

**COUNTY OF VENTURA
PUBLIC WORKS AGENCY**

October 1, 2015

To: All Prospective Bidders

From: Jeff Pratt
Director of Public Works


Addendum No.1

Subject: **Project Name: ARROYO SIMI UPSTREAM OF MADERA ROAD
GRADE STABILIZER REPAIR**
Specification No. WP16-03
Bids to be Opened October 6, 2015

Make the following modifications to the bidding documents for subject project:

1. Add to the plans and specifications the attached groundwater sample test results for pollutants from the Arroyo Simi Upstream of Madera Road Grade Stabilizer Repair, as required for the National Pollutant Discharge Elimination System (NPDES) Application Supplemental Requirements form referenced in the Los Angeles Regional Water Quality Control Board Notice on Intent (RWQCB). Accordingly, the Contractor shall meet all RWQCB requirements.

Acknowledgment of this addendum by inserting the addendum No. on page 7 of the Proposal is required. Failure to do so may result in the disqualification of your bid.

Approved: 
Jeff Pratt, Director
For

October 1, 2015
Date Approved



ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

October 1, 2015
Project No. 1501-4101

Ventura County Watershed Protection District
800 South Victoria Avenue
Ventura, California 93009-1610

Attention: Mr. Masood Jilani, P.E.

Subject: **Results for Environmental Sampling Services**, Groundwater Sample, Arroyo Simi Stabilizer #2 Repair Project Upstream of Madera Road, Simi Valley, Ventura County, California

Dear Mr. Jilani:

Padre Associates, Inc. (Padre) is pleased to submit the results and documentation for Ventura County Watershed Protection District (VCWPD) Work Order No. PW16-048. The project is located within the Arroyo Simi upstream of Madera Road in Simi Valley, Ventura County, California (Site). The scope of work consisted of the manual construction of a test pit to facilitate the collection of a groundwater sample for chemical analysis for the constituents specified.

Groundwater Sample Collection and Analysis

Padre on September 23, 2015 met with VCWPD Inspector Mr. Wendell Ho and collected one groundwater sample within Arroyo Simi at a location upstream of Madera Road. The sample collection location and procedure was discussed with Mr. Ho prior to starting work. Groundwater was collected from water that flowed into an approximately 1-foot deep hand dug test pit which was temporarily cased with a clean, 5-gallon bucket with the bottom cut out creating a temporary well. Groundwater within the temporary well was purged using a stainless steel 1-gallon pail until the visual turbidity had dissipated. Depth to groundwater from ground surface was approximately 3 inches.

Groundwater was then collected into a separate, clean, new 5-gallon bucket and allowed to settle for 30 minutes. After settling the water was collected into the laboratory provided containers. The sample containers were labeled with the sample identification of MADERA-S2-GW and sample time of 09:25. The remaining ground water in the sample bucket was field analyzed by Padre using a calibrated portable YSI-556MPS multi-parameter water quality meter. The results of field analyses are provided below in Table 1 - Field Water Quality Monitoring Results. After groundwater sampling the temporary well location was recorded using GPS methods, the temporary well was removed and backfilled with native materials. Groundwater sample containers were stored in coolers with ice pending transport to the laboratory or pickup by laboratory courier.

**Table 1- Field Water Quality Monitoring Results
September 23, 2015, Arroyo Simi, Simi Valley, California**

Sample ID	Temperature (°C)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH (pH units)	Oxidation-Reduction Potential (mV)
MADERA-S2-GW	23.18	1.496	4.72	7.56	70.4

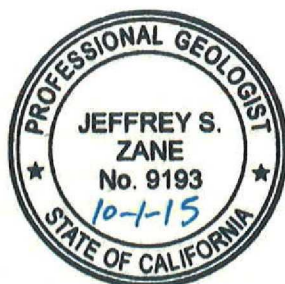
Analyses were conducted through state certified laboratories for pollutants specified in the National Pollution Discharge Elimination System (NPDES) Application Supplemental Requirements form referenced in the Los Angeles Regional Water Quality Control Board Notice of Intent (NOI). Padre submitted the groundwater sample to American Scientific Laboratories located in Los Angeles, California for the following analyses: California Title 22 metals including chromium III, chromium VI and boron, volatile organic compounds and fuel oxygenates, pesticides and PCBs, semi-volatile organic compounds including 1,4-dioxane, perchlorate, hardness, pH, suspended solids, turbidity, total dissolved solids, chlorides, sulfates, nitrites and nitrates, and sulfides,

Padre also submitted the groundwater sample to Aquatic Testing Laboratories located in Ventura, California for analysis of Fathead Minnow 96 hour Percent Survival Bioassay (EPA-821-R-02-012).

Padre has summarized the laboratory analytical results in the attached NPDES Supplemental Requirements Form and summary table, which includes the screening levels. Also included as attachments are the analytical report from the contracted laboratories and a map showing the location of the hand dug temporary well groundwater sample location in Plate 1- Site Plan.

Closing

If you have any questions concerning this letter, please contact the undersigned at (805) 644-2220, ext. 38.



Sincerely,

PADRE ASSOCIATES, INC.

A handwritten signature in blue ink, appearing to read "J.S. Zane".

Jeffrey S. Zane, P.G.
Project Geologist

Attachments: Plate 1 - Site Plan
NPDES Application Supplemental Requirements Table
Laboratory Analytical Report



LEGEND:

- ⊕ Sample Location
- Channel



PROJECT NAME: VCWPD ARROYO SIMI UPSTREAM OF
MADERA ROAD STABILIZER #2 REPAIR
VENTURA COUNTY, CA
PROJECT NUMBER: 1501-4101 DATE: September 2015

SITE PLAN

PLATE
1

Source: Esri Online Imagery Basemap 2015
Coordinate System: NAD 1983 StatePlane California V FIPS 4025 Feet
Notes: This map was created for informational and display purposes only

NPDES Application Supplemental Requirements

I. Pollutants Analysis/Measurements

Analysis/measurement for the following pollutants should accompany the NPDES application for discharges of wastewater to surface waters.

Arroyo Simi upstream of Madera Road, Sample ID: MADERA-S2-GW

Table I. List of Pollutants Analysis/Measurements

ID Num.	Pollutant	Quantitation Level	Screening Levels		Minimum Levels (ML)
			MUN ^a	Others ^b	
		Unit -- (µg/L)	Unit -- (µg/L)		Unit -- (µg/L)
	Metals^(a)				
1097	Antimony (Sb)	<2	14	4300	5
1000	Arsenic (As)	3.29 J	50	36	10
1012	Beryllium (Be)	<0.5	4	--	0.5
1027	Cadmium (Cd)	<0.5	2.4	9.4	0.5
1033	Chromium III (Cr3+)	<1	50	--	10
1032	Chromium VI (Cr6+)	0.960 J	11	50	5
1119	Copper (Cu)	4.61	9.4	3.7	0.5
720	Cyanide (CN)	<20	5.2	--	5
1051	Lead (Pb)	0.277 J	3.2	8.5	0.5
71900	Mercury (Hg)	<0.1	0.050	0.051	0.2
1067	Nickel (Ni)	17.8	52	8.3	1
1147	Selenium (Se)	30.4	5.0	71	2
1077	Silver (Ag)	<0.111	4	2.2	0.25
1059	Thallium (Tl)	<0.101	1.7	6.3	1
1092	Zinc (Zn)	<1	122	86	20
	(a) = Metals concentrations are expressed as total recoverable				
	Volatile Organic Compounds				
34496	1,1 Dichloroethane	<0.372	5	5	1
34501	1,1 Dichloroethylene	<0.355	0.057	3.2	0.5
34506	1,1,1 Trichloroethane	<0.150	200	200	2
34511	1,1,2 Trichloroethane	<0.233	0.60	42	0.5
34516	1,1,2,2 Tetrachloroethane	<0.579	0.17	11	0.5
34536	1,2 Dichlorobenzene	<0.358	600	17000	0.5
32103	1,2 Dichloroethane	<0.182	0.38	99	0.5
34541	1,2 Dichloropropane	<0.359	0.52	39	0.5
34549	1,2-Trans Dichloroethylene	<0.176	10	140000	1
34566	1,3 Dichlorobenzene	<0.333	400	2600	2
34561	1,3 Dichloropropylene	<0.1	0.5	0.5	0.5
34571	1,4 Dichlorobenzene	<0.384	5	0.5	0.5
34576	2-Chloroethyl vinyl ether	<0.665	--	--	1
34210	Acrolein	<5	100	100	5
34215	Acrylonitrile	<5	0.059	0.66	2.0
34030	Benzene	<0.097	1.0	1.0	0.5
32104	Bromoform	<0.284	4.3	360	0.5
32102	Carbon Tetrachloride	<0.144	0.25	4.4	0.5
34301	Chlorobenzene	<0.176	30	21000	2
34306	Chlorodibromo-methane	<0.300	0.401	34	0.5
85811	Chloroethane	<0.328	100	100	2
32106	Chloroform	<0.247	100	100	2
32101	Dichlorobromo-methane	<0.169	0.56	46	0.5
78113	Ethylbenzene	<0.209	700	700	2
34413	Methyl Bromide	<0.174	10	4000	2
34418	Methylene Chloride	<1	4.7	1600	0.5
34475	Tetrachloroethylene	<0.421	0.8	8.85	0.5
34010	Toluene	<0.282	150	150	2
39180	Trichloroethylene	<0.117	2.7	5	0.5
39175	Vinyl Chloride	<0.331	0.5	0.5	0.5
63	Xylenes	<0.476	1750	1750	na
	Acetone	<2.52	700	700	na
	Ethylene Dibromide	<0.226	0.05	0.05	na
	Methyl Chloride	<0.174	3	3	0.5

^a Applies to water with Municipal and Domestic Supply (MUN) (indicated with E and I in the Basin Plan) beneficial uses designations.

^b Applies to all other receiving waters.

