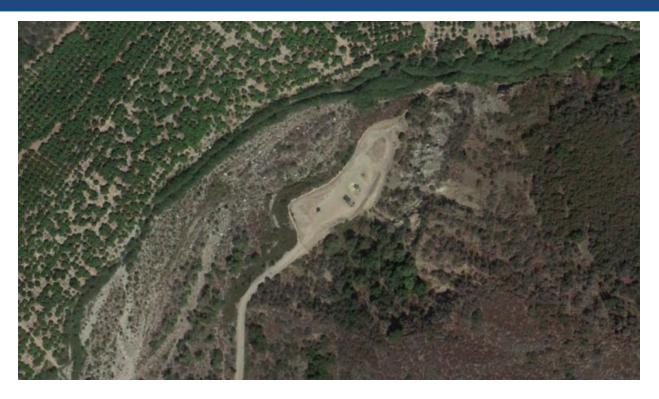
Hydrologic Considerations of CUP PL 13-050

Drill Site No. 7 – Ferndale Lease, Ojai Oil Field



Prepared by:

Blue Tomorrow, LLC BLUE TOMORROW

&

Newton Geo-Hydrology consulting services



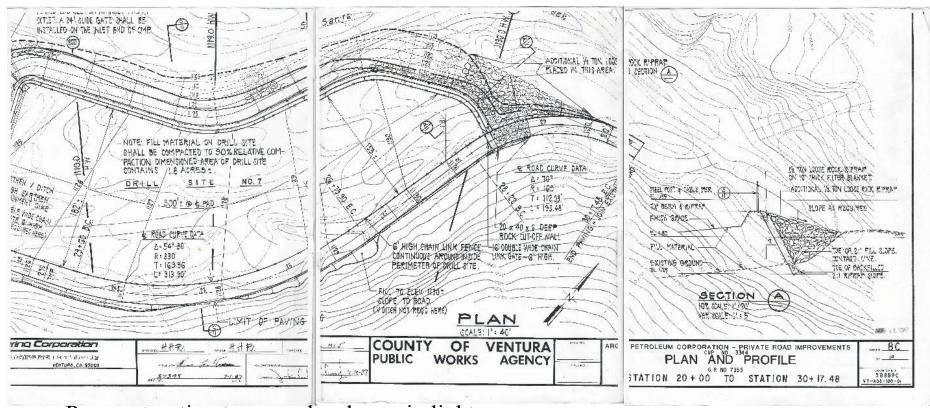
Prepared for:

