APPENDIX E

Phase II Environmental Site Assessment

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RNC ENVIRONMENTAL, LLC
3326 M Street, Sacramento, CA 95816
(888) 485-3330 • rnc-enviro.com

September 15, 2016
RNC Project Number 1606B

Mr. Darren Berberian
c/o Pacific West Communities, Inc.
430 E. State St, Suite 100
Eagle ID, 83616

Re: Phase II Environmental Site Investigation
1936 Alum Rock Avenue, San Jose, CA

Dear Darren:

The attached report describes the process and results of the investigation we conducted at 1936 Alum Rock Avenue on your behalf. Here's a summary of the results:

- The southern portion of the site is covered by 2-3 feet of black soil, which appears to be the result of application of a dust suppressant. It contains low levels of petroleum hydrocarbons, and does not appear to represent a significant environmental concern at the site.
- One soil sample located in the approximate center of the site contained elevated concentrations of pesticides, including arsenic, lead, and DDE. This was likely due to a spill in an area used for handling pesticides at the farm supply store.
- Petroleum-contaminated soil from the former UST does not extend to any significant horizontal distance from the UST site. The extent to which it extends beneath the building is not known.
- While some migration of petroleum into the underlying aquifer has been documented, there are no monitoring wells completed in the underlying aquifer and conditions there are unknown.

In a related item, a recent Review Summary Report prepared by the State Water Resources Control Board (copy also attached), which recommends the following:

- Conduct regular groundwater monitoring to assess current groundwater quality and to calculate groundwater trends,
- Define the extent of groundwater contamination to the northwest, southwest, and east, and
- Collect an additional round of soil vapor samples to assess vapor intrusion with recognition that tight soil conditions may increase cross contamination with atmospheric air.

Based on these findings, we are recommending the following additional investigation:

- Soils near the pesticide-impacted location will eventually need to be excavated and transported off−site for disposal at a licensed facility. Additional soil sampling in this area

is recommended to confirm the volume of impacted soil, in order to estimate disposal costs.

- As noted, the black soil staining appears to be environmentally innocuous. Limited additional soil sampling in this area is recommended to confirm the innocuous nature of the layer.
- Three monitoring wells should be installed in the sand and gravel aquifer and two rounds of groundwater monitoring should be conducted prior to transfer of property ownership.

It should also be noted that additional subsurface investigations will be needed around the former UST area, following removal of the building and prior to redevelopment of the property. The scope of remediation that may be necessary near the former UST cannot be estimated at this time.

Sincerely,
RNC Environmental

Neil O'Hara

September 15, 2016

Mr. Neil O'Hara
RNC Environmental, LLC
3326 M Street
Sacramento, CA 95816

RE: Soil Boring and Sampling Investigation
1936 Alum Rock Ave
San Jose, CA

Dear Neil –

The purpose of this letter report is to document the results of a soil boring investigation conducted at the above referenced site on August 19, 2016. Existing subsurface information available in the publically available GeoTracker database was also reviewed as part of the investigation. GeoTracker contains "environmental data from regulated facilities in California" and is maintained by the State Water Resources Control Board (SWRCB). The investigation has identified three areas of environmental impact at the site, and recommendations are made for additional investigation of subsurface conditions.

Document Review

The site was formerly occupied by Farmer's Supply, and a 550-gallon underground storage tank (UST) used for gasoline was removed from just behind the main building circa 1984[1]. Three groundwater monitoring wells were installed near the former UST location in June 2007. **Figure 1** is a site map showing features of interest.

Soil samples from well installation[2] clearly indicate elevated concentrations of petroleum constituents centered at about 25 feet bgl in all three wells. **Table 1** is a summary of those soil sampling results and show total petroleum hydrocarbons in the gasoline range (TPHg) as high as 860,000 micrograms per kilogram (µg/kg) and benzene concentrations as high as 2,900 µg/kg. An April 2016 summary of groundwater sampling results[3] indicate the depth to groundwater in the wells varies between about 7 to 13 ft bgl, TPHg concentrations vary between 30,900 and 73,000 micrograms per liter (µg/L), and benzene concentrations vary between 5,460 and 24,000 µg/L. The wells penetrate silty clay and reach depths of 30 feet below ground level (ft bgl). Note that the highest concentrations of petroleum constituents have been observed in MW-3 which is located inside the main building approximately 25 feet west-northwest of the former UST location.

[1] Lowney Associates, September 6, 2005. "Phase I Environmental Site Assessment", 20p., http://geotracker.Waterboards.ca.gov/esi/uploads/geo_report/3977792203/T10000001657.PDF.
[2] Georestoration, Inc. August 7, 2007. "Well Installation Report", 50p, http://geotracker.waterboards.ca.gov/esi/uploads/geo_report/4959596037/T10000001657.PDF.
[3] WellTest, Inc., April 23, 2016. "Grab Groundwater Sampling Report", http://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9912437140/T10000001657.PDF

A report of soil boring investigation dated August 2011[4] included a deep boring and grab groundwater sample near MW-3. That boring (DP-3B) documented a sand and gravel layer existing at 36 ft bgl, and groundwater collected from that layer contained 200 µg/L TPHg, 8.3 µg/L benzene, and 100 µg/L of total petroleum hydrocarbons in the diesel range (TPHd). Each of these concentrations is at or above environmental screening level concentrations for groundwater. These results indicate that at least some petroleum had migrated downward from the silty clay into the underlying sand and gravel aquifer by 2011.

Soil was excavated from beneath the former UST location on January 2016[5] creating an excavation about 10 by 14 feet wide and 14 feet deep. After excavation, petroleum hydrocarbon staining was noted in the sidewalls from approximately 8.5 ft bgs to the base of the excavation. Also after excavation, a "temporary well MW-4" (28 ft total depth, screen from 14 to 28 ft bgl) was installed nearby the excavation and was found to contain 0.01 to 0.09 inches of free petroleum product during numerous gauging events conducted throughout May 2016.

Correspondence from the Santa Clara County Department of Environmental Health (SCCDEH) to Mr. David Mijares at Farmer's Supply dated June 30, 2016[6] indicated that case closure under the low threat closure policy was not appropriate due the presence of free product and dissolved phase petroleum constituents remaining in the subsurface after soil excavation and that adequate groundwater monitoring had not been conducted. A SWRCB case review document[7] dated August 2016 indicates the need for outstanding issues to be resolved as follows:

- additional groundwater monitoring (northwest, southwest and east of the former UST location) to define the extent of the dissolved phase plume and identify groundwater trends,
- the need for additional soil gas sampling to address the potential indoor air vapor intrusion threat indicated by > 1,000 µg/L benzene in groundwater at less than 30 ft bgl, and
- the status of free product removal must be addressed.

Scope of Subsurface Sampling

A total of seven borings were installed using a GeoProbe® rig on August 19, 2016. Four borings (B1 thru B4) were each advanced to a total depth of 5 feet and were located in the back half of the property. Three borings (B5 thru B7) were each advanced to a total depth of 24 to 27 feet and were located in a triangular pattern surrounding the former UST (see **Figure 1**).

Relatively undisturbed and continuous soil cores encased in acetate liners were retrieved from each boring for inspection by a professional geologist. The liners were cut open lengthwise, examined for lithology and signs of petroleum staining, and a description of the core was recorded in a written log (see **Appendix A**).

[4] WellTest, Inc. August 7, 2011. "Limited Soil and Groundwater Sampling and Testing Report (Report #2341)", 34p, http://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9096934020/T10000001657.PDF
[5] WellTest, Inc. June 3, 2016. "Secondary –Source and Free Product Removal Documentation Report, Farmers Supply, 1936 Alum Rock Ave, San Jose, CA", 61p.
[6] Correspondence from SCCDEH to Mr. David Mijares, Farmers Supply, Inc., June 30, 2016. http://geotracker .waterboards.ca.gov/regulators/deliverable_documents/6380892693/07S1E03F03f.pdf.
[7] SWRCB Clean-up Fund Review Summary Report, August 2016. http://geotracker.waterboards.ca.gov/regulators /deliverable_documents/2320784628/19660%201st%20RSR%20Rationale%20for%20Concur%20August%202016.pdf

Soil samples were collected from the zone most likely to be adversely impacted in each core based on visual observations. Soil samples were collected into either an 8-ounce jar with Teflon® lined screw cap lid and/or into a 25 gram Encore® sampler. The sample containers were labeled with depth and location information and temporarily stored on ice in a cooler. Later the same day the samples were transported under proper chain of custody to Accutest Laboratoies in San Jose, CA.

Depending on the location of sample collection, laboratory analysis was for one or more groups of compounds as follows:

- Organo-chlorine pesticides (OCPs) by method SW-846 8081A,
- Metals by SW-846 6000/7000 series methods,
- Volatile organic compounds (VOCs) by method SW-846 8260,
- TPHg, TPHd, and/or TPHmo by method SW-846 8015M, or
- Extractable Petroleum Hydrocarbons by the Massachusetts Department of Environmental Protection method (MaDEP EPH) which includes 17 poly-nuclear aromatic hydrocarbons (PAHs) and 4 different aliphatic and aromatic hydrocarbon groups.

Storage and Equipment Yard

The first of three environmental impact areas identified during this investigation consists of the near surface soils around boring B4 in the storage and equipment yard (back two-thirds of the property).

A layer of black stained soil approximately 3 feet thick exists below the 6 to 12 inches of gravel covering the storage and equipment yard. This layer was observed in borings B-1 thru B-5 and was most pronounced at B-4. A total of four soil samples, one from each B-1 thru B-4, were collected from the top several inches of this layer for laboratory analysis. Samples were analyzed for TPH_{mo}, OCP, and metals. The sample from B-4 was additionally analyzed by MaDEP EPH.

Table 2 is a summary of laboratory analytical results for soil samples collected from the black stained soil layer. With the exception of the sample from B-4, there were no OCPs detected in any sample, there were no metals (except arsenic) detected above environmental screening levels (ESLs), and the concentration of TPHmo was also below ESLs. The sample from B4 contained arsenic and lead above ESLs and the pesticide dichlorodiphenyldichloroethylene (DDE). Five PAHs were detected in the B-4 sample but only one, benzo(a)pyrene was at a concentration above ESLs. The 4 different aliphatic and aromatic hydrocarbon groups are at concentrations below MaDEP Group S-1/GW-1 ESLs.