ID Num.	Pollutant	Quantitation Level	Screening Levels		Minimum Levels (ML)
			MUN ^a	Others ^b	
		Unit -- (µg/L)	Unit -- (µg/L)		Unit -- (µg/L)
	Methyl ethyl ketone	<5	700	700	na
	Pesticides and PCBs				
39310	4,4'-DDD	<0.008	0.00083	0.00084	0.05
39320	4,4'-DDE	<0.007	0.00059	0.00059	0.05
39300	4,4'-DDT	<0.006	0.00059	0.00059	0.01
78428	Alpha-Endosulfan	<0.01	0.056	0.0087	0.02
39336	Alpha-BHC	<0.009	0.0039	0.013	0.01
39330	Aldrin	<0.007	0.00013	0.00014	0.005
34356	Beta-Endosulfan	<0.009	0.056	0.0087	0.01
39338	beta-BHC	<0.005	0.014	0.046	0.005
39350	Chlordane	<0.017	0.00057	0.00059	0.1
34198	delta-BHC	<0.008	--	--	0.005
39380	Dieldrin	<0.009	0.00014	0.00014	0.01
34351	Endosulfan Sulfate	<0.01	110	240	0.05
39390	Endrin	<0.009	0.036	0.0023	0.01
34366	Endrin Aldehyde	<0.015	0.76	0.81	0.01
39410	Heptachlor	<0.002	0.00021	0.00021	0.01
39420	Heptachlor Epoxide	<0.005	0.0001	0.00011	0.01
39340	gamma-BHC	<0.006	0.019	0.063	0.02
4166	PCB 1016	<0.279	0.00017	0.00017	0.5
4166	PCB 1221	<0.558	0.00017	0.00017	0.5
4166	PCB 1232	<0.225	0.00017	0.00017	0.5
4166	PCB 1242	<0.225	0.00017	0.00017	0.5
4166	PCB 1248	<0.225	0.00017	0.00017	0.5
4166	PCB 1254	<0.225	0.00017	0.00017	0.5
4166	PCB 1260	<0.225	0.00017	0.00017	0.5
39400	Toxaphene	<2	0.00073	0.00075	0.5
	Semi - Volatile Organic Compounds				
34536	1,2 Dichlorobenzene	<1.38	600	17000	0.5
34346	1,2 Diphenylhydrazine	<0.53	0.040	0.54	1
34551	1,2,4 Trichlorobenzene	<1.62	70	--	5
34566	1,3 Dichlorobenzene	<1.32	400	2600	2
34571	1,4 Dichlorobenzene	<1.38	5	2600	2
34586	2 Chlorophenol	<0.60	120	400	5
34601	2,4 Dichlorophenol	<0.60	93	790	5
34606	2,4 Dimethylphenol	<0.60	540	2300	2
34616	2,4 Dinitrophenol	<0.40	70	14000	5
34611	2,4 Dinitrotoluene	<1.77	0.11	9.1	5
34624	2,4,6 Trichlorophenol	<0.99	2.1	6.5	10
34626	2,6 Dinitrotoluene	<1.8	--	--	5
34591	2-Nitrophenol	<0.5	--	--	10
34581	2-Chloronaphthalene	<1.74	1700	4300	10
34631	3,3' Dichlorobenzidine	<2.4	0.04	0.077	5
	3-Methyl-4-Chlorophenol	<0.5	--	--	1
3615	2-Methyl-4,6-Dinitrophenol	<0.88	13	765	5
34646	4-Nitrophenol	<0.5	--	--	5
34636	4-Bromophenyl phenyl ether	<2.19	--	--	5
34641	4-Chlorophenyl phenyl ether	<1.98	--	--	5
34205	Acenaphthene	<1.86	1200	2700	1
34200	Acenaphthylene	<1.83	--	--	10
34220	Anthracene	<1.92	9600	110000	5
39120	Benidine	<3.86	0.00012	0.00054	5
34526	Benzo (a) Anthracene	<1.41	0.0044	0.049	5
34247	Benzo (a) Pyrene	<1.47	0.0044	0.049	2
34230	Benzo (b) Fluoranthene	<1.38	0.0044	0.049	10
34521	Benzo (g,h,i) Perylene	<1.98	--	--	5
34242	Benzo (k) Fluoranthene	<1.44	0.0044	0.049	2
34278	Bis (2-Chloroethoxy) methane	<1.77	--	--	5
34273	Bis(2-Chloroethyl) ether	<1.29	0.031	1.4	1
34283	Bis(2-Chloroisopropyl) ether	<1.47	1400	170000	10
39100	Bis(2-Ethylhexyl) phthalate	<0.780	1.8	5.9	5
34292	Butyl benzyl phthalate	<2.73	3000	5200	10
34320	Chrysene	<1.41	0.0044	0.049	5
34556	Dibenzo(a,h)-anthracene	<1.92	0.0044	0.049	0.1

ID Num.	Pollutant	Quantitation Level	Screening Levels		Minimum Levels (ML)
			MUN ^a	Others ^b	
		Unit -- (µg/L)	Unit -- (µg/L)		Unit -- (µg/L)
34336	Diethyl phthalate	<1.74	23000	120000	10
34341	Dimethyl phthalate	<3.75	313000	2900000	10
39110	di-n-Butyl phthalate	<1.14	2700	12000	10
34596	di-n-Octyl phthalate	<1.8	--	--	10
34376	Fluoranthene	<1.59	300	370	10
34381	Fluorene	<1.92	1300	14000	10
39700	Hexachlorobenzene	<2.01	0.00075	0.00077	1
39702	Hexachlorobutadiene	<1.05	0.44	50	1
34386	Hexachloro-cyclopentadiene	<0.720	50	17000	5
34396	Hexachloroethane	<1.11	1.9	8.9	1
34403	Indeno(1,2,3,cd)-pyrene	<1.92	0.0044	0.049	0.05
34408	Isophorone	<1.74	8.4	600	1
34438	N-Nitrosodimethyl amine (NDMA)	<1.29	0.00069	8.1	5
34428	N-Nitroso-di-n-propyl amine	<1.74	0.005	1.4	5
34433	N-Nitrosodiphenyl amine	<1.65	5.0	16	1
34696	Naphthalene	<1.74	21	--	10
34447	Nitrobenzene	<1.53	17	1900	10
39032	Pentachlorophenol	<0.200	0.28	7.9	1
34461	Phenanthrene	<2.13	--	--	5
34694	Phenol	<0.84	21000	4600000	50
34469	Pyrene	<1.83	960	11000	10
Miscellaneous					
82698	2,3,7,8-TCDD (Dioxin)	NA	1.3E-08	1.3E-08	na
948	Asbestos (in fibers/L k.s.)	NA	7000000	7000000	na
	Perchlorate	2.80	4	4	na
	1,4-Dioxane	<2	3	3	na
	Methyl tertiary butyl ether (MTBE)	<0.24	5	5	2
	Di-isopropyl Ether (DIPE)	<0.53	0.8	0.8	2
	Ethyl Tertiary Butyl Ether (ETBE)	<0.46	2	2	2
	Tertiary Amyl Methyl Ether (TAME)	<0.44	2	2	2
	Tertiary Butyl Alcohol (TBA)	<4.75	12	12	10
	Methanol	<500	1000	1000	1000
	Ethanol	<250	1000	1000	1000
	Total Petroleum Hydrocarbons Using both EPA 418.1 and EPA 8015 (modified) methods	<50	100	100	100
* Analysis required for petroleum-fuel impacted water only.					
	Conventional	mg/L	mg/L	mg/L	mg/L
	Hardness	846	na	na	na
	pH (pH unit)	7.88	na	na	na
	Suspended solids	5.00 J	na	na	na
	BOD ₅ 20°C	<1	na	na	na
	Oil and grease	3.0 J	na	na	na
	Settleable Solids (ml/L)	<0.1	na	na	na
	Turbidity	1.17	na	na	na
	Total Dissolved Solids	1450	na	na	na
	Chlorides	158	na	na	na
	Sulfates	869	na	na	na
	Nitrites+Nitrates (as Nitrogen)	6.64	na	na	na
	Sulfides	<0.01	na	na	na
	Boron	1250	na	na	na
Note: na = not applicable -- = no screening level					

II. Alternative Method of Disposal

The application should also be accompanied by a feasibility study of reuse of the wastewater, and if reuse is not feasible, alternatives for disposal other than surface waters.



AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services

2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

Ordered By

Padre Associates, Inc.
1861 Knoll Dr.
Ventura, CA 93003-

Number of Pages 32

Date Received 09/23/2015

Date Reported 09/30/2015

Telephone (805) 644-2220
Attn Jeff Zane

Job Number	Ordered	Client
65921	09/23/2015	PADRE

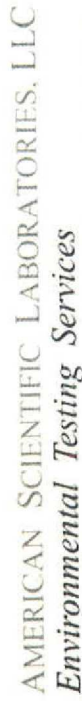
Project ID: 1501-4101
Project Name: Arroyo Simi GW Sample
Site: Arroyo Simi
Simi Valley, CA

Enclosed are the results of analyses on 1 sample analyzed as specified on attached chain of custody.

Wendy Lu
Organics Supervisor

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

- 1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
- 2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.