Citizens for Responsible Oil & Gas CFROG

County of Ventura Board of Supervisors Hearing - October 20, 2015

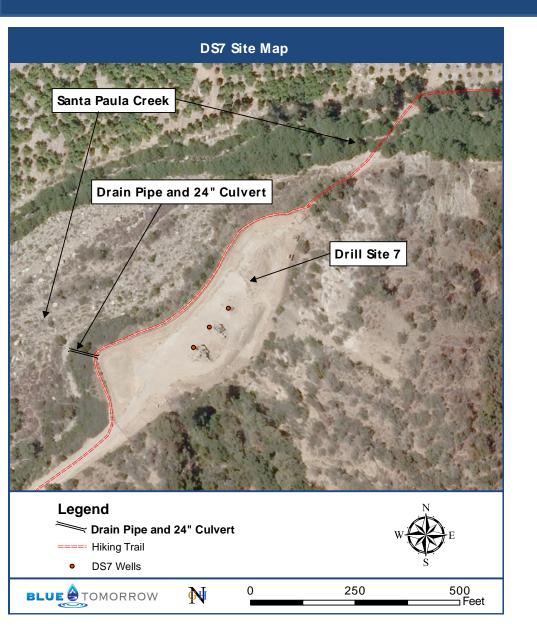
Plan & Profile CUP No. 3344

Approved 7/9/1987



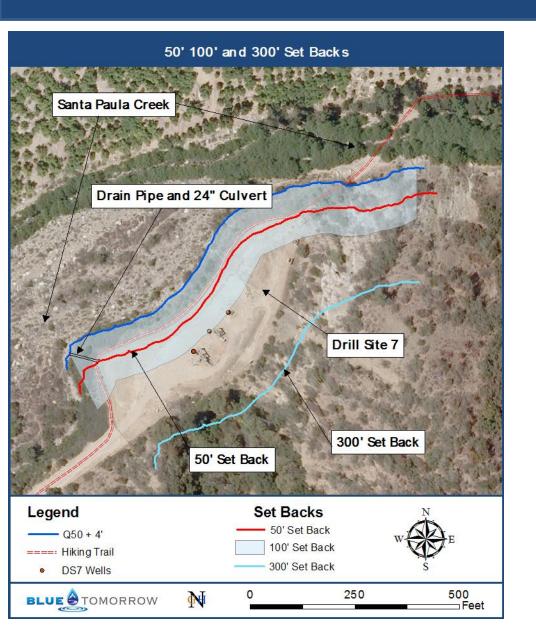
- Preconstruction topography shown in light gray
- Shows Drill Site 7 (DS7) was built within the Santa Paula Creek channel
- 20 ft (west end) to 5 ft (east end) of fill material
- Percolation downward into channel
- Lateral flow off DS7 into channel
- Contaminants are carried with water and sediment

Current Site Facilities



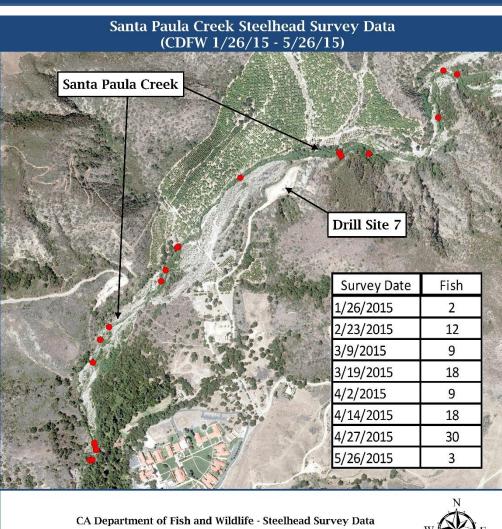
- 24" culvert discharges directly into Santa Paula Creek
- 3 existing wells:2 currently with pumps; 1 idle
- Cement cellar at each well
- Pipes to convey oil from site to off-site facilities
- Berm and fence, access road

New Wells & Facilities Within Setback



- VCWPD designated Santa Paula
 Creek a "red line" creek, 300' set back
- USGS 2000' scale shows Santa Paula Creek as a "blue line" creek, 100' set back
- In no case shall facilities be within 50' of channel
- Existing facilities are within 50 ft of Q50 + 4' boundary

Endangered Steelhead by Drill Site 7



Observed Steelhead

TOMORROW



Meters

400

- CDFW rescued 112 steelhead near DS7 on September 4 & 11, 2014

- 1978 and 1984 Environmental Impact Reports did not evaluate impacts to steelhead
- 2006 Southern California Steelhead final listing as an endangered species under the Endangered Species Act
- Steelhead are in Santa Paula Creek near DS7
 - Between January 26, 2015 and May 26, 2015, 101 sightings of steelhead were made by California Department of Fish and Wildlife (CDFW) in proximity of DS7
- Recent steelhead recovery efforts

Conclusion

- Drill Site 7 was built in Santa Paula Creek
- Multiple pathways for contamination to enter water body
- Adding new oil wells and facilities will increase the risk of pollution
- Drill Site 7 encroaches on the Ventura County NCZO 50-foot setback requirement
- Endangered steelhead are in Santa Paula Creek near Drill Site 7
- Impacts to steelhead from oil operations on Drill Site 7 were not evaluated in the 1978 and 1984 Environmental Impact Reports.