORE ANALYSIS COMPANY

Seneca Resources Corp.
WELL: "Ferndale" #712
FIELD: Ojai

FILE NO: 89348
DEPTH: 3588
SAMPLE ID: Sidewall

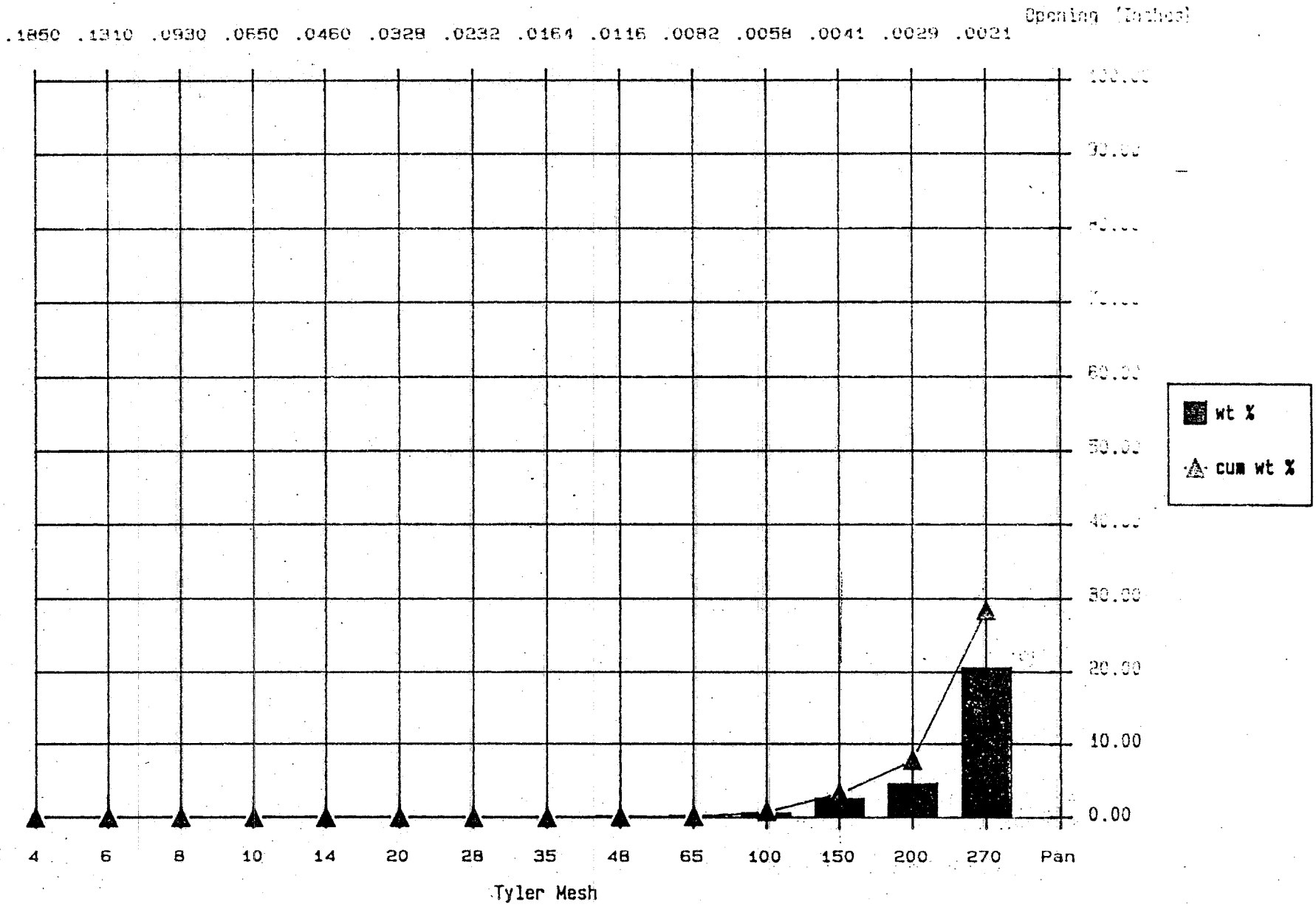
Sieve Analysis Tabular Data

Tyler Mesh	Opening Inches	Sample Weight	Percent Total	Cumulative % Weight	Percent Passed	Opening Inches
4	0.1850	0.00	00.00	00.00	10	0.0028
6	0.1310	0.00	00.00	00.00	20	0.0024
8	0.0930	0.00	00.00	00.00	30	**
10	0.0650	0.00	00.00	00.00	40	**
14	0.0460	0.00	00.00	00.00	50	**
20	0.0328	0.00	00.00	00.00	60	**
28	0.0232	0.00	00.00	00.00	70	**
35	0.0164	0.00	00.00	00.00	80	**
48	0.0116	0.01	00.09	00.09	90	**
65	0.0082	0.01	00.13	00.21		
100	0.0058	0.04	00.57	00.78		
150	0.0041	0.18	02.51	03.29		
200	0.0029	0.32	04.59	07.88		
270	0.0021	1.44	20.48	28.36		
Pan		5.03	71.64	100.00		
	Totals	7.02	100.0			

Seneca Resources Corp.
WELL: "Ferndale" #712
FIELD: Ojai

SIEVE ANALYSIS

FILE NO: 89348
DEPTH: 3588
SAMPLE ID: Sidewall



GOODE CORE ANALYSIS COMPANY

Seneca Resources Corp.
WELL: "Ferndale" #712
FIELD: Ojai

FILE NO: 89348
DEPTH: 4144
SAMPLE ID: Sidewall

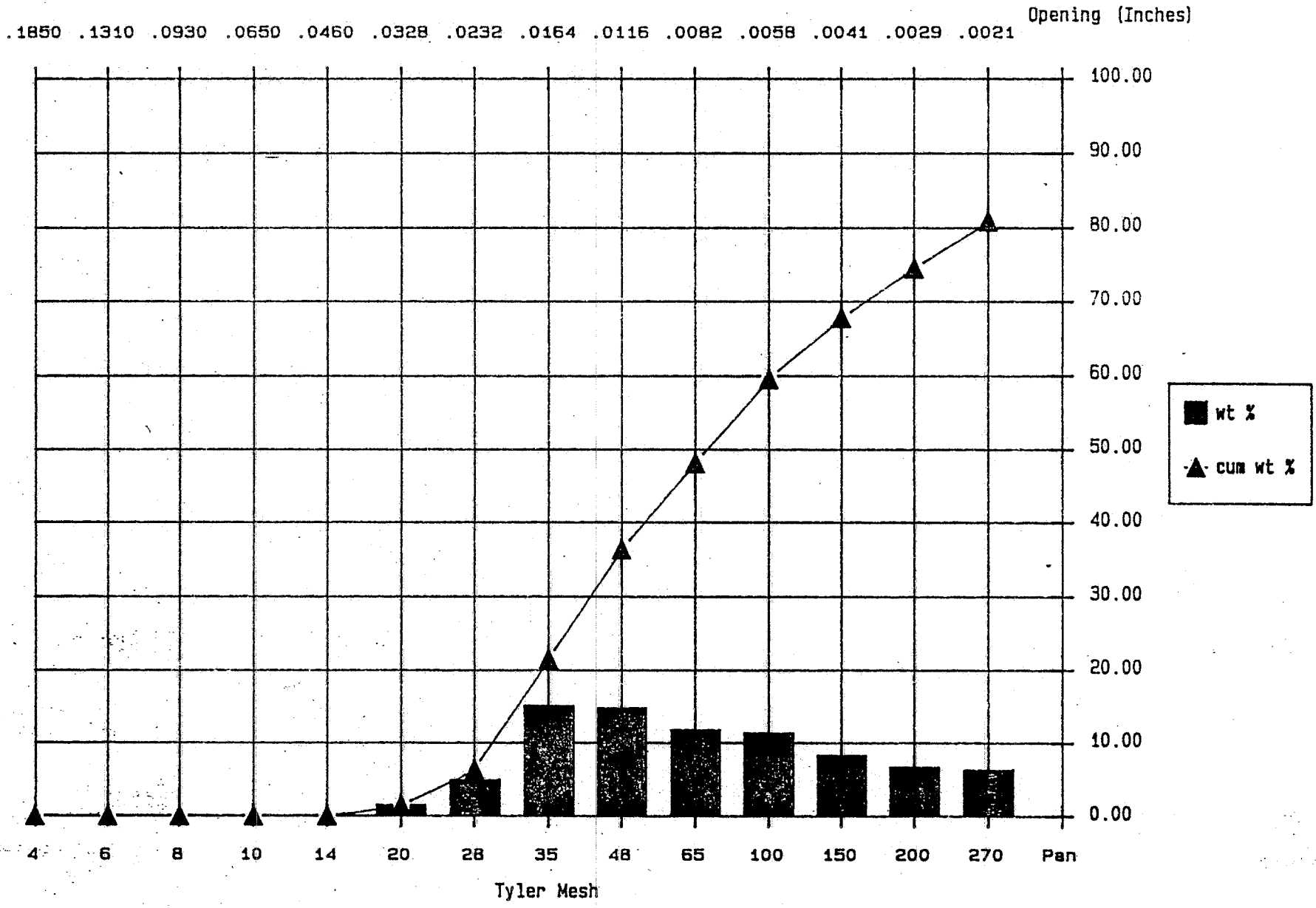
Sieve Analysis Tabular Data

Tyler Mesh	Opening Inches	Sample Weight	Percent Total	Cumulative % Weight	Percent Passed	Opening Inches
4	0.1850	0.00	00.00	00.00	10	0.0215
6	0.1310	0.00	00.00	00.00	20	0.0170
8	0.0930	0.00	00.00	00.00	30	0.0136
10	0.0650	0.00	00.00	00.00	40	0.0105
14	0.0460	0.00	00.00	00.00	50	0.0078
20	0.0328	0.04	01.43	01.43	60	0.0057
28	0.0232	0.15	04.87	06.29	70	0.0037
35	0.0164	0.47	15.15	21.45	80	0.0022
48	0.0116	0.46	14.86	36.31	90	**
65	0.0082	0.36	11.81	48.12		
100	0.0058	0.35	11.32	59.44		
150	0.0041	0.26	08.34	67.78		
200	0.0029	0.21	06.68	74.46		
270	0.0021	0.20	06.33	80.79		
Pan		0.59	19.21	100.00		
	Totals	3.08	100.0			

Seneca Resources Corp.
WELL: "Ferndale" #712
FIELD: Ojai

SIEVE ANALYSIS

FILE NO: 89348
DEPTH: 4144
SAMPLE ID: Sidewall



GOODE CORE ANALYSIS COMPANY

Seneca Resources Corp.
WELL: "Ferndale" #712
FIELD: Ojai

FILE NO: 89348
DEPTH: 4190
SAMPLE ID: Sidewall

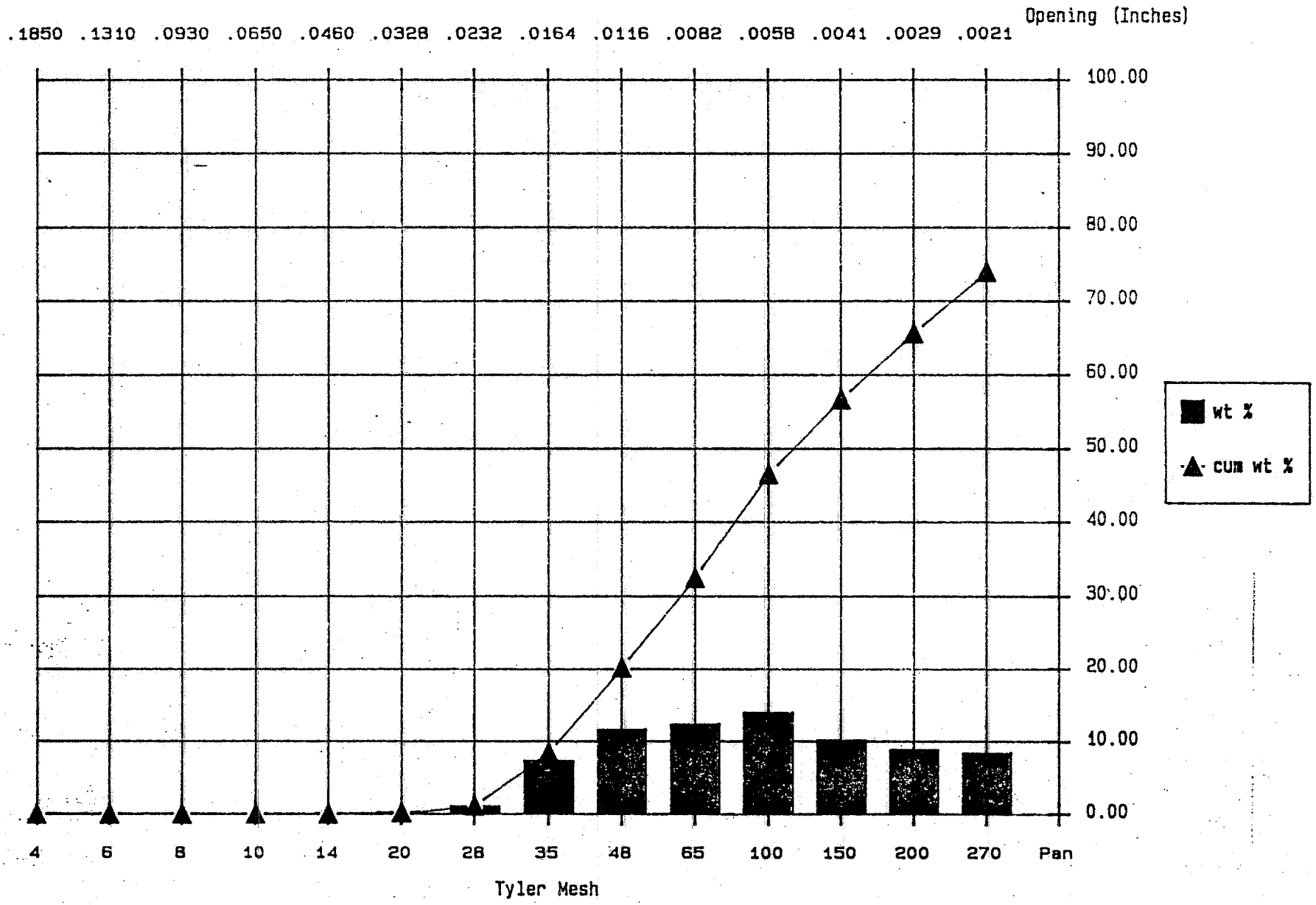
Sieve Analysis Tabular Data

Tyler Mesh	Opening Inches	Sample Weight	Percent Total	Cumulative % Weight	Percent Passed	Opening Inches
4	0.1850	0.00	00.00	00.00	10	0.0157
6	0.1310	0.00	00.00	00.00	20	0.0116
8	0.0930	0.00	00.00	00.00	30	0.0089
10	0.0650	0.00	00.00	00.00	40	0.0069
14	0.0460	0.00	00.00	00.00	50	0.0052
20	0.0328	0.01	00.13	00.13	60	0.0036
28	0.0232	0.04	01.01	01.15	70	0.0025
35	0.0164	0.27	07.27	08.42	80	**
48	0.0116	0.44	11.64	20.05	90	**
65	0.0082	0.46	12.38	32.44		
100	0.0058	0.53	14.03	46.47		
150	0.0041	0.38	10.17	56.64		
200	0.0029	0.33	08.89	65.54		
270	0.0021	0.32	08.42	73.95		
Pan		0.98	26.05	100.00		
	Totals	3.75	100.0			

Seneca Resources Corp.
WELL: "Ferndale" #712
FIELD: Ojai

SIEVE ANALYSIS

FILE NO: 89348
DEPTH: 4190
SAMPLE ID: Sidewall



GOODE CORE ANALYSIS SERVICE

Company: Seneca Resources Corp.
Well: "Ferndale" 712
Field: Ojai
County,St: Ventura, CA

Location: Sec 9-4N-21W
Elevation: 1172' KB
Drlg Fluid: Water Base

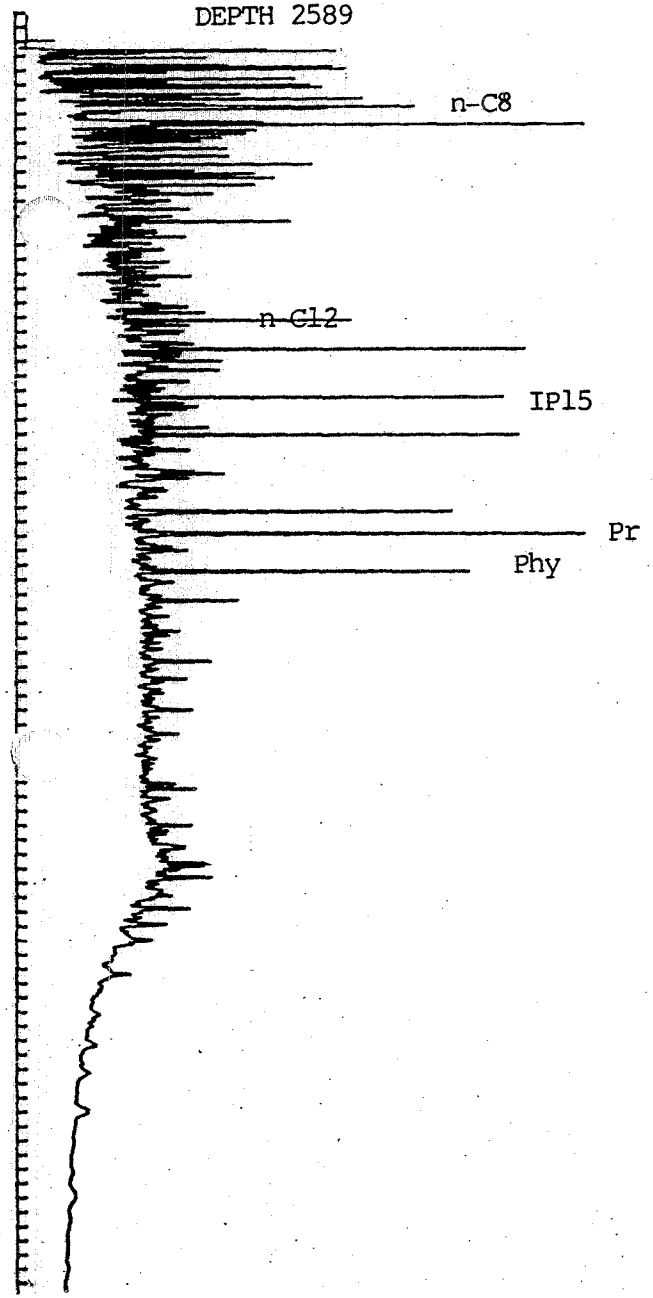
File No.: 89348
Date: 1\5\90
Core Type: Sidewall

PYRO-CHROMATOGRAPHY TABULAR DATA

Smpl #	Depth	17+18/ Pr+Phy	IP15/ n-C14	Pr/Phy	CPI	% <n-C13	% >n-C18	% n-C/ Total	Total Area
1	2589.0	0.26	2.97	1.26	1.07	28.8	49.3	8.4	16.110
2	2616.0	0.38	2.52	1.28	0.99	22.0	52.7	11.3	23.932
3	3588.0	0.76	0.83	1.18	0.99	32.4	45.4	18.9	7.752
4	4144.0	0.74	0.90	1.25	0.98	30.5	45.1	17.4	27.088
5	4190.0	0.66	1.27	1.20	0.98	30.8	46.4	13.1	21.582

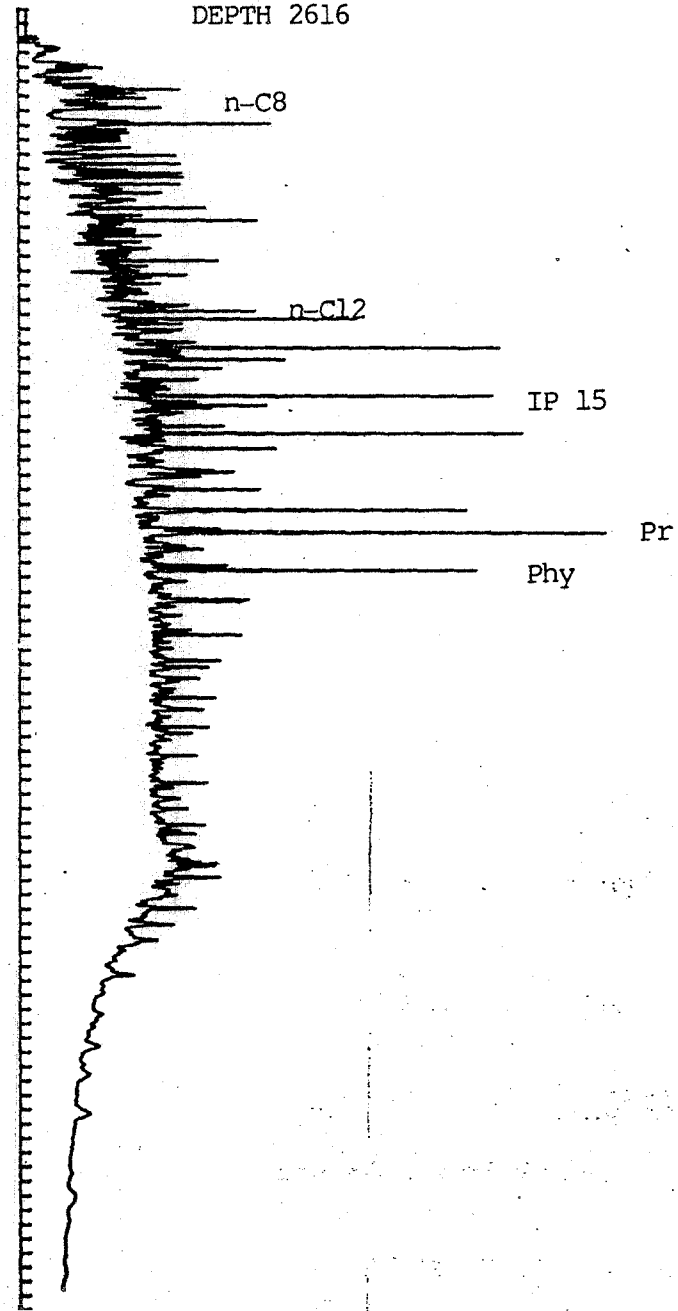
SENECA RESOURCES CORP.
"FERNDALE" 712
OJAI FIELD
< 893481 >
0.0- 90.0 MIN
27 MV FULL
5 OFFSET

DEPTH 2589



< 893482 >
0.0- 90.0 MIN
35 MV FULL
5 OFFSET

DEPTH 2616



SENECA RESOURCES CORP.
"FERNDALE" 712
OJAI FIELD

< 893483 >
0.0- 90.0 MIN
25 MV FULL
5 OFFSET

DEPTH 3588

n-C8
n-C12
IP15
Phy
n-C25

< 893484 >
0.0- 90.0 MIN
32 MV FULL
5 OFFSET

DEPTH 4144

n-C8
n-C12
IP15
Pr
Phy
n-C25

< 893485 >
0.0- 90.0 MIN
24 MV FULL
5 OFFSET

DEPTH 4190

n-C8
n-C12
IP15
Pr
Phy
n-C25

ESOURCES AGENCY OF CALIFORNIA
EPARTMENT OF CONSERVATION
IVISION OF OIL AND GAS

SUPPLEMENTAL
WELL SUMMARY REPORT

API No. 111-21492

WELL FILE

Operator: Seneca Resources Corporation	Well: Ferndale 712				
Field: Silverthread	County: Ventura	Sec. 9	T. 4N	R. 21W	B.&M. S.B.

Location (Give surface location from property or section corner, street center line and/or California coordinates): 1637' W & 671' N from SW corner of Section 9.

Elevation of ground above sea level: 1132'

Commenced drilling (date): 12-16-89

Completed drilling (date): 1-3-90

Commenced producing (date): 1-11-90

[X] Flowing [ ] Pumping [ ] Gas lift

Name of producing zone(s): ohnian Sands in the CFZ.

Total depth: (1st hole) 5001' (2nd) --- (3rd) ---

Present effective depth: 4260' KB (Bridge Plug)

Junk: 4-1/2" TCP Guns in Rathole

Depth measurements taken from top of: [ ] Derrick Floor [ ] Rotary Table [X] Kelly Bushing. Which is 30' feet above ground level.

GEOLOGICAL MARKERS	DEPTH
San Cayetano Fault	2160' KB
Upper Big Canyon Fault	3650' KB

Formation and age at total depth: Repetto, Pliocene

	Clean Oil (bbl per day)	Gravity Clean Oil	Percent Water including emulsion	Gas (Mcf per day)	Tubing Pressure	Casing Pressure
Initial Production	100	32	1%	125	450	Packer
Production After 30 days	25	32	1%	40	150	Packer

CASING RECORD (Present Hole)

Size of Casing (API)	Top of Casing	Depth of Shoe	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Number of Sacks or Cubic Feet of Cement	Depth of Cementing (if through perforations)
3-3/8"	Surface	895'	54.5#	J&K-55	SH	17.5"	850 sx	N/A
7"	Surface	714'	26#	N-80	SH	10.5"	See below	N/A
7"	714'	5001'	35#	P-110	SH	10.5"	1130 sx	N/A

PERFORATED CASING (Size, top, bottom, perforated intervals, size and spacing of perforation and method.)

-1/2" guns - 4277'-4370' cont., 5 (0.5"), 60° phased, tubing conveyed.
-1/2" guns - 4104'-4194' cont., 5 (0.5"), 60° phased, tubing conveyed.

DIVISION OF OIL AND GAS
RECEIVED
JUL 29 1991
VENTURA, CALIFORNIA

Was the well directionally drilled? [X] Yes [ ] No If yes, show coordinates at total depth: 1006.26' S & 195.49' E

Electrical log depths: DLL/GR/SP, GR/CAL/DENS-NEUT, DIPMETER, GR/CBL/CCL 5000'-895'

Other surveys: MUD LOG, REPEAT FORMATION TESTER, SIDEWALL CORES

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Name	Title	
James A. Beck	General Manager Operations	
Address: P.O. Box 630, 725 E. Main, Suite 200	City: Santa Paula	Zip Code: 93060
Telephone Number: 805) 656-2445	Signature: James A. Beck	Date: 6/27/90

SUBMIT IN DUPLICATE

3100 (3/82/GSR1/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

API No. 111-21492

WELL SUMMARY REPORT

Operator	Well				
Seneca Resources Corporation	Ferndale 712				
Field	**County**	**Sec.**	**T.**	**R.**	**B.&M.**
Silverthread	Ventura	9	4N	21W	S.B.

Location (Give surface location from property or section corner, street center line and/or California coordinates)
1637' W & 671' N from SW corner of Section 9.

Elevation of ground above sea level
1132'

Commenced drilling (date)
12-16-89

Completed drilling (date)
1-3-90

Commenced producing (date)
1-11-90
☒ Flowing ☐ Pumping
☐ Gas lift

Name of producing zone(s)
Mohnian Sands in the BCFZ.

Total depth

(1st hole)	(2nd)	(3rd)
5001'	---	---

Present effective depth
4920' KB (Float collar)

Junk
NONE

Depth measurements taken from top of:
☐ Derrick Floor ☐ Rotary Table ☒ Kelly Bushing
Which is 30' feet above ground level.

GEOLOGICAL MARKERS	DEPTH
San Cayetano Fault	2160' KB
Upper Big Canyon Fault	3650' KB

Formation and age at total depth
Repetto, Pliocene

	Clean Oil (bbl per day)	Gravity Clean Oil	Percent Water including emulsion	Gas (Mcf per day)	Tubing Pressure	Casing Pressure
Initial Production	100	32	1%	125	450	Packer
Production After 30 days	25	32	1%	40	150	Packer

CASING RECORD (Present Hole)

Size of Casing (API)	Top of Casing	Depth of Shoe	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Number of Sacks or Cubic Feet of Cement	Depth of Cementing (if through perforations)
13-3/8"	Surface	895'	54.5#	J&K-55	SH	17.5"	850 sx	N/A
7"	Surface	714'	26#	N-80	SH	10.5"	See below	N/A
7"	714'	5001'	35#	P-110	SH	10.5"	1130 sx	N/A

PERFORATED CASING (Size, top, bottom, perforated intervals, size and spacing of perforation and method.)
4-1/2" guns - 4277'-4370' cont., 5 (0.5"), 60° phased, tubing conveyed.
4-1/2" guns - 4104'-4194' cont., 5 (0.5"), 60° phased, tubing conveyed.

Was the well directionally drilled? If yes, show coordinates at total depth
☒ Yes ☐ No 1006.26' S & 195.49' E

MAR 5 1990

Electrical log depths
DLL/GR/SP, GR/CAL/DENS-NEUT, DIPMETER, GR/CBL/CCL 5000'-895'

Other surveys
MUD LOG, REPEAT FORMATION TESTER, SIDEWALL CORES

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Name	Title	
James A. Beck	General Manager Operations	
Address	**City**	**Zip Code**
P.O. Box 630, 725 E. Main, Suite 200	Santa Paula	93060
Telephone Number	**Signature**	**Date**
(805) 656-2445	James A. Beck	2/14/90

SUBMIT IN DUPLICATE

OG100 (3/82/GSR1/5M)

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION
WELL: "FERNDALE 712"
A.P.I. #111-21492

SILVERTHREAD FIELD, VENTURA COUNTY
SEC. 9, T4N, R21W, SBB&M
ERIC R. WILSON, DIVISION ENGINEER

Eric Wilson

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

12/16/89
Day 1. Depth = 137'. Present Operation = Drilling. WOC. Cut off 20" conductor. RU flowline. MU BHA. Drill rathole. PU stab. Spud @ 0330 hrs. Drill to 137'.

12/17/89
Day 2. Depth = 603'. Present Operation - Drilling. Drill from 137'-195'. POOH. Remove Catalytic converter manifold & install rig mufflers. RIH. Drill & survey from 195'-404'. POOH for bit. RIH & ream from 374'-404'. Drill & survey from 404'-603'.

12/18/89
Day 3. Depth = 806'. Present Operations - Work csg. Drill from 603'-806'. Partial returns from 650'-780'. Lost 250-300 bbls. POOH & LD MM. RIH. Jets plugged. POOH & clear. RIH. Wash & ream from 671'-806'. Circ. for logs. Log hole. Run csg. to 280'. Hit ledge or boulder. Work csg. to 320'.

12/19/89
Day 4. Depth = 895'. Present Operations - Cement casing. LD csg. & RD casers. MU BHA, RIH & wash & ream from 160'-776'. POOH for plugged bit. RIH, wash & ream from 643'-806'. Drill to 895'. Circ., wipe hole, circ. & POOH. RU casers. Run 13-3/8" csg. to 895'. Circ. Cmt. csg. @ 0600 hrs. Casing: 21 jts. 54.5# 13-3/8" J-K 55 ST&C. Shoe @ 895', baffle @ 852'. 20 bbls. Mudflush ahead, 850 sks. Class "G" with 2% CaCl2 displaced with 132 bbls. mud. Plug did not bump @ 3% over calculated & float did not hold, holding pressure on cementing head.

12/20/89
Day 5. Depth = 895'. Present Operations - Prepare to test BOPE. CIP @ 0630. WOC. Drain & cut off conductor & csg. Nipple up BOPE, function test blind rams to 2000 psi for 15 minutes. Prepare to test BOPE with DOG witness @ 0600 hrs.

12/21/89
Day 6. Depth = 1620'. Present Operations - Drilling. MU BHA. Test BOPE to 2500 psi. RIH. Drill out cmt. & shoe. Drill to 900'. Press. to 13.2 ppg EMW (no losses). Drill from 900'-1321'. POOH for bit. Gas to surface after trip (1800 units). RIH, circ. out 2400 units gas. Drill from 1321'-1620'.

RECEIVED
MAR 5 1990
VENTURA, CALIFORNIA

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION
WELL: "FERNDALE 712"
A.P.I. #111-21492

SILVERTHREAD FIELD, VENTURA COUNTY
SEC. 9, T4N, R21W, SBB&M
ERIC R. WILSON, DIVISION ENGINEER

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

12/22/89
Day 7. Depth = 2125'. Present Operations - Drilling. Drill from 1620'-1661'. Circ. & raise MW. Drill & survey from 1661'-1960'. Circ. & POOH. Change bit & MU steerable BHA. RIH & orient MWD. Drill & survey from 1960'-2099'. Circ. & POOH for BHA. Circ. & POOH for BHA. RIH & drill from 2099'-2125'.

12/23/89
Day 8. Depth = 2867'. Present Operations - Repair rig. Drill from 2125-2199'. POOH for BHA. RIH & drill from 2199'-2677'. Circ. & increase MW. Wipe hole 2677'-2000' Drill 2677'-2867'. Circ. bottoms up. Wipe hole & pull to shoe to repair rig air compressors @ 0600 hrs.

12/24/89
Day 9. Depth = 3269'. Present Operations - POOH. Repair rig. POOH for BHA. RIH. Circ. Drill from 2867'-3018'. Circ. & increase MW to 12 ppg. Wipe hole to 2500' Drill 3018'-3206'. Circ. & wipe hole to 2879'. Drill from 3206'-3269'. Circ. & POOH to repair mud pump.

12/25/89
Day 10. Depth = 3645'. Present Operations - Drilling.

12/26/89
Day 11. Depth = 4269'. Present Operations - POOH. Drill from 3645'-3739'. Wipe hole to 3224'. Drill 3769'-4156'. Circ. & raise MW to 13.8 ppg. Drill 4269'. POOH. Work pipe through tight hole. POOH.

12/27/89
Day 12. Depth = 4540'. Present Operations - Drilling. POOH. Change bit, BHA & service MWD. RIH. Wash & ream 3573'-4269'. Circ. out 3500 units trip gas. Drill from 4269'-4319'. Circ. & raise MW to 14 ppg. Drill to 4364'. Circ. out 1700 units. Build MW to 14.2 ppg. Wipe hole to 3385'. Drill to 4492'. Circ. & wipe hole to 3979'. Drill to 4540'.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION
WELL: "FERNDALE 712"
A.P.I. #111-21492

SILVERTHREAD FIELD, VENTURA COUNTY
SEC. 9, T4N, R21W, SBB&M
ERIC R. WILSON, DIVISION ENGINEER

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

12/28/89
Day 13. Depth = 4730'. Present Operations - Drilling. Drill from 4540'-4674'. Circ. & wipe hole to 4291'. POOH for bit & BHA. MU new BHA. Slip & cut drilling line. RIH & orient MWD. Ream from 4385'-4704'. Drill from 4704'-4730'.

12/29/89
Day 14. Depth = 4920'. Present Operations - Drilling. Drill from 4730'-4867' with wiper trips @ 4741' & 4835'. Circ. & condition for trip. POOH, check blind rams, change bit & RIH. Fill pipe & test MWD @ 2041'. RIH to 4852'. Wash & ream to 4867'. Drill to 4875'. Circ. 4000 units gas. Drill from 4875'-4920'.

12/30/89
Day 15. Depth = 5001'. Present Operations - Logging. Drill from 4920'-4929'. Wipe hole to 3980'. Drill from 4929'-5001'. Circ. & cond. Wipe to shoe. RIH. Circ. & cond. POOH. LD tools. RU loggers.

12/31/89
Day 16. Depth = 5001'. Present Operations - Logging. Log. MU BHA. RIH & circ. gas from 3528'. RIH to 5001'. Circ. & cond. Raise MW to 14.2 ppg. POOH. Log.

1/1/90
Day 17. Depth = 5001'. Present Operations - Circulate for cement. Log. RD loggers. RIH, circ. & cond. POOH. Install 7" casing guns. RU casers. Run 7" csg. to 5001'. RU cementers. Circ. for cmt.

1/2/90
Day 18. Depth = 5001'. Present Operations - W.O.C. Test cmt. lines to 3000 psi. Cement 7" casing. 50 bbls. CW 100 ahead, 135 bbls. 1:1 POZ: Class "G" + 4% D20 Bentonite + 2% D112 FLAC + 0.37 D65 TIC + 0.2% D46 defoam + 5% KCL (BWOW) 13.8 ppg (Lead) followed by 185 bbls. Class "G" + 1% D127 FLAC + 0.3% D13 retarder + 0.2% D46 defoamer + 5% KCl (BWOW) (Tail). WOC.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION
WELL: "FERNDALE 712"
A.P.I. #111-21492

SILVERTHREAD FIELD, VENTURA COUNTY
SEC. 9, T4N, R21W, SBB&M
ERIC R. WILSON, DIVISION ENGINEER

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

1/3/90
Day 19. Depth = 5001'. Present Operations - Rig Released. WOC. Lift BOPE. Install csg. slips. Cut off csg. Install tbg. head. Release rig @ 2330 hrs.

1/9/90
Day 1. MIRU Oilwell. Unhang well. Bolt on Homco mechanical gate & PGSR stripper. Rig working floor. Rig for tbg. MU new 5-7/8" bit. Measure & PU (6) 3-1/2" DC's. Measure & PU 2-3/8" EU8 new tbg. Run 130 jts. SDFN.

1/10/90
Day 2. Continue picking up tbg. Tag top of cement @ 4809'. Pull tbg. to 4802'. Rig pump & recorder. Press. well to 2000 psi. Held o.k. for 30 min. Bled pressure. Strip on PGSR stripper rubber. RU power swivel. Drill out soft cmt. 29' from 4809'-4838'. Hard cmt. 4838'-4920'. Drill out plug. Pull tbg. to 4913'. Press. well to 2000 psi. Held o.k. for 30 min. Bled press. Pull tbg. LD DC's. Make up Robinson's 7" positive csg. scraper. RIH to float collar @ 4920' Pull to 4918'. Change well over to oil. Stand back 3833' tbg. LD excess tbg. RU Schlumberger. Run GR-CBL-CCL log per program.

1/11/90
Day 3. Finish running log. RO loggers. MU Schlumberger 4-1/2" tbg. Conveyed guns, bottom assembly & Baker Lok-set pkr. RU A&F Testers. Test tbg. above pkr. to 5000 psi. Trouble running with guns & pkr. Slow fluid bypass. RO testers. RU Schlumberger. Correlate tbg. depth to cased depth. RO Schlumberger. Space tbg. & land on donut. Remove BOPE. Set pkr. @ 3988' with 5000# tension. Test pkr. to 500 psi, held o.k. Trouble unscrewing lift sub. Bolt on wellhead & tree. Rig line to tree. Fill tbg. with oil. Test tree between 2-7/8" valves to 2000 psi. SDFN. Note: Used 136 jts. 2-3/8" EU8 N-80 in well.

1/12/90
Day 4. Tear out line to tree. Drop firing bar to perforate 4277'-4370' with 5 JHPF 60°F °phasing, 29" penetration. Rig gauge & chart recorder. Well pressure to 1000. Open to production through adjustable choke. Move drill collars. SJD.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION
WELL: "FERNDALE 712"
A.P.I. #111-21492

SILVERTHREAD FIELD, VENTURA COUNTY
SEC. 9, T4N, R21W, SBB&M
ERIC R. WILSON, DIVISION ENGINEER

EW

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

1/13/90
Well flowing.

1/14/90
Well flowing.

1/15/90
Well flowing.

1/16/90
Day 5. Load out equipment. RD & release production rig. RU Otis slick line unit. RIH with 1.70 O.D gauge tool. Tag firing bar @ 4265' (no fill in tbg.). POH. Make up shifting tool. RIH. Tag mechanical release @ 4007', jar & release tool, dropping guns. POH with shifting tool. MU gauge tool. RIH to 4500' (top of gun assembly @ 4550'). POH with gauge tool. RO Otis. Open well to system through 10/64" choke. RDMO.

1/17/90
No activity.

1/18/90
Day 6. MIRU Oilwell. 260 psi tbg. RU Archer Reed. Trouble setting plug. Plug outside tbg. Sheared off & let drop. Run #2 plug & set in tbg. Circulating plug leak. Run Otis pos. plug & set in tbg. @ 3953'. RO Archer Reed. Unbolt wellhead, remove tree & unland tbg. Remove donut. Stack out pkr. Bolt on Homco hyd. gate. Bolt up SWS BOE equipment, rig lines to gate & test & Rig for tbg. Screw onto tbg. Press. test BOE to 1000 psi. Bled press. Release pkr. No press. on csg. Rig lines to flowline. Open to production through #10 choke. Make up swab sinker bars & cups. SDFN.

1/19/90
Day 7. 150# on well. Bled tbg. MU 1 jt. 2-7/8" EU8 for swab lubricator. Rig hose to frac tank. Swab fluid out tbg. to 3900'. LD swab. Pull tbg. through SWS equipment. Press. on csg. bled off. Pull tbg. through stripper. MU Schlumberger 4-1/2" tbg. conveyed guns. Run BHA. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION
WELL: "FERNDALE 712"
A.P.I. #111-21492

SILVERTHREAD FIELD, VENTURA COUNTY
SEC. 9, T4N, R21W, SBB&M
ERIC R. WILSON, DIVISION ENGINEER

EW

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

1/20/90
Day 8. 0 press. Fill tbg. with oil. Run tbg. & guns. Fill tbg. every 1200'. Space out tbg. Land tbg. on donut. RO SWS equipment. RU Schlumberger wireline. Run corrolation log to set tbg. RO Schlumberger. Unland tbg. Add 2' x 2-3/8" pup jt. Set pkr. @ 4018' (tbg. meas.) with 10,000# compression. Land on donut with RA sub @ 4003', "F" nipple @ 4027' & production valve @ 4060'. Remove BOE. Small amount flow from tbg. Rig pump. Test pkr. to 1000 psi. Hold for 15 min. Bled press. Remove lift sub & valve. Install tree & test to 1500 psi. Make up X-mas tree. Clean & load out tbg. tools. SDFN.

1/21/90
Day 9. 550# press. Open well to flowline through #14 bean. Load out pump. Schlumberger dropped firing bar, guns fired to perforate 4104'-4194'. Tbg. pressure to 900#. Open to production through #6 bean. RDMO.

1/22/90
Recover load oil 1/21/90.

1/25/90
31 BO, 0 BW, 150# CP (PCKR) 540# TP

1/26/90
43 BO, 0 BW, 150# CP 250# TP

1/27/90
32 BO, 0 BW, 250# CP 250# TP

1/28/90
32 BO, 0 BW, 250# CP 250# TP

1/29/90
30 BO, 0 BW, 230# CP 230# TP

1/30/90
25 BO, 0 BW, 230# CP 250# TP

1/31/90
23 BO, 0 BW. 230# CP 240# TP

2/1/90
Wait for drilling rig to move off to frac.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION
WELL: "FERNDALE 712"
A.P.I. #111-21492

SILVERTHREAD FIELD, VENTURA COUNTY
SEC. 9, T4N, R21W, SBB&M
JAMES A. BECK, MANAGER OPERATIONS

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

3/1/90
Day 1. MIRU Signal.

3/2/90
No activity.

3/3/90
Day 2. MU circ. pump. RO Homco pump. Tbg. press. varies 25 psi to 110 psi. Put 100 bbls. produced oil in pit. Hood up 2" hose from pump to flowline. Pump on tbg. @ 1/2 BPM. Went on vacuum, then press. to 400#. Shut on pump, press. dropped to 0# in approx. 2 min. & went on vacuum for short time then began slight blow. Pump on tbg. @ idle until press. up. Press. dropped slowly & went on slight vacuum. Watch 15 min. Still on vacuum. Fill tbg. with oil while on vacuum. Remove tree & install lifting sub & safety valve. Install Class 3 BOE & floor. Rig hoses, put control valve in tbg. & set @ .17. Run hose from valve on tbg. to flowline. Open valve. Run in rams on donut. SDFN.

3/4/90
Day 3. 0 press. on csg. & tbg. Fill tbg. with oil. Release pkr. Reverse circ. gas & oil. 400 psi. on csg. Keep returns pinched back with control valve. Increase backside press. to 700#. Formation taking fluid. Pump away approx. 60 bbls. Reverse circ. out gas & oil. Csg. press. 400-500#. Shut on pump. Tbg. continues gassing out oil. Pump on tbg. Circ. arund 140 bbls. oil. Csg. & tbg. dead. POH with tbg., slowly, keeping csg. full. Joint below prod. valve packed with fine sand. LD guns. Close & lock blind rams. Open to system. SDFN.

3/5/90
No activity.

3/6/90
Day 4. 0 press. Fill csg. with oil (8-1/2 bbls., 225 lin. ft.). RIH with 20 stds. at a time. POH, laying down on trailer. Keep hole full. Close & lock blind ram. Remove floor & bag. Leave pipe & blind rams on well. Install flange & bull plug & close csg. valves. Move out equipment. RDMO.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION
WELL: "FERNDALE 712"
A.P.I. #111-21492

SILVERTHREAD FIELD, VENTURA COUNTY
SEC. 9, T4N, R21W, SBB&M
JAMES A. BECK, MANAGER OPERATIONS

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

3/27/90
Day 1. MIRU Schlumberger. Could not get lubricator to test. Order out replacement equipment. Wait on equipment 3 hrs. RU & test lubricator. RIH with wireline junk basket and gauge ring for 7" 35# pipe. Tag @ 4543' KB. POH with junk basket. RIH with Baker 7" 35# N-1 drillable BP & set @ 4260' KB. POH & RD Schlumberger. Install cap flange & lock blind rams in closed position. SDFN.

3/28/90
Day 2. RU Halliburton wellhead isolation tool in preparation for fracture stimulation job.

3/29/90
Day 3. RU Halliburton for frac stimulation. Frac well as follows:
PrePad 1 - 143 bbls. @ 30 BPM. No breakdown noted. FG = 1.11
PrePad 2 - 143 bbls. Super E @ 30 BPM (No breakdown noted).
ISIP = 3200 psi, F.G. = 1.2 psi/ft., holes open = 15.
Max. rate = 35 BPM, max. press. = 4400 psi, avg. rate = 33 BPM, avg. press. = 3700 psi. Total oil = 813 bbls. Total gel = 397 bbls. Total sand out = 101,000#, avg. sand conc. = 6 ppg, max. sand conc. = 8 ppg. Total sand pumped 103,000#. FSIP = 3875 psi, 5 min. = 3754#, 10 min. = 3654# & 15 min. = 3586#.
Additives = WG-22 = 800#, SP-BRK = 3#, BA-20 = 3 gal., Crafix II = 100 gal., SEM-7 = 100 gal.

3/30/90
No activity.

3/31/90
Day 1. RU Otis slickline unit. 1750 psi on well. Make feeler run. Tag fill @ 4211' (Perfs 4104'-4194'). RO Otis, lock BOP & plumb well to flowline.

4/2/90
Day 1. MIRU Oilwell. Rig SWS swabbing unit. Test BOE to 1700 psi. MU Baker 7" Lok-set pkr. with "F" nipple & plug. Run pkr. Measure, rabbit & PU 2-3/8" tbg. Run 90 jts. SDFN. Note: Snubbing tbg. & pkr. in hole with 1600 psi on well. Haul 62 bbls. oil to pump tank. Fill tbg. each run tbg. pick up.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION
WELL: "FERNDALE 712"
A.P.I. #111-21492

SILVERTHREAD FIELD, VENTURA COUNTY
SEC. 9, T4N, R21W, SBB&M
JAMES A. BECK, MANAGER OPERATIONS

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

4/3/90
Day 2. Finish running tbg. & pkr. Replace 7 jts. 2-3/8" EU8 tbg. Space well. Set pkr. @ 4023'. Pull above pipe rams. Unbolt swabbing unit. Strip on donut. Bolt up snubbing unit. Land tbg. on donut with 6000# tension. Donut leaking. Unable to bleed down csg. Fill pump tank with oil. Pull above pipe rams. Tear out snubbing unit. Found "0" rings gone. Order out & replace same. Strip on PGSR stripper & spool. Open pipe rams. Land tbg. on donut with 600# tension. Fill & press. csg. to 500#, o.k. Remove stripper, spool & hyd. gate. Install tree. Fill tbg. & press. test tree to 1800 psi, o.k. Bled press. Clean & load out tbg. tools. Leave well closed in. RDMO.

4/4/90
Day 1. MIRU Otis slickline unit. RIH & retrieve equalizer prong. Tbg. built to 1550 psi. Retrieve tbg. plug out of "F" nipple. RDMO Otis. Plumb well to flow.

4/10/90
Recover load. IP 126 BOPD , 1 BWPD and 150 MCF. 850# pckr. 10/64" choke.

4/23/90
Day 1. RU Otis. Run sample bailer on slickline. Tag fill @ 4202'. Work bailer to 4203' (perfs 4104'-4194'). POH with bailer. Recover frac sand with traces of flour sand.

5/10/90
Day 1. MIRU Otis. Shut well in @ 0800. Run BHP instruments in tandem @ 200'/min. to 3,995' WLM, soft set instruments. POH. RD.

5/13/90
Day 1. MIRU Otis & lubricator. RIH. Retrieve BHP instruments. Instruments did not record pressures. RD Otis. Place well on 11/64" choke.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION
WELL: "FERNDALE 712"
A.P.I. #111-21492

SILVERTHREAD FIELD, VENTURA COUNTY
SEC. 9, T4N, R21W, SBB&M
JAMES A. BECK, MANAGER OPERATIONS

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

5/26/90
Day 1. Shut well in. RU Otis. Make feeler run, WLM 3,995'. RIH with 120 hr. & 144 hr. clocks on BHP instruments. Unable to release from soft-set. POOH. Repaired tool. Refit & reset BHP instruments & RIH. Released from soft-set. POOH. Well open to pressure gauge & chart only. To return for tool retrieval on 5-29 a.m.

5/27/90
to No activity
5/29/90

5/30/90
Day 2. RU Otis for tool retrieval. Bled well. RIH & retrieve BHP instruments. POOH. Secure well. Shut in. Release Otis @ 1300 hrs.

POG

DATADRIL

REPORT
of
FERNDALE NO. 712
SURVEY

DIVISION OF OIL
RE
MAR 5 1990
CALIFORNIA

SENECA RESOURCES CORPORATION
FERNDALE NO. 712
VENTURA COUNTY, CA
SUPERVISOR: NICK FREDRICK,

SMITH INTERNATIONAL

CERTIFICATION

The data for this survey and the calculations for this survey were obtained and performed by me according to the standards and procedures as set forth by Smith International, Inc. and are true and correct to the best of my knowledge.

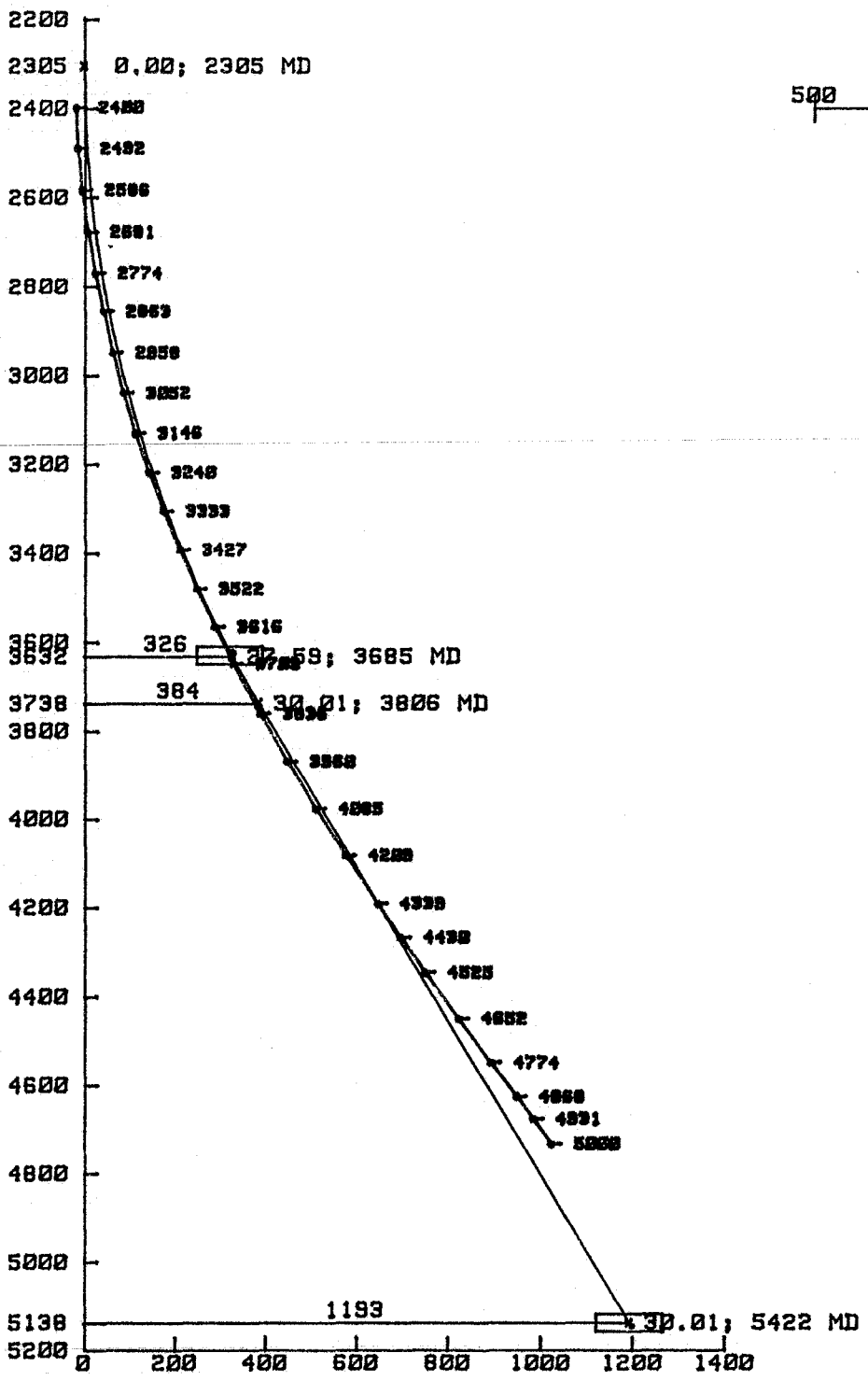
MWD Operator/Directional Supervisor/Surveyor

30 MAR 1990 @ 21:16

SENECA RESOURCES CORPORATION
FERNDALE 712
VENTURA COUNTY, CA

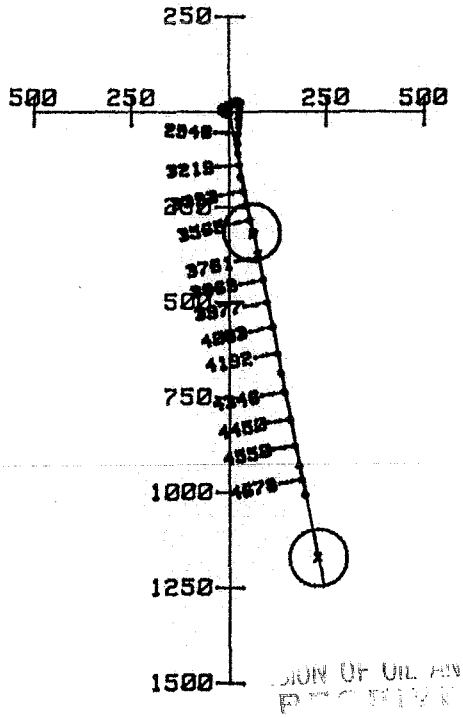
SMITH

VERTICAL PLANE
SCALE: 200 FEET/DIVISION



VERTICAL SECTION PLANE: S 10.98 E

HORIZONTAL PLANE
SCALE: 250 FEET/DIVISION



DIVISION OF OIL AND
RECEIVED
MAR 5 1990

DATADRIL

SENECA RESOURCES CORPORATION
FERNDALE NO. 712
VENTURA COUNTY, CA
SUPERVISOR: NICK FREDRICK, HMFIC
SII JOB NO: 1112-892566

DECLINATION: 14 DEGREES EAST

...ION OF OIL ...
MAR 5 1990
...ERA, CALIFORN

File Name: SURVEYS

*** RECORD OF SURVEY ***

Calculated by DATADRIL's CADDS System

Radius of Curvature Method
All Angles are Decimal
Vertical Section Plane: S 10.98 E

TYPE OF SURVEY	MEASURED DEPTH (FT)	INCL ANGLE (DEG)	DRIFT DIRECTION (DEG)	COURSE LENGTH (FT)	TOTAL VERTICAL DEPTH	TOTAL RECTANGULAR COORDINATES (FT)		VERTICAL SECTION (FT)	DOGLEG SEVERITY (DEG/100')
MSS	0.00	0.00	N 0.00 E	0.00	0.00	0.00 N	0.00 E	0.00	0.00
MSS	123.00	.75	S 21.00 W	123.00	123.00	.75 S	.29 W	.68	.61
MWD	274.00	.75	S 49.00 W	151.00	273.98	2.35 S	1.41 W	2.04	.24
MWD	452.00	1.00	S 55.00 W	178.00	451.96	4.03 S	3.55 W	3.28	.15
MWD	707.00	1.75	N 80.00 W	255.00	706.89	5.32 S	9.37 W	3.44	.49
MWD	991.00	1.50	N 30.00 W	284.00	990.77	.84 S	15.76 W	-2.17	.49
MWD	1170.00	.75	N 71.00 W	179.00	1169.74	1.34 N	18.42 W	-4.83	.59
MWD	1407.00	1.75	N 27.00 E	237.00	1406.68	5.57 N	20.13 W	-9.31	.84
MWD	1621.00	2.00	N 58.00 E	214.00	1620.56	10.67 N	15.45 W	-13.42	.48
MWD	1808.00	3.25	N 47.00 E	187.00	1807.36	15.88 N	8.67 W	-17.24	.72
MWD	1900.00	4.25	N 58.00 E	92.00	1899.16	19.54 N	3.90 W	-19.92	1.33
MWD	2019.00	6.00	N 75.00 E	119.00	2017.68	23.76 N	5.81 E	-22.22	1.93
MWD	2111.00	5.80	N 80.00 E	92.00	2109.20	25.81 N	15.04 E	-22.47	.60
MWD	2213.00	3.50	N 81.00 E	102.00	2210.85	27.17 N	23.19 E	-22.26	2.26
MWD	2307.00	2.10	S 75.00 E	94.00	2304.74	26.93 N	27.75 E	-21.15	1.91
MWD	2400.00	1.80	S 20.00 W	93.00	2397.69	24.44 N	29.05 E	-18.46	3.10
MWD	2492.00	4.40	S 1.00 W	92.00	2489.54	19.57 N	28.14 E	-13.85	3.00
MWD	2586.00	7.00	S 0.00 E	94.00	2583.07	10.23 N	28.06 E	-4.70	2.77
MWD	2681.00	9.00	S 2.00 W	95.00	2677.14	2.99 S	27.83 E	8.23	2.13
MWD	2774.00	11.20	S 4.00 W	93.00	2768.69	19.27 S	26.98 E	24.06	2.40
MWD	2863.00	12.60	S 5.00 W	89.00	2855.78	37.57 S	25.54 E	41.74	1.59

DATADRIL

SENECA RESOURCES CORPORATION
FERNDALE NO. 712

VENTURA COUNTY, CA
SUPERVISOR: NICK FREDRICK, HMFIC

TYPE OF SURVEY	MEASURED DEPTH (FT)	INCL ANGLE (DEG)	D R I F T DIRECTION (DEG)	COURSE LENGTH (FT)	TOTAL VERTICAL DEPTH	T O T A L RECTANGULAR COORDINATES (FT)		VERTICAL SECTION (FT)	DOGLEG SEVERITY (DEG/100')
MWD	2958.00	13.70	S 3.00 W	95.00	2948.29	59.12 S	24.03 E	62.62	1.25
MWD	3052.00	15.20	S 0.00 E	94.00	3039.31	82.57 S	23.42 E	85.52	1.78
MWD	3146.00	17.50	S 5.00 E	94.00	3129.50	109.00 S	24.57 E	111.68	2.87
MWD	3240.00	19.40	S 6.00 E	94.00	3218.67	138.61 S	27.42 E	141.29	2.05
MWD	3333.00	21.90	S 7.00 E	93.00	3305.69	171.19 S	31.13 E	173.98	2.71
MWD	3427.00	22.90	S 12.00 E	94.00	3392.59	206.51 S	37.04 E	209.78	2.29
MWD	3522.00	24.80	S 13.00 E	95.00	3479.48	244.01 S	45.36 E	248.18	2.04
MWD	3616.00	25.40	S 13.00 E	94.00	3564.60	282.86 S	54.33 E	288.03	.64
MWD	3709.00	26.40	S 12.00 E	93.00	3648.26	322.52 S	63.12 E	328.64	1.17
MWD	3836.00	29.00	S 12.00 E	127.00	3760.69	380.26 S	75.39 E	387.66	2.05
MWD	3960.00	29.40	S 11.00 E	124.00	3868.93	439.54 S	87.45 E	448.15	.51
MWD	4085.00	30.70	S 10.00 E	125.00	3977.13	501.08 S	98.86 E	510.74	1.11
MWD	4209.00	32.70	S 12.00 E	124.00	4082.63	565.04 S	111.29 E	575.89	1.82
MWD	4339.00	33.40	S 10.00 E	130.00	4191.59	634.63 S	124.82 E	646.78	1.00
MWD	4430.00	34.00	S 11.00 E	91.00	4267.30	684.27 S	134.02 E	697.27	.90
MWD	4525.00	34.20	S 10.00 E	95.00	4345.96	736.64 S	143.72 E	750.53	.63
MWD	4652.00	35.20	S 11.00 E	127.00	4450.37	807.73 S	156.90 E	822.82	.91
MWD	4774.00	35.40	S 11.00 E	122.00	4549.94	876.93 S	170.35 E	893.32	.16
MWD	4868.00	35.50	S 11.00 E	94.00	4626.52	930.45 S	180.75 E	947.84	.11
MWD	4931.00	35.50	S 11.00 E	63.00	4677.81	966.36 S	187.73 E	984.43	0.00
PROJ	5000.00	35.50	S 11.00 E	69.00	4733.98	1005.69 S	195.38 E	1024.49	0.00

BOTTOM HOLE CLOSURE: 1024.49 Feet at S 10.99 Degrees E

MAR 5 1990

FERNDALE NO. 712
SILVERTHREAD, VENTURA CNTY
SENECA RESOURCES CORPORATION

30 DEC 1989 @ 21:36

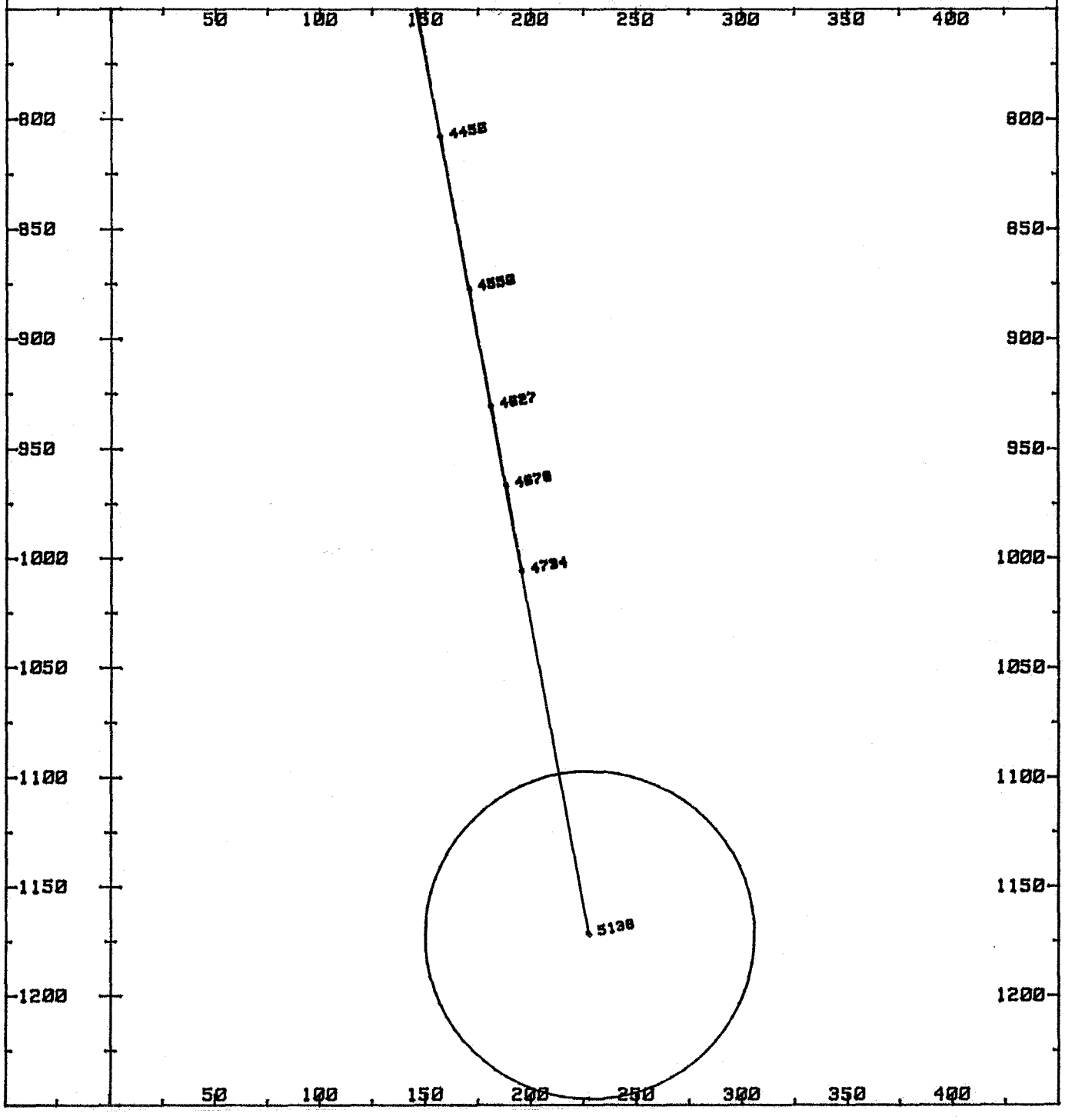
DATADRIL

HORIZONTAL PLOT

SCALE: 50 FEET/DIV.