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E REPORT: ~~PDF~~ ☐ EDF ☐ EDF

E REPORT: ~~PDF~~

ASL JOB#

ASL JOB# 65921

Page 1 Of 1

CHAIN OF CUSTODY RECORD

[illegible]

White - Report	Yellow - Laboratory	Pink - Client
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AMERICAN SCIENTIFIC LABORATORIES, LLC

Environmental Testing Services

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ANALYTICAL RESULTS

Ordered By

Padre Associates, Inc.
1861 Knoll Dr.
Ventura, CA 93003-

Site

Arroyo Simi
Simi Valley, CA

Telephone: (805)644-2220

Attn: Jeff Zane

Page: 2

Project ID: 1501-4101

Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: 1664, Revision A, Oil and Grease (HEM)

QC Batch No: 092415-1

Our Lab I.D.		338418				
Client Sample I.D.		MADERA.S2				
		.GW				
Date Sampled		09/23/2015				
Date Prepared		09/24/2015				
Preparation Method						
Date Analyzed		09/24/2015				
Matrix		Groundwater				
Units		mg/L				
Dilution Factor		1				
Analytes	MDL	PQL	Results			
Conventionals						
Oil and Grease	1.40	5.00	3.00J			

QUALITY CONTROL REPORT

QC Batch No: 092415-1

	LCS	LCS DUP	LCS RPD	LCS/LCSD	LCS RPD					
Analytes	% REC	% REC	% REC	% Limit	% Limit					
Conventionals										
Oil and Grease	87	89		80-120	<20					



AMERICAN SCIENTIFIC LABORATORIES, LLC

Environmental Testing Services

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ANALYTICAL RESULTS

Ordered By

Padre Associates, Inc.
1861 Knoll Dr.
Ventura, CA 93003-

Site

Arroyo Simi
Simi Valley, CA

Telephone: (805)644-2220

Attn: Jeff Zane

Page: 3

Project ID: 1501-4101

Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: 180.1, Turbidity (Nephelometric)

QC Batch No: 092315-1

Our Lab I.D.		338418				
Client Sample I.D.		MADERA.S2 .GW				
Date Sampled		09/23/2015				
Date Prepared		09/23/2015				
Preparation Method						
Date Analyzed		09/23/2015				
Matrix		Groundwater				
Units		NTU				
Dilution Factor		1				
Analytes	MDL	PQL	Results			
Conventionals						
Turbidity	0.0100	1.00	1.17			

QUALITY CONTROL REPORT

QC Batch No: 092315-1

	LCS	LCS DUP	LCS RPD	LCS/LCSD	LCS RPD					
Analytes	% REC	% REC	% REC	% Limit	% Limit					
Conventionals										
Turbidity	100	100	<1	80-120	<20					



AMERICAN SCIENTIFIC LABORATORIES, LLC

Environmental Testing Services

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ANALYTICAL RESULTS

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1861 Knoll Dr.
Ventura, CA 93003-

Site

Arroyo Simi
Simi Valley, CA

Telephone: (805)644-2220

Attn: Jeff Zane

Page: 4

Project ID: 1501-4101

Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: 218.6, Hexavalent Chromium by Ion Chromatography

QC Batch No: 092315-1

Our Lab I.D.		338418				
Client Sample I.D.		MADERA.S2				
		.GW				
Date Sampled		09/23/2015				
Date Prepared		09/23/2015				
Preparation Method						
Date Analyzed		09/23/2015				
Matrix		Groundwater				
Units		ug/L				
Dilution Factor		1				
Analytes	MDL	PQL	Results			
Conventionals						
Chromium (VI)	0.144	1.00	0.960J			

QUALITY CONTROL REPORT

QC Batch No: 092315-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Conventionals										
Chromium (VI)	100	105	4.9	90-110	10					



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Environmental Testing Services

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ANALYTICAL RESULTS

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Padre Associates, Inc.
1861 Knoll Dr.
Ventura, CA 93003-

Site

Arroyo Simi
Simi Valley, CA

Telephone: (805)644-2220

Attn: Jeff Zane

Page: 5

Project ID: 1501-4101

Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: 300, Anions by Ion Chromatography

QC Batch No: 092515-1

Our Lab I.D.		338418				
Client Sample I.D.		MADERA.S2 .GW				
Date Sampled		09/23/2015				
Date Prepared		09/25/2015				
Preparation Method						
Date Analyzed		09/25/2015				
Matrix		Groundwater				
Units		mg/L				
Dilution Factor		1				
Analytes	MDL	PQL	Results			
Conventionals						
Chloride	0.241	1.00	158			
Nitrate as N	0.0070	0.100	5.36			
Nitrite as N	0.0052	0.0500	1.28			
Sulfate	0.0700	1.00	869			

QUALITY CONTROL REPORT

QC Batch No: 092515-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Conventionals										
Chloride	97	96	<1	80-120	<20					
Nitrate as N	107	107	<1	80-120	<20					
Nitrite as N	108	109	<1	80-120	<20					
Sulfate	104	104	<1	80-120	<20					



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ANALYTICAL RESULTS

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Site

Arroyo Simi
Simi Valley, CA

Telephone: (805)644-2220

Attn: Jeff Zane

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Project ID: 1501-4101

Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: 314.0, Perchlorate by Ion Chromatography

QC Batch No: 092915-1

Our Lab I.D.		338418				
Client Sample I.D.		MADERA.S2				
		.GW				
Date Sampled		09/23/2015				
Date Prepared		09/29/2015				
Preparation Method						
Date Analyzed		09/29/2015				
Matrix		Groundwater				
Units		ug/L				
Dilution Factor		1				
Analytes	MDL	PQL	Results			
Conventional						
Perchlorate	0.950	2.00	2.80			

QUALITY CONTROL REPORT

QC Batch No: 092915-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit				
Conventional									
Perchlorate	87	96	9.8	80-120	<20				



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Project ID: 1501-4101

Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: 6010B/7470A, CCR Title 22 Metals (TTLC)

QC Batch No: 092615-6

Our Lab I.D.		338418					
Client Sample I.D.		MADERA.S2					
		.GW					
Date Sampled		09/23/2015					
Date Prepared		09/26/2015					
Preparation Method							
Date Analyzed		09/28/2015					
Matrix		Groundwater					
Units		ug/L					
Dilution Factor		1					
Analytes	MDL	PQL	Results				
AA Metals							
Mercury	0.100	0.500	ND				
ICP Metals							
Boron	9.00	50.0	1250				
Antimony	2.00	10.0	ND				
Arsenic	2.00	10.0	3.92J				
Beryllium	0.500	10.0	ND				
Cadmium	0.500	10.0	ND				
Chromium	1.00	10.0	ND				
Nickel	1.00	10.0	4.71J				
Thallium	1.00	10.0	ND				
Zinc	1.00	10.0	ND				

QUALITY CONTROL REPORT

QC Batch No: 092615-6

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit				
AA Metals									
Mercury	93	96	2.7	80-120	20				
ICP Metals									
Boron	112	107	4.6	80-120	20				
Antimony	94	94	<1	80-120	20				
Arsenic	94	94	<1	80-120	20				
Beryllium	102	102	<1	80-120	20				
Cadmium	95	95	<1	80-120	20				
Chromium	96	96	<1	80-120	20				
Nickel	96	96	<1	80-120	20				
Thallium	98	97	<1	80-120	20				



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ANALYTICAL RESULTS

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Project ID: 1501-4101

Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: 6010B/7470A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

QC Batch No: 092615-6

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
ICP Metals										
Zinc	105	104	<1	80-120	20					



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Attn: Jeff Zane

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Project ID: 1501-4101

Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: 8015B, TPH DROs and OROs (Diesel and Oil Range Organics)

QC Batch No: W1D-092315

Our Lab I.D.		338418					
Client Sample I.D.		MADERA.S2					
		.GW					
Date Sampled		09/23/2015					
Date Prepared		09/23/2015					
Preparation Method							
Date Analyzed		09/23/2015					
Matrix		Groundwater					
Units		mg/L					
Dilution Factor		1					
Analytes	MDL	PQL	Results				
TPH DROs (C10 to C28)	0.0500	0.500	ND				
TPH OROs (C28+)	0.170	0.500	ND				

Our Lab I.D.		338418					
Surrogates	% Rec.Limit	% Rec.					
Surrogate Percent Recovery							
Chlorobenzene	70-120	105					

QUALITY CONTROL REPORT

QC Batch No: W1D-092315

Analytes	MS	MS DUP	RPD	MS/MSD	MS RPD				
	% REC	% REC	%	% Limit	% Limit				
Diesel	96	99	3.1	75-120	<20				



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Telephone: (805)644-2220

Attn: Jeff Zane

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Project ID: 1501-4101

Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: 8015B, TPH GROs (Gasoline Range Organics)

QC Batch No: W1H-092415

Our Lab I.D.		338418					
Client Sample I.D.		MADERA.S2					
		.GW					
Date Sampled		09/23/2015					
Date Prepared		09/25/2015					
Preparation Method							
Date Analyzed		09/25/2015					
Matrix		Groundwater					
Units		ug/L					
Dilution Factor		1					
Analytes	MDL	PQL	Results				
TPH GROs (C6 to C10)	50.0	50.0	ND				

Our Lab I.D.		338418					
Surrogates	% Rec.Limit	% Rec.					
Surrogate Percent Recovery							
Bromofluorobenzene	70-120	82					

QUALITY CONTROL REPORT

QC Batch No: W1H-092415

Analytes	MS	MS DUP	RPD						
	% REC	% REC	%						
Benzene	88	90	2.2						
Toluene	83	84	1.2						



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Project ID: 1501-4101

Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: 8081A, Organochlorine Pesticides

QC Batch No: 092515-1

Our Lab I.D.		338418				
Client Sample I.D.		MADERA.S2 .GW				
Date Sampled		09/23/2015				
Date Prepared		09/25/2015				
Preparation Method						
Date Analyzed		09/25/2015				
Matrix		Groundwater				
Units		ug/L				
Dilution Factor		1				
Analytes	MDL	PQL	Results			
Aldrin	0.0070	0.0400	ND			
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.0090	0.120	ND			
Beta-Hexachlorocyclohexane (Beta-BHC)	0.0050	0.110	ND			
Gamma-Chlordane	0.0090	0.400	ND			
alpha-Chlordane	0.0170	0.400	ND			
4,4'-DDD (DDD)	0.0080	0.100	ND			
4,4'-DDE (DDE)	0.0070	0.0900	ND			
4,4'-DDT (DDT)	0.0060	0.0400	ND			
delta-Hexachlorocyclohexane (Delta-BHC)	0.0080	0.110	ND			
dieldrin	0.0090	0.0500	ND			
Endosulfan I	0.0100	0.0600	ND			
Endosulfan II	0.0090	0.0900	ND			
Endosulfan sulfate	0.0100	0.0700	ND			
Endrin	0.0090	0.0800	ND			
Endrin aldehyde	0.0150	0.0900	ND			
Endrin ketone	0.0060	0.0700	ND			
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.0060	0.0600	ND			
Heptachlor	0.0020	0.0300	ND			
Heptachlor epoxide	0.0050	0.0700	ND			
Methoxychlor	0.0050	0.100	ND			
Toxaphene	2.00	10.0	ND			
Chlordane, Total	10.0	10.0	ND			