Note that arsenic is a naturally occurring constituent in soil at concentrations which typically exceed ESLs. The arsenic concentrations detected in soil at B-1 through B-3 are typical of naturally occurring concentrations. Also, toxaphene was not detected in any soil sample but the analytical detection limit for toxaphene was greater than the ESL for that compound. This is a common problem with toxaphene, and not of particular concern unless toxaphene was known to be used at the site.

Interpretation of data in **Table 2** is as follows:

(1) Black soil staining in the storage and equipment yard is the result of application of a dust suppressant containing low levels of PAH and aliphatic and aromatic hydrocarbons. It does <u>not</u> appear to represent a significant environmental concern at the site.

(2) The occurrence of DDE in sample B-4 is the result of a spill during operations at the former Farmer's Supply.
(3) The elevated concentration of arsenic (65.1 mg/kg) and lead (86.6 mg/kg) in sample B-4 is the result of a spill of lead arsenate pesticide during operations at the former Farmer's Supply.
(4) The mutual occurrence of DDE and lead arsenate in soil at B-4 marks the location where storage and handling of pesticides occurred at the former Farmer's Supply.
(5) Arsenic is a naturally occurring constituent in soil at a concentration of 9.4 to 9.9 mg/kg. Lead is a naturally occurring constituent in soil at a concentration of 8.1 to 9.4 mg/kg.

Groundwater Beneath Former UST

The second of three environmental impact areas identified during this investigation consists of the groundwater beneath the former UST.

Borings B5, B6, and B7 were located in a triangular pattern surrounding the former UST location and were all advanced to 24 to 27 ft bgl. These borings were left in an open-hole condition for several hours, and no groundwater accumulated in any of the three borings during that time. This confirms that the groundwater table in the silty clay had fallen to below 27 ft bgl.

No groundwater samples were collected during the August 19, 2016 soil boring event. Knowledge of dissolved petroleum constituents in groundwater is therefore based on literature review (see above **Document Review**).

Soils Surrounding the Former UST

The third of three environmental impact areas identified during this investigation consists of subsurface soil near the UST.

Borings B5, B6, and B7 were located in a triangular fashion surrounding the former UST location and were all advanced to 24 to 27 ft bgl. Natural soil colors for silty clay in the area are various mixtures of red and brown. Light and dark gray staining, characteristic of weathered petroleum, was observed in the bottom third of all three borings. One soil sample was collected in each boring from a dark gray, soft, silty, and presumably more permeable layer occurring near the base of each boring. Those samples were analyzed for TPHg, TPHd, and 81 VOCs. Results of laboratory analysis show only non-detectable concentrations for all analytes, with the exception that acetone and methylene chloride were detected but were flagged as lab contaminants.

Note the that the three monitoring wells installed in 2007 are 30 feet deep, and soil samples collected during well installation in 2007 clearly show the highest concentration of petroleum impact occurring at about 25 ft bgl. The samples collected at 24 to 26 feet deep in each boring should have found petroleum hydrocarbons if they were present.

Interpretation of the soil sample analytical results from B5, B6, and B7 is as follows:

(1) Laboratory analysis confirms that petroleum impact in soil from the former UST does not currently extend as far as the B5, B6, and B7 locations at the 24 to 26 foot depth interval.

(2) The light gray to dark gray staining observed in the bottom third of these three borings indicates that petroleum hydrocarbons had reached the B5, B6, and B7 locations.
(3) The dark gray staining at the base of B5, B6, and B7 may be the result of oxygen deficiency created by biologic activity acting to mineralize the petroleum constituents that had previously migrated to those depth locations.

Conclusions and Recommendations

Conclusions and recommendations based on the results of the soil boring investigation and document review are as follows:

(1) Soils near the B-4 location are impacted by pesticides and will eventually need to be excavated and transported off-site for disposal at a licensed facility. An accurate estimate of soil volume for removal cannot be made at this time. Additional soil sampling in this area is recommended to confirm the volume of soil impacted by pesticides prior to transfer of property ownership.
(2) Black soil staining throughout the equipment and storage yard area occurs just below the surface layer of gravel and contains low levels of PAHs. It appears to be environmentally innocuous. Limited additional soil sampling in this area is recommended to confirm the innocuous nature of the layer prior to transfer of property ownership.
(3) A release of petroleum hydrocarbons to a silty clay layer at the surface is known to have occurred. Indications are that subsurface migration of petroleum has been hindered by the physical nature of the silty clay and by artesian water table conditions existing in the underlying sand and gravel aquifer. While some migration of petroleum into the underlying aquifer has been documented, there are no monitoring wells completed in the underlying aquifer and conditions there are unknown. It is recommended that a monitoring well network be installed in the sand and gravel aquifer and two rounds of groundwater monitoring be conducted prior to transfer of property ownership.
(4) Additional subsurface investigations will be needed around the former UST area prior to re-development of the property. At a minimum, additional subsurface investigations must include soil gas sampling, free product monitoring and removal, and installation of the groundwater monitoring well network in the sand and gravel aquifer. Should additional remedial actions be required, it is likely a detailed Geoprobe® soil sampling program and/or additional groundwater monitoring wells in the sand and gravel aquifer, and/or removal of the existing building will be necessary prior to remedial action. The scope of remediation that may be necessary near the former UST cannot be estimated at this time.

Should you require any additional information or if you have any questions regarding this letter report then please feel free to contact me.

Sincerely,

Richard Ryan, P.G.

Attachments:

Table 1: Summary Soil Sample Analytical Results, June 2007 Well Installation

Well	Depth (ft)	TPHg	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE
MW-1	5	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05
MW-1	10	**13**	<0.005	**0.059**	<0.005	**0.043**	<0.05
MW-1	15	**40**	**0.026**	**0.41**	**0.4**	**0.012**	<0.05
MW-1	20	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05
MW-1	25	**400**	<0.50	**2.8**	**4.4**	**14**	<5.0
MW-1	30	**4.9**	**0.45**	**0.033**	**0.58**	**0.46**	<0.05
MW-2	5	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05
MW-2	10	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05
MW-2	15	**1.7**	<0.005	<0.005	<0.005	<0.005	<0.05
MW-2	20	**9.2**	**0.053**	**0.13**	**0.2**	**0.045**	<0.05
MW-2	25	**860**	**1.6**	**19**	**18**	**73**	<5.0
MW-2	30	**4.9**	**0.9**	**0.046**	**0.49**	**0.36**	<0.05
MW-3	5	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05
MW-3	10	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05
MW-3	15	**32**	**0.46**	**0.22**	**0.82**	**0.12**	<0.05
MW-3	20	**120**	**2.8**	**1.2**	**3.4**	**7.3**	<0.50
MW-3	25	**110**	**2.9**	**1.8**	**2.9**	**7.5**	<0.50
MW-3	30	<1.0	**0.012**	**0.011**	**0.009**	**0.017**	<0.05
	ESLs	100	0.044	2.9	3.3	2.3	0.023

Notes:

(1) All concentrations are in units of milligrams per kilogram (mg/kg), equivalent to parts per million (ppm).

(2) "<" indicates the analyte was not detected, the associated value is the analytical detection limit.

(3) Values which exceed environmental screening levels (ESLs) have been highlighted. ESLs from: SF Bay RWQCB, December 2013.

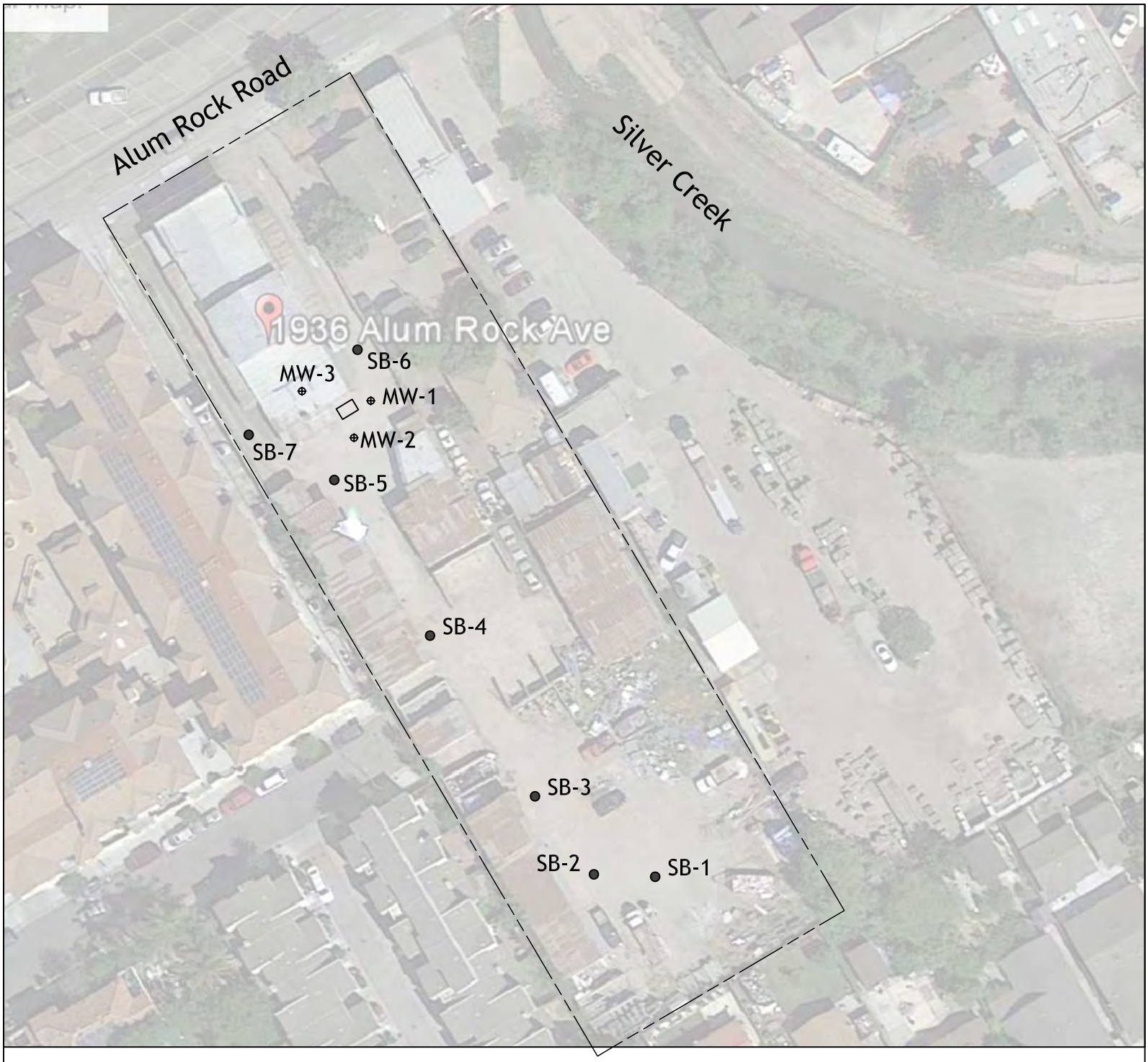
(4) Data from: Georestoration, Inc. August 7, 2007. "Well Installation Report", 50p.