MIN TVD: 0 FEET
MAX TVD: 10000 FEET

N



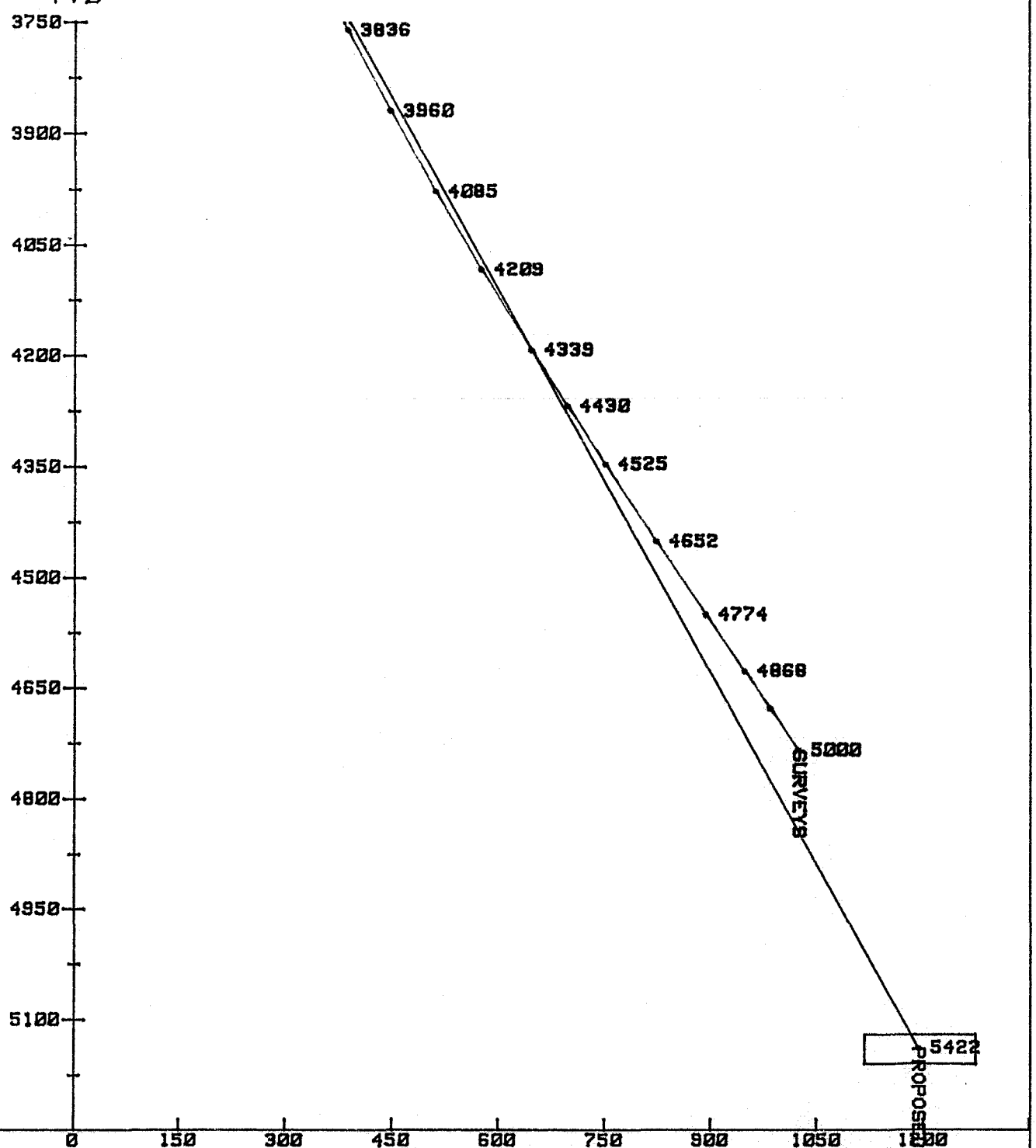
FERNDALE NO. 712
SILVERTHREAD, VENTURA CNTY
SENECA RESOURCES CORPORATION

30 DEC 1989 @ 21:47

DATADRIL

VERTICAL PLOT

SCALE: 150 FEET/DIV.



SECTION PLANE: 169.02 DEGS CLOCK-WISE FROM NORTH

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No.T290-3

REPORT ON OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
January 4, 1990

Your operations at well "Ferndale" 712, API No. 111-21492, Sec. 9, T. 4N, R. 21W, S.B.B.&M. Ojai Field, in Ventura County, were witnessed on 12/20/89. Bruce Hesson, representative of the supervisor, was present from 0600 to 0900. There were also present Brett Barnhizer.

Present condition of well: 13 3/8" cem 895'. TD 895' (drilling)

The operations were performed for the purpose of testing the blowout prevention equipment and installation.

ECISION:

he blowout prevention equipment and its installation on the 13 3/8" casing re approved.

ig

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

9

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No.P 289-126
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
May 2, 1989

Your supplementary proposal to drill well "Ferndale" 712, A.P.I. No. 111-21492, Section 9, T. 4 N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Lower Miocene pool, Ventura County, dated ---, received 4/24/89, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Requirements specified in permit No. P288-114 dated March 17, 1988 shall apply.

Blanket Bond
SF:ljg

Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Hinnear
Patrick J. Hinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

ISION OF OIL AND
RECEIVED
APR 24 1989
ENTURA, CALIFORNIA

The Resources Agency of California
Department of Conservation
DIVISION OF OIL AND GAS

WELL STATUS INQUIRY

RECEIVED
APR 18 1989
SANTA PAULA

Ventura, California
April 13, 1989

Murdock M. Baker, Jr. Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

In a notice dated February 10, 1988, you propose to drill well "Ferndale" 712 (111-21492)
Sec. 9, T. 4N, R. 21W, SBB.&M., Ojai Field
(Field or County)

Please indicate below, conditions or intentions regarding this proposed work and return the completed form to this office within 10 days.

M.G. MEFFERD, State Oil and Gas Supervisor
By Patrick J. Kinnear
Patrick J. Kinnear, Deputy Supervisor

PC:ljg

___PROSOSED WORK HAS BEEN DONE. (If you check this space, please file the required well records on this work in duplicate within 60 days after work was completed.*)

___PROPOSED WORK IS IN PROGRESS AND SHOULD BE COMPLETED ABOUT _____,19____.

X PROPOSED WORK HAS NOT BEEN DONE, BUT WE STILL INTEND TO DO THE WORK.**

___SUPPLEMENTARY NOTICE (Form OG123) ATTACHED.

X PLEASE CONSIDER THIS FORM AS A SUPPLEMENTARY NOTICE.

___WE DO NOT INTEND TO DO THE PROPOSED WORK. Please cancel our notice to _____, dated _____,19____.

___OTHER:_____

Eric R. Wilson 4/18
(Signature)

ERIC R. WILSON, DIVISION ENGINEER
(Name and Title)

*Division 3 of the Public Resources Code states in part:
Section 3215,...Well records shall be filed 60 days after completion or suspension of proposed work.

**Section 3203,...If operations have not commenced within one year of receipt of the notice, the notice will be considered cancelled. (To prevent cancellation, file a Supplementary Notice with the Division.)

OGD3

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 288-114

520 (field code)

12 (area code)

10 (new pool code)

10 (old pool code)

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
SENECA RESOURCES CORP.
P.O. Box 630
Santa Paula, CA93060

Ventura, California
March 17, 1988

Your proposal to drill well "Ferndale" 712,
A.P.I. No. 111-21492, Section 9, T. 4N, R. 21W, S.B. B. & M.,
Ojai field, Silverthread area, Lower Mohian pool,
Ventura County, dated 2/10/88, received 2/11/88 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. The 13 3/8" casing is cemented with sufficient cement to fill behind this casing from the shoe to the ground surface.
2. Drilling fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. Blowout prevention equipment conforming to DOG Class III 2M C requirements is installed on the 13 3/8" casing and maintained in operating condition at all times.
4. This office shall be consulted before sidetracking the well or running any additional casing.
5. Unlined sumps, if they contain harmful waters, shall not be located over freshwater zones.
6. Any sump used during these operations shall be thoroughly cleaned and filled with earth as soon as operations are completed.
7. The Division will monitor the monthly production of this well for a period of six months and if anomalous water production is indicated, remedial action will be required.
8. The issuance of this report was held in abeyance pending receipt of mineral-right legal description.
9. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.
10. THIS DIVISION SHALL BE NOTIFIED:
    a. TO WITNESS a pressure test of the blowout prevention equipment prior to drilling out the shoe of the 13 3/8" casing. The blind/blank rams must be tested by the operator prior to calling the Division inspector. Test information of the blind/blank ram test must be entered on the tour sheet along with the signature of the person in charge.

Blanket Bond
MS:ljg

Engineer Michael Stettner

Phone (805) 654-4761

M. G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Thurmond
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

DIVISION OF OIL AND GAS
RECEIVED
FEB 11 1988
VENTURA, CALIFORNIA

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS
Notice of Intention to Drill New Well

C.E.Q.A. INFORMATION			
EXEMPT ☐ CLASS____	NEG. DEC. ☐ S.C.H. NO.____	E.I.R. ☒ S.C.H. NO. CUP 3344	DOCUMENT NOT REQUIRED BY LOCAL JURISDICTION ☐
See Reverse Side			

FOR DIVISION USE ONLY					
MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121
203	pm4 2/11/88		98	✓	✓

D

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to commence drilling well Ferndale 712, well type oil, API No. 111-21492 (Assigned by Division)

Sec. 9, T. 4N, R. 21W, S.B. B. & M., ~~Silverthread~~ Ojai Field, Ventura County.

Legal description of mineral-right lease, consisting of -- acres, is as follows: (Attach map or plat to scale)

PREVIOUSLY SUBMITTED

Do mineral and surface leases coincide? Yes X No____. If answer is no, attach legal description of both surface and mineral leases, and map or plat to scale.

Location of well 1,601 feet West (Direction) along section / ~~property~~ (Cross out one) line and 584 feet North (Direction)

at right angles to said line from the Southeast corner of section / ~~property~~ (Cross out one) 9 or

Is this a critical well according to the definition on the reverse side of this form? Yes ☐ No ☒

If well is to be directionally drilled, show proposed coordinates (from surface location) and TVD at total depth:
1560 feet South (Direction) and 950 feet West (Direction)

Estimated **true vertical** depth 8,000. Elevation of ground above sea level 1,150 feet.

All depth measurements taken from top of KB (Derrick Floor, Rotary Table, or Kelly Bushing) that is 22 feet above ground.

PROPOSED CASING PROGRAM

SIZE OF CASING INCHES API	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS	CALCULATED FILL BEHIND CASING (Linear Feet)
13-3/8"	54.5	J-55 ST&C	Surface	800'	Shoe	800'
9-5/8"	36	K-55 LT&C	Surface	5500'	Shoe	500'
7"	26	N-80 LT&C	Surface	8500'	Shoe	2,000'

(A complete drilling program is preferred and may be submitted in lieu of the above program.)

Intended zone(s) of completion Lower Mohian, 8000', 3000 psi (Name, depth, and expected pressure) Estimated total depth 8,500

It is understood that if changes in this plan become necessary we are to notify you immediately.

Name of Operator	Type of Organization (Corporation, Partnership, Individual, etc.)	
Seneca Resources Corporation	Corporation	
Address	**City**	**Zip Code**
Post Office Box 630	Santa Paula, CA	93060
Telephone Number / **Name of Person Filing Notice**	**Signature**	**Date**
656-2445 / Ted Nilssen	Ted J. Nilssen	2/10/88

This notice and indemnity or cash bond shall be filed, and approval given, before drilling begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

OG105 (3/86/DWRR/3M)

Seneca Resources Corporation
a National Fuel Gas System company

DIVISION OF OIL AND GAS
RECEIVED
MAR 11 1988
VENTURA, CALIFORNIA

March 10, 1988

Mr. Mike Stettner
Division of Oil & Gas
6401 Telephone Road
Suite 240
Ventura, California 93003

RE: PLAT FOR FERNDALE #712

Dear Mr. Stettner:

Please find attached a copy of the plat for Ferndale Ranch per your request in reference to our request for a permit for the above mentioned well.

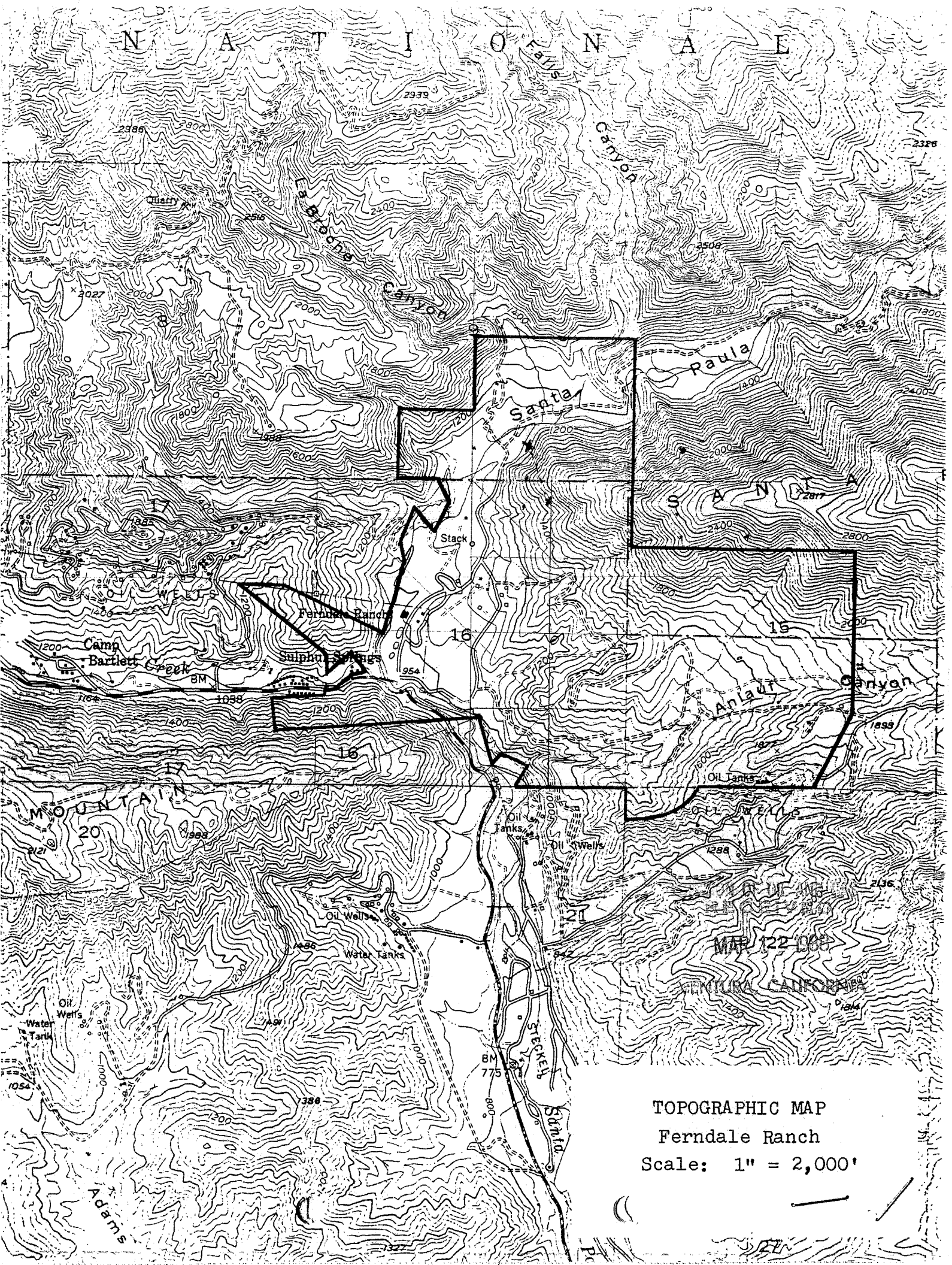
Should you have any questions, please do not hesitate to contact me.

Sincerely,

Ted Nilssen
Manager, Drilling & Production

TN:dh

Attachment



TOPOGRAPHIC MAP
Ferndale Ranch
Scale: 1" = 2,000'

712

EXHIBIT "I"

Attached to and made a part of OIL AND GAS LEASE dated March 15, 1972, by and between GRAFE-CALLAHAN CONSTRUCTION CO., as LESSOR, and LAWRENCE BARKER, JR., as LESSEE

DESCRIPTION OF LEASED LAND

Township 4 North, Range 21 West, S.B.B. & M.
in Ventura County, California

PARCEL NO. 1

A part of the Rancho Ojai, in the County of Ventura, State of California, as granted by the United States of America to Fernando Tico, by letters of patent dated December 22, 1870, recorded in Book "A", Page 323 of Patents, in the office of the County Recorder of said Ventura County, and being part of Tract 37 of the Bard Subdivision of the Rancho Ojai Tracts, as per map recorded in Book 5, Page 25-1/2 of Maps, in the office of the County Recorder of Ventura County, said real property particularly described as follows:

Beginning at a rock mound at the foot of a fallen Sycamore tree, at corner No. 8 of the final survey of said Rancho Ojai; thence from said point of beginning,

1. North 83° - 30' West, 726 ft. along line No. 8 of the final survey of said Rancho Ojai, to a rock mound in Arroyo Mupu; thence
2. North 83° - 29' West, 1497.18 ft. along line No. 8 to a point; thence
3. South 22° - 21' West, 974.20 ft. to a point; thence
4. South 56° - 15' - 10" East, 309.23 ft. to a point; thence
5. South 9° - 38' West, 300 ft. to a point; thence
6. South 80° - 42' East, 313.9 ft. to a point; thence
7. North 67° - 40' - 30" East, 335.3 ft. to a point; thence
8. North 89° - 57' - 30" East, 335.3 ft. to a point; thence
9. North 62° - 52' East, 182.42 ft. to a point; thence
10. South 64° - 58' East, 125.53 ft. to a point; thence
11. South 44° - 57' - 30" East, to a point on the Southern R/W limits of State Hwy. 150; thence

12. Along the South R/W limits of State Hwy. 150 to the Northeasterly corner of Lot 15 of Sulphur Mountain Springs Company Subdivision, as per map thereof recorded in Book 8, page 25 of Maps; thence
13. South 8° - 48' West, 100 ft. to a point; thence
14. North 81° - 12' West, 355.63 ft. to a point; thence
15. South 6° - 18' West, 9.9 ft. to a point; thence
16. North 81° - 12' West, 50 ft. to a point; thence
17. South 6° - 28' West, 37.79 ft. to a point; thence
18. South 82° - 59' - 30" West, 91.54 ft. (Along the easterly line of the land conveyed to Bernard R. Muldoon and wife, by deed recorded July 10, 1944, as document No. 7161, in Book 694, Page 414 of Official Records) to a point; thence
19. North 83° - 28' West, 87.8 ft. to a point; thence
20. North 0° - 06' West, 72.59 ft. to a point; thence
21. South 79° - 47' West, 288.19 ft. to a point; thence
22. South 10° - 13' East, 787.6 ft. to line 5 of the final survey of Rancho Ojai; thence
23. North 82° - 39' East, 3488.1 ft. to Corner No. 6; thence
24. North 64° - 15' West, 1086.36 ft. to a point; thence
25. North 4° - 30' East, 1386.0 ft. to Corner No. 8, the point of beginning

Containing 140.39 acres, more or less.

PARCEL NO. 2

Section 9: SE 1/4; and SE 1/4 of SW 1/4. Containing 200.00 acres, more or less.

Section 15: S 1/2 of NW 1/4; SW 1/4 of NE 1/4; SW 1/4; and NW 1/4 of SE 1/4. Containing 320.00 acres, more or less.

Section 15: A portion of the SW 1/4 of SE 1/4 described as follows:

Beginning at the Northeast (NE) corner of said quarter of quarter section, thence from said point of beginning:

1. South 0° - 23' West, 224.9 ft. to a point; thence
2. South 45° - 11' - 30" West, 1,553.88 ft. to a point, on the Southern boundary of said Section 15; thence
3. South 89° - 15' West, 229.85 ft. to the Southwest (SW) corner of said quarter of quarter section;; thence
4. North 0° - 23' East, 1320.0 ft. to the Northwest (NW) corner of said quarter of quarter section; thence
5. Easterly along the Northern Boundary of said quarter section to the Northeast (NE) corner and point of beginning.

Containing 26.23 acres, more or less.

Section 16: NE 1/4; E 1/2 of SE 1/4; and NW 1/4 of SE 1/4. Containing 280.00 acres, more or less.

Section 16: A portion of the SW 1/4 of SE 1/4 described as follows:

Beginning at the Southeast (SE) corner of the Southwest Quarter (SW 1/4) of the Southeast Quarter (SE 1/4) of Section 16, thence from said point of beginning;

1. South 89° - 15' West, 588.06 ft. to a point; thence
2. North 36° - 30' East, approx. 420 ft. to a point; thence
3. North 65° - 30' West, approx. 675.5 ft. to a point; thence
4. South 40° - 40' West, approx. 138.2 ft. to a point on the Rancho Ex-Mission boundary line; thence
5. North 16° - 30' West, approx. 699.6 ft. to a point; thence
6. North 64° - 15' West, to the Northerly boundary line of said quarter of quarter section; thence
7. Easterly along said Northern boundary to the Northeast (NE) corner of said quarter of quarter section; thence
8. Southerly along the eastern boundary to the Southeast (SE) corner of said quarter of quarter section, the point of beginning

Containing 21.19 acres, more or less.

Section 16: A portion of the NE 1/4 of NW 1/4 described as follows:

Beginning at a 1-1/2 inch pipe set at the Southwest (SW) corner of the Northeast Quarter (NE 1/4) of the Northwest Quarter (NW 1/4) of said Section 16; thence from said point of beginning,

1. North 36° - 18' East, 582.33 ft. to a point; thence
2. South 52° - 03' East, 351.26 ft. to a point; thence
3. North 21° - 53' East, 481.48 ft. to a point; thence
4. North 9° - 54' West, 629.30 ft. to a point in the north line of said Northeast Quarter (NE 1/4) of the Northwest Quarter (NW 1/4) of Section 16; thence along said north line,
5. East 627.1 ft. to a 3-inch pipe set at the Northeast (NE) corner of said Northeast Quarter (NE 1/4) of the Northwest Quarter (NW 1/4) of Section 16; thence
6. South 1320.0 ft. along the east line of said Northeast Quarter (NE 1/4) of the Northwest Quarter (NW 1/4) of Section 16 to a 1-1/2 inch pipe set at the Southeast

(SE) corner of said Northeast Quarter (NE 1/4) of the Northwest Quarter (NW 1/4) of Section 16; thence along the south line of said Northeast Quarter (NE 1/4) of the Northwest Quarter (NW 1/4) of Section 16; thence

7. West 1320.0 ft. to the point of beginning.

Containing 22.60 acres, more or less.

Section 16: All remaining portions of SE 1/4 of NW 1/4 and NE 1/4 of SW 1/4 not included in Parcel No. 1 as hereinbefore described. Containing 55.30 acres, more or less.

Section 17: A portion thereof lying within Parcel No. 1 as hereinbefore described.

Section 22: A portion of the N 1/2 of NW 1/4 described as follows:

Beginning at the Northwest (NW) corner of Section 22, thence from said point of beginning:

1. South 0° - 43' East, 555.67 ft. to a point; thence
2. South 88° - 26' East, 679.42 ft. to a point; thence
3. North 59° - 13' East, 165.96 ft. to a point; thence
4. North 54° - 40' East, 331.90 ft. to a point; thence
5. North 24° - 30' East, 223.49 ft. to a point; thence
6. North 85° - 17' East, 154.32 ft. to a point; thence
7. North 5° - 31' East, 81.29 ft. to a point; thence
8. South 89° - 15' West, 1353.18 ft. to the Northwest (NW) corner of Section 22, the point of beginning.

Containing 13.77 acres, more or less.

0.00 T

140.39 +
200.00 +
320.00 +
25.25 +
230.00 +
21.19 +
22.60 +
55.30 +
13.77 +
1077.48 T

1079.48 A

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

VENTURA California FEBRUARY 22 19 88

Murdock M. Baker, Jr., Agent
SENECA RESOURCES CORP.
P.O. Box 630
Santa Paula, CA 93060

I have received your notice dated February 10 19 88, of intention to drill new well "Ferndale" 712 (111-21492)

(Well name and number)

Sec. 9, T. 4N, R. 21W, S.B. B. & M.

YOUR PROPOSAL TO DRILL WELL "FERNDALE" 712 CANNOT BE PROCESSED UNTIL A LEGAL DESCRIPTION OF THE MINERAL-RIGHT LEASE IS RECEIVED. A MAP OR PLAT DRAWN TO SCALE MUST ACCOMPANY THE MINERAL-RIGHT DESCRIPTION.

MS:ljg

M. G. MEFFERD
State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear *Deputy Supervisor*

OG113 (11/82/DWRR/1M)

PROPERTY/WELL TRANSFER OR ACQUISTION

Seneca Resources Corporation (S2630)

to

Vintage Production California LLC (V1370)

Effective April 25, 2008

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF WELL ABANDONMENT

Ventura, California
April 9, 1991

Murdock M. Baker, Jr. Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Your report of abandonment of well "Ferndale" 401, A.P.I. No. 111-21537, Section 15, T. 4N, R. 21W, SB B.&M., Ojai field, Ventura County, dated 6-5-90, received 6-6-90, has been examined in conjunction with records filed in this office, and we have determined that all of the requirements of this Division have been fulfilled.

MAP	MAP BOOK	CARDS	BOND	EDP	FORMS	
					114	123
203	12-8-90 SPM	—	BB	✓	—	✓

cc: Conservation Committee
Update
bb

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear, Deputy Supervisor

OPERATOR Seneca
WELL NO. "Tundale" 401
MAP

INTENTION	Add					
NOTICE DATED	289-857					
P-REPORT NUMBER	10-4-89					
CHECKED BY/DATE						
MAP LETTER DATED	pmc 1/5/90 Map 203	PE 4-12-97				
SYMBOL	◇ (89-cont)	◇ (89-6027)				

	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED
NOTICE	10-5-89											
HISTORY	6-6-90											
SUMMARY												
E-LOG												
MUD LOG												
DIPMETER												
DIRECTIONAL												
CORE/SWS												
CBL												

ENGINEERING CHECK

T-REPORTS						
OPERATOR'S NAME						
WELL NO.						
LOC & ELEV						
SIGNATURE						
SURFACE INSP. OK	4-4-91 SPM					
DRILL CARD						

RECORD'S COMPLETE pmc

Removed fr edp ~~1/90~~ 12/90

INJECTION BOOK _____
IDLE WELL LIST _____
SURFACE INSP. CARD _____

REMARKS: _____

FINAL LETTER OK _____
MAILED _____
RELEASED BOND _____

OK TO RELEASE FROM CONFIDENTIAL _____

OPERATOR Seneca
WELL NO. "Ferndale" 401
MAP

INTENTION	Drill	Supp	Supp	Supp	Supp	Supp
NOTICE DATED	3-1-89	4-14-89	5-29-89	6-9-89	6-29-89	7-14-89
P-REPORT NUMBER	289-66	289-119	289-159	289-168	289-209	289-240
CHECKED BY/DATE						
MAP LETTER DATED						
SYMBOL						

	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED
NOTICE	3-3-89		4-14-8		5-31-89		6-12-89				7-17-89	
HISTORY											10/2/89	
SUMMARY											10/2/89	
E-LOG											10/2/89	
MUD LOG											10/2/89	
DIPMETER											10/2/89	
DIRECTIONAL											10/2/89	
CORE/SWS											10/2/89	
CBL											10/2/89	
Micro Log											10/2/89	
Fracture Finder											10/2/89	
Sonic Log											10/2/89	
Neutron Log											10/2/89	
Acoustic Vel.											10/2/89	
Multi Sec Tester											10/2/89	
Sonic											10/2/89	
Dual Laterolog											10/2/89	
6 Mos. Prod. (12/89)											N/A	✓

ENGINEERING CHECK

T-REPORTS						✓
OPERATOR'S NAME						✓
WELL NO.						✓
LOC & ELEV						
SIGNATURE						✓
SURFACE INSP.						
DRILL CARD						

RECORD'S COMPLETE _____ _____ _____ _____ _____ _____

FINAL LETTER OK pmc
MAILED _____
RELEASED BOND _____

INJECTION BOOK _____
IDLE WELL LIST _____
SURFACE INSP. CARD _____

REMARKS: Copies of logs include Redballs 1 & 2.

DATE RELEASED FROM CONFIDENTIAL _____

RECEIVED
JUN 6 1990
VENTURA, CALIFORNIA

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION OJAI FIELD VENTURA COUNTY
WELL: "FERNDALE 401" SEC. 15, T4N, R21W, SBB&M
A.P.I. #111-21537 ERIC R. WILSON, DIVISION ENGINEER

Eric R. Wilson 6/5

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

1/21/90

Day 1. MIRU Oilwell. Bled well. Bolt on Homco mechanical gate. POH with tbg. Measure & run tbg. to 2357'. Rig pump & B.J. Titan. Cement well with 60 sks. Class "G" cement. Displace tbg. with 7 bbls. water. RO B.J. Pull tbg. to 1637'. Backscuttle well clean. RU B.J. Pump 1/2 bbls. water. Well pressure to 500#. Bled press. RO B.J. Pull tbg. LD extra jts. SDFN.

1/22/90

No activity.

1/23/90

Day 2. Run tbg. Tag TOC @ 1901'. Pull tbg. to 1899'. Change well over to 72 ppcf mud. DOG witnessed. Pull & LD extra tbg. Stand back 615'. RU Dia-Log. Perf 4 holes @ 604'. RO Dia-Log. Run tbg. to 615'. RU B.J. Titan. Circulate through 9-5/8". Cement well with 35 sks. Class "G" cmt. with 2% CC. Displace tbg. with 6-1/2 cf mud. Pull tbg. RU B.J. to csg. Displace cmt. with 21 cf mud. Let well set 3 hrs. Run tbg. Tag TOC @ 588'. DOG witnessed. Pull tbg. to 585'. RU B.J. & cmt. well with 16 sks. Class "G" cmt. Displace with 9.8 cf mud. TOC @ 450'. DOG witnessed. Pull & LD tbg. Unbolt surface flange. Remove landing flange. RU Dia-Log. Chemical cut 5-1/2" csg. 30' below GL. Run 1 jt. 2-3/8". RU B.J. Cement well 30' to surface. Cement returns. RO B.J. LD 1 jt. Load out BOE & tbg. tools. Leave rig on location.

1/24/90

Day 3. Unable to tag surface plug from previous day. Hang 1 jt. tbg. from stinger. Mix & pump 24 sxs. Class "G" cement with 2% CaCl2 cmt to surface. Witnessed by DOG. WOC for 1 hr. Surface plug dropping. RU stinger. PU 1 jt. 2-3/8" tbg. Mix & pump 16 sxs Class "G: cement with 2% CaCl2. WOC 2 hrs. Notified DOG & job was o.k. RDMO.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. T290-45

REPORT ON OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
February 1, 1990

Your operations at well "Ferndale" 401, API No. 111-21537, Sec. 15, T. 4N, R. 21W, S.B.B.&M. Ojai Field, in Ventura County, were witnessed on 1/23/90. Pam Ceccarelli, representative of the supervisor, was present from 1130 to 1230. There were also present Bill Wright.

Present condition of well: 9 5/8" cem 604'; 5 1/2" cem 6027', cp 3400', perfs 5950'-5896', 4666'-4646', 3260'-3220', 2340'-2320', 2245'-2230', 2150'-2115'. TD 6027'. Bp 5860' & 5842'. Plugged w/50 sx cem below retainer @ 4494', & w/50 sx cem below retainer @ 3047', 2357'-1901', 615'-450', 30'-5'.

The operations were performed for the purpose of abandonment.

DECISION:

The plugging operations as witnessed and reported are approved.

ljg SURFACE INSP. OK. 4-4-91 S. MULQUEEN

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

OG109

45

DIVISION OF OIL AND GAS
Cementing/Plugging Memo

Operator SENECA RESOURCES CORP. Well No. "Ferndale" 401
API No. 111-21537 Sec. 15, T. 4N, R. 21W, SB B&M
Field OIL, County VENTURA. On 1/23/90
Mr. Pam Ceccarelli, representative of the supervisor was present from 1130 to 230.
There were also present BILL WRIGHT
Casing record of well: 9 5/8" cem 604'; 5 1/2" cem 6027', CP 3400', perfs 5950'-5896', 4666'-4646', 3260'-3220', 2340'-2320', 2245'-2230', 2150'-2115'. TD 6027'. BP 5860 & 5842'. Plugged w/ 50 sx cem below retainer @ 4494', & w/50 sx cem below retainer @ 3047', 2357'-1901', 615'-450', 30'-5'.
The operations were performed for the purpose of ABANDONMENT

☒ The plugging/~~cementing~~ operations as witnessed and reported are approved.
☐ The location and hardness of the cement plug @_____' is approved.

Hole size:_____" fr._____' to_____', _____" to_____' & _____" to_____'

Casing				Cemented			Top of Fill		Squeezed Away	Final Press.	Perfs. @ INT.
Size	Wt.	Top	Bottom	Date	MO-Depth	Volume	Annulus	Casing			
5 1/2	17#	0	6027'	1-20	TBG @ 2357'	60 SX	—	1901	1/2 BBL	500#	2115'-2340
									21 cf	250#	604'

Casing/~~tubing recovered~~: 5 1/2" ~~shot~~/cut at 604', _____', _____' pulled fr._____';
5 1/2" ~~shot~~/cut at 30', _____', _____' pulled fr. 30'.

Junk (in hole):_____

Hole fluid (bailed to) at_____'. Witnessed by_____

Mudding	Date	Bbls.	Displaced	Poured	Fill	Engr.
70# /cf CLAY GEL	1-22-90	55 BBL	TBG @ 1901	—	SURFACE	S. MULQUEEN

Cement Plugs		Placing	Placing Witnessed		Top Witnessed			
Date	Sx./cf	MO & Depth	Time	Engr.	Depth	Wt/Sample	Date & Time	Engr.
1/20	60 SX	TBG @ 2357'	—	REPORTED	1901'	10K #	1/22 0800	S. MULQUEEN
1/22	35 SX	tbg 615	1145		588'	Full Stack	1/22 3:15	P.C.
1/22	16 SX	tbg 585'	1540	PC	450'	calc.	No tag	
1/23	25 SX	tbg 30'	rept.		30'	full stack	1/23 1130	pc
1/23	24 SX	tbg 30'	1200	pc	5'	Visual	1/23 1200	pc
1/23	16 SX	tbg 24'	1500	rept.	5'	"	rept.	

OGD10 (8/83/GSR1/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No.P 289-351
Field Code 520
Area Code 23
New Pool Code --
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
October 17, 1989

Your proposal to abandon well "Ferndale" 401, A.P.I. No. 111-21537, Section 15, T. 4 N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 10/4/89, received 10/5/89, has been examined in conjunction with records filed in this office.
THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOG Class II 2M requirements shall be installed and maintained in operating condition at all times.
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. Any sump used during these operations shall be thoroughly cleaned and filled with earth as soon as operations are completed.
4. The well shall be plugged with cement from 2340' to 2015'.
5. All portions of the well not plugged with cement are filled with inert mud fluid having a minimum density of 72 lbs./cu. ft. and a minimum gel-shear strength (10 min.) of 20 lbs./100 sq. ft.
6. The well shall be plugged with cement from ~~850'~~ 604' to ~~750'~~ 529'.
7. The casing and all annuli shall be plugged with cement from 30' to the surface.
8. This office shall be consulted before deviating from the proposed abandonment program.
9. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.
10. THIS DIVISION SHALL BE NOTIFIED:
    a. To witness the location and hardness of the cement plug at 2015' and ~~750~~ 504'.
    b. To witness the mudding of the well.
    c. To witness the placing of the surface plug or to verify its location.
    d. To inspect and approve the cleanup of the well site before approval of abandonment will be issued.

OK 4-4-91 S. MULQUEEN

NOTE: In the event that this well is to be turned over to landowner for use as a water well, please notify this Division for further requirements.

P&K / Carl Isaacs 1/18/90 will shoot & Squeeze BFW @ 604 (shoe of 9 5/8") DOG To Tag @ 504'

SF:ljg

Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear

Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

VISION OF OIL AND
RECEIVED
OCT 5 1989
VENTURA, CALIFORNIA

Notice of Intention to Abandon Well

FOR DIVISION USE ONLY			
CARDS	BOND	FORMS OGD114	FORMS OGD121
✓	—	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3229, Division 3, Public Resources Code, notice is hereby given that it is our intention to abandon well Ferndale 401, API No. 111-21537,

Sec. 15, T. 4N, R. 21W, S.B. B. & M., ~~Silverthread~~ agai Field, Ventura County.

commencing work on _____, 1989.

The present condition of the well is:

1. Total depth 6027' KB

2. Complete casing record, including plugs and perforations (present hole)

See Attached.

3. Last produced 8/89 (Date) 0 (Oil, B/D) 0 (Gas, Mcf/D) 51 (Water, B/D)

or

4. Last injected N/A (Date) (Water, B/D) (Gas, Mcf/D) (Surface pressure)

Additional data for dry hole (show depths):

5. Oil or gas shows

5900-5980'	3540-3570'
5550-5710'	2320-2340'
5385-5400'	2230-2245'
4650-4670'	2115-2150'

6. Stratigraphic markers

Monterey 2108'
Mohnian 5318'

7. Formation and age at total depth
Mohnian Sands. Miocene Age

8. Base of fresh water sands 550'

9. Is this a critical well according to the definition on the reverse side of this form? ☐ Yes ☒ No

The proposed work is as follows:

1. Spot plug and squeeze zone from 2115'-2340'.
2. Test squeeze.
3. Change over to 72 ppcf mud.
4. Shoot squeeze holes @ ~~850'~~ 604' 604'-504'
5. Squeeze 5-1/2" - 9-5/8" annulus from ~~850'~~-~~575'~~.
6. Test squeeze.
7. Spot plug from 50' to 25'.
8. Test plug.

It is understood that if changes in this plan become necessary, we are to notify you immediately.

Address 725 E. Main St., Suite 200 (Street)

Santa Paula (City) CA. (State) 93060 (Zip)

Telephone Number (805) (Area Code) 656-2445 (Number)

Seneca Resources Corporation (Name of Operator)

By Eric R. Wilson (Print Name)

Eric R. Wilson (Signature) 10/4/89 (Date)

OG108 (10/85/DWRR/5M)

SENECA RESOURCES CORPORATION

COMPLETE CASING RECORD
FERNDALE 401

CASING DETAIL:

9-5/8" (36.0#, K-55) cmt'd at 604' with 271 cf.
5-1/2" (17#, N-80) cmt'd at 6027' with 300 cf.
Alpha EZ-Drill bridge plug at 5860'.
Baker EZ-Drill bridge plug at 5842'.
Baker K-1 Cement Retainer at 4494'.
Baker K-1 Cement Retainer at 3047'.

DV Tool:	2606.67'
Float Shoe:	6027.33'
Float Collar:	5983.55'
Flag Joints:	5576-5590'
	1910-1923'
Pipe Grade:	Jts. 1-140 N-80

PERFORATIONS:

5896'-5950' 6 spf 60 degree phased with through tubing guns, abandoned with drillable plug.

4646-4666' 4 spf 90 degree phased with 4" casing guns, abandoned with 50 sx "G" below retainer at 4494'.

3220-3260' 4 spf 90 degree phased with 4" casing guns, abandoned with 50 sx "G" below retainer at 3047'.

2320-2340' 4 spf 90 degree phased with 4" casing guns.

2230-2245' 4 spf 90 degree phased with 4" casing guns.

2115-2150' 2 spf 180 degree phased with 4" casing guns.

Form OG100 (7/79)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

API No. 111-21537

WELL SUMMARY REPORT

DIVISION OF OIL AND GAS
RECEIVED
OCT 2 1989
VENTURA, CALIFORNIA

Operator	Well				
Seneca Resources Corporation	Ferndale 401				
Field	**County**	**Sec.**	**T.**	**R.**	**B.&M.**
Silverthread	Ventura	15	4N	21W	S.B.

Location (Give surface location from property or section corner, street center line and/or California coordinates)
800' N & 20' E from SW corner of Section 15.

Elevation of ground above sea level
1299' G.L.

Commenced drilling (date)	Total depth			Depth measurements taken from top of:
4/9/89	(1st hole) 3175'	(2nd) 4725'	(3rd) 6027'	☐ Derrick Floor ☐ Rotary Table ☒ Kelly Bushing
Completed drilling (date) 5/15/89				Which is 10' feet above ground level
Commenced producing (date) 5/27/89	Present effective depth 3000'			GEOLOGICAL MARKERS / DEPTH
☐ Flowing ☒ Pumping ☐ Gas lift	Junk None.			Monterey Shale 2108'
Name of producing zone(s) None				Mohnian Sands 5310'
				Formation and age at total depth: Mohnian Formation, Miocene Age

	Clean Oil (bbl per day)	Gravity Clean Oil	Percent Water including emulsion	Gas (Mcf per day)	Tubing Pressure	Casing Pressure
Initial Production	0	N/A	100%	0	145	Packer
Production After 30 days	0	N/A	100%	0	0	0

CASING RECORD (Present Hole)

Size of Casing (API)	Top of Casing	Depth of Shoe	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Number of Sacks or Cubic Feet of Cement	Depth of Cementing (if through perforations)
9-5/8"	Surface	604'	36#	K-55 ST&C	New	12-1/4"	271 cf	---
5-1/2"	Surface	6027'	17#	N-80 LT&C	New	8-3/4"	300 cf	---

PERFORATED CASING (Size, top, bottom, perforated intervals, size and spacing of perforation and method.)
6 (0.38") JHPF 60 degree phased from 5896'-5950' Tubing conveyed
4 (0.44") JHPF 90 degree phased from 4646'-4666', 3220'-3260', 2320'-2340', 2230'-2245' w/ 4" csg. guns.
2 (0.44") JHPF 180 degree phased from 2115'-2150' with 4" casing guns.

Was the well directionally drilled? If yes, show coordinates at total depth
☒ Yes ☐ No 821.05 S & 725.63 E (Closure 1095.72' @ S 41.47 degree E from surface)

Electrical log depths
See attached.

Other surveys
See attached.

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Name	Title	
Eric R. Wilson	Division Engineer	
Address	**City**	**Zip Code**
P.O. Box 630	Santa Paula	93060
Telephone Number	**Signature**	**Date**
(805) 656-2445	Eric R. Wilson	

SUBMIT IN DUPLICATE

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

DIVISION OF OIL AND GAS
RECEIVED
OCT 2 1989
VENTURA, CALIFORNIA

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "FERNDALE 401" — SEC. 15, T4N, R21W, SBB&M
A.P.I. #111-21537 — ERIC R. WILSON, DIVISION ENGINEER

Eric R. Wilson 9/8

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

PAGE 1

4/7/89
Day 1. Moving in Gary Rig D-16 and drilling and setting surface conductor.

4/8/89
Day 2. Moving in and rigging up Gary Rig D-16.

4/9/89
Day 3. Spud well and drill 12-1/4" hole to 211'.

4/10/89
Day 4. Drill 12-1/4" hole to 619'. Run and cement 9-5/8" casing at 604'. WOC.

4/11/89
Day 5. Nipple up and test BOP's per DOG. Drill cement 560' to 604' (shoe). Drill 8-3/4" hole to 624'. Condition mud. Drill 8-3/4" hole 624' to 677'. Trip to drill mouse hole and pick up dynadrill.

4/12/89
Day 6. Drill 8-3/4" hole to 695'. Trip for dynadrill and to drill mousehole. Dynadrill 695' - 1030'. Trip to pick up new BHA. RIH. Ream to 1000' and pipe stuck. Jar 1 hour and pipe came free. Ream to 1030'. Presently drilling.

4/13/89
Day 7. Drilling @ 1306'. Ream from 1000' to 1030'. Drill to 1115' and trip for Dynadrill. Dynadrill to 1185' and trip for kick sub. Dynadrill to 1306'. Trip for drilling assembly. Ream and drill to 1306'.

4/14/89
Day 8. Trip for bit @ 2213'. Ream from 1280' to 1306'. Drill to 2213'.

4/15/89
Day 9. Drilling @ 2950'. Drill from 2213' to 2822'. Trip for bit. Drill from 2822' to 2950'.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "FERNDALE 401" — SEC. 15, T4N, R21W, SBB&M
A.P.I. #111-21537 — ERIC R. WILSON, DIVISION ENGINEER

EW 9/8

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

PAGE 2

4/16/89
Day 10. Waiting on cement. Drill from 2950' to 3175'. Well turning wrong direction. Spot cement plug 2650' to 2900'. POOH.

4/17/89
Day 11. Trip for 1-1/2° sub at 2833'. Tag cement at 2700'. Drill to 2720'. WOC. Drill cement 2720'-2758'. POOH. Pick up Dynadrill and 1-1/2° kick sub. Drill from 2758'-2813'. POOH for 2° kick sub. Dynadrill 2813'-2833'.

4/18/89
Day 12. Waiting on cement. POOH at 2833' to change kick sub to 1-1/4°. Dynadrill from 2833' to 2906'. Fell back in old hole. POOH. RIH and lay cement plug from 2575' to 2275'. POOH. RIH with drilling assembly.

4/19/89
Day 13. Drilling @ 2403'. Testing and waiting on cement for 18 hrs. Trip for Dynadrill assembly and 2° kick sub. Drill off plug @ 2380' with Dynadrill.

4/20/89
Day 14. Trip for drilling assembly at 2750'. Drill with dynadrill from 2403'-2693'. Trip for bit. Dynadrill 2693'-2750'.

4/21/89
Day 15. Trip at 3119'. Ream from 2321'-2750'. Drill to 3119'.

4/22/89
Day 16. Drilling at 3441'. Drill 3119'-3129'. Trip for bit and change bottom hole assembly. Ream 3115'-3129'. Drill 3129'-3441'.

4/23/89
Day 17. Drilling @ 3848'. Drill 3441'-3781'. Trip for bit @ 3781'. Drill from 3781'-3848'.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "FERNDALE 401" — SEC. 15, T4N, R21W, SBB&M
A.P.I. #111-21537 — ERIC R. WILSON, DIVISION ENGINEER

EW 9/8

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

PAGE 3

4/24/89
Day 18. Drilling @ 4348'. Drill from 3848'-4188'. Trip for bit @ 4188'. Drill from 4188'-4348'.

4/25/89
Day 19. Logging at 4409'. Drill from 4308' to 4409'. Circulate and condition hole for logs.

4/26/89
Day 20. Drilling at 4627'. Complete logging. Drop mud weight to 9.8#/gal. Drill to 4627' and drop mud weight to 9.7#/gal.

4/27/89
Day 21. Running logs at 4725'. Drill 4627' to 4725'. Condition mud for logs. POOH for logs.

4/28/89
Day 22. Running in hole to spot cement plug. Run formation tests. RIH with bit to 4000' and condition mud. POOH.

4/29/89
Day 23. Waiting on cement. Circulate and condition mud. Spot cement plug from 3124' to 3424'. POOH. Wait on cement 11 hrs. RIH and tag cement at 3160'. Clean out cement to 3189'. Wait on cement 4 hrs. Drill cement at 200' 1 hr. to 3205'. WOC.

4/30/89
Day 24. POOH at 3300'. Waiting on and testing cement plug for 10 hrs. POOH. RIH with slow speed mud motor. Drill from 3205' to 3300'. Not off plug. POOH for high speed motor.

5/1/89
Day 25. Dynadrill with bent housing at 3375'. Drill with high speed motor from 3300' to 3328'. Unable to get out of cement plug. POOH for bent housing. RIH with bent housing and high speed motor. Circulate out gas cut mud and drill 3328' to 3375'.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "FERNDALE 401" — SEC. 15, T4N, R21W, SBB&M
A.P.I. #111-21537 — ERIC R. WILSON, DIVISION ENGINEER

LW 9/8

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

PAGE 4

5/2/89
Day 26. Trip at 3583' for 1-1/2° kick sub. Drill with dynadrill at 4' for 1 hr. to 3484'. POOH to change to slow speed motor and 2° kick sub. RIH. Wash fill from 3444' to 3484'. Drill 3484' to 3583'.

5/3/89
Day 27. Drilling at 3940'. RIH with dynadrill and clean out 55' of fill. Drill from 3583' - 3804'. POOH for bit. RIH with new bit. Circulate gas cut and clean out 35' of fill. Drill from 3804' - 3940'.

5/4/89
Day 28. Reaming hole at 4000'. Dynadrill 3943'-4292'. Work pipe through tight section 4230'-3980'. POOH to ream. RIH and ream from 3308' to 4000'.

5/5/89
Day 29. Drilling at 4562'. Ream from 3630' to 4292'. Drill from 4292' to 4562'.

5/6/89
Day 30. Drilling at 4920'. Drill from 4562' to 4621'. Trip for bit. Ream from 4540' to 4621'. Drill from 4621' to 4920'.

5/7/89
Day 31. Drilling at 5197'. Drill from 4920' to 4945'. Trip for bit. Trip for bit and to change bottom hole assembly.

5/8/89
Day 32. Drilling at 5440'. Drill from 5197' to 5224'. Trip for bit and bottom hole assembly and to change jars. Ream from 5200' to 5224'. Drill to 5440'.

5/9/89
Day 33. Drilling at 5706'. Drill from 5440' to 5461'. Trip for bit. Tight spots from 3890' to 3755'. Ream from 5395' to 5461'. Drill from 5461' to 5706'.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "FERNDALE 401" — SEC. 15, T4N, R21W, SBB&M
A.P.I. #111-21537 — ERIC R. WILSON, DIVISION ENGINEER

EW 9/8

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

PAGE 5

5/10/89
Day 34. Drill from 5706' to 5864'. Wipe hole from 5864' to 4854'. Drill from 5706' to 6037'. Circulate and wipe hole to 3650'. Circulate and surveys.

5/11/89
Day 35. Wipe hole and strap pipe. Circulate and condition mud for logging. Chain out of hole. Rig up loggers. Run DIL-SP-GR, Dens.-Neut., Sidewall Cores.

5/12/89
Day 36. Finish Sidewall samples. Circulate and condition mud for Dipmeter. Run Dipmeter - 6 Arm Caliper to surface. Run FracFinder-Sonic Log.

5/13/89
Day 37. Finish FracFinder-Sonic Log. Circulate and ream 5972' to 6027'. Circulate and condition mud. Pull out of hole with drill pipe and tools. Rig up and run 140 jts. 5-1/2" 17# N-80 casing to 6027.33'. Float shoe at 6027.33', float collar at 5983.55', stage collar at 2606.07'. Rig up cementers. Pressure test to 5000#. Cement Stage 1: 6027' to 5000'± with 10 bbls. FW + 3% KCl ahead followed by 20 bbls. Viscosified Spacer, 30 bbls. 10.5 ppg POZ Scavenger and 260 sx (25% excess) Class "G" + .75% D127 FLAC (low temp.) + 5% KCl (BWOW) + 3% D13 retarder + 2% D46 Defoamer at 5 BPM. Displace with 139 BW.

5/14/89
Day 38. Drop bomb on stage collar to open ports. Establish circulation. WOC 10 hrs. Pressure test lines. Cement Stage 2 (2600'-600') with 10 bbls. FW + KCl ahead followed by 20 bbls. Viscosified Spacer, 643 sx "G" (no excess) + .5% D112 + .25% D65 + .2% D46 + 3% KCl (BWOW). Displace with 62 BW. Plug bumped to 3000#. Stage collar held 3000#. WOC 6 hours. Land 5-1/2" casing. Install wellhead. Test wellhead to 2000 psi. Remove BOP.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "FERNDALE 401" — SEC. 15, T4N, R21W, SBB&M
A.P.I. #111-21537 — ERIC R. WILSON, DIVISION ENGINEER

EW 5/8

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

PAGE 6

5/15/89
Day 39. Load out Baker tanks. Clean mud tanks. RDMO. Release Rig @ 4:00 p.m. 5/14/89.

5/20/89
Day 1. MIRU Oilwell. Haul rig mat from yard to location. Spot & raise mast. Put out wind guys. Unbolt wellhead. Bolt on N/L Acme mechanical gate. Build working platform Unload tubing tools. Spot Oilwell Service pump. Plumb steel line to casing. Spot tubing trailer. SDFN.

5/21/89
Day 2. Service rig. Rig for tubing. Make up 4-3/4" bit. Measure & pick up 6 ea. 3-1/2" drill collars. Measure & pick up 2-3/8" EU8 N-80 tubing (200 jts. on location). Tag fill @ 2557'. Test BOE to 2000 psi. Repair leak. Strip on stripper. Rig power swivel. Clean out fill, small amount cement to rubber plug @ 2608'. Drill out. Hit D.V. @ 2609'. Drop through @ 2610'. Circulate well clean. Lay down power swivel. Run bit, collars & tubing to 3279'. Close pipe rams. Pressure casing to 2000 psi. Hold pressure for 30 minutes. Bled off pressure. Close well in until Monday.

5/22/89
Shut down.

5/23/89
Day 3. Pull tubing to collars. Re-measure tubing. Tubing measurement o.k. (.43 longer). Run bit, collars & tubing. Continue measuring and picking up 2-3/8" tubing. Tag top of cement @ 5932'. Rig pump and power swivel. 800 psi to lift fluid. LD swivel. Pull tubing to 5332'. Rig pump. Circulate well clean. Run tubing to 5632'. Circulate well clean. Replace stripper rubber. Run tubing to 5928'. Circulate well clean. Small amount of mud. Rig power swivel. Drill out rubber & cement to 5989'. Circulate well clean. Close well in. SDFN. Note: No sign of baffle @ 5982'.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION OJAI FIELD VENTURA COUNTY
WELL: "FERNDALE 401" SEC. 15, T4N, R21W, SBB&M
A.P.I. #111-21537 ERIC R. WILSON, DIVISION ENGINEER

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

PAGE 7

5/24/89

Day 4. Circulate well. Move tubing. Continue drilling out cement 5989' to 6019'. (No baffle.) Circulate well clean. Pull tubing and collars. Measure out. 0.14 shorter. Check bit size. Make up 4-3/4" bit. Run bit, 6 3-1/2" collars and tubing to 6017'. Rig pump and power swivel. Drill out cement to 6025'. Circulate well clean. Pull tubing to 6025'. Pressure test tubing and casing to 2000 psi. Slow bled. Bled pressure. Pull out stripper rubber. Pressure tubing and casing to 2000 psi. Slow bled. Bled to 1200 psi in 35 minutes. Bled pressure. Close well in till a.m.
Note: Stem on casing valve leaks when opening and closing.

5/25/89

Day 5. Grease stem on casing valve. Pressure tubing and casing to 2000 psi. Pressure held 30 minutes. Bled pressure. Seneca vacuum truck hauled 210 bbls. Ferndale oil to location. Change well over to oil. Returns to Baker tank. Pull tubing. Lay down collars. Rig Welex. Run logs per program. Tag T.D. @ 6023'. Fill and pressure casing to 1000 psi for logging. Rig out Welex. Close well in.
Note: Logs run, GR-CBL-CCL.

5/26/89

Day 6. Open well. RU Guiberson bottomhole assembly with Guiberson Up-VI 2-3/8 x 5-1/2 packer. RU A&F Testers. Test tubing above packer to 5000 psi. RO tester. RU Welex. Run log to correlate tubing depth. Strip off BOPE. Add 9' 2-3/8" subs to tubing. Re-run logs. RO Welex. Set packer at 5852' with 16,000# tension. Replace casing valve. Rig pump. Test casing to 1000 psi. Bolt on wellhead. Make up 5000 psi X-mas tree. Rig A&F and test tree to 4000 psi. Rig swab equipment. Swab fluid down to 1000'. Lay down swab equipment. Pressure casing to 500 psi. Drop firing bar to fire guns. Slight blow on tubing. Rig tubing to chart recorder. Bled casing pressure. Close well in till a.m. Note: 63.78' of bottomhole assembly dropped to bottom. See tubing detail sheet on back. 54' perfs, 6 JHPF, 324 holes 5896'-5950'.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "FERNDALE 401" — SEC. 15, T4N, R21W, SBB&M
A.P.I. #111-21537 — ERIC R. WILSON, DIVISION ENGINEER

EW 9/8

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

PAGE 8

5/27/89
Day 7. 145 psi on tubing. Rig Calif. Wireline Service ret. firing bar. Tear out wireline. Pressure on tubing 200 psi. Open well to cellar. Small amount oil & gas. Let well blow. Plumb flowline to Baker tank. Rig N/L Acme swab equipment. Run swab. Swab 300' fluid each run. Swab fluid to 1650'. Let set 1/2 hr. Run swab fluid @ 1260. Swab fluid to 2500'. Oil & gas returns. Swab total 6.5 bbls. Open well to Baker tank through #12 bean. SDFN. Note: Swab 6.5 bbls. Approx. 13.5 to recover.

5/28/89
Day 8. No production overnight. Run swab. Tag fluid @ 2000'. Swab fluid to 5800'. Swab 12-1/2 bbls. Rig pump to tubing. Dump 5 gals. Hy-Flo down tubing. Fill tubing with 15.3 bbls. oil. Pressure to 2000 psi., slow bleed. No pump rate. Pressure to 2500, slow bleed. No pump rate. Pressure to 3000 psi, slow bleed. Well flowed back small amount of oil. Used approximately 1 bbl. oil to try to break down formation. Run swab. Swab fluid surface to 5880'. Let set 1 hr. Run swab. Fluid @ 5550'. Swab from 5880'. Set choke on 10/64". Leave well open to Baker tank. SJD. Note: Fluid swab before breakdown attempt = 12.5 bbls. Total fluid pumped into well = 16.3 bbls. Fluid swab after breakdown attempt = 21.5 bbls. Total fluid swab = 34 bbls. 2.4 bbls. from formation.

5/29/89
Shut down for Holiday.

5/30/89
Shut down for Holiday.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "FERNDALE 401" — SEC. 15, T4N, R21W, SBB&M
A.P.I. #111-21537 — ERIC R. WILSON, DIVISION ENGINEER

EW 9/8

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

PAGE 9

5/31/89

Day 9. No flow on tubing. Run swab. Fluid level @ 2600'. Swab 1000' each run. Swab fluid to 5880'. Oil & water returns. No gas. RU McMahan's. Mix 15 gal. Hy-Flo IV with 13 bbls. Ferndale oil. Test lines & X-mas tree to 4700 psi. Pump mixture down tubing. Displace with 20-1/2 bbls. oil. Pump fluid away @ 1 BPM @ 3500 psi. Close well in. Pressure bled to 2500 psi in 15 minutes. Bled pressure. Small amount flow back. Run swab. Pull 500' fluid each run. Swab to 2000'. Let well set 1/2 hr. Run swab. Fluid @ 1990. Swab fluid to 5880'. Run 6 3/4" rods on sandline. Tag fill @ 5970'. (Perfs 5896'-5950'.) Pull rods. Rig well for swabbing. Open tubing to Baker tank through 10/64" choke. SDFN. Note: Swab 9.5 bbls. fluid. Total formation fluid 11.9 bbls. Used 33.5 bbls. for breakdown & pump rate. Swab 22.5 bbls. after breakdown. Have 11 bbls. to recover.

6/1/89

Day 10. No flow through tubing. Run swab. Found fluid @ 4500'. Swab from 5880'. Swab 1/2 bbl. oil & water. RU Halliburton to X-mas tree. Test lines & tree to 5000 psi. Hold safety meeting. Pressure casing to 1000 psi. Pump 5000 gals. 7 1/2% HCl (20 bbls.). Displace with 23 bbls. oil & Hy-Flo IV mixture. Pump 4 bbls. per minute @ 4000'. Drop balls. Reduce rate to 2 bbls. per minute for short period of time, increased back to 4 BPM. Shut-in pressure = 3500 psi. Bled to 2490 in 3 hrs. Rig flowline. Open to Baker tank through 14/64" choke. Well flowed back 42 bbls. fluid from 11:45 p.m. to 6:30 p.m. Leave well flowing to Baker tank. Plumb line from Baker tank to crown tank. Turn well over to pumper. NOTE: Swab 1/2 bbl. fluid before treatment. 10-1/2 to recover. Pump 120 bbls. 7 1/2% HCL with additives. Displace with 23 bbls. oil & Hy-Flo IV mixture. 153-1/2 to recover. Hauled 50 bbls. oil to location. Total oil hauled to location = 273 bbls.

6/5/89

Well flowing. Rig Archer Reed. Make feeler run. Tag fill @ 5971'. (Btm. perf @ 5950'.) Run sample bailer. Unable to recover sample.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "FERNDALE 401" — SEC. 15, T4N, R21W, SBB&M
A.P.I. #111-21537 — ERIC R. WILSON, DIVISION ENGINEER

EW 9/8

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

PAGE 10

6/7/89

Day 11. Bled tubing. Small amount of gas and fluid. Rig swab equipment. Run swab. Fluid surface. Swab 300' fluid each run. Water and small amount oil returns. Swab fluid to 1750' (30 runs). Let well set 1/2 hr. Fluid at 1201'. Change cups and check swab tools, 45 minutes. Run swab. Fluid at 880'. Swab fluid to 2000', 22 bbls. Let well set 1/2 hr. Run swab. Fluid at 1400'. Swab from 2000'. Good gas blow after run. Let well set 1/2 hr. Run swab. Fluid @ 1550'. Swab from 1900'. No gas. Let well set 1 hr. Run swab. Fluid at 1300'. Swab to 2000'. Open well to Baker tank through #16 bean. SDFN. Note: Total fluid flowed back 5/31/89 to 6/6/89 = 149.5 bbls. Barrels to recover, 10.5 prior & 4 acid job = 14.5 bbls. Total fluid swab = 25 bbls. Fluid from formation = 10.5 bbls.

6/8/89

Day 12. Well not flowing. Open well. Run swab. Fluid @ 355'. Swab 500' fluid each run. Swab fluid to 2500' (16 runs). Swab 18 bbls. Water & small amount oil. Gas blow last run. Let well set 1 hr. Run swab. Fluid @ 1720'. Swab fluid to 2500'. Swab 2 bbls. Small gas blow. Let well set 1 hr. Run swab. Fluid @ 1790'. Swab to 2500'. Swab 15 bbls. Small gas blow. Let well set 1 hrs. Run swab fluid @ 1870. Swab to 3000'. Dirty water, small amount oil & small amount of gas. Swab 7.5 bbls. Let well set 1 hr. Run swab. Fluid @ 1900'. Swab from 3000'. Dirty water, small amount oil & lots of gas. Swab 2.5 bbls. Open well to Baker tank thru 16/64" bean. SDFN. NOTE: Swab total = 32.5 bbls. Total fluid swab from formation = 43 bbls. Collar gate on tank gauge indicated 109 bbls. oil, Baker tank. Thief gauge indicated 82 bbls. Baker tank.

6/9/89

Day 13. Open well. Run swab. Tag fluid @ 1230'. Pull 500' fluid each run. Swab fluid to 5700'. (22 bbls.) Swab 32 bbls. water. Small amount oil & gas, 2500' - 5700'. Good gas blow 3 minutes after each run. Let well set 1 hr. Run swab fluid @ 4755'. Swab fluid to 5350'. Swab 3 bbls. Let well set 1 hr. Run swab. Fluid @ 4646'. Pull from 5100', swab 1.5 bbls. Open well to Baker tank through #16 bean. SDFN.
Note: Swab total, water & oil = 36.5 bbls. Total fluid from formation = 79.5 bbls. 8:00 a.m.: Collar gate on tank gauge indicated 109.5 bbls. oil in Baker tank.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "FERNDALE 401" — SEC. 15, T4N, R21W, SBB&M
A.P.I. #111-21537 — ERIC R. WILSON, DIVISION ENGINEER

EW 9/8

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

PAGE 11

6/10/89

Day 14. Open well. Run swab. Fluid @ 2420'. Swab 500' fluid each run. Swab fluid to 5500'. Water & oil returns. Swab 13.5 bbls. Let well set 1 hr. Run swab. Fluid @ 4660'. Swab fluid to 5500'. Water & oil returns. Swab 3.5 bbls. Let well set 1 hr. Run swab. Fluid @ 4600'. Swab fluid to 5500'. Swab 2.5 bbls. Water & oil retuns. Let well set 1 hr. Run swab. Fluid @ 4600'. Swab fluid to 5500'. Water & oil returns. Swab 2 bbls. Open well to Baker tank through 16/64" bean. SDFN. NOTE: Swab total, water & oil = 21.5 bbls. Total fluid from formation = 100 bbls. Electric tape on Baker tank = 99.5 bbls. oil.