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ANALYTICAL RESULTS

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Project ID: 1501-4101

Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		338418				
Surrogates	% Rec.Limit	% Rec.				
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	72				

QUALITY CONTROL REPORT

QC Batch No: 092515-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	84	91	8.0	42-122	<30					
4,4'-DDT (DDT)	102	113	10.2	25-160	<30					
dieldrin	98	109	10.6	36-146	<30					
Endrin	99	107	7.8	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	93	96	3.2	32-127	<30					
Heptachlor	91	97	6.4	34-111	<30					



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Project ID: 1501-4101

Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 092515-1

Our Lab I.D.		338418					
Client Sample I.D.		MADERA.S2					
		.GW					
Date Sampled		09/23/2015					
Date Prepared		09/25/2015					
Preparation Method							
Date Analyzed		09/25/2015					
Matrix		Groundwater					
Units		ug/L					
Dilution Factor		1					
Analytes	MDL	PQL	Results				
Aroclor-1016 (PCB-1016)	0.279	0.650	ND				
Aroclor-1221 (PCB-1221)	0.558	1.00	ND				
Aroclor-1232 (PCB-1232)	0.225	0.650	ND				
Aroclor-1242 (PCB-1242)	0.225	0.650	ND				
Aroclor-1248 (PCB-1248)	0.225	0.650	ND				
Aroclor-1254 (PCB-1254)	0.225	0.650	ND				
Aroclor-1260 (PCB-1260)	0.225	0.650	ND				

Our Lab I.D.		338418					
Surrogates	% Rec.Limit	% Rec.					
Surrogate Percent Recovery							
Decachlorobiphenyl	43-169	72					

QUALITY CONTROL REPORT

QC Batch No: 092515-1

Analytes	LCS	LCS DUP	LCS RPD	LCS/LCSD	LCS RPD				
	% REC	% REC	% REC	% Limit	% Limit				
Aroclor-1260 (PCB-1260)	112	96	15.4	39-150	<30				



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Project ID: 1501-4101

Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: 8260B, Acrolein and Acrylonitrile

QC Batch No: W1B-092415

Our Lab I.D.		338418				
Client Sample I.D.		MADERA.S2				
		.GW				
Date Sampled		09/23/2015				
Date Prepared		09/24/2015				
Preparation Method						
Date Analyzed		09/24/2015				
Matrix		Groundwater				
Units		ug/L				
Dilution Factor		1				
Analytes	MDL	PQL	Results			
Acrolein (2-Propenal)	5.00	50.0	ND			
Acrylonitrile (2-Propenenitrile)	5.00	50.0	ND			

Our Lab I.D.		338418				
Surrogates	% Rec.Limit	% Rec.				
Bromofluorobenzene	70-120	102				
Dibromofluoromethane	70-120	84				
Toluene-d8	70-120	98				

QUALITY CONTROL REPORT

QC Batch No: W1B-092415

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit				
Benzene	83	85	2.4	75-120	15				
Chlorobenzene	113	115	1.8	75-120	15				
1,1-Dichloroethene	81	85	4.8	75-120	15				
Toluene	106	108	1.9	75-120	15				
Trichloroethene	93	94	1.1	75-120	15				



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Project ID: 1501-4101

Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: 8260B, ETHANOL AND METHANOL

QC Batch No: W1A-092515

Our Lab I.D.		338418				
Client Sample I.D.		MADERA.S2				
		.GW				
Date Sampled		09/23/2015				
Date Prepared		09/25/2015				
Preparation Method						
Date Analyzed		09/25/2015				
Matrix		Groundwater				
Units		ug/L				
Dilution Factor		1				
Analytes	MDL	PQL	Results			
Ethanol	250	500	ND			
Methanol	500	1000	ND			

QUALITY CONTROL REPORT

QC Batch No: W1A-092515

Analytes	MS	MS DUP	RPD	MS/MSD	MS RPD				
	% REC	% REC	%	% Limit	% Limit				
Ethanol	84	91	8.0	70-120	15				
Methanol	84	86	2.4	70-120	15				



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Project ID: 1501-4101

Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: 8260B, Volatile Organic Compounds + Oxygenates

QC Batch No: W1B-092415

Our Lab I.D.		338418				
Client Sample I.D.		MADERA.S2				
		.GW				
Date Sampled		09/23/2015				
Date Prepared		09/24/2015				
Preparation Method						
Date Analyzed		09/24/2015				
Matrix		Groundwater				
Units		ug/L				
Dilution Factor		1				
Analytes	MDL	PQL	Results			
Acetone	2.52	5.00	ND			
Benzene	0.0970	1.00	ND			
Bromobenzene (Phenyl bromide)	0.291	1.00	ND			
Bromochloromethane (Chlorobromomethane)	0.169	1.00	ND			
Bromodichloromethane (Dichlorobromomethane)	0.169	1.00	ND			
Bromoform (Tribromomethane)	0.284	5.00	ND			
Bromomethane (Methyl bromide)	0.174	3.00	ND			
2-Butanone (MEK, Methyl ethyl ketone)	5.00	5.00	ND			
n-Butylbenzene	0.363	1.00	ND			
sec-Butylbenzene	0.338	1.00	ND			
tert-Butylbenzene	0.235	1.00	ND			
Carbon disulfide	0.463	1.00	ND			
Carbon tetrachloride (Tetrachloromethane)	0.144	1.00	ND			
Chlorobenzene	0.176	1.00	ND			
Chloroethane	0.328	3.00	ND			
2-Chloroethyl vinyl ether	0.665	5.00	ND			
Chloroform (Trichloromethane)	0.247	1.00	ND			
Chloromethane (Methyl chloride)	0.174	3.00	ND			
4-Chlorotoluene (p-Chlorotoluene)	0.147	1.00	ND			
2-Chlorotoluene (o-Chlorotoluene)	0.311	1.00	ND			
DIPE	0.530	2.00	ND			
1,2-Dibromo-3-chloropropane (DBCP)	0.333	5.00	ND			
Dibromochloromethane	0.300	1.00	ND			
1,2-Dibromoethane (EDB, Ethylene dibromide)	0.226	1.00	ND			
Dibromomethane	0.316	1.00	ND			



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Project ID: 1501-4101

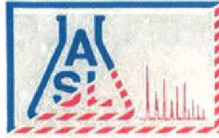
Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: 8260B, Volatile Organic Compounds + Oxygenates

QC Batch No: W1B-092415

Our Lab I.D.		338418				
Client Sample I.D.		MADERA.S2				
		.GW				
Date Sampled		09/23/2015				
Date Prepared		09/24/2015				
Preparation Method						
Date Analyzed		09/24/2015				
Matrix		Groundwater				
Units		ug/L				
Dilution Factor		1				
Analytes	MDL	PQL	Results			
1,2-Dichlorobenzene (o-Dichlorobenzene)	0.358	1.00	ND			
1,3-Dichlorobenzene (m-Dichlorobenzene)	0.333	1.00	ND			
1,4-Dichlorobenzene (p-Dichlorobenzene)	0.384	1.00	ND			
Dichlorodifluoromethane	0.244	3.00	ND			
1,1-Dichloroethane	0.372	1.00	ND			
1,2-Dichloroethane	0.182	1.00	ND			
1,1-Dichloroethene (1,1-Dichloroethylene)	0.355	1.00	ND			
cis-1,2-Dichloroethene	0.279	1.00	ND			
trans-1,2-Dichloroethene	0.176	1.00	ND			
1,2-Dichloropropane	0.359	1.00	ND			
1,3-Dichloropropane	0.205	1.00	ND			
2,2-Dichloropropane	0.341	1.00	ND			
1,1-Dichloropropene	0.210	1.00	ND			
trans-1,3-Dichloropropene	0.100	1.00	ND			
cis-1,3-Dichloropropene	0.122	1.00	ND			
ETBE	0.460	2.00	ND			
Ethylbenzene	0.209	1.00	ND			
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	0.413	3.00	ND			
2-Hexanone	0.944	5.00	ND			
Isopropylbenzene	0.291	1.00	ND			
p-Isopropyltoluene (4-Isopropyltoluene)	0.468	1.00	ND			
MTBE	0.240	2.00	ND			
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	1.71	5.00	ND			
Methylene chloride (Dichloromethane, DCM)	1.00	5.00	ND			
Naphthalene	0.375	1.00	ND			
n-Propylbenzene	0.254	1.00	ND			
TAME	0.440	2.00	ND			
Styrene	0.122	1.00	ND			
TBA	4.75	10.0	ND			
1,1,1,2-Tetrachloroethane	0.141	1.00	ND			
1,1,2,2-Tetrachloroethane	0.579	1.00	ND			



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Project ID: 1501-4101
Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: 8260B, Volatile Organic Compounds + Oxygenates

QC Batch No: W1B-092415

Our Lab I.D.		338418					
Client Sample I.D.		MADERA.S2					
		.GW					
Date Sampled		09/23/2015					
Date Prepared		09/24/2015					
Preparation Method							
Date Analyzed		09/24/2015					
Matrix		Groundwater					
Units		ug/L					
Dilution Factor		1					
Analytes	MDL	PQL	Results				
Tetrachloroethene (Tetrachloroethylene)	0.421	1.00	ND				
Toluene (Methyl benzene)	0.282	1.00	ND				
1,2,3-Trichlorobenzene	0.219	1.00	ND				
1,2,4-Trichlorobenzene	0.451	1.00	ND				
1,1,1-Trichloroethane	0.150	1.00	ND				
1,1,2-Trichloroethane	0.233	1.00	ND				
Trichloroethene (TCE)	0.117	1.00	ND				
Trichlorofluoromethane	0.294	1.00	ND				
1,2,3-Trichloropropane	0.303	1.00	ND				
1,2,4-Trimethylbenzene	0.451	1.00	ND				
1,3,5-Trimethylbenzene	0.219	1.00	ND				
Vinyl acetate	1.62	5.00	ND				
Vinyl chloride (Chloroethene)	0.331	3.00	ND				
o-Xylene	0.262	1.00	ND				
m- & p-Xylenes	0.476	2.00	ND				

Comment(s):

Comment

Our Lab I.D.		338418					
Surrogates	% Rec.Limit	% Rec.					
Surrogate Percent Recovery							
Bromofluorobenzene	70-120	102					
Dibromofluoromethane	70-120	84					
Toluene-d8	70-120	98					

QUALITY CONTROL REPORT

QC Batch No: W1B-092415

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit				
Benzene	83	85	2.4	75-120	15				
Chlorobenzene	113	115	1.8	75-120	15				
1,1-Dichloroethene (1,1-Dichloroethylene)	81	85	4.8	75-120	15				
MTBE	105	104	<1	75-120	15				



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ANALYTICAL RESULTS

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Project ID: 1501-4101

Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: 8260B, Volatile Organic Compounds + Oxygenates

QUALITY CONTROL REPORT

QC Batch No: W1B-092415

Analytes	MS	MS DUP	RPD	MS/MSD	MS RPD					
	% REC	% REC	%	% Limit	% Limit					
Toluene (Methyl benzene)	106	108	1.9	75-120	15					
Trichloroethene (TCE)	93	94	1.1	75-120	15					



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ANALYTICAL RESULTS

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Telephone: (805)644-2220

Attn: Jeff Zane

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Project ID: 1501-4101

Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: 8270C, Semivolatile Organics

QC Batch No: 092915-1

Our Lab I.D.		338418				
Client Sample I.D.		MADERA.S2				
		.GW				
Date Sampled		09/23/2015				
Date Prepared		09/29/2015				
Preparation Method						
Date Analyzed		09/29/2015				
Matrix		Groundwater				
Units		ug/L				
Dilution Factor		1				
Analytes	MDL	PQL	Results			
Acenaphthene	1.86	10.0	ND			
Acenaphthylene	1.83	10.0	ND			
Anthracene	1.92	10.0	ND			
Benz(a)anthracene (Benzo(a)anthracene)	1.41	10.0	ND			
Benzo(a)pyrene	1.47	10.0	ND			
Benzo(b)fluoranthene	1.38	10.0	ND			
Benzo(ghi)perylene	1.98	10.0	ND			
Benzo(k)fluoranthene	1.44	10.0	ND			
Benzidine	3.86	20.0	ND			
Benzoic acid	1.29	10.0	ND			
Benzyl alcohol	1.98	10.0	ND			
Bis(2-chloroethoxy)methane	1.77	10.0	ND			
Bis(2-chloroethyl)ether	1.29	10.0	ND			
Bis(2-chloroisopropyl) ether	1.47	10.0	ND			
Bis(2-ethylhexyl) phthalate	0.780	10.0	ND			
4-Bromophenyl phenyl ether	2.19	10.0	ND			
Butyl benzyl phthalate (Benzyl butyl phthalate)	2.73	10.0	ND			
4-Chloro-3-methylphenol (p-Chloro-m-cresol)	0.500	1.00	ND			
4-Chloroaniline	1.74	10.0	ND			
2-Chloronaphthalene	1.74	10.0	ND			
2-Chlorophenol (o-Chlorophenol)	0.600	1.00	ND			
4-Chlorophenyl phenyl ether	1.98	10.0	ND			
Chrysene	1.41	10.0	ND			
Di-n-butyl phthalate	1.14	10.0	ND			
Di-n-octyl phthalate (Dioctyl ester)	1.80	10.0	ND			
Dibenz(a,h)anthracene	1.92	10.0	ND			



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ANALYTICAL RESULTS

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Project ID: 1501-4101

Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: 8270C, Semivolatile Organics

QC Batch No: 092915-1

Our Lab I.D.		338418				
Client Sample I.D.		MADERA.S2 .GW				
Date Sampled		09/23/2015				
Date Prepared		09/29/2015				
Preparation Method						
Date Analyzed		09/29/2015				
Matrix		Groundwater				
Units		ug/L				
Dilution Factor		1				
Analytes	MDL	PQL	Results			
Dibenzofuran	1.95	10.0	ND			
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.32	10.0	ND			
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.38	10.0	ND			
1,4-Dichlorobenzene	1.38	10.0	ND			
3,3'-Dichlorobenzidine	2.40	20.0	ND			
2,4-Dichlorophenol	0.600	1.00	ND			
Diethyl phthalate (Diethyl ester)	1.74	10.0	ND			
2,4-Dimethylphenol	0.600	1.00	ND			
Dimethyl phthalate (Dimethyl ester)	3.75	10.0	ND			
2,4-Dinitrophenol	0.400	1.00	ND			
2,4-Dinitrotoluene	1.77	10.0	ND			
2,6-Dinitrotoluene (2,6-DNT)	1.80	10.0	ND			
1,2-Diphenylhydrazine	0.530	10.0	ND			
Fluoranthene	1.59	10.0	ND			
Fluorene	1.92	10.0	ND			
Hexachlorobenzene	2.01	10.0	ND			
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	1.05	20.0	ND			
Hexachlorocyclopentadiene	0.720	10.0	ND			
Hexachloroethane	1.11	10.0	ND			
Indeno(1,2,3-cd)pyrene	1.92	10.0	ND			
Isophorone	1.74	10.0	ND			
2-methyl-4,6-Dinitrophenol	0.880	1.00	ND			
2-Methylnaphthalene	1.74	10.0	ND			
2-Methylphenol (o-Cresol, 2-Cresol)	0.840	1.00	ND			
4-Methylphenol (p-Cresol, 4-Cresol)	0.560	1.00	ND			
N-Nitroso-Di-n-propylamine	1.74	10.0	ND			
N-Nitrosodimethylamine (NDMA)	1.29	10.0	ND			
N-Nitrosodiphenylamine	1.65	10.0	ND			
Naphthalene	1.74	10.0	ND			
2-Nitroaniline	1.65	10.0	ND			
3-Nitroaniline	1.71	10.0	ND			
4-Nitroaniline	1.80	10.0	ND			
Nitrobenzene (NB)	1.53	10.0	ND			



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ANALYTICAL RESULTS

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Project ID: 1501-4101
Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: 8270C, Semivolatile Organics

QC Batch No: 092915-1

Our Lab I.D.		338418				
Client Sample I.D.		MADERA.S2				
		.GW				
Date Sampled		09/23/2015				
Date Prepared		09/29/2015				
Preparation Method						
Date Analyzed		09/29/2015				
Matrix		Groundwater				
Units		ug/L				
Dilution Factor		1				
Analytes	MDL	PQL	Results			
2-Nitrophenol (o-Nitrophenol)	0.500	1.00	ND			
4-Nitrophenol	0.500	1.00	ND			
Pentachlorophenol	0.200	1.00	ND			
Phenanthrene	2.13	10.0	ND			
Phenol	0.840	1.00	ND			
Pyrene	1.83	10.0	ND			
1,2,4-Trichlorobenzene	1.62	10.0	ND			
2,4,5-Trichlorophenol	0.870	1.00	ND			
2,4,6-Trichlorophenol	0.990	1.00	ND			

Our Lab I.D.		338418				
Surrogates	% Rec.Limit	% Rec.				
Surrogate Percent Recovery						
2-Fluorophenol	21-105	30				
Phenol-d6	10-107	26				
2,4,6-Tribromophenol	10-123	85				
Nitrobenzene-d5	35-114	63				
2-Fluorobiphenyl	18-116	57				
Terphenyl-d14	33-141	95				

QUALITY CONTROL REPORT

QC Batch No: 092915-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit				
Acenaphthene	75	64	15.8	43-118	<30				
4-Chloro-3-methylphenol (p-Chloro-m-cresol)	89	77	14.5	23-117	<30				
2-Chlorophenol (o-Chlorophenol)	72	62	14.9	27-113	<30				
1,4-Dichlorobenzene	67	59	12.7	36-105	<30				
2,4-Dinitrotoluene	88	86	2.3	24-120	<30				
N-Nitroso-Di-n-propylamine	102	85	18.2	41-116	<30				
4-Nitrophenol	23	22	4.4	10-133	<30				
Pentachlorophenol	55	72	26.8	9-118	<30				
Phenol	51	43	17.0	12-110	<30				



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ANALYTICAL RESULTS

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Project ID: 1501-4101

Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: 8270C, Semivolatile Organics
QUALITY CONTROL REPORT

QC Batch No: 092915-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Pyrene	103	97	6.0	26-127	<30					
1,2,4-Trichlorobenzene	84	77	8.7	39-98	<30					



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ANALYTICAL RESULTS

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Telephone: (805)644-2220

Attn: Jeff Zane

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Project ID: 1501-4101

Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: 8270C, 1,4-Dioxane

QC Batch No: 092915-1

Our Lab I.D.			338418				
Client Sample I.D.			MADERA.S2 .GW				
Date Sampled			09/23/2015				
Date Prepared			09/29/2015				
Preparation Method							
Date Analyzed			09/29/2015				
Matrix			Groundwater				
Units			ug/L				
Dilution Factor			1				
Analytes	MDL	PQL	Results				
1,4-Dioxane	2.00	10.0	ND				

Our Lab I.D.			338418				
Surrogates	% Rec.Limit		% Rec.				
Surrogate Percent Recovery							
Nitrobenzene-d5	35-114		63				

QUALITY CONTROL REPORT

QC Batch No: 092915-1

	LCS	LCS DUP	LCS RPD	LCS/LCSD	LCS RPD				
Analytes	% REC	% REC	% REC	% Limit	% Limit				
1,4-Dioxane	53	50	5.8	12-110	<30				



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Project ID: 1501-4101

Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: SM2340-C, Hardness (EDTA Titrimetric Method)

QC Batch No: 092415-1

Our Lab I.D.		338418				
Client Sample I.D.		MADERA.S2				
		.GW				
Date Sampled		09/23/2015				
Date Prepared		09/24/2015				
Preparation Method						
Date Analyzed		09/24/2015				
Matrix		Groundwater				
Units		mg/L				
Dilution Factor		1				
Analytes	MDL	PQL	Results			
Conventionals						
Hardness (Ca,Mg) as CaCO3	5.00	10.0	846			

QUALITY CONTROL REPORT

QC Batch No: 092415-1

	LCS	LCS DUP	LCS RPD	LCS/LCSD	LCS RPD				
Analytes	% REC	% REC	% REC	% Limit	% Limit				
Conventionals									
Hardness (Ca,Mg) as CaCO3	100	100	<1	80-120	20				



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ANALYTICAL RESULTS

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Attn: Jeff Zane

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Project ID: 1501-4101

Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: SM2540-C, Total Dissolved Solids (TDS)

QC Batch No: 092315-1

Our Lab I.D.		338418					
Client Sample I.D.		MADERA.S2					
		.GW					
Date Sampled		09/23/2015					
Date Prepared		09/23/2015					
Preparation Method							
Date Analyzed		09/23/2015					
Matrix		Groundwater					
Units		mg/L					
Dilution Factor		1					
Analytes		MDL	PQL	Results			
Conventional							
Solids, Total Dissolved (TDS)		5.00	10.0	1450			

QUALITY CONTROL REPORT

QC Batch No: 092315-1

Analytes	LCS	LCS DUP	LCS RPD	LCS/LCSD	LCS RPD				
	% REC	% REC	% REC	% Limit	% Limit				
Conventional									
Solids, Total Dissolved (TDS)	99	103	3.9	80-120	20				



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ANALYTICAL RESULTS

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Attn: Jeff Zane

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Project ID: 1501-4101

Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: SM2540-D, Total Suspended Solids (TSS)

QC Batch No: 092815-1

Our Lab I.D.		338418				
Client Sample I.D.		MADERA.S2 .GW				
Date Sampled		09/23/2015				
Date Prepared		09/28/2015				
Preparation Method						
Date Analyzed		09/28/2015				
Matrix		Groundwater				
Units		mg/L				
Dilution Factor		1				
Analytes	MDL	PQL	Results			
Conventional						
Solids, Total Suspended (TSS)	5.00	10.0	5.00J			

QUALITY CONTROL REPORT

QC Batch No: 092815-1

	LCS	LCS DUP	LCS RPD	LCS/LCSD	LCS RPD					
Analytes	% REC	% REC	% REC	% Limit	% Limit					
Conventional										
Solids, Total Suspended (TSS)	101	99	2.0	80-120	20					



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Attn: Jeff Zane

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Project ID: 1501-4101

Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: SM2540-F, Settleable Solids

QC Batch No: 092415-1

Our Lab I.D.		338418				
Client Sample I.D.		MADERA.S2 .GW				
Date Sampled		09/23/2015				
Date Prepared		09/24/2015				
Preparation Method						
Date Analyzed		09/24/2015				
Matrix		Groundwater				
Units		mL/L/hr				
Dilution Factor		1				
Analytes	MDL	PQL	Results			
Conventionals						
Solids, Settleable (SS)	0.100	0.200	ND			

QUALITY CONTROL REPORT

QC Batch No: 092415-1

	SM	SM DUP	RPD	SM RPD					
Analytes	Result	Result	%	% Limit					
Conventionals									
Solids, Settleable (SS)	ND	ND	<1	20					



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ANALYTICAL RESULTS

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Project ID: 1501-4101

Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: SM4500-CN-E, Cyanide, Total (Colorimetric Method)

QC Batch No: 092815-1

Our Lab I.D.		338418					
Client Sample I.D.		MADERA.S2					
		.GW					
Date Sampled		09/23/2015					
Date Prepared		09/28/2015					
Preparation Method							
Date Analyzed		09/28/2015					
Matrix		Groundwater					
Units		mg/L					
Dilution Factor		1					
Analytes	MDL	PQL	Results				
Conventionals							
Cyanide	0.0200	0.0500	ND				

QUALITY CONTROL REPORT

QC Batch No: 092815-1

	LCS	LCS DUP	LCS RPD	LCS/LCSD	LCS RPD					
Analytes	% REC	% REC	% REC	% Limit	% Limit					
Conventionals										
Cyanide	100	99	1.0	80-120	20					



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ANALYTICAL RESULTS

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Project ID: 1501-4101

Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: SM4500-H-B, pH (Electrometric Method)

QC Batch No: 092315-1

Our Lab I.D.		338418				
Client Sample I.D.		MADERA.S2 .GW				
Date Sampled		09/23/2015				
Date Prepared		09/23/2015				
Preparation Method						
Date Analyzed		09/23/2015				
Matrix		Groundwater				
Units		pH Units				
Dilution Factor		1				
Analytes	MDL	PQL	Results			
Conventionals						
pH	0.0100	0.0100	7.88			

QUALITY CONTROL REPORT

QC Batch No: 092315-1

	LCS	LCS DUP	LCS RPD	LCS/LCSD	LCS RPD					
Analytes	% REC	% REC	% REC	% Limit	% Limit					
Conventionals										
pH	100	100	<1	95-105	10					



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ANALYTICAL RESULTS

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Project ID: 1501-4101

Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: SM4500-S-2-D, Sulfide (Methylene Blue Method)

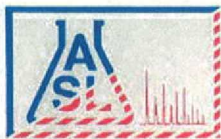
QC Batch No: 092315-1

Our Lab I.D.		338418					
Client Sample I.D.		MADERA.S2					
		.GW					
Date Sampled		09/23/2015					
Date Prepared		09/23/2015					
Preparation Method							
Date Analyzed		09/23/2015					
Matrix		Groundwater					
Units		mg/L					
Dilution Factor		1					
Analytes	MDL	PQL	Results				
Conventionals							
Sulfide, total	0.0100	0.0200	ND				

QUALITY CONTROL REPORT

QC Batch No: 092315-1

Analytes	SM Result	SM DUP Result	RPD %	SM RPD % Limit					
Conventionals									
Sulfide, total	ND	ND	<1	20					



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Project ID: 1501-4101

Project Name: Arroyo Simi GW Sample

ASL Job Number	Submitted	Client
65921	09/23/2015	PADRE

Method: SM5210B, Biochemical Oxygen Demand (BOD)

QC Batch No: 092815-1

Our Lab I.D.		338418				
Client Sample I.D.		MADERA.S2 .GW				
Date Sampled		09/23/2015				
Date Prepared		09/23/2015				
Preparation Method						
Date Analyzed		09/28/2015				
Matrix		Groundwater				
Units		mg/L				
Dilution Factor		1				
Analytes	MDL	PQL	Results			
Conventionals						
BOD @ 20C	1.00	5.00	ND			

QUALITY CONTROL REPORT

QC Batch No: 092815-1

	LCS	LCS DUP	LCS RPD	LCS/LCSD	LCS RPD					
Analytes	% REC	% REC	% REC	% Limit	% Limit					
Conventionals										
BOD @ 20C	95	94	1.2	80-120	20					



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Supplemental Report 1

**WORK ORDER NUMBER: 15-09-1829***The difference is service*

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For**Client:** American Scientific Laboratories, LLC**Client Project Name:** 65921**Attention:** Alen Hosepian
2520 North San Fernando Road
Los Angeles, CA 90065-1324Approved for release on 09/30/2015 by:
Carla Hollowell
Project Manager

ResultLink ▶

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Work Order Number: 15-09-1829

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Work Order Narrative

Work Order: 15-09-1829

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Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 09/23/15. They were assigned to Work Order 15-09-1829.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.


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Sample Summary

Client: American Scientific Laboratories, LLC	Work Order: 15-09-1829
2520 North San Fernando Road	Project Name: 65921
Los Angeles, CA 90065-1324	PO Number:
	Date/Time Received: 09/23/15 14:45
	Number of Containers: 2

Attn: Alen Hosepians

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
338418	15-09-1829-1	09/23/15 09:25	2	Aqueous


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Detections Summary

Client: American Scientific Laboratories, LLC	Work Order: 15-09-1829
2520 North San Fernando Road	Project Name: 65921
Los Angeles, CA 90065-1324	Received: 09/23/15

Attn: Alen Hosepian

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Client SampleID

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
338418 (15-09-1829-1)						
Copper	4.61		1.00	ug/L	EPA 6020	EPA 3Q20A Total
Lead	0.277	J	0.0898*	ug/L	EPA 6020	EPA 3Q20A Total
Nickel	17.8		1.00	ug/L	EPA 6020	EPA 3Q20A Total
Selenium	30.4		1.00	ug/L	EPA 6020	EPA 3Q20A Total

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown



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Analytical Report

American Scientific Laboratories, LLC
2520 North San Fernando Road
Los Angeles, CA 90065-1324

Date Received: 09/23/15
Work Order: 15-09-1829
Preparation: EPA 3020A Total
Method: EPA 6020
Units: ug/L

Project: 65921

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
338418	15-09-1829-1-A	09/23/15 09:25	Aqueous	ICP/MS 03	09/24/15	09/29/15 04:05	150924LA2

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Copper	4.61	1.00	0.140	1.00	
Lead	0.277	1.00	0.0898	1.00	J
Nickel	17.8	1.00	0.132	1.00	
Selenium	30.4	1.00	0.168	1.00	
Silver	ND	1.00	0.111	1.00	
Thallium	ND	1.00	0.101	1.00	

Method Blank	096-06-003-4935	N/A	Aqueous	ICP/MS 03	09/24/15	09/24/15 18:47	150924LA2
--------------	-----------------	-----	---------	-----------	----------	-------------------	-----------

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Copper	ND	1.00	0.140	1.00	
Lead	ND	1.00	0.0898	1.00	
Nickel	ND	1.00	0.132	1.00	
Selenium	ND	1.00	0.168	1.00	
Silver	ND	1.00	0.111	1.00	
Thallium	ND	1.00	0.101	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



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Quality Control - Spike/Spike Duplicate

American Scientific Laboratories, LLC
2520 North San Fernando Road
Los Angeles, CA 90065-1324

Date Received: 09/23/15
Work Order: 15-09-1829
Preparation: EPA 3020A Total
Method: EPA 6020

Project: 65921

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
15-09-1642-10	Sample	Aqueous	ICP/MS 03	09/24/15	09/24/15 19:29	150924SA2				
15-09-1642-10	Matrix Spike	Aqueous	ICP/MS 03	09/24/15	09/24/15 19:01	150924SA2				
15-09-1642-10	Matrix Spike Duplicate	Aqueous	ICP/MS 03	09/24/15	09/24/15 19:05	150924SA2				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Copper	ND	100.0	100.8	101	100.5	101	72-108	0	0-10	
Lead	ND	100.0	111.5	111	111.6	112	79-121	0	0-10	
Nickel	3.241	100.0	103.2	100	103.3	100	68-122	0	0-10	
Selenium	ND	100.0	99.06	99	96.16	96	59-125	3	0-12	
Silver	ND	50.00	50.38	101	52.64	105	68-128	4	0-14	
Thallium	ND	100.0	110.6	111	111.0	111	73-121	0	0-11	

RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - PDS

American Scientific Laboratories, LLC
2520 North San Fernando Road
Los Angeles, CA 90065-1324

Date Received: 09/23/15
Work Order: 15-09-1829
Preparation: EPA 3020A Total
Method: EPA 6020

Project: 65921

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
15-09-1642-10	Sample	Aqueous	ICP/MS 03	09/24/15 00:00	09/24/15 19:29	150924SA2
15-09-1642-10	PDS	Aqueous	ICP/MS 03	09/24/15 00:00	09/24/15 19:08	150924SA2
Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Copper	ND	100.0	95.99	96	75-125	
Lead	ND	100.0	107.5	107	75-125	
Nickel	3.241	100.0	98.40	95	75-125	
Selenium	ND	100.0	86.55	87	75-125	
Silver	ND	50.00	48.47	97	75-125	
Thallium	ND	100.0	106.1	106	75-125	

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RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS

American Scientific Laboratories, LLC
2520 North San Fernando Road
Los Angeles, CA 90065-1324

Date Received: 09/23/15
Work Order: 15-09-1829
Preparation: EPA 3020A Total
Method: EPA 6020

Project: 65921

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
096-06-003-4935	LCS	Aqueous	ICP/MS 03	09/24/15	09/24/15 18:51	150924LA2
Parameter		Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Copper		100.0	98.97	99	80-120	
Lead		100.0	98.86	99	80-120	
Nickel		100.0	95.78	96	80-120	
Selenium		100.0	89.60	90	80-120	
Silver		50.00	50.58	101	80-120	
Thallium		100.0	95.20	95	80-120	



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Glossary of Terms and Qualifiers

Work Order: 15-09-1829

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Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY

15-09-1829

DATE: 9/23/15

PAGE: 1 OF 1

[illegible]

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: American Scientific Labs

DATE: 09 / 23 / 2015

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC5 (CF:-0.2°C); Temperature (w/o CF): 3.0 °C (w/ CF): 2.8 °C; ☐ Blank ☒ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 802

CUSTODY SEAL:

Cooler ☐ Present and Intact

☐ Present but Not Intact

☒ Not Present

☐ N/A

Checked by: 802

Sample(s) ☐ Present and Intact

☐ Present but Not Intact

☒ Not Present

☐ N/A

Checked by: 689

SAMPLE CONDITION:

Yes No N/A

Chain-of-Custody (COC) document(s) received with samples ☒ ☐ ☐

COC document(s) received complete ☒ ☐ ☐
☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers

☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time

Sampler's name indicated on COC ☐ ☐ ☒

Sample container label(s) consistent with COC ☒ ☐ ☐

Sample container(s) intact and in good condition ☒ ☐ ☐

Proper containers for analyses requested ☒ ☐ ☐

Sufficient volume/mass for analyses requested ☒ ☐ ☐

Samples received within holding time ☒ ☐ ☐

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ ☐ ☒

Proper preservation chemical(s) noted on COC and/or sample container ☒ ☐ ☐

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals

Container(s) for certain analysis free of headspace ☐ ☐ ☒
☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)

☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)

Tedlar™ bag(s) free of condensation ☐ ☐ ☒

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA_h ☐ VOA_{na2} ☐ 100PJ ☐ 100PJ_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☒ 125PB_n
☐ 125PB_{znna} ☐ 250AGB ☐ 250CGB ☐ 250CGB_s ☐ 250PB ☐ 250PB_n ☐ 500AGB ☐ 500AGJ ☐ 500AGJ_s
☐ 500PB ☐ 1AGB ☐ 1AGB_{na2} ☐ 1AGB_s ☐ 1PB ☐ 1PB_{na} ☒ 500PB ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (_____) ☐ EnCores® (_____) ☐ TerraCores® (_____) ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (_____) ☐ _____ ☐ _____

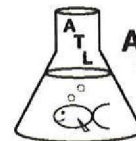
Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 619

s = H₂SO₄, u = ultra-pure, znna = Zn(CH₃CO₂)₂ + NaOH

Reviewed by: 681

LABORATORY REPORT



**Aquatic
Testing
Laboratories**

"dedicated to providing quality aquatic toxicity testing"

Date: September 28, 2015

Client: Padre Associates, Inc.
1861 Knoll Drive
Ventura, CA 93003
Attn: Jeff Zane

4350 Transport Street, Unit 107
Ventura, CA 93003
(805) 650-0546 FAX (805) 650-0756
CA ELAP Cert. No.: 1775

Laboratory No.: A-15092301-001
Sample I.D.: MADERA-S2-GW

Sample Control: The sample was received by ATL directly from the field, chilling in cooler with ice and with the chain of custody record attached.

Date Sampled: 09/23/15
Date Received: 09/23/15
Temp. Received: 21.2°C
Chlorine (TRC): 0.0 mg/l
Date Tested: 09/23/15 to 09/27/15

Sample Analysis: The following analyses were performed on your sample:

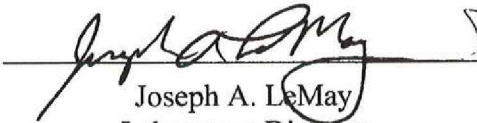
Fathead Minnow 96 hr Percent Survival Bioassay (EPA-821-R-02-012).

Attached are the test data generated from the analysis of your sample. Sample temperature was acceptable as sample was received directly from field in cooler with ice. All testing was conducted under the direct supervision of Joseph A. LeMay. Daily test readings were taken by Jacob LeMay (initials: J).

Result Summary:

<u>Sample ID.</u>	<u>Results</u>
MADERA-S2-GW	100% Survival (TUa = 0.0)

Quality Control: Reviewed and approved by:


Joseph A. LeMay
Laboratory Director

FATHEAD MINNOW PERCENT SURVIVAL TEST

EPA Method 2000.0



Lab No.: A-15092301-001

Client/ID: Padre Associates MADERA-S2-GW

Start Date: 09/23/2015

TEST SUMMARY

Species: *Pimephales promelas*.

Age: 12 (1-14) days.

Regulations: NPDES.

Test solution volume: 250 ml.

Feeding: prior to renewal at 48 hrs.

Number of replicates: 4.

Control water: Moderately hard reconstituted water.

Photoperiod: 16/8 hrs light/dark.

Source: In-laboratory Culture.

Test type: Static-Renewal.

Test Protocol: EPA-821-R-02-012.

Endpoints: Percent Survival at 96 hrs.

Test chamber: 600 ml beakers.

Temperature: 20 +/- 1°C.

Number of fish per chamber: 10.

QA/QC No.: RT-150902.

TEST DATA

		°C	DO	pH	# Dead				Analyst & Time of Readings
					A	B	C	D	
INITIAL	Control	20.8	8.5	8.5	0	0	0	0	✓
	100%	20.8	8.5	7.9	0	0	0	0	1300 9-23-15
24 Hr	Control	20.9	8.6	8.6	0	0	0	0	✓
	100%	20.9	8.1	8.0	0	0	0	0	1330 9-24-15
48 Hr	Control	20.6	7.7	7.7	0	0	0	0	✓
	100%	20.5	7.8	7.7	0	0	0	0	1330 9-25-15
Renewal	Control	20.7	8.5	8.0	0	0	0	0	✓
	100%	20.7	8.4	7.8	0	0	0	0	1330 9-25-15
72 Hr	Control	20.7	8.4	8.2	0	0	0	0	✓
	100%	20.6	8.0	7.9	0	0	0	0	1300 9-26-15
96 Hr	Control	20.8	8.0	7.7	0	0	0	0	✓
	100%	20.8	8.1	7.9	0	0	0	0	1300 9-27-15

Comments: - sample received directly from field in ice chest w/ice

Sample as received: Chlorine: 0 mg/l; Temp: 21.2 °C; DO: 5.2 mg/l; pH: 7.9 ;

Alkalinity: 198 mg/l; Hardness: 931 mg/l; Conductivity: 2384 umho; NH₃-N: 1.4 mg/l.

Sample aerated moderately (approx. 500 ml/min) to raise or lower DO? Yes / No.

Control: Alkalinity: 62 mg/l; Hardness: 90 mg/l; Conductivity: 312 umho.

Test solution aerated (not to exceed 100 bubbles/min) to maintain DO >4.0 mg/l? Yes No.

Original sample (-001) sample used for renewal kept at 0-6°C with minimal headspace.

Dissolved Oxygen (DO) readings in mg/l O₂.

RESULTS

Percent Survival In: Control: 100 % 100% Sample: 100 %



REFERENCE TOXICANT DATA

FATHEAD MINNOW ACUTE Reference Toxicant - SDS



QA/QC Batch No.: RT-150902

TEST SUMMARY

Species: *Pimephales promelas*.
Age: 14 days old.
Regulations: NPDES.
Test chamber volume: 250 ml.
Feeding: Prior to renewal at 48 hrs.
Temperature: 20 +/- 1°C.
Number of replicates: 2.
Dilution water: MHSF.

Source: In-lab culture.
Test type: Static-Renewal.
Test Protocol: EPA-821-R-02-012.
Endpoints: LC50 at 96 hrs.
Test chamber: 600 ml beakers.
Aeration: None.
Number of organisms per chamber: 10.
Photoperiod: 16/8 hrs light/dark.

TEST DATA

Date/Time: Analyst:	INITIAL			24 Hr						48 Hr				
	9-2-15 1030			9-3-15 1030						9-4-15 1030				
	2			2						2				
	°C	DO	pH	°C	DO	pH	# Dead			°C	DO	pH	# Dead	
							A	B					A	B
Control	20.5	9.0	8.3	20.6	8.4	8.1	0	0		20.8	8.4	8.1	0	0
1.0 mg/l	20.6	9.0	8.2	20.2	8.3	8.1	0	0		20.7	8.2	8.0	0	0
2.0 mg/l	20.6	9.0	8.2	20.3	8.2	8.1	0	0		20.6	8.0	8.0	0	0
4.0 mg/l	20.6	9.0	8.2	20.3	8.2	8.1	0	0		20.6	8.0	8.0	0	0
8.0 mg/l	20.6	9.0	8.1	20.4	8.2	8.1	10	10		-	-	-	-	-
16.0 mg/l	20.6	9.0	8.1	20.4	8.0	8.0	10	10		-	-	-	-	-

Date/Time: Analyst:	RENEWAL			72 Hr						96 Hr				
	9-4-15 1030			9-5-15 1030						9-6-15 1045				
	2			2						2				
	°C	DO	pH	°C	DO	pH	# Dead			°C	DO	pH	# Dead	
							A	B					A	B
Control	20.8	8.6	8.1	20.7	8.2	8.0	0	0		20.6	8.0	8.1	0	0
1.0 mg/l	20.9	8.6	8.1	20.8	8.3	8.1	0	0		20.6	8.1	8.2	0	0
2.0 mg/l	20.6	8.1	8.1	20.7	8.2	8.1	0	0		20.6	7.9	8.2	0	0
4.0 mg/l	20.6	8.1	8.1	20.7	8.3	8.1	0	0		20.6	7.9	8.1	0	0
8.0 mg/l	-	-	-	-	-	-	-	-		-	-	-	-	-
16.0 mg/l	-	-	-	-	-	-	-	-		-	-	-	-	-

Comments: Control: Alkalinity: 60 mg/l; Hardness: 71 mg/l; Conductivity: 317 umho.
SDS: Alkalinity: 61 mg/l; Hardness: 90 mg/l; Conductivity: 321 umho.

Concentration-response relationship acceptable? (see attached computer analysis):

☒ Yes (response curve normal)

☐ No (dose interrupted indicated or non-normal)

Acute Fish Test-96 Hr Survival

Start Date: 9/2/2015 10:30 **Test ID:** RT150902 **Sample ID:** REF-Ref Toxicant
End Date: 9/6/2015 10:45 **Lab ID:** CAATL-Aquatic Testing Labs **Sample Type:** SDS-Sodium dodecyl sulfate
Sample Date: 9/2/2015 **Protocol:** EPAAW02-EPA/821/R-02-01 **Test Species:** PP-Pimephales promelas
Comments:

Conc-mg/L	1	2
D-Control	1.0000	1.0000
1	1.0000	1.0000
2	1.0000	1.0000
4	1.0000	1.0000
8	0.0000	0.0000
16	0.0000	0.0000

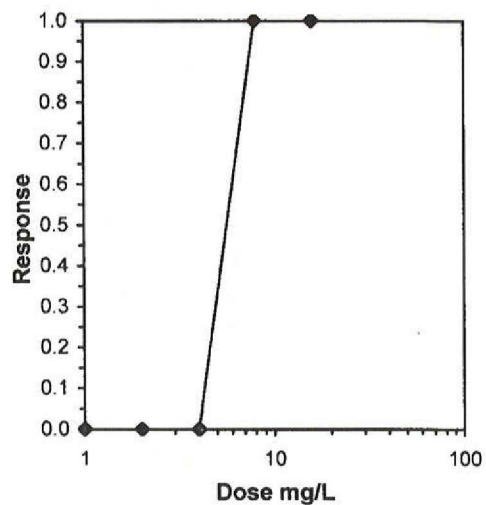
Conc-mg/L	Mean	N-Mean	Transform: Arcsin Square Root					N	Number Resp	Total Number
			Mean	Min	Max	CV%				
D-Control	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2		0	20
1	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2		0	20
2	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2		0	20
4	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2		0	20
8	0.0000	0.0000	0.1588	0.1588	0.1588	0.000	2		20	20
16	0.0000	0.0000	0.1588	0.1588	0.1588	0.000	2		20	20

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Normality of the data set cannot be confirmed				
Equality of variance cannot be confirmed				

Graphical Method

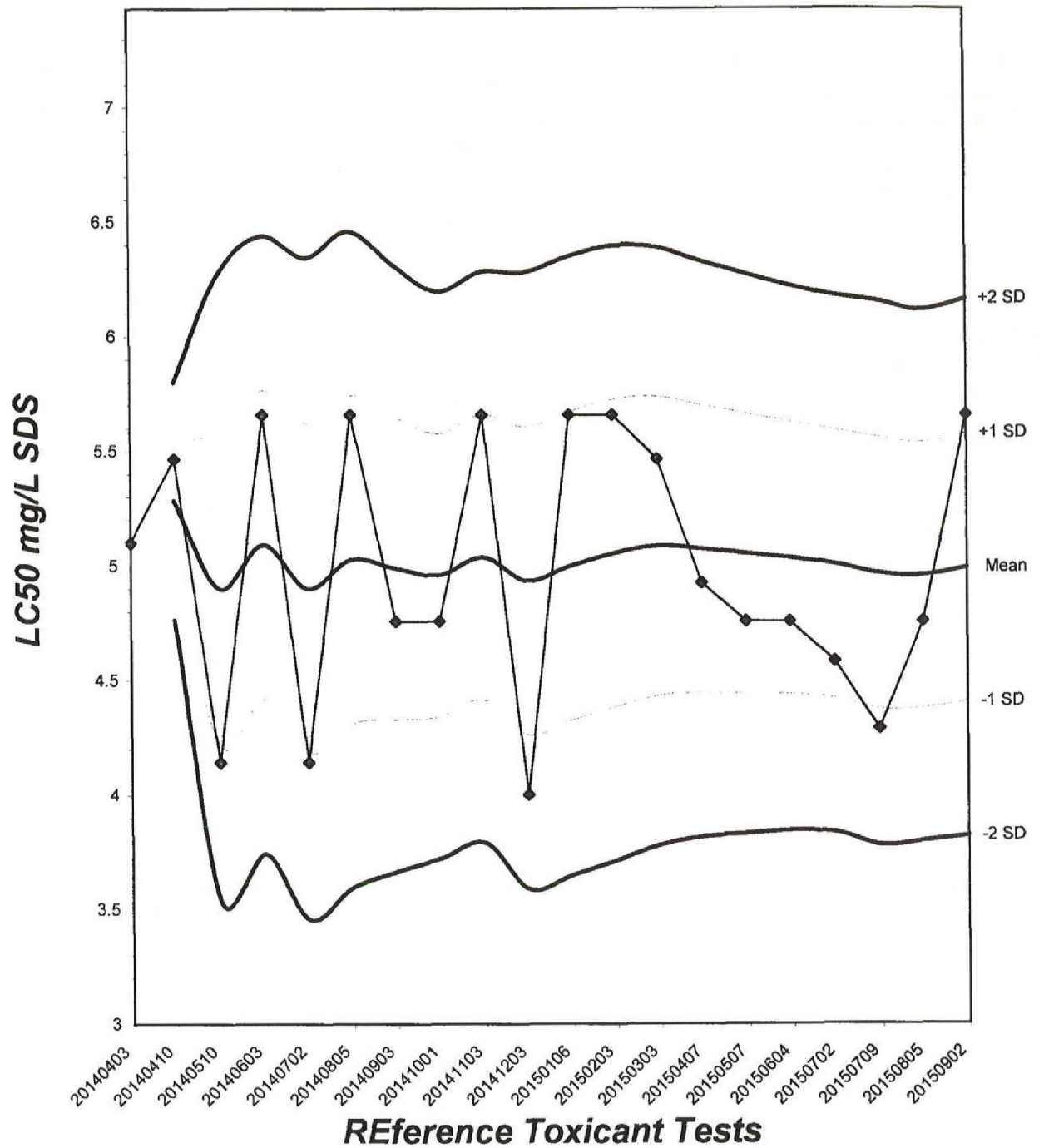
Trim Level	EC50
0.0%	5.6569

5.6569



Fathead Minnow Acute Laboratory Control Chart

CV% = 11.7



TEST ORGANISM LOG
FATHEAD MINNOW - LARVAL
(*Pimephales promelas*)



QA/QC BATCH NO.: RT-150902

SOURCE: In-Lab Culture

DATE HATCHED: 8-19-15

APPROXIMATE QUANTITY: 400

GENERAL APPEARANCE: juv

MORTALITIES 48 HOURS PRIOR TO
TO USE IN TESTING: 0

DATE USED IN LAB: 9/2/15

AVERAGE FISH WEIGHT: 0.006 gm

LOADING LIMITS: 0.65 gm/liter @ 20°C, 0.40 gm/liter @ 25°C

Approximately 1000 fish per 10 liters limit if held overnight for acclimation without filtration @ 20°C for fish with a mean weight of 0.006 gm.

Approximately 650 fish per 10 liters limit if held overnight for acclimation without filtration @ 25°C for fish with a mean weight of 0.006 gm.

200 ml test solution volume = 0.013 gm mean fish weight limit @ 20°C; 0.008 @ 25°C

250 ml test solution volume = 0.016 gm mean fish weight limit @ 20°C; 0.010 @ 25°C

ACCLIMATION WATER QUALITY:

Temp.: 20.5 °C

pH: 8.2 Ammonia: 0 mg/l NH₃-N

DO: 9.0 mg/l

Alkalinity: 60 mg/l

Hardness: 41 mg/l

READINGS RECORDED BY: gm DATE: 9-3-15

Test Temperature Chart

Test No: RT-150901

Date Tested: 09/02/15 to 09/06/15

Acceptable Range: 20 +/- 1°C