Table 2: Summary Soil Sample Analytical Results, August 2016 Storage and Equipment Yard

Analyte	Units	B1:14-19"	B2:14-19"	B3:14-19"	B4:8-15"	ESL
Acenaphthylene	µg/kg	-	-	-	42.8 J	13000
Benzo(a)pyrene	µg/kg	-	-	-	43.8 J	38
Fluorene	µg/kg	-	-	-	96.1 J	8900
2-Methylnaphthalene	µg/kg	-	-	-	183 J	250
Phenanthrene	µg/kg	-	-	-	37.5 J	11000
C11-C22 Aromatics (Unadj.)	µg/kg	-	-	-	30100	-
C9-C18 Aliphatics	µg/kg	-	-	-	82900	1000000
C19-C36 Aliphatics	µg/kg	-	-	-	29500	3000000
C11-C22 Aromatics	µg/kg	-	-	-	29700	1000000
4,4'-DDE	µg/kg	*< 0.53*	*< 0.53*	*< 0.52*	1.6 J	1.7
Toxaphene	µg/kg	*< 33*	*< 33*	*< 32*	*< 33*	0.00042
TPH_{mo} (>C28-C40)	mg/kg	3.03 J	3.74 J	*< 2.6*	3.10 J	100
Arsenic	mg/kg	9.4	9.4	9.9	65.1	0.39
Barium	mg/kg	218	208	187	203	750
Chromium	mg/kg	67.7	65.7	61.0	64.8	1000
Cobalt	mg/kg	15.9	16.2	14.3	13.8	23
Copper	mg/kg	39.2	38.4	33.2	29.8	230
Lead	mg/kg	9.5	8.9	8.1	86.8	80
Mercury	mg/kg	*<0.040*	*<0.040*	0.043	0.072	6.7
Nickel	mg/kg	100	97.6	99.8	106	150
Vanadium	mg/kg	46.2	45.2	36.4	34.8	200
Zinc	mg/kg	79.0	75.1	67.6	164	600

Notes:

(1) Summary includes only analytes that occur above analytical detection limit in at least one sample.
(2) "<" indicates the analyte was not detected, the associated value is the analytical detection limit.
(3) "J" indicates a concentration above the analytical detection limit but below the reporting limit.
(4) Values which exceed environmental screening levels (ESLs) have been highlighted. ESLs for aliphatic and aromatic hydrocarbons are from MaDEP, 2004. All other ESLs are from SFBay RWQCB, December 2013.



Explanation

SB-1 Soil Boring Location, August 19, 2016

MW-1 Monitoring Well Location (installed 2007)

Former UST Location, circa 1984

N

Scale

0 50 ft

Ryan Geologic & Environmental Services, Inc. PO Box 525; McCloud, California 96057 www.RyanGES.com * 530.925.4932	1936 Alum Rock Road San Jose, CA	Figure 1: Site Map

Appendix A: Lithologic Log of Soil Borings

LITHOLOGIC LOG

JOSE & ARTURO

Date: 8/19/16 | Boring ID: B5 | Well ID: | Casing Diam: | Stick-up: | Project: 1936 AR

Time: | Boring Diam: 2" / 3.5 | Sand: | Casing Lngth: | | |

Geologist: RL RYAN | Boring TD: 24' | Bentonite: | Screen Lngth: | | |

Driller: CASCADE | DTW: DRY | Cement: | Screen Type: | | |

Depth (ft)	Thick.	Rec'vry	Grain Size	Color		Description
8"	8"	35/47		BLK		SAND GRAVEL; CLAY; DRY
4'	40"	37/47		DRK GRY		CLAY, DRK GRY; SLIGHTLY MOIST; HARD
17.5'	162"			BRWN		CLAY; MOIST; MALLEABLE; HARD; BRWN;
						SOFTER (SILTY?) @ 6-7'; 14.5-15.5', 16.5-17.5
24'	78"			MED GRY		CLAY; MOIST; MALLEABLE; HARD; MED GRY; POOR
						HARD DRILLING; SOFT @ 24-23.5'; 22-22.5'
						DRK GRY AT BASE
						SAMPLES @ 8-12" & 24'
						BACKFILL W/ GROUT; CONCRETE @ SURFACE

LITHOLOGIC LOG

Date: 8/19/16 | Boring ID: B7 | Well ID: | Casing Diam: | Stick-up: | Project: 1936 AR

Time: 0911 | Boring Diam: 3" / 3.5" | Sand: | Casing Lngth: |

Geologist: RLRYMN | Boring TD: 27' | Bentonite: | Screen Lngth: |

Driller: CASCADE | DTW: DRY | Cement: | Screen Type: |

Depth (ft)	Thick.	Rec'vry	Grain Size	Color		Description
4'	48"	28"/48"		DRK BWN		DRY TO CLAY SLIGHTLY MOIST; DARK BWN; GRAVEL IN TOP 8" HARD
23'	228"	20"/228"		MED BWN		CLAY; SLIGHTLY MOIST; MALLEABLE; HARD; MED BWN; SOFT ZONES (SILTY?) @ 5-6, 7-8, 13-15; 22-22.5.
27'	48"	100%		BWN/GRY		CLAY; WITH SAND; SOFT; MOIST; MED BWN & MED GRAY MOTTLED
						SAMPLES @ 10-15" & 26'
						CORE BASICALLY IDENTICAL TO B5
						BACKFILL W/ GROUT; CONCRETE @ SURFACE

LITHOLOGIC LOG

Date: 8/19/16 | Boring ID: B6 | Well ID: | Casing Diam: | Stick-up: | Project: 1936 AVE
Time: 0935 | Boring Diam: 2" / 3.5" | Sand: | Casing Lngth: |
Geologist: RL RYAN | Boring TD: 24' | Bentonite: | Screen Lngth: |
Driller: CASCADE | DTW: DRY | Cement: | Screen Type: |

Depth (ft)	Thick.	Rec'vry	Grain Size	Color		Description
5'		32/48		BLK/TAN		SAND GRAVEL; CLAY; DRY; LOOSE; TOP 8" 5 4 TO 4.5'
						ANG DRK GRAY; TAN CONCRETE @ 4.5'
8'		23/48				CLAY; DRY; HARD;
22'				MED BRWN		CLAY; MED BRWN; SLIGHTLY MOIST; SOFT (SILTY) @ 14-15
						HARD; MALLEABLE; SLIGHT COLOR SHIFT TO GRAY DOWNWARD
24'				DK GRY		CLAY; SOFT (SILTY); DRK GRAY; SLIGHTLY MOIST;
						SAMPLE @ 10-15'; 7-7.5'; 24'
						BACKFILL W/ GROUT; CONCRETE @ SURFACE

LITHOLOGIC LOG

Date: 8/19/16 | Boring ID: See Below | Well ID: | Casing Diam: | Stick-up: | Project: 1936 AR

Time: | Boring Diam: 1.25"/2.25" | Sand: | Casing Lngth: |

Geologist: R.L. RYAN | Boring TD: 5' | Bentonite: | Screen Lngth: |

Driller: CASCADE | DTW: | Cement: | Screen Type: |

Depth (ft)	Thick.	Rec'vry	Grain Size	Color		Description
	B-1	51/60"				
10"						SAND, GRAVEL; CLAY; DRY; LOOSE; TAN.
60"						CLAY; SLIGHTLY MOIST; DARK GRY; MED PLAN @ BOTTOM 1/2
						SOME SILT @ 55"; SAMPLE 14-19"
	B-2	100%				
12"						SAME AS B1 SAMPLE 14-19"
60"						" " "
	B-3	100%				
12"						SAME AS B1 SAMPLE 14-19"
60"						" " "
	B-4	100%				SAME AS B1 SAMPLE 8-15"
6"						" " "
60"						
						BACKFILL W/ GROUT

SGS ACCUTEST

CHAIN OF CUSTODY

2105 Lundy Ave, San Jose, CA 95131
(408) 588-0200 FAX: (408) 588-0201

FED-EX Tracking #	Bottle Order Control #
SGS Accutest Quote #	SGS Accutest NC Job #: C

Client / Reporting Information		Project Information	
Company Name	RNC ENVIRONMENTAL LLC	Project Name:	1936 AR
Address	3326 M STREET	Street	
City / State / Zip	SACRAMENTO CA 95816	City / State	
Project Contact:		Project #	
Phone #	889 495 3330	EMAIL:	
Samplers's Name	RICH RYAN 530.925.4932	Client Purchase Order #	

Requested Analysis: CAM 17 METALS 6010B/7000; ORGANOCHLORINE PEST 8081A; TPH GAS 8015M; TPH DIESEL 8015M; TPH MOTOR OIL 8015M; VOCs 8260; MADEP EPH; HOLD

SGS Accutest Sample ID	Sample ID / Field Point / Point of Collection	Date	Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	NaHSO4	MEOH	ENCORE	CAM 17 METALS 6010B/7000	ORGANOCHLORINE PEST 8081A	TPH GAS 8015M	TPH DIESEL 8015M	TPH MOTOR OIL 8015M	VOCs 8260	MADEP EPH	HOLD			
	B1: 14-19"	8/19		RLR	SOIL	1					✓				✓	✓			✓						
	B2: 14-19"					1									✓	✓			✓						
	B3: 14-19"					1									✓	✓			✓						
	B4 8-15"					2									✓	✓			✓		✓				
	B5: 8-12"					1																✓			
	B5: 24'					2											✓	✓		✓					
	B6: 7.5-8.0"					1																✓			
	B6: 24'					2											✓	✓		✓					
	B7 10-15"					1											[illegible]	[illegible]	[illegible]	[illegible]		✓			
	B7: 26'					2											✓	✓		✓					