6/11/89

Rig shut down. Will open well to tank. Slight gas blow. No fluid production.

6/12/89

Rig shut down. Well open to tank. Slight gas blow. No fluid production.

6/13/89

Day 15. Lay down swab equipment. Rig pump. Fill tubing with 6 bbls. oil. Unbolt wellhead. Remove tree. Unland tbg. Release Guiberson packer. Land tubing on donut. Bolt on N/L Acme mechanical gate. Rig for tubing. Pull stand back & measure 150 jts. 2-3/8" EU8. LD remaining tbg. Break down packer, nipples, on/off tool & gun release assembly. Bolt on N/L Acme shooting flange. RU Schlumberger. Run Alpha 5-1/2 EZY-Drill bridge plug. Set plug @ 5860'. Fill casing with 8 bbls. oil. Test plug & BOPE to 1000 psi. Perf well per program: Perf #1 = 4 (0.44") JHPF 4666'-4656'. Well flowed back small amount. Perf #2 = 4 (0.44") JHPF 4656'-4646'. Well flowed back. Close well in. RO Schlumberger. 250 psi on casing after 30 minutes. Bled casing. Well flowed to cellar. Run STC, 1 jt. 2-3/8" 2" API T/L shoe & 148 jts. 2-3/8" EU8. Land tubing on donut with shoe @ 4517' & tail @ 4547'. Close well in. Suck cellar. Clean location. 240 psi on casing @ 7:00 p.m. SDFN. Note: Used 14 bbls. oil in well. Transferred 105.5 bbls. oil from Baker tank.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "FERNDALE 401" — SEC. 15, T4N, R21W, SBB&M
A.P.I. #111-21537 — ERIC R. WILSON, DIVISION ENGINEER

EW 9/8

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

PAGE 12

6/14/89

Day 16. 400 psi on casing. Rig flow X-mas tree to Baker tank. 382 psi on tubing. Open to Baker tank through 14/64" bean. Flow 7.5 bbls. oil in 4 hrs. 15 min. Open full 3/4". Well died. Tear out flow X-mas tree. Unscrew pup jt. Bolt on X-mas tree. Rig bean & flowline. Rig swab equipment. Swab well. Pull 500' fluid each run. Swab fluid to 2000'. Swab 71 bbls. fluid. Drilling mud & trace of oil. Open well to Baker tank through 10/64". SDFN. Note: Well flowed 7.5 bbls. oil. Swab drill mud = 71 bbls. Total fluid from well = 78.5

6/15/89

Day 16. 29 psi on casing. Open well. Tubing flowed small amount. Run swab. 1000' fluid each run. Small amount oil & muddy water returns. Oil & water returns after swabbing = 86 bbls. fluid. Swab total 154.5 bbls. fluid. Open well to Baker tank through 10/64" bean. SDFN. Note: Total fluid swabbed from well = 225.5 bbls. Total fluid from well = 233 bbls. Oil in Baker tank, lots of emulsion.

6/16/89

Day 17. No pressure on tubing or casing. Tear out swab equipment. Unbolt wellhead. Remove X-mas tree. Bolt on N/L Acme mechanical gate. Rig for tubing. Unland tbg. Measure & run tubing off rack. Tag BP @ 5903'. Pull tubing to 5899'. Rig pump. Change well over with lease water, 138 bbls. POH with tbg. Measurement put BP @ 5905'. Run 21 stands in well. SDFN. Note: Barnett emptied crown tank. Transferred to Baker tank on Pad 3.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "FERNDALE 401" — SEC. 15, T4N, R21W, SBB&M
A.P.I. #111-21537 — ERIC R. WILSON, DIVISION ENGINEER

EW 9/8

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

PAGE 13

6/17/89

Day 18. Bled tubing and casing. No pressure. Pull & lay down kill string, 42 jts. RU Schlumberger. Run Baker EZY-Drill bridge plug. Plug hung up coming out of hole @ 5822'. Lower to 5842'. Hung up pulling. Set plug @ 5842'. Pull setting tool through mud?? RO Schlumberger. Make up Guiberson 5-1/2 Uni-Packer VI with entry collar. Run packer and tubing. Land tubing on donut. Remove BOPE. Set packer @ 4616'. Land on donut with 10,000# tension. RU pump. Pressure casing to 500 psi. Fluid flowed through tubing. Unland tubing. Work tension and pack off packer. Land on donut. Fluid pumped around @ 500 psi. Release packer. Pull packer to 4606' & reset. Land on donut. Fluid pumped around @ 500 psi. Indication of leak around casing, not packer. Release packer. Bolt on BOPE. Rig for tubing. Pull tubing to 2476'. Set & test o.k. Run packer to 2715', test o.k., 3512', test o.k., 4540', test o.k. Run packer to 4577'. Land on donut. Remove BOPE. Set packer @ 4577'. Test @ 1000 psi, o.k. Bled pressures. Bolt on wellhead and X-mas tree. SDFN.
Note: Transferred 25 bbls. oil.

6/18/89

Day 19. 85 psi on tubing. RU Halliburton Wireline. Run Temperature Survey per Engineering program. RO wireline truck. Clean location. Rig swab equipment. Open well to Baker tank thru #14 bean. SDFN. Note: Tools set down @ 5747' second run.

6/19/89

Day 20. Small flow from well. Open well. 7.5 bbls. fluid flowed overnight. Run swab. Swab 1500' fluid each run. Swab fluid level at 2100'. Pull 155.5 bbls. fluid. Welll started flowing gas & oil. Well died in 30 minutes. Run swab. Swab oil, gas & water. Swab total 168 bbls. Lay down swab equipment. RU Halliburton Wireline. Open well to Baker tank thru #18 bean. SDFN. Note: Swab total = 168 bbls. fluid, (oil, water & gas.) After pulling 155.5 bbls., well flowed.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "FERNDALE 401" — SEC. 15, T4N, R21W, SBB&M
A.P.I. #111-21537 — ERIC R. WILSON, DIVISION ENGINEER

EW 9/8

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

PAGE 14

6/20/89

Day 21. RO Halliburton Logging. 20 psi on tubing. Bled tubing. Unbolt wellhead. Remove X-mas tree. Release packer. Bolt on N/L Acme mechanical gate. Rig for tbg. Pull tubing & packer. Make up & run 2 entry collar, 2 API T/L shoe & 149 jts. 2-3/8" EU8. Land tbg. on donut with shoe @ 4540' & tail @ 4570'. Remove BOPE. Bolt on wellhead. Break off 5000 psi X-mas tree. Make up 2000 psi X-mas tree. Rig for rods. Check & run Axelson 2 x 1-1/2 x 16-005 RWA exchange pump & new 3/4" rods. Seat pump. Space out well. Make up new 1-1/4 x 22' polish rod. Reseat pump. Fill tubing. Pressure to 300 psi with rig. Clean & load out rod & tbg. tools. SDFN.
Note: 150 jts. 2-3/8" EU8 in well. 49 jts. 2-3/8" EU8 on rack. 1 jt. 2-3/8" junk. 150 3/4" rods in well. 2' & 4' 3/4 sub in well.

6/21/89

Day 22. Load out pump. Lay down 3 stands 3/4" rods. Lay mast down. Clean location. RDMO.

7/1/89

Day 1. MIRU Oilwell. Bled tubing. Rig for rods. Pull rods & pump. Unload N/L Acme truck. Bled casing. Unbolt wellhead. Remove tree. Bolt on N/L Acme mechanical gate. Rig for tubing. Pull tubing. RU Schlumberger. Perf 4 (0.5") JHPF @ 3400'. Well started good gas blow, (40 min.). Rig pump to casing. Bled well through pump. RO Schlumberger. Make up Baker 5-1/2" fullbore packer with 5-1/2" Model "C" ret. bridge plug. Measure tubing in. Run plug, packer & tubing. Set plug @ 3527'. Pull packer to 3495'. Rig pump. Set packer. Fill tubing with lease water. Pressure test BP to 1000 psi. Hold for 5 minutes. Release packer. Pull packer to 3288' & set. Dump 2 sacks Silica sand down tubing. Run water while dumping sand. Close well in. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "FERNDALE 401" — SEC. 15, T4N, R21W, SBB&M
A.P.I. #111-21537 — ERIC R. WILSON, DIVISION ENGINEER

EW 9/8

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

PAGE 15

7/2/89

Day 2. Bled tubing. Small amount of gas. Release packer. Run tubing. Tag top of sand @ 3506'. Pull packer to 2998'. Rig pump. Fill well with lease water. Circulate out gas. Set packer. RU Dowell. Pressure casing to 1000 psi. Cement well per program. Pump rate (breakdown) 1 BPM @ 600#, 1-1/2 BPM @ 840#, 2 BPM @ 1040#, 2-1/2 BPM @ 1220#, 3 BPM @ 1460# & 3-1/2 BPM @ 1670#. Cement well with 75 sacks Class "G" cement with additives. Bullhead in, over displace with 1-1/2 bbls., 880 psi. shut-in pressure. Let well set 2 hrs. (100 psi on tubing after 2 hrs. Establish breakdown of .5 BPM @ 1150 psi.) Release packer. Spot 60 sacks Class "G" cement 5 bbls. from packer. Set packer. Presssure back side to 1000 psi. Squeeze perfs. Displace cement to 3250'. Close well in with 2130 psi on tubing, 1000 psi on casing. SJD until Monday.

7/3/89

Job shut down. Waiting on cement.

7/4/89

750 psi on tubing. Bled tubing. Release packer. Packer free. Reset packer. Rig pump. Pressure tubing to 1000 psi. Release packer. Pull tubing and packer. Make up 4-3/4" bit. Pick up 6 3-1/2" drill collars. Run tools and tubing. Tag cement @ 3159'. Pull tubing to 3135'. Land on donut. Pressure well to 1000 psi. Bled approximately 5 psi in 25 minutes. Unland tubing. Strip on PGSR stripper. Rig pump & power swivel. Drill out streamers 3159'-3197'. Medium cement 3197'-3258'. Hard cement 3258'-3290'. Circulate well clean. SJD.

7/5/89

Shut down for July 4th Holiday.

7/6/89

Day 4. Circulate well. Continue drilling out hard cement 3290'-3410'. Drill out stringers to sand @ 3506'. Circulate sand to 3510'. Circulate well clean. Pull tubing to 3498'. Strip off PGSR stripper. Close pipe rams. Pressure well to 1050 psi. Bled off approximately 10 psi in 20 minutes. Bled pressure. Pull tubing and collars. Lay down 6 3-1/2" drill collars. Close well in. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "FERNDALE 401" — SEC. 15, T4N, R21W, SBB&M
A.P.I. #111-21537 — ERIC R. WILSON, DIVISION ENGINEER

EW 9/8

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

PAGE 16

7/7/89

Day 5. Haul 10 extra jts. 2-3/8" EU8 to location. Open well. Make up ret. head for bridge plug. Run tool & tubing to 3500'. Strip on PGSR stripper. Rig poorboy swivel & pump. Backscuttle out sand on top of bridge plug. Release plug @ 3527'. RIH to 3539'. Circulate well clean. Strip off stripper. Pull tubing & plug. Run entry collar, T/L shoe & tubing to 4879'. Rig pump. Backscuttle well 1 hr. Mud & small amount of oil returns. Pull and lay down 10 extra jts. tbg. Land tbg. on donut with 149 jts. 2-3/8" EU8 to shoe @ 4537' & 150 jts. to tail @ 4567'. Remove BOE. Install X-mas tree. Ship water from pump to Baker tank. Load out pump. Haul extra tbg. to rack. Open well to production tank. SDFN.

7/8/89

Day 6. Bled tbg. Rig for rods. Check & run 150 3/4" rods & pump. Seat pump. Pressure tbg. to 320 psi with rig. Clean & load out rod & tbg. tools. Load out N/L Acme rental tools. Hang well on. Respace well. Lay mast down. RWTP @ 11:30 a.m. @ 10 SPM. RDMO.

7/17/89

Day 1. MIRU WellTech. Hung well off. POH with rods & pump. Bled casing. Remove tree. Install BOPE. Rig tbg. tools. Pull & measure out with tbg. Rig Acme pump & lines. Close well in. SDFN.

7/18/89

Day 2. Make up Baker 5-1/2" 17# cement retainer. RIH with tbg. Set retainer @ 4494'. Stab out of retainer. Change well over to clean lease water (90 bbls.). Stab into retainer. Pump 10 bbls. lease water. Establish rate of 2.5 BPM @ 30 psi. Pumped 5 bbls. fresh water @ 2.5 BPM 30 psi followed with 50 sx Class "G" neat cement. Displaced with 16 bbls. lease water & stabbed out of retainer. Pulled tbg. to 4434' & reverse hole clean. (Final squeeze pressure 400 psi below stab out.) Displace with 89 cf lease water. Recover 1.5 bbls. cement. POH with tbg. Install shooting flange. Close well in. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "FERNDALE 401" — SEC. 15, T4N, R21W, SBB&M
A.P.I. #111-21537 — ERIC R. WILSON, DIVISION ENGINEER

EW 9/8

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

PAGE 17

7/19/89

Day 3. RU Schlumberger. Perforate 5-1/2" casing using high efficiency casing guns and (4) 90 degree JSPF as follows: 3220'-3251', 3253'-3260' (E Log depth). No blow was seen on #1 or #2 run. Well was on medium vacuum. RO Schlumberger. RIH and lay down 47 jts. 2-3/8" tbg. Make up 45 degree collar, 1 jt. and 2" API T/L shoe. RIH with tbg. Clean and load out tbg. tools. Remove BOPE. Install tree. RO Acme mud pump. RIH & lay down 49 3/4" rods. Pick up exchange pump. RIH with rods. Space well out. Pressure test to 350 psi. Hang well on. Rig mast down. SDFN. Note: Well filled when tbg. was @ 3000'. Indicates a 5 bbl. fluid gain. Tbg. tail @ 3141'.

7/27/89

Day 1. MIRU Oilwell. Bled tbg. Rig for rods. Pull rods & pump. LD 34 3/4" rods. Bled casing. Unbolt wellhead. Remove tree. Bolt on N/L Acme mechanical gate. Rig for tbg. SDFN.

7/28/89

Day 2. Make up Baker Model K-1 cement retainer. RIH & set @ 3047'. Rig pump. Pump fluid into formation @ 1/4 BPM @ 1000 psi. Final pressure 1200. Fill casing with lease water. RU Halliburton. Pressure casing to 500 psi. Break down formation with 7.5 bbls., 2-1/2 BPM @ 1550. Mix & pump 50 sacks Class "G" cement with additives. Displace with 11 bbls. water. Avg. rate = 2 BPM @ 1550#. Final press. = 1750#. RO Halliburton. Pull out of retainer. Pull & lay down 2 jts. tbg. Rig pump. Backscuttle well clean. Very small amount of cement returns. Pull tubing. Lay down extra tbg. & measure. Bolt on shooting flange. Close well in. SDFN.
Note: Perfs cemented 3220'-3251' & 3253'-3260 (E-Log depths).

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "FERNDALE 401" — SEC. 15, T4N, R21W, SBB&M
A.P.I. #111-21537 — ERIC R. WILSON, DIVISION ENGINEER

EW 9/8

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

PAGE 18

8/29/89

Day 3. Fill casing with lease water. RU Schlumberger. Perf well @ 2 (0.37") JHPF @ 2150'-2141' & 2139'-2115' (E-Log depths). No blow on well after perf. RO and load out pump. RO Schlumberger. RU and run 1 jt. 2-3/8" with STC, 2" T/L shoe & 68 jts. 2-3/8" tbg. Land on donut with shoe @ 2086' and tail @ 2117'. Remove BOPE. Bolt on wellhead. Make up tree. Rig for rods. Check & run exchange 2 x 1-1/2 x 16 and 68 3/4" rods. Seat pump. Respace well. Pressure tbg. to 350 psi with rig. Hang well on. RWTP @ 11-1/2 SPM thru #15 bean @ 1:30 p.m. RDMO. Note: 34 3/4" rods from well to stock & 34 jts. 2-3/8" EU8 tbg. to stock.

8/2/89

Day 4. Bled tubing. Rig for rods. Pull rods & pump. Bled casing. Unbolt wellhead. Remove tree. Bolt on N/L Acme mechanical gate. Pull tubing. Make up entry nipple, 1 jt. 2-3/8" tbg., 2" API T/L shoe & Guiberson Uni-Packer VI. RU A&F Testers. Test packer & 34 stands 2-3/8" tbg. to 6000 psi. RO testers. Rig pump. Fill well with lease water. Pull and lay down 2 jts. tbg. Pump fluid away @ 1-1/2 minutes @ 1300 psi. Pump away 8 bbls. SDFN. Note: Packer @ 2031' and tail @ 2062'.

8/3/89

Day 5. Set packer. Land tubing on donut with 2,000 set weight with packer @ 2031' and tail @ 2062'. RU B.J. pump truck. Pressure casing to 500 psi. Pump on B.J. truck quit working. Close well in. SDFN.

8/4/89

Day 6. RU B.J. pump truck. Pump 1-1/2 bbls. lease water. Follow with 23 bbls. 7.5% HCl + additives & Xylene 80-20. Drop 4 balls per 1 bbls. fluid. Displace with 10 bbls. lease water 2100 psi avg. @ 3-1/2 bbl/min. 2400 psi max. ISIP = 1400 psi. Theor FG = 1.1. RO B.J. Rig guage to tbg. Check pressures & let bleed to formation. SDFN. Note: Had 500# on csg. during stimulation job.

Time	Pressure	Time	Pressure
8:55	1400	10:30	220
9:30	270	11:00	170
10:00	220	11:30	150

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "FERNDALE 401" — SEC. 15, T4N, R21W, SBB&M
A.P.I. #111-21537 — ERIC R. WILSON, DIVISION ENGINEER

EW 9/8

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

PAGE 19

8/5/89

Day 7. 90 psi on tbg. Bled tbg. Release packer. Run packer to 2176' & tail to 2207'. Lay down extra tbg. Pull tbg. & packer. Run STC, 1 jt. 2-3/8", 2 API T/L shoe & 68 jts. 2-3/8" tbg. Land tubing on donut with shoe @ 2086' & tail @ 2117'. Remove BOE. Bolt on wellhead. Make up X-mas tree. Load out pump. Rig for rods. Check & run 2 x 1-1/2 x 20 -005 RWA acid pump & 68 3/4" rods. Seat pump. Pressure tbg. to 300 psi. Hang well on. Clean & load out rod & tbg. tools. Load out BOE. Lay mast down. RWTP @ 10 SPM. RDMO.
Note" Perfs @ 2115'-2139' & 2141' - 2150'.

8/10/89

Day 1. MIRU Oilwell. Bled tbg. & csg. Rig for rods. Pressure tbg. to 375 psi with rig. Pull rods & pump. Rig pump. Fill well with fresh (S.P) water. Unbolt wellhead. Remove tree. Bolt on N/L Acme hydraulic gate. Test pipe rams. Rig for tbg. Pull tbg. RU Welex. Fill casing with fresh water. Perf well with 4 (0.44") JHPF @ 2319'-2339' & 2229'-2244', (E-Log depth). No blow after perf. All shots fired. RO Welex. Run 1 jt. 2-3/8" with STC, 2" API T/L shoe, Guiberson Uni-VI packer & 68 jts. 2-3/8" EU8 tbg. Packer @ 2084'. SDFN.

8/11/89

Day 2. Bled tubing & casing. Run packer to 2209' & set with 2,000 set down weight. Rig swab tree & pump. Pump fresh water into perfs @ 2229'-2244' & 2319'-2339'. Pump 1-1/2 BPM @ 1200 psi, 1-1/2 BPM @ 1500 psi & 3-1/2 BPM @ 2100 psi. Pumped total 25 bbls. into formation. 1500 psi ISIP. Bled to 100 psi in 25 minutes. Rig swab equipment. Swab tbg. Run 1, pull 1500' fluid. Rest of runs pull from 2200'. Swab fluid to 2200', 13 bbls. Let set 1 hour. Fluid @ 1400'. Swab 3 bbls. Set 1 hr. Fluid @ 1660'. Swab 1-1/2 bbls. Set 1 hr. Fluid @ 1793'. Swab 1 bbl. Swab total 18-1/2 bbls. water.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "FERNDALE 401" — SEC. 15, T4N, R21W, SBB&M
A.P.I. #111-21537 — ERIC R. WILSON, DIVISION ENGINEER

EW

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

PAGE 20

8/12/89
Day 3. 140 psi on tbg. Rapid bleed off. Run swab. Fluid level @ 735'. Swab fluid from 2200', 55 bbls. Let set 1 hr. Fluid @ 1880'. Swab 1 bbl. Let set 1 hr. Fluid @ 1990'. Swab 1.5 bbls. Let set 1 hrs. Fluid @ 1990'. Swab .3 bbls. Swab total 8.3 bbls. today. Total swab 26.8. 1.8 bbls. from formation. LD swab equipment. Rig for tbg. Release packer. Close well in. SDFN.

8/13/89
Day 4. Bolt on B.J. frac head. Rig line. Break down swab equipment. Frac well per program. Frac with 857 bbls. gel water. 21,000# 20/40 sand. Max. conc. = 2#/gal. Sand out perfs = 18,900#. Avg. rate = 30 BPM. Avg press. = 2200 psi. 30.5 BPM max. rate. 2600 max. press. Flush with 19 bbls. fresh water. BOE failure shut down frac job. Secure well. Close well in until Monday with 540 psi @ 1:50 p.m. Note: Did not record breakdown, F.G., or holes open. No pre pad was pumped. HHP = 1563.

8/14/89
Day 5. Shut down.

8/15/89
Day 6. 10 psi on well. Rig line to production tank. Bled well. Bled back 6 bbls. Remove frac head. Close well in with donut. Remove BOE. Change rams. Bolt on BOE & test pipe rams. Rig for tbg. Run 2-3/8" STC, 1 jt. 2-3/8", 2" T/L shoe & tbg. to 1015'. Rig pump. Backscuttle well. Run tbg. to 1621'. Backscuttle well. Run tbg. to 2228'. Backscuttle well. Pick up tbg. Tag fill @ 2705'. Pull tbg. to 2680'. Backscuttle well clean. Pull and lay down extra tbg. Land tbg. on donut with 68 jts. to shoe @ 2086', 1 jt. with STC @ 2117'. Remove BOE. Bolt on wellhead. Make up X-mas tree. Load out mud pump. Small flow back through tbg. & csg. Open well to production tank. SDFN. Note: 14/64" bean in tbg. & 16/64" bean in csg.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION — OJAI FIELD — VENTURA COUNTY
WELL: "FERNDALE 401" — SEC. 15, T4N, R21W, SBB&M
A.P.I. #111-21537 — ERIC R. WILSON, DIVISION ENGINEER

EW 9/8

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

PAGE 21

8/16/89

Day 7. 50 psi on well. Well flowed 52 bbls. Bled pressure. Rig for rods. Well flowed small amount. Check & run exchange 2 x 1-1/2 x 16 - 005 RWA acid pump and 68 3/4" rods. Seat pump. Pressure tbg. to 300 psi with rig. Clean & load out rod & tbg. tools. Hang well on. Lay mast down. RWTP through #19 bean on tubing and #16 bean on casing. Note: 799 bbls. fluid to recover.

RESERVOIR POTENTIAL - FORMATION SENSITIVITY ANALYSIS: MONTEREY SHALE AND MOHINIAN SANDSTONE ZONES SENECA RESOURCES FERNDALE 401 REDRILL NO. 3 WELL VENTURA COUNTY, CALIFORNIA

DIVISION OF OIL AND GAS
RECEIVED
OCT 2 1989
VENTURA, CALIFORNIA

Report Prepared For:

Mr. Jim Beck
Seneca Resources
725 E. Main Street, Suite 200
Santa Paula, CA
93060

June 16, 1989

David K. Davies & Associates, Inc.
1410 Stonehollow Drive
Kingwood, Texas 77339
(713) 358-2662

TABLE OF CONTENTS

Page

SUMMARY..... 1

INTRODUCTION..... 2

DESCRIPTION OF THE MOHINIAN SANDSTONE INTERVAL..... 3

DESCRIPTION OF MONTEREY "SHALES"..... 5

TREATMENT RECOMMENDATIONS..... 7

TABLES

TABLE 1 - LIST OF SAMPLES AND ANALYSES..... 9

TABLE 2 - THIN SECTION PETROGRAPHY..... 10

TABLE 3 - SHALE DISTRIBUTION..... 11

TABLE 4 - X-RAY DIFFRACTION..... 12

TABLE 5 - SUMMARY OF WHOLE ROCK ANALYSIS..... 13

TABLE 6 - POTENTIAL FORMATION DAMAGE MECHANISMS..... 14

FIGURES 1-10 - THIN SECTION PHOTOMICROGRAPHS AND SCANNING ELECTRON MICROSCOPY..... 15-24

SUMMARY

Mohinian Sand Zone- This portion of the cored sequence consists of fine grained (0.21 mm), poorly sorted, sandstone. The rock consist predominantly of monocrystalline quartz and plagioclase feldspar. Intergranular porosity has been substantially reduced due to cementation by dolomite, siderite, and authigenic clay as well as smaller quantities of authigenic silica, feldspar, and pyrite. The clay cement in this sandstone consists largely of illite-smectite (30%) smectite layers and kaolinite. Thin section analysis reveals that the sandstone has 16 percent porosity (largely intergranular in nature). The rock is moderately permeable and could contribute to fluid production if tested. This reservoir zone is not susceptible to damage from contact with fresh water based fluids. The sandstones are highly susceptible to damage from clay particle migration and pore throat blockage effects. The formation is also susceptible to damage from contact with HCl and HF acid and from the formation of acid-oil emulsions.

Monterey "Shale" Zone- Rocks comprising this interval are very fine grained and poorly sorted. Three of the four sampled intervals (2143, 2166, 2240 ft) are siliceous (cherty) shales. These rocks consists of a groundmass of shale and cristobalite. One sample (4660 ft) is a silty shale containing very little authigenic silica. The 4660 foot shale sample is essentially non-porous and impermeable. The siliceous portions of the sequence are characterized by development of microporosity (pores <0.1 micron size). Micropores are poorly interconnected resulting in low formation permeability. Microfractures visible within the 2143 and 2166 foot samples could act as conduits for fluid flow to the wellbore.

Rocks comprising the Monterey Formation are not fresh water sensitive, HCl acid sensitive, or susceptible to damage from clay particle migration and pore throat blockage effects. The rocks are highly susceptible to damage from plugging of small intercrystalline pores by solids. The microcrystalline silica phase of the rocks could react with HF acid to form secondary precipitants which could damage near wellbore permeability.

Richard K. Vessell, Ph.D.
Vice President-Operations

David K. Davies, Ph.D.
President
Certified Professional
Geologist No. 4188

SENECA RESOURCES FERNDALE 401 REDRILL NO. 3 WELL

INTRODUCTION

This report summarizes the results of thin section, X-ray diffraction, and scanning electron microscope analyses performed on five (5) sidewall core samples recovered from the Mohinian sandstone zone and the Monterey "shale" zone in the Seneca Resources Ferndale 401 Redrill No. 3 Well, Ventura County, California (Table 1). The study was initiated to evaluate the lithological, compositional, reservoir quality, and fluid sensitivity characteristics of rocks comprising the interval of interest. Information concerning bulk rock composition, cement composition, and clay mineralogy will be utilized in the selection of nondamaging completion fluids.

The results of thin section point count analysis are summarized in Tables 2, 3, and 5 and as a series of color photomicrograph plates. X-ray diffraction analysis is presented in Table 4. Scanning electron photomicrographs of each sample, illustrating development of porosity and cementation, are presented as a series of black and white plates in the back of this report.

Our interpretations and recommendations are based solely on the analyses performed in this study. We make the assumption that all samples are truly representative of the intervals of interest. All data, interpretations and recommendations presented in this report are considered highly confidential, and the sole proprietorship of Seneca Resources. Four (4) copies of this report have been forwarded to Mr. Jim Beck of Seneca Resources, Santa Paula, California. David K. Davies and Associates retains one copy of this report for possible use in future consultation with authorized personnel on specific details relating to this study.

DESCRIPTION OF THE MOHINIAN SANDSTONE INTERVAL

Lithology-Texture- This potential reservoir zone is represented by a single sidewall core sample (5927 ft). The sample is a fine grained sandstone. The mean grain size of the rock is 0.21 mm (Table 2). The sandstone is poorly sorted. Poor sorting reflects both the large standard deviation of framework grain sizes and the occurrence of large amounts of depositional shale in the rock.

Framework sand grains are angular to subangular in shape. Compaction has resulted in the development of close grain packing, ductile grain deformation, and the loss of porosity and permeability.

Composition- The sandstone sample consists predominantly of monocrystalline quartz (20%), plagioclase feldspar (13%), and igneous rock fragments (8%). Polycrystalline quartz, chert, muscovite and biotite mica, potassium feldspar, metamorphic rock fragments, and the heavy mineral epidote are less abundant framework grain constituents.

Cementation- Intergranular porosity has been substantially reduced due to cementation. Cements comprise 17 percent of the bulk volume of the sandstone. The most abundant cementing agents in the rock are dolomite (9%), siderite (3%), and authigenic clay (4%). The rocks contain much smaller amounts of authigenic silica overgrowths, feldspar overgrowths, and pyrite.

Nature And Distribution Of Shale- Shale forms 20 percent of the bulk volume of the sandstone (Table 3). Most of the shale in the rock occurs as thin laminae of depositional shale (16%) which alternate with layers of clean sandstone. The clean sandstone layers also contain dispersed pore filling kaolinite clay cement (4%).

Clay Mineralogy- The shale component of the rock consists of three clay minerals; illite, mixed layer illite-smectite, and kaolinite (Table 4). Illite-smectite and kaolinite are the most abundant clay mineral constituents of the rock. The illite-smectite consists of 30% expandable smectite layers and 70% non-expandable illite layers.

Illite is largely depositional in origin and occurs as thin laminae within the rock. Illite-smectite is both depositional and authigenic. The authigenic illite-smectite is a pore lining clay cement. The kaolinite in the sandstone is entirely authigenic and occurs as pore filling aggregates.

Pore System Geometry- Thin section point count analysis reveals that the sandstone has 16 percent total porosity (Table 5). Most of the porosity in the sandstone is intergranular macroporosity. The rock also contains smaller quantities of secondary dissolution porosity and microporosity associated with pore filling and pore lining clay cement. The rock is moderately permeable. The rock pore system is capable of yielding fluids to the wellbore if tested.

Potential For Formation Damage- The sandstone sample contains mixed layer illite-smectite clay cement. However, our analyses reveal that the illite-smectite contains very few expandable smectite layers (30%). Thus, the potential for formation damage from clay swelling will not be serious.

The rock pore system does contain large amounts of loosely bound, booklet-like aggregates of kaolinite clay cement. The kaolinite clay fines have morphologies rendering them susceptible to dislodgement under conditions of high fluid turbulence. Particles dislodged in this fashion will migrate into and block pore throat opening resulting in the loss of near wellbore permeability. Damage attributable to this source could be severe (Table 6). Particle migration and pore throat blockage effects could be minimized by limiting the differential pressure into the wellbore during perforation and by treating the formation with a clay stabilizing polymer designed for silt and clay sized fines.

The sandstone has limited susceptibility to damage from contact with HCl acid or oxygenated fluids. HCl acid sensitivity would result from the occurrence of siderite in the rock pore system. Iron dissolved from siderite could form secondary iron-hydroxide precipitants from spent acid. Damage attributable to this source could be minimized by utilizing weak acid, by blending an iron chelating agent such as EDTA into the acid, and by recovering the acid from the formation before it has entirely spent.

The sandstone sample will also be susceptible to damage from the formation of secondary fluoaluminates and fluosilicates and from CaF_2 precipitation from spent HF acid. HF will react with sodium, calcium, and potassium ions liberated from partially dissolved clays, feldspars, and dolomite to form these compounds.

Other potential damage mechanisms for this sandstone reservoir zone include possible formation of acid-oil emulsions and solids blockage of pores and pore throats by lost solids.

DESCRIPTION OF MONTEREY "SHALES"

Texture- Four (4) sidewall core samples from the Monterey "shale" were forwarded for analysis (2143, 2166, 2240, 4660 ft). The rocks are very fine grained (0.01-0.02 mm) and poorly sorted (Table 2).

Lithology-Composition- Three of the four sampled intervals (2143, 2166, 2240 ft) originally consisted of mixtures of diatomaceous tests and depositional shale. During burial diagenesis the opaline silica tests were altered to cristobalite. Cristobalite partially replaced the shale groundmass of the rocks. This rock groundmass of siliceous shale and cristobalite supports scattered silt sized grains of monocrystalline quartz, plagioclase feldspar, volcanic rock fragments, and shell fragments (largely globigerinid foraminifera). Portions of the rock groundmass have been replaced by dolomite, pyrite, or calcite.

One (1) of the core samples from this zone is a shale (4660 ft). The rock groundmass consists largely of depositional shale (57%) as well as small amounts of cristobalite (4%). This fine grained rock groundmass supports scattered silt sized grains of monocrystalline quartz, feldspar, and igneous rock fragments. Portions of the rock shale groundmass have been replaced by authigenic pyrite.

Porosity- No porosity is visible in thin sections prepared of the "shale" samples. Scanning electron microscopy reveals that the siliceous portions of the 2143, 2166, and 2240 foot samples are characterized by development of microporosity. Micropores exist between silica microcrystals within the cristobalite. These micropores are less than 0.1 micron in diameter. Micropores are poorly interconnected resulting in low formation permeability. Microporosity is best developed within the 2143 foot sample. The 4660 foot shale sample is dense and non-porous.

Fracturing- Reservoir drainage may be enhanced by natural fracturing. Microfractures visible within the 2143 foot sample are open and could act as conduits for fluid flow to the wellbore. The 2166 foot sample is also naturally fractured. Fractures visible within this rock are partially healed by dolomite and zeolite cement.

Reservoir Potential- Rocks comprising the siliceous portions of the Monterey Formation (2143, 2166, and 2240 ft) in this well are porous, but have very low permeability. The pore system of the rocks consist exclusively of micropores. Micropores are not effectively connected. The micropore system of the rocks is expected to yield fluids to the wellbore at low rates of production, if at all. The 4660 foot shale sample is not expected to contribute to fluid production at all.

Potential For Formation Damage- Siliceous rocks comprising the Monterey Formation in this well have limited susceptibility to damage from contact with fluids. The rocks are devoid of expandable smectite or clay fines with morphologies rendering them susceptible to dislodgement under conditions of high fluid turbulence. Thus, the potential reservoir zones are not fresh water sensitive or susceptible to damage from clay particle migration and pore throat blockage effects. The rocks also lack mineral phases which will react with HCl acid to form secondary iron hydroxide compounds.

The Monterey reservoir rocks are highly susceptible to damage from plugging of small intercrystalline pores by solids. The microcrystalline silica phase of the rocks is also susceptible to damage from contact with HF acid.

TREATMENT RECOMMENDATIONS

Drilling-Cementing- The Mohinian sandstone reservoir zone contains very little expandable clay and has very limited susceptibility to damage from contact with fresh water based fluids. The Monterey "shales" lack swellings clay minerals and will not be susceptible to damage from contact with fresh water based fluids. Thus, it will be possible to use fresh water based drilling mud systems without causing serious formation damage in both the Monterey "shale" and Mohinian sandstone zones. Cements may be made up in fresh water. The fresh water mud filtrate will not cause formation damage in any of the potential reservoir zones.

Completion Fluid Selection- The Mohinian sandstone zone has limited susceptibility to damage from clay swelling. The Monterey "shale" zone is not fresh water sensitive. Thus, it will not be essential to utilize a completion fluid capable of inhibiting clay swelling in either zone. A brine such as 2% KCl water will be compatible with both formations. The brine should be filtered to the 2-5 micron size range with D.E. or cartridge filters and should contain 2 gallons/1000 gallons of nonionic surfactant and clay stabilizing polymer. The brine may be viscosified with HEC.

Perforating- The Mohinian sandstone zone contains large amounts of kaolinite clay fines and will be highly susceptible to damage from clay particle migration and pore throat blockage effects promoted by high formation/wellbore pressure differentials. In addition, the sample is poorly indurated and could fail mechanically if a high differential pressure is drawn across the formation face. These two damage mechanisms may be minimized by perforating with a low negative differential pressure (200-500 psi). We recommend shooting at least 4 shots per foot 90 degrees out of phase. A high density of perforations could be required if this single sample is representative of the reservoir zone and the rocks are thinly laminated.

The Monterey "shale" zones do not contain clay fines with morphologies rendering them susceptible to damage from clay particle migration and pore throat blockage effects. These potential reservoir rocks may be safely perforated with a large negative differential pressure. The rocks are also extremely well indurated and are not susceptible to mechanical failure if high differential pressures are drawn across the formation face.

Clean-up-

A) Mohinian Sandstone Zone- Perforations may be balled out with acid to remove debris in perforation tunnels and at the formation face. The most appropriate acid to utilize for this purpose would be staged HCl-HF acid.

Stage 1- 100-200 gallons per foot of 7.5-10% HCl acid containing the following additives per 1000 gallons:

a) 2 gallons of nonionic surfactant
b) Corrosion inhibitor
c) Iron chelating agent (E.D.T.A. or 20-30 lbs/1000 gallons of citric acid)
d) Non-emulsifying surfactant or a volume of mutual solvent
e) Diverter

Stage 2- 100-200 gallons per foot of 6-7.5% HCl and 1.5% HF containing the additives noted above.

Stage 3- Overflush of diesel or lease crude or 2-3% ammonium chloride containing 2 gallons/1000 gallons of the nonionic and non-emulsifying surfactant additives.

B) Monterey "Shale" Zone- Microcrystalline silica phases in these rocks as well as fracture filling dolomite and zeolite could react with HF acid used in stimulation to form secondary fluosilicate, fluoaluminate, and CaF_2 precipitants which could reduce near wellbore permeability and flow rate. Damage attributable to these sources could be minimized by limiting formation contact with HF acid. The safest, nondamaging fluid to utilize in balling out perforations would be diesel or lease crude containing mutual solvent. If the decision is made to ball out perforations with acid, an HF acid treatment of the type outlined for the Mohinian sand zone could be attempted. We recommend that if such an acid treatment is attempted, the acid be recovered as quickly as possible from the formation in order to minimize potential damage associated with the formation of harmful secondary precipitants.

TABLES

TABLE 1

ANALYSES PERFORMED
Ferndale 401 Redrill No. 3 Well

Sample No. D2443	Depth (ft)	Zone/ Formation	Thin Section	X-Ray Diffraction	Scanning Electron Microscopy
001	2143	Monterey Shale	X	X	X
002	2166	Monterey Shale	X	X	X
003	2240	Monterey Shale	X	X	X
004	4660	Monterey Shale	X	X	X
005	5927	Mohinian Sand	X	X	X

TABLE 2

THIN SECTION PETROGRAPHY
Ferndale 401 Redrill No. 3 Well

Depth (ft)	2143	2166	2240	4660	5927
Sample No. D2443	001	002	003	004	005
Grain Size (mm)	0.01	0.01	0.01	0.02	0.21
Overall Sorting		PS	PS	PS	PS
GRAIN COMPOSITION					
Mono Quartz	4	4	2	26	20
Poly Quartz	-	Tr	-	-	5
Chert	-	-	-	-	Tr
Muscovite	-	-	-	-	Tr
Biotite	-	Tr	-	-	1
K-Feldspar	-	-	Tr	Tr	4
Plagioclase	4	3	5	4	13
Igneous RF`s	1	-	-	3	8
Metamorphic RF`s	-	-	-	-	Tr
Sandstone RF`s	-	-	-	-	-
Shale Fragments	-	-	-	-	-
Glauconite	-	-	-	-	-
Carbonate Fragments	6	4	7	-	-
Bitumen	-	-	-	-	Tr
Epidote	-	-	-	-	Tr
DEPOSITIONAL SHALE					
Laminar	-	-	-	-	16
Dispersed	80*	87*	80*	57	-
CEMENTS					
Clay	Tr	-	-	-	4
Silica	-	-	-	4**	1
Calcite	-	-	Tr	-	-
Dolomite	4	-	-	-	9
Siderite	-	-	-	-	3
Pyrite	1	1	3	6	Tr
Feldspar	-	-	-	-	Tr
Zeolite	Tr	Tr	-	-	-
POROSITY					
Pores	Tr	1	3	0	16
TOTALS					
Quartz/Chert	4	4	2	30	26
Shale/Clay	80	87	80	57	20
Carbonates	10	4	7	0	12
Other Minerals	6	4	8	13	26
Porosity	Tr	1	3	0	16
Total Percentages	100	100	100	100	100

*Mixture of diatomaceous test and shale.
**Cristobalite

TABLE 3

SHALE DISTRIBUTION
Ferndale 401 Redrill No. 3 Well

Sample No. D2443	Depth (ft)	Laminar Shale	Structural Shale	Dispersed Shale	Total Shale(TS)
001	2143	0	0	80	80
002	2166	0	0	87	87
003	2240	0	0	80	80
004	4660	0	0	57	57
005	5927	16	0	4	20

TS = Total shale volume derived from thin section analysis.

TABLE 4

X-RAY DIFFRACTION MINERALOGY
Ferndale 401 Redrill No. 3 Well

Depth (ft)	2143	2166	2240	4660	5927
Sample No. D2443	001	002	003	004	005
CLAYS					
Smectite	-	-	-	-	-
Illite-Smectite(*)	-	-	-	10	11
Illite	Tr	Tr	Tr	25	3
Kaolinite	-	-	-	8	7
Chlorite	-	-	-	-	-
Others	-	-	-	-	-
CARBONATES					
Ankerite	-	-	-	-	-
Calcite	6	20	17	-	-
Dolomite	-	-	-	-	8
Siderite	-	-	-	-	3
Others	-	-	-	-	-
OTHER MINERALS					
Quartz	14	12	11	30	38
K-Feldspar	2	-	-	7	12
Plagioclase	4	2	3	13	18
Pyrite	2	2	3	7	-
Anhydrite	-	-	-	-	-
Cristobalite	72	64	66	-	-
DRILL SOLIDS					
Bentonite	-	-	-	-	-
Halite	-	-	-	-	-
Barite	-	-	-	-	-
TOTALS					
Total Clays	Tr	Tr	Tr	43	21
Total Carbonates	6	20	17	0	11
Total Other Minerals	94	80	83	57	68
Total Drill Solids	0	0	0	0	0
Total Percentages	100	100	100	100	100

(*) Mixed layered clay - contains 30% expandable smectite layers.

TABLE 5

SUMMARY OF WHOLE ROCK ANALYSIS AND POROSITY VARIETIES
Ferndale 401 Redrill No. 3 Well

	Depth (ft)	2143	2166	2240	4660	5927
	Sample No. D2443	001	002	003	004	005
	Grains %	15	11	14	33	51
	Matrix % *	80	87	80	57	16
	Cement %	5	1	3	10	17
POROSITY	Primary %	0	0	0	0	13
	Secondary %	0	0	0	0	2
	Micro %	Tr	1	3	0	1
	Total Porosity %	Tr	1	3	0	16
	Total Percentages	100	100	100	100	100

* Fines deposited simultaneously with the sand grains ("depositional shale").

TABLE 6

POTENTIAL FORMATION DAMAGE MECHANISMS
Ferndale 401 Redrill No. 3 Well

Sample No. D2443	Depth (ft)	Migration of Fines	Sensitivity		
			Fresh Water	HCl Acid	HF Acid
001	2143	-	-	Tr	+
002	2166	-	-	Tr	+
003	2240	-	-	Tr	+
004	4660	-	-	+	Tr
005	5927	X	Tr	+	Tr

X = Major potential for damage
\+ = Moderate potential for damage
Tr = Minor potential for damage
\- = No potential for damage

FIGURES

FIGURE 1

THIN SECTION PHOTOMICROGRAPHS

SENECA RESOURCES FERNDALE 401 REDRILL NO. 3 WELL

MONTEREY FORMATION

DEPTH: 2143 Feet **SAMPLE NUMBER:** D2443-001

GRAIN SIZE: 0.01 mm **SORTING:** Poorly Sorted

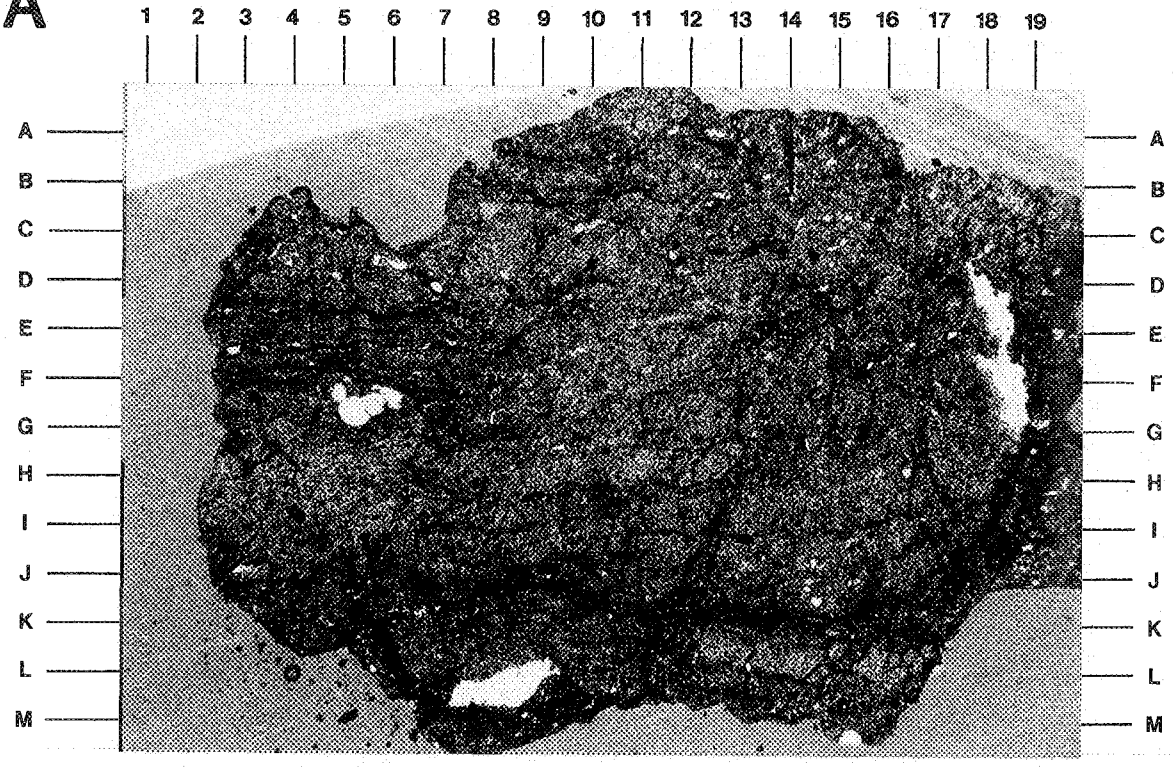
PHOTOGRAPH SCALE: A: Bar length represents 0.50 mm.
B: Bar length represents 0.125 mm.

ILLUMINATION: Plane Polarized Light.

Thin sections were impregnated with blue dyed epoxy resin and were stained for calcite (red). Macropores appear blue in these photomicrographs.

This sample from the 2143 foot interval in the well is a "chert". The rock groundmass consists almost entirely of cristobalite. Considerable amounts of microporosity exist within the cristobalite. Some drainage of the rock micropore system is provided by microfractures (photo B, C-2, F-3). These microfractures are partially healed by dolomite and analcime cement.

A


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
A B C D E F G H I J K L M

Scale

B

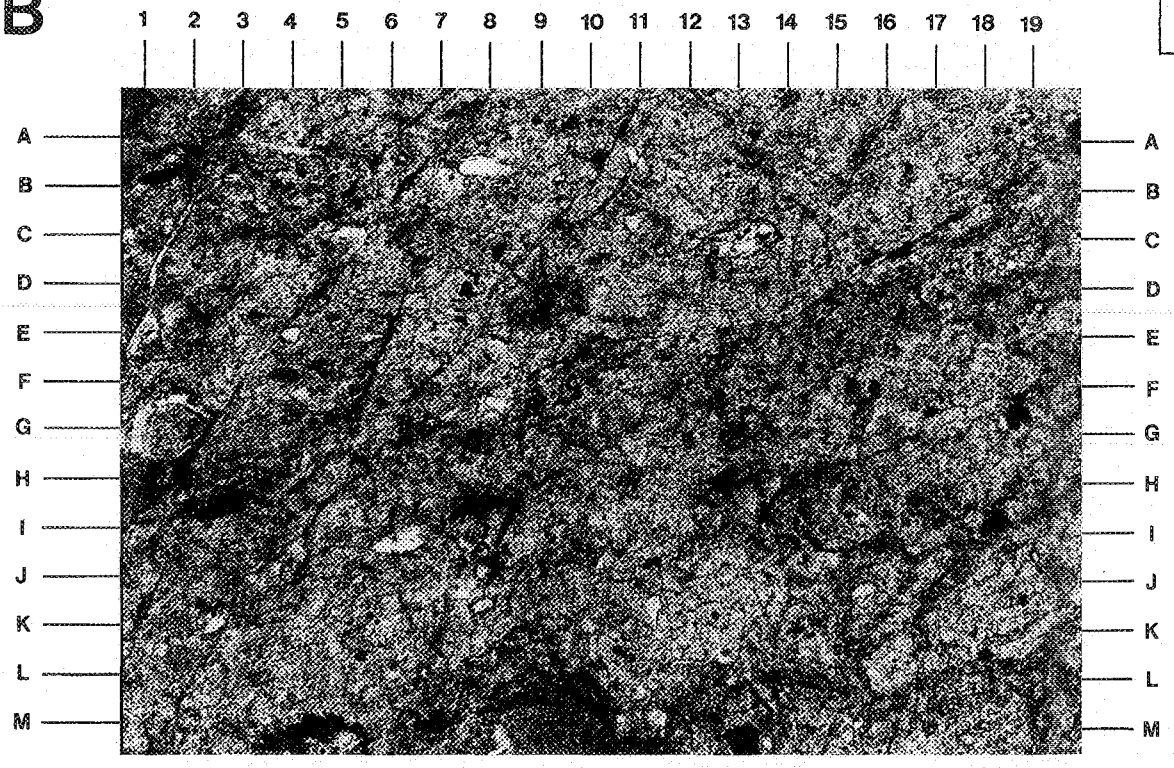

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
A B C D E F G H I J K L M

FIGURE 2

SCANNING ELECTRON MICROSCOPY

SENECA RESOURCES FERNDALE 401 REDRILL NO. 3 WELL

MONTEREY FORMATION

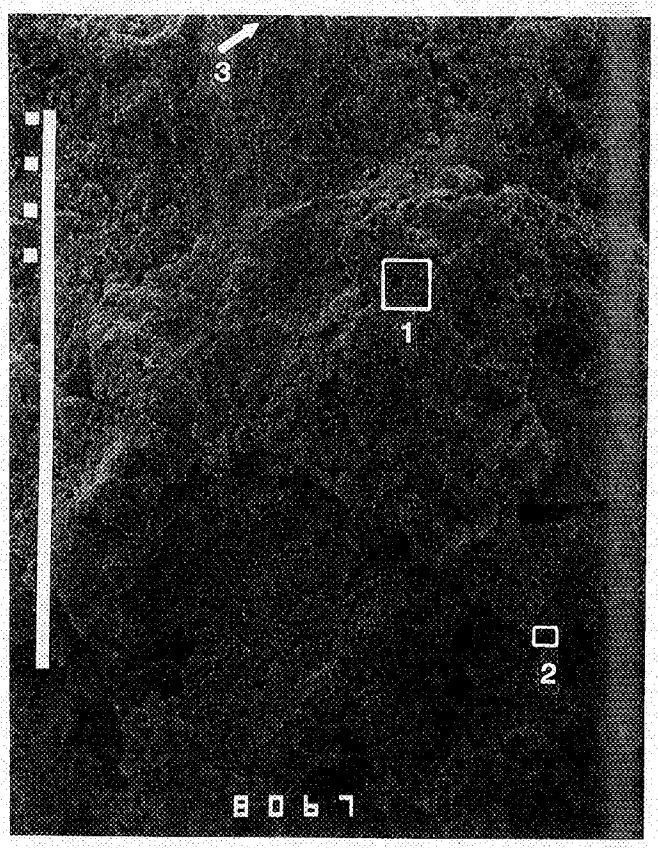
2143 Feet

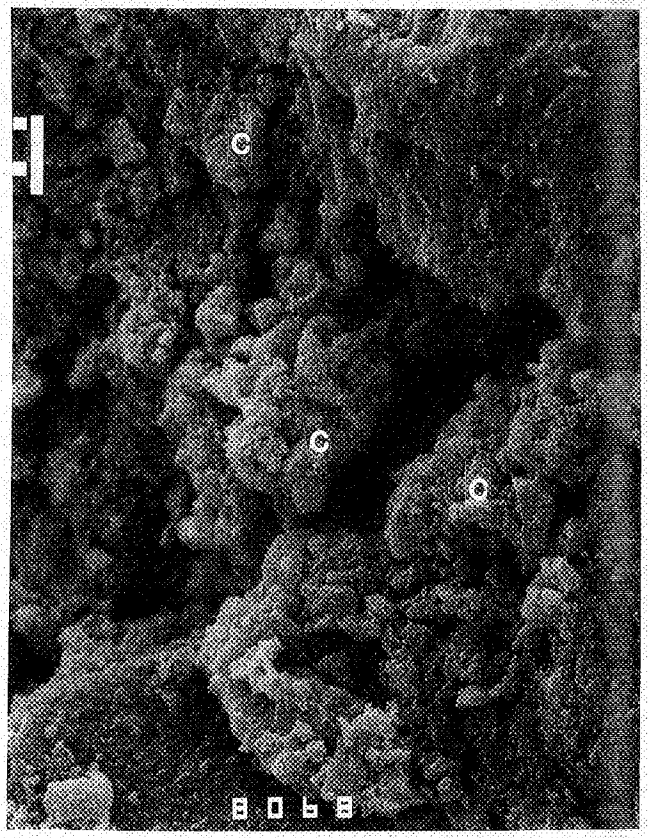
Photomicrograph	Bar Scale*	Magnification
8067	1000	70X
8068	10	1000X
8069	10	3000X
8070	1	10000X

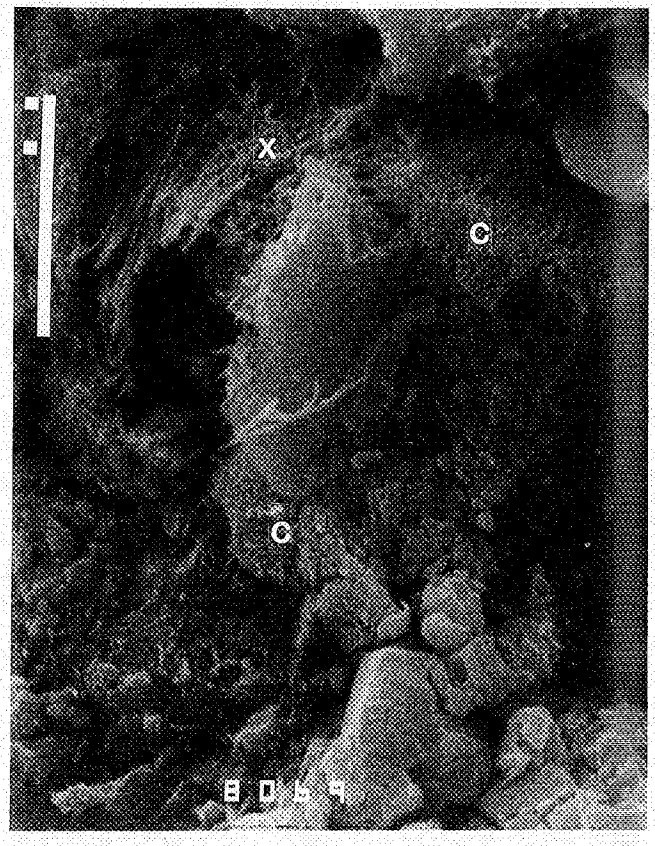
Photograph 8067 is a general view of the sample. Boxes labeled 1, 2, and 3 display the areas shown in high magnification photomicrographs (8068, 8069, and 8070).

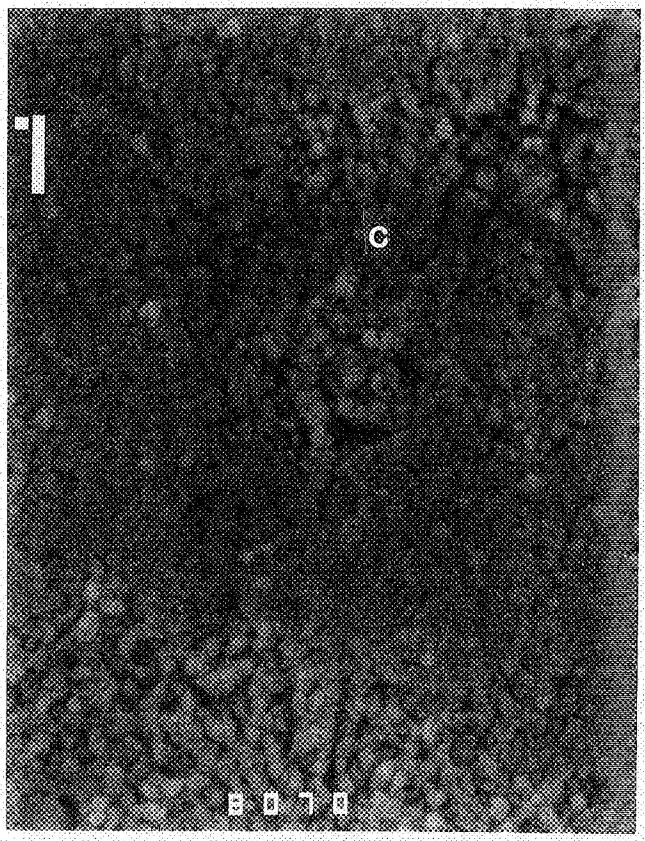
Scanning electron photomicrographs on the facing page display a core sample from the Monterey "shale". The rock actually consists largely of authigenic silica and could be more accurately described as a "chert". The silica phase in the rock is authigenic cristobalite (C). The cristobalite is interpreted as having formed by the diagenesis of opaline silica tests within the rock. Considerable amounts of microporosity exist within portions of the rock replaced by cristobalite. These micropores are approximately 0.1 microns in size and are poorly interconnected. Some drainage of the rock micropore system is provided by microfractures. Microfractures are partially occluded by dolomite and zeolite (X) cements.

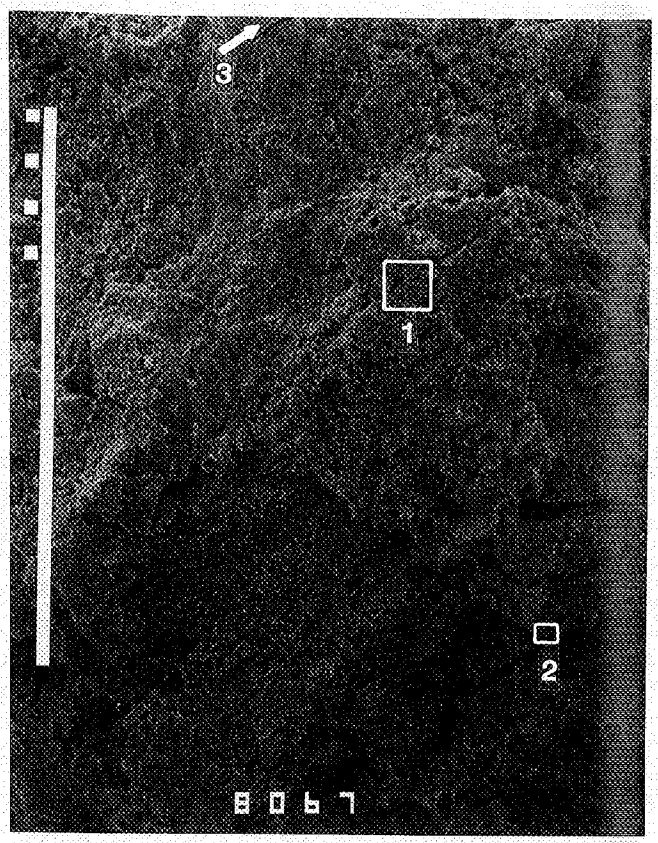
*Bar scale refers to the length, in microns, of the bar scale on the left margin of each photograph. (1000 microns=1 mm)

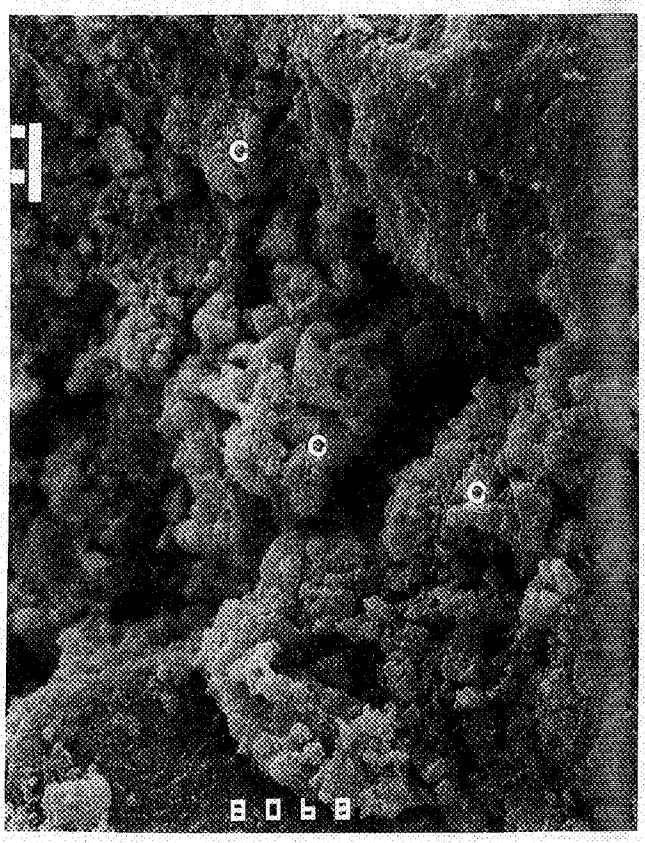

3
1
2
8067

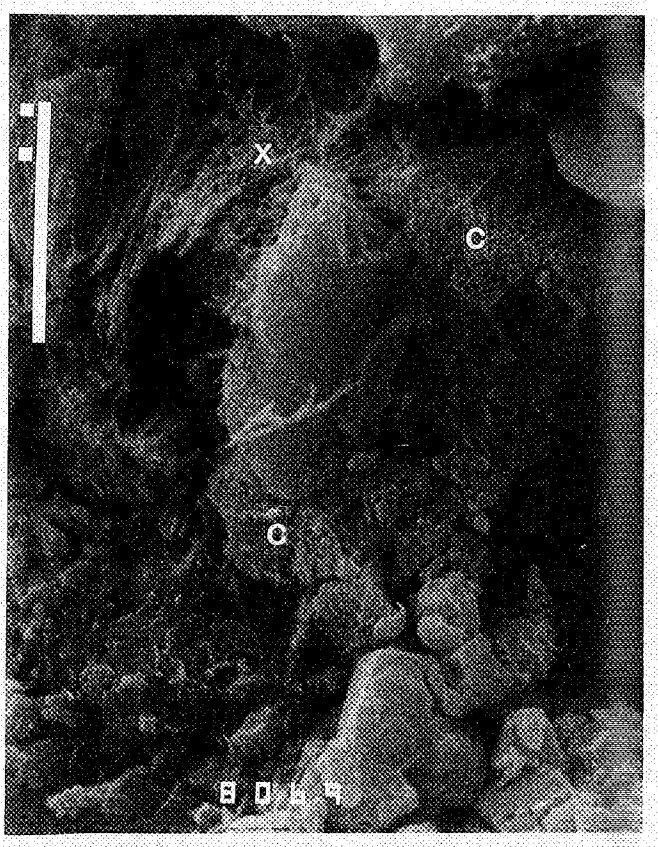

C
C
C
8068


X
C
C
8069


C
8070


3
1
2
8067


C
C
C
8068


X
C
C
8069

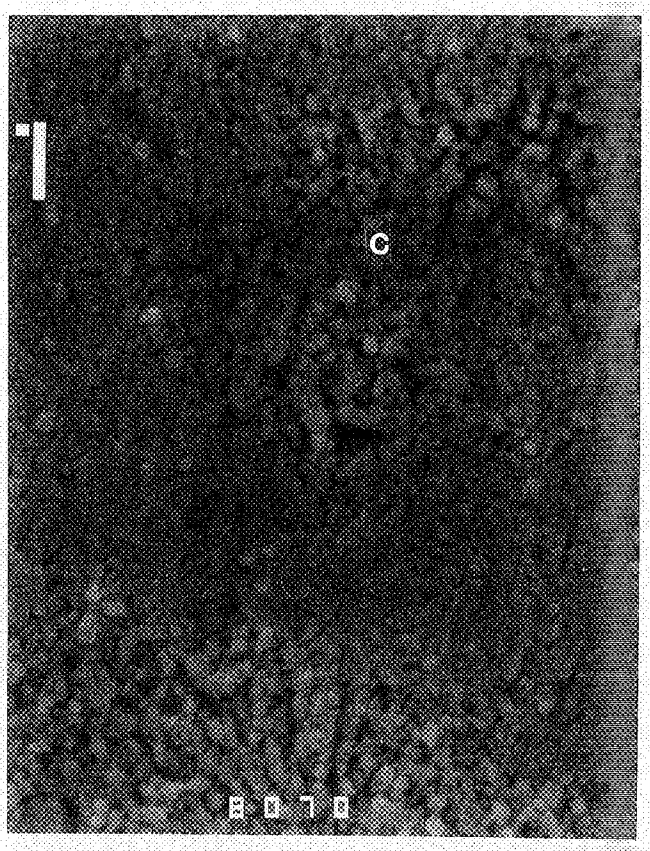

C
8070

FIGURE 3

THIN SECTION PHOTOMICROGRAPHS

SENECA RESOURCES FERNDALE 401 REDRILL NO. 3 WELL

MONTEREY FORMATION

DEPTH: 2166 Feet **SAMPLE NUMBER:** D2443-002

GRAIN SIZE: 0.01 mm **SORTING:** Poorly Sorted

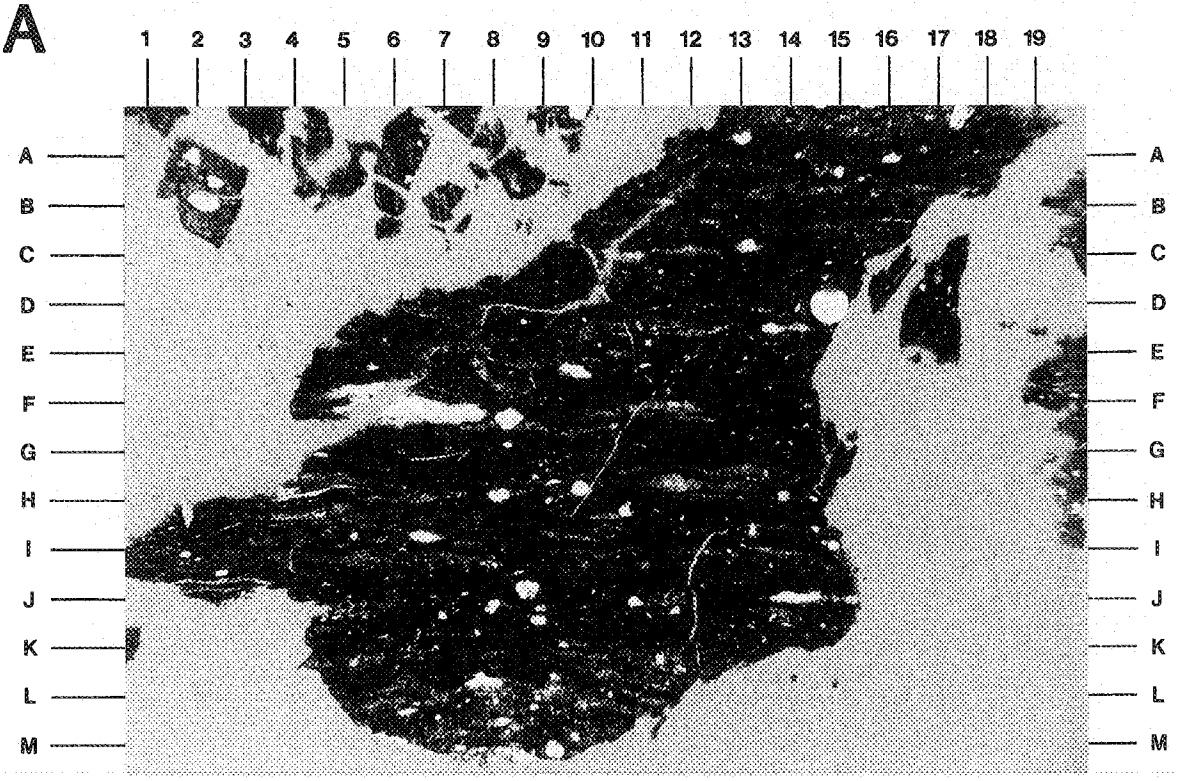
PHOTOGRAPH SCALE: A: Bar length represents 0.50 mm.
B: Bar length represents 0.125 mm.

ILLUMINATION: Plane Polarized Light.

Thin sections were impregnated with blue dyed epoxy resin and were stained for calcite (red). Macropores appear blue in these photomicrographs.

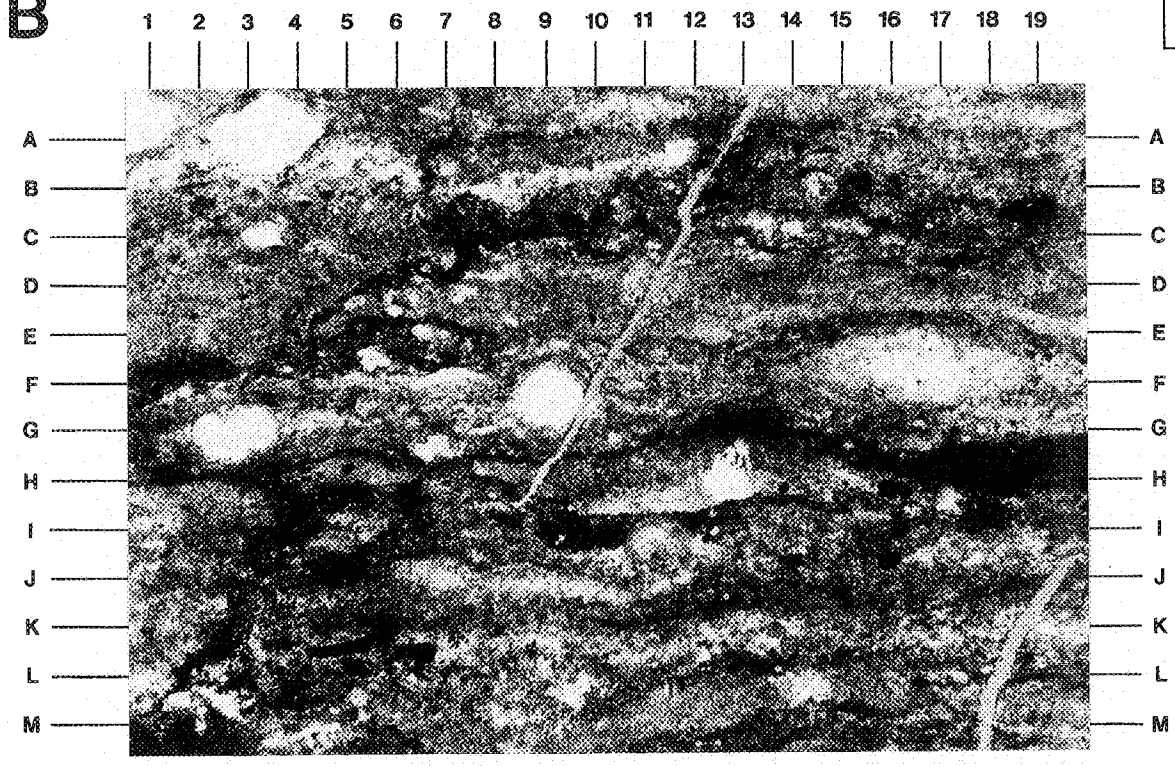
Color photomicrographs on the facing page illustrate the very poorly sorted, very fine grained nature of rocks comprising the 2166 foot interval in the well. The rock was originally a shale containing opaline silica tests. The opaline silica has recrystallized to cristobalite. The cristobalite rock groundmass is microporous. Micropores could trap hydrocarbons. Fractures visible in these photomicrographs were induced during coring and are not natural.

A



Scale

B



David K. Davies and Associates, Inc.

FIGURE 4

SCANNING ELECTRON MICROSCOPY

SENECA RESOURCES FERNDALE 401 REDRILL NO. 3 WELL

MONTEREY FORMATION

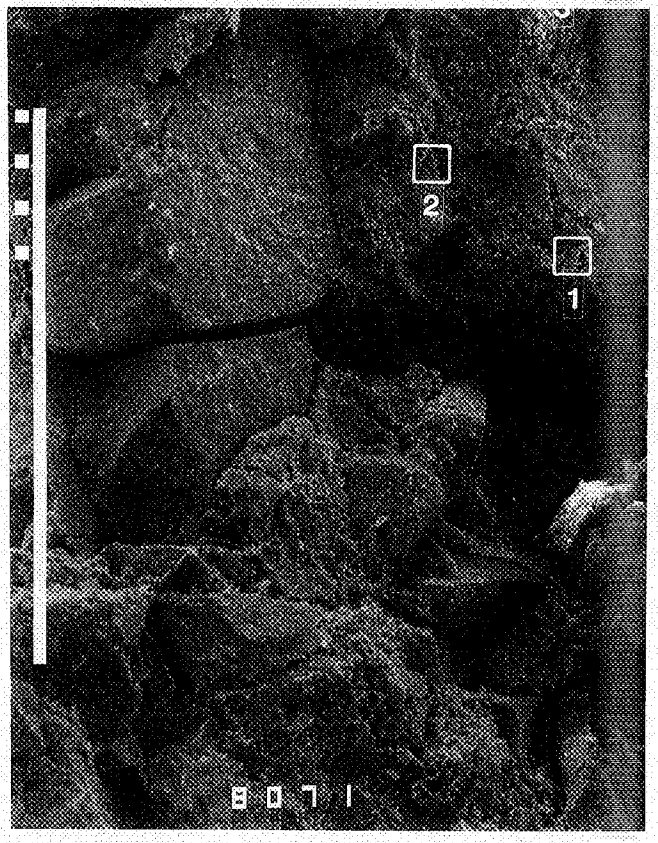
2166 Feet

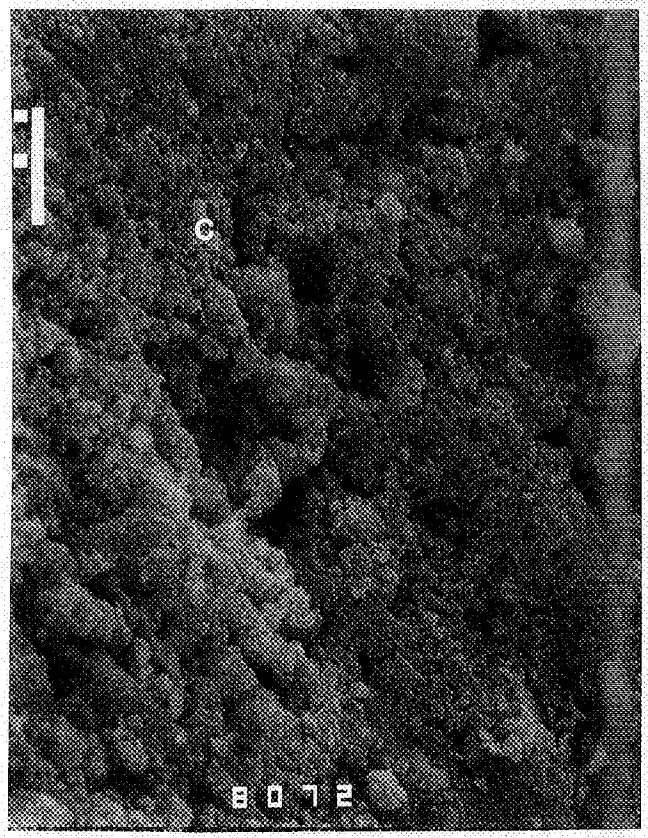
Photomicrograph	Bar Scale*	Magnification
8071	1000	70X
8072	10	1500X
8073	10	1500X
8074	10	3000X

Photograph 8071 is a general view of the sample. Boxes labeled 1, 2, and 3 display the areas shown in high magnification photomicrographs (8072, 8073, and 8074).

Scanning electron photomicrographs on the facing page display a siliceous shale sample from the 2166 foot interval in the well. Fractures visible in photo 8071 were induced during coring. The rock originally consisted of depositional shale as well as opaline silica tests. Opaline silica was recrystallized to cristobalite (C). The cristobalite is microporous. Micropores within the cristobalite could contribute to fluid production from this zone.

*Bar scale refers to the length, in microns, of the bar scale on the left margin of each photograph. (1000 microns=1 mm)


2
1
8071


C
8072

C
8073

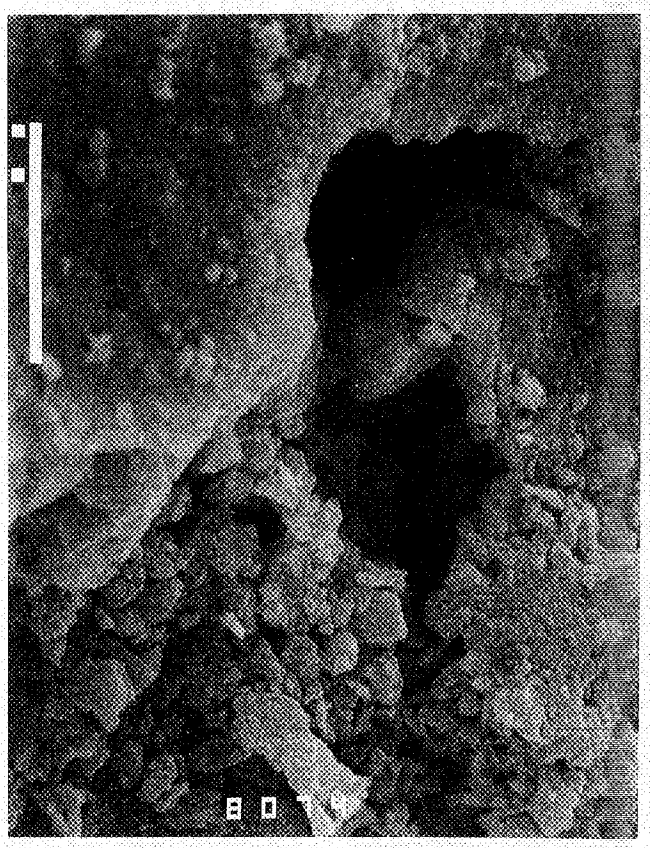

8074

FIGURE 5

THIN SECTION PHOTOMICROGRAPHS

SENECA RESOURCES FERNDALE 401 REDRILL NO. 3 WELL

MONTEREY FORMATION

DEPTH: 2240 Feet **SAMPLE NUMBER:** D2443-003

GRAIN SIZE: 0.01 mm **SORTING:** Poorly Sorted

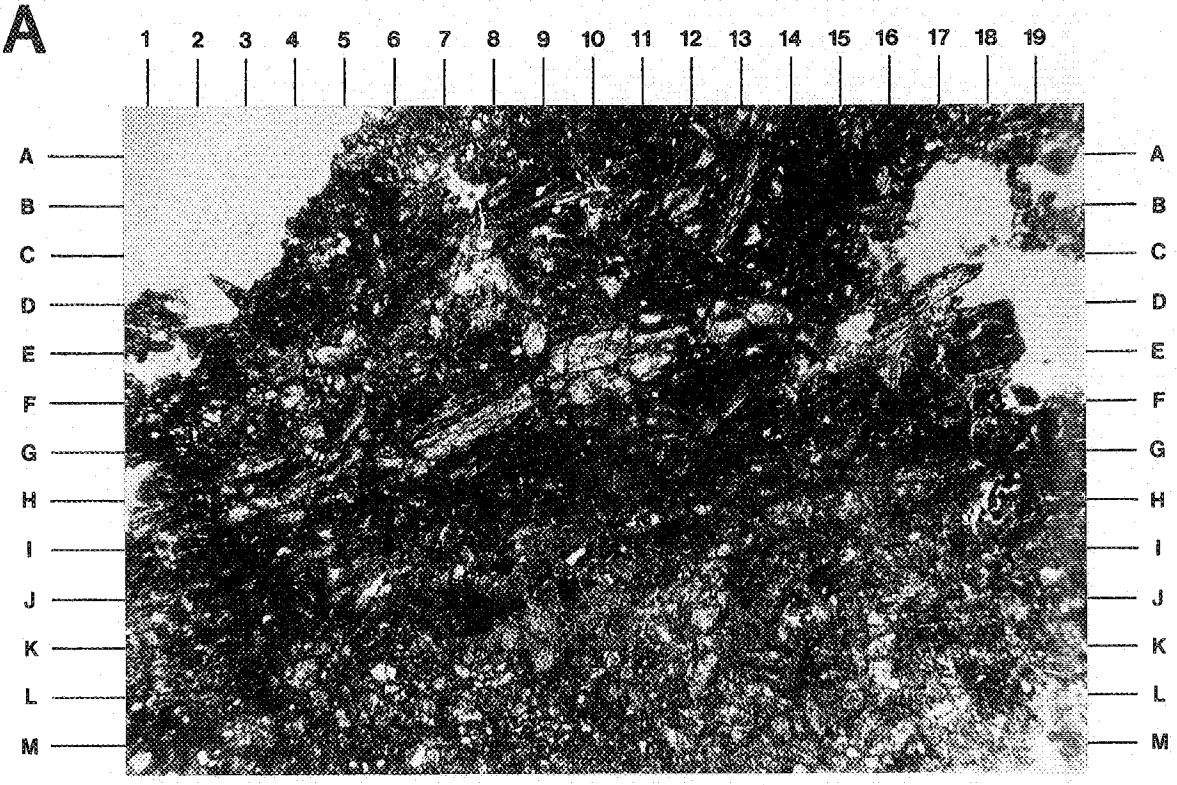
PHOTOGRAPH SCALE: A: Bar length represents 0.50 mm.
B: Bar length represents 0.125 mm.

ILLUMINATION: Plane Polarized Light.

Thin sections were impregnated with blue dyed epoxy resin and were stained for calcite (red). Macropores appear blue in these photomicrographs.

This sample from the 2240 foot interval in the well is a siliceous shale. The rock originally consisted of opaline silica tests in a rock groundmass of depositional shale. The most completely silicified portions of the rock appear as light areas in these photomicrographs. More shaly areas are brown. These shaly areas have also been partially to completely replaced by silica. The silica phase in this rock is cristobalite. Considerable amounts of microporosity exist within the rock groundmass. The micropore structure of the rock could trap hydrocarbons. This sample bears evidence of tectonically induced brecciation.

A


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
A B C D E F G H I J K L M

Scale

B

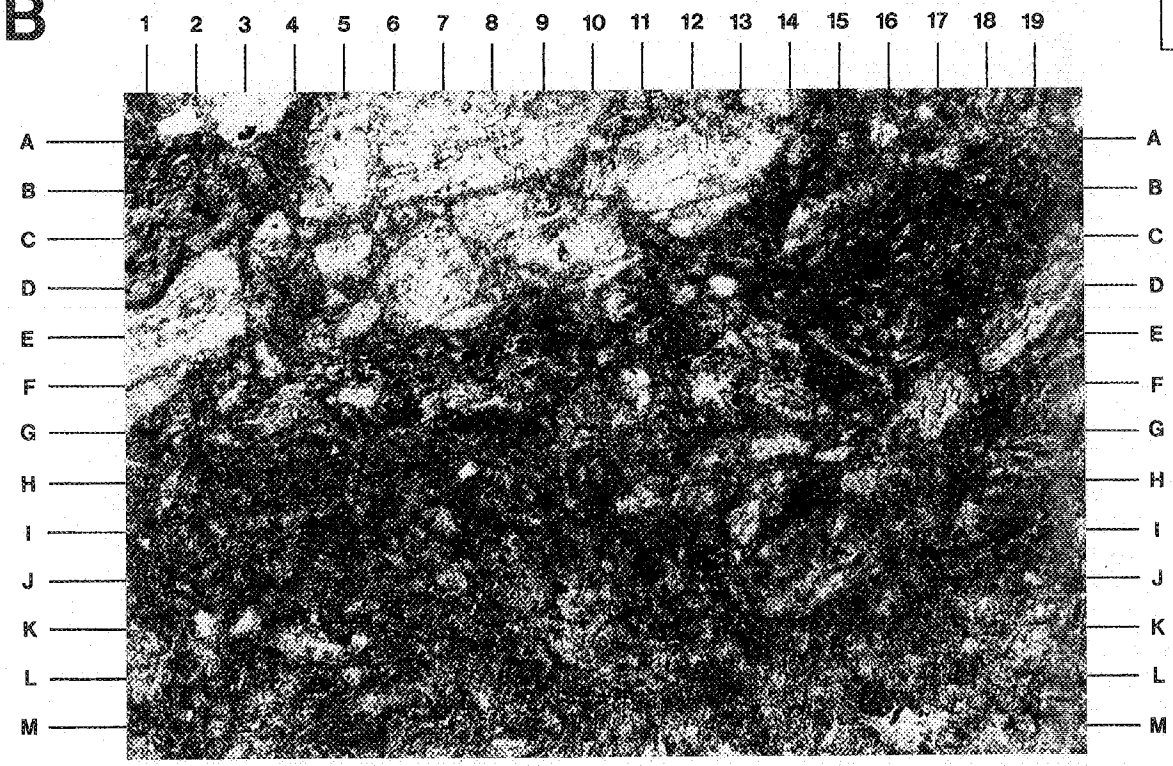

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
A B C D E F G H I J K L M

FIGURE 6

SCANNING ELECTRON MICROSCOPY

SENECA RESOURCES FERNDALE 401 REDRILL NO. 3 WELL

MONTEREY FORMATION

2240 Feet

Photomicrograph	Bar Scale*	Magnification
8075	1000	70X
8076	100	450X
8077	10	1000X
8078	10	1000X

Photograph 8075 is a general view of the sample. Boxes labeled 1, 2, and 3 display the areas shown in high magnification photomicrographs (8076, 8077, and 8078).

This sample is a siliceous shale or "chert" from the 2240 foot interval in the well. Fractures (X) visible in photo 8075 were induced during coring and are not natural.

High magnification photomicrographs (8076, 8077, 8078) illustrate development of microporosity within the sample. Large portions of the rock groundmass have been replaced by silica. The silica in this rock occurs as authigenic cristobalite (C). Portions of the rock groundmass also consists of illite (I). Microporosity is associated with both the illite clay and cristobalite. Micropores could contribute to fluid production.

*Bar scale refers to the length, in microns, of the bar scale on the left margin of each photograph. (1000 microns=1 mm)

FIGURE 6

SCANNING ELECTRON MICROSCOPY

SENECA RESOURCES FERNDALE 401 REDRILL NO. 3 WELL

MONTEREY FORMATION

2240 Feet

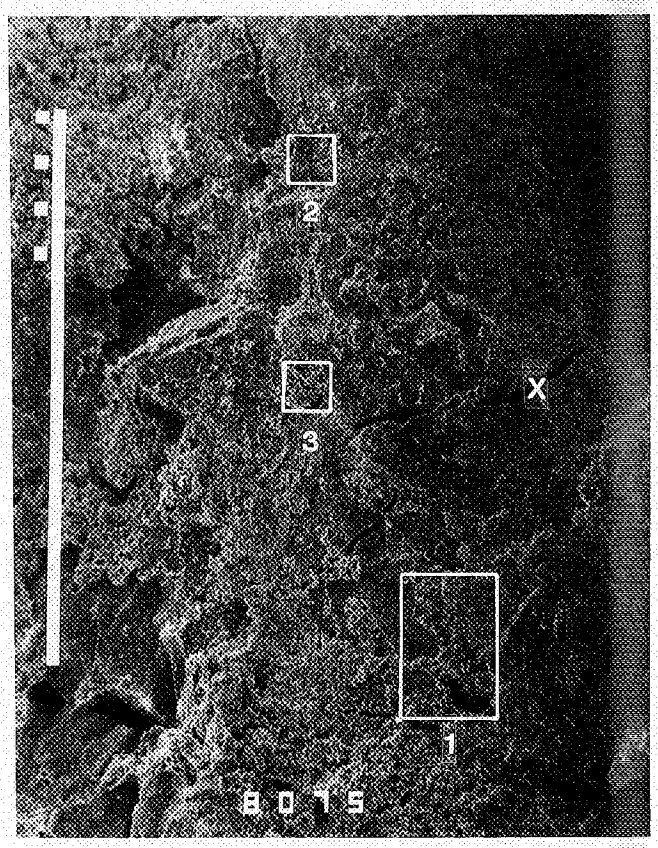
Photomicrograph	Bar Scale*	Magnification
8075	1000	70X
8076	100	450X
8077	10	1000X
8078	10	1000X

Photograph 8075 is a general view of the sample. Boxes labeled 1, 2, and 3 display the areas shown in high magnification photomicrographs (8076, 8077, and 8078).

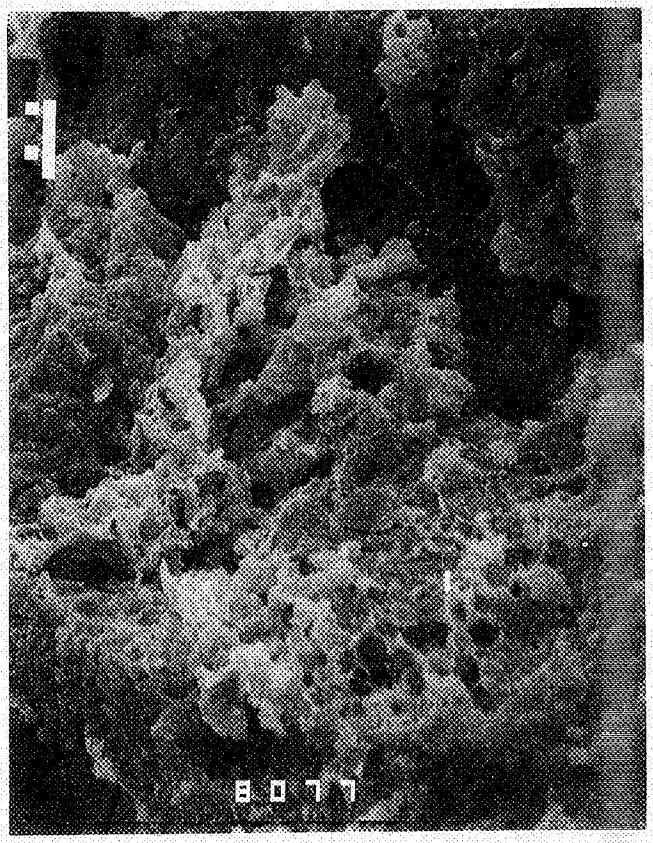
This sample is a siliceous shale or "chert" from the 2240 foot interval in the well. Fractures (X) visible in photo 8075 were induced during coring and are not natural.

High magnification photomicrographs (8076, 8077, 8078) illustrate development of microporosity within the sample. Large portions of the rock groundmass have been replaced by silica. The silica in this rock occurs as authigenic cristobalite (C). Portions of the rock groundmass also consists of illite (I). Microporosity is associated with both the illite clay and cristobalite. Micropores could contribute to fluid production.

*Bar scale refers to the length, in microns, of the bar scale on the left margin of each photograph. (1000 microns=1 mm)


2
3
X
1
8075

1
8076


8077

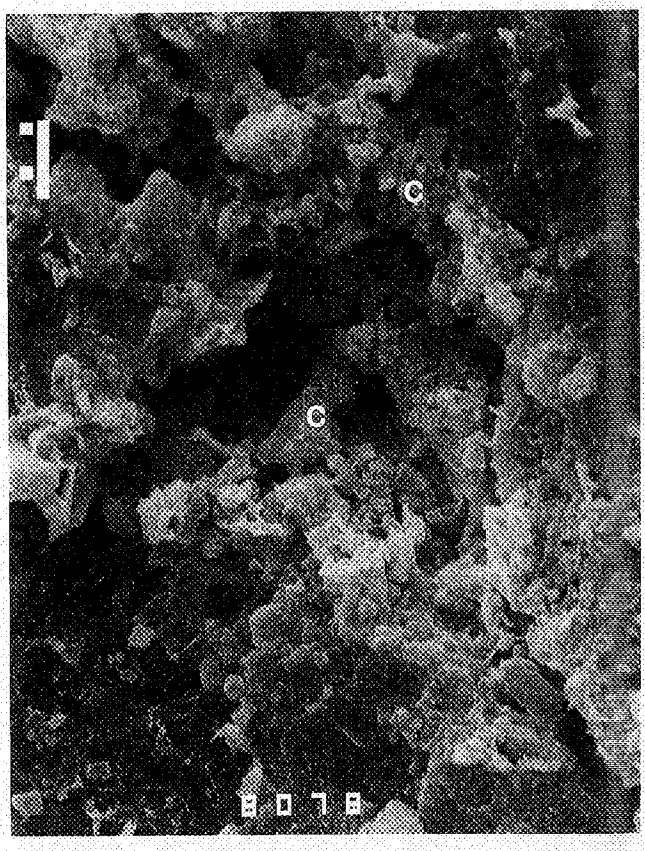

C
C
8078

FIGURE 7

THIN SECTION PHOTOMICROGRAPHS

SENECA RESOURCES FERNDALE 401 REDRILL NO. 3 WELL

MONTEREY FORMATION

DEPTH: 4660 Feet **SAMPLE NUMBER:** D2443-004

GRAIN SIZE: 0.02 mm **SORTING:** Poorly Sorted

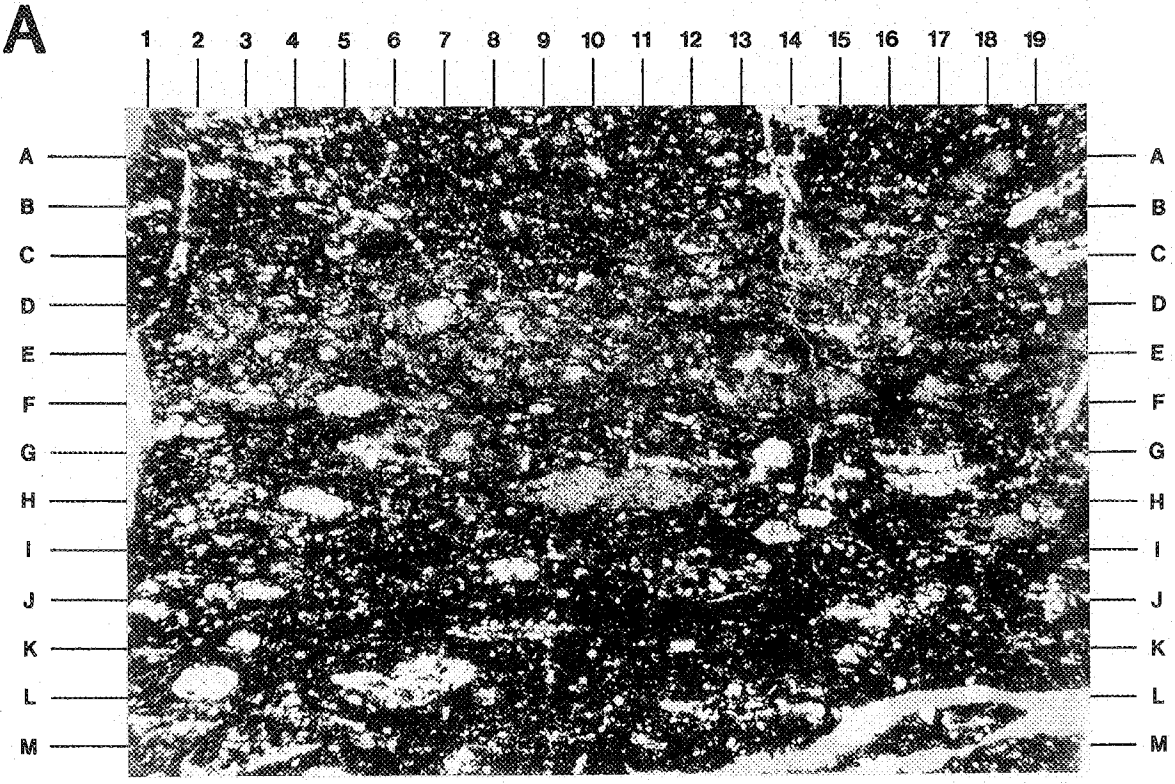
PHOTOGRAPH SCALE: A: Bar length represents 0.50 mm.
B: Bar length represents 0.125 mm.

ILLUMINATION: Plane Polarized Light.

Thin sections were impregnated with blue dyed epoxy resin and were stained for calcite (red). Macropores appear blue in these photomicrographs.

Color photomicrographs on the facing page display a siliceous shale sample from the 4660 foot interval in the well. The portion of the Monterey Formation has the highest shale content of any rocks examined in this study. The shale (brown) is depositional in origin. Microporosity is poorly developed in this sample. Fractures visible in the rock were induced during coring and are not natural.

A


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
A B C D E F G H I J K L M
A B C D E F G H I J K L M

Scale

B

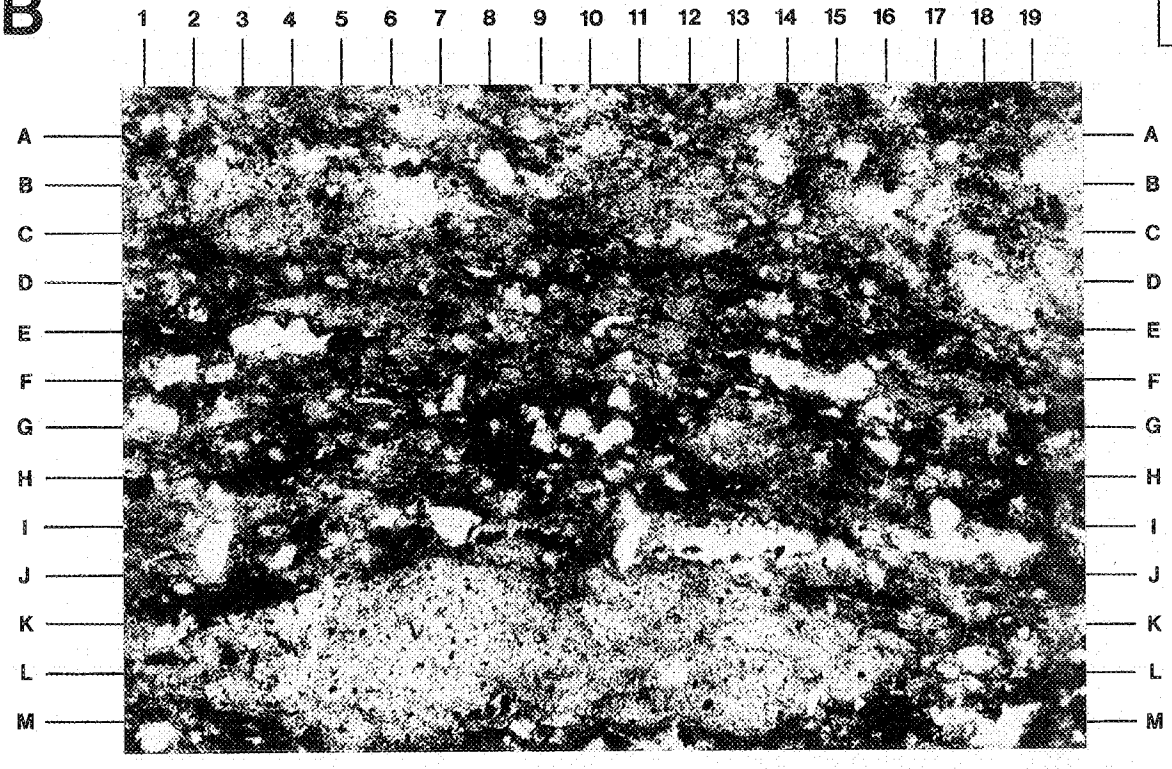

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
A B C D E F G H I J K L M
A B C D E F G H I J K L M

FIGURE 8

SCANNING ELECTRON MICROSCOPY

SENECA RESOURCES FERNDALE 401 REDRILL NO. 3 WELL

MONTEREY FORMATION

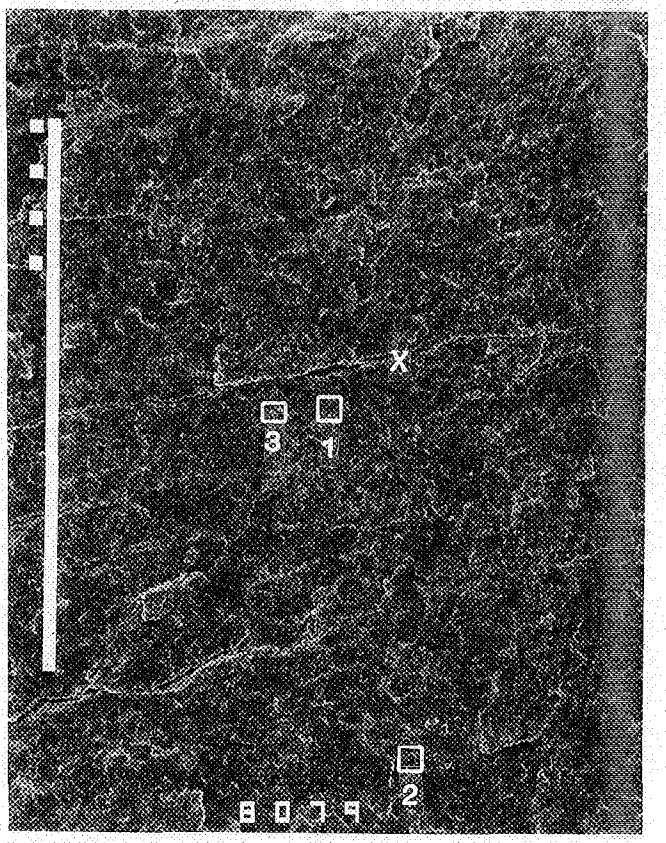
4660 Feet

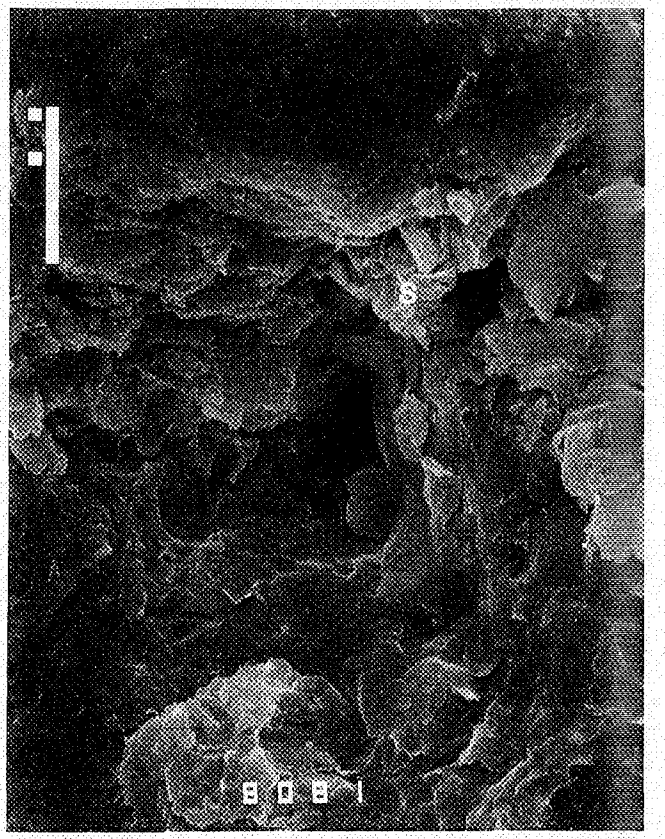
Photomicrograph	Bar Scale*	Magnification
8079	1000	70X
8080	10	2000X
8081	10	2000X
8082	10	3000X

Photograph 8079 is a general view of the sample. Boxes labeled 1, 2, and 3 display the areas shown in high magnification photomicrographs (8080, 8081, and 8082).

This sample from the Monterey Formation is a silty shale. Fractures visible within the rock (X) are coring induced and are not natural. The rock consists of a depositional shale groundmass (S) supporting scattered silt sized grains of quartz and feldspar. The shale component of the rock consists predominantly of illite-smectite (30% expandable). Microporosity exists within the shale rock groundmass. Micropores are not effectively interconnected. This rock has low effective porosity and permeability and is not expected to contribute to fluid production if tested.

*Bar scale refers to the length, in microns, of the bar scale on the left margin of each photograph. (1000 microns=1 mm)


X
3
1
2


3

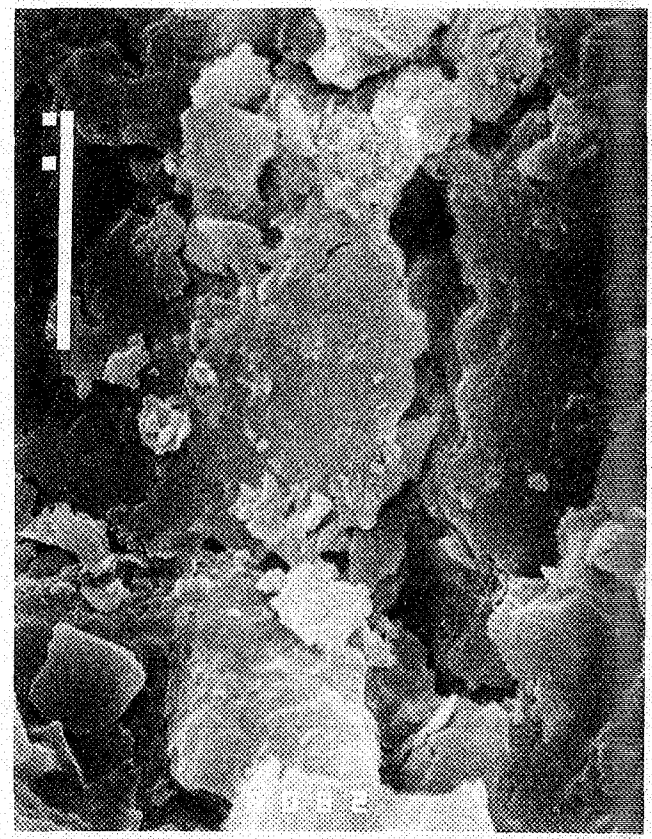


FIGURE 9

THIN SECTION PHOTOMICROGRAPHS

SENECA RESOURCES FERNDALE 401 REDRILL NO. 3 WELL

MOHINIAN SANDSTONE

DEPTH: 5927 Feet **SAMPLE NUMBER:** D2443-005

GRAIN SIZE: 0.21 mm **SORTING:** Poorly Sorted

PHOTOGRAPH SCALE: A: Bar length represents 0.50 mm.
B: Bar length represents 0.125 mm.

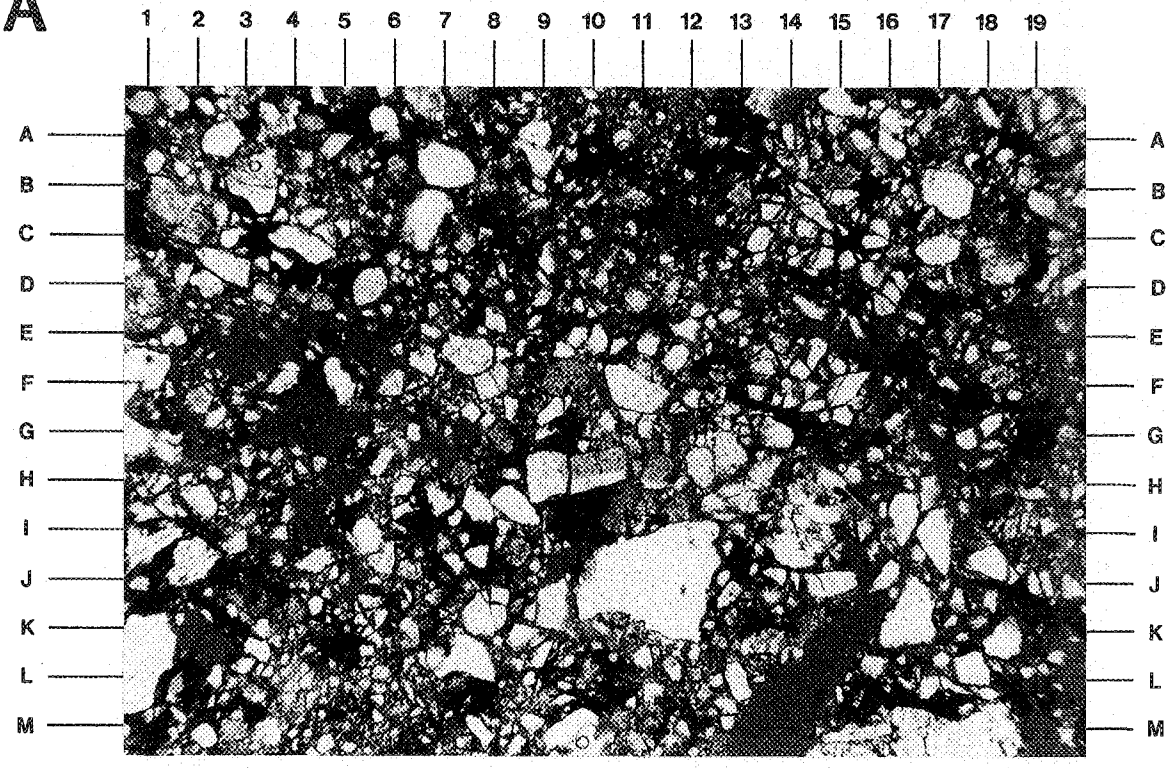
ILLUMINATION: Plane Polarized Light.

Thin sections were impregnated with blue dyed epoxy resin and were stained for calcite (red). Macropores appear blue in these photomicrographs.

This sample is a poorly sorted sandstone. The rock is very poorly indurated and has partially disaggregated. The integrity of the rock has been further altered by the impact of the sidewall coring device.

Unaltered portions of the rock are characterized by well developed intergranular porosity (blue, photo B). Pores and pore throats are lined and partially filled by authigenic clay and siderite cement (L-9). The rock has excellent reservoir potential and is capable of yielding fluids to the wellbore at high rates of production if tested.

A


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
A B C D E F G H I J K L M

Scale

B

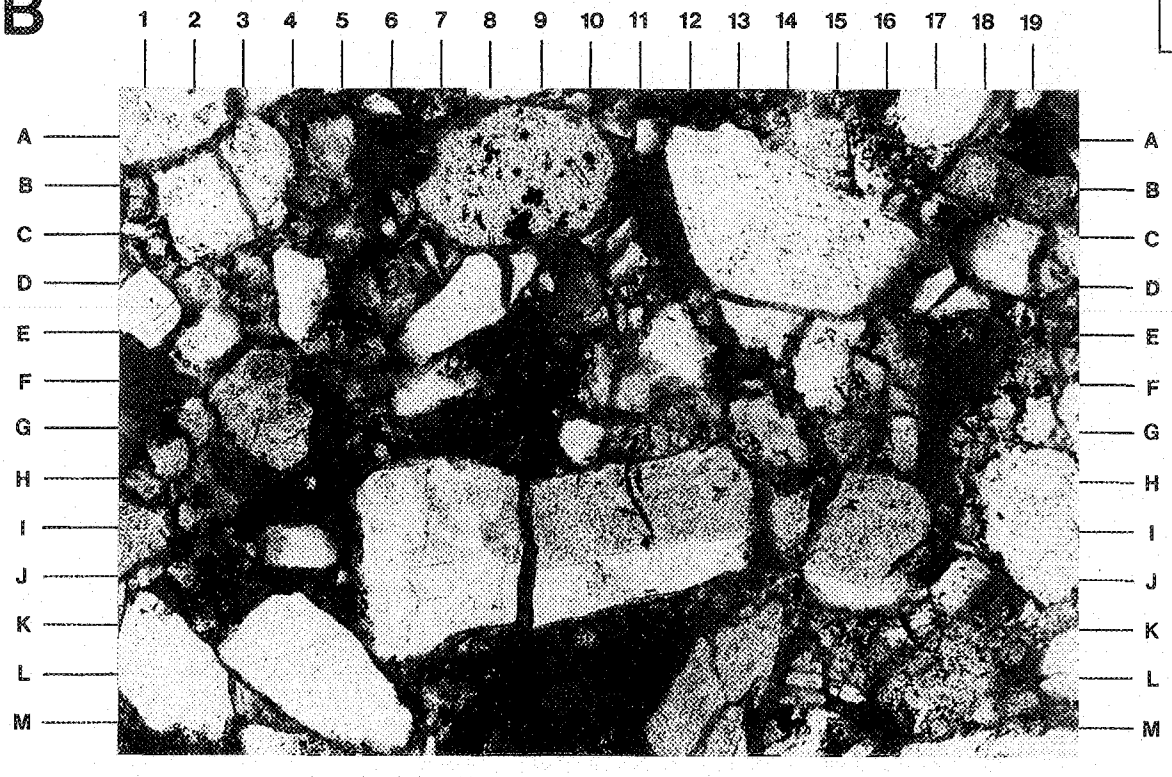

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
A B C D E F G H I J K L M

FIGURE 10

SCANNING ELECTRON MICROSCOPY

SENECA RESOURCES FERNDALE 401 REDRILL NO. 3 WELL

MOHINIAN SANDSTONE

5927 Feet

Photomicrograph	Bar Scale*	Magnification
8019	1000	70X
8020	100	450X
8021	100	700X
8022	10	1500X

Photograph 8019 is a general view of the sample. Boxes labeled 1, 2, and 3 display the areas shown in high magnification photomicrographs (8020, 8021, and 8022).

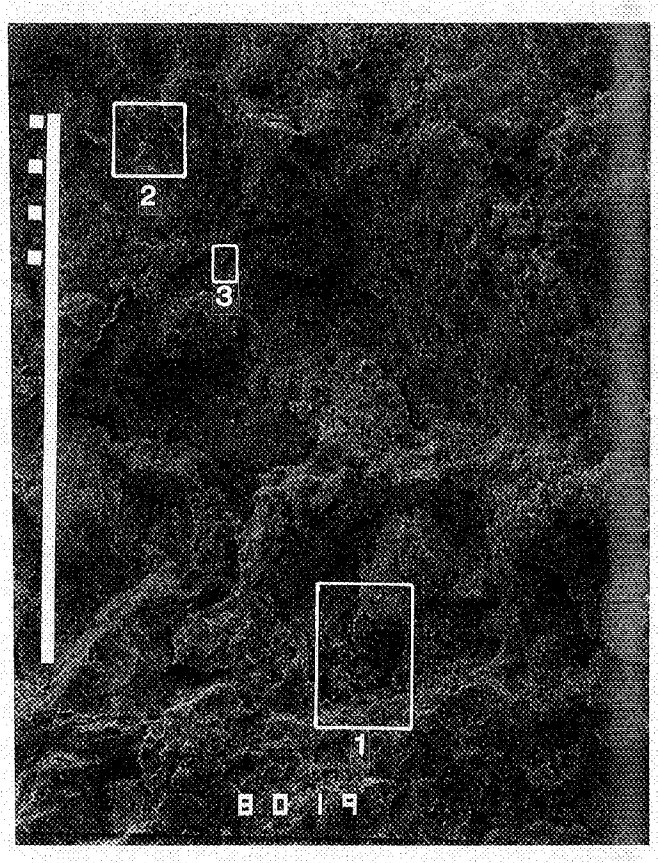
Photograph 8019 is a low magnification survey view of the sample illustrating the fine grained, poorly sorted nature of rocks comprising this reservoir interval. Much of the original porosity and permeability of the sandstone has been lost due to compaction and cementation.

Photographs 8020, 8021, and 8022 display the interiors of intergranular and secondary pores within the sample. Pores and pore throats in this rock have been reduced in size due to compaction and development of close grain packing. Pore walls are lined by thin films of illite and illite-smectite clay cement (I). Pore interiors are blocked by booklet-like masses of authigenic kaolinite clay cement (K).

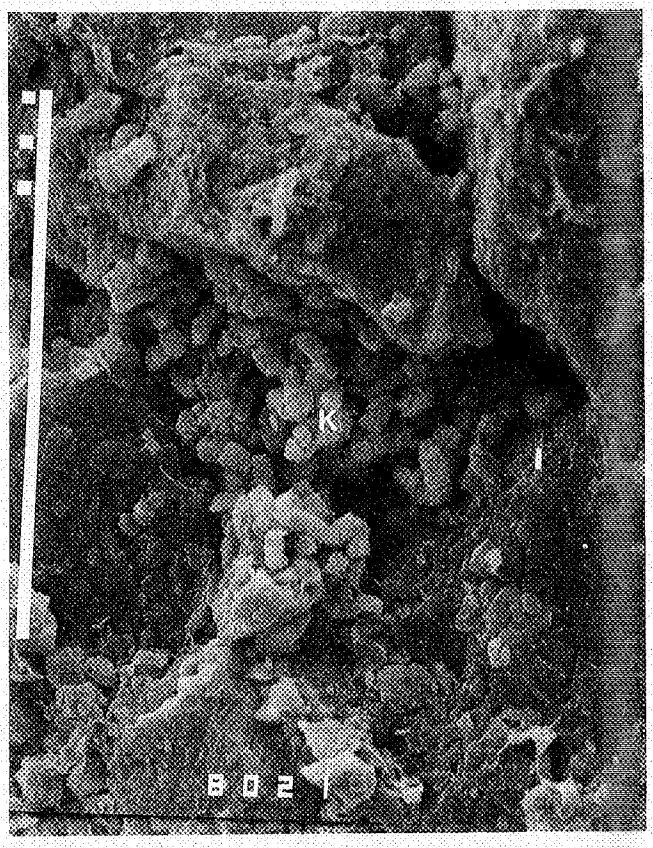
While the rock pore system is lined by illite-smectite clay, the clay cement contains very few expandable smectite layers. Thus, the formation is not susceptible to damage from clay swelling promoted by formation contact with fresh water based fluids.

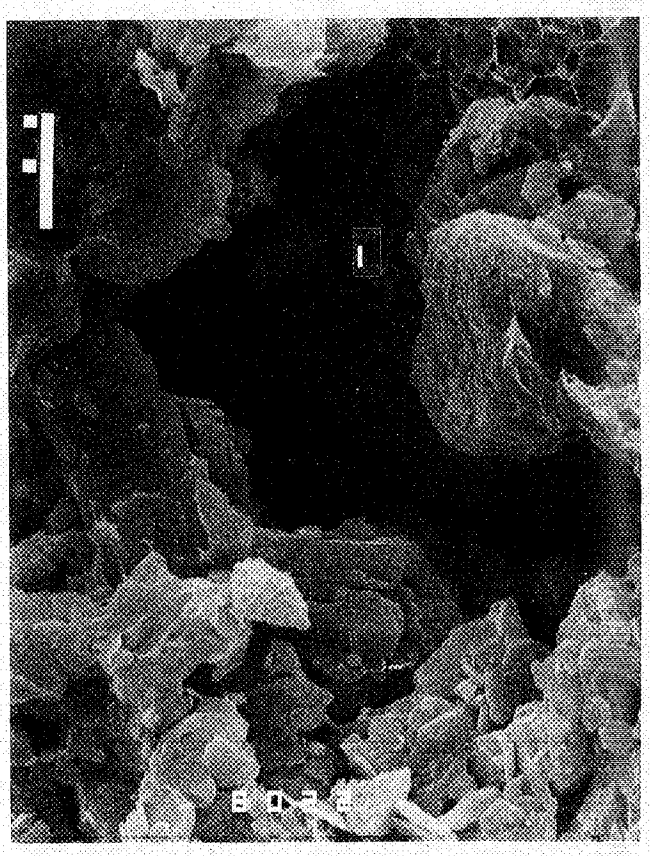
The occurrence of large amounts of kaolinite clay fine in the interiors of intergranular and secondary pores will render the formation highly susceptible to damage from clay particle migration and pore throat blockage effects promoted by high rate completions. Damage attributable to this source may be minimized by perforating with a low formation/wellbore differential pressure and by treating the formation with a clay stabilizing polymer.

*Bar scale refers to the length, in microns, of the bar scale on the left margin of each photograph. (1000 microns=1 mm)


2
3
1
8019

1
K
8020


K
1
8021


1
8022

DOG

DATADRIL

REPORT
of
SUB-SURFACE DIRECTIONAL SURVEY

SENECA RESOURCES
WELL: FERNDALE #401
DRILL PAD #4
VENTURA COUNTY

DATADRIL

SENECA RESOURCES
WELL: PERMOBILE #401

DRILL PAD #4
VENTURA COUNTY

MEASURED DEPTH (FT)	INCL ANGLE DEG	D R I F T DIRECTION (DEG)	COURSE LENGTH (FT)	TOTAL VERTICAL DEPTH	T O T A L RECTANGULAR COORDINATES (FT)		VERTICAL SECTION (FT)	C L O S U R E DISTANCE (FT)	C L O S U R E DIRECTION (DEG)	DOGLEG SEVERITY (DEG/100')
2039.00	13.00	N 71.00 E	83.00	2028.10	86.26 N	382.80 E	174.11	343.30	N 76.46 E	1.65
2101.00	13.25	N 66.00 E	32.00	2059.33	88.82 N	395.00 E	172.90	350.44	N 76.33 E	4.14
2433.00	13.25	N 64.00 E	32.00	2380.34	94.81 N	345.40 E	175.02	357.39	N 75.11 E	3.42
2496.00	13.25	N 55.00 E	63.00	2441.86	99.13 N	387.83 E	182.93	371.31	N 74.62 E	0.27
2559.00	13.00	N 47.00 E	62.00	2502.24	107.98 N	368.76 E	184.40	384.25	N 73.68 E	2.96
2621.00	13.50	N 40.00 E	63.00	2563.63	118.26 N	378.51 E	184.03	396.55	N 72.65 E	2.50
2684.00	12.25	N 30.00 E	63.00	2625.10	129.52 N	386.40 E	181.64	407.53	N 71.37 E	3.66
2804.00	11.75	N 19.00 E	120.00	2742.48	152.19 N	396.73 E	172.92	424.92	N 69.01 E	1.95
2868.00	13.00	N 15.00 E	64.00	2804.99	165.30 N	400.74 E	166.48	433.49	N 67.58 E	2.37
2995.00	13.00	N 11.00 E	127.00	2928.74	193.13 N	407.16 E	151.34	450.65	N 64.62 E	.71
3089.00	13.50	N 10.00 E	94.00	3020.20	214.32 N	411.09 E	139.14	463.60	N 62.47 E	.59
3220.00	14.00	N 11.00 E	131.00	3147.48	244.93 N	416.77 E	121.50	483.41	N 59.56 E	.42
3300.00	14.00	N 9.00 E	80.00	3225.10	263.99 N	420.13 E	110.40	496.18	N 57.86 E	.60
3332.00	14.00	N 7.00 E	32.00	3256.15	271.66 N	421.20 E	105.74	501.21	N 57.19 E	1.51
3394.00	13.60	N 1.00 E	62.00	3316.36	286.40 N	422.23 E	96.05	510.20	N 55.85 E	2.40
3426.00	12.70	N 5.00 W	32.00	3347.53	293.68 N	421.98 E	90.73	514.11	N 55.16 E	5.11
3491.00	9.60	N 11.00 W	65.00	3411.29	306.12 N	420.23 E	80.69	519.91	N 53.93 E	5.09
3586.00	4.00	N 10.00 W	95.00	3505.58	317.17 N	418.16 E	71.43	524.86	N 52.82 E	5.90
3649.00	1.10	N 40.00 E	63.00	3568.52	319.79 N	418.89 E	70.07	527.00	N 52.64 E	5.40
3712.00	2.30	S 50.00 E	63.00	3631.49	319.94 N	420.56 E	71.15	528.43	N 52.74 E	4.05
3776.00	4.70	S 16.00 E	64.00	3695.36	316.71 N	422.66 E	74.92	528.15	N 53.15 E	4.80
3839.00	6.60	S 9.00 E	63.00	3758.05	310.66 N	424.00 E	80.14	525.63	N 53.77 E	3.20
3901.00	8.30	S 8.00 E	62.00	3819.53	302.71 N	425.19 E	86.61	521.94	N 54.55 E	2.75
3965.00	10.00	S 9.00 E	64.00	3882.71	292.64 N	426.69 E	94.79	517.40	N 55.56 E	2.67
4027.00	10.50	S 14.00 E	62.00	3943.72	281.84 N	428.89 E	103.98	513.21	N 56.69 E	1.65
4089.00	11.30	S 19.00 E	62.00	4004.60	270.60 N	432.22 E	114.28	509.94	N 57.95 E	2.00
4152.00	11.90	S 24.00 E	63.00	4066.32	258.82 N	436.86 E	125.90	507.77	N 59.36 E	1.86
4212.00	13.50	S 26.00 E	60.00	4124.85	246.86 N	442.44 E	138.29	506.65	N 60.84 E	2.77
4351.00	17.50	S 22.00 E	139.00	4258.76	212.94 N	457.54 E	172.96	504.66	N 65.04 E	2.98
4478.00	23.50	S 16.00 E	127.00	4377.67	170.93 N	472.00 E	212.89	502.00	N 70.09 E	5.00
4573.00	28.50	S 15.00 E	95.00	4463.02	130.81 N	483.13 E	249.13	500.53	N 74.85 E	5.28
4679.00	31.50	S 15.00 E	106.00	4554.81	79.62 N	496.85 E	295.02	503.19	N 80.90 E	2.83
4805.00	33.00	S 13.00 E	126.00	4661.37	14.39 N	513.11 E	352.65	513.31	N 88.39 E	1.46

DATADRILL

SENECA RESOURCES
WELL: FERNDALE #401

DRILL PAD #4
VENTURA COUNTY

MEASURED DEPTH (FT)	INCL ANGLE (DEG)	D I R E C T I O N DIRECTION (DEG)	COURSE LENGTH (FT)	TOTAL VERTICAL DEPTH	T O T A L RECTANGULAR COORDINATES (FT)		VERTICAL SECTION (FT)	C L O S U R E DISTANCE (FT)	C L O S U R E DIRECTION (DEG)	DOGLEG SEVERITY (DEG/100')
4960.00	34.25	S 13.00 E	95.00	4750.47	36.87 S	524.94 E	397.26	526.24	S 85.98 E	1.32
5021.00	36.75	S 13.00 E	121.00	4948.97	145.33 S	540.75 E	456.85	560.91	S 78.98 E	2.07
5084.00	37.75	S 13.00 E	63.00	4999.12	142.43 S	549.33 E	489.19	567.51	S 75.46 E	1.59
5179.00	40.00	S 14.00 E	95.00	4973.08	200.46 E	563.25 E	540.02	597.85	S 70.41 E	2.46
5336.00	43.00	S 14.00 E	157.00	5090.65	301.39 S	588.41 E	629.18	661.10	S 62.88 E	1.91
5431.00	45.50	S 14.00 E	95.00	5158.69	365.70 S	604.45 E	686.00	706.46	S 58.83 E	2.63
5556.00	48.25	S 15.00 E	124.00	5243.45	453.31 S	627.10 E	763.97	773.79	S 54.14 E	2.29
5714.00	52.00	S 15.00 E	159.00	5345.37	571.16 S	658.68 E	869.63	871.83	S 49.07 E	2.36
5840.00	55.25	S 15.00 E	126.00	5420.09	669.14 S	684.93 E	957.47	957.54	S 45.67 E	2.58
5934.00	57.25	S 15.00 E	94.00	5472.31	744.63 S	705.16 E	1025.16	1025.53	S 43.44 E	2.13
6027.00	59.25	S 15.00 E	93.00	5521.24	821.01 S	725.63 E	1093.64	1095.72	S 41.47 E	2.15

BOTTOM HOLE CLOSURE: 1095.72 Feet at S 41.47 Degrees E

SENECA RESOURCES
WELL: FERNDALE #401
DRILL PAD #4
VENTURA COUNTY

11 MAY 1989 @ 7:48

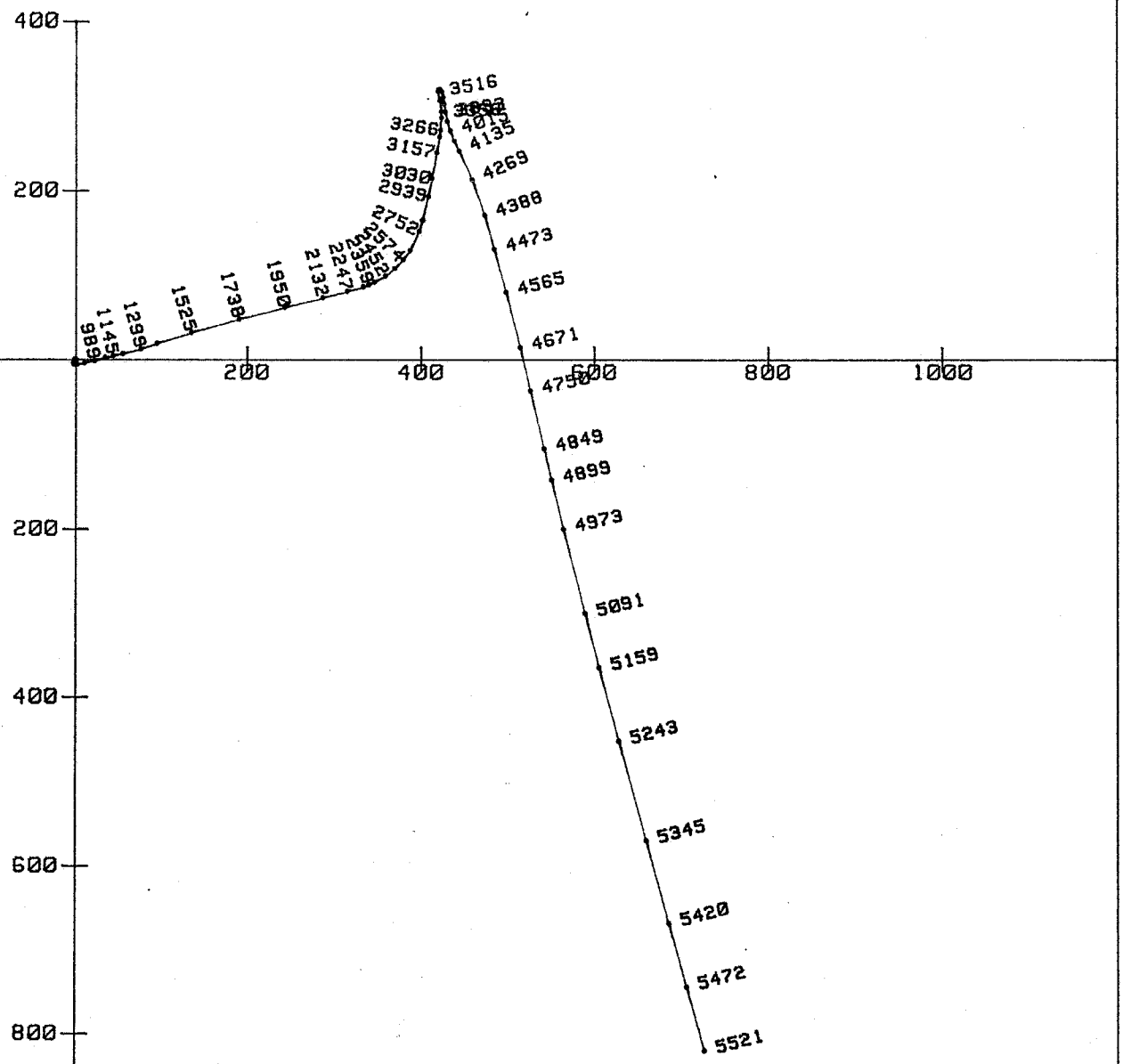
DATADRIL

HORIZONTAL PLOT

N

SCALE: 200 FEET/INCH

BHL: 1096 FEET
@ S 41.47 E
TVD: 5521 FEET
MD: 6027 FEET



RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No.P 289-249
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
July 25, 1989

Your supplementary proposal to drill well "Ferndale" 401, A.P.I. No. 111-21537, Section 15, T. 4 N, R. 21W, S.B. B.&M., Ojai field, ------- area, Miocene pool, Ventura County, dated 7/25/89, received 7/26/89, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Requirements specified in permit No. P289-66, dated 3/9/89 shall apply.

Blanket Bond
SF:ljg

Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By _____
Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

SUPPLEMENTARY NOTICE

rec 7/25/89 P.O.

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
33	-	✓

DIVISION OF OIL AND GAS

Ventura Calif.

A notice to you dated May 29, 1989, stating the intention to

Drill (Drill, rework, abandon), Well No. Ferndale 401, API No. 111-21537,

Sec. 15, T. 4N, R. 21W, S.B. B. & M., Ojai Field,

Ventura County, should be amended because of changed conditions.

The present condition of the well is as follows:

Total depth 6037' MD

Complete casing record including plugs and perforations:

9-5/8" 36# K-55 ret. at 604' KB. Cement circulated.

5-1/2" 17# N-80 set at 6027' KB. Bottom cemented with 260 sacks Class "G" plus additives. DV collar at 2605' KB cemented with 643 sacks Class "G" plus additives.

Perforations from 5896' to 5950' with 6 JSPF.

Cast iron bridge plug at 5842' KB.

Perforations 4646'-66' KB. Set cement retainer at 4494' and abandon with 50 sx Class "G".
Perforations 3220'-51'; 3253'-60' with 4 JSPF.
Perf 4 JSPF at 3400' and squeezed, in two stages, with 135 sacks Class "G" cement with additives. Drilled out and tested squeeze to 1000 psig.

We now propose

Abandon perforations 3220'-60' KB by setting cement retainer 3070' or higher and filling casing below retainer to perforations with cement.

Selectively perforate and test Monterey Shale form 2900' to 2000' KB.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 725 E. Main St., Suite 200 (Street)

Santa Paula (City) CA. (State) 93060 (Zip)

Telephone Number (805) 656-2445

Seneca Resources Corporation (Name of Operator)

By Eric K. Wilson (Name) 7/25/89 (Date)

Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No.P 289-240
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
July 25, 1989

Your supplementary proposal to drill well "Ferndale" 401, A.P.I. No. 111-21537, Section 15, T. 4 N, R. 21W, S.B. B.&M., Ojai field, ------- area, Miocene pool, Ventura County, dated 7/14/89, received 7/17/89, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Requirements specified in permit No. P289-240, dated 3/9/89 shall apply.

Blanket Bond
SF:ljg

Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By

Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

0611I

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

SUPPLEMENTARY NOTICE

ISION OF OIL AND
RECEIVED
JUL 17 1989
VENTURA, CALIFORNIA

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
BB	—	✓

DIVISION OF OIL AND GAS

Ventura Calif.

A notice to you dated May 29, 19 89, stating the intention to

Drill (Drill, rework, abandon), Well No. Ferndale 401, API No. 111-21537,

Sec. 15, T. 4N, R. 21W, S.B. B. & M., Ojai Field,

Ventura County, should be amended because of changed conditions.

The present condition of the well is as follows:

Total depth 6037' MD

Complete casing record including plugs and perforations:

9-5/8" 36# K-55 ret. at 604' KB. Cement circulated.

5-1/2" 17# N-80 set at 6027' KB. Bottom cemented with 260 sacks Class "G" plus additives. DV collar at 2605' KB cemented with 643 sacks Class "G" plus additives.

Perforations from 5896' to 5950' with 6 JSPF.

Cast iron bridge plug at 5842' KB.

Perforations 4646'-66' KB.

Perf 4 JSPF at 3400' and squeezed, in two stages, with 135 sacks Class "G" cement with additives. Drilled out and tested squeeze to 1000 psig.

WE NOW PROPOSE:

Abandon perforations 4646'-66' KB by setting cement retainer at 4546' or higher and filling casing below retainer to perforations with cement.

Selectively perforate and test Monterey Shale from 3350' to 2000' KB.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 725 E. Main St., Suite 200 (Street)

Santa Paula (City) CA. (State) 93060 (Zip)

Telephone Number (805) 656-2445

Seneca Resources Corporation (Name of Operator)

By Enrique Wilson (Name) 7/14/89 (Date)

Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P289-209
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
July 10, 1989

Your supplementary proposal to drill well "Ferndale" 401, A.P.I. No. 111-21537, Section 15, T. 4N, R. 21W, S.B. B.&M., Ojai field, any area, Miocene pool, Ventura County, dated 6/29/89, received 6/30/89, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Requirements specified in permit No. P289-66 dated 3/9/89 shall apply.

Blanket Bond
SF:b

Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

ISION OF OIL AND
RECEIVED
JUN 30 1989
ENTURA, CALIFORNI

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

SUPPLEMENTARY NOTICE

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
23	/	

DIVISION OF OIL AND GAS

Ventura Calif.

A notice to you dated May 29, 19 89, stating the intention to

Drill (Drill, rework, abandon), Well No. Ferndale 401, API No. 111-21537,

Sec. 15, T. 4N, R. 21W, S.B. B. & M., Ojai Field,

Ventura County, should be amended because of changed conditions.

The present condition of the well is as follows:

Total depth 6037' MD

Complete casing record including plugs and perforations:
9-5/8" 36# K-55 ST&C ret. at 604' KB. Cement circulated.

5-1/2" 17# N-80 LT&C set at 6027' KB. Bottom cemented with 260 sacks Class "G" plus additives. DV collar at 2605' KB cemented with 643 sacks Class "G" plus additives.

Perforations from 5896' to 5950' with 6 JSPF.
Cast iron bridge plug at 5842' KB.
Perforations 4646' - 66' KB.

We now propose

Perforate 4 JS at 3400' and squeeze cement to shut off water. Re-test perforations 4646' - 66' KB.

Verbal approval on above obtained from D.O.G. on 6/28/89.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 725 E. Main, Suite 200 (P.O. Box 630) (Street)
Santa Paula, (City) CA. (State) 93060 (Zip)

Telephone Number (805) 656-2445

Seneca Resources Corporation (Name of Operator)

By Eric K. Wilson (Name) 6/29/89 (Date)

Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No.P 289-168
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
June 19, 1989

Your supplementary proposal to drill well "Ferndale" 401, A.P.I. No. 111-21537, Section 15, T. 4 N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 6/9/89, received 6/12/89, has been examined in conjunction with records filed in this office.

THE PROPOSAL, COVERING WORK ALREADY COMPLETED IN ACCORDANCE WITH PRIOR AGREEMENT, IS APPROVED PROVIDED THAT:

1. Requirements specified in permit No. P289-66 dated 3/9/89 shall apply.

Blanket Bond
SF:ljg

Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By _____
Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

VISION OF OIL AND
RECEIVED
JUN 12 1989
VENTURA, CALIFORNIA

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

SUPPLEMENTARY NOTICE

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
BB	—	✓

DIVISION OF OIL AND GAS

Ventura Calif.

A notice to you dated May 29, 19 89, stating the intention to

Drill (Drill, rework, abandon), Well No. Ferndale 401, API No. 111-21537,

Sec. 15, T. 4N, R. 21W, S.B. B. & M., Ojai Field,

Ventura County, should be amended because of changed conditions.

The present condition of the well is as follows:

Total depth 6037' MD

Complete casing record including plugs and perforations:

9-5/8" 36# K-55 ST&C set at 604' KB. Cement circulated.

5-1/2" 17# N-80 LT&C set at 6027' KB. Bottom cemented with 260 sacks Class "G" plus additives. DV collar at 2605' KB cemented with 643 sacks Class "G" plus additives.

Perforations from 5896' to 5950' with 6 JSPF.

We now propose

Set cast iron bridge plug at approximately 5700' to isolate perforations from 5896' to 5950', and to attempt completion in the Monterey interval from 3200' to 5000'.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 725 E. Main Street, Suite 200 (Street)

Santa Paula (City) CA. (State) 93060 (Zip)

Telephone Number (805) 656-2445

Seneca Resources Corporation (Name of Operator)

By Eric K. Wilson (Name) 6/9/89 (Date)

Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No.P 289-159
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
June 2, 1989

Your supplementary proposal to drill well "Ferndale" 401, A.P.I. No. 111-21537, Section 15, T. 4 N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 5/29/89, received 5/31/89, has been examined in conjunction with records filed in this office.

THE PROPOSAL, COVERING WORK ALREADY COMPLETED IN ACCORDANCE WITH PRIOR AGREEMENT, IS APPROVED PROVIDED THAT:

1. Requirements specified in permit No. P289-66, dated 3/9/89 shall apply.

ERIC WILSON / S. MULQUEEN 6-9-89 1515 HOURS, 656-2445
SENECA NOW PROPOSES TO SET BRIDGE PLUG WITHIN THE INTERVAL 5700-5800 & PERFORATE INTERVALS BETWEEN 3900'-5000'.
A SUPPLEMENTARY NOTICE IS FORTHCOMING.

Blanket Bond
SF:ljg

Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

VISION OF OIL AND
RECEIVED
MAY 31 1989
VENTURA, CALIFORNIA

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

SUPPLEMENTARY NOTICE

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
93	—	✓

DIVISION OF OIL AND GAS

Ventura Calif.

A notice to you dated March 1, 19 89, stating the intention to

Drill (Drill, rework, abandon), Well No. Ferndale 401, API No. 111-21537,

Sec. 15, T. 4N, R. 21W, S.B. B. & M., Ojai Field,

Ventura County, should be amended because of changed conditions.

The present condition of the well is as follows:

Total depth 6037' MD

Complete casing record including plugs and perforations:

9-5/8" 36# K-55 ST&C set at 604' KB. Cement circulated.

5-1/2" 17# N-80 LT&C set at 6027' KB. Bottom cemented with 260 sacks Class "G" plus additives. DV collar at 2605' KB cemented with 643 sacks Class "G" plus additives.

We now propose

Set 5-1/2" casing instead of 7".

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 725 E. Main, Suite 200 (Street)

Santa Paula (City) CA. (State) 93060 (Zip)

Telephone Number (805) 656-2445

Seneca Resources Corporation (Name of Operator)

By Eric L. Wilson (Name) 5/29/89 (Date)

Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

Seneca Resources Corporation
a National Fuel Gas System company

VISION OF OIL AND
RECEIVED
MAY 8 1989
VENTURA, CALIFORNIA

May 5, 1989

Patrick J. Kinnear
Division of Oil & Gas
6401 Telephone Road, Suite 204
Ventura, California 93003

RE: Permit to Conduct Well Operations
Ferndale 401

Dear Pat:

Received your notice of April 21, 1989 on May 2, 1989. I am enclosing a plat and legal description of the Ferndale-Pericata Unit. Hope all this information will meet your requirements.

Thanks for your help on this matter.

Sincerely,

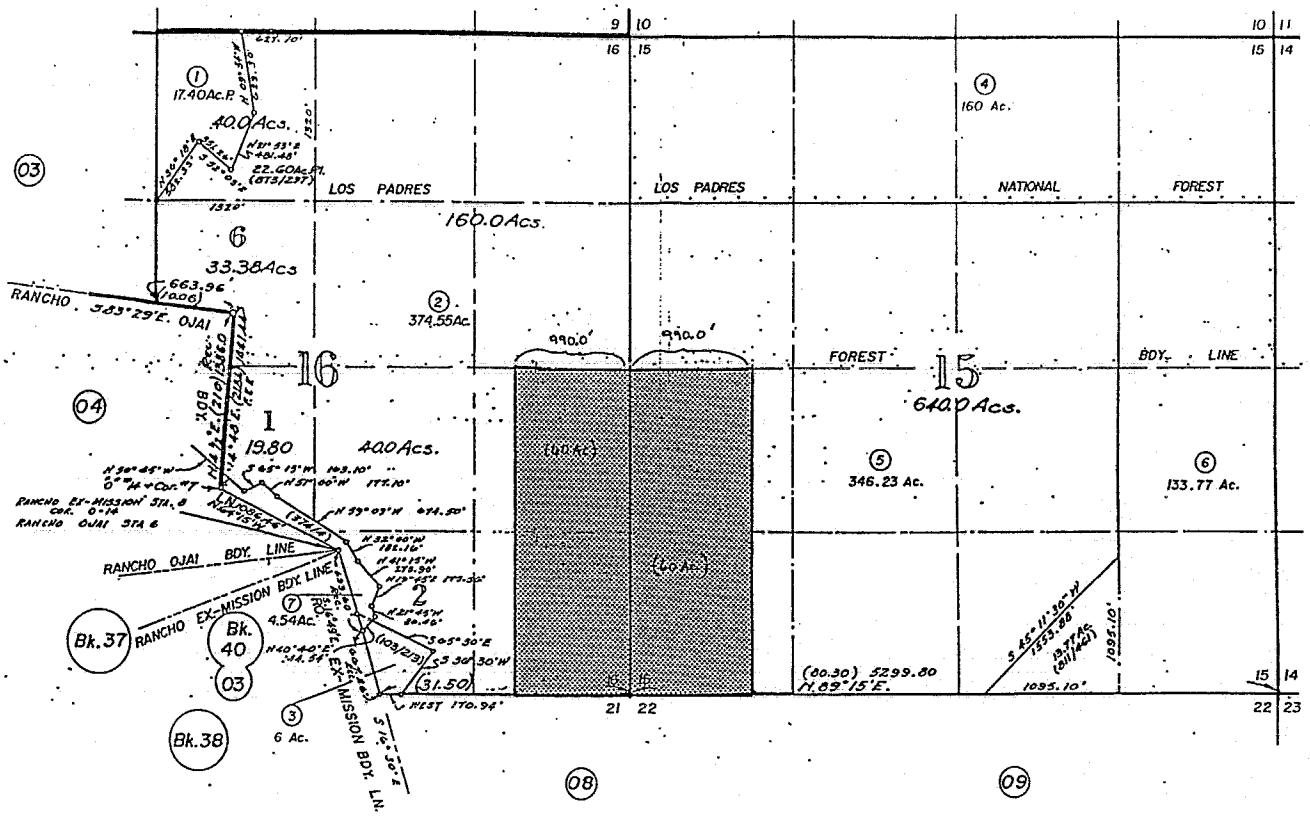
Eric R. Wilson
Division Engineer

ERW:csf

Encl:

T. 4 N., R. 21 W., S.B.B.&M.
SECT. 15 & 16

Tax Area Code 69-03 40-06
New
AUG 1 1973



NOTE - Assessor's Block Numbers Shown in Ellipses
Assessor's Parcel Numbers Shown in Circles
Assessor's Mineral Numbers Shown in Squares

Assessor's Map Bk 40, Pg 06
County of Ventura, Calif
1958

SENECA RESOURCES CORPORATION - FERNDALE-PERICATA UNIT

VISION OF OIL AND
RECEIVED
MAY 8 1989
VENTURA, CALIFORNIA

EXHIBIT "A"

ATTACHED TO AND MADE A PART OF
DECLARATION OF POOLING
SENECA RESOURCES CORPORATION - FERNDALE-PERICATA UNIT

The following described lands located in Ventura County, California, are included in this Unit:

Township 4 North, Range 21 West, S.B.B.&M.

1. Section 16: The East 60 acres of the E/2 of the SE/4.

2. Section 15: The West 60 acres of the W/2 of the SW/4.

The exterior boundaries of said Unit are described as follows:

Beginning at the SE corner of Section 16, thence from said point of beginning:

1. South 89° - 15′ West, 990 feet to a point; thence

2. Northerly parallel to the easterly boundary line of Section 16 to the northern boundary line of the SE/4 of Section 16; thence

3. Easterly, along the immediate aforesaid northern boundary line to the NE corner of the SE/4 of Section 16, being the NW corner of the SW/4 of Section 15, and continuing from the NW corner of Section 15 along the northern boundary line of the SW/4 of Section 15, 990 feet to a point; thence

4. Southerly parallel to the westerly boundary line of Section 15 to the southern boundary line of the SW/4 of Section 15; thence

5. Westerly, along the immediately aforesaid southern boundary line, to the point of beginning.

MEMORANDUM OF TELEPHONE OR PERSONAL CONVERSATION

VENTURA, Calif.

APRIL 17 19 89

Operator SENECA RESOURCES CORP. Well No. "Ferndale" 401

Field OIAI Sec. 15 T. 4N R. 21W SB B&M

personal
A telephone conversation was held, concerning above well, with Mr. BILL MAYFIELD

for above operator on APRIL 17 19 89 at 4:15 PM.

Details of the conversation were as follows:

SENECA NOW PROPOSES TO SET ANOTHER KICK-OFF PLUG. THE K.O. PLUG @ 2642' DID NOT RESULT IN A GOOD KICK-OFF, SINCE THE BIT FOLLOWED THE ORIGINAL HOLE. THE PLUG WAS DRILLED OUT TO 2700'. A PLUG WILL BE PLACED FROM 2700' TO 2400' & THE WELL WILL BE KICKED-OFF JUST BELOW 2400'. SENECA WILL SUBMIT A SUPPLEMENTARY NOTICE TO COVER BOTH PLUGS.

(Signed) Steve Mulqueen

Title

OG136 (11-74-GSR1-5M)

(see reverse side for proposed well operations)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No.P 289-119
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Bakersfield, CA. 93389-1164

Ventura, California
April 21, 1989

Your supplementary proposal to drill well "Ferndale" 401, A.P.I. No. 111-21537, Section 15, T. 4N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 4/14/89, received 4/14/89, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Requirements specified in permit No. P289-66 dated 3/9/89 shall apply.
2. The spacing provisions of Section 3606 shall apply.
3. A revised lease description is filed with this office.
4. A subsurface directional survey is made and a plat of such survey is filed with this office within 15 days of completion of the well.

NOTE; Under PRC Section 3606 and PRC Section 3600, this well is a public nuisance until revised lease description is filed.

recieved 5/8/89
OK

Blanket Bond
SF:ljg

Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By

Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

SUPPLEMENTARY NOTICE

VISION OF OIL AND G.
RECEIVED
APR 1 1989
VENTURA, CALIFORNIA

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
83	—	✓

DIVISION OF OIL AND GAS

Ventura Calif.

A notice to you dated March 1, 19 89, stating the intention to

Drill (Drill, rework, abandon), Well No. Ferndale 401, API No. 111-21537,

Sec. 15, T. 4N, R. 21W, S.B. B. & M., Ojai Field,

Ventura County, should be amended because of changed conditions.

The present condition of the well is as follows:

Total depth

Complete casing record including plugs and perforations:

We now propose

To drill the subject well to a true vertical depth of 6000'.
Run 7", 26#, K-55 and/or N-80 LT&C casing from surface to T.D.
Proposed new bottom hole location to be 1191' N & 438' E of SW corner of Section 15, T4N, R21W, S.B.B.&M, Ventura County, California.
Resurveyed surface location is 923' N and 12' E of SW corner of Section 15, T4N, R21W, S.B.B.&M, Ventura County, California.

MAP	MAP BOOK	CARDS	BOND	EDP	FORMS 114	FORMS 121
BHH NC 4/21/89						

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address P.O. Box 630 (Street)

Santa Paula, CA. 93060 (City) (State) (Zip)

Telephone Number (805) 656-2445

Seneca Resources Corporation (Name of Operator)

By [signature] (Name) 4-14-89 (Date)

Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No.T289-105

REPORT ON OPERATIONS

Murdock M. Baker, Jr.
SENECA RESOURCES CORP.
P.O. Box 630
Santa Paula, CA 93060

Ventura, California
April 12, 1989

Your operations at well "Ferndale" 401 API No. 111-21537,
Sec. 15,T. 4N,R. 21W, S.B.B.&M. Ojai Field,in Ventura
County, were witnessed on 4/10/89. Bruce Hesson, representative of the supervisor, was present from 2330 to 0130. There were also present B. Mayfield, D.F.

Present condition of well: 9 5/8" cem 604'. TD 604' (drilling)

The operations were performed for the purpose of testing the blowout prevention equipment and installation.

DECISION:

THE BLOWOUT PREVENTION EQUIPMENT AND ITS INSTALLATION ON THE 9 5/8" CASING ARE APPROVED.

ljg

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Deputy Supervisor

OG109

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 289-66
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code --

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr.
SENECA RESOURCES CORP.
P.O. Box 630
Santa Paula, CA 93060

Ventura, California
March 9, 1989

Your proposal to drill well "Ferndale" 401, A.P.I. No. 111-21537, Section 15, T. 4N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 3/1/89, received 3/3/89, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOG Class III B2M requirements is installed on the 9 5/8"casing and maintained in operating condition at all times.
2. Drilling fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. Blowout prevention practice drills are conducted at least weekly and recorded on the tour sheet.
4. Unlined sumps, if they contain harmful waters, shall not be located over freshwater zones.
5. Any sump used during these operations shall be thoroughly cleaned and filled with earth as soon as operations are completed.
6. This office shall be consulted before sidetracking the well or running any additional casing.
7. The 9 5/8" casing is cemented with sufficient cement to fill behind this casing from the shoe to the ground surface.
8. The 7" casing is cemented with sufficient cement to fill behind this casing to at least 500 feet above the uppermost oil and/or gas zone or anomalous pressure interval, whichever is higher.
9. The Division will monitor the monthly production of this well for a period of six months and if anomalous water production is indicated, remedial action well be required.
10. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.
11. THIS DIVISION SHALL BE NOTIFIED:
    a. To witness a pressure test of the blowout prevention equipment prior to drilling out the shoe of the 9 5/8" casing. Prior to notifying the division engineer to witness the test, the blind rams must be tested. Information of the blind ram test must be entered on the tour sheet along with the signature of the person in charge.

Blanket Bond
SF:ljg
Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

OG111

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS
Notice of Intention to Drill New Well

DIVISION OF OIL AND G...
RECEIVED
MAR 3 1989
VENTURA, CALIFORNIA

C.E.Q.A. INFORMATION			
EXEMPT ☐ CLASS____	NEG. DEC. ☐ S.C.H. NO.____	E.I.R. ☒ S.C.H. NO. CUP3344	DOCUMENT NOT REQUIRED BY LOCAL JURISDICTION ☐
See Reverse Side			

FOR DIVISION USE ONLY					
MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121
203	SPM 3-11-89		93	✓	✓

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to commence drilling well Ferndale #401, well type oil, API No. 111-21537 (Assigned by Division)

Sec. 15, T. 4N, R. 21W, S.B. B. & M., ~~Silverthread~~ agai Field, Ventura County.

Legal description of mineral-right lease, consisting of 190 acres, is as follows: (Attach map or plat to scale)

(see attachments 1 & 2)

Do mineral and surface leases coincide? Yes X No____. If answer is no, attach legal description of both surface and mineral leases, and map or plat to scale.

Location of well 800 feet North (Direction) along section / ~~property~~ (Cross out one) line and 20 feet East (Direction)

at right angles to said line from the Southeast corner of section / ~~property~~ (Cross out one) 16 or

T4N, R21W, S.B.B.&M.

Is this a critical well according to the definition on the reverse side of this form? Yes ☐ No ☒

If well is to be directionally drilled, show proposed coordinates (from surface location) and TVD at total depth: 762 feet North (Direction) and 419 feet East (Direction)

Estimated **true vertical** depth 4000'. Elevation of ground above sea level 1299 feet.

All depth measurements taken from top of Kelly Bushing (Derrick Floor, Rotary Table, or Kelly Bushing) that is 10 feet above ground.

PROPOSED CASING PROGRAM

SIZE OF CASING INCHES API	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS	CALCULATED FILL BEHIND CASING (Linear Feet)
9-5/8"	36#	K-55, LT&C	Surf	600'	600'	600'
7"	26#	K-55, LT&C	Surf	4082'	4082'	4000'

(A complete drilling program is preferred and may be submitted in lieu of the above program.)

Intended zone(s) of completion Monterey Shale (Name, depth, and expected pressure) Estimated total depth 4082' MD

It is understood that if changes in this plan become necessary we are to notify you immediately.

Name of Operator	Type of Organization (Corporation, Partnership, Individual, etc.)	
Seneca Resources Corporation	Corporation	
Address	**City**	**Zip Code**
P.O. Box 630, 725 E. Main #200	Santa Paula	93060
Telephone Number / **Name of Person Filing Notice**	**Signature**	**Date**
656-2445 / Eric R. Wilson	Eric R. Wilson	3/1/89

This notice and indemnity or cash bond shall be filed, and approval given, before drilling begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

OG105 (3/86/DWRR/3M)

ATTACH. 1

EXHIBIT "A"

Lease Description

(Attached to and made a part of Lease dated April 11, 1977)

PARCEL 1:

The west half of the southeast quarter of Section 15, Township 4 North, Range 21 West, San Bernardino meridian, in the county of Ventura, state of California, according to the official plat of the survey of said land.

EXCEPT the south 20 acres of said west half of the southeast quarter.

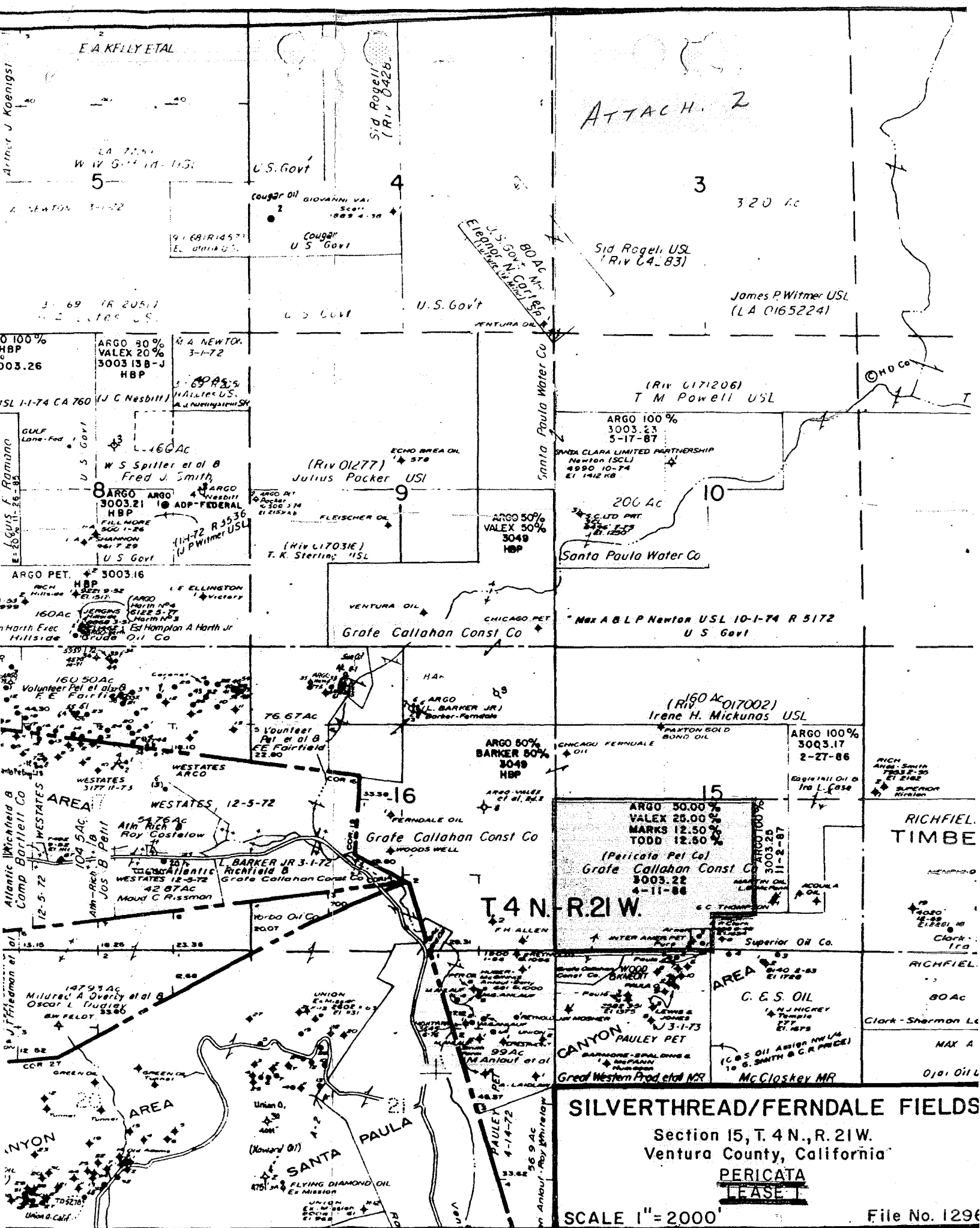
ALSO EXCEPT the easterly twenty-seven and one-half (27½) acres of that portion of the west half of the southeast quarter (W½SE¼) lying north of the south 20 acres of said west half of the southeast quarter (W½SE¼).

PARCEL 2:

The southwest quarter of Section 15, Township 4 North, Range 21 West, San Bernardino meridian, in the county of Ventura, state of California, according to the official plat of the survey of said land.

EXCEPT the southeast quarter of the southeast quarter of the southeast quarter of the southwest quarter (SE¼SE¼SE¼SW¼),

and containing 190.00 acres more or less.


ATTACH. 2
T. 4 N. - R. 21 W.
SILVERTHREAD/FERNDALE FIELDS
Section 15, T. 4 N., R. 21 W.
Ventura County, California
PERICATA
LEASE
SCALE 1" = 2000'
File No. 1296
00100451

SENECA RESOURCES CORPORATION

DRILLING PROGRAM

WELL: Ferndale 401 **LEASE:** Ferndale

FIELD: Silverthread **COUNTY:** Ventura **STATE:** California

---

SURFACE LOCATION:	800' North and 20' East of the SE corner, Section 16, T4N, R21W, S.B.B.&M.
DATUM DESCRIP. & ELEVATION:	1299' GL
K.B. ABOVE DATUM:	10'
ESTIMATED T.D.:	4,082'
ESTIMATED DRILLING TIME:	10 Days
ESTIMATED TOTAL DAYS:	20 Days

PREPARED BY: Eric R. Wilson DATE: 3/1/89

SENECA RESOURCES CORPORATION
DRILLING PROGRAM - FERNDALE 401
MARCH 1, 1989

1. MIRU drilling rig.

2. Do not drill mouse hole until after surface casing is cemented.

3. Call Ventura County Fire Department to inspect rig before spudding well.

4. Measure and record K.B. on tour sheet.

5. Drill 12-1/4" hole to 600'±. Install MudLogger.

6. Run and cement 9-5/8", 36#, K-55, LT&C casing.

7. Install 9-5/8" X 3000 psi, wellhead and test welds to 500 psi. Nipple up BOPs; test pipe rams, casing and manifold to 1000 psi; and Hydrill to 500 psi. D.O.G. to witness test.

8. Directionally drill 8-3/4" hole to 4082'±.

9. Run DIL-FDC-CNL, Acoustic (Delta T and wave format)-GR, and Dipmeter logs.

10. Condition hole for casing.

11. Run and cement 7", 26#, K-55, LT&C casing to T.D.

12. Clean mud pits and release rig.

CALIFORNIA
DIVISION OF OIL AND GAS

March 13, 1989

To: Murdock M. Baker, Jr.
SENECA RESOURCES INC.
P.O. Box 630
Santa Paula, CA 93060

From: Division of Oil & Gas
6401 Telephone Rd., STe. 240
Ventura, CA 93003

Subject: ☒ Request for confidential status dated March 9, , 19 89.

☐ Request for extension of confidential status dated _____, 19___.

☒ Subject request is approved

☐ Subject request is partially approved

☐ Subject request is denied.

Records approved for confidential status are:

WELL NAME AND NUMBER	FIELD OR COUNTY	DATE ON WHICH RECORDS WILL BECOME PUBLIC
"Ferndale" 401	Sec. 15,T.4N.,R.21W.,SBB&M Ojai Field	2 yrs after cessation of drilling

Patrick J. Kinnear
Deputy Supervisor

cc: M.J. System
P.I.

SEE REVERSE SIDE FOR RECORDS DENIED CONFIDENTIAL STATUS OR EXTENSION OF CONFIDENTIAL STATUS AND REMARKS.

OGD181 (7/82/DWRR/2M)

Seneca Resources Corporation
a National Fuel Gas System company

March 9, 1989

DIVISION OF OIL AND G
RECEIVED
MAR 1 5 1989
VENTURA, CALIFORNIA

Division of Oil & Gas
6401 Telephone Road
Suite 240
Ventura, California 93003

Gentlemen:

By letter of March 1, 1989, we transmitted a "Notice of Intention to Drill New Well" for our planned Ferndale #401.

Since this well is to be exploratory in nature, we would like to request a confidential status for it at this time.

Sincerely,

Eric R. Wilson

Eric R. Wilson
Division Engineer

ERW:deh

PROPERTY/WELL TRANSFER OR ACQUISTION

Seneca Resources Corporation (S2630)

to

Vintage Production California LLC (V1370)

Effective April 25, 2008

OPERATOR Unica
WELL NO. "Tundale" #6
MAP

INTENTION	Drill	rework				
NOTICE DATED	12-26-89	—				
P-REPORT NUMBER	290-7	290254				
CHECKED BY/DATE		Map 203 JMC 3/25/91				
MAP LETTER DATED						
SYMBOL						

	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED
NOTICE	12/27/89		6-18-90									
HISTORY	7/2/90		2/5/91									
SUMMARY	7/3/90											
E-LOG (Dual LL/GR)	7/3/90											
MUD LOG	7/3/90											
DIPMETER	7/3/90											
DIRECTIONAL	7/3/90											
CORE/SWS	7/3/90											
CBL	7/3/90											
Form. Tester	7/3/90											
Sonic	7/3/90											
Den/Neutron	7/3/90											
(Same logs as	—											
Above for Redrill)	7/3/90											
6 Mos. Prod (Jan '91)	3/25/91	→	→									

ENGINEERING CHECK

T-REPORTS						
OPERATOR'S NAME						
WELL NO.						
LOC & ELEV						
SIGNATURE						
SURFACE INSP.						
DRILL CARD						
RECORD'S COMPLETE	JMC	JMC				

FINAL LETTER OK _____
MAILED _____
RELEASED BOND _____

INJECTION BOOK _____
IDLE WELL LIST _____
SURFACE INSP. CARD _____
OK TO RELEASE FROM CONFIDENTIAL _____

REMARKS: 42% Cut

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. T291- 76

REPORT ON OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
March 27, 1991

Your operations at well "Ferndale" 716, API No. 111-21563, Sec. 9, T. 4N, R. 21, S.B.B.&M. Ojai Field, in Ventura County, were witnessed on 3/25/91. Pam Ceccarelli, representative of the supervisor, was present from ---- to ----. There were also present .

Present condition of well: 13 3/8" cem 905'; 9 5/8" cem 5325'; 5 1/2" cem 7315', perfs 6565'-6624' & 6688'-6718'. TD 7319' (present hole).

The operations were performed for the purpose of the six-month production water shut-off audit.

DECISION:

The 5 1/2" shutoff at 6565' is approved.

ljg

M.G. MEFFERD, ~~State Oil and Gas~~ Supervisor

By
Patrick J. Kinnear
Deputy Supervisor

OG109

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

No. T 76

DIVISION OF OIL AND GAS

Report on Operations

Seneca

_____ Calif.

Your operations at well "Ferndale" 716, API No. 1112563,
Sec. 9, T. 4, R. 21, SB B.& M. Ojai Field, in Ventura County,
were witnessed on 3/25/91. Pam Ceccarelli, representative of
the supervisor, was present from ---- to ----. There were also present ---

Present condition of well: 13 3/8" cem 905'; 9 5/8" cem 5325'; 5 1/2" cem 7315' perfs 6565'-6624' & 6688'-6718'. TD 7319' (prebent hole)

The operations were performed for the purpose of the 6-month production water shut-off audit.

DECISION:

The 5 1/2" shutoff at 6565' is approved.

OG109 (9/83/GSR1/15M)

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

DIVISION OF OIL AND GAS
RECEIVED
FEB 5 1991
VENTURA, CALIFORNIA

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 716 R/D SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-21563 JAMES A. BECK, GENERAL MANAGER

James A. Beck

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445

****

8/30/90
Day 1. MIRU WellTech. Bled well. Rig to circulate. Rig well down flowline. SDFN.

8/31/90
Day 2. Bled well. Unseat pump. Pump 50 bbls. lease oil down tbg. POH with rods & pump. RU Otis Wireline. Run sample bailer & tag fill @ 6618'. RO Otis. Remove tree & install Class 3 BOPE. Rig floor & tbg. tools. Move in 20 jts. 2-3/8" N-80 tbg. Rig to circulate well. SDFN.

9/1/90
Day 3. Bled well. Circ. bottoms up. RIH & tag fill @ 6618'. Clean out frac sand to 6650'. Pull up to 6400'. Close well in. SDFN.

9/2/90
to No activity.
9/4/90

9/5/90
Day 4. Bled well. RIH with tbg. from 6400'. Tag fill @ 6650'. Circulate well bottoms up. POH with tbg. Remove Hydril. Secure well.

9/6/90
Day 5. Flanged 5-1/2" wellhead isolation tool. RU Halliburton frac equipment & frac well as per program. (See attached). Max. rate = 33 BPM, avg. rate = 30 BPM, max. press. = 5200#, avg. press. = 4700#, Max. conc. = 8 ppg, avg. conc. = 6 ppg. Total sand pumped = 19,500# 20/40 resin coated, total sand out = 19,100#, total oil pumped = 325 bbls., total gel pumped = 82 bbls. FSIP = 3104#, 5 min. = 2536#, 10 min = 1150#, 15 min. = 660# & 30 min. = 250#. Repack with resin coated sand, zone that was frac'd 4/90. (FSIP F.G. = .88). RO Halliburton & isolation tool. RU Otis Wireline & lubricator. Run in with slickline & tag fill @ 6651'. RO Otis. Nipple up Hydril & HLS wireline & full lubricator. Run in with 5-1/2" ret. BP & set @ 6550'. POH. Test BP @ 2000 psi & lubricator to 1000 psi - OK. Run in with 3-3/8" & shot 4 (0.44") holes over two foot @ 6504'-06', 6510'-12', 6514'-16', 6520'-22', 6527'-29' & 6536'-38'. RO HLS wireline & lubricator. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 716 R/D SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-21563 JAMES A. BECK, GENERAL MANAGER

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445
****

9/7/90
Day 6. Remove Hydrill. NU isolation tool. RU Halliburton frac equipment & frac well as per program. (See attached). Stage III. Interval 6504'-6538'. Frac fluid = Super "E". Prepad #1 = 146 bbls. oil. Holes open = 24. Breakdown = none noted. ISIP = 3625#, 5 min. SIP = 1723#, 10 min. = 950# & 15 min. = 833#. Max rate = 34, avg. rate = 31, max. press. = 5400#, avg. press. = 4800#. Avg. conc. = 5 ppg, max. conc. = 7.5 ppg. Total oil pumped = 574 bbls., total gel pumped = 196 bbls. Super "E". FSIP = 3210#, 5 min. = 2700#, 10 min. = 1995# & 15 min. = 1523#. Theo. TOS = 6505'. Total sand = 43,000# resin coated 20/40. RO frac equipment & isolation tool. NU Hydril & Otis Wireline & lubricator. Run in with slickline & tag fill @ 6508'. POH. RO Otis. RU HLS wireline & full lubricator. Run in with 5-1/2" ret. BP. Tag sand @ 6492'. Pull up & set plug @ 6485'. POH. RU pump, unable to press. test BP, (seals on blind rams leaking). SDFN. Note: 500 psi on well prior to setting BP.

9/8/90
Day 7. Exchange double gate tested BP @ 2000 psi - OK. RU & test lubricator to 1000 psi. RU HLS. RIH with 3-3/8" carrier & perforate 4 (0.44") @ 6451'-53', 6440'-42', 6433'-35', 6433'-35', 6418'-20', 6410'-12', 6402'-04', 6393'-95', 6373'-75'. POH. RO HLS. NU Hydrill & isolation tool. NU frac equipment & frac well as per program. Stage IV 6374'-6452'. 32 holes. Frac fluid = Super "E". Prepad #1 = 143 bbls. oil. ISIP = 4003#, frac grad. = 1.04. Breakdown = 6 BPM @ 4306 psi & 25 BPM @ 5400 psi. 5 min. SIP = 1700#, 10 min. = 1598# & 15 min. = 1510#. Max rate = 32, avg. rate = 31, max. press. = 5630#, avg. press. = 5220. Avg. conc. = 5 ppg, max. conc. = 8 ppg. Total oil pumped = 691 bbls., total gel pumped = 261 bbls. Super "E". FSIP = 4200#, 5 min. = 2750#, 10 min. = 2315# & 15 min. = 2291#. Total sand = 69,000# resin coated 20/40. RO frac equipment. ND isolation tool. NU tree. SDFN.

9/9/90
to No activity.
9/10/90

9/11/90
Day 8. RU Otis. RIH & tag fill @ 6304'. RO Otis. Remove tree & floor. RU flowline to Baker tank. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 716 R/D SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-21563 JAMES A. BECK, GENERAL MANAGER

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445
****

9/12/90
Day 9. RU Specialized Workover Service. MU Baker ret. tool, 1 jt 2-3/8" tbg & 2-3/8" Otis circulating valve. Measure in hole with 2-3/8" tbg. to 6000'. SDFN.
Note: 875 psi on well @ 7:00 a.m. Opened well to tank thru 7/64" choke. Bled to 60 psi.

9/13/90
Day 10. 900 psi. Finish RIH with 2-3/8" tbg. & tag fill @ 6289'. RU pump & clean out fill to 6490' (tbg. meas.). Wash over BP & circ. hole clean. Release BP. POH with 70 stds. 2-3/8" tbg. SDFN.

9/14/90
Day 11. 850 psi. Finish POH with 2-3/8" tbg. (under press.). LD ret. tool & BP. MU 2-3/8" mule shoe, 1 jt. 2-3/8" tbg. & T/L pump shoe & 10' pup jt & Otis XN circ. valve. Snubbed in with 20 stds. 2-3/8" tbg. RU pump & fill tbg. with oil. Valve not holding. SDFN.

9/15/90
Day 12. 800 psi. RU Otis wireline. Change out valves on Otis profile nipple. RO Otis. RIH with 40 stds. tbg. & filled same with oil. RIH with tbg. Tag fill @ 6463'. RU pump & clean out to 6550' (tbg. meas.). Circulate hole clean. Pull tbg. to 6000'. SDFN.

9/16/90
Day 13. 800 psi. RIH with tbg. Tag sand @ 6473'. RU pump & clean out to 6550'. Circulate bottoms up. Pull out to 6000' holding 900 psi on backside while pulling tbg. Note: Circ. on bottom for 3-1/2 hrs. @ 1.8 BPM. Calculated holding 900 psi on well. SDFN.

9/17/90
Day 14. 800 psi. RIH & tag sand @ 6497'. CO solid sand from 6497'-6550' (10' at a time). Circulate bottoms up for 4 hrs. Pull tbg. under press. & land @ 6007'. RO SWS. Remove BOP. NU tree. SDFN. Note: Checked for sand bridge while cleaning out. Solid sand from 6497'-6550'.

9/18/90
Day 15. RU Otis piano wire. RIH & retrieve Otis tbg. plug @ 5963'. Tag fill @ 6509'. Rig well to flow. RDMO.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 716 R/D SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-21563 JAMES A. BECK, GENERAL MANAGER

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93060 (805) 656-2445
****

12/04/90
Day 1. MIRU Oilwell. Rig for rods. Bled tbg. Tbg quit flowing. Pull rods and pump. Unable to bleed csg. Unbolt wellhead. Take off x-mas tree. Bolt on Homco hyd. gate. Make up lines from accum to gate and hydrill. Spot pump and clean out tank. Plumb lines from pump to well and clean out tank. Close well in. SDFN.

12/05/90
Day 2. Bolt on Homco Hydril and PGSR stripper. Pump oil down csg and tbg. Land tbg. Strip on PGSR rubber. Measure rabbit and pick up 2-3/8" N-80 tbg. Tag fill @ 6496'. Circulate out gas. Clean out sand 6496' to 6540'. Circulate well 2 hrs. Pull tbg. Make up Otis circulating plug and Baker ret head. Run tools and tbg. Fill tbg with oil every 24 stands. Run 79 stands. Close well in. SDFN.

12/06/90
Day 3. No press on well. Open well. Run tbg. Tag fill @ 6489'. Rig poorboy swivel. Circulate out sand w/500 psi. Back press to bridge plug @ 6559'. Release plug. Lower plug 10'. Pull up and circulate well 3-1/2 hrs. Small amount of sand still in returns. Pull tbg and plug. Plug hanging up. Work to 6466'. Rig pump. Circulate free. Cont. pulling tbg and plug. Packing rubber gone. Make up 2-3/8 STC, 1 jt. 2-3/8, 2" pump shoe ring, 10' 2-3/8 pup jt, 1.87 Otis X-nipple. Measure and run tbg. Run 60 stands. Close well in. Open csg to flowline. SDFN.

12/8/90
Day 5. Space well & hang on. Clean & load out equipment. RWTP. RDMO.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P290- 254
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
June 19, 1990

Your proposal to rework well "Ferndale" 716, A.P.I. No. 111-21563, Section 9, T. 4N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated ---, received 6/18/90, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOG Class II 2M requirements shall be installed and maintained in operating condition at all times.
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. Wire line operations are conducted through at least a 2M lubricator.
4. Any sump used during these operations shall be thoroughly cleaned and filled with earth as soon as operations are completed.
5. The Division will monitor the monthly production of this well for a period of six months and if anomalous water production is indicated, remedial action well be required.
6. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.

Blanket Bond
SF:ljg

Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OGIII

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
JUN 18 1990
VENTURA, CALIFORNIA

Notice of Intention to Rework Well

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	FORMS	
	OGD 114	OGD 121
✓	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well Ferndale 716 R/D (Well designation), API No. 111-21563

Sec. 9, T. 4N, R. 21W, SB B. & M., Silverthread Field, Ventura County.

The present condition of the well is as follows:

1. Total depth 7315'
   Eff. Depth 6672' BP
2. Complete casing record, including plugs and perforations (present hole)

   See attached

3. Present producing zone name L. Mohnian ; Zone in which well is to be recompleted L. Mohnian
4. Present zone pressure 2900 psi ; New zone pressure 2900 psi
5. Last produced 6/1/90 (Date) | 80 (Oil, B/D) | 8 (Water, B/D) | 150 (Gas, Mcf/D)
   (or)
   Last injected --- (Date) | (Water, B/D) | (Gas, Mcf/D) | (Surface pressure, psig)
6. Is this a critical well according to the definition on the reverse side of this form? ☐ (Yes) ☒ (No)

The proposed work is as follows:

Perforate with 3-3/8" casing guns and frac the interval from 6374'-6537' in two successive stages above bridge plugs. Clean out to 6672' and put well on production.

Note: If well is to be redrilled, show proposed new bottom-hole coordinates and true vertical depth.

It is understood that if changes in this plan become necessary, we are to notify you immediately.

Address 725 E. Main St., Suite 200 (Street)
Santa Paula (City) CA. (State) 93061 (Zip)
Telephone Number (805) 656-2445

Seneca Resources Corporation (Name of Operator)
By James A. Beck (Name—Printed)
James A. Beck (Name—Signature) (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

OG107 (8/87/DWRR/5M)

FERNDALE 716
CASING RECORD

DEPTH REFERENCE	:	KB is 30' above GL
TOTAL DEPTH	:	7319' Drilled Depth
EFFECTIVE DEPTH	:	6672' BP
ESTIMATED TOC	:	5390'
CASING DETAIL	:	13-3/8" (54.5 #, &K-55, ST&C) cmnt'd at 905'. Bumped plug. Float held. 9-5/8" (43.5 #, P-110, LT&C) cmnt'd at 5325'. Bumped plug. Float held. 5-1/2" (17.0 #, N-80, LT&C) cmnt'd at 7315'. Bumped plug. Plug held. Casing - Jts 1-169, 17 #, N-80 Short Jts. - 6237'-6245', 8.01'
PERFORATIONS	:	Argo Sand below BCFZ 4(.38") jhpf, 90 degree, from 6688' to 6718' with 3-3/8" tubing-conveyed guns. Frac'd 3/27/90. Argo Sand below BCFZ 4(.44") jhpf over two feet, 90 degree, from 6565 to 6624'with 3-3/8" casing guns. 32 holes. Frac'd 4/18/90.
BRIDGE PLUG	:	6672'

Seneca Resources Corporation
a National Fuel Gas System company

DIVISION OF OIL AND GAS
RECEIVED
JUN 18 1990
VENTURA, CALIFORNIA

June 14, 1990

Steve Fields
Division of Oil & Gas
6401 Telephone Road, Suite 240
Ventura, California 93003

Dear Steve:

Enclosed please find, in duplicate, "Notice of Intention to Rework Well":

Ferndale 716 R/D
Ferndale 4 R/D
Nesbitt 4

Should you require additional information, please call me at (805) 656-2445.

Sincerely,

Carol Fletcher

Carol Fletcher
Operations Secretary

Encl:

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
JUL 3 1990
VENTURA, CALIFORNIA

API No. 111-21563

WELL SUMMARY REPORT

Operator	Well				
Seneca Resources Corporation	Ferndale 716 R/D 1				
Field	**County**	**Sec.**	**T.**	**R.**	**B.&M.**
Silverthread	Ventura	9	4N	21W	S.B.

Location (Give surface location from property or section corner, street center line and/or California coordinates)
629' N & 3610' E from SW corner of Section 9

Elevation of ground above sea level
1132'

Commenced drilling (date)	Total depth			Depth measurements taken from top of:
1/7/90	(1st hole)	(2nd)	(3rd)	☐ Derrick Floor ☐ Rotary Table ☒ Kelly Bushing
Completed drilling (date)	6620'	7315'		Which is 30 feet above ground
2/12/90	Present effective depth: 6672' BP			
Commenced producing (date)	Junk: None			

☒ Flowing ☐ Pumping ☐ Gas lift

Name of producing zone(s)
L. Mohnian Sands
Below BCFZ

GEOLOGICAL MARKERS	DEPTH
San Cayetano Fault	2090'
U. Big Canyon Fault	3205'
L. Big Canyon Fault	5280'

Formation and age at total depth
L. Mohnian, Miocene

	Clean Oil (bbl per day)	Gravity Clean Oil	Percent Water including emulsion	Gas (Mcf per day)	Tubing Pressure	Casing Pressure
Initial Production	90	31	11	200	1000	1200
Production After 30 days	80	31	7	130	500	950

CASING RECORD (Present Hole)

Size of Casing (API)	Top of Casing	Depth of Shoe	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Number of Sacks or Cubic Feet of Cement	Depth of Cementing (if through perforations)
13-3/8"	Surface	905	54.5	K-55 ST&C	New	17-1/2"	860 sxs.	
9-5/8"	Surface	5325	43.5	P-110 LT&C	New	12-1/4"	1230 sks.	
5-1/2"	Surface	7315	17.0	N-80 LT&C	New	8-1/2"	500 sks.	

PERFORATED CASING (Size, top, bottom, perforated intervals, size and spacing of perforation and method.)
Stage I: 4 (0.37") JHPF 6688'6718' with 3-3/8" TCP 90° phased.
Stage II: 4 (0.44") JHPF over 2' at 6624', 6615', 6604', 6596', 6584', 6578', 6571' & 6565' (32 holes)

Was the well directionally drilled? If yes, show coordinates at total depth
☒ Yes ☐ No 1400.85 S 111.33 E

Electrical log depths
#1 903-5316' #2 5316-6620' #3 5310-7315' DLL-SP-GR, CNL-CDL,

Other surveys
FWS, SFT-GR, Dip, SWL, Mudlog

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Name	Title	
James A. Beck	General Manager Operations	
Address	**City**	**Zip Code**
P.O. Box 630	Santa Paula	93061
Telephone Number	**Signature**	**Date**
(805) 656-2445	James A. Beck	6/26/90

SUBMIT IN DUPLICATE

OG100 (3/82/GSR1/5M)

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 716 SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-21563 JAMES A. BECK, GENERAL MANAGER OPERATIONS

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93061 (805) 656-2445
****

1/7/90
Day 1. MIRU Loffland 217. PU BHA. Drill 46'-240'. Survey 240'-324'. Circ. & POOH for bit. RIH. Drill from 324'-358'. Mud to surface around rig. POOH. Wait on cementers. RIH, open ended to 348' & pump lost circulation cmt. plug. POOH. WOC.

1/8/90
Day 2. Present Operation: Trip for bit. RIH. Depth: 648'. WOC. Tag cmt. @ 41'. Clean out to 80'. WOC. Clean out to 358'. Drill from 358'-473'. Survey. Drill from 473'-518'. Trip for BHA. Drill from 518'-618'. Survey. Drill from 618'-648'. POOH for bit. RIH.

1/9/90
Day 3. Present Operation: Run 13-3/8" csg. Depth: 905'. Ream from 578'-648'. Drill from 648'-770'. Survey. Drill from 770'-905'. Circ. & survey. POOH. Measure out. MU BHA. Ream from 46'-350'. RIH. Circ. BU. Wipe to bit. RIH. Circ. for csg. POOH. Run 13-3/8" csg.

1/10/90
Day 4. Present Operation: Nipple up. Depth: 905'. Run 13-3/8" csg. to 905'. Circulate for cement. Cement casing. WOC. Cut off conductor & csg. Nipple up BOPE.

1/11/90
Day 5. Present Operation: RIH. Depth: 905'. Nipple up BOPE. Test blind rams to 2000 psi. LD 17-1/2" tools. Clean mud tanks & condition mud. MU BHA. RIH, test BOPE, witnessed by DOG. Circulate & condition mud. Weld bell nipple. Clean out cmt. to shoe. POOH, bit locked on steel junk. Wait on magnet. POOH. RIH with bit.

1/12/90
Day 6. Present Operation: Drilling. Depth: 1436'. Install MWD. RIH. Drill out shoe @ 905'. Drill from 905'-1049'. Pull to shoe. Repair swivel & inspect BOP rams for loose iron. Drill from 1049'-1078'. Trip for bit & steerable drlg. assembly. Drill from 1078'-1436'.

1/13/90
Day 7. Present Operation: Trip. Depth: 1821'. Drill from 1436'-1660'. POOH. Inspect drill pipe. Pull & replace MWD tools. RIH. Circulate & wash to bottom. Drill from 1660'-1821'.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 716 SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-21563 JAMES A. BECK, GENERAL MANAGER OPERATIONS

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93061 (805) 656-2445
****

1/14/90
Day 8. Present Operation: Drilling. Depth: 2376'. Drill from 1821'-1823'. POOH. Change survey equipment. RIH. Ream from 1783'-1823'. Drill from 1823'-2235'. Change MWD transducer. Drill from 2235'-2376'.

1/15/90
Day 9. Present Operation: Drilling. Depth: 3158'. Drill from 2376'-2384'. POOH. LD drill pipe. Change mud motor & tools. RIH. Work through tight hole. Break circulation. Ream from 2309'-2384'. Drill from 2284'-2856'. Circulate bottoms up. Wipe hole to 1868. Drill from 2856'-3158'.

1/16/90
Day 10. Present Operation: Drilling. Depth: 3560'. Drill from 3158'-3229'. Wipe hole from 3229'-2183'. Ream from 2623'-2873'. Repair rig. Ream from 2873'-3229'. Drill from 3229'-3326'. Repair rig generators. POOH for bit & BHA. RIH. Ream from 3281'-3326'. Drill from 3326'-3480'. Wipe hole to 2495'. Drill to 3560'.

1/17/90
Day 11. Present Operation: Drilling. Depth: 3920'. Drill from 3560'-3635'. Wipe hole to 2640'. Drill from 3635'-3650'. POOH for bit. RIH. Ream & work junk sub. Drill from 3650'-3750'. Wipe hole to 2650'. Drill from 3750-3889'. Wipe hole to 2937'. Drill from 3889'-3920'

1/18/90
Day 12. Present Operation: Drilling. Depth: 4478'. Drill from 3930'-4074'. Wipe hole from 4074' to 3129'. Drill from 4074'-4262'. POOH for bit. RIH. Test MWD. Ream from 4000'-4262'. Drill from 4262'-4448'. Wipe hole to 2400'. Drill to 4478'.

1/19/90
Day 13. Present Operation: Drilling. Depth: 4916'. Drill from 4478'-4599'. Pull to 3527'. Work on pumps. RIH to 4299'. Ream from 4299'-4359'. RIH to 4599'. Drill from 4599'-4729'. Wipe hole to 3529'. Drill from 4729'-4853'. Wipe hole to 3778'. Drill from 4853'-4916'.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 716 SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-21563 JAMES A. BECK, GENERAL MANAGER OPERATIONS

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93061 (805) 656-2445
****

1/20/90
Day 14. Present Operation: Drilling. Depth: 5196'. Drill from 4916'-4976'. Circ. Pull to 3527'. Repair rig. POOH. Repair rig. RIH and spot ream. Drill from 4976'-5104'. Wipe hole to 4618'. Drill from 5104'-5196'.

1/21/90
Day 15. Present Operation: Wipe hole. Depth: 5325'. Drill from 5196'-5228'. Wipe hole to 4409'. Drill to 5274'. POOH & LD directional tools. MU BHA. RIH and ream to 5274'. Drill from 5274'-5325'. Circ. & cond. mud. Wipe hole to shoe.

1/22/90
Day 16. Present Operation: Logging. Depth: 5316'(strap depth). Wipe hole. Circ. for logs. Chain out for logs. RU loggers. Run DIL-GR; CDL-CNS-GR; 4 Arm Dipmeter; GR-SFT & Six Arm Dipmeter.

1/23/90
Day 17. Present Operation: Running 9-5/8" csg. Depth: 5325'. Run logs. RD loggers. RIH to 4990'. Wash & ream to 5325'. Circ. for csg. POOH. LD BHA. Install 9-5/8" csg. rams. RU casing crew. Weld shoe & float collar. Run csg.

1/24/90
Day 18. Present Operation: W.O.C. Depth: 5325'. Run 125 jts. 9-5/8" 43.5# P-110 csg. to 5325'. Float collar @ 5282' with 50 bbls. Chemwash ahead. Lead: 601 cf. 13.8 ppg 1:1 POZ: Class "G" + 4% D20 Bentonite + 2% D112 FLAC + 0.3% D65 TIC + 0.2% D46 defoamer + 5% KCL (BWOW). Tail: 820 cf 15.2 ppg Class "G" + 1% D127 FLAC + 0.3% D13 retarder + 0.2% D46 defoamer + 5% KCL (BWOW). Top & bottom plugs, plug bumped, held. WOC.

1/25/90
Day 19. Present Operation: RIH. Depth: 5325'. WOC. Lift BOP & set slips. Cut off csg. Nipple down BOP. Install wellhead. Nipple up BOP & test blind rams to 1500 psi. RIH.

1/26/90
Day 20. Present Operation: Circ. & cond. Depth: 5421'. RIH. Circulate. Test BOPE with DOG witness. Clean out cement. Drill out float & shoe. Drill from 5325'-5389'. Circ. & survey. Drill from 5389'-5421'. Circ., survey & POOH. Measure tools & install wear bushing. PU BHA. Test MWD. RIH. Circ. & increase mud weight.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 716 SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-21563 JAMES A. BECK, GENERAL MANAGER OPERATIONS

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93061 (805) 656-2445
****

1/27/90
Day 21. Present Operation: Drilling. Depth: 5807'. Circ. & cond. Drill from 5421'-5438'. Circ. & cond. Drill from 5438'-5532'. Circ. Wipe hole to 5285'. Drill from 5532'-5689'. Wipe hole to 5300'. Drill from 5689'-5783'. Circ. & survey. Trip for bit. Wash & ream to bottom. Drill from 5783'-5807'.

1/28/90
Day 22. Present Operation: Drilling. Depth: 6255'. Drill from 5807'-5878'. Wipe to shoe. Repair rig. Drill from 5878'-6002'. Wipe to shoe. Drill from 6126'-6225'. Wipe to shoe. Drill from 6225'-6255'.

1/29/90
Day 23. Present Operation: POOH for logs. Depth: 6620'. Drill from 6255'-6312'. POOH for bit. RIH. Ream from 6162'-6312'. Drill from 6312'-6499'. Wipe to shoe. Drill from 6499'-6620'. Circ. bottoms up. Pull to shoe. Circ. RIH & tag fill (10'). Circ. & increase MW. POOH for logs.

1/30/90
Day 24. Present Operation: Logging. Depth: 6620'. LD BHA. RU loggers. Run DIL-GR, Density Neutron-GR, & FT. MU BHA. RIH. Ream, RIH & circ. Run SFT.

1/31/90
Day 25. Present Operation: W.O.C. Depth: 5700' PBTD. Run SFT. RD loggers. LD bit & BHA. RIH, open ended, to 6507'. Circ. RU cementers. Pump cmt. plug @ 6507'. Pull to shoe. Circ. & WOC. Tag top of plug @ 6190' with 10,000#. Pull to 6015'. Pump cmt. plug @ 6015'. Pull to shoe. Circ. & WOC.
Plug #1: 125 cf Class "G" neat 15.8 ppg. Bottom @ 6507±, top @ 6190' (observed).
Plug #2: 125 cf Class "G" neat 15.8 ppg. Bottom @ 6015'±, top @ 5700'±.

2/1/90
Day 26. Present Operation: POOH. Depth: 5330' PBTD. Circ. & WOC. RIH & tag plug @ 5671'. Pull to 5615'. Pump 3rd plug. Pull to 4600'. Circ. & WOC. POOH. WOC. MU BHA & RIH. Tag plug @ 5225'. Drill out cmt. to 5295'. Circ. & WOC. Drill out cmt. to 5330'. Circ. & POOH.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 716 SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-21563 JAMES A. BECK, GENERAL MANAGER OPERATIONS

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93061 (805) 656-2445
****

2/2/90
Day 27. Present Operation: Drilling. Depth: 5485'. POOH. MU new BHA, RIH & test.. Time drill for kickoff from 5330'-5425'. Circ. POOH & LD 15 jts. DP. Change BHA & PU 15 jts. HW DP. RIH. Wash & ream from 5325'-5425'. Drill from 5425'-5485'.

REDRILL #1:

2/3/90
Day 28. Present Operation: Drilling. Depth: 5804'. Drill from 5485'-5560'. Wipe hole to shoe. Repair rig. Drill from 5560'-5672'. Wipe to shoe. Drill from 5672'-5733'. POOH for bit. RIH, LD DP. Ream from 5360'-5733'. Drill from 5733'-5804'.

2/4/90
Day 29. Present Operation: Reaming. Depth: 6275'. Drill from 5804'-5857'. Wipe to shoe. Repair rig. Drill from 5857'-5992'. Wipe hole. Drill from 5992'-6061'. Wipe hole. Drill from 6061'-6180'. Wipe hole. Drill from 6180'-6275'. Wipe hole & ream.

2/5/90
Day 30. Present Operation: Repair rotary chain. Depth: 6686'. Repair rig. Drill from 6275'-6336'. Trip for bit. Ream from 6156'-6336'. Drill from 6336'-6485'. Wipe hole. Drill from 6485'-6640'. Wipe hole. Drill from 6640'-6686'. Repair rotary chain.

2/6/90
Day 31. Present Operation: Drilling. Depth: 7193'. Repair rig. Drill from 6686'-6795'. Wipe hole. Drill from 6795'-6917'. Circ. Trip for bit. Ream from 6767'-6917'. Drill from 6917'-7102'. Wipe hole. Drill from 7102'-7193'.

2/7/90
Day 32. Present Operation: Logging. Depth: 7319'. Drill from 7193'-7319'. Circ. POOH & change BHA. RIH. Wash & ream from 6995'-7314'. Wipe to shoe. Repair rig. Logging.

2/8/90
Day 33. Present Operation: Strip over wireline. Depth: 7319'. Logging. Stuck SFT. Work stuck tool. RU fishing tools. Cut & thread wireline.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 716 R/D #1 SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-21563 JAMES A. BECK, GENERAL MANAGER OPERATIONS

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93061 (805) 656-2445
****

2/9/90
Day 34. Present Operation: Drain sample bailer. Depth: 7319'. Strip over wireline. Circ. Work over fish. Circ. Shear & recover wireline. POOH. No fish recovery. Wait on tools. RIH to 6520'. Circ. & condition. No fish @ 6528'. RIH to 7296'. Work over fish. Circ. POOH with fish. Drain sample bailer.

2/10/90
Day 35. Present Operation: Circulate for logs. Depth: 7319'. LD fish & fishing tools. MU BHA. RIH, wash & ream from 7082'-7319'. Circ. & cond. POOH. RU loggers. Log. RIH. Ream & circ. for log.

2/11/90
Day 36. Present Operation: Run 5-1/2" casing. Depth: 7319'. POOH. Run DLL-GR, DSN-CDL-GR, FWS, SFT SED GR, SWC 7319'-5325'. RIH & ream from 7199'-7319'. POOH. RU laydown machine. LD HWDP. RU casers. Run 5-1/2" csg.

2/12/90
Day 37. Present Operation: Release rig. Depth: 7319'. Run 5-1/2" csg. to 7315'. (Casing Detail: 169 jts. 5-1/2" 17# N80 LT&C. Shoe @ 7315', float @ 7223' & flag jt. @ 6245'). Circ. for cmt. Pump cmt. (Cement = 97 bbls. (10-0) RFC +5% KCL (BWOW) + 1.25% D127 + 3% D13 + .2% D46 14.2 ppg slurry, displaced with 168 bbls. H20. Bumped plug with 500 psi over. Plug held. Bleed back 1 bbl. Cement in place 10.45). WOC. Nipple down. Set slips. Cut off csg. Install wellhead & test to 2500 psi. Release rig @ 0300 hrs.

2/17/90
Day 1. Bolt on 7" 8rd shooting gate. RU loggers & tester. RIH with GR-CBL-CCL. Tag @ 7157'. Run repeat. 1000 psi on csg. Run main pass to 5100' (TOC). RD HLS & tester.

2/18/90
No activity.

2/19/90
Day 2. MIRU Signal Well Service. Rig tie downs & guy lines.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 716 R/D #1 SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-21563 JAMES A. BECK, GENERAL MANAGER OPERATIONS

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93061 (805) 656-2445
****

2/20/90
Day 3. Remove flange & install mechanical BOP. Install platform & RU tbg. equipment. RIH with 4-3/4" bit on 5-1/2" 17# pos. scraper. Tag bottom @ 7197' with tbg. RU mud pump & turned hole over with 170 bbls. of Ferndale crude oil. Measure out with tbg. RU HydroTest & plug test pkr., pup & 2 jts. MU tbg. conveyed guns & Hydrotest hole with tbg. to 5000#. SDFN.

2/21/90
Day 4. RO HydroTest. RU Halliburton & correlated tbg. to log. Land tbg. on donut. Tore out platform & BOP. Space out tbg. & set Baker 5-1/2" 17# Lok-set pkr. with 10,000# compression. Test csg. to 500 psi, okay. Flange up tree & test to 5000 psi, okay. MU flowline. Drop firing bar to perforate 6688'-6718' with 3-3/8" TCP, 4 (0.37") SPF, 90° phasing. Max. press. on tbg. 100 psi. SDFN.

2/22/90
Day 5. 160# tbg. Well flowing. RDMO.
Note: 8:00 a.m. Packer set @ 6588'. Tbg. vol. = 26 bbls. Line vol. = 8 bbl. 8 a.m. TP = 0, well dead: 9 a.m. TP = 320#. Well flowing on 14/64. Flowed 30 BO in 3 hrs. Blew gas the rest of the day.

2/23/90
Day 6. Release rig. RU Halliburton. Apply 600 psi on csg. (Packer set @ 6588') Press. test lines to 6300 psi. Perform oil squeeze with Ferndale Lease Crude. Press. up and surge back 32 times. Max. injection rate = 4 BPM, max. surface press. = 4500#, max. bottom hole press. = 6400#. Total oil pumped = 20 bbls. No breakbacks noted. Bleed tbg. to zero. Tie in to casing. Bleed csg. off. Break out Halliburton. Breakout vacuum truck. Transfer excess oil back to tanks. Release equipment. Leave well open on 9/64 choke to production tank.

2/24/90
Well shut-in at 11:00 a.m.

2/25/90
Well shut-in. TP = 600 psi. Open well up. Well dies. Shut well in.

2/26/90
Shut-in TP = 600#. Open up on 9/64". Well dies. At 12 noon, well pressures to 250 psi. Well flowed 26 bbls.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 716 R/D #1 SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-21563 JAMES A. BECK, GENERAL MANAGER OPERATIONS

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93061 (805) 656-2445
****

2/27/90
Well flowed 8.1 BO in 18 hrs. TP = 150 psi.

2/28/90
Put well on to bleed off. Move rig in after Ferndale #712 to prep for frac.

3/8/90
Day 1. MIRU Signal. 300# tbg. RU Otis. RIH with tool & wireline fish firing bar. RO Otis. 200# tbg. Pump approx. 16 bbls. oil down tbg. Press. to 500 psi. Shut down pump. Press. dropped to 0# in 2 min. Wait 15 min. Tbg. dead. Remove tree. Install pup & safety valve. Install BOE & floor. Close & lock pipe rams & bag. Install control valve in tbg. & hook to flowline. Rig to pull tbg. SDFN.

3/9/90
Day 2. 0# press. Unset pkr. POOH with tbg. Kept hole full. LD 210 jts. 2-3/8" N-80 tbg. Broke down van guns. Close blind rams & locked. RO working platform & Hydrill. Install tree & flange up adapter on BOE. Drift in oil & clean up tools. SDFN.

3/10/90
Day 3. Load out equipment. Clean location. RDMO.

3/27/90
Day 1. MIRU Halliburton wellhead isolation tool. Halliburton cleaned out gel, Carbo-lite & BS out of their frac manifold. SDFN.

3/28/90
Day 2. Frac well down 5-1/2" 17# N-80 csg. as follows:
<u>Frac Stage I - Perfs 6688'-6718'</u>
Breakdown 30 BPM @ 5280 psi.
PrePad 1 (Lease oil) = 143 bbls. @ 30 BPM, ISIP = 3825 psi, F.G. TVD = .96 psi/ft., holes open = 14.
PrePad 2 (Emulsion) = 143 bbls. @ 30 BPM, ISIP = 3470 psi, F.G. TVD = .93 psi/ft., holes open = 34. T-pump = 5 min., T-close = 5 min., E-fluid = 40%, 5 min. = 3140 = Closure press. & time.
(Con't)

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 716 R/D #1 SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-21563 JAMES A. BECK, GENERAL MANAGER OPERATIONS

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93061 (805) 656-2445
****

3/28/90 (Con't)
Total oil = 824 bbls. Total gel = 201 bbls. (27%). Total fluid = 1025 bbls. Total sand out = 48,000# 20/40 Ottowa, avg. sand conc. = 5.5 ppg, max. sand conc. = 8.5 ppg. Avg. rate = 30 BPM, max. rate = 33 BPM, avg. press. = 4700 psi, max. press. 5280 (PrePad 1), max. press. = 4900 (Frac), FSIP = 3650 psi. Top of sand = rathole (±7100). Additives = 600# WG-22 (40#/1000), 2# SP-BRK (.15#/1000), 2 gal. BA-20, 71 gal. Clafix II (5 gal/1000), 71 gal. SEM-7
(5 gal/1000), 15 gal. BE-4. Close and lock blind rams. RD Halliburton.

3/29/90
No activity.

3/30/90
No activity.

3/31/90
Day 1. RU Otis wireline. 50 psi on well. Make feeler run. Tag fill @ 7101' (Perfs 6688'-6718'). RO Otis. MIRU Oilwell. Bolt on Homco Hydrill & PGSR stripper cage. Build platform. Rig for tbg. Rig line from well to pump. Open well to production line. SDFN.

4/1/90
Day 2. Bled well. Small amount of pressure. MU Baker 2-3/8" x 5-1/2" Lok-set pkr. & "F" nipple. Strip on PGSR rubber. Open well. Measure, rabbit & run tbg. Set pkr. @ 6629'. Gas blowing through tbg. Bled to pump tank. Unbolt Hydrill & strip in donut. MU Hydrill. Land tbg. on donut with 6000# set down wt. on pkr. with tail @ 6633'. Remove stripper, Hydrill & Hyd. gate. Install tree flange. RDMO.
Note: Haul 20 bbls. oil to well from tank battery. Unable to fill backside with 90 bbls. oil. Replaced 1 jt. 2-3/8" (crimped) EU8 N-80 (30.60). Plug (pos) in "F" nipple. Fill tbg. after each run tbg. pick up.

4/2/90
Day 3. RU Otis slickline unit. RIH & retrieve equalizer bar on 1st trip. RIH & retrieve blanking plug. POH with plug. Tbg. pressured to 435 psi. Open well to tank. Press. bled to 0#. Slugging oil & gas. RO Otis.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 716 R/D #1 SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-21563 JAMES A. BECK, GENERAL MANAGER OPERATIONS

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93061 (805) 656-2445
****

4/7/90
Day 1. MIRU Oilwell. Install flange & production tree. Well started flowing. Rig to Baker tank. SDFN.

4/8/90
Day 2. Change out 1-1/2" polish rod to 1-1/4". RU McMahan Dewaxing. Pump 4 bbls. oil. RO McMahan's. Install rod BOP. Wait on new nitrogen bottle. Hook up bottle. PU pump & RIH with rods (178 3/4" rods & 1 2' sub). Install polish rod. Set pump @ 5366'. Pressure to 300#, o.k. RDMO.

4/15/90
Day 1. MIRU Oilwell. Bled tbg. Rig for rods. Well started flowing. Close well in. Pump oil down tbg. Press. to 500 psi. Let well bleed into formation. Open tbg. Pull rods & pump. Remove head & install tree & platform. Rig for tbg. Release pkr. Circulate well 1 hr. Pull tbg. & pkr. SJD.

4/16/90
Holiday.

4/17/90
Day 2. Bled csg. Small amount of press. Bolt on shooting flange. RU HLS. Set Baker wireline set plug @ 6672'. Fill well with oil. Pressure test BOPE & riser to 1000 psi, okay. Run 3-3/8" guns. Perf well with 4 (0.44") JH over 2' @ 6623'-25', 6614'-16', 6603'-05', 6595'-97', 6583'-85', 6577'-79', 6570'-72' & 6564'-66'. RO HLS. Bolt on Homco isolation tool. No press. on well. Stab in with tool. SDFN. Note: Test BP to 1600 psi, held okay.

4/18/90
Day 3. RU HLS. Frac Stage II as per program. Perf 6565'-6624' (32 holes). Breakdown = 33 BPM @ 6126#, Pre-pad = 50 bbls. @ 30 BPM. ISIP = 3718#, F.G. (TVD) = .98, holes open = 10. Total oil = 467 bbls., total gel = 80 bbls. & total fluid = 547 bbls. Total sand = 39,800#, avg. sand conc. = 4 ppg, max sand conc. = 7.5 ppg, avg. rate = 30 BPM, max. rate = 33 BPM, avg. press. = 5200#, max. press. (pre-pad) = 6126#, (frac = 5600#). FSIP = 3500#. Est. top of sand = 6580'. RO isolation tool. Bolt on hydrill with flange. RU HLS. 1000# on well. Run dummy gun. Tag TOS @ 6528'. RO HLS. Remove hydrill. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 716 R/D #1 SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-21563 JAMES A. BECK, GENERAL MANAGER OPERATIONS

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93061 (805) 656-2445
****

4/19/90
Day 4. 800 psi on well. Open well to production through #8 choke. Bolt on hydrill. Well bled to 80 psi. MU 2" STC & Baker "F" nipple. Run 75 stds. 2-3/8" tbg. with "F" nipple & STC. Close pipe rams. Open well to production through #8 choke. SDFN.

4/20/90
Day 5. 425 psi on well. Circulate well through choke. Unable to kill well. Oil returns @ 200 psi. Pump oil from pump to frac tank. RO pump lines. Move pump. Spot & plumb 4" line from pump to frac tank. Clean tank. Plumb lines from pump to well & clean tank. Close well in with 600 psi on csg. & tbg. SDFN.

4/21/90
Day 6. RU Otis. Run circulation 1.81 plug. Go through "F" nipple. Drop plug. Run 1.87 circulation plug, hanging up in tbg. Set plug in "F" nipple. RO Otis. Install hydrill. Install SWS snubbing unit. Note: Tbg. plug must be fished before BP @ 6670' is pulled.

4/22/90
Day 7. 400# on well. Equalize press. to snubbing unit. Press. dropped to 200#. Run tbg. to 6512'. RU pump & poorboy swivel. Clean out sand to 6618'. Hard fill or plug. Circ. well 3 hrs. Kill well. Pull tbg. Close well in. RO SWS equipment. Note: Marks on STC indicate setting down on wireline tbg. plug. SDFN.

4/23/90
Day 8. 600# on well. Install Hydrill & flange. RU Otis. Run 3-3/4" overshot. Tools stopped @ 6514'. Unable to work deeper. Pull tools to lubricator. Rig pump. Press. well to 1500# & hold press. Run tools. Tag fill @ 6517', work to 6518'. Pull bailer. Found frac sand & fines. RO Otis. SDFN.

4/24/90
to No activity.
4/28/90

4/29/90
Day 9. Remove Hydrill. RU SWS snubbing unit. MU tbg. bottom assembly with Otis circulating valve. Valve leaked. Repaired valve, again leaked. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 716 R/D #1 SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-21563 JAMES A. BECK, GENERAL MANAGER OPERATIONS

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93061 (805) 656-2445
****

4/30/90
Day 10. 750 psi. MU Otis X-nipple (1/87) & circ. plug. Run bottom assembly. Run tbg., snubbing in. Fill tbg., equalized. Tag solid bridge @ 6555'. Circ. through bridge 1 hr., tag @ 6609', clean out to 6621', circ. 1/2 hr., clean out to 6650', circ. 2 hrs. 25 min. Small amount of sand in returns. Pull tbg. to 6022'. Close pipe rams. 200 psi. Press. to 1500 psi. SDFN. Note: LD 5 jts. bad tbg.

5/1/90
Day 11. 600 psi. Run tbg., snubbing in. Tag @ 6630'. Pull & LD extra tbg. (8 jts.). Land tbg. on donut with x-nipple @ 5968', pump shoe @ 5979' & tail @ 6011'. RO SWS. Remove BOPE & install tree. RU Otis & retrieve circulating plug @ 5968'. SDFN.

5/2/90
Day 12. Tear out pump lines & load out. Clean pump tank. Haul out extra tbg. Load out Homco equipment. Well still flowing. SDFN.

5/3/90
Day 13. Clean location. Move pump. Paint wellhead. Well still flowing. SJD.

5/4/90
Day 14. Well flowing. LD 89 stds. rods. Break down rods. Load out tools. RDMO.

6/11/90
Day 1. MIRU Otis slickline unit. RIH with 1-1/2" bailer. Tag fill @ 6114'. (Perfs 6564'-6625'.) Made 3 runs working bailer down to 6175'. Fell through bridge to 6250'. Made 4 additional runs, bailing down to 6276'. Sand coming back in to 6260' between each run. RO Otis. Open well to system.

6/15/90
Day 1. MIRU Artic Coil tbg. & Halliburton pump truck. Press. test lines to 4000 psi. RIH with coil tbg., circulating in hole. Tag solid sand @ 6490'. Attempt to reverse between 1-1/2" & 2-3/8" annulus. Unable to due to excessive pressures. Rig Halliburton 2-3/8" - 5-1/2" annulus. Reverse sand out from 6490'-6650'. Reverse well 2 times up at average rate of 1.5 BPM @ 2700 psi. Pull coil tbg. to 3300'. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 716 R/D #1 SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-21563 JAMES A. BECK, GENERAL MANAGER OPERATIONS

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93061 (805) 656-2445
****

6/16/90
Day 2. 300 psi on tbg. RIH with coil tbg. from 3300'. Tag fill @ 6660'. (Btm. perf 6625'). POH with coil tbg. RO coil tbg. unit & Halliburton. Plumb flowline.

6/17/90
Day 3. Attempt to run swab tool, unable to run below 450'. Run paraffin scratcher to 2000'. Run swab tool. Fluid level @ 400'. Swab. Ending fluid level 1250'. Made feeler run. Top of fill @ 6641'. POH. SDFN.

6/18/90
Day 4. RU Otis & RIH with swab tool. Found fluid level @ 750'. Swab well, well came on & flowed to tank @ 200 psi for 30 minutes. Flow to trap @ 260 psi. RWTP. RDMO.

6/26/90
Day 1. MIRU Oilwell. Bled well. Flowed tbg. to trap overnight. SDFN.

6/27/90
Day 2. Flowed well back thru 7/64" bean. 320 psi on casing. Pump 40 bbls. oil down tbg. Kill well. MU new pump & RIH picking up 197 3/4" rods. Space well out & hang on.
Note: Changed out flow tree for rod pumper production tree.
RDMO.

DOG

REDRILL

DATADRIL

DIVISION OF OIL AND GAS
RECEIVED
JUL 3 1990
VENTURA, CALIFORNIA

REPORT
of
FERNDALE NO. 716 REDRILL
SURVEY

TO: SENECA RESOURCES CORPORATION
WELL: FERNDALE NO. 716 RD
FIELD: SILVERTHREAD
VENTURA COUNTY, CA

DATADRIL

TO: SENECA RESOURCES CORPORATION
WELL: FERNDALE NO. 716 RD
FIELD: SILVERTHREAD
VENTURA COUNTY, CA
1 FEBRUARY 1990

DECLINATION: 14 DEGREES EAST
COMPANY REP: BRET BARNHIZER
DIRECTIONAL SUPVR: NICK FREDRICK
MWD FLD ENGNR: FRANK BENEDETTI
RIG: LOFFLAND NO. 217

RIG PHONE: (805) 525-1176
SII DIRECTIONAL: (805) 658-6400
SII MWD SERVICE: (805) 834-6464

File Name: SURVEY16RD

*** RECORD OF SURVEY ***

Calculated by DATADRIL's CADDS System

Radius of Curvature Method
All Angles are Decimal
Vertical Section Plane: S 6.57 E

TYPE OF SURVEY	MEASURED DEPTH (FT)	INCL ANGLE (DEG)	D R I F T DIRECTION (DEG)	COURSE LENGTH (FT)	TOTAL VERTICAL DEPTH	T O T A L RECTANGULAR COORDINATES (FT)		VERTICAL SECTION (FT)	DOGLEG SEVERITY (DEG/100')
MSS	5330.00	29.50	S 1.00 W	0.00	5176.60	713.10 S	91.31 E	718.86	0.00
MWD	5456.00	25.30	S 11.00 E	126.00	5288.44	770.75 S	96.35 E	776.71	5.49
MWD	5582.00	25.60	S 11.00 E	126.00	5402.21	823.90 S	106.68 E	830.69	.24
MWD	5712.00	24.10	S 5.00 E	130.00	5520.17	877.97 S	114.28 E	885.28	2.26
MWD	5837.00	23.00	S 9.00 E	125.00	5634.76	927.53 S	120.37 E	935.21	1.55
MWD	5963.00	22.70	S 11.00 E	126.00	5750.87	975.71 S	128.87 E	984.05	.66
MWD	6089.00	22.40	S 12.00 E	126.00	5867.24	1023.06 S	138.50 E	1032.19	.39
MWD	6214.00	21.30	S 7.00 E	125.00	5983.26	1068.93 S	146.17 E	1078.64	1.73
MWD	6333.00	21.20	S 5.00 E	119.00	6094.17	1111.82 S	150.68 E	1121.76	.61
MWD	6456.00	17.60	S 2.00 W	123.00	6210.16	1152.63 S	151.75 E	1162.43	3.48
MWD	6580.00	18.00	S 5.00 W	124.00	6328.23	1190.46 S	149.44 E	1199.74	.81
MWD	6705.00	17.50	S 6.00 W	125.00	6447.28	1228.40 S	145.79 E	1237.01	.47
MWD	6828.00	17.60	S 8.00 W	123.00	6564.55	1265.21 S	141.27 E	1273.06	.50
MWD	6948.00	18.30	S 10.00 W	120.00	6678.71	1301.73 S	135.48 E	1308.68	.78
MWD	7072.00	15.30	S 14.00 W	124.00	6797.40	1336.78 S	128.03 E	1342.65	2.59
MWD	7164.00	15.00	S 12.00 W	92.00	6886.21	1360.20 S	122.62 E	1365.30	.66
MWD	7257.00	16.00	S 17.00 W	93.00	6975.82	1384.26 S	116.40 E	1388.48	1.79
PROJ	7319.00	16.50	S 17.00 W	62.00	7035.35	1400.85 S	111.33 E	1404.39	.81

BOTTOM HOLE CLOSURE: 1405.27 Feet at S 4.54 Degrees E

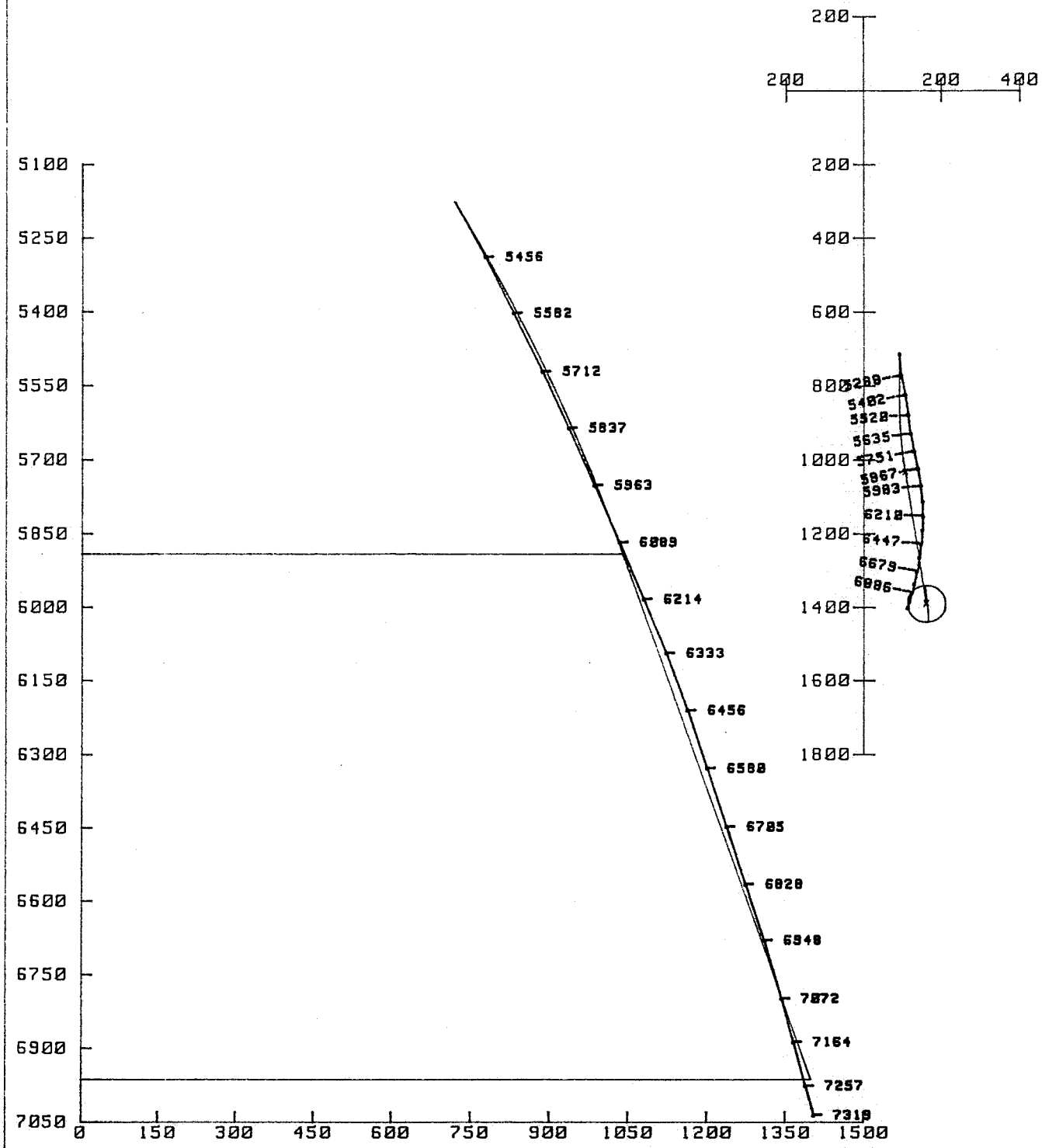
7 FEB 1990 @ 0:24

TO: SENECA RESOURCES CORPORATION
WELL: FERNDALE NO. 716
FIELD: SILVERTHREAD
VENTURA COUNTY, CALIFORNIA

SMITH

VERTICAL PLANE
SCALE: 150 FEET/DIVISION

HORIZONTAL PLANE
SCALE: 200 FEET/DIVISION



VERTICAL SECTION PLANE: S 6.57 E

FERNDALE NOS. 712, 716
SILVERTHREAD, VENTURA CNTY
SENECA RESOURCES CORPORATION

7 FEB 1990 @ 0:57

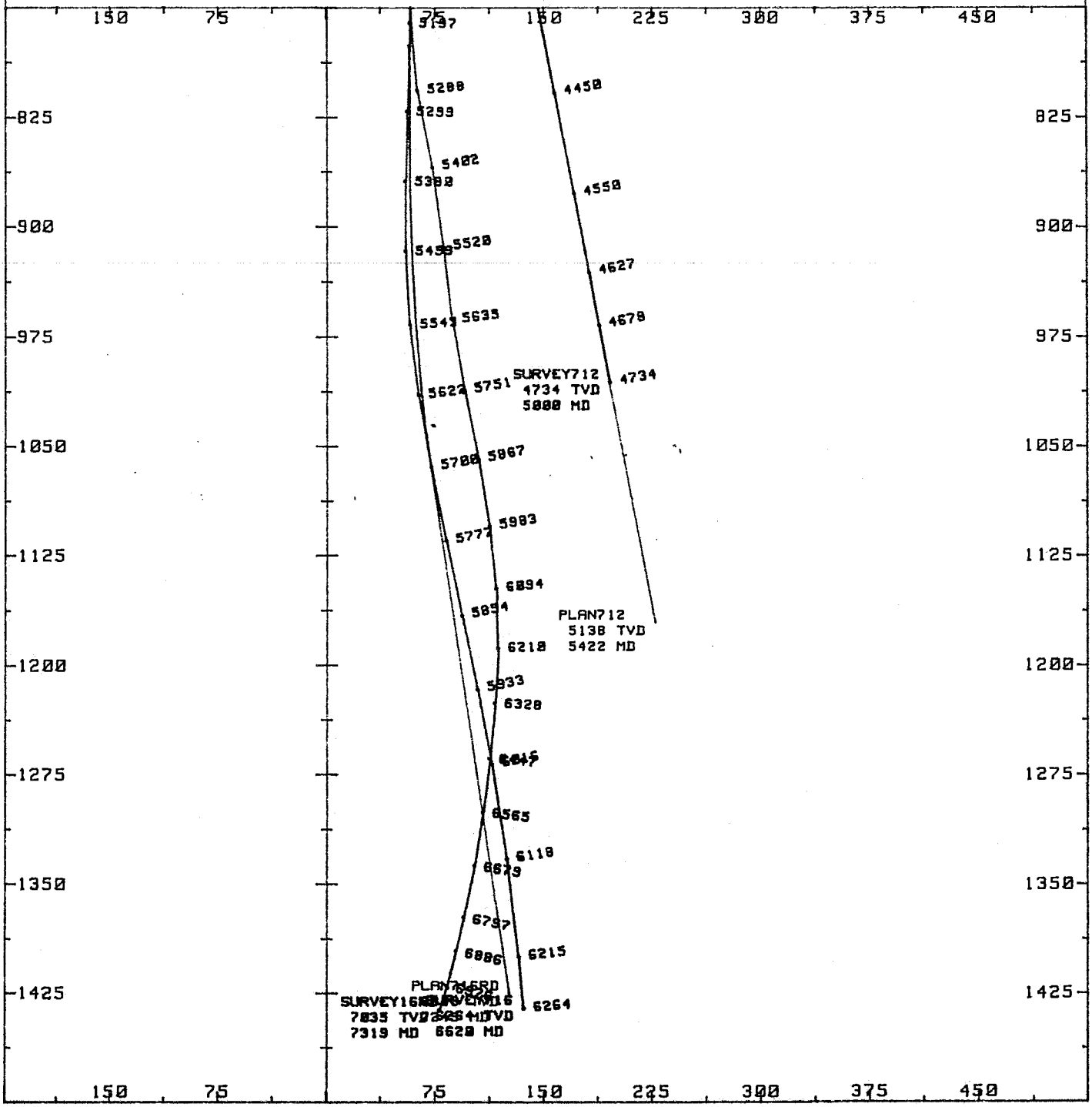
DATADRIL

HORIZONTAL PLOT

MIN TVD: 0 FEET
MAX TVD: 10000 FEET

N

SCALE: 75 FEET/DIV.



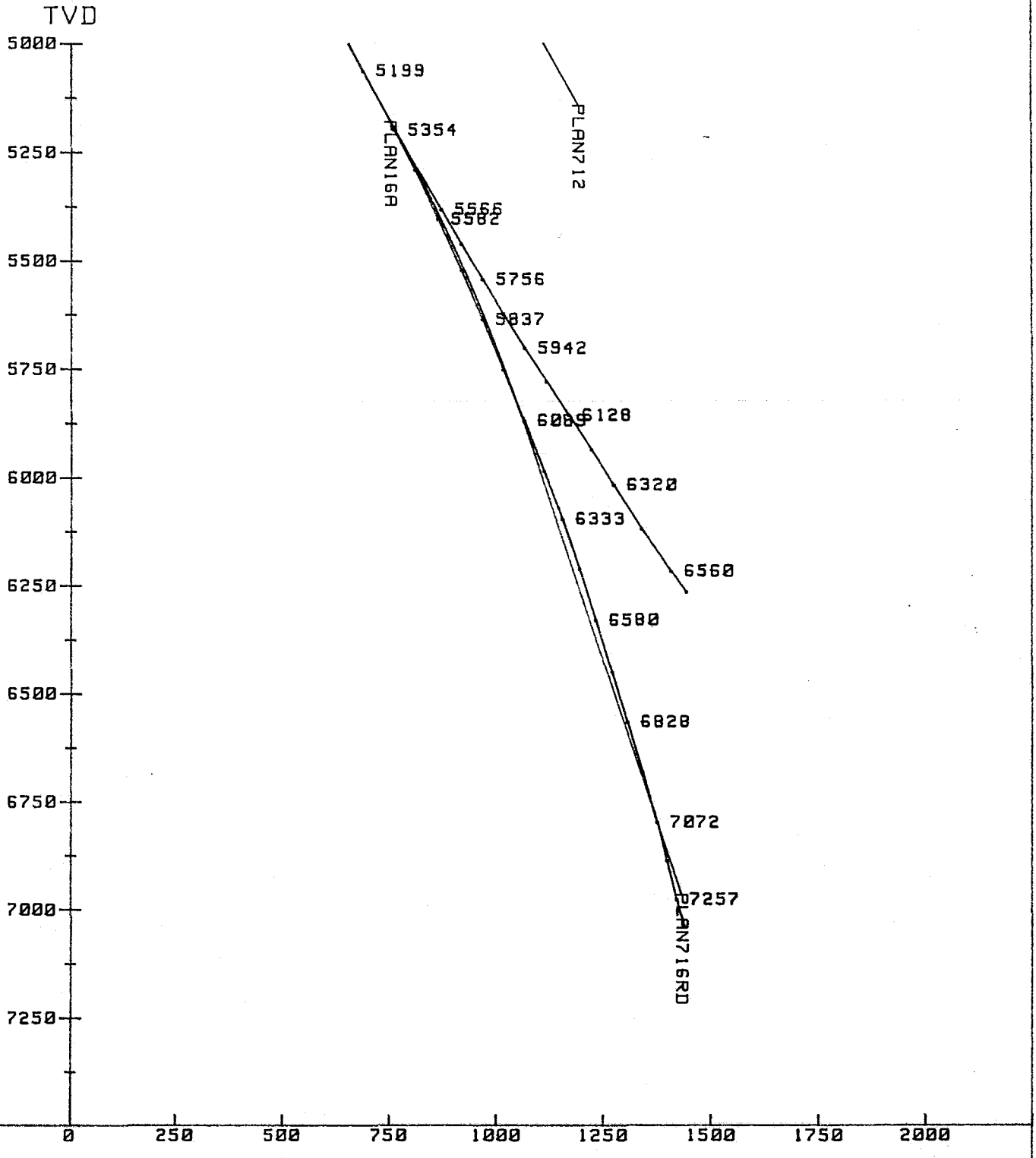
FERNDALE NOS. 712, 716
SILVERTHREAD, VENTURA CNTY
SENECA RESOURCES CORPORATION

7 FEB 1990 @ 1:05

DATADRIL

VERTICAL PLOT

SCALE: 250 FEET/DIV.



SECTION PLANE: 173.43 DEGS CLOCK-WISE FROM NORTH

DOG

DATADRIL

DIVISION OF OIL AND GAS
RECEIVED
JUL 3 1990
VENTURA, CALIFORNIA

REPORT of FERNDALE NO. 716 SURVEY

TO: SENECA RESOURCES CORPORATION
WELL: FERNDALE NO. 716
FIELD: SILVERTHREAD
VENTURA COUNTY, CALIFORNIA

SMITH INTERNATIONAL

CERTIFICATION

The data for this survey and the calculations for this survey were obtained and performed by me according to the standards and procedures as set forth by Smith International, Inc. and are true and correct to the best of my knowledge.

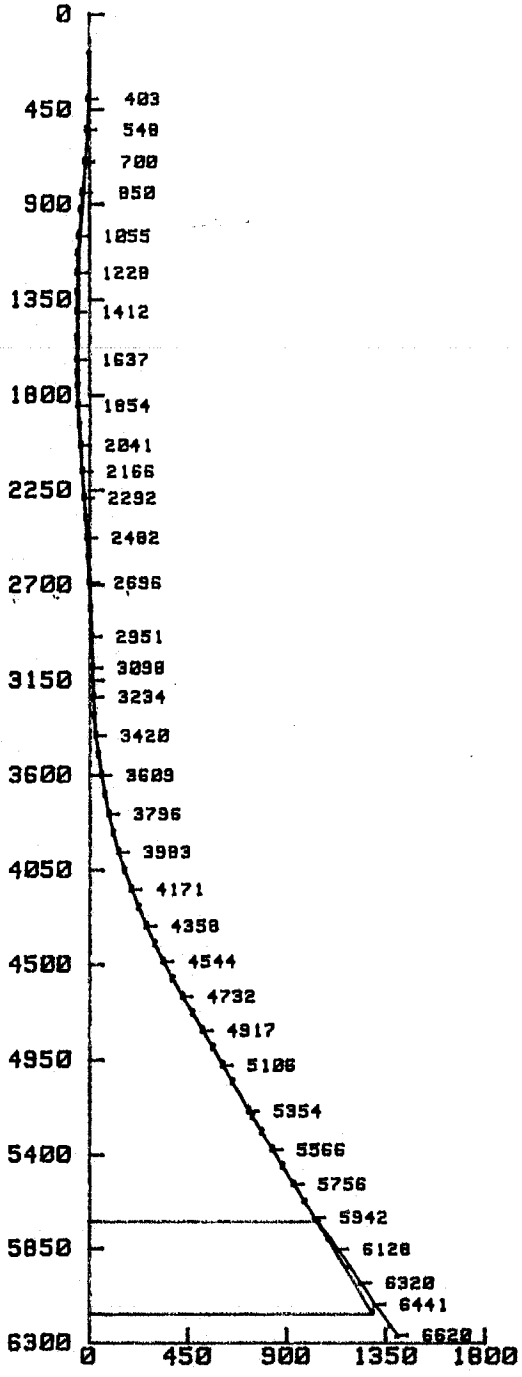
MWD Operator/Directional Supervisor/Surveyor

29 JAN 1990 @ 0:20

TO: SENECA RESOURCES CORPORATION
WELL: FERNDALE NO. 716
FIELD: SILVERTHREAD
VENTURA COUNTY, CALIFORNIA

SMITH

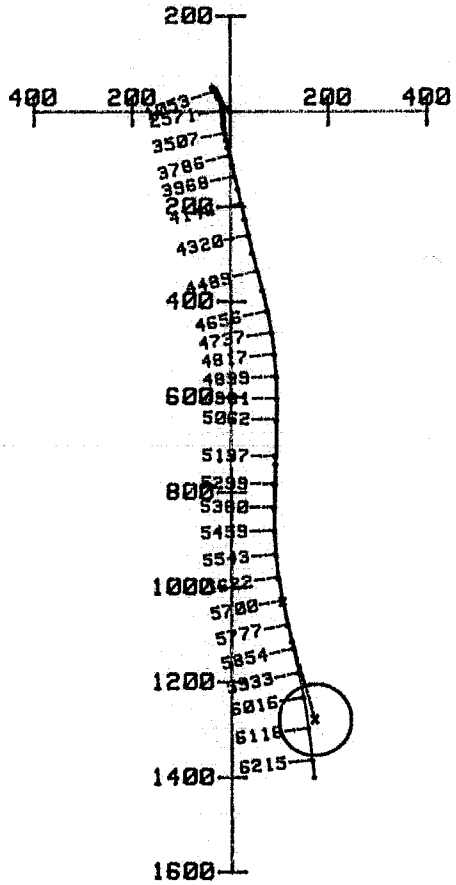
VERTICAL PLANE
SCALE: 450 FEET/DIVISION



PRESENT LOCATION:
TVD: 6263.56 FT
MD: 6620.00 FT
VS: 1407.94 FT

VERTICAL SECTION PLANE: S 10.00 E

HORIZONTAL PLANE
SCALE: 200 FEET/DIVISION



DATADRIL

TO: SENECA RESOURCES CORPORATION
WELL: FERNDALE NO. 716
FIELD: SILVERTHREAD
VENTURA COUNTY, CALIFORNIA
CO. REP: BRET BARNHIZER

DECLINATION: 14 DEGREES EAST
DIRECTIONAL SUPVR: NICK FREDRICK
M.W.D. FLD ENGNR:FRANK BENEDETTI
SII JOB NO: 1112-900006
10 JANUARY 1990

File Name: SURVEY716

*** RECORD OF SURVEY ***

Calculated by DATADRIL's CADDS System

Radius of Curvature Method
All Angles are Decimal
Vertical Section Plane: S 3.45 E

TYPE OF SURVEY	MEASURED DEPTH (FT)	INCL ANGLE (DEG)	D R I F T DIRECTION (DEG)	COURSE LENGTH (FT)	TOTAL VERTICAL DEPTH	T O T A L RECTANGULAR COORDINATES (FT)		VERTICAL SECTION (FT)	DOGLEG SEVERITY (DEG/100')
MSS	195.00	0.00	N 0.00 E	0.00	195.00	0.00 N	0.00 E	0.00	0.00
MSS	403.00	2.00	N 28.00 W	208.00	402.96	3.21 N	1.70 W	-3.30	.96
MSS	548.00	3.75	N 57.00 W	145.00	547.77	8.51 N	6.57 W	-8.89	1.53
MSS	700.00	6.00	N 43.00 W	152.00	699.21	16.79 N	16.44 W	-17.75	1.66
MSS	850.00	4.50	N 31.00 W	150.00	848.58	27.73 N	24.68 W	-29.17	1.23
MWD	931.00	4.90	N 28.00 W	81.00	929.30	33.51 N	27.95 W	-35.13	.58
MWD	1055.00	4.70	N 19.00 W	124.00	1052.87	43.01 N	32.08 W	-44.87	.63
MWD	1135.00	2.30	N 30.00 W	80.00	1132.71	47.45 N	34.10 W	-49.42	3.10
MWD	1228.00	.70	S 81.00 W	93.00	1225.68	48.44 N	36.17 W	-50.53	2.31
MWD	1321.00	.40	N 23.00 W	93.00	1318.67	48.84 N	36.89 W	-50.97	.77
MWD	1412.00	.80	N 24.00 E	91.00	1409.67	49.77 N	36.89 W	-51.89	.66
MWD	1536.00	.30	N 73.00 E	124.00	1533.66	50.53 N	36.02 W	-52.61	.52
MWD	1637.00	1.30	S 40.00 E	101.00	1634.65	50.15 N	34.75 W	-52.15	1.20
MWD	1699.00	1.90	S 58.00 E	62.00	1696.63	49.02 N	33.44 W	-50.94	1.25
MWD	1761.00	1.70	S 56.00 E	62.00	1758.60	47.96 N	31.81 W	-49.79	.34
MWD	1854.00	2.60	S 30.00 E	93.00	1851.53	45.43 N	29.45 W	-47.12	1.40
MWD	1948.00	3.80	S 22.00 E	94.00	1945.38	40.72 N	27.15 W	-42.28	1.36
MWD	2041.00	4.10	S 27.00 E	93.00	2038.16	34.89 N	24.50 W	-36.30	.49
MWD	2166.00	3.50	S 30.00 E	125.00	2162.89	27.61 N	20.55 W	-28.80	.51
MWD	2292.00	4.20	S 8.00 E	126.00	2288.60	19.66 N	17.81 W	-20.70	1.29
MWD	2388.00	4.60	S 6.00 E	96.00	2384.32	12.35 N	16.91 W	-13.35	.45

DATADRIL

TO: SENECA RESOURCES CORPORATION
WELL: FERNDALE NO. 716

FIELD: SILVERTHREAD
VENTURA COUNTY, CALIFORNIA

TYPE OF SURVEY	MEASURED DEPTH (FT)	INCL ANGLE (DEG)	D R I F T DIRECTION (DEG)	COURSE LENGTH (FT)	TOTAL VERTICAL DEPTH	T O T A L RECTANGULAR COORDINATES (FT)		VERTICAL SECTION (FT)	DOGLEG SEVERITY (DEG/100')
MWD	2482.00	3.10	S 8.00 E	94.00	2478.10	6.09 N	16.14 W	-7.05	1.60
MWD	2575.00	2.80	S 8.00 E	93.00	2570.98	1.35 N	15.48 W	-2.28	.32
MWD	2696.00	2.50	S 5.00 E	121.00	2691.85	4.21 S	14.84 W	3.31	.27
MWD	2820.00	2.20	S 5.00 E	124.00	2815.75	9.28 S	14.40 W	8.39	.24
MWD	2951.00	1.90	S 0.00 E	131.00	2946.66	13.96 S	14.19 W	13.08	.27
MWD	3098.00	2.00	S 1.00 E	147.00	3093.58	18.96 S	14.15 W	18.07	.07
MWD	3234.00	1.90	S 5.00 W	136.00	3229.50	23.58 S	14.31 W	22.68	.17
MWD	3328.00	2.80	S 4.00 E	94.00	3323.42	27.43 S	14.35 W	26.52	1.03
MWD	3420.00	6.10	S 15.00 E	92.00	3415.13	34.46 S	13.17 W	33.60	3.69
MWD	3513.00	8.30	S 11.00 E	93.00	3507.39	45.81 S	10.55 W	45.10	2.42
MWD	3609.00	8.60	S 9.00 E	96.00	3602.35	59.70 S	8.10 W	59.11	.44
MWD	3703.00	10.10	S 11.00 E	94.00	3695.10	74.74 S	5.45 W	74.28	1.63
MWD	3796.00	11.60	S 15.00 E	93.00	3786.43	91.80 S	1.51 W	91.54	1.80
MWD	3890.00	14.30	S 11.00 E	94.00	3878.03	112.32 S	3.23 E	112.31	3.02
MWD	3983.00	16.00	S 12.00 E	93.00	3967.80	136.13 S	8.07 E	136.37	1.85
MWD	4077.00	18.10	S 15.00 E	94.00	4057.66	162.93 S	14.51 E	163.51	2.42
MWD	4171.00	21.10	S 12.00 E	94.00	4146.20	193.58 S	21.86 E	194.55	3.37
MWD	4264.00	20.60	S 12.00 E	93.00	4233.11	225.96 S	28.75 E	227.28	.54
MWD	4358.00	23.20	S 12.00 E	94.00	4320.32	260.25 S	36.04 E	261.95	2.77
MWD	4451.00	24.60	S 13.00 E	93.00	4405.34	297.03 S	44.19 E	299.16	1.57
MWD	4544.00	26.10	S 15.00 E	93.00	4489.39	335.67 S	53.82 E	338.30	1.86
MWD	4638.00	28.00	S 14.00 E	94.00	4573.10	377.05 S	64.53 E	380.25	2.08
MWD	4732.00	29.20	S 12.00 E	94.00	4655.63	420.89 S	74.65 E	424.62	1.63
MWD	4825.00	29.40	S 9.00 E	93.00	4736.73	465.64 S	82.94 E	469.78	1.59
MWD	4917.00	29.90	S 6.00 E	92.00	4816.69	510.75 S	88.88 E	515.18	1.70
MWD	5012.00	29.50	S 3.00 E	95.00	4899.21	557.67 S	92.57 E	562.23	1.62
MWD	5106.00	29.20	S 0.00 E	94.00	4981.14	603.72 S	93.78 E	608.27	1.60
MWD	5199.00	29.10	S 2.00 W	93.00	5062.36	649.02 S	92.99 E	653.44	1.05
MSS	5354.00	29.75	S 1.00 W	155.00	5197.36	725.14 S	90.99 E	729.30	.53
MSS	5385.00	30.50	S 2.00 W	31.00	5224.18	740.69 S	90.59 E	744.80	2.91
MWD	5472.00	31.10	S 2.00 W	87.00	5298.91	785.21 S	89.03 E	789.15	.69
MWD	5566.00	30.50	S 1.00 W	94.00	5379.65	833.33 S	87.77 E	837.10	.84
MWD	5659.00	31.20	S 2.00 E	93.00	5459.49	881.01 S	88.19 E	884.72	1.82

DATADRIL

TO: SENECA RESOURCES CORPORATION
WELL: FERNDALE NO. 716

FIELD: SILVERTHREAD
VENTURA COUNTY, CALIFORNIA

TYPE OF SURVEY	MEASURED DEPTH (FT)	INCL ANGLE (DEG)	D R I F T DIRECTION (DEG)	COURSE LENGTH (FT)	TOTAL VERTICAL DEPTH	T O T A L RECTANGULAR COORDINATES (FT)	VERTICAL SECTION (FT)	DOGLEG SEVERITY (DEG/100')
MWD	5756.00	31.10	S 5.00 E	97.00	5542.50	931.08 S 91.25 E	934.89	1.60
MWD	5849.00	31.60	S 9.00 E	93.00	5621.93	979.10 S 97.15 E	983.17	2.30
MWD	5942.00	33.40	S 11.00 E	93.00	5700.36	1028.30 S 105.82 E	1032.81	2.25
MWD	6035.00	34.60	S 12.00 E	93.00	5777.46	1079.26 S 116.19 E	1084.30	1.42
MWD	6128.00	33.70	S 12.00 E	93.00	5854.42	1130.33 S 127.04 E	1135.92	.97
MWD	6222.00	32.90	S 12.00 E	94.00	5932.99	1180.81 S 137.77 E	1186.96	.85
MWD	6320.00	32.00	S 10.00 E	98.00	6015.68	1232.42 S 147.81 E	1239.08	1.43
MWD	6441.00	33.40	S 8.00 E	121.00	6117.50	1296.98 S 158.03 E	1304.14	1.46
MWD	6560.00	35.90	S 6.00 E	119.00	6215.39	1364.13 S 166.28 E	1371.66	2.31
PROJ	6620.00	37.30	S 5.00 E	60.00	6263.56	1399.73 S 169.71 E	1407.41	2.54

BOTTOM HOLE CLOSURE: 1409.98 Feet at S 6.91 Degrees E

TO: SENECA RESOURCES CORPORATION
WELL: FERNDALE NO. 716
FIELD: SILVERTHREAD
VENTURA COUNTY, CALIFORNIA

28 JAN 1990 @ 23:51

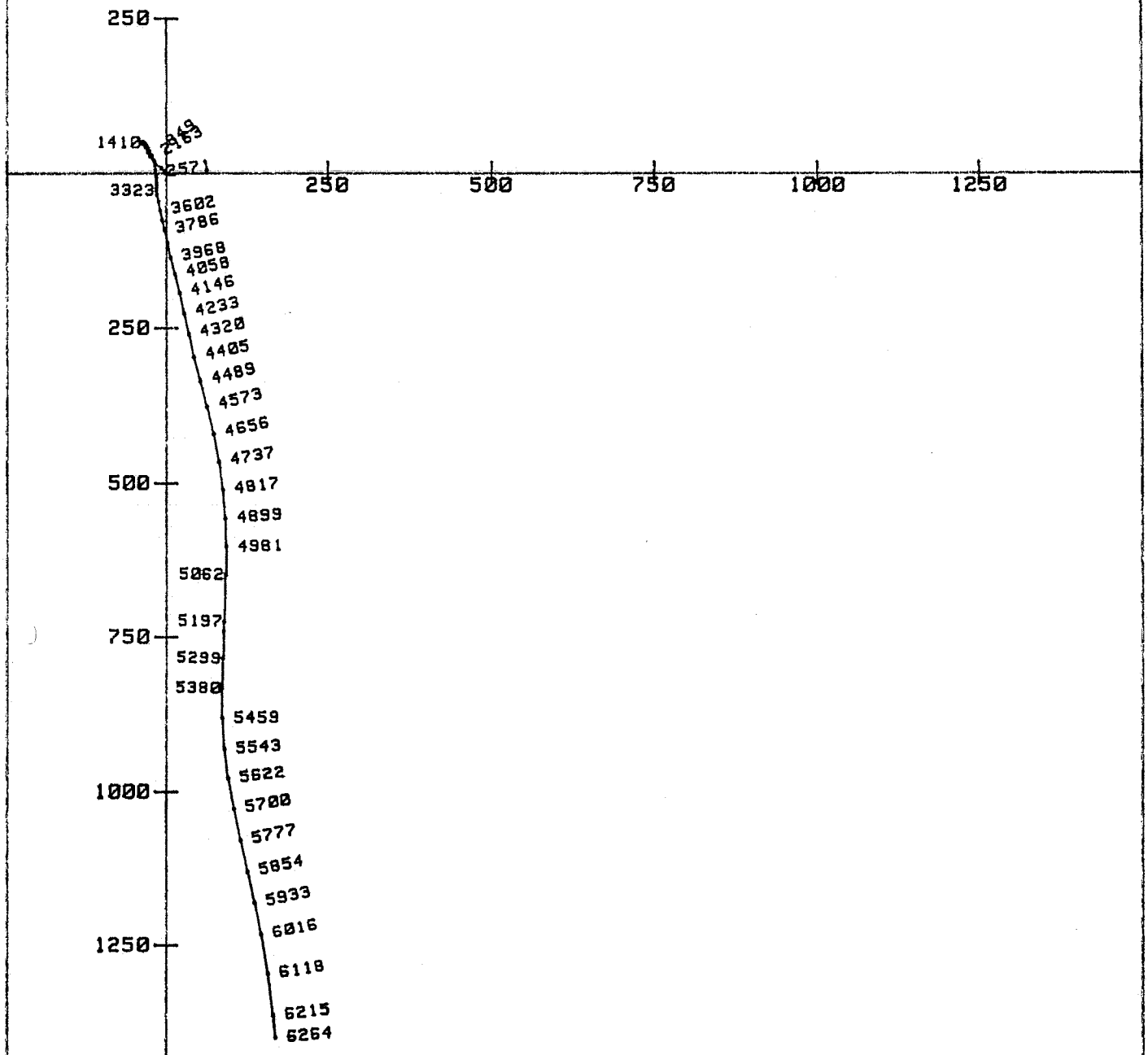
SMITH

HORIZONTAL PLOT

N

SCALE: 250 FEET/INCH

BHL: 1410 FEET
@ S 6.91 E
TVD: 6264 FEET
MD: 6620 FEET



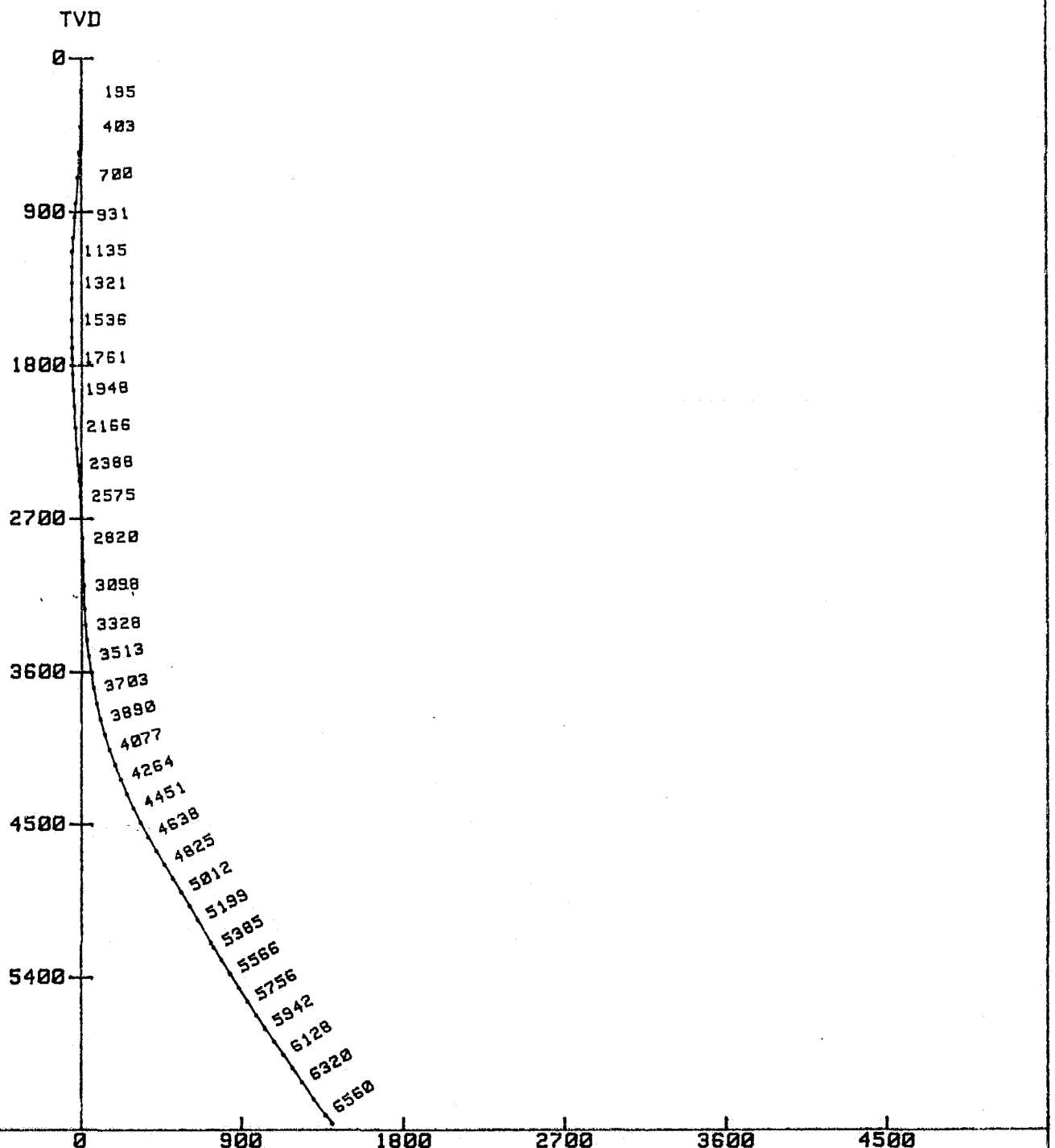
TO: SENECA RESOURCES CORPORATION
WELL: FERNDALE NO. 716
FIELD: SILVERTHREAD
VENTURA COUNTY, CALIFORNIA

28 JAN 1990 @ 23:59

SMITH

VERTICAL PLOT

SCALE: 900 FEET/INCH



VERTICAL SECTION

SECTION PLANE: S 3.45 E

BHL: 1410 FEET
@ S 6.91 E
TVD: 6264 FEET
MD: 6620 FEET

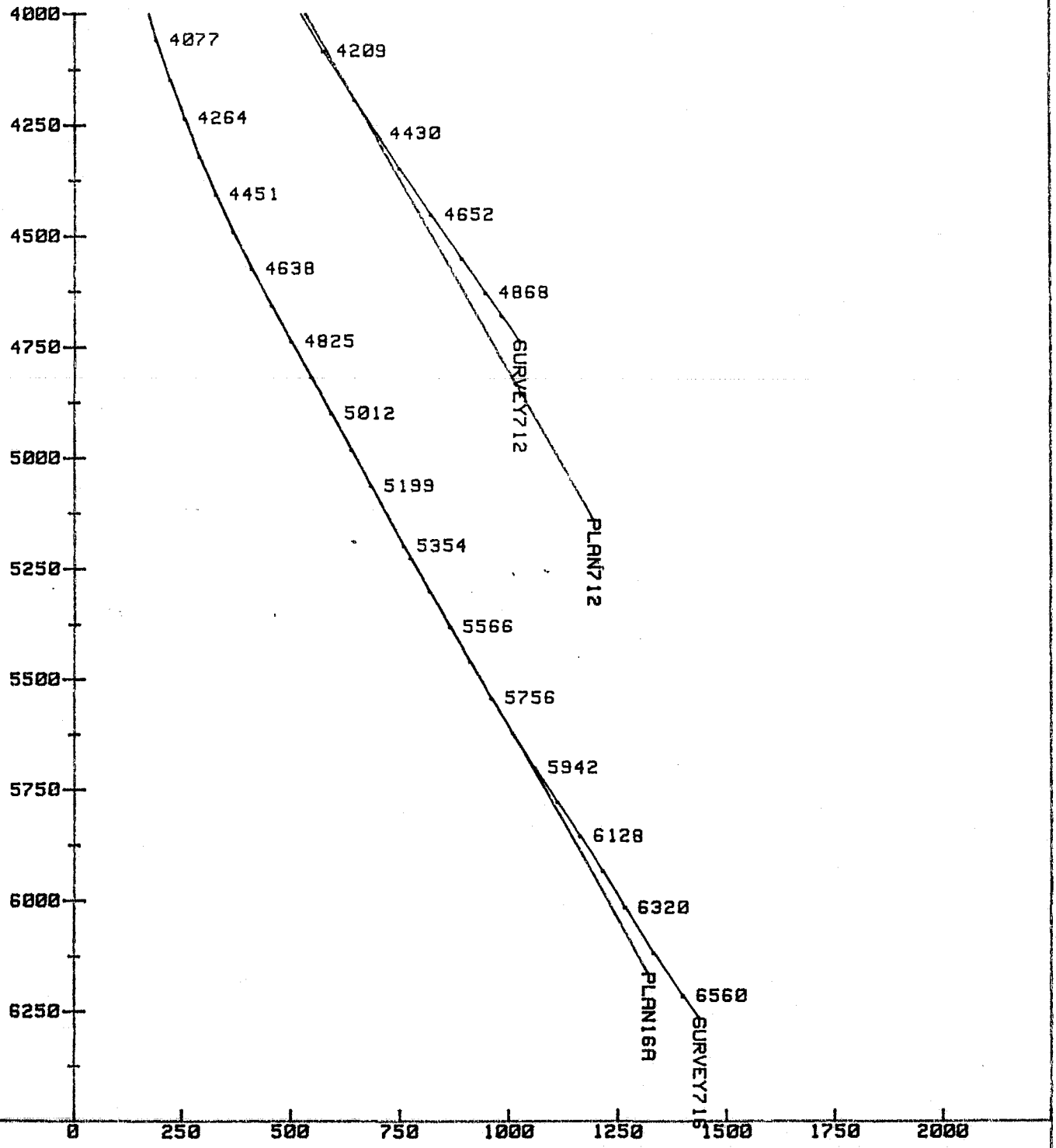
FERNDALE NOS. 712, 716
SILVERTHREAD, VENTURA CNTY
SENECA RESOURCES CORPORATION

29 JAN 1990 @ 0:49

DATADRIL

VERTICAL PLOT

SCALE: 250 FEET/DIV.



SECTION PLANE: 170.00 DEGS CLOCK-WISE FROM NORTH

FERNDALE NOS. 712, 716
SILVERTHREAD, VENTURA CNTY
SENECA RESOURCES CORPORATION

29 JAN 1990 @ 0:37

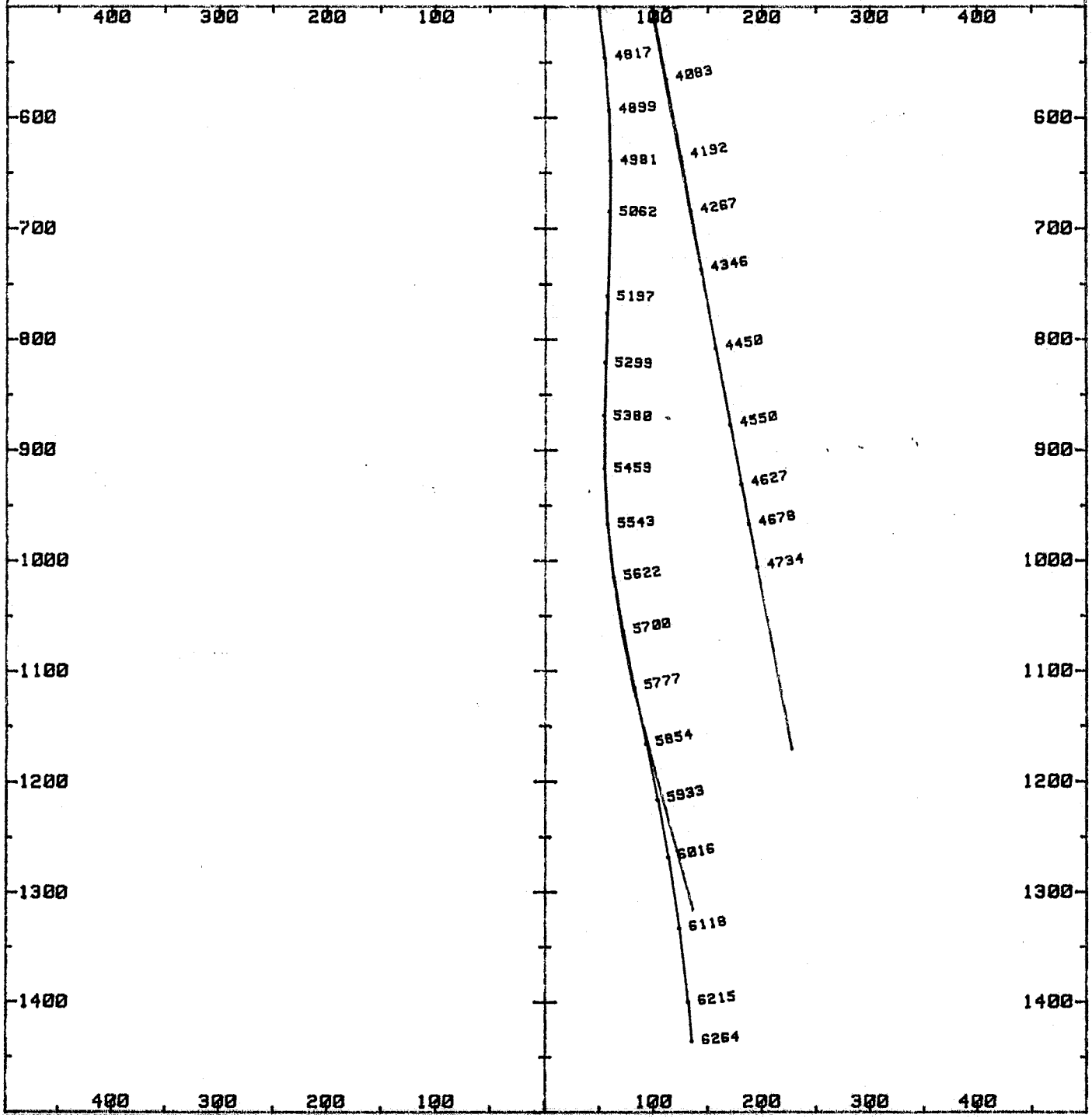
DATADRIL

HORIZONTAL PLOT

MIN TVD: 0 FEET
MAX TVD: 10000 FEET

N

SCALE: 100 FEET/DIV.



MEMORANDUM OF TELEPHONE OR PERSONAL CONVERSATION

VENTURA, Calif.

FEB 1 1990

Operator SENECA RESOURCES Well No. "FERNDALE" 7/6

Field OJAI Sec. T. R. B&M

personal

A telephone conversation was held, concerning above well, with Mr. BRENT BARNHIZER

for above operator on JAN 30 1990 at 1400 PM.

Details of the conversation were as follows:

WELL WILL BE SIDETRACKED.

2 ISOLATION AND 1 KICK-OFF PLUG WILL BE SET IN HOLE. ISOLATION PLUGS WILL BE FROM 6460'-6280' (ZONE W/ SHOWS- NOW PRODUCTIVE), 6000'-5900'. KICK-OFF PLUG FROM 5600-5325. WILL R/U NEW HOLE FROM SHOE OF 9 5/8" CSG. TD ON OLD HOLE IS 6620'.

SUPPLEMENTAL: (LATER PHONE CONV. W/ BRENT BARNHIZER)
INFORMATION FOR ISOLATION PLUGS IS AS FOLLOWS:
PLUG #1 FROM 6507-6190' (TAG W/ 10,000#) 22.5 bbls 15.8 CEM "G"
PLUG #2 FROM 6015-5670' (TAG W/ 10,000#) 22.5 bbls CEM "G"
KICK-OFF PLUG SET FROM 5600'-5100'. WILL POLISH-OFF TO R/O DEPTH.

(Signed) [signature]

Title ENGR

OG136 (11-74-GSR1-5M) (see reverse side for proposed well operations)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No.T290- 29

REPORT ON OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
January 29, 1990

Your operations at well "Ferndale" 716, API No. 111-21563, Sec. 9, T. 4N, R. 21W, S.B.B.&M. Ojai Field, in Ventura County, were witnessed on 1/25/90. Pam Ceccarelli, representative of the supervisor, was present from 0800 to 1030. There were also present Harry Taylor, Pusher.

Present condition of well: 13 3/8" cem 905'; 9 5/8" cem 5325'. TD 5325' (drilling).

The operations were performed for the purpose of testing the blowout prevention equipment and installation.

DECISION:

The blowout prevention equipment and its installation on the 9 5/8" casing are approved.

ljg

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Deputy Supervisor

OG109

DIVISION OF OIL AND GAS

BLOWOUT PREVENTION EQUIPMENT MEMO

CT 29

Operator Seneca Well "Ferndale" 716 Field Ojai County Ventura

VISITS:	Date	Engineer	Time	Operator's Rep.	Title
1st	1-25-90	Pam Ceccarelli	0800 to 1030	Harry Taylor	Pusher
2nd			to		

Casing record of well: 13 3/8" cem 905'; 9 5/8" cem 5325', TD 5325' (drilling).

OPERATION: Testing (~~inspecting~~) the blowout prevention equipment and installation.
DECISION: The blowout prevention equipment and its installation on the 9 5/8 "casing are approved.

REQUIRED BOPE CLASS: III 2M b

Proposed Well Opns: drill MPSP: _____ psi
Hole size: 12 1/4 " fr. 0 ' to 5325 ' , _____ " to _____ ' & _____ " to _____ '

CASING RECORD (BOPE ANCHOR STRING ONLY)

Size	Weight(s)	Grade(s)	Shoe at	CP at	Cement Details	Top of Cement: Casing	Top of Cement: Annulus
9 5/8	43.5	P110	5325		cem w/ 1420 cf Class G -		~600'

BOP STACK

API Symb.	Ram Sz.	Mfr.	Model or Type	Size (in.)	Press. Rtg.	Date Last Overhaul	a Gal. to Close	b Rec. Time (Min.)	a/b Calc. GPM Output	TEST DATA: psi Drop to Close	Secs. to Close	Test Date	Test Press.
A	CSC	Koomey	GK	13 5/8	3000								1000
RD	–	Shaffer	B	〃	〃				rept.	per Tour Sheet			1500
RD	5"	✓	B	✓	✓								1000

ACTUATING SYSTEM

Accum. Unit(s) Wkg. Press. 2800 psi
Total Rated Pump Output _____ gpm
Distance From Well Bore 60 ft.

	Mfr.	Accum. Cap.	Precharge
1	Koomey	2000 gal.	1500 psi
2		gal.	psi

CONTROL STATIONS	Elec.	Hyd.
✓ Manif. at accum. unit	✓	✓
✓ Remote at Drlr's. stn.	✓	
Other:		

EMERG. BACKUP SYST.	Press.	Wkg. Fl.
✓ N2 Cyl No: 4 Type:	1 1950	gal.
Other:	2 1950	gal.
	3 2000	gal.
	4 2000	gal.
	5	gal.
	6	gal.

AUXILIARY EQUIPMENT

		No.	Sz. (in.)	Rated Press.	Connections: Weld	Flan.	Thrd.	
✓	Fill-Up Line							
✓	Kill Line		2"	5000	✓	✓		1000
✓	Control Valve(s)	2		3000		✓		1000
✓	Check Valve(s)	1				✓		1000
✓	Auxil. Pump Connec.						✓	1000
✓	Choke Line		4"		✓	✓		1000
✓	Control Valve(s) (5)	2		✓		✓		1000
✓	Pressure Gauge					✓	✓	
✓	Adjustable Choke(s)	2	4"			✓		–
✓	Bleed Line				✓	✓		
✓	Upper Kelly Cock							–
✓	Lower Kelly Cock		5"					1000
✓	Standpipe Valve							1000
✓	Standpipe Pressure Ga.							
✓	Pipe Safety Valve		5"					–
✓	Internal Preventer		5"					–

HOLE FLUID MONITORING EQUIPMENT

	Alarm: Aud.	Alarm: Vis.	Class
✓ Calibrated Mud Pit	✓	✓	A
✓ Pit Level Indicator	✓	✓	B
✓ Pump Stroke Counter		✓	
✓ Pit Level Recorder	✓	✓	
✓ Flow Sensor		✓	C
✓ Mud Totalizer		✓	
Calibrated Trip Tank			
Other:			

REMARKS:

Hole Fluid Type	Weight	Storage Pits
Gel/H2O		

OGD9 (3/83/DWRR/3M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. T290- 21

REPORT ON OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
January 19, 1990

Your operations at well "Ferndale" 716, API No. 111-21563, Sec. 9, T. 4N, R. 21W, S.B.B.&M. Ojai Field, in Ventura County, were witnessed on 1/10/90. Bruce Hesson, representative of the supervisor, was present from 1530 to 1900. There were also present Brett Barnheizer, Drilling Foreman.

Present condition of well: 13 3/8" cem 905'. TD 905' (drilling)

The operations were performed for the purpose of testing the blowout prevention equipment and installation.

DECISION:

The blowout prevention equipment and its installation on the 13 3/8" casing are approved.

ljg

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

OG109

DIVISION OF OIL AND GAS

BLOWOUT PREVENTION EQUIPMENT MEMO

T 21

Operator SENECA RESOURCES CORP. Well "FERNDALE" 716 Field QUA1 County VENTURA

VISITS:	Date	Engineer	Time	Operator's Rep.	Title
1st	1/10/90	D. HESSON	1530 to 1900	BRETT BARNHIZER	DF
2nd			to		

Casing record of well: 13 3/8 @ 905'. TD 905 (DRILLING)

OPERATION: Testing (inspecting) the blowout prevention equipment and installation.
DECISION: The blowout prevention equipment and its installation on the 13 3/8 "casing are approved.

REQUIRED BOPE CLASS: III B 2M

Proposed Well Opns: NEW DRILL MPSP: _____ psi
Hole size: 17 1/2 " fr. 0 ' to 905 ' , _____ " to _____ ' & _____ " to _____ '

CASING RECORD (BOPE ANCHOR STRING ONLY)					Cement Details	Top of Cement	
Size	Weight(s)	Grade(s)	Shoe at	CP at		Casing	Annulus

BOP STACK

API Symb.	Ram Sz.	Mfr.	Model or Type	Size (in.)	Press. Rtg.	Date Last Overhaul	a Gal. to Close	b Rec.Time (Min.)	a/b Calc. GPM Output
A	-	HOOKER	GK	13 3/8	2000				
Rd	5"	SHAFFER	B	12	"				
Rd	CSO	"	B	12	"				

TEST DATA

psi Drop to Close	Secs. to Close	Test Date	Test Press.
		1/10/90	2000
		1/10/90	2000
		1/10/90	2000

ACTUATING SYSTEM

Accum. Unit(s) Wkg. Press. 3000 psi
Total Rated Pump Output - gpm
Distance From Well Bore 50 ft.

	Mfr.	Accum. Cap.	Precharge
1	HOOKER	200 gal.	1500 psi
2		gal.	psi

CONTROL STATIONS	Elec.	Hyd.
✓ Manif. at accum. unit		✓
✓ Remote at Drlr's. stn.		✓
Other:		

EMERG. BACKUP SYST.	Press.	Wkg. Fl.
N2 Cyl No: Type: 1	2050	gal.
Other: 2	2000	gal.
3	2000	gal.
4	2050	gal.
5		gal.
6		gal.

AUXILIARY EQUIPMENT

		No.	Sz. (in.)	Rated Press.	Connections: Weld	Flan.	Thrd.	
✓	Fill-Up Line							
✓	Kill Line		2	3000		✓	✓	3000
✓	Control Valve(s)	3				✓	✓	
✓	Check Valve(s)	1				✓	✓	
✓	Auxil. Pump Connec.					✓	✓	
✓	Choke Line		3			✓	✓	
✓	Control Valve(s)	9				✓	✓	
✓	Pressure Gauge					✓	✓	
✓	Adjustable Choke(s)	2	3			✓	✓	
✓	Bleed Line		3			✓	✓	
✓	Upper Kelly Cock							
✓	Lower Kelly Cock		5					
✓	Standpipe Valve							
✓	Standpipe Pressure Ga.							
✓	Pipe Safety Valve		5					
✓	Internal Preventer		5					

HOLE FLUID MONITORING EQUIPMENT	Alarm Aud.	Alarm Vis.
✓ Calibrated Mud Pit	✓	✓
✓ Pit Level Indicator	✓	✓
✓ Pump Stroke Counter	✓	✓
✓ Pit Level Recorder	✓	✓
✓ Flow Sensor	✓	✓
✓ Mud Totalizer	✓	✓
Calibrated Trip Tank		
Other:		

Class: A B C

REMARKS:

Hole Fluid Type	Weight	Storage Pits
GB MUD	-	400+

OGD9 (12-83-DWRR-3M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P290- 7
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
January 4, 1990

Your proposal to drill well "Ferndale" 716, A.P.I. No. 111-21563, Section 9, T. 4 N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 12/26/89, received 12/27/89, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOG Class III B2M requirements shall be installed and maintained in operating condition at all times.
2. Drilling fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. Blowout prevention practice drills are conducted at least weekly and recorded on the tour sheet.
4. The 13 3/8" casing is cemented with sufficient cement to fill behind this casing from the shoe to the ground surface.
5. The 9 5/8" and 5 1/2" casing is cemented with sufficient cement to fill behind this casing to at least 500 feet above the uppermost oil and/or gas zone or anomalous pressure interval, whichever is higher.
6. The Division will monitor the monthly production of this well for a period of six months and if anomalous water production is indicated, remedial action well be required.
7. This office shall be consulted before sidetracking the well or running any additional casing.
8. THIS DIVISION SHALL BE NOTIFIED:
   a. To witness a pressure test of the blowout prevention equipment prior to drilling out the shoe of the 13 3/8" and 9 5/8" casing. Prior to notifying the division engineer to witness the test, the blind rams must be tested. Information of the blind ram test must be entered on the tour sheet along with the signature of the person in charge.

Blanket Bond
SF:ljg

Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS
Notice of Intention to Drill New Well

DIVISION OF OIL AND GAS
RECEIVED
DEC 27 1989
VENTURA, CALIFORNIA

C.E.Q.A. INFORMATION			
EXEMPT ☐ CLASS ____	NEG. DEC. ☐ S.C.H. NO. ____	E.I.R. X S.C.H. NO. CUP 3344	DOCUMENT NOT REQUIRED BY LOCAL JURISDICTION ☐
See Reverse Side			

FOR DIVISION USE ONLY					
MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121
202	12/30/89 DH	✓	✓	✓	✓

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to commence drilling well Ferndale 716, well type oil, API No. 111-21563 (Assigned by Division),

Sec. 9, T. 4N, R. 21W, S. B. B. & M., ~~Silverthread~~ Ugar Field, Ventura County.

Legal description of mineral-right lease, consisting of --- acres, is as follows: --- (Attach map or plat to scale)

Previously submitted.

(See Ferndale 712)

Do mineral and surface leases coincide? Yes X No ____. If answer is no, attach legal description of both surface and mineral leases, and map or plat to scale.

Location of well 3610 feet East (Direction) along section/~~property~~ (Cross out one) line and 629 feet North (Direction)

at right angles to said line from the Southwest corner of section/~~property~~ (Cross out one) 9 or

Is this a critical well according to the definition on the reverse side of this form? Yes ☐ No ☒

If well is to be directionally drilled, show proposed coordinates (from surface location) and TVD at total depth: 1581 feet South (Direction) and 297 feet East (Direction)

Estimated **true vertical** depth 8000'. Elevation of ground above sea level 1152 feet.

All depth measurements taken from top of Kelly Bushing (Derrick Floor, Rotary Table, or Kelly Bushing) that is 30 feet above ground.

KB 1152

PROPOSED CASING PROGRAM

SIZE OF CASING INCHES API	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS	CALCULATED FILL BEHIND CASING (Linear Feet)
13 3/8"	54.5#	J-55 ST&C	Surface	800'	Shoe	800'
9 5/8"	36#	K 55 LT&C	Surface	5350'	Shoe	500'
5 1/2"	17#	N 80 LT&C	Surface	8500'	Shoe	2000'

(A complete drilling program is preferred and may be submitted in lieu of the above program.)

Intended zone(s) of completion Lower Mohnian, 8125', 3000 PSI (Name, depth, and expected pressure) Estimated total depth 8,500'

It is understood that if changes in this plan become necessary we are to notify you immediately.

Name of Operator	Type of Organization (Corporation, Partnership, Individual, etc.)	
Seneca Resources Corporation	Corporation	
Address	**City**	**Zip Code**
P.O. Box 630	Santa Paula, CA	93060
Telephone Number / **Name of Person Filing Notice**	**Signature**	**Date**
(805)656-2445 / James A. Beck	James A Beck	12-26-89

This notice and indemnity or cash bond shall be filed, and approval given, before drilling begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

OG105 (3/86/DWRR/3M)

PROPERTY/WELL TRANSFER OR ACQUISTION

Seneca Resources Corporation (S2630)

to

Vintage Production California LLC (V1370)

Effective April 25, 2008

OPERATOR Seneca
WELL NO. "Fundale" 717
MAP

INTENTION	Drlg	Supp				
NOTICE DATED	2-12-90	2-16-90				
P-REPORT NUMBER	290-59	290-87				
CHECKED BY/DATE		8-20-92 SPM				
MAP LETTER DATED		8-29-92				
SYMBOL						

	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED
NOTICE	2-13-90		2-19-90									
HISTORY	7/3/90											
SUMMARY	7/3/90											
E-LOG ✓	7/3/90											
MUD LOG ✓	7/3/90											
DIPMETER ✓	7/3/90											
DIRECTIONAL ✓	7/3/90											
CORE/SWS												
CBL ✓	7/3/90		→									
COMP NEUT. ✓	7/3/90											
BHC Plot ✓	7/3/90											
Form. Tester ✓	7/3/90											
C-Prodip ✓	7/3/90											
Fluid Entry ✓	7/3/90											
COMP. NEUT/DENSITY ✓	7-3-90											
CONTINUOUS DIP ✓	7-3-90											
DUAL DIP ✓	7-3-90											
6 MTH. PROD.	8-14-92											
OK (13% CUT)			1-29-93									

ENGINEERING CHECK

T-REPORTS		✓				
OPERATOR'S NAME		✓				
WELL NO.		✓				
LOC & ELEV		✓				
SIGNATURE		✓				
SURFACE INSP.						
DRILL CARD						
RECORD'S COMPLETE		SPM 8-20-92				

FINAL LETTER OK _____
MAILED _____
RELEASED BOND _____

INJECTION BOOK _____
IDLE WELL LIST _____
SURFACE INSP. CARD _____

REMARKS: _____

OK TO RELEASE FROM CONFIDENTIAL _____

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS
AND GEOTHERMAL RESOURCES

No.T293-028

REPORT ON OPERATIONS

James A. Beck, Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
February 2, 1993

Your operations at well "Ferndale" 717, API No. 111-21569, Sec. 9, T. 4N, R. 21W, S.B.B.&M. Ojai Field, in Ventura County, was tested for water shutoff on 1-29-93. S. Mulqueen, representative of the supervisor, was present.

Present condition of well: 13 3/8" cem 1140'; 9 5/8" cem 6092' WSO; 5 1/2" cem 5560'-7648', perfs @ int 6957'-7299'. TD 7650'. Plugged w/cem 7650'-7538'.

The operations were performed for the purpose of demonstrating a water shut off on the 9 5/8" casing by means of a production test.

DECISION:

The 9 5/8" shutoff at 6092' is approved.

PK:SM:nr

WILLIAM F. GUERARD, Jr.
Acting State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

OG109

DIVISION OF OIL AND GAS

PRODUCTION RECORD REVIEW WATER SHUT OFF TEST

No. T 293-028

Operator SENECA RESOURCES CORP.

Well designation "Ferndale" 717 Sec. 9, T. 4N, R. 21W, SB B.&M.

Field OJAI, County VENTURA was tested for water shutoff on 1-29-93. (Name) S. MULQUEEN, representative of the supervisor, was present from — to —. Also present were —

Casing record of well: 13 3/8" cem 1140. 9 5/8" cem 6092' WSO. 5½" cem 5560'-7648', perfs @ int 6957-7299. TD 7650'. Plugged w/ cem 7650'-7538'.

The operations were performed for the purpose of DEMONSTRATING A WATER SHUT OFF ON THE 9 5/8" CASING BY MEANS OF A PRODUCTION TEST.

☐ The 9 5/8" shutoff at 6092' is approved.

☐ The seal between the _____" and _____" casings is approved.

☐ The operations are approved as indicating that all of the injection fluid is confined to the formations below _____' at this time.

Hole size: _____" fr. _____' to _____'; _____" to _____'; & _____" to _____'

Casing				Cemented			Top of Fill		Sqd. Away	Final Press	Test psi/min. Perfs.
Size	Wt.	Top	Bottom	Date	MO-Depth	Volume	Annulus	Casing			

Depth or interval tested _____

The hole was open to _____' for test.

FORMATION TEST:

Packer(s) _____' & _____' Tail _____' Bean size _____" Cushion _____

IHP _____ IFP _____ FFP _____ FHP _____

Blow _____

Open for test _____ Hr. _____ min. Fluid entry _____

BAILING TEST:

The hole fluid was bailed to _____', at _____ on _____ 19__.

The hole fluid was found at _____', at _____ (time) on _____ 19__.

PRODUCTION TEST:

Gauge/meter reading _____ on _____ 19___, at _____ pump depth _____' Engr. _____

Gauge/meter reading _____ on _____ 19___, at _____ Engr. _____

Fluid level _____' surveyed on _____ 19___, reviewed (witnessed) by _____

Total fluid produced, Bbls. 2482 Net oil 2183 Water 299

Rate: 73 B/D oil, 10 B/D water, 12 % water cut

INJECTION SURVEY:

RA/Spinner/Temperature survey run at _____ B/D & _____ psi on _____ 19__, fluid confined below _____' (Packer depth _____')

* ADJACENT WELLS "FERNDALE" 712 = 10% CUT "FERNDALE" 716 = 60% CUT

CALIFORNIA
DIVISION OF OIL AND GAS

April 19,1990

To: Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
P.O. Box 630
Santa Paula, CA 93060

From: Division of Oil and Gas
6401 Telephone Road, Ste. 240
Ventura, CA 93003

Subject: ☒ Request for confidential status dated March 29, 19 90.

☐ Request for extension of confidential status dated _____, 19___.

☒ Subject request is approved

☐ Subject request is partially approved

☐ Subject request is denied.

Records approved for confidential status are:

WELL NAME AND NUMBER	FIELD OR COUNTY	DATE ON WHICH RECORDS WILL BECOME PUBLIC
"Ferndale" 717	Sec. 9,T.4N.,R.21W.,SBB&M Ojai Field	Two years after cessation of drilling

Patrick J. Kinnear
Deputy Supervisor

cc: P.I.
M.J. System

SEE REVERSE SIDE FOR RECORDS DENIED CONFIDENTIAL STATUS OR EXTENSION OF CONFIDENTIAL STATUS AND REMARKS.

OGD181 (7/82/DWRR/2M)

Seneca Resources Corporation
a National Fuel Gas System company

DIVISION OF OIL AND
RECEIVED
MAR 29 1990
VENTURA, CALIFORNIA

March 29, 1990

Mr. Patrick J. Kinnear
Division of Oil & Gas
6401 Telephone Road, Suite 240
Ventura, California 93003

RE: FERNDALE 717

Dear Mr. Kinnear:

Subsequent to your letter of February 20, 1990, whereby Seneca was denied "Confidential Status" for the "Ferndale" 717, we logged and set pipe in this well. As I indicated in my verbal request that the denial be reevaluated, we can now show from logs and RFT's that the 717 well is fault separated from the "Barker-Ferndale" #4 and has some new sands not encountered in the "Ferndale" 215 well.

Therefore, Seneca feels the "Ferndale" 717 would qualify for "Confidential Status" because it extends the limits of a known field and has established a new pool in the field. The log enclosed shows virgin pressure in the pay-sand and the RFT results show a new sand which is not productive in adjacent wells.

If you have any questions or would like to discuss this further, please feel free to contact me at (805) 656-2445.

Sincerely,

James A. Beck

James A. Beck
General Manager Operations

JAB:csf

Encl:

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED JUL 3 1990
VENTURA, CALIFORNIA

API No. 111-11569

WELL SUMMARY REPORT

Operator	Well				
Seneca Resources Corporation	Ferndale 717				
Field	**County**	**Sec.**	**T.**	**R.**	**B.&M.**
Silverthread	Ventura	9	4N	21W	S.B.

Location (Give surface location from property or section corner, street center line and/or California coordinates)
3584' E & 595' N from SW corner of Sec. 9

Elevation of ground above sea level
1132'

Commenced drilling (date)
2-17-90

Completed drilling (date)
3-21-90

Commenced producing (date)
5-9-90

[X] Flowing [ ] Pumping
[ ] Gas lift

Name of producing zone(s)
Mohnian Sands
Below BCFZ

Total depth

(1st hole)	(2nd)	(3rd)
7650'		

Present effective depth
7538' PBTD

Junk
None

Depth measurements taken from top of:
[ ] Derrick Floor [ ] Rotary Table [X] Kelly Bushing
Which is feet above ground

GEOLOGICAL MARKERS	DEPTH
San Cayetano Fault	2685'
U. Big Canyon Fault	2925'
L. Big Canyon Fault	5960'

Formation and age at total depth
L. Mohnian, Miocene

	Clean Oil (bbl per day)	Gravity Clean Oil	Percent Water including emulsion	Gas (Mcf per day)	Tubing Pressure	Casing Pressure
Initial Production	192	31.0	4	240	1180	2400
Production After 30 days	175	31.0	4	340	980	1600

CASING RECORD (Present Hole)

Size of Casing (API)	Top of Casing	Depth of Shoe	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Number of Sacks or Cubic Feet of Cement	Depth of Cementing (if through perforations)
13-3/8"	Surface	1140'	54.5	K-55 ST&C	New	17-1/2"	1100 sx	N/A
9-5/8"	Surface	6092'	40.0	N-80 LT&C	New	12-1/4"	1500 sx	N/A
5-1/2"	5560'	7648'	17.0	N-80 LT&C	New	8-1/2"	313 sx	N/A

PERFORATED CASING (Size, top, bottom, perforated intervals, size and spacing of perforation and method.)
All selections 4 (0.44") over 2' with 3-3/8" casing guns: Stage I - 7299, 7294, 7288, 7283, 7276, 7269, 7261, 7253, 7250 (36 holes). Stage II - 7210, 7200, 7184, 7177, 7168, 7162, 7145, 7134, 7128, 7122, 7114, 7104 (48 H). Stage III - 7072, 7065, 7054, 7042, 7034, 7030, 7022, 7009, 6989, 6977, 6957, (44 Holes).

Was the well directionally drilled? If yes, show coordinates at total depth
[X] Yes [ ] No 7650' MD, 7407' TVD, 811.26' S & 1199.33' E

Electrical log depths
1137'-6101' & 6091'-7645'

Other surveys
DIL-GR, LDT-CNL-GR, HDT, CST, RFT, CBL, Mudlog, Directional

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Name	Title	
James A. Beck	General Manager Operations	
Address	**City**	**Zip Code**
P.O. Box 630	Santa Paula	93061
Telephone Number	**Signature**	**Date**
(805) 656-2445	James A. Beck	6/26/90

SUBMIT IN DUPLICATE

OG100 (3/82/GSR1/5M)

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 717 SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-11569 JAMES A. BECK, GENERAL MANAGER OPERATIONS

James A. Beck

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93061 (805) 656-2445
****

2/17/90
Day 1. MIRU Loffland 217. Present Operation: Drilling. Spud @ 2000 hr. 2/16/90. Drill from 54'-114'. LD DC's. Ream from 54'-114'. Drill from 114'-143'. Circ. & survey. Drill from 143'-185'.

2/18/90
Day 2. Depth: 512'. Present Operation: Drilling. Circ. Trip for MM & MWD. Wash & ream from 54'-185'. Circ. POOH for MWD tools. RIH, drill from 185'-231'. Trip to replace MWD tools. Drill from 231'-512'.

2/19/90
Day 3. Depth: 1140'. Present Operation: RIH. Drill from 512'-578'. Circ. POOH for bit. RIH. Ream from 533'-578'. Drill from 578'-1140'. POOH for reaming assembly. RIH.

2/20/90
Day 4. Depth: 1140'. Present Operation: Nipple up BOPE. RIH. Wash & ream to btm. Wipe hole to conductor. Wash & spot ream to btm. Circ. POOH. RU casers. Run 29 jts. 13-3/8" 54.5# K-55 ST&C csg. to 1140'. RU cementers. Circ., cmt. 13-3/8" csg. with 10 bbls. H20 ahead, 223 bbls. Class "G" 15.8 ppg + 1% CaCl2 + .2% D46 defoamer, displaced with 172 bbls. mud, bumped plug, held.
WOC. Cut off csg. & nipple up.

2/21/90
Day 5. Depth: 1140'. Present Operation: Pick up BHA. Nipple up BHA. Test blind rams to 2000 psi. Slip & cut. drilling line. Install wear bushing. LD 17-1/2" BHA. MU 12-1/4" BHA. RIH.

2/22/90
Day 6. Depth: 1509'. Present Operation: POOH for bit. RIH. LD DP. Replace swivel. RIH. Test BOPE with DOG as witness. RIH. Remove, clean & replace flowline. Drill out float, cement & shoe. Drill from 1140'-1509'. Circ. POOH for bit.

2/23/90
Day 7. Depth: 1969'. Present Operation: Drilling. RIH. Wash & ream from 1464'-1509'. Drill from 1509'-1630'. Circ. Drill from 1630'-1680'. POOH for bit. RIH. Drill from 1680'-1969'.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 717 SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-11569 JAMES A. BECK, GENERAL MANAGER OPERATIONS

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93061 (805) 656-2445
****

2/24/90
Day 8. Depth: 2545'. Present Operation: Wipe hole. Drill from 1969'-2200'. Trip for bit. Drill from 2200'-2545'. Wipe hole.

2/25/90
Day 9. Depth: 3013'. Present Operation: POOH for bit. Drill from 2545'-2560'. Circ. & cond. Drill from 2560'-2670'. Circ. Wipe hole to 1140'. Repair rig. Wipe hole. Drill from 2670'-2764'. Circ. Drill from 2764'-2827'. Circ. Wipe hole to 2031'. Drill from 2827'-2880'. Clean trash from pumps. Drill from 2880'-3013'. Circ. & cond. Trip for bit & mud motor.

2/26/90
Day 10. Depth: 3755'. Present Operation: Drilling. Service MWD & RIH. Ream from 2900'-3013'. Drill from 3013'-3263'. Circ. & wipe hole to 2000'. Drill from 3263'-3491'. Wipe hole to 2218'. Drill from 3491'-3700'. Circ. Wipe hole to 2530'. LD standing DP. Wash & ream from 3530'-3700'. Drill from 3700'-3755'.

2/27/90
Day 11. Depth: 4199'. Present Operation: RIH. Repair pumps. Drill from 3755'-3917'. Circ. & wipe to shoe. Circ. Trip for bit. RIH. Ream from 3562'-3917'. Drill from 3917'-4199'. Circ. Wipe hole to 3467'. RIH.

2/28/90
Day 12. Depth: 4560'. Present Operation: Drilling. Drill from 4199'-4240'. Circ. Drill from 4240'-4324'. Circ. Wipe to 3000'. Spot ream. Drill from 4324'-4333'. Circ. & cond. Drill from 4333'-4449' Circ. Wipe hole to 1874'. RIH. Circ. & cond. Drill from 4449'-4560'.

3/1/90
Day 13. Depth: 4885'. Present Operation: Drilling. Drill from 4560'-4573'. Circ. Trip for bit. Ream. Drill from 4573'-4792'. Circ. Wipe to 2249'. Wash & ream from 4715'-4792'. Drill from 4792'-4818' Circ. Drill from 4818'-4885'.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 717 SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-11569 JAMES A. BECK, GENERAL MANAGER OPERATIONS

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93061 (805) 656-2445
****

3/2/90
Day 14. Depth: 5042'. Present Operation: Circulate. Drill from 4885'-4916'. Circ. Wipe hole. Ream from 4816'-4916'. Drill from 4916'-4989'. Wipe to 3090'. Ream from 4862'-4989'. Drill from 4989'-5042' Trip for bit & mud motor. RIH, circ. out gas.

3/3/90
Day 15. Depth: 5231'. Present Operation: RIH. Ream from 4510'-4042'. Circ. Drill from 5042'-5137'. Wipe to 3100'. Drill from 5137'-5199'. Wipe to 3200'. Drill from 5199'-5231' Circ. Trip for bit. Slip & cut drilling line.

3/4/90
Day 16. Depth: 5364'. Present Operation: Drilling. RIH. Check pumps & surface equipment for pressure loss. Pump carbide to find washout. Chain out of hole for washout in H.W.D.P. LD washed jt. RIH. Ream from 5119'-5231'. Drill from 5231'-5315'. Wipe to 2400'. Drill from 5315'-5364'.

3/5/90
Day 17. Depth: 5517'. Present Operation: Drilling. Drill from 5364'-5374'. Wipe to 4500'. Drill from 5374'-5417'. Circ. & cond. Drill from 5417'-5424'. Wipe to 4500'. Drill from 5424'-5456'. MWD tool failure. POOH. Change MWD tools. RIH. Drill from 5456'-5517'.

3/6/90
Day 18. Depth: 5762'. Present Operation: RIH. Wipe hole to 4400'. Drill from 5517'-5608'. Wipe to 4600'. Drill from 5608'-5702'. Wipe to 4172'. Repair rig pump. Drill from 5702'-5762'. Circ. POOH for bit. RIH.

3/7/90
Day 19. Depth: 5981'. Present Operation: POOH. RIH. Drill from 5762'-5836'. Wipe to 4880'. Drill from 5836'-5918'. Wipe to 4879'. Drill from 5918'-5981'. Wipe to 4981'. Drill from 5981'-5987'. Circ. POOH for bit.

3/8/90
Day 20. Depth: 6100'. Present Operation: Circ. Trip for bit & change BHA. Ream from 5923'-5987'. Drill from 5987'-6100'. Circulate and condition for logs.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 717 SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-11569 JAMES A. BECK, GENERAL MANAGER OPERATIONS

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93061 (805) 656-2445
****

3/9/90
Day 21. Depth: 6101'. Present Operation: Logging. Circulate and condition. Wip to shoe. Spot ream as needed. Circ. & cond. Chain & measure out of hole. RU loggers. Run SP-GR-Dual Laterlog; GR-CNL-LDT; HDT-GR; & SWC.

3/10/90
Day 22. Depth: 6100'. Present Operation: Run casing. Logging. RD loggers. RIH. Circ. & condition. POOH. RU casers. Run 9-5/8" casing.

3/11/90
Day 23. Depth: 6100'. Present Operation: W.O.C. Run 146 jts. 9-5/8" 40# N-80 LT&C csg. to 6092'. Float collar @ 6007'. RD casers. RU cementers. Circ. Pump 50 bbls. CW100 + 5% KCL (BWOW) cmt. Lead - 600 sk 1:1 POZ + 4% D20 + 2% D112 + 3% D65 + 5% KCL (BWOW) + 2% D46, 13.8 ppg. Tail: 900 sk "G" + 5% KCL (BWOW) + 1% D127 + .3% D13 + .2% D46, 15.2 ppg. Displaced with 467 bbls. mud. Bumped plug. Held. Cement to surface. W.O.C.

3/12/90
Day 24. Depth: 6100'. Present Operation: Nipple up. W.O.C. Nipple down BOP. Clean cellar. Lift BOP.

3/13/90
Day 25. Depth: 6120'. Present Operation: RIH. Nipple up BOPE. PU BHA. RIH, test BOPE with DOG as witness. Circ. & cond. Drill out cmt. & shoe. Drill from 6100'-6120'. Circ. POOH for steerable BHA.

3/14/90
Day 26. Depth: 6460'. Present Operation: Drilling. RIH & orient MWD. Slip & cut drilling line. RIH. Drill from 6120'-6326'. Circ. Wipe hole. Drill from 6326'-6412'. Circ. POOH for bit. RIH. Ream from 6332'-6412'. Drill from 6412'-6460'.

3/15/90
Day 27. Depth: 6906'. Present Operation: Drilling. Drill from 6460'-6690'. Circ. Wipe hole. Drill from 6690'-6732'. Circ. POOH for bit. RIH. Ream from 6650'-6732'. Drill from 6732'-6906'.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 717 SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-11569 JAMES A. BECK, GENERAL MANAGER OPERATIONS

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93061 (805) 656-2445
****

3/16/90
Day 28. Depth: 7160'. Present Operation: Drilling. Drill from 6906'-6969'. Circ. Wipe hole. Drill from 6969'-6985'. Circ. Motor failure. POOH, LD motor & PU new motor & tools (junk sub). RIH. Ream from 6540'-6985' & work junk sub. Drill from 6985'-7160'.

3/17/90
Day 29. Depth: 7444'. Present Operation: RIH. Drill from 7160'-7188'. Wipe hole. Drill from 7188'-7252'. Circ. POOH for bit. RIH. Drill from 7252'-7406'. Circ. Wipe hole. Drill from 7406'-7444'. Circ. Trip for bit.

3/18/90
Day 30. Depth: 7650'. Present Operation: Logging. RIH. Ream from 7329'-7444'. Drill from 7444'-7650'. Circ. Wipe hole. Ream from 7500'-7620'. Pull to shoe. to replace swivel packing. RIH. Ream from 7620'-7650'. Circ. POOH for logs (Strap out). LD tools. RU loggers. Run Dual Laterlog.

3/19/90
Day 31. Depth: 7650'. Present Operation: Logging. Log. RD loggers. MU BHA. RIH. Slip & cut drilling line. RIH. Ream from 7572'-7650'. Circ. POOH. Run RFT's.

3/20/90
Day 32. Depth: 7650'. Present Operation: RD casers. Logging. RD loggers. RIH. Circ. POOH. RU casers. LD drill pipe & BHA. Run float equipment, 48 jts. 5-1/2", 17#, N-80 LT&C liner, liner hanger and polished bore receptacle with 20' extension on drillpipe setting tool. RD casers.

3/21/90
Day 33. Depth: 7650'. Present Operation: Release rig. Run liner to 7584'. Circ. & run to 7648' & hang liner with top of extension at 5562'. RU cementers. Pump 50 bbls. CW100 mud flush cmt: 313 sks 10-0 RFC + 5% KCL (BWOW) + 1.25% D127 + .5% D13 + .2% D46 14.2 ppg displaced with 144 bbls. mud. Bumped plug, bled back, plug held. RD cementers. Pull to 5230'. Circ. LD DP. RD & LD machine. Nipple down BOPE. NU production BOPE. Release rig @ 0700 hrs.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 717 SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-11569 JAMES A. BECK, GENERAL MANAGER OPERATIONS

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93061 (805) 656-2445

****

4/4/90

Day 1. MIRU Oilwell. Bolt on 10" Hydrill & x-over spool. Rig for tbg. Test BOE. Transfer oil & clen pump tank. Refill with 90 bbls. mud. MU 5-1/2" pos. csg. scraper. Measure, rabbit & PU 2-7/8" EU8 N-80 tbg. Bit & scraper stopped @ 5403'. Work free. Pull tbg. to 5356'. Backscuttle well. Circulate 2 hrs. @ 2-1/2 BPM. Unable to bleed tbg. down. Backscuttle well. Circulate @ 1000 psi @ 2 BPM for 2 hrs. Tbg. bled. Pull stand. Install PGSR stripper. Replaced 11 2-7/8" EU8 N-80 collars. SDFN.

4/5/90

Day 2. Clean out to 5409'. Unable to work deeper. Pull & meas. tbg. out. RU Schlumberger. Fill hole with mud. Perforate 4 (0.44") JH @ 2834'. RO Schlumberger. Pump 20 bbls. mud @ 1.5 BPM 1600 psi. No returns through 13-3/8". Press. bled to 1250# in 5 min. MU Baker K-1 cmt. retainer with tbg. Set retainer @ 2788'. RU Dowell. Mix & pump 90 sxs Class "G" cmt. Displace with 12.5 bbls. mud. Press. to & held 1300#. Stab out of retainer. Reverse btms. up. POH with tbg. RU Schlumberger. Perforate 4 (0.44") JH @ 1150'. RO Schlumberger. Press. to 1500#, held o.k. No bleed off. Press. to 2000#, no bleed off. Close in 13-3/8" for 15 min. Reopen, no gas blow. SDFN.

4/6/90

Day 3. Check 13-3/8" csg. No pressure. MU 8-5/8" bit. PU 6 ea. 3-1/2" DC's. Strip on spool & PGSR cage. Run tools & tbg. Tag top of retainer @ 2788'. Rig Homco power swivel. Rig pump to circulate. Drill on retainer. Bit hanging up, hard to finish drilling up retainer. Drill on retainer 13 hrs. SDFN.

4/7/90

Day 4. Continue drilling on retainer @ 2790'. Unable to drill past 2791'. LD swivel. POH. Stand back DC's. Order out new bit. SDFN.

4/8/90

Day 5. MU 8-1/2" bit & junk sub, collars & RIH to 2790'. Continue drilling on retainer. Drill past retainer @ 2792'. Continue drilling cement to 2846'. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 717 SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-11569 JAMES A. BECK, GENERAL MANAGER OPERATIONS

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93061 (805) 656-2445
****

4/9/90
Day 6. Test csg. to 1000 psi for 10 min. Install flow meter on tbg. Secure well & rig until a.m. Pressure on well 780 psi. Open well. PU kelly & drill to 2860'. LD kelly. Hook back up to recorder & test to 1000 psi @ 10:20 a.m. Bled to 980 psi in 20 min. Held 975 psi for 45 min. 10:40 a.m. held 950 psi for 10 min, held 925 psi for 20 min. Held 900 psi at end of 2 hr. test. PU kelly & continue to push retainer junk down hole. Repair swivel arm. Continue to push retainer. Unable to make hole. Pull 15 stds. Order out new swivel. SDFN.

4/10/90
Day 7. Open well. Condition mud in pump tank. RIH with tbg. & tools to 5384'. RU power swivel. Tag down @ 5403'. Drill out cement to 5566' (top liner). Circulate well 2 hrs. to clean up. LD swivel. Pull tbg., collars & 8-1/2" bit MU Baker 9-5/8" csg. scraper & RIH to 5566'. Pull tbg. & scraper. MU 4-3/4" bit & 6 ea. 3-1/2" collars. RIH & tag down @ 5569'. Rig swivel & pump. Drill through 1'. Run bit to 5600'. Load out swivel. Pull tbg. to 5540'. Press. well to 1000 psi. Pressure bled to 850# in 30 min. Bled press. PU 2-7/8" tbg. & run bit to 7534'. Set down. Rig poorboy swivel. Unable to circulate down. SDFN.

4/11/90
Day 8. RU power swivel. Clean out fill to 7565'. Circ. well 2-1/2 hrs. Pull tbg. & tools to 5075'. Fill well. Test csg. to 1000 psi. Bled to 840 in 30 min. Bled press. Finish running tbg. RU Schlumberger. Run GR/CCL/CBL log 7533'-5450'. Log with 750 psi press. on csg. RO Schlumberger. Press. csg. to 1000 psi, bled to 840 in 30 min. Repressure, bled to 880 in 30 min. Bled press. RU A&F Testers. MU Baker 5-1/2" retrievamatic pkr. Test tbg. to 7000 psi. Set pkr. @ 5610'. Press. 5-1/2" csg. to 6000 psi. Hold for 15 min. Bled. RO tester. Release pkr. Clean pump tank. Run pkr., set down @ 7538'. Pull to 7537'. Rig pump to circulate. Change well over to inhibited KCl water. SDFN.

4/12/90
Day 9. Change well over to inhibited KCl water. Pull pkr. to 7500'. Measure 5-1/2" 17# csg. Pull tbg. & pkr. MU Baker polishing mill. Run mill & 6 ea. 3-1/2" collars to 7550'. Rig pump & power swivel. Mill through PBR 5566'-5586'. Measure out with tbg. Load out power swivel. LD DC's. RU Coastal Casers & HydroTest.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 717 SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-11569 JAMES A. BECK, GENERAL MANAGER OPERATIONS

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93061 (805) 656-2445
****

4/13/90
Day 10. Finish rigging Coastal Casing & Hydrotest. MU Baker. Test csg. in well to 7000 psi. Latch onto polished bore extension. RO Coastal. Test 5-1/2" csg. to 5000 psi. 5200 csg. move up hole. Bled press. Lower csg. back down. Unbolt spool. RU Terry's Hydro-lift. Lift BOE off flange. Drop slips on 5-1/2" csg. Cut casing. Unbolt & remove BOE equipment. Install production head. Bolt on Homco 5000# Hyd. gate & test. Rig for tbg. Clean 5-1/2" scraper. Run scraper & tbg. SDFN.

4/14/90
Day 11. Continue running scraper & tbg. Work scraper thru seal ass'y @ 5566'. Small amount of drag. Run to 7530'. Change well over to oil. Pull tbg. & scraper. Tbg. hanging up, rotate to free up. Tbg. hanging up each collar. Check gate & tree, okay. Tbg. hanging up in liner hanger. LD tbg. on trailer. Run tbg. in mast. Pull & LD. SDFN.

4/15/90
No activity.

4/16/90
Holiday.

4/17/90
Day 12. Bolt on Homco hydrill with shooting flange. RU HLS. Run 3-3/8" guns. Fill well with oil. Press. test BOPE & riser to 1000 psi, okay. Perf well with 4 (0.44") JH over 2' @ 7298'-7300', 7293'-95', 7287'-89', 7282'-84', 7275'-77', 7268'-70', 7260'-62', 7252'-54' & 7249'-51'. RO HLS. No pressure on well. SDFN.

4/18/90
Day 13. Rig Howco isolation tool. Frac Stage I per program. Perf: 7250'-99' (36 holes). Breakdown = 30 BPM @ 4510, pre-pad = 50 bbls. @ 30 BPM. ISIP = 2956#, F.G. (TVD) = .81, holes open = 51, total oil pumped = 422, total gel = 119, total fluid = 541. Avg. sand conc. = 5 ppg, max. conc. = 8 ppg, avg. rate = 30 BPM, max. rate = 31 BPM, avg. press. = 4700#, max. press. = 4510# pre-pad, 5000# frac, FSIP = 3400#. Top of sand = 7300', total sand pumped = 37,300# & total sand out = 37,000#. RO isolation tool & install hydrill with flange. RU HLS. 1800# on well. Unable to run dummy gun due to high pressure. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 717 SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-11569 JAMES A. BECK, GENERAL MANAGER OPERATIONS

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93061 (805) 656-2445
****

4/19/90
Day 14. 1200 psi on well. Run HLS & run dummy gun. Tag fill @ 7320'. Run & set Baker wireline set plug @ 7225'. Perf Stage II as per program with 4 (0.44") JH over 2' using 3-3/8" guns 7209'-11', 7199'-7201', 7183'-85', 7176'-78', 7167'-69', 7161'-63', 7144'-46', 7133'-35', 7127'-29', 7121-23', 7113'-15', & 7103'-05' (48 holes). Frac Stage II. Breakdown = 30 BPM @ 4820#, Pre-pad = 50 bbls. oil @ 30 BPM, ISIP = 3160#, F.G. (TVD) = .85, holes open = 18. Avg. rate = 30 BPM, max. rate = 31 BPM, avg. press. = 4900#, max press (pre-pad) = 4820#, max. press (frac) = 5230#. FSIP = 3860#, 5 min. = 3183#, 10 min. = 2863#, 15 min. = 2406#. Est. TOS = 7200', total oil = 674 bbls., total gel = 256 bbls, total fluid = 930 bbls. Total sand = 75,300#, total sand out = 75,000#, avg. sand conc. = 5 ppg, max. sand conc. = 8 ppg. Remove hydrill. Install isolation tool. 1420# on well. SDFN.

4/20/90
Day 15. 1100 psi on well. RU HLS. Run 3-3/8" dummy gun. Tag fill @ 7142'. Run Baker wireline set BP & set @ 7081'. Perf well with 4 (0.44") JH over 2' @ 7071'-73', 7064'-66', 7053'-55', 7041'-43', 7033'-35', 7029'-31', 7021'-23', 7008'-10', 6988'-90', 6976'-78' & 6956'-58' (44 holes) RO HLS. SDFN.

4/21/90
Day 16. 1000 psi on well. Remove Hydrill. Bolt on Homco isolation tool. Bled press. Pressured to 100# in 30 min. Frac Stage III (Perfs 6957'-7072') as per program. Breakdown = 25 BPM @ 6000#. Pre-pad = 60 bbls. @ 25 BPM, ISIP = 4300#, F.G. (TVD) = 1.02, holes open = 30. (ISIP & F.G. misleading due to perf restrictions.) Total oil = 691 bbls., total gel = 250 bbls., total fluid = 941 bbls., total sand = 80,600#, total sand out = 78,100#. Avg. sand conc. = 4 ppg, max. sand conc. = 5 ppg. Avg. rate = 19 BPM, max. rate (pre-pad) = 25 BPM, max. rate (frac) = 21 BPM. Avg. press. = 5880#, max. press. (pre-pad) = 6000#, max. press. (frac) = 5970#. FSIP = 3839#, 5 min. = 2779#, 10 min. = 2417# & 15 min. = 2089#. TOS @ 6890'. RO isolation tool.

4/22/90
Day 17. 1200 psi on well. Open to frac tank. Press. bled to 0#. RU SWS snubbing unit. Spot tbg. trailer. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 717 SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-11569 JAMES A. BECK, GENERAL MANAGER OPERATIONS

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93061 (805) 656-2445
****

4/23/90
Day 18. 900 psi csg. Open to frac tank. Press. bled to 0#. MU Baker ret. head, SWS flow valve. Run tools, 1 jt 2-3/8" & "F" nipple. Measure, rabbit & run tbg. Change out first 69 2-3/8" collars to beveled collars (2123'). Rig pump & fill tbg. with tail @ 1922'. Continue running tbg. Fill tbg. with tail @ 3700'. Continue running tbg. & fill with tail @ 5380. SDFN. Note: Ran 172 jts. 2-3/8" EU8 tbg.

4/24/90
Day 19. 900 psi csg. Continue running tbg. Tag fill @ 6908'. Rig poorboy swivel & pump. Circulate out sand to BP @ 7098'. Circulate well clean between connections (60' kelly). Release plug. Pull tbg. & plug, snubbing out with 800 psi on well. Pull 52 stds.. SDFN.

4/25/90
Day 20. 950 psi. Pull tbg. & plug, snubbing out. MU Baker ret. head. Rebuild flow check valve. Run tools & tbg. 10900 psi on well. Snubbing in, fill tbg. 12 stds. Fill tbg. 22 stds., reached balance point. Run 48 stds. SDFN.

4/26/90
Day 21. 1175 psi. Continue snubbing tbg. in. Run 32 stds. Fill tbg. & tag fill @ 7054'. RU pump & poorboy swivel. Circulate through bridge. Tag @ 7107'. Circulate out frac sand to BP @ 7239'. Circulate well 1 hr. between connections. Circ. 1-1/2 hrs. on top plug. Release plug. Pull tbg. & plug. Snubbing out with 900 psi on well. Pulled 45 stds. (50 out). SDFN.

4/27/90
Day 22. 860 psi. Continue pulling tbg. & plug, snubbing out. LD plug. MU disposable circulating plug, 1 jt. 2-3/8" & 2" API T/L shoe. Snub tbg. in well with 1000 psi on csg. Run 26 stds. Fill tbg. with oil. Tbg. equalized. Continue running tbg. to 6453', snubbing in. Fill tbg. with oil. LD 3 gaulded jts. SDFN.

DIVISION OF OIL & GAS

HISTORY OF OIL OR GAS WELL

SENECA RESOURCES CORPORATION SILVERTHREAD FIELD VENTURA COUNTY
WELL: FERNDALE 717 SEC. 9, T4N, R21W, SBB&M
A.P.I. #111-11569 JAMES A. BECK, GENERAL MANAGER OPERATIONS

P.O. BOX 630 SANTA PAULA, CALIFORNIA 93061 (805) 656-2445

****

4/28/90
Day 23. 860 psi. Run tbg., snubbing in. Tag fill @ 7214'. RU poorboy swivel & pump. Circulate through bridge. Circ. 30 minutes. Tag fill @ 7302'. Circ. out frac sand, 1 hr. Clean out to 7404', circ. 2 hrs. Clean out to 7467', circ. 45 min. Clean out to 7530, circ. 4-1/2 hrs. Pull tbg. to 6600'. SDFN. Note: Collar hung up with 25 jts. out.

4/29/90
Day 24. 900 psi. Run tbg., snubbing in. Tag fill @ 7487'. Pull & LD extra tbg. Land tbg. on donut with shoe @ 6570' & tail @ 6601'. RO SWS equipment. Remove BOPE & install tree. Pressure tbg. to 2000 psi. Drop off tbg. 850 psi on tbg. RDMO.

5/9/90
Recover load oil.
IP 192 BO, 8 BW & 240 MCF. 2400 CP & 1180 TP ON 12/64" choke.

DOG

DATADRIL

DIVISION OF OIL AND GAS
RECEIVED
JUL 3 1990
VENTURA, CALIFORNIA

REPORT
of
FERNDALE NO. 717
SURVEY

SENECA RESOURCES CORPORATION
WELL: FERNDALE NO. 717
SIVERTHREAD, VENTURA COUNTY, CA
FOR: MR. BRET BARNHIZER

SMITH INTERNATIONAL

CERTIFICATION

The data for this survey and the calculations for this survey were obtained and performed by me according to the standards and procedures as set forth by Smith International, Inc. and are true and correct to the best of my knowledge.

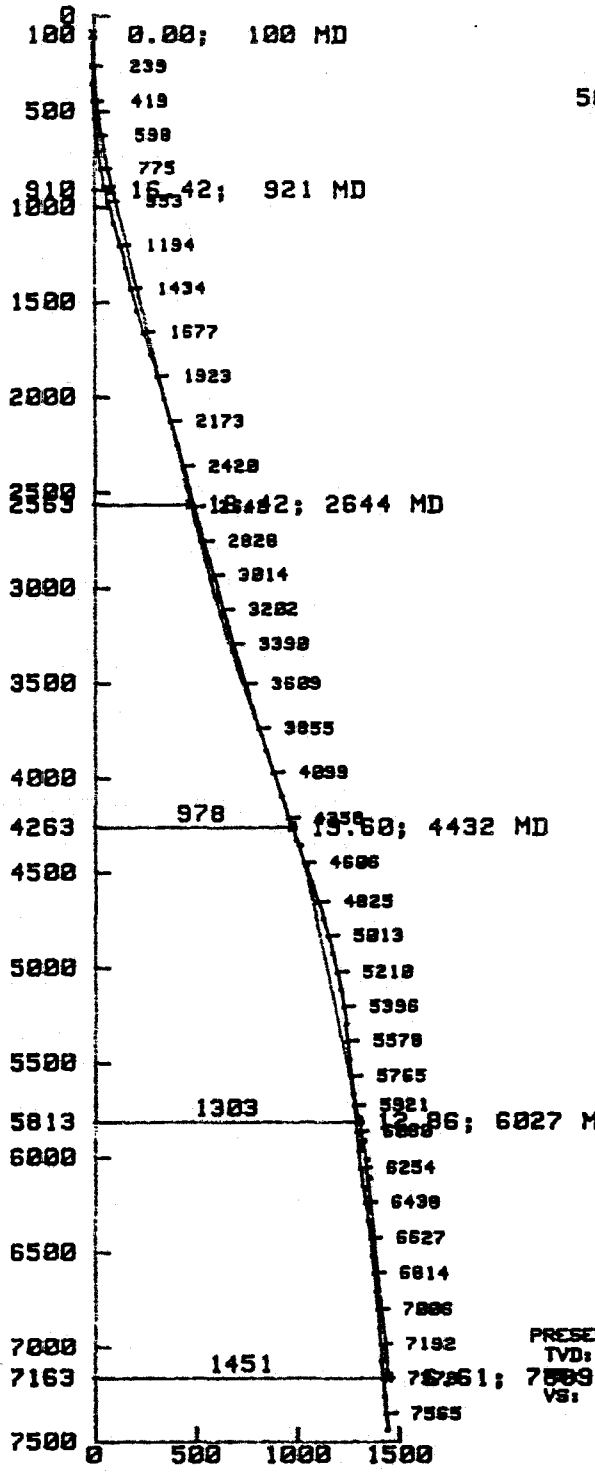
MWD Operator/Directional Supervisor/Surveyor

17 MAR 1990 @ 18:36

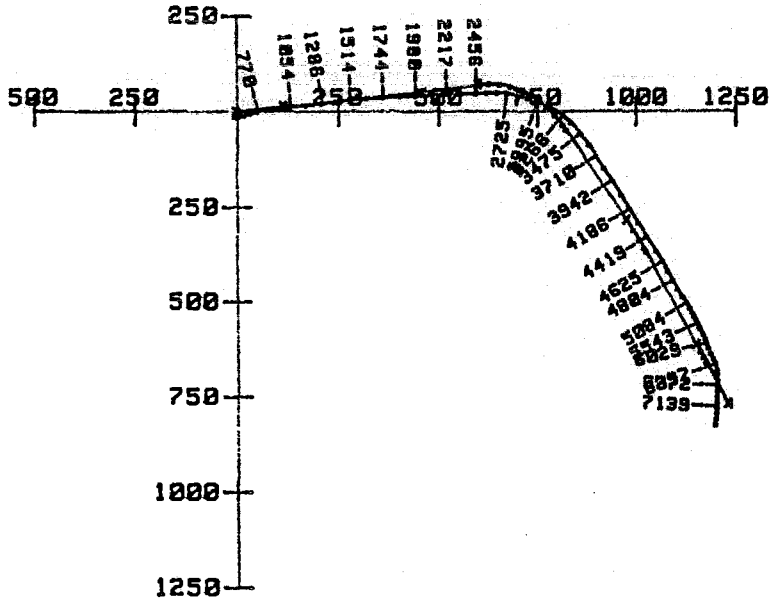
SENECA RESOURCES CORPORATION
WELL: FERNDALE NO. 717
SILVERTHREAD, VENTURA COUNTY, CA
FOR: MR. BRET BARNHIZER

SMITH

VERTICAL PLANE
SCALE: 500 FEET/DIVISION



HORIZONTAL PLANE
SCALE: 250 FEET/DIVISION



DATADRIL

SENECA RESOURCES CORPORATION
WELL: FERNDALE NO. 717
SIVERTHREAD, VENTURA COUNTY, CA
FOR: MR. BRET BARNHIZER
17 FEBRUARY 1990

DECLINATION: 14 DEGREES EAST
DIRECTIONAL SUPVR: NICK FREDRICK
MWD FLD ENGNR: FRANK BENEDETTI
SII JOB NO: 1112-900047
TELEPHONE: (805) 834-6464

File Name: SURVEY717

*** RECORD OF SURVEY ***

Calculated by DATADRIL's CADDS System

Radius of Curvature Method
All Angles are Decimal
Vertical Section Plane: S 57.95 E

TYPE OF SURVEY	MEASURED DEPTH (FT)	INCL ANGLE (DEG)	D R I F T DIRECTION (DEG)	COURSE LENGTH (FT)	TOTAL VERTICAL DEPTH	T O T A L RECTANGULAR COORDINATES (FT)		VERTICAL SECTION (FT)	DOGLEG SEVERITY (DEG/100')
MSS	116.00	1.00	N 40.00 W	0.00	115.99	.78 N	.65 W	-.96	0.00
MWD	239.00	1.40	S 85.00 W	123.00	238.96	1.73 N	2.94 W	-3.41	.95
MWD	329.00	1.30	S 55.00 E	90.00	328.94	.15 N	3.36 W	-2.93	2.82
MWD	419.00	3.60	N 90.00 E	90.00	418.85	.99 S	.25 E	.74	2.94
MWD	509.00	7.40	N 77.00 E	90.00	508.42	.01 S	8.80 E	7.47	4.42
MWD	598.00	9.40	N 73.00 E	89.00	596.46	3.35 N	21.36 E	16.32	2.34
MWD	686.00	11.20	N 72.00 E	88.00	683.04	8.08 N	36.36 E	26.53	2.06
MWD	775.00	12.60	N 75.00 E	89.00	770.12	13.30 N	53.96 E	38.68	1.72
MWD	863.00	15.50	N 78.00 E	88.00	855.48	18.28 N	74.72 E	53.63	3.40
MWD	953.00	16.80	N 82.00 E	90.00	941.93	22.63 N	99.37 E	72.22	1.90
MWD	1070.00	18.10	N 85.00 E	117.00	1053.54	26.60 N	134.23 E	99.65	1.35
MWD	1194.00	18.50	N 84.00 E	124.00	1171.27	30.33 N	172.98 E	130.52	.41
MWD	1315.00	18.50	N 81.00 E	121.00	1286.02	35.34 N	211.04 E	160.12	.79
MWD	1434.00	15.80	N 79.00 E	119.00	1399.71	41.43 N	245.60 E	186.18	2.32
MWD	1553.00	18.20	N 87.00 E	119.00	1513.51	45.67 N	280.10 E	213.17	2.81
MWD	1677.00	19.60	N 86.00 E	124.00	1630.82	48.12 N	320.19 E	245.85	1.16
MWD	1797.00	20.60	N 87.00 E	120.00	1743.51	50.64 N	361.35 E	279.40	.88
MWD	1923.00	19.30	N 87.00 E	126.00	1861.94	52.89 N	404.28 E	314.60	1.03
MWD	2047.00	17.70	N 87.00 E	124.00	1979.53	54.95 N	443.57 E	346.81	1.29
MWD	2173.00	18.00	N 86.00 E	126.00	2099.47	57.31 N	482.12 E	378.23	.34
MWD	2297.00	18.40	N 88.00 E	124.00	2217.26	59.33 N	520.79 E	409.93	.60

DATADRIL

SENECA RESOURCES CORPORATION
WELL: FERNDALE NO. 717

SIVERTHREAD, VENTURA COUNTY, CA
FOR: MR. BRET BARNHIZER

TYPE OF SURVEY	MEASURED DEPTH (FT)	INCL ANGLE (DEG)	D R I F T DIRECTION (DEG)	COURSE LENGTH (FT)	TOTAL VERTICAL DEPTH	T O T A L RECTANGULAR COORDINATES (FT)		VERTICAL SECTION (FT)	DOGLEG SEVERITY (DEG/100')
MWD	2420.00	17.30	N 90.00 E	123.00	2334.34	59.99 N	558.49 E	441.53	1.02
MWD	2547.00	16.70	N 88.00 E	127.00	2455.79	60.64 N	595.61 E	472.65	.66
MWD	2642.00	16.50	N 88.00 E	95.00	2546.83	61.59 N	622.74 E	495.14	.21
MWD	2735.00	16.20	N 90.00 E	93.00	2636.07	62.04 N	648.91 E	517.08	.69
MWD	2828.00	17.10	S 82.00 E	93.00	2725.17	60.19 N	675.47 E	540.58	2.65
MWD	2923.00	16.90	S 76.00 E	95.00	2816.02	54.89 N	702.72 E	566.49	1.86
MWD	3014.00	16.10	S 71.00 E	91.00	2903.27	47.55 N	727.50 E	591.38	1.79
MWD	3109.00	16.10	S 70.00 E	95.00	2994.55	38.76 N	752.33 E	617.10	.29
MWD	3202.00	14.90	S 64.00 E	93.00	3084.16	29.05 N	775.20 E	641.63	2.15
MWD	3297.00	15.10	S 58.00 E	95.00	3175.92	17.14 N	796.69 E	666.17	1.65
MWD	3390.00	15.60	S 49.00 E	93.00	3265.61	2.51 N	816.46 E	690.69	2.61
MWD	3485.00	17.40	S 43.00 E	95.00	3356.69	16.23 S	835.86 E	717.07	2.61
MWD	3609.00	16.70	S 39.00 E	124.00	3475.24	43.66 S	859.71 E	751.84	1.10
MWD	3734.00	17.00	S 32.00 E	125.00	3594.87	73.14 S	880.74 E	785.31	1.64
MWD	3855.00	17.80	S 32.00 E	121.00	3710.34	103.83 S	899.91 E	817.85	.66
MWD	3975.00	18.00	S 33.00 E	120.00	3824.53	134.93 S	919.73 E	851.15	.31
MWD	4099.00	19.00	S 32.00 E	124.00	3942.12	168.11 S	940.87 E	886.68	.85
MWD	4232.00	19.20	S 31.00 E	133.00	4067.80	205.22 S	963.61 E	925.64	.29
MWD	4358.00	20.00	S 31.00 E	126.00	4186.49	241.45 S	985.37 E	963.32	.63
MWD	4480.00	20.30	S 30.00 E	122.00	4301.03	277.66 S	1006.70 E	1000.61	.37
MWD	4606.00	20.10	S 31.00 E	126.00	4419.28	315.15 S	1028.79 E	1039.22	.32
MWD	4732.00	20.00	S 32.00 E	126.00	4537.64	351.98 S	1051.36 E	1077.90	.28
MWD	4825.00	19.70	S 32.00 E	93.00	4625.11	378.76 S	1068.09 E	1106.29	.32
MWD	4917.00	18.50	S 27.00 E	92.00	4712.05	404.95 S	1082.91 E	1132.75	2.20
MWD	5013.00	16.10	S 27.00 E	96.00	4803.70	430.39 S	1095.87 E	1157.23	2.50
MWD	5108.00	14.60	S 28.00 E	95.00	4895.31	452.69 S	1107.48 E	1178.91	1.60
MWD	5210.00	13.10	S 33.00 E	102.00	4994.34	473.72 S	1119.87 E	1200.57	1.88
MWD	5302.00	10.90	S 31.00 E	92.00	5084.32	489.94 S	1130.00 E	1217.77	2.43
MWD	5396.00	8.70	S 28.00 E	94.00	5176.95	503.87 S	1137.88 E	1231.83	2.40
MWD	5488.00	7.30	S 27.00 E	92.00	5268.05	515.22 S	1143.79 E	1242.87	1.53
MWD	5578.00	6.50	S 22.00 E	90.00	5357.39	525.06 S	1148.28 E	1251.89	1.11
MWD	5672.00	6.30	S 25.00 E	94.00	5450.81	534.67 S	1152.45 E	1260.53	.41
MWD	5765.00	6.20	S 25.00 E	93.00	5543.26	543.84 S	1156.73 E	1269.02	.11

DATADRIL

SENECA RESOURCES CORPORATION
WELL: FERNDALE NO. 717

SIVERTHREAD, VENTURA COUNTY, CA
FOR: MR. BRET BARNHIZER

TYPE OF SURVEY	MEASURED DEPTH (FT)	INCL ANGLE (DEG)	D R I F T DIRECTION (DEG)	COURSE LENGTH (FT)	TOTAL VERTICAL DEPTH	T O T A L RECTANGULAR COORDINATES (FT)		VERTICAL SECTION (FT)	DOGLEG SEVERITY (DEG/100')
MWD	5858.00	6.20	S 23.00 E	93.00	5635.71	553.02 S	1160.82 E	1277.36	.23
MWD	5921.00	6.30	S 23.00 E	63.00	5698.34	559.33 S	1163.50 E	1282.98	.16
MSS	6060.00	6.60	S 27.00 E	139.00	5836.46	573.48 S	1170.09 E	1296.08	.39
MWD	6164.00	7.10	S 21.00 E	104.00	5939.72	584.81 S	1175.14 E	1306.36	.84
MWD	6254.00	7.70	S 14.00 E	90.00	6028.97	595.86 S	1178.62 E	1315.18	1.20
MWD	6347.00	9.90	S 19.00 E	93.00	6120.86	609.49 S	1182.66 E	1325.84	2.50
MWD	6438.00	10.20	S 24.00 E	91.00	6210.47	624.26 S	1188.48 E	1338.61	1.01
MWD	6533.00	8.60	S 24.00 E	95.00	6304.19	638.44 S	1194.79 E	1351.48	1.68
MWD	6627.00	8.80	S 20.00 E	94.00	6397.11	651.62 S	1200.11 E	1362.99	.68
MWD	6722.00	8.30	S 8.00 E	95.00	6491.05	665.30 S	1203.53 E	1373.14	1.95
MWD	6814.00	9.00	S 6.00 E	92.00	6582.00	679.03 S	1205.21 E	1381.85	.83
MWD	6909.00	9.20	S 3.00 E	95.00	6675.81	694.01 S	1206.39 E	1390.80	.54
MWD	7006.00	9.00	S 3.00 W	97.00	6771.59	709.34 S	1206.39 E	1398.94	1.00
MWD	7100.00	8.80	S 3.00 W	94.00	6864.46	723.86 S	1205.63 E	1406.00	.21
MWD	7192.00	8.30	S 4.00 W	92.00	6955.43	737.52 S	1204.79 E	1412.53	.57
MWD	7283.00	8.60	S 2.00 W	91.00	7045.45	750.87 S	1204.09 E	1419.03	.46
MWD	7378.00	9.00	S 4.00 W	95.00	7139.33	765.38 S	1203.33 E	1426.08	.53
MWD	7471.00	9.50	S 2.00 W	93.00	7231.12	780.31 S	1202.55 E	1433.34	.64
MWD	7565.00	10.20	S 7.00 W	94.00	7323.73	796.33 S	1201.29 E	1440.78	1.18
PROJ	7650.00	10.20	S 8.00 W	85.00	7407.39	811.26 S	1199.33 E	1447.03	.21

BOTTOM HOLE CLOSURE: 1447.94 Feet at S 55.92 Degrees E

SENECA RESOURCES CORPORATION
NESBITT-FERNDALE AREA
UPPER OJAI-SILVERTHREAD
VENTURA COUNTY

17 MAR 1990 @ 19:37

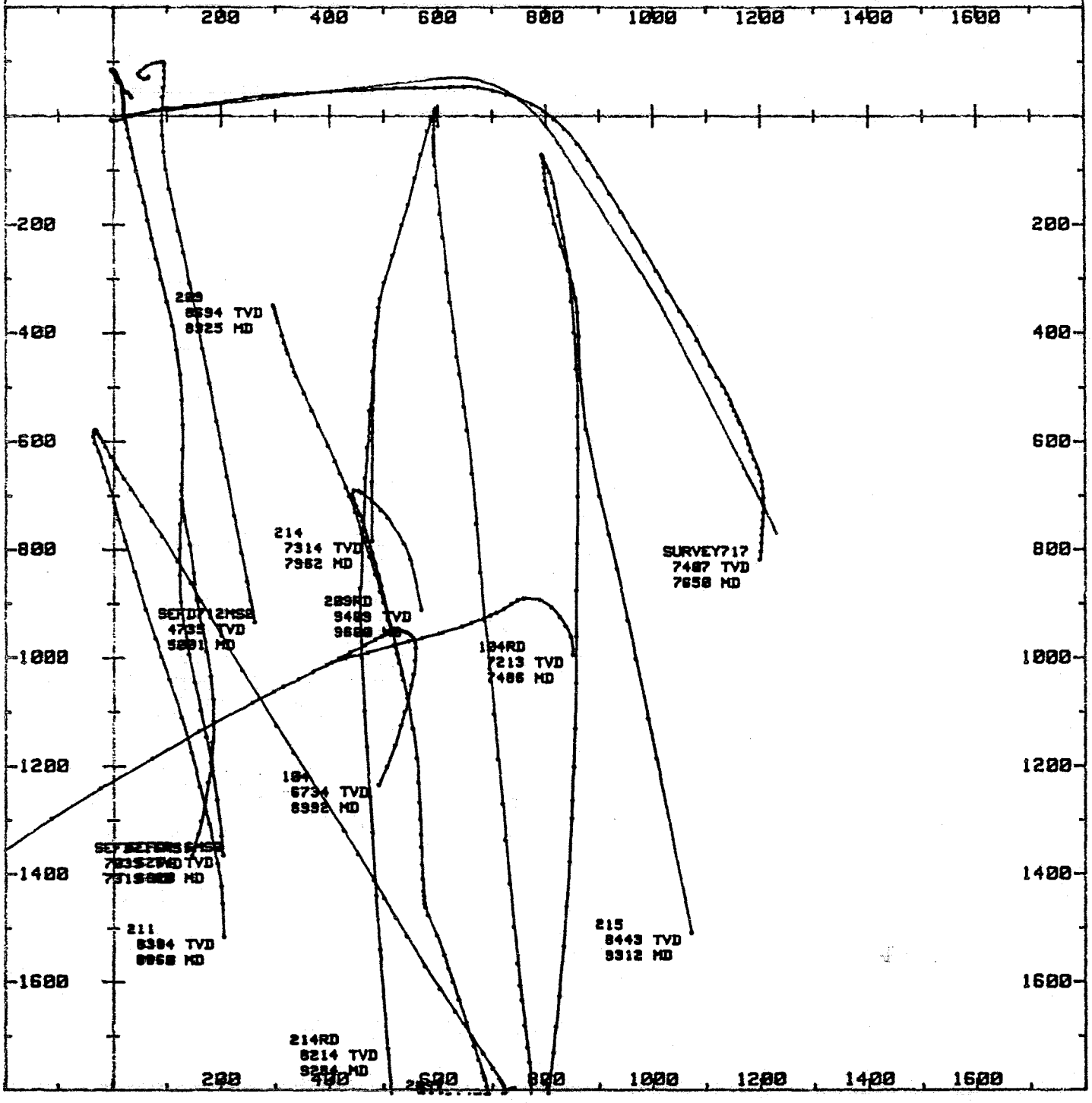
DATADRIL

HORIZONTAL PLOT

MIN TVD: 0 FEET
MAX TVD: 10000 FEET

N

SCALE: 200 FEET/DIV.



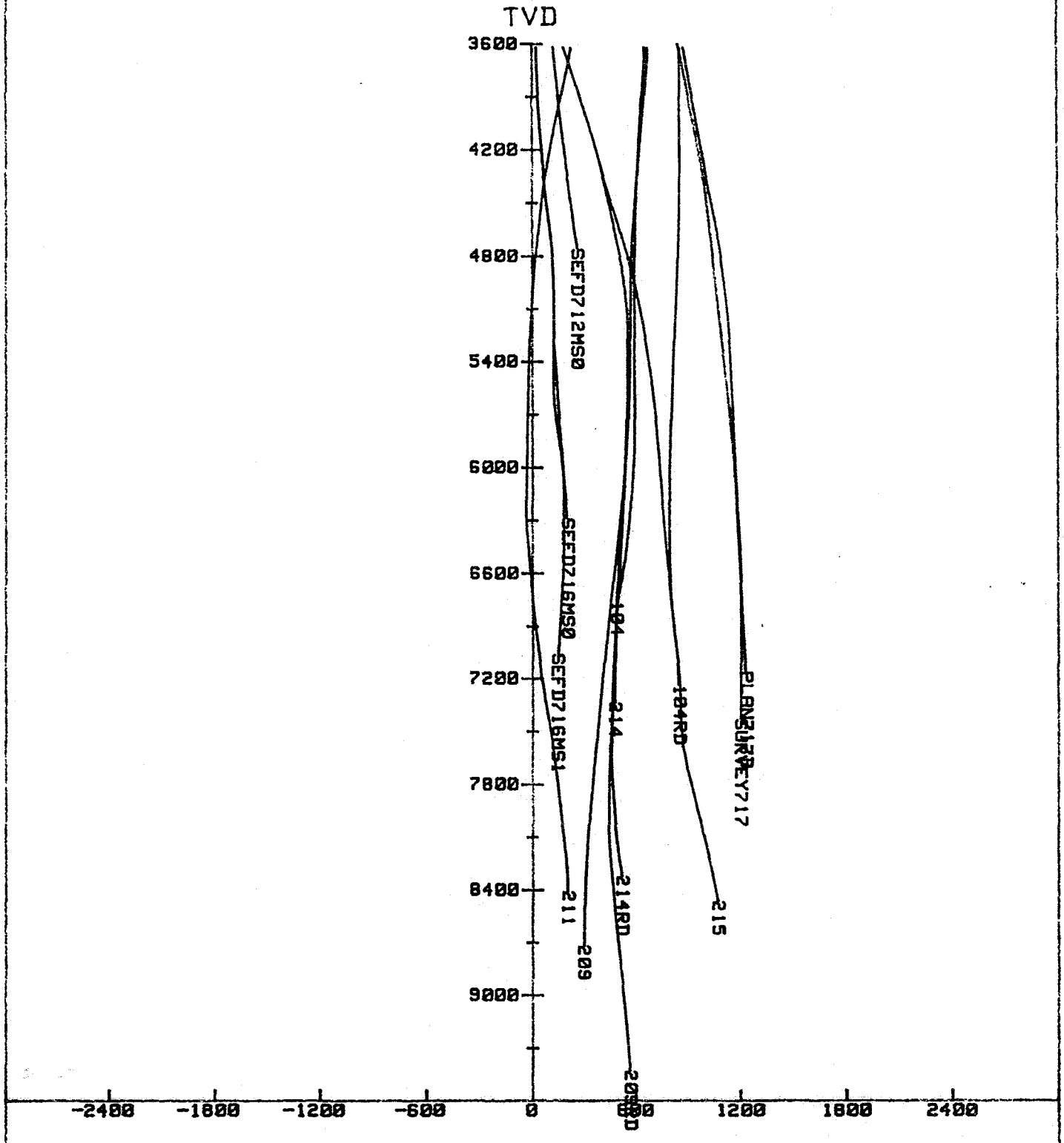
SENECA RESOURCES CORPORATION
NESBITT-FERNDALE AREA
UPPER OJAI-SILVERTHREAD
VENTURA COUNTY

17 MAR 1990 @ 20:28

DATADRIL

VERTICAL PLOT

SCALE: 600 FEET/DIV.



SECTION PLANE IS ALONG THE EAST-WEST AXIS

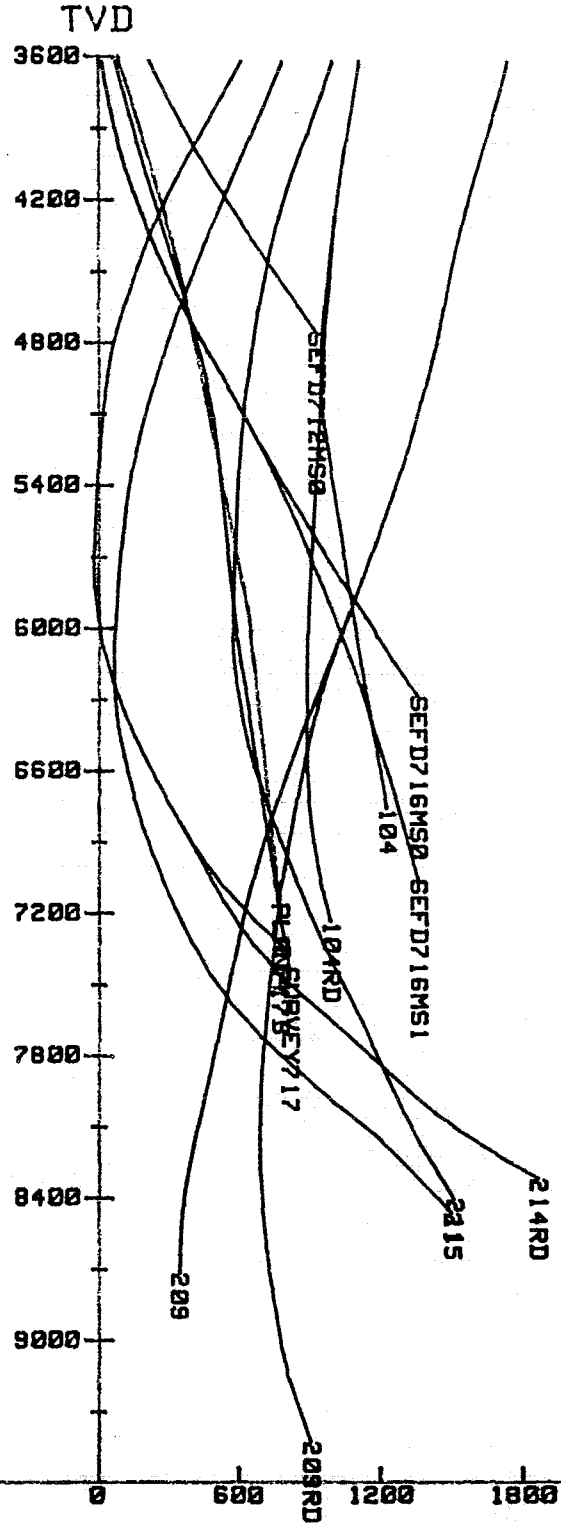
SENECA RESOURCES CORPORATION
NESBITT-FERNDALE AREA
UPPER OJAI-SILVERTHREAD
VENTURA COUNTY

17 MAR 1990 @ 20:45

DATADRIL

VERTICAL PLOT

SCALE: 600 FEET/DIV.



SECTION PLANE: 180.00 DEGS CLOCK-WISE FROM NORTH

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No.T290- 94

REPORT ON OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
March 14, 1990

Your operations at well "Ferndale" 717, API No. 111-21569, Sec. 9, T. 4N, R. 21W, S.B.B.&M. Ojai Field, in Ventura County, were witnessed on 3/12/90. Bruce Hesson, representative of the supervisor, was present from 1700 to 2100. There were also present Brett Barnhizer.

Present condition of well: 13 3/8" cem 1137'; 9 5/8" cem 6092'. TD 6092' (drilling)

The operations were performed for the purpose of testing the blowout prevention equipment and installation.

DECISION:

The blowout prevention equipment and its installation on the 9 5/8" casing are approved.

ljg

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

OG109

DIVISION OF OIL AND GAS

BLOWOUT PREVENTION EQUIPMENT MEMO

T 94

Operator SENECA RESOURCES CORP Well "FERNDALE" 717 Field OJAI County VENTURA

VISITS:	Date	Engineer	Time	Operator's Rep.	Title
1st	3/12/90	B. HESSON	1700 to 2100	BRETT BANNISTER	D.F
2nd			to		

Casing record of well: 13 3/8" CEM 1137'; 9 5/8" CEM 6092'. TD 6092' (DRILLING)

OPERATION: ~~Testing~~ (~~inspecting~~) the blowout prevention equipment and installation.
DECISION: The blowout prevention equipment and its installation on the _____ "casing are approved.

REQUIRED BOPE CLASS: III B 2M

Proposed Well Opns: NEW DRILL MPSP: _____ psi
Hole size: 13 3/8 " fr. 0 ' ... 12 1/4 " to 6092 ' & _____ " to _____

CASING RECORD (BOPE ANCHOR STRING (

Size	Weight(s)	Grade(s)	Shoe at
9 5/8	40#	N-80	6092

Top of Cement	
Casing	Annulus
6040±	Surf

BOP STACK

API Symb.	Ram Sz.	Mfr.	Model or Type	Size (in.)	Press. Rtg.	Da Ot
A	—	HYDRIL	GK	13 3/8	2000	
Rc	5	SHAFFER	LWS	12	11	
Rc	CSO	11	LWS	12	11	✓

TEST DATA

rop ose	Secs. to Close	Test Date	Test Press.
		3/12	1500
		3/12	1500
		3/12	2000

TEST ON 9 5/8" CSG

ACTUATING SYSTEM

Accum. Unit(s) Wkg. Press. 3000 psi
Total Rated Pump Output _____ gpm
Distance From Well Bore 50 ft.

	Mfr.	Accum. Cap.	Precharge
1	KOOMEY	200 gal.	1500 psi
2		gal.	psi

CONTROL STATIONS	Elec.	Hyd.
✓ Manif. at accum. unit		✓
✓ Remote at Drlr's. stn.		✓
Other:		

EMERG. BACKUP SYST.	Press.	Wkg. Fl.
✓ N2 Cyl No: 4 Type: G	1 1900	gal.
Other:	2 1900	gal.
	3 1900	gal.
	4 1950	gal.
	5	gal.
	6	gal.

Connections			
ed ss.	Weld	Flan.	Thrd.
	✓		
	✓	✓	
	✓		
	✓		
	✓		
	✓		
	✓	✓	
	✓	✓	
	✓		

✓	Standpipe Pressure Ga.		1500
✓	Pipe Safety Valve	5	
✓	Internal Preventer	5	

HOLE FLUID MONITORING EQUIPMENT

		Alarm Aud.	Alarm Vis.	Class
✓	Calibrated Mud Pit	✓	✓	A
✓	Pit Level Indicator	✓	✓	B
✓	Pump Stroke Counter	✓	✓	B
✓	Pit Level Recorder	✓	✓	C
✓	Flow Sensor	✓	✓	C
✓	Mud Totalizer	✓	✓	C
✓	Calibrated Trip Tank	✓	✓	C
	Other:			

REMARKS:

Hole Fluid Type	Weight	Storage Pits

OGD9 (12/87/DWRR/2M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No.T290- 90

REPORT ON OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
March 13, 1990

Your operations at well "Ferndale" 717, API No. 111-21569, Sec. 9, T. 4N, R. 21W, S.B.B.&M. Ojai Field, in Ventura County, were witnessed on 2/21/90. Bruce Hesson, representative of the supervisor, was present from 1100 to 1200. There were also present Brett Barnhizer.

Present condition of well: 13 3/8" cem 1137'. TD 1140' (drilling).

The operations were performed for the purpose of testing the blowout prevention equipment and installation.

DECISION:

The blowout prevention equipment and its installation on the 13 3/8" casing are approved.

ljg

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

OG109

DIVISION OF OIL AND GAS

BLOWOUT PREVENTION EQUIPMENT MEMO

T 90

Operator SENECA RESOURCES CORP Well "FERNDALE" 717 Field OJAI County VENTURA

VISITS:	Date	Engineer	Time		Operator's Rep.	Title
1st	2/21/90	B. HESSON	1100	to 1200	BRETT BANNISTER	D.F.
2nd				to		

Casing record of well: 13 3/8" CSG 1137'. TD 1140' (DRILLING)

OPERATION: (Testing) (inspecting) the blowout prevention equipment and installation.
DECISION: The blowout prevention equipment and its installation on the 13 3/8" casing are approved.

REQUIRED BOPE CLASS: III B 2M

Proposed Well Opns: NEW DRILL MPSP: _____ psi
Hole size: 17 1/2" fr. 0' to 1140' , _____" to _____' & _____" to _____'

CASING RECORD (BOPE ANCHOR STRING ONLY)					Cement Details	Top of Cement	
Size	Weight(s)	Grade(s)	Shoe at	CP at		Casing	Annulus
13 3/8	54.5 #	K-55	1137	—	CSG 223 "G" 15.8 PPG 126 CU FT RETURNS TO SURF		SURF

BOP STACK

API Symb.	Ram Sz.	Mfr.	Model or Type	Size (in.)	Press. Rtg.	Date Last Overhaul	a Gal. to Close	b Rec. Time (Min.)	a/b Calc. GPM Output
A	—	HYDRIL	GK	13 3/8	2000				
Rd	4½	SHAFFER	LWS	12	"				
Rd	5"	"	LWS	12	"				

TEST DATA

psi Drop to Close	Secs. to Close	Test Date	Test Press.
		2/20	1500
		2/20	1500
		2/20	1500

ACTUATING SYSTEM

Accum. Unit(s) Wkg. Press. 3000 psi
Total Rated Pump Output _____ gpm
Distance From Well Bore 50 ft.

	Mfr.	Accum. Cap.	Precharge
1	KOOMEY	300 gal.	1500 psi
2		gal.	psi

CONTROL STATIONS	Elec.	Hyd.
✓ Manif. at accum. unit		✓
✓ Remote at Drlr's. stn.		—
Other:		

EMERG. BACKUP SYST.	No:	Type:	Press.	Wkg. Fl.
✓ N2 Cyl			12000	gal.
Other:			2 1950	gal.
			3 1950	gal.
			4 2000	gal.
			5	gal.
			6	gal.

AUXILIARY EQUIPMENT

	No.	Sz. (in.)	Rated Press.	Connections: Weld	Flan.	Thrd.	
✓ Fill-Up Line							
✓ Kill Line		2		✓			1500
✓ Control Valve(s)				✓	✓		
✓ Check Valve(s)				✓	✓		
✓ Auxil. Pump Connec.				✓			
✓ Choke Line		3		✓			
✓ Control Valve(s)				✓			
✓ Pressure Gauge				✓	✓		
✓ Adjustable Choke(s)		3		✓	✓		
✓ Bleed Line		3		✓			
✓ Upper Kelly Cock							
✓ Lower Kelly Cock		4½ (5)					
✓ Standpipe Valve							
✓ Standpipe Pressure Ga.							
✓ Pipe Safety Valve		4½ (5)					
— Internal Preventer		4½ (5)					

HOLE FLUID MONITORING EQUIPMENT

	Alarm Aud.	Alarm Vis.	Class
✓ Calibrated Mud Pit	✓	✓	A
✓ Pit Level Indicator	✓	✓	B
✓ Pump Stroke Counter	✓	✓	
✓ Pit Level Recorder	✓	✓	
✓ Flow Sensor	✓	✓	C
✓ Mud Totalizer	✓	✓	
✓ Calibrated Trip Tank	✓	✓	
Other:			

REMARKS:

Hole Fluid Type	Weight	Storage Pits

OGD9 (12-83-DWRR-3M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P290- 87
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
February 21, 1990

Your supplementary proposal to drill well "Ferndale" 717, A.P.I. No. 111-21569, Section 9, T. 4 N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 2/16/90, received 2/19/90, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Requirements specified in permit No. P289-59, dated 2/13/90 shall apply.
2. The 13 3/8" casing is cemented with sufficient cement to fill behind this casing from the shoe to the ground surf
3. The 9 5/8" and 5 1/2" casing is cem to fill behind this casing oil and/or ga higher.
4. This office additions to suspended.
5. THIS DIVISION S
   a. To witness prior to d ing. Prior test, the b ram test signature o

FOR "FERNDALE" 717
SUPPLEMENTAL - CHANGING COMPLETION
13 3/8"
9 5/8" - SHOULD READ "CEM TO SURF" INSTEAD OF 500' OF CEM FILL
5 1/2"
PER BRENT BARNHISER 2/21/90 @ 0930
PHONE CONVERSATION WITH B. HESSON.

Blanket Bond
SF:ljg

Engineer Steve Fields
Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor
By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

STATE OF CALIFORNIA-RESOURCES AGENCY
GEORGE DEUKMEJIAN, *Governor*

DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS
6401 TELEPHONE ROAD, SUITE 240
VENTURA, CALIFORNIA 93003-4458
(805) 654-4761

February 20, 1990

Murdock M. Baker, Jr. Agent
Seneca Resources Corp.
725 E. Main St. Suite 200
P.O. Box 630
Santa Paula, CA. 93060

Re: "Ferndale" 717

Public Resources Code (PRC) Section 3234 states that only exploratory wells may be granted confidentially. PRC Section 3008 defines an exploratory well as any well drilled to extend a field or explore a new, potentially productive reservoir. Similarly, the API and the AAPG define exploratory wells as wells drilled to:

1. Find and Produce oil or gas in an unproved area; or

2. Find a new pool in a field; or

3. To extend the limits of a known field.

A new pool wildcat is a well drilled to explore for a new pool that is (1) Shallower than existing productive pools (2) Deeper then productive pools or (3) Outside the known limits of productive pools. An extension test is defined as a well drilled to extend the productive limits of a pool. Such a well must be at least TWO well locations from the nearest producing well in that field. A well location is determined by the well spacing commonly used in the area.

The proposed bottom-hole location of "Ferndale" 717 does not seem to fit either of the three categories. The location is approximately 500 feet from the bottom hole location of "Barker-Ferndale" 4 and appears to be in the same Lower Mohnian pool.

As a result, your request, dated February 15, 1990, for "Confidential Status" for "Ferndale" 717 is denied.

If you have any questions, please feel free to contact us at (805) 654-4761.

Sincerely,

Patrick J. Kinnear
District Deputy

SAF:sf

Seneca Resources Corporation

a National Fuel Gas System company

February 15, 1990

ISION OF OIL AND
RECEIVED
FEB 19 1990
NTURA, CALIFORNI

Division of Oil & Gas
6401 Telephone Road, Suite 240
Ventura, California 93003

RE: FERNDALE 717:

Dear Sir:

Confidential Status is requested for the above captioned well.

Your consideration regarding this matter is appreciated. Should you require additional information, please call me at (805) 656-2445.

Sincerely,

James A. Beck

James A. Beck
General Manager Operations

JAB/csf

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

SUPPLEMENTARY NOTICE

FOR DIVISION USE ONLY			
BOND	FORMS		EDP WELL FILE
	OGD114	OGD121	
BB	—	✓	

DIVISION OF OIL AND GAS

February 16, 1990 Calif.

A notice to you dated February 12, 1990, stating the intention to

drill (Drill, rework, abandon), Ferndale 717 (Well name and number), API No. _____,

Sec. 9, T. 4N, R. 21W, S.B. B. & M., Silverthread Field,

Ventura County, should be amended because of changed conditions.

The present condition of the well is as follows:

Total depth 0' Has not been drilled.

Complete casing record including plugs and perforations (present hole)

N/A

DIVISION OF OIL AND
RECEIVED
FEB 19 1990
VENTURA, CALIFORNIA

We now propose

1. To change the bottom hole location and depth to as follows: 904' South and 1303' East of the surface location at an estimated true vertical depth of 7163'.
2. The following is the revised casing program:

Size Csg.	Weight	Grade & Type	Top	Bottom	Cmt. Depth	Calc. Fill
13-3/8"	54.5#	K-55 ST&C	Surface	900'	Shoe	900'
9-5/8"	40#	N-80 LT&C	Surface	6000'	Shoe	500'
5-1/2"	17#	N-80 LT&C	Surface	7500'	Shoe	2500'

3. Intended zone of completion, Lower Mohnian 6500'-7500', 3000 psi. Estimated total depth 7500'.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address 725 E. Main St., Suite 200 (Street)

Santa Paula (City) CA. (State) 93060 (Zip)

Telephone Number (805) 656-2445

Seneca Resources Corporation (Name of Operator)

Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

By James A. Beck (Name) 2/16/90 (Date)

Signature James A. Beck

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P290- 59
Field Code 520
Area Code 12
New Pool Code 10
Old Pool Code 10

PERMIT TO CONDUCT WELL OPERATIONS

Murdock M. Baker, Jr., Agent
Seneca Resources Corp.
725 E. Main St., Ste. 200
P.O. Box 630
Santa Paula, CA. 93060

Ventura, California
February 13, 1990

Your proposal to drill well "Ferndale" 717, A.P.I. No. 111-21569, Section 9, T. 4 N, R. 21W, S.B. B.&M., Ojai field, Silverthread area, Miocene pool, Ventura County, dated 2/12/90, received 2/13/90, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOG Class III B2M requirements shall be installed and maintained in operating condition at all times.
2. Drilling fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. Blowout prevention practice drills are conducted at least weekly and recorded on the tour sheet.
4. The 9 5/8" casing is cemented with sufficient cement to fill behind this casing from the shoe to the ground surface.
5. The 5 1/2" casing is cemented with sufficient cement to fill behind this casing to at least 500 feet above the uppermost oil and/or gas zone or anomalous pressure interval, whichever is higher.
6. The Division will monitor the monthly production of this well for a period of six months and if anomalous water production is indicated, remedial action well be required.
7. This office shall be consulted before sidetracking the well or running any additional casing.
8. THIS DIVISION SHALL BE NOTIFIED:
   a. To witness a pressure test of the blowout prevention equipment prior to drilling out the shoe of the 9 5/8" casing. Prior to notifying the division engineer to witness the test, the blind rams must be tested. Information of the blind ram test must be entered on the tour sheet along with the signature of the person in charge.

Blanket Bond
SF:ljg

Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

DIVISION OF
RECEIV
JUL

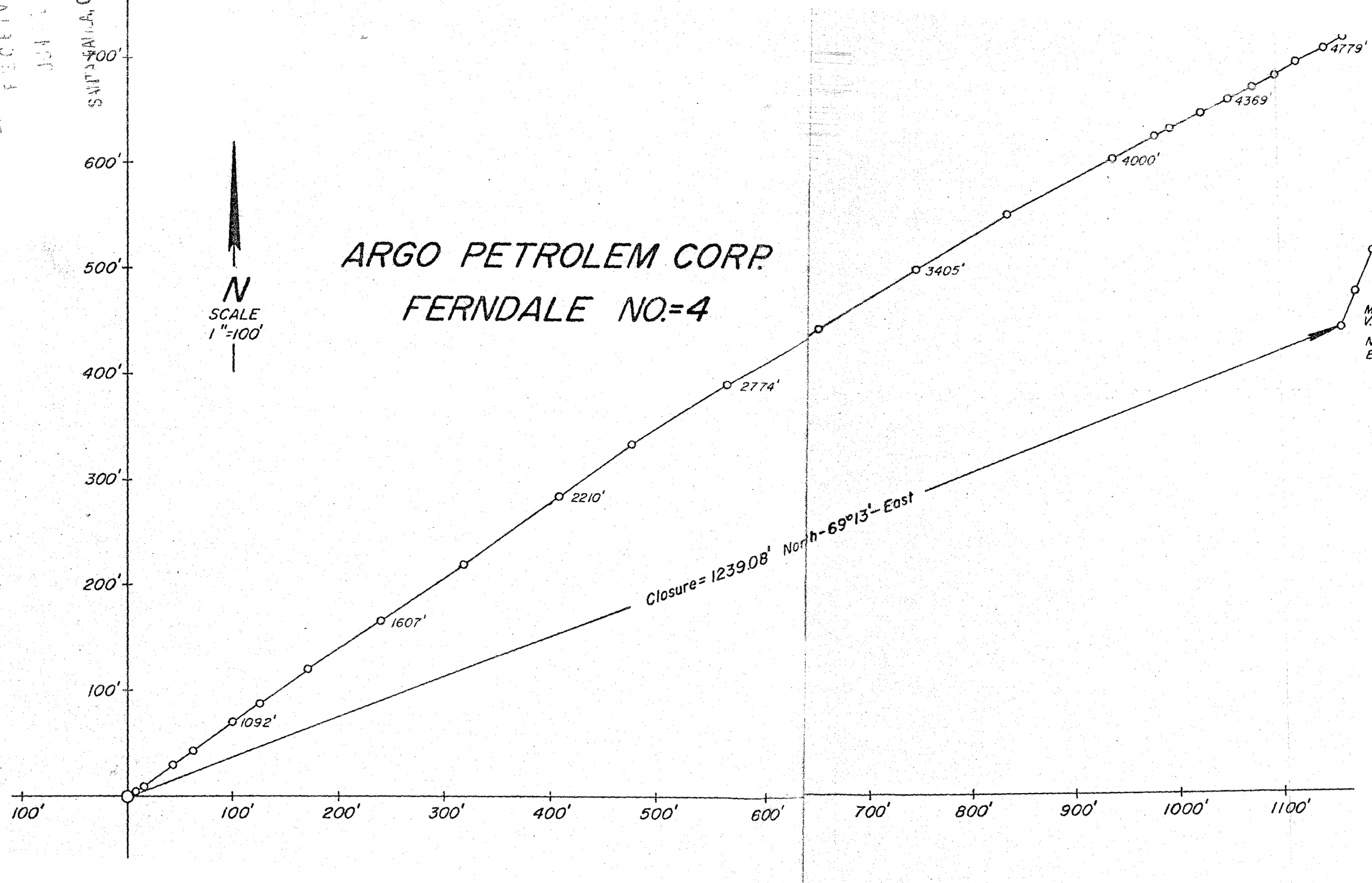


EXHIBIT 9

Distribution Memo Showing Premature Determination of Environmental Review

Appeal of CRC Oil & Gas Project
Ventura County Board of Supervisors Hearing
October 20, 2015
Item #39

Planning Divis[redacted]ty of Ventura

DISTRIBUTION MEMO

Case Planner: Jay Dobrowalski **Phone No.:** (805) 654-2498 **email:** jay.dobrowalski@ventura.org
Date: 10/18/2013 **Date Submitted:** 10/10/2013

REQUEST FOR PROJECT REVIEW AND ANALYSIS FOR: PL13-0150

The information requested below should be submitted no later than 11/06/2013. If you have any questions, or if you can not meet this due date, please call the case planner as soon as possible. Time spent reviewing this project should be charged to PL13000150.

I. PROJECT INFORMATION

APPLICANT: Jim Robinson **PROPERTY OWNER:**
Agent: InterAct **Agent's phone:** 805-658-5600

PROJECT DESCRIPTION: Minor Modification to Conditional Use Permit 3344 (CUP) entails renewal of the CUP with the current boundary and current operations, including the existing wells operations, for another 30 years for a site located north of Thomas Aquinas College. The majority of the project area is within the Open Space 160 acre minimum Zone District and the Open Space General Plan land use designation though a smaller portion of the project area is within the Agricultural 40 acre minimum Zone District and Agricultural General Plan land use designation. The modification also includes the renewal of the term for drilling, testing, production and maintenance of 18 previously approved wells as illustrated on the project plans. Drilling period for the remaining approved 18 wells which expired on October 29, 2011 is requested to be extended for the same time period as the CUP, to Feb 7, 2045.

All of the undrilled wells will be drilled on the existing four Drill Sites, as approved. No new grading or removal of vegetation outside of the existing Drill Sites is required to effectuate the proposed modifications.

Vintage will not use hydraulic fracturing for the undrilled wells unless and until regulations addressing potential hydraulic fracturing impacts are adopted and in place.

Gross production from the existing wells is transported out of the CUP boundary via existing pipelines and seperated and stored off site. It is anticipated that these existing pipelines will be sufficient to accommodate production from the remaining approved 18 wells for transportation of produced fluids off the CUP boundary. Thus no new pipelines leading off the CUP are proposed. The installation of pumping units, gathering lines, electrical connections and ancillary equipment will be necessary to operate the remaining wells.

Access to the project site is provided by a private gated all weather surface driveway that forks off of the common drive that leads to Thomas Aquinas College at 10,000 Ojai Santa Paula Road (HWY 150).

Additional project details have been provided by the Permittee in the application package.

LOCATION: East of 10000 Ojai-Santa Paula Road

A.P.N#: 0400010260 **ZONE:** AE-40 ac **SUPERVISOR DISTRICT:** 1

II. ENVIRONMENTAL IMPACT ANALYSIS

This project does not qualify for a Categorical Exemption from the California Environmental Quality Act (CEQA). However, an EIR was approved with the original permit. Therefore an addendum to the original EIR will be prepared.

The IS and ND have been provided. Please review the Initial Study and Discussion for your area(s) of responsibility. If the project modifications affect your agency's original Initial Study Checklist determinations or additional analysis should be added the IS or new conditions should be added to the permit please input the Initial Study Assessment information into the Acella workflow under the project case number PL13-0150. Call the Case Planner if you need clarification.

III. APPLICATION COMPLETENESS

Attached are standard application materials for the subject project, including any specific items requested by your agency. Please review these materials and input the following information into Accela:
If the project is incomplete please update the Accela task status as "Deemed Incomplete" and detail the incomplete items in the Comments text field within your workflow. If the application is complete update the task status as "Complete" in the Accela workflow and commence with the "Environmental Analysis." Once the project has been deemed complete you can input any appropriate Initial Study comments within the workflow accordingly.

IV. PROJECT CONDITIONS

Input any conditions that have been developed for the project into Accela under the conditions tab and update the task status to "Conditions Provided" when complete. If no conditions are required for the project, update the task status to "Conditions Not Required."

V. DISTRIBUTION LIST

Reviewing Agencies

AG Comm Review
APCD Review
Environmental Health Review
Fire Prevention Review
Floodplain Drainage Review
General Services Review
Groundwater Review
Surface Water Quality Review
WPD Jur Drainage Review

EXHIBIT 10

Request from ForestWatch to Nullify Permit Application

Appeal of CRC Oil & Gas Project
Ventura County Board of Supervisors Hearing
October 20, 2015
Item #39

February 11, 2015

Kim Prillhart, Director
Ventura County Planning Division
800 South Victoria Avenue
Ventura, CA 93009-1740

RE: Nullification Request - Vintage Production Oil & Gas Facility, Santa Paula Canyon (PL 13-0150)

Dear Ms. Prillhart:

You are currently considering whether to approve a proposal by Vintage Production California LLC to drill 19 new oil and gas wells and to continue operating 17 existing oil and gas wells and related facilities for another thirty years. The wells are located along a popular recreation trail next to Santa Paula Creek between Thomas Aquinas College and the Los Padres National Forest in Ventura County. We submitted written comments on this proposal and provided testimony at the Planning Director's hearing on January 8, 2015.

I am writing today to request that you nullify the application for the above-referenced project, based on the presence of several ongoing violations at this facility. This request is made pursuant to Section 8111-2.2(g) of the Ventura County Non-Coastal Zoning Ordinance ("Zoning Ordinance"), which states:

> Nullification of Applications When Violations Are Discovered - Where a violation is discovered on a lot where an application request has been accepted or is being processed after being deemed complete, said application shall become null and void and returned to the applicant.

If your Division has already approved this CUP modification, then we request that you nullify the modified CUP pursuant to Section 8111-2.7 of the Zoning Ordinance, which states that permits "shall be null and void" if "[t]he application request which was submitted was not in full, true, and correct form."

It is important to note that these nullification requirements are mandatory and without discretion; the Division shall nullify the application or permit where violations occur or where incorrect information has been presented in the application. Based on our site visit last month,

this facility appears to be in violation of the following permit conditions and Zoning Ordinance provisions:

1. **CUP 3344 Condition 4: That two (2) years and five (5) years after the approval of CUP-3344 MOD #8 and #9 and every fifth year thereafter, the permit shall be reviewed by the Planning Director at the permittee's expense. The permittee shall initiate the review by filing an application for said review and paying the deposit fee then applicable…. The purpose of the review is to ascertain whether the permit, as conditioned, has remained consistent with its findings for approval and if there are grounds for the filing of an application for modification or revocation of the permit.**

We initially requested a copy of the most recent condition compliance review for this facility in an email to Brian Baca and Jay Dobrowalski dated January 7, 2015. That same day, Mr. Baca notified us that "[t]he Planning Division Condition Compliance Officer is preparing a copy of the most recent review that will be sent with a separate email." After receiving no response from the Condition Compliance Officer, on January 15, 2015 we requested that Mr. Baca follow up with the request, or put us in touch directly with the Condition Compliance Officer. Upon receiving no further communications from your Division, we filed a formal Public Records Act request for the most current condition compliance review on January 21, 2015.
After repeated assurances that the requested records were being prepared and provided to us, we were finally granted access to a large box of enforcement files on February 9, 2015, nearly one month after we had initially requested access.

Based on our cursory search of the voluminous records provided to us, we located one compatibility review for this facility – a Compatibility Review Inspection Report dated January 25, 1988. We could not locate any subsequent compatibility review report, suggesting that the Division has not prepared one for this facility in more than 25 years.

In its application, Vintage does not identify when the most recent compliance review was conducted for this facility. Vintage does acknowledge that it acquired the facility in 2008. While we do not dispute that timeline, what it means is that Vintage has failed to submit at least one (and perhaps two) applications for permit review as required by this condition. While Vintage submitted a Reimbursement Agreement for Permit Condition Compliance Review in 2008 in connection with the facility transfer, we could find no record of any such review ever actually taking place.

2. **CUP 3344 Condition 6: Separate Zoning Clearances shall be obtained prior to initiating construction of any access roads, grading of any drill sites and drilling each permitted well. Prior to issuance of a Zoning Clearance the permittee shall submit written**

documentation that the provisions of the following conditions (as applicable) have been complied with: 7, 10, 11, 12, 20, 21, 22, 23, 25, 27, 30, 42, 47, 52, 54, 55, 57, 58, 59, 60, 61, 62, 67, 74.

Vintage does not state in its application whether it or its predecessors obtained Zoning Clearances for any access roads, grading, or drilling. Instead, Vintage merely commits to applying for Zoning Clearances "pending approval of this Minor Modification." We have reason to believe that Zoning Clearances were not obtained for all wells, grading, and roads at the facility, and on that basis, request that the application be nullified.

3. **CUP 3344 Condition 13: That ten days prior to commencement of site preparation or drilling, the permittee shall notify, in writing, Thomas Aquinas College and the Ferndale Ranch (or their successors in interest) that such activities are about to occur. Additionally, the permittee shall notify Thomas Aquinas College and the Ferndale Ranch in writing prior to conducting major maintenance activities, including, but not limited to, geologic fracturing, reworking and redrilling.**

There is no evidence in the record showing that Vintage or its predecessors provided the required notice to Thomas Aquinas College or Ferndale Ranch. In its application, Vintage only states that it will comply with this condition in the future, and fails to affirm whether it and its predecessors have complied with this condition. For example, when Ferndale Well 716 was drilled and fracked several times in 1990, we have reason to believe that the college and the ranch were not properly notified. Moreover, we have reason to believe that the college and the ranch were not properly notified for more recent work that has occurred since Vintage acquired the facility, including but not limited to:

- Barker-Ferndale 3 (API 11120609) – reworked and acidized in 2011
- Barker-Ferndale 4 (API 11120685) – reworked and acidized in 2011
- Valex-Ferndale 107 (API 11121066) – reworked and fracked in 2012, reworked in 2014
- Valex-Ferndale 211 (API 11121178) – reworked in 2014

At such time when Vintage re-submits its application, the company must certify that it has complied with this permit condition by properly notifying the college and the ranch.

4. **CUP 3344 Condition 31: [A]ll permanent facilities, structures, and aboveground pipelines shall be colored so as to mask the facilities from the surrounding environment and uses in the area. Said colors shall also take into account such additional factors as heat buildup and designation of danger areas. Said colors shall be approved by the Planning Director prior to painting of facilities.**

The facilities we observed at Drill Sites 1 and 7 are indeed painted, but the paint is in various stages of decay and the facilities require repainting to achieve compliance with this condition. Vintage claims in its application that the paint is "maintained" but clearly it is not, and has not been painted for several years if not decades. Moreover, the colors are not compatible with the surrounding environment (i.e. tan against a green backdrop).

Drill site 1

5. **CUP 3344 Condition 32: [T]he permit area shall be maintained in a neat and orderly manner so as not to create any hazardous or unsightly conditions such as debris, pools of oil, water or other liquids, weeds, brush, and trash.**

We observed unsightly graffiti at Drill Site 7 during our recent visit, in violation of this permit condition.

Graffiti at Drill Site 1

6. **CUP 3344 Condition 49: That within 90 days of the approval of CUP-3344 MOD #8 and MOD #9, all equipment and facilities on Drill Site Nos. 1, 3, and 7 shall be completely enclosed by a two (2) inch mesh chain link fence of a non-rusting material, constructed to a height of not less than six (6) feet and containing no openings except those required for ingress and egress. A gate or gates made of the same material as the fence shall be provided for each opening and the gate or gates shall be kept locked except when oil field personnel are present on the drill site.**

During our site visit, the gate at Drill Site 7 was unlocked and opened, in direct violation of this permit condition. No workers were present at the site during our visit. Vintage claims in its application that the gates "are locked" but this is clearly not the case.

Gate unlocked at Drill Site 7

7. **CUP 3344 Condition 51 (Landscaping of Drill Sites): All drill site[s] shall be landscaped so as to fully screen production equipment (including permanent storage tanks) and cut and fill slopes from view of Highway 150, Thomas Aquinas College, the Santa Paula Canyon hiking trail and any residences in the area to the extent which the Planning Director determines is reasonably feasible. Landscaping shall also be designed to revegetate cut and fill slopes to control erosion. Required landscaping shall be accomplished in a manner consistent with the native character of the area. Landscape Plans for Drill Sites 1, 2 and 7 shall be designed to accomplish the required screening in the lease amount of time.**

Drill Site Nos. 1 and 7 have not been landscaped so that they are "fully screened" from the Santa Paula Canyon hiking trail, as required by this permit condition. Also, we are unaware of any Landscape Plan for Drill Sites 1 and 7 and whether such plans were ever submitted to the County for review, as required by other provisions of this condition. Vintage must prepare such plans and resubmit them with a new application if they were not previously prepared and approved by the County.

Vintage claims in its application that the required landscaping "was assumed to have been addressed by the previous Lease holders, at the time the soil work has been implemented in

the 1980's." Vintage also assumes that some (but not all) of the drill sites have approved landscaping plans in place, and further assumes that the Planning Director determined that full screening would not be feasible. It is unclear why Vintage is assuming that the previous lease holders fully complied with this or any other permit condition, particularly given the long history of permit violations at this facility. It is also unclear why Vintage assumes that full screening is not feasible. We are unaware of any formal determination by the Planning Director to the contrary.

Vintage also claims that the equipment at Drill Site 1 "is screened from views from the hiking trail by fencing with wooden slats, trees and other vegetation," that the equipment at this site is "painted in colors that blend with the surroundings," and that "[s]hort-duration intermittent views of the equipment exist from the hiking trail." This is completely false, and the application/permit should be nullified based on this gross mischaracterization alone. While a chain-link fence does screen portions of Drill Site 1, many of its wooden slats are broken or missing, and vegetation is sparsely located around the fence. Moreover, the equipment at the site is in various stages of decay and has not been painted in years, if not decades, and does not blend in with the natural surroundings (i.e. tan paint and green background).

Drill Site 1, as viewed from the hiking trail

Drill site 1, as viewed from the hiking trail

With respect to Drill Site 7, Vintage claims in its application that the pumping units are "obscured from the hiking trail views" because they are painted to blend in with the surroundings, and are at a sufficient distance from the hiking trail. The pumping units are in various stages of decay and have not been painted in years, if not decades, and are directly in view from the hiking trail because they are located less than 100 feet from the trail. Again, such blatant mischaracterizations should provide the County with immediate grounds for nullification.

Drill site 7, viewed from the hiking trail.

Then Vintage states that while the pumping units "could be visible from the hiking trail," landscaping to fully screen them is not feasible because of land ownership issues, lack of space, and Fire Department restrictions. Vintage cannot avoid compliance with a permit condition that has been on the books for several decades by unilaterally determining that the condition is infeasible now. It is also important to note that the proposed modified CUP Condition 68 only requires a thirty-foot vegetation clearance for fire prevention, leaving ample room to accommodate vegetative screening on the well pad itself.

In order to fully comply with the plain terms of this permit condition requiring landscaping to "fully screen" all equipment, Vintage should consider moving the chain link fence to allow additional space for landscaping between the fence and the trail.

Vintage must immediately prepare and implement a landscaping plan for these drill sites prior to re-submitting its application.

8. **CUP 3344 Condition 52 (Landscape Bond): That within 30 days of the approval of CUP-3344 MOD #8 and MOD #9, the permittee shall file, in a form acceptable to the County, a bond or other surety in the amount of $5,000 to guarantee success germination and plant growth. Such bond shall be exonerated after two years if the permittee can demonstrate to the satisfaction of the County that successful germination and plant growth has occurred.**

We cannot locate any documentation that this bond was filed, whether the permittee demonstrated to the satisfaction of the County that successful landscaping had occurred, nor whether the bond has been exonerated.

In its application, Vintage merely assumes that the County was provided with the required bond "because the CUP was valid and operations were allowed to continue." This statement is incomprehensible, and we are frankly surprised that the County accepts responses like this in determining the completeness of an application.

9. **CUP 3344 Condition 58 (Access Road Realignment): The access road between Drill Site No. 1 and Drill Site No. 2 shall be realigned to reduce grades and runaway vehicle escape ramps shall be provided to reduce runaway vehicle hazards. Particular attention shall be paid to surface water run-off.**

This permit condition addresses two concerns with the steep grade of this access road: hazards associated with runaway vehicles, and stormwater runoff. Vintage admits in its application that guard rails were installed in lieu of escape ramps, in direct violation of this mandatory permit condition. Vintage also claims that drainage ditching along the roadside is adequate to manage runoff, even though the permit condition aims to avoid runoff and erosion problems in the first place by reducing the road grade.

Vintage is currently in violation of this condition, and must re-submit its application to include this road realignment in the project description.

10. **CUP 3344 Condition 66 (Paving of Drill Sites): That prior to commencement of drilling operations, Drill Site Nos. 1 and 7 shall be paved or otherwise made impermeable to minimize the potential for ground water pollution.**

Neither drill site is paved. Vintage claims that paving with asphalt "is not common practice and is not feasible," and then somehow claims that this condition is "in compliance." Again, Vintage does not have the authority to unilaterally declare that a longstanding mitigation measure is

infeasible. In resubmitting its application, Vintage should include paving these two pads as part of the project description.

11. **Zoning Ordinance Section 8107-5.6.4 (Waste Handling and Containment of Contaminants): The permittee shall furnish the Planning Director with a plan for controlling oil spillage and preventing saline or other polluting or contaminating substances from reaching surface or subsurface waters. The plan shall be consistent with requirements of County, State and Federal laws.**

Vintage attached to its application a three-page Spill Containment Plan that does not comply with current state requirements for Spill Contingency Plans that have been on the books since 2008, as set forth in 14 CCR § 1722.9. A legally adequate spill containment plan must include:

- A list of the operator's 24-hour emergency contact telephone numbers.
- Complete information about the production facility emergency shutdown procedures, including a list of safety shutdown devices including, but not limited to, kill switches, emergency shut-down devices, or master valves.
- A list of available personal safety equipment, including location and maintenance frequency.
- A one page quick-action checklist for use during initial stages of a spill response.
- A list of required local, state and federal agency notifications with telephone numbers, including, but not limited to, the phone number for the appropriate Division district office and the phone number for reporting spills to the California Emergency Management Agency.
- A list of control and/or cleanup equipment available onsite or locally, with contact procedures.
- A map of the production facilities covered by the plan, including: (1) Labeling of all permanent tanks, equipment, and pipelines. (2) Identification of access roads for emergency response. (3) Labeling of all out-of-service equipment. (4) Labeling of all sumps and catch basins. (5) Volume of all tanks and storage containers covered by the plan, listing the type of fluid stored. (6) All designated waterways within one-quarter mile of the facility. (7) Location of secondary containment with access routes. (8) Topography or drainage flow direction. (9) All storm drains within one-quarter mile of the site.

Moreover, Vintage did not submit any Pipeline Management Plan for this facility, as required by 14 CCR §1774.2. Such a plan guards against corrosion and spills, and includes:

- pipeline type, grade, actual or estimated installation date of pipeline
- design and operating pressures
- leak, repair, inspection and testing history
- description of the testing method and schedule for all pipelines

Finally, as an additional measure to guard against spills, Vintage must comply with 14 CCR §1773 regarding storage tanks, particularly those requirements regarding out-of-service tanks.

The absence or inadequacy of these plans is not consistent with the Zoning Ordinance. On that basis, Vintage's application must be nullified, and Vintage must resubmit its application after completing adequate plans that are consistent with the above-referenced state regulations.

12. **1978 MND Mitigation Measure C.3 (Flood Control & Drainage): The applicant will install automatic safety valves on the shipping line so that the maximum amount of oil that could be spilled into Santa Paula Creek, in the event of pipeline breakage, would be 45 barrels (1,890 gallons). In addition, a properly designed suspension bridge would reduce the likelihood of pipeline breakage from flooding.**

Vintage claims that "there are shut-off valves on the pipeline" but does not disclose whether they are functional, what procedures are in place to ensure that they effectively prevent a spill o fless than 45 barrels. Vintage also claims that the pipeline is "suspended above ground across the Santa Paula Creek." This mitigation measure does not require merely that the pipeline be suspended across the creek, but rather requires a "properly designed suspension bridge."

Based on our analysis of aerial imagery and our review of the permit files, we have reason to believe that the suspension bridge envisioned in this mitigation measure was never constructed. If that is the case, then Vintage is in violation of this mitigation measure, and must include in its project description a proposal to construct such a facility to guard against pipeline failure during high-streamflow events. If this suspension bridge has not been constructed, then Vintage is in violation of this requirement.

13. **1982 MND Trail Construction (Item 5 - Recreation, Measure 2): That the permittee shall reroute the Santa Paula Creek trail so that it completely avoids Drill Site Nos. 1 and 7 and the access road to proposed Drill Site No. 7. The cost of construction and maintenance for the rerouted trail shall be borne by the permittee. The location and design specifications for the rerouted trail shall be approved by both the U.S. Forest Service and the surface land owner prior to construction. All required trail improvements shall be completed by November 1, 1982.**

This permit condition is clear – Vintage is responsible for rerouting the trail to "completely avoid" the drill sites and the access road, must consult and receive approval from the U.S. Forest Service and the landowner, and shall bear all costs. These improvements were required to be in place by 1982, more than 30 years ago, and the failure of Vintage and its predecessors to do so means that Vintage is not in compliance with this requirement. Vintage must submit trail reroute plans as part of any application resubmittal.

14. **DOGGR Idle Well Regulations**

Existing well Valex-Ferndale 110 (API 11121163) is classified as "active" in the DOGGR online well records database, but according to DOGGR well production records, the well has not produced since November 2010. This well is thus more accurately classified as an "idle" well, as defined by Pub. Res. Code 3008(d) ("'Idle well' means any well that has not produced oil or natural gas or has not been used for injection for six consecutive months of continuous operation during the last five or more years.")

Because this well is mis-classified, we are concerned that Vintage has not complied with DOGGR's idle well requirements, including payment of an annual idle well fee, establishing an escrow account for the idle well, filing a $5,000 bond for the idle well, and performing periodic idle well testing to ensure that no damage is occurring to groundwater. Vintage must immediately comply with these requirements, and must take steps toward plugging and abandoning this idle well. It is in violation of the Public Resources Code until it does otherwise, and the application/permit should be nullified on this basis.

These ongoing permit violations are part of a long history of non-compliance at this facility. Based on the seriousness of these offenses, we strongly urge you to nullify the application (or permit, if already approved). This will ensure that the applicant takes all steps necessary to adequately remedy these deficiencies, undertake additional work, prepare required plans, revise the project description as needed, and submit this additional information as part of a

revised application. It will also give your Division an opportunity to conduct a long-overdue condition compliance review for this facility.

We appreciate your consideration, and hope that your Division will take the appropriate steps to comply with the Zoning Ordinance and remedy longstanding permit compliance issues at this facility before proceeding with any permit modification. Thank you for your assistance in this matter.

Best regards,

Jeff Kuyper
Executive Director

EXHIBIT 11

Division's Initial Response to ForestWatch's Nullification Request

Appeal of CRC Oil & Gas Project
Ventura County Board of Supervisors Hearing
October 20, 2015
Item #39

RESOURCE MANAGEMENT AGENCY

county of ventura

Planning Division
Kimberly L. Prillhart
Director

February 27, 2015

Jeff Kuyper
Los Padres Forest Watch
P.O. Box 831
Santa Barbara CA 93102

Re: **Vintage Petroleum, PL13-0150:** Response to February 11, 2015 letter

Dear Mr. Kuyper:

The Planning Division received your letter dated February 11, 2015 regarding the Vintage Petroleum conditional use permit (CUP) modification request (Case No. PL13-0150) that has been under review by the County of Ventura. Given that Los Padres Forest Watch has appealed the February 17, 2015 decision of the Planning Director on the PL13-0150 application, your letter and a staff response to the issues raised therein will be included in the staff report provided to the Planning Commission at the de novo hearing on the proposed project. When a date for the hearing has been identified, I will let you know.

Sincerely,

Brian R. Baca, Manager
Commercial and Industrial Permits

Cc: Kim Prillhart, RMA Planning
Jay Dobrowalski, RMA Planning

800 South Victoria Avenue, L# 1740, Ventura, CA 93009 (805) 654-2481 Fax (805) 654-2509

Printed on Recycled Paper

EXHIBIT 12

Division's Final Response to ForestWatch's Nullification Request

Appeal of CRC Oil & Gas Project
Ventura County Board of Supervisors Hearing
October 20, 2015
Item #39

Memorandum

County of Ventura · Resource Management Agency · Planning Division
800 S. Victoria Avenue, Ventura, CA 93009-1740 · (805) 654-2478 · ventura.org/rma/planning

DATE: May 26, 2015
TO: The Honorable Planning Commission
FROM: Brian R. Baca, Commercial Permits Manager
SUBJECT: PL13-0150, Response to Public Comment

Planning Staff received a letter from Jeff Kuyper dated February 11, 2015 regarding the California Resources Corporation (CRC, formerly known as Vintage Petroleum) conditional use permit (CUP) modification request (Case No. PL13-0150) that has been under review by the County of Ventura (see attached). In the letter, it is requested that either the PL13-0150 application be nullified or that any modified CUP granted be nullified because of the "presence of several ongoing violations at this facility." Provided below are specific responses to the comments provided, numbered in correspondence with the attached marked copy of the February 11, 2015 letter.

Responses:

1. The referenced section of the Non-Coastal Zoning Ordinance (NCZO) and Section 8101-3.2 of the NCZO generally prohibit the processing of an application for, or the granting of, a new permit on a lot where an outstanding violation has been confirmed to exist. In this case, a Notice of Violation has not been issued for the CRC facility that is the subject of the PL13-0150 application.

   In any case, Section 8111-2.2.f of the NCZO allows the processing of a permit application and the granting of a permit if such action would serve to abate identified violations. For example, the issues of equipment screening are addressed in the recommended conditions of approval. Similar to the current permit, the level of screening required will be determined at the discretion of the Planning Director.

2. CRC submitted an application for a modification of CUP 3344 to authorize the continued use of the oil and gas facility, and to authorize the drilling of 19 new wells. The application submitted by CRC was determined by the Planning Division to be adequate for processing.

3. According to the records made available to Mr. Kuyper, the County Planning Division conducted a "compatibility review" of the subject oil and gas facility in 2003. By letter dated March 20, 2003, the Planning Division determined that:

   "Seneca is in compliance with the Conditions of Approval of the permit, the use is consistent with the findings of approval of the parent permit, and the use remains compatible with the surrounding uses."

As recognized in the LPFW letter, Vintage Petroleum purchased the Ferndale Lease from Seneca in 2008. At that time, Vintage paid a Condition Compliance fee to the County Planning Division and signed a Reimbursement Agreement to fund any County compliance reviews. However, there is no record of a formal compliance review being conducted by the County since 2003. However, the access roads and Drillsites 1, 2, 3 and 7 had already been constructed more than a decade earlier and were in use. According to DOGGR records, the last three of the 17 existing permitted wells at this facility were drilled in 1990. Thus, no substantial changes in the facility have occurred in the past 25 years, including the 12 years since the last formal compliance review.

Given the current discretionary action under consideration by the County, the next compliance review will occur after the final action by the County on the requested modified CUP.

4. All project related construction had occurred by 2003. The County Planning Division determined in 2003 (refer to response to comment 3 above) that the facility was being operated in compliance with the conditions of approval. No evidence of a violation of Condition of Approval #6 of CUP 3344 is provided in this comment.

5. The condition of approval requiring notification of Thomas Aquinas College of site preparation or drilling has been included in the recommended conditions of approval for the requested modified conditional use permit. No formal complaint has been filed with the Planning Division regarding a lack of compliance with this condition. A representative of Thomas Aquinas College has indicated in writing that the College administration has no objection to the requested modified CUP.

   In any case, the abatement of a "lack of notice" violation would involve the operator providing the required notification in the future. All documentation of the past "rework" events is currently available to college representatives as the records are maintained as a public record on the DOGGR Well Finder website. Furthermore, recently adopted State regulations also require notice to surrounding property owners prior to the conduct of certain well stimulation activities.

6. The painting of oil field facilities is required to minimize the contrast between these facilities and the surrounding vegetated areas. Given that the hillsides may be green in the springtime (based on rainfall) and tan the majority of the year, it is not possible to have the equipment painted to match the color of the surrounding landscape at all times.

7. County staff informed representatives of CRC of the graffiti. CRC staff informed the Planning Division that the graffiti had been removed. Note that the placement of graffiti on the project site requires an illegal act of trespass. No

hazardous or unsightly conditions resulting from the operation of the oil and gas facility have been identified.

8. County staff also observed the gate to be unlocked and informed representatives of CRC. CRC staff informed the Planning Division that the gate has been locked and the site secured.

9. A landscaping maintenance condition of approval is included in the requested permit. This condition of approval is consistent with a similar condition included in the previous permit (CUP 3344). In each case, the drillsites are to be screened from public views *"to the extent the Planning Director determines is reasonably feasible."*

   The commenter is correct in that there is currently no screening of the views of Drillsite #7 or the existing oil well pumping units in operation on this site. However, given the narrow corridor where the public trail exists, full screening of Drillsite #7 would obscure views of the natural hillsides above the drillsite and could create a "tunnel effect" along the interim public trail. Full slats incorporated into the fencing would create a potential "graffiti wall." The Planning Director will determine the ultimate design of the required landscaping and screening measures that will minimize visual effects. The vegetation included in the required landscaping will be comprised of native species.

10. The landscaping plan required pursuant to the recommended conditions of approval must be prepared in accordance with the County's Landscape Guidelines. These Guidelines allow for the County to require a surety (i.e. a bond) to guarantee installation of required plantings if done after the issuance of a zoning clearance. Regardless of whether a landscape bond is required, any non-compliance with landscaping requirements would be subject to the issuance of a Notice of Violation, imposition of civil penalties and other enforcement actions.

11. The access road between drill sites 1 and 2 was improved many years ago. No grading is now required to alter this road.

12. The paving of Drill Sites Nos. 1 and 7 required under condition of approval #66 of CUP 3344 has not occurred. Thus, the facility is not in conformance with this requirement of CUP 3344. This non-conformance would be eliminated with the granting of the requested modified CUP. In this case, potential adverse effects on water resources (surface and groundwater) would be exacerbated by paving of the drillsites according to Certified Hydrogeologist Brian R. Baca (CHG 398). The sites are underlain by bedrock and not unconsolidated sand or gravel aquifers. This is recognized in current State stormwater regulations that seek to minimize the area of impervious surfaces to reduce runoff from and maximize water infiltration on developed properties. The proposed project does not involve

any substantial changes in the runoff characteristics of any of the existing facilities.

13. Each oil and gas facility is required by State law to have a Spill Prevention Control and Countermeasure (SPCC) Plan. These SPCC plans are subject to review and approval by the California Division of Oil and Gas and Geothermal Resources (DOGGR). The County Planning Division works in coordination with DOGGR on oil and gas projects. Each approved SPCC plan is available to the County Planning Division. According to DOGGR (Bruce Hesson, pers. Comm., 2-26-15), the SPCC for the subject Vintage Petroleum operation has been approved.

14. Refer to response to comment above. The design and maintenance of the pipelines would be addressed in the SPCC plan as approved by DOGGR. The referenced measure from the 1978 MND is not a condition of approval included in the current permit (CUP 3344) for the Vintage facility.

15. Condition of Approval No. 50 of CUP 3344 states that:

> *"The Permittee shall cooperate with Thomas Aquinas College, the Ferndale Ranch (or their successors in interest) and the U.S. Forest Service to establish a permanent hiking trail in the Santa Paula Canyon. In the meantime, the permittee shall reconstruct and maintain a temporary hiking trail in the vicinity of Drill Site Nos. 1 and 7. In no case shall the oil operations obstruct the hiker's access to Santa Paula Canyon. "*

This condition of approval constitutes the method that the County Board of Supervisors chose to address the issue of a hiking trail in Santa Paula Canyon. It requires only that the permittee "cooperate" with the other listed entities in the establishment of a permanent trail. There is no timeframe or allocation of costs specified in this condition. The permittee (Vintage-CRC) continues to maintain the temporary trail in the vicinity of Drillsites 1 and 7 and is in compliance with the above condition.

16. The issue raised in this comment refers to State regulations enforced by DOGGR. They do not relate to compliance with the current permit (CUP 3344) or the requested modified permit (CUP PL13-0150). Thus, no specific response is required.

17. Refer to responses to comments 1 through 16 above.

****

Attachment:
1- Letter from Jeff Kuyper to Kim Prillhart dated February 11, 2015