Matrix Codes
WW- Wastewater
GW- Ground Water
SW- Surface Water
SO- Soil
OI-Oil
WP-Wipe
LIQ - Non-aqueous Liquid
AIR
DW- Drinking Water (Perchlorate Only)

LAB USE ONLY

Turnaround Time (Business days) — Approved By:/ Date:
- [ ] 10 Day
- [x] 5 Day
- [ ] 3 Day
- [ ] 2 Day
- [ ] 1 Day
- [ ] Same Day

Emergency T/A data available VIA Lablink

Data Deliverable Information
- [ ] Commercial "A" - Results only
- [ ] Commercial "B" - Results with QC summaries
- [ ] Commerical "B+" - Results, QC, and chromatograms
- [ ] FULT1 - Level 4 data package
- [ ] EDF for Geotracker [ ] EDD Format ____________
- Provide EDF Global ID ____________
- Provide EDF Logcode: ____________

Comments / Remarks
EMAIL RESULTS TO
NEIL@RNC-ENVIRO.COM
RICH@RYANGES.COM

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 [signature]	8/19/16 1505	1 [signature]	2		2
Relinquished by: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	Appropriate Bottle / Pres. Y / N Headspace Y / N On Ice Y / N; Labels match Coc? Y / N Separate Receiving Check List used: Y / N	Cooler Temp. ______ oC

CASCADE DRILLING DAILY WORK REPORT

CASCADE DRILLING, L.P.
LEADERS IN SAFETY

Boise, ID (208) 345-0878
Fife, WA (253) 883-5200
Peoria, AZ (623) 935-0124
Upland, CA (562) 929-8176

Las Vegas, NV (702) 643-0023
Portland, OR (503) 775-4118
Reno, NV (530) 682-3068
Richmond, CA (510) 478-0858

Sacramento, CA (916) 638-1169
San Diego, CA (619) 596-0644
Seattle, WA (425) 485-8908

CLIENT [illegible]	PROJECT NO	DATE 9-19-16	DAY Friday
JOB LOCATION 1934 Alum Rock ave. San Jose CA	DIG ALERT # [illegible]	CD-LP# [illegible]	

DESCRIPTION OF WORK

Please explain reasons for Down Time and Standby Time and Shop Time

Well # Bore #	Depth Drilled	Description	Start	Stop	Total Hrs	Charge Hrs
SB-1	24'	AM Shop Time: Pre trip, load up	5:00	5:30	.50	.50
SB-2	27'	Travel to Site	5:30	7:00	1.50	1.5
SB-3	27'	Safety meeting, Set up	7:00	7:30	.50	.50
SB-4	5'	we start drilling at 35 next location	7:30			
SB-5	5'	[illegible] collect soil samples				
SB-6	5'	next locations push to 5' each, use macrocore		11:00	3.50	3.50
SB-7	5'	grout all locations, patch completion	11:00	12:00		
		load up, clean up	12:00	12:30		
		Lunch	12:30	1:00		
		Travel to Shop	1:00			
		PM Shop Time				
Total Ft. 95'		**TOTAL CHARGEABLE RIG HOURS**				

RIG ENGINE HOURS:	START		STOP		TOTAL

EQUIPMENT

DRILL RIG #	1712	COMPRESSOR/JACKHAMMER	
SUPPORT TRUCK #		SNOW FENCE RENTAL	
SUPPORT TRUCK #		CONTINUOUS SAMPLER	
TRAILER #	285	CONTINUOUS SAMPLER FOOTAGE	
BOBCAT		# OF CORE CUTS	
AUTO HAMMER		# OF BULLDOG CUTS	
GROUT MIXER		# OF SERVICE RUNS	
GROUT PUMP		# OF SAW CUTS	
PERISTALTIC PUMP		PORTABLE RESTROOM	
FORKLIFT/HOPPER			

LABOR

CREW WITH PER DIEM		CHARGEABLE EXTRA LABOR HRS		
NAME	SIGNATURE	SHOP	DRILL	TOTAL HRS
Arturo Sanchez	[signature]			
Jose Carranza				

CASING

TYPE ___ SLOT ___	2	4	
20' SCREEN			
10' SCREEN			
5' SCREEN			
20' BLANK			
10' BLANK			
5' BLANK			
5' PP SCREEN			
10' PP SCREEN			
SLIP CAP			
THREADED CAPS			
LOCKING CAPS			
DRIVE SHOE			
CENTRALIZERS			
LOCKS			

MATERIALS

ITEM	QTY	ITEM	QTY
SAND		WELL COVER 8	
READYMIX		WELL COVER 12	
QUICKSET	1	MONUMENT CASING	
PORTLAND	7	BOLLARDS	
ASPHALT		DRUMS	1
BENTONITE GROUT		HOLE COVER PLATES	
BENTONITE CHIPS		PLASTIC SHEETING	
BENTONITE POWDER		TRAFFIC CONTROL	
BENTONITE PELLETS		CORE BOXES	
BENTONITE GRANULAR		PLYWOOD	
SAMPLER TUBES		WATER SAMPLES	
SHELBY TUBES		HYDROPUNCH SAMPLES	
PROBE POINTS		AUGER PLUGS	
GW PROBE POINTS		DRILL OUT BITS	
MACRO LINERS 5'	4		
SAMPLER SHOE			

UTILITIES FOUND OR HIT [illegible] 4/25

REMARKS

Client Signature [signature]

Operator Signature Arturo Sanchez

Appendix B: Copies of Laboratory Analytical Report Sheets

e-Hardcopy 2.0
Automated Report

Technical Report for

RNC Environmental

1936 AR

1936 AR

SGS Accutest Job Number: C46897

Sampling Date: 08/19/16

Report to:

RNC Environmental
3326 M Street
Sacramento, CA 95816
neil@rnc-enviro.com; rich@ryanges.com

ATTN: Neil O'Hara

Total number of pages in report: **105**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

James J. Rhudy
Lab Director

Client Service contact: Maureen Coloma 408-588-0200

Certifications: CA (ELAP 2910) AK (UST-092) AZ (AZ0762) NV (CA00150) OR (CA300006) WA (C925) DoD ELAP (L-A-B L2242)

Sections:

Table of Contents

Sample Summary

RNC Environmental

Job No: C46897

1936 AR
Project No: 1936 AR

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
C46897-1	08/19/16	00:00	RLR	08/19/16	SO	Soil	B1:14-19"
C46897-2	08/19/16	00:00	RLR	08/19/16	SO	Soil	B2:14-19"
C46897-3	08/19/16	00:00	RLR	08/19/16	SO	Soil	B3:14-19"
C46897-4	08/19/16	00:00	RLR	08/19/16	SO	Soil	B4:8-15"
C46897-6	08/19/16	00:00	RLR	08/19/16	SO	Soil	B5:24"
C46897-8	08/19/16	00:00	RLR	08/19/16	SO	Soil	B6:24"
C46897-10	08/19/16	00:00	RLR	08/19/16	SO	Soil	B7:26"

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

2

Summary of Hits

Job Number: C46897
Account: RNC Environmental
Project: 1936 AR
Collected: 08/19/16

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
C46897-1	**B1:14-19"**					
TPH (> C28-C40) [a]		3.03 J	4.9	2.5	mg/kg	SW846 8015C
Arsenic [b]		9.4	2.0		mg/kg	SW846 6010C
Barium [b]		218	40		mg/kg	SW846 6010C
Chromium [b]		67.7	2.0		mg/kg	SW846 6010C
Cobalt [b]		15.9	9.9		mg/kg	SW846 6010C
Copper [b]		39.2	5.0		mg/kg	SW846 6010C
Lead [b]		9.5	4.0		mg/kg	SW846 6010C
Nickel [b]		100	7.9		mg/kg	SW846 6010C
Vanadium [b]		46.2	9.9		mg/kg	SW846 6010C
Zinc [b]		79.0	4.0		mg/kg	SW846 6010C
C46897-2	**B2:14-19"**					
TPH (> C28-C40) [a]		3.74 J	5.1	2.5	mg/kg	SW846 8015C
Arsenic [b]		9.4	2.0		mg/kg	SW846 6010C
Barium [b]		208	41		mg/kg	SW846 6010C
Chromium [b]		65.7	2.0		mg/kg	SW846 6010C
Cobalt [b]		16.2	10		mg/kg	SW846 6010C
Copper [b]		38.4	5.1		mg/kg	SW846 6010C
Lead [b]		8.9	4.1		mg/kg	SW846 6010C
Nickel [b]		97.6	8.1		mg/kg	SW846 6010C
Vanadium [b]		45.2	10		mg/kg	SW846 6010C
Zinc [b]		75.1	4.1		mg/kg	SW846 6010C
C46897-3	**B3:14-19"**					
Arsenic [b]		9.9	2.0		mg/kg	SW846 6010C
Barium [b]		187	40		mg/kg	SW846 6010C
Chromium [b]		61.0	2.0		mg/kg	SW846 6010C
Cobalt [b]		14.3	10		mg/kg	SW846 6010C
Copper [b]		33.2	5.0		mg/kg	SW846 6010C
Lead [b]		8.1	4.0		mg/kg	SW846 6010C
Mercury [a]		0.043	0.038		mg/kg	SW846 7471B
Nickel [b]		99.8	8.1		mg/kg	SW846 6010C
Vanadium [b]		36.4	10		mg/kg	SW846 6010C
Zinc [b]		67.6	4.0		mg/kg	SW846 6010C
C46897-4	**B4:8-15"**					
Acenaphthylene [c]		42.8 J	420	17	ug/kg	MADEP EPH REV 1.1
Benzo(a)pyrene [c]		43.8 J	420	13	ug/kg	MADEP EPH REV 1.1
Fluorene [c]		96.1 J	420	18	ug/kg	MADEP EPH REV 1.1
2-Methylnaphthalene [c]		183 J	420	28	ug/kg	MADEP EPH REV 1.1

Summary of Hits

Job Number: C46897
Account: RNC Environmental
Project: 1936 AR
Collected: 08/19/16

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Phenanthrene [c]		37.5 J	420	19	ug/kg	MADEP EPH REV 1.1
C11-C22 Aromatics (Unadj.) [c]		30100	17000	4000	ug/kg	MADEP EPH REV 1.1
C9-C18 Aliphatics [c]		82900	8400	2500	ug/kg	MADEP EPH REV 1.1
C19-C36 Aliphatics [c]		29500	17000	6800	ug/kg	MADEP EPH REV 1.1
C11-C22 Aromatics [c]		29700	17000	4000	ug/kg	MADEP EPH REV 1.1
TPH (> C28-C40) [a]		3.10 J	5.0	2.5	mg/kg	SW846 8015C
4,4'-DDE [d]		1.6 J	3.3	0.53	ug/kg	SW846 8081B
Arsenic [b]		65.1	2.4		mg/kg	SW846 6010C
Barium [b]		203	48		mg/kg	SW846 6010C
Chromium [b]		64.8	2.4		mg/kg	SW846 6010C
Cobalt [b]		13.8	12		mg/kg	SW846 6010C
Copper [b]		29.8	6.0		mg/kg	SW846 6010C
Lead [b]		86.8	4.8		mg/kg	SW846 6010C
Mercury [a]		0.072	0.040		mg/kg	SW846 7471B
Nickel [b]		106	9.5		mg/kg	SW846 6010C
Vanadium [b]		34.8	12		mg/kg	SW846 6010C
Zinc [b]		164	4.8		mg/kg	SW846 6010C
C46897-6	**B5:24"**					
Methylene Chloride [e]		9.6 JB	10	4.0	ug/kg	SW846 8260B
C46897-8	**B6:24"**					
Acetone [f]		16.2 J	49	10	ug/kg	SW846 8260B
Methylene Chloride [e]		13.9 B	9.8	3.9	ug/kg	SW846 8260B
C46897-10	**B7:26"**					
Methylene Chloride [e]		9.9 B	9.9	4.0	ug/kg	SW846 8260B

(a) Analysis performed at SGS Accutest, Orlando FL.
(b) Sample dilution required due to difficult matrix. Analysis performed at SGS Accutest, Orlando FL.
(c) Analysis performed at SGS Accutest, Marlborough, MA.
(d) All hits confirmed by dual column analysis. Analysis performed at SGS Accutest, Orlando FL.
(e) Sample was received in a bulk container but was not preserved within 48 hours of sampling. Reported results are considered minimum values. Analysis performed at SGS Accutest, Orlando FL. Suspected laboratory contaminant.
(f) Sample was received in a bulk container but was not preserved within 48 hours of sampling. Reported results are considered minimum values. Analysis performed at SGS Accutest, Orlando FL.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	B1:14-19"		
Lab Sample ID:	C46897-1	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8081B SW846 3546	**Percent Solids:**	n/a
Project:	1936 AR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	TT378856.D	1	08/25/16	AFL	08/24/16	F:OP61612	F:GTT1846
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	5.0 ml
Run #2		

Pesticide PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	1.7	0.50	ug/kg	
319-84-6	alpha-BHC	ND	1.7	0.51	ug/kg	
319-85-7	beta-BHC	ND	1.7	0.51	ug/kg	
319-86-8	delta-BHC	ND	1.7	0.48	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	1.7	0.51	ug/kg	
12789-03-6	Chlordane	ND	17	6.6	ug/kg	
60-57-1	Dieldrin	ND	1.7	0.62	ug/kg	
72-54-8	4,4'-DDD	ND	3.3	0.57	ug/kg	
72-55-9	4,4'-DDE	ND	3.3	0.53	ug/kg	
50-29-3	4,4'-DDT	ND	3.3	0.65	ug/kg	
72-20-8	Endrin	ND	3.3	0.62	ug/kg	
1031-07-8	Endosulfan sulfate	ND	3.3	0.62	ug/kg	
7421-93-4	Endrin aldehyde	ND	3.3	0.62	ug/kg	
959-98-8	Endosulfan-I	ND	1.7	0.48	ug/kg	
33213-65-9	Endosulfan-II	ND	1.7	0.61	ug/kg	
76-44-8	Heptachlor	ND	1.7	0.56	ug/kg	
1024-57-3	Heptachlor epoxide	ND	1.7	0.58	ug/kg	
72-43-5	Methoxychlor	ND	3.3	0.85	ug/kg	
8001-35-2	Toxaphene	ND	83	33	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	92%		50-122%
2051-24-3	Decachlorobiphenyl	72%		50-133%

(a) Analysis performed at SGS Accutest, Orlando FL.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B1:14-19"		
Lab Sample ID:	C46897-1	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8015C SW846 3546	**Percent Solids:**	n/a
Project:	1936 AR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	YR4660.D	1	08/31/16	AFL	08/24/16	F:OP61615	F:GYR115
Run #2							

	Initial Weight	Final Volume
Run #1	20.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (> C28-C40)	3.03	4.9	2.5	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	96%		56-122%

(a) Analysis performed at SGS Accutest, Orlando FL.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B1:14-19"		
Lab Sample ID:	C46897-1	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
		Percent Solids:	n/a
Project:	1936 AR		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Antimony [a]	< 4.0	4.0	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Arsenic [a]	9.4	2.0	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Barium [a]	218	40	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Beryllium [a]	< 0.99	0.99	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Cadmium [a]	< 0.79	0.79	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Chromium [a]	67.7	2.0	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Cobalt [a]	15.9	9.9	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Copper [a]	39.2	5.0	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Lead [a]	9.5	4.0	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Mercury [b]	< 0.040	0.040	mg/kg	1	08/24/16	08/24/16	AFL	SW846 7471B [1]	SW846 7471B [3]
Molybdenum [a]	< 9.9	9.9	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Nickel [a]	100	7.9	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Selenium [a]	< 4.0	4.0	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Silver [a]	< 2.0	2.0	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Thallium [a]	< 2.0	2.0	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Vanadium [a]	46.2	9.9	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Zinc [a]	79.0	4.0	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]

(1) Instrument QC Batch: F:MA13360
(2) Instrument QC Batch: F:MA13364
(3) Prep QC Batch: F:MP30749
(4) Prep QC Batch: F:MP30752

(a) Sample dilution required due to difficult matrix. Analysis performed at SGS Accutest, Orlando FL.
(b) Analysis performed at SGS Accutest, Orlando FL.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B2:14-19"		
Lab Sample ID:	C46897-2	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8081B SW846 3546	**Percent Solids:**	n/a
Project:	1936 AR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	TT378859.D	1	08/25/16	AFL	08/24/16	F:OP61612	F:GTT1846
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	5.0 ml
Run #2		

Pesticide PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	1.7	0.50	ug/kg	
319-84-6	alpha-BHC	ND	1.7	0.51	ug/kg	
319-85-7	beta-BHC	ND	1.7	0.51	ug/kg	
319-86-8	delta-BHC	ND	1.7	0.48	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	1.7	0.51	ug/kg	
12789-03-6	Chlordane	ND	17	6.6	ug/kg	
60-57-1	Dieldrin	ND	1.7	0.62	ug/kg	
72-54-8	4,4'-DDD	ND	3.3	0.57	ug/kg	
72-55-9	4,4'-DDE	ND	3.3	0.53	ug/kg	
50-29-3	4,4'-DDT	ND	3.3	0.65	ug/kg	
72-20-8	Endrin	ND	3.3	0.62	ug/kg	
1031-07-8	Endosulfan sulfate	ND	3.3	0.62	ug/kg	
7421-93-4	Endrin aldehyde	ND	3.3	0.62	ug/kg	
959-98-8	Endosulfan-I	ND	1.7	0.48	ug/kg	
33213-65-9	Endosulfan-II	ND	1.7	0.61	ug/kg	
76-44-8	Heptachlor	ND	1.7	0.56	ug/kg	
1024-57-3	Heptachlor epoxide	ND	1.7	0.58	ug/kg	
72-43-5	Methoxychlor	ND	3.3	0.85	ug/kg	
8001-35-2	Toxaphene	ND	83	33	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	92%		50-122%
2051-24-3	Decachlorobiphenyl	63%		50-133%

(a) Analysis performed at SGS Accutest, Orlando FL.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B2:14-19"		
Lab Sample ID:	C46897-2	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8015C SW846 3546	**Percent Solids:**	n/a
Project:	1936 AR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	YR4661.D	1	08/31/16	AFL	08/24/16	F:OP61615	F:GYR115
Run #2							

	Initial Weight	Final Volume
Run #1	19.8 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (> C28-C40)	3.74	5.1	2.5	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	101%		56-122%

(a) Analysis performed at SGS Accutest, Orlando FL.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B2:14-19"		
Lab Sample ID:	C46897-2	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
		Percent Solids:	n/a
Project:	1936 AR		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Antimony [a]	< 4.1	4.1	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Arsenic [a]	9.4	2.0	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Barium [a]	208	41	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Beryllium [a]	< 1.0	1.0	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Cadmium [a]	< 0.81	0.81	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Chromium [a]	65.7	2.0	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Cobalt [a]	16.2	10	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Copper [a]	38.4	5.1	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Lead [a]	8.9	4.1	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Mercury [b]	< 0.040	0.040	mg/kg	1	08/24/16	08/24/16	AFL	SW846 7471B [1]	SW846 7471B [3]
Molybdenum [a]	< 10	10	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Nickel [a]	97.6	8.1	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Selenium [a]	< 4.1	4.1	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Silver [a]	< 2.0	2.0	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Thallium [a]	< 2.0	2.0	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Vanadium [a]	45.2	10	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Zinc [a]	75.1	4.1	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]

(1) Instrument QC Batch: F:MA13360
(2) Instrument QC Batch: F:MA13364
(3) Prep QC Batch: F:MP30749
(4) Prep QC Batch: F:MP30752

(a) Sample dilution required due to difficult matrix. Analysis performed at SGS Accutest, Orlando FL.
(b) Analysis performed at SGS Accutest, Orlando FL.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B3:14-19"		
Lab Sample ID:	C46897-3	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8081B SW846 3546	**Percent Solids:**	n/a
Project:	1936 AR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	TT378860.D	1	08/25/16	AFL	08/24/16	F:OP61612	F:GTT1846
Run #2							

	Initial Weight	Final Volume
Run #1	15.5 g	5.0 ml
Run #2		

Pesticide PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	1.6	0.49	ug/kg	
319-84-6	alpha-BHC	ND	1.6	0.50	ug/kg	
319-85-7	beta-BHC	ND	1.6	0.49	ug/kg	
319-86-8	delta-BHC	ND	1.6	0.47	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	1.6	0.49	ug/kg	
12789-03-6	Chlordane	ND	16	6.5	ug/kg	
60-57-1	Dieldrin	ND	1.6	0.61	ug/kg	
72-54-8	4,4'-DDD	ND	3.2	0.55	ug/kg	
72-55-9	4,4'-DDE	ND	3.2	0.52	ug/kg	
50-29-3	4,4'-DDT	ND	3.2	0.63	ug/kg	
72-20-8	Endrin	ND	3.2	0.60	ug/kg	
1031-07-8	Endosulfan sulfate	ND	3.2	0.60	ug/kg	
7421-93-4	Endrin aldehyde	ND	3.2	0.60	ug/kg	
959-98-8	Endosulfan-I	ND	1.6	0.47	ug/kg	
33213-65-9	Endosulfan-II	ND	1.6	0.60	ug/kg	
76-44-8	Heptachlor	ND	1.6	0.55	ug/kg	
1024-57-3	Heptachlor epoxide	ND	1.6	0.56	ug/kg	
72-43-5	Methoxychlor	ND	3.2	0.83	ug/kg	
8001-35-2	Toxaphene	ND	81	32	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	89%		50-122%
2051-24-3	Decachlorobiphenyl	64%		50-133%

(a) Analysis performed at SGS Accutest, Orlando FL.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B3:14-19"		
Lab Sample ID:	C46897-3	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8015C SW846 3546	**Percent Solids:**	n/a
Project:	1936 AR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	YR4662.D	1	08/31/16	AFL	08/24/16	F:OP61615	F:GYR115
Run #2							

	Initial Weight	Final Volume
Run #1	19.6 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (> C28-C40)	ND	5.1	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	90%		56-122%

(a) Analysis performed at SGS Accutest, Orlando FL.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B3:14-19"		
Lab Sample ID:	C46897-3	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
		Percent Solids:	n/a
Project:	1936 AR		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Antimony [a]	< 4.0	4.0	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Arsenic [a]	9.9	2.0	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Barium [a]	187	40	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Beryllium [a]	< 1.0	1.0	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Cadmium [a]	< 0.81	0.81	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Chromium [a]	61.0	2.0	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Cobalt [a]	14.3	10	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Copper [a]	33.2	5.0	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Lead [a]	8.1	4.0	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Mercury [b]	0.043	0.038	mg/kg	1	08/24/16	08/24/16	AFL	SW846 7471B [1]	SW846 7471B [3]
Molybdenum [a]	< 10	10	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Nickel [a]	99.8	8.1	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Selenium [a]	< 4.0	4.0	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Silver [a]	< 2.0	2.0	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Thallium [a]	< 2.0	2.0	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Vanadium [a]	36.4	10	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Zinc [a]	67.6	4.0	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]

(1) Instrument QC Batch: F:MA13360
(2) Instrument QC Batch: F:MA13364
(3) Prep QC Batch: F:MP30749
(4) Prep QC Batch: F:MP30752

(a) Sample dilution required due to difficult matrix. Analysis performed at SGS Accutest, Orlando FL.
(b) Analysis performed at SGS Accutest, Orlando FL.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B4:8-15"		
Lab Sample ID:	C46897-4	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8081B SW846 3546	**Percent Solids:**	n/a
Project:	1936 AR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	TT378861.D	1	08/25/16	AFL	08/24/16	F:OP61612	F:GTT1846
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	5.0 ml
Run #2		

Pesticide PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	1.7	0.50	ug/kg	
319-84-6	alpha-BHC	ND	1.7	0.51	ug/kg	
319-85-7	beta-BHC	ND	1.7	0.51	ug/kg	
319-86-8	delta-BHC	ND	1.7	0.48	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	1.7	0.51	ug/kg	
12789-03-6	Chlordane	ND	17	6.6	ug/kg	
60-57-1	Dieldrin	ND	1.7	0.62	ug/kg	
72-54-8	4,4'-DDD	ND	3.3	0.57	ug/kg	
72-55-9	4,4'-DDE	1.6	3.3	0.53	ug/kg	J
50-29-3	4,4'-DDT	ND	3.3	0.65	ug/kg	
72-20-8	Endrin	ND	3.3	0.62	ug/kg	
1031-07-8	Endosulfan sulfate	ND	3.3	0.62	ug/kg	
7421-93-4	Endrin aldehyde	ND	3.3	0.62	ug/kg	
959-98-8	Endosulfan-I	ND	1.7	0.48	ug/kg	
33213-65-9	Endosulfan-II	ND	1.7	0.61	ug/kg	
76-44-8	Heptachlor	ND	1.7	0.56	ug/kg	
1024-57-3	Heptachlor epoxide	ND	1.7	0.58	ug/kg	
72-43-5	Methoxychlor	ND	3.3	0.85	ug/kg	
8001-35-2	Toxaphene	ND	83	33	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	86%		50-122%
2051-24-3	Decachlorobiphenyl	55%		50-133%

(a) All hits confirmed by dual column analysis. Analysis performed at SGS Accutest, Orlando FL.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B4:8-15"		
Lab Sample ID:	C46897-4	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	MADEP EPH REV 1.1 SW846 3546	**Percent Solids:**	n/a
Project:	1936 AR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	DE15342.D	1	08/26/16	AMA	08/23/16	M:OP48512	M:GDE856
Run #2							

	Initial Weight	Final Volume
Run #1	11.9 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	420	29	ug/kg	
208-96-8	Acenaphthylene	42.8	420	17	ug/kg	J
120-12-7	Anthracene	ND	420	23	ug/kg	
56-55-3	Benzo(a)anthracene	ND	420	15	ug/kg	
50-32-8	Benzo(a)pyrene	43.8	420	13	ug/kg	J
205-99-2	Benzo(b)fluoranthene	ND	420	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	420	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	420	17	ug/kg	
218-01-9	Chrysene	ND	420	14	ug/kg	
53-70-3	Dibenz(a,h)anthracene	ND	420	15	ug/kg	
206-44-0	Fluoranthene	ND	420	18	ug/kg	
86-73-7	Fluorene	96.1	420	18	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	ND	420	17	ug/kg	
91-57-6	2-Methylnaphthalene	183	420	28	ug/kg	J
91-20-3	Naphthalene	ND	420	31	ug/kg	
85-01-8	Phenanthrene	37.5	420	19	ug/kg	J
129-00-0	Pyrene	ND	420	15	ug/kg	
	C11-C22 Aromatics (Unadj.)	30100	17000	4000	ug/kg	
	C9-C18 Aliphatics	82900	8400	2500	ug/kg	
	C19-C36 Aliphatics	29500	17000	6800	ug/kg	
	C11-C22 Aromatics	29700	17000	4000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	73%		40-140%
321-60-8	2-Fluorobiphenyl	71%		40-140%
580-13-2	2-Bromonaphthalene	88%		40-140%
3386-33-2	1-Chlorooctadecane	101%		40-140%

(a) Analysis performed at SGS Accutest, Marlborough, MA.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B4:8-15"		
Lab Sample ID:	C46897-4	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8015C SW846 3546	**Percent Solids:**	n/a
Project:	1936 AR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	YR4663.D	1	08/31/16	AFL	08/24/16	F:OP61615	F:GYR115
Run #2							

	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (> C28-C40)	3.10	5.0	2.5	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	95%		56-122%

(a) Analysis performed at SGS Accutest, Orlando FL.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B4:8-15"		
Lab Sample ID:	C46897-4	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
		Percent Solids:	n/a
Project:	1936 AR		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Antimony [a]	< 4.8	4.8	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Arsenic [a]	65.1	2.4	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Barium [a]	203	48	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Beryllium [a]	< 1.2	1.2	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Cadmium [a]	< 0.95	0.95	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Chromium [a]	64.8	2.4	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Cobalt [a]	13.8	12	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Copper [a]	29.8	6.0	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Lead [a]	86.8	4.8	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Mercury [b]	0.072	0.040	mg/kg	1	08/24/16	08/24/16	AFL	SW846 7471B [1]	SW846 7471B [3]
Molybdenum [a]	< 12	12	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Nickel [a]	106	9.5	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Selenium [a]	< 4.8	4.8	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Silver [a]	< 2.4	2.4	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Thallium [a]	< 2.4	2.4	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Vanadium [a]	34.8	12	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]
Zinc [a]	164	4.8	mg/kg	5	08/24/16	08/24/16	AFL	SW846 6010C [2]	SW846 3050B [4]

(1) Instrument QC Batch: F:MA13360
(2) Instrument QC Batch: F:MA13364
(3) Prep QC Batch: F:MP30749
(4) Prep QC Batch: F:MP30752

(a) Sample dilution required due to difficult matrix. Analysis performed at SGS Accutest, Orlando FL.
(b) Analysis performed at SGS Accutest, Orlando FL.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B5:24"		
Lab Sample ID:	C46897-6	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8260B	**Percent Solids:**	n/a [a]
Project:	1936 AR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L50481.D	1	08/19/16	JT	n/a	n/a	VL1516
Run #2							

	Initial Weight
Run #1	5.05 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [b]	ND	40	9.9	ug/kg	
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.50	ug/kg	
75-25-2	Bromoform	ND	5.0	0.50	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.99	ug/kg	
67-66-3	Chloroform	ND	5.0	0.50	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.50	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.99	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	0.50	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B5:24"		
Lab Sample ID:	C46897-6	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8260B	**Percent Solids:**	n/a [a]
Project:	1936 AR		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	5.0	0.50	ug/kg	
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	0.99	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.50	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	0.99	ug/kg	
74-87-3	Methyl chloride	ND	5.0	0.99	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.50	ug/kg	
75-09-2	Methylene chloride	ND	20	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	0.99	ug/kg	
91-20-3	Naphthalene	ND	5.0	0.99	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/kg	
100-42-5	Styrene	ND	5.0	0.50	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	40	9.9	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.99	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.99	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.99	ug/kg	
127-18-4	Tetrachloroethylene [b]	ND	5.0	0.59	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	0.99	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	0.99	ug/kg	
1330-20-7	Xylene (total)	ND	9.9	0.99	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		72-140%
2037-26-5	Toluene-D8	102%		87-113%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B5:24"		
Lab Sample ID:	C46897-6	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8260B	**Percent Solids:**	n/a [a]
Project:	1936 AR		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	95%		81-115%

(a) All results reported on a wet weight basis.
(b) Associated ICV outside of control limits (biased high); not detected in sample.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B5:24"		
Lab Sample ID:	C46897-6	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8260B	**Percent Solids:**	n/a [a]
Project:	1936 AR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [b]	Y30734.D	1	08/24/16	AFL	n/a	n/a	F:VY1236
Run #2							

	Initial Weight	Final Volume
Run #1	5.02 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	10	ug/kg	
71-43-2	Benzene	ND	5.0	1.3	ug/kg	
108-86-1	Bromobenzene	ND	5.0	1.2	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	1.1	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	25	9.0	ug/kg	
104-51-8	n-Butylbenzene [c]	ND	5.0	1.0	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	1.0	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	1.0	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.0	1.8	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.2	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	1.0	ug/kg	
106-43-4	p-Chlorotoluene [c]	ND	5.0	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	2.2	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	1.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	2.5	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.0	1.0	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.0	1.0	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.0	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.7	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.2	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.5	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.6	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	1.0	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	1.0	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	1.3	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B5:24"		
Lab Sample ID:	C46897-6	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8260B	**Percent Solids:**	n/a [a]
Project:	1936 AR		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.9	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
108-20-3	Di-Isopropyl Ether	ND	5.0	1.2	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.1	ug/kg	
637-92-3	Ethyl Tert Butyl Ether	ND	5.0	1.3	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	2.2	ug/kg	
591-78-6	2-Hexanone	ND	25	8.7	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	1.4	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	1.0	ug/kg	
74-83-9	Methyl Bromide	ND	5.0	2.6	ug/kg	
74-87-3	Methyl Chloride	ND	5.0	2.4	ug/kg	
74-95-3	Methylene Bromide	ND	5.0	1.8	ug/kg	
75-09-2	Methylene Chloride [d]	9.6	10	4.0	ug/kg	JB
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	11	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.1	ug/kg	
91-20-3	Naphthalene	ND	5.0	2.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	1.2	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	1.3	ug/kg	
75-65-0	Tert-Butyl Alcohol	ND	50	14	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.1	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	2.2	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.3	ug/kg	
108-88-3	Toluene	ND	5.0	1.1	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene [c]	ND	5.0	1.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.8	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.2	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.9	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.6	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl Chloride	ND	5.0	1.7	ug/kg	
1330-20-7	Xylene (total)	ND	15	2.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	114%		75-124%
17060-07-0	1,2-Dichloroethane-D4	118%		72-135%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B5:24"		
Lab Sample ID:	C46897-6	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8260B	**Percent Solids:**	n/a [a]
Project:	1936 AR		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	96%		75-126%
460-00-4	4-Bromofluorobenzene	101%		71-133%

(a) All results reported on a wet weight basis.
(b) Sample was received in a bulk container but was not preserved within 48 hours of sampling. Reported results are considered minimum values. Analysis performed at SGS Accutest, Orlando FL.
(c) Associated BS recovery outside control limits.
(d) Suspected laboratory contaminant.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B5:24"		
Lab Sample ID:	C46897-6	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8015C	**Percent Solids:**	n/a [a]
Project:	1936 AR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [b]	UV075469.D	1	08/24/16	AFL	n/a	n/a	F:GUV4019
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.99 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	103%		56-149%
98-08-8	aaa-Trifluorotoluene	100%		66-132%

(a) All results reported on a wet weight basis.
(b) Sample was received in a bulk container but was not preserved within 48 hours of sampling. Reporteed results are considered minimum values. Analysis performed at SGS Accutest, Orlando FL.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B5:24"		
Lab Sample ID:	C46897-6	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8015C SW846 3546	**Percent Solids:**	n/a [a]
Project:	1936 AR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [b]	YR4651.D	1	08/31/16	AFL	08/24/16	F:OP61615	F:GYR115
Run #2							

	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	95%		56-122%

(a) All results reported on a wet weight basis.
(b) Analysis performed at SGS Accutest, Orlando FL.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B6:24"		
Lab Sample ID:	C46897-8	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8260B	**Percent Solids:**	n/a [a]
Project:	1936 AR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L50482.D	1	08/19/16	JT	n/a	n/a	VL1516
Run #2							

	Initial Weight
Run #1	5.03 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [b]	ND	40	9.9	ug/kg	
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.50	ug/kg	
75-25-2	Bromoform	ND	5.0	0.50	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.99	ug/kg	
67-66-3	Chloroform	ND	5.0	0.50	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.50	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.99	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	0.50	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B6:24"		
Lab Sample ID:	C46897-8	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8260B	**Percent Solids:**	n/a [a]
Project:	1936 AR		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	5.0	0.50	ug/kg	
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	0.99	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.50	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	0.99	ug/kg	
74-87-3	Methyl chloride	ND	5.0	0.99	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.50	ug/kg	
75-09-2	Methylene chloride	ND	20	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	0.99	ug/kg	
91-20-3	Naphthalene	ND	5.0	0.99	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/kg	
100-42-5	Styrene	ND	5.0	0.50	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	40	9.9	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.99	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.99	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.99	ug/kg	
127-18-4	Tetrachloroethylene [b]	ND	5.0	0.60	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	0.99	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	0.99	ug/kg	
1330-20-7	Xylene (total)	ND	9.9	0.99	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		72-140%
2037-26-5	Toluene-D8	102%		87-113%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B6:24"		
Lab Sample ID:	C46897-8	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8260B	**Percent Solids:**	n/a [a]
Project:	1936 AR		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	94%		81-115%

(a) All results reported on a wet weight basis.
(b) Associated ICV outside of control limits (biased high); not detected in sample.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B6:24"		
Lab Sample ID:	C46897-8	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8260B	**Percent Solids:**	n/a [a]
Project:	1936 AR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [b]	Y30736.D	1	08/24/16	AFL	n/a	n/a	F:VY1236
Run #2							

	Initial Weight	Final Volume
Run #1	5.12 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	16.2	49	10	ug/kg	J
71-43-2	Benzene	ND	4.9	1.2	ug/kg	
108-86-1	Bromobenzene	ND	4.9	1.2	ug/kg	
74-97-5	Bromochloromethane	ND	4.9	1.1	ug/kg	
75-27-4	Bromodichloromethane	ND	4.9	0.98	ug/kg	
75-25-2	Bromoform	ND	4.9	0.98	ug/kg	
78-93-3	2-Butanone (MEK)	ND	24	8.9	ug/kg	
104-51-8	n-Butylbenzene [c]	ND	4.9	0.98	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.9	0.98	ug/kg	
98-06-6	tert-Butylbenzene	ND	4.9	0.98	ug/kg	
56-23-5	Carbon Tetrachloride	ND	4.9	1.7	ug/kg	
108-90-7	Chlorobenzene	ND	4.9	0.98	ug/kg	
75-00-3	Chloroethane	ND	4.9	2.0	ug/kg	
67-66-3	Chloroform	ND	4.9	1.2	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.9	0.98	ug/kg	
106-43-4	p-Chlorotoluene [c]	ND	4.9	0.98	ug/kg	
124-48-1	Dibromochloromethane	ND	4.9	0.98	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.9	2.2	ug/kg	
106-93-4	1,2-Dibromoethane	ND	4.9	0.98	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.9	2.4	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	4.9	0.98	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	4.9	0.98	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	4.9	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.9	1.6	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.9	0.98	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.9	0.98	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.9	1.2	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4.9	1.5	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.9	1.6	ug/kg	
142-28-9	1,3-Dichloropropane	ND	4.9	0.98	ug/kg	
594-20-7	2,2-Dichloropropane	ND	4.9	0.98	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.9	1.3	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B6:24"		
Lab Sample ID:	C46897-8	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8260B	**Percent Solids:**	n/a [a]
Project:	1936 AR		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	4.9	1.9	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.9	0.98	ug/kg	
108-20-3	Di-Isopropyl Ether	ND	4.9	1.2	ug/kg	
100-41-4	Ethylbenzene	ND	4.9	1.1	ug/kg	
637-92-3	Ethyl Tert Butyl Ether	ND	4.9	1.3	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.9	2.1	ug/kg	
591-78-6	2-Hexanone	ND	24	8.5	ug/kg	
98-82-8	Isopropylbenzene	ND	4.9	1.4	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.9	0.98	ug/kg	
74-83-9	Methyl Bromide	ND	4.9	2.5	ug/kg	
74-87-3	Methyl Chloride	ND	4.9	2.3	ug/kg	
74-95-3	Methylene Bromide	ND	4.9	1.8	ug/kg	
75-09-2	Methylene Chloride [d]	13.9	9.8	3.9	ug/kg	B
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	24	10	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.9	1.1	ug/kg	
91-20-3	Naphthalene	ND	4.9	2.0	ug/kg	
103-65-1	n-Propylbenzene	ND	4.9	1.2	ug/kg	
100-42-5	Styrene	ND	4.9	0.98	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	4.9	1.3	ug/kg	
75-65-0	Tert-Butyl Alcohol	ND	49	13	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	4.9	1.1	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.9	2.2	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.9	1.3	ug/kg	
108-88-3	Toluene	ND	4.9	1.1	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.9	1.9	ug/kg	
120-82-1	1,2,4-Trichlorobenzene [c]	ND	4.9	1.4	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.9	0.98	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.9	1.8	ug/kg	
79-01-6	Trichloroethylene	ND	4.9	1.1	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.9	1.8	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.9	1.6	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.9	0.98	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.9	0.98	ug/kg	
75-01-4	Vinyl Chloride	ND	4.9	1.6	ug/kg	
1330-20-7	Xylene (total)	ND	15	2.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	115%		75-124%
17060-07-0	1,2-Dichloroethane-D4	113%		72-135%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B6:24"		
Lab Sample ID:	C46897-8	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8260B	**Percent Solids:**	n/a [a]
Project:	1936 AR		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	100%		75-126%
460-00-4	4-Bromofluorobenzene	106%		71-133%

(a) All results reported on a wet weight basis.
(b) Sample was received in a bulk container but was not preserved within 48 hours of sampling. Reported results are considered minimum values. Analysis performed at SGS Accutest, Orlando FL.
(c) Associated BS recovery outside control limits.
(d) Suspected laboratory contaminant.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B6:24"		
Lab Sample ID:	C46897-8	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8015C	**Percent Solids:**	n/a [a]
Project:	1936 AR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [b]	UV075470.D	1	08/24/16	AFL	n/a	n/a	F:GUV4019
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.99 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	102%		56-149%
98-08-8	aaa-Trifluorotoluene	99%		66-132%

(a) All results reported on a wet weight basis.
(b) Sample was received in a bulk container but was not preserved within 48 hours of sampling. Reported resulta are considered minimum values. Analysis performed at SGS Accutest, Orlando FL.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B6:24"		
Lab Sample ID:	C46897-8	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8015C SW846 3546	**Percent Solids:**	n/a [a]
Project:	1936 AR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [b]	YR4654.D	1	08/31/16	AFL	08/24/16	F:OP61615	F:GYR115
Run #2							

	Initial Weight	Final Volume
Run #1	19.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	5.1	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	84%		56-122%

(a) All results reported on a wet weight basis.
(b) Analysis performed at SGS Accutest, Orlando FL.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B7:26"		
Lab Sample ID:	C46897-10	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8260B	**Percent Solids:**	n/a [a]
Project:	1936 AR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L50483.D	1	08/19/16	JT	n/a	n/a	VL1516
Run #2							

	Initial Weight
Run #1	5.19 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [b]	ND	39	9.6	ug/kg	
71-43-2	Benzene	ND	4.8	0.48	ug/kg	
108-86-1	Bromobenzene	ND	4.8	0.48	ug/kg	
74-97-5	Bromochloromethane	ND	4.8	0.48	ug/kg	
75-27-4	Bromodichloromethane	ND	4.8	0.48	ug/kg	
75-25-2	Bromoform	ND	4.8	0.48	ug/kg	
104-51-8	n-Butylbenzene	ND	4.8	0.48	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.8	0.48	ug/kg	
98-06-6	tert-Butylbenzene	ND	4.8	0.48	ug/kg	
108-90-7	Chlorobenzene	ND	4.8	0.48	ug/kg	
75-00-3	Chloroethane	ND	4.8	0.96	ug/kg	
67-66-3	Chloroform	ND	4.8	0.48	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.8	0.48	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.8	0.48	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.8	0.48	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.8	0.48	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.8	0.48	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.8	0.48	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.8	1.3	ug/kg	
106-93-4	1,2-Dibromoethane	ND	4.8	0.48	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.8	0.48	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.8	0.48	ug/kg	
142-28-9	1,3-Dichloropropane	ND	4.8	0.48	ug/kg	
108-20-3	Di-Isopropyl ether	ND	4.8	0.48	ug/kg	
594-20-7	2,2-Dichloropropane	ND	4.8	0.48	ug/kg	
124-48-1	Dibromochloromethane	ND	4.8	0.48	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.8	0.96	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.8	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.8	0.48	ug/kg	
541-73-1	m-Dichlorobenzene	ND	4.8	0.48	ug/kg	
95-50-1	o-Dichlorobenzene	ND	4.8	0.48	ug/kg	
106-46-7	p-Dichlorobenzene	ND	4.8	0.48	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B7:26"		
Lab Sample ID:	C46897-10	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8260B	**Percent Solids:**	n/a [a]
Project:	1936 AR		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	4.8	0.48	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.8	0.48	ug/kg	
100-41-4	Ethylbenzene	ND	4.8	0.48	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	4.8	0.48	ug/kg	
591-78-6	2-Hexanone	ND	19	1.9	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.8	0.96	ug/kg	
98-82-8	Isopropylbenzene	ND	4.8	0.48	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.8	0.48	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	19	1.9	ug/kg	
74-83-9	Methyl bromide	ND	4.8	0.96	ug/kg	
74-87-3	Methyl chloride	ND	4.8	0.96	ug/kg	
74-95-3	Methylene bromide	ND	4.8	0.48	ug/kg	
75-09-2	Methylene chloride	ND	19	4.8	ug/kg	
78-93-3	Methyl ethyl ketone	ND	19	1.9	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.8	0.96	ug/kg	
91-20-3	Naphthalene	ND	4.8	0.96	ug/kg	
103-65-1	n-Propylbenzene	ND	4.8	0.48	ug/kg	
100-42-5	Styrene	ND	4.8	0.48	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	4.8	0.48	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	39	9.6	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	4.8	0.48	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.8	0.48	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.8	0.48	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.8	0.48	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.8	0.48	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.8	0.96	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.48	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.8	0.96	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.8	0.96	ug/kg	
127-18-4	Tetrachloroethylene [b]	ND	4.8	0.58	ug/kg	
108-88-3	Toluene	ND	4.8	0.48	ug/kg	
79-01-6	Trichloroethylene	ND	4.8	0.48	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.8	0.96	ug/kg	
75-01-4	Vinyl chloride	ND	4.8	0.96	ug/kg	
1330-20-7	Xylene (total)	ND	9.6	0.96	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		72-140%
2037-26-5	Toluene-D8	102%		87-113%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B7:26"		
Lab Sample ID:	C46897-10	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8260B	**Percent Solids:**	n/a [a]
Project:	1936 AR		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	95%		81-115%

(a) All results reported on a wet weight basis.
(b) Associated ICV outside of control limits (biased high); not detected in sample.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B7:26"		
Lab Sample ID:	C46897-10	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8260B	**Percent Solids:**	n/a [a]
Project:	1936 AR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [b]	Y30737.D	1	08/24/16	AFL	n/a	n/a	F:VY1236
Run #2							

	Initial Weight	Final Volume
Run #1	5.04 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	10	ug/kg	
71-43-2	Benzene	ND	5.0	1.2	ug/kg	
108-86-1	Bromobenzene	ND	5.0	1.2	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	1.1	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.99	ug/kg	
75-25-2	Bromoform	ND	5.0	0.99	ug/kg	
78-93-3	2-Butanone (MEK)	ND	25	9.0	ug/kg	
104-51-8	n-Butylbenzene [c]	ND	5.0	0.99	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.99	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.99	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.0	1.8	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.99	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.2	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.99	ug/kg	
106-43-4	p-Chlorotoluene [c]	ND	5.0	0.99	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.99	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	2.2	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	0.99	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	2.5	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.0	0.99	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.0	0.99	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.0	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.7	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.99	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.99	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.2	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.5	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.6	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.99	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.99	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	1.3	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B7:26"		
Lab Sample ID:	C46897-10	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8260B	**Percent Solids:**	n/a [a]
Project:	1936 AR		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.9	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.99	ug/kg	
108-20-3	Di-Isopropyl Ether	ND	5.0	1.2	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.1	ug/kg	
637-92-3	Ethyl Tert Butyl Ether	ND	5.0	1.3	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	2.2	ug/kg	
591-78-6	2-Hexanone	ND	25	8.7	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	1.4	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.99	ug/kg	
74-83-9	Methyl Bromide	ND	5.0	2.6	ug/kg	
74-87-3	Methyl Chloride	ND	5.0	2.4	ug/kg	
74-95-3	Methylene Bromide	ND	5.0	1.8	ug/kg	
75-09-2	Methylene Chloride [d]	9.9	9.9	4.0	ug/kg	B
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	11	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.1	ug/kg	
91-20-3	Naphthalene	ND	5.0	2.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	1.2	ug/kg	
100-42-5	Styrene	ND	5.0	0.99	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	1.3	ug/kg	
75-65-0	Tert-Butyl Alcohol	ND	50	13	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.1	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	2.2	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.3	ug/kg	
108-88-3	Toluene	ND	5.0	1.1	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene [c]	ND	5.0	1.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.99	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.8	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.2	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.9	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.6	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.99	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.99	ug/kg	
75-01-4	Vinyl Chloride	ND	5.0	1.7	ug/kg	
1330-20-7	Xylene (total)	ND	15	2.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		75-124%
17060-07-0	1,2-Dichloroethane-D4	118%		72-135%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B7:26"		
Lab Sample ID:	C46897-10	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8260B	**Percent Solids:**	n/a [a]
Project:	1936 AR		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	96%		75-126%
460-00-4	4-Bromofluorobenzene	103%		71-133%

(a) All results reported on a wet weight basis.
(b) Sample was received in a bulk container but was not preserved within 48 hours of sampling. Reported results are considered minimum values. Analysis performed at SGS Accutest, Orlando FL.
(c) Associated BS recovery outside control limits.
(d) Suspected laboratory contaminant.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B7:26"		
Lab Sample ID:	C46897-10	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8015C	**Percent Solids:**	n/a [a]
Project:	1936 AR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [b]	UV075471.D	1	08/24/16	AFL	n/a	n/a	F:GUV4019
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.04 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	102%		56-149%
98-08-8	aaa-Trifluorotoluene	99%		66-132%

(a) All results reported on a wet weight basis.
(b) Sample was received in a bulk container but was not preserved within 48 hours of sampling. Reported results are considered minimum values. Analysis performed at SGS Accutest, Orlando FL.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B7:26"		
Lab Sample ID:	C46897-10	**Date Sampled:**	08/19/16
Matrix:	SO - Soil	**Date Received:**	08/19/16
Method:	SW846 8015C SW846 3546	**Percent Solids:**	n/a [a]
Project:	1936 AR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [b]	YR4655.D	1	08/31/16	AFL	08/24/16	F:OP61615	F:GYR115
Run #2							

	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	4.9	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	87%		56-122%

(a) All results reported on a wet weight basis.
(b) Analysis performed at SGS Accutest, Orlando FL.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS ACCUTEST — CHAIN OF CUSTODY

2105 Lundy Ave, San Jose, CA 95131
(408) 588-0200 FAX: (408) 588-0201

FED-EX Tracking #:
Bottle Order Control #:
SGS Accutest Quote #:
SGS Accutest NC Job #: C C46897

Client / Reporting Information

Company Name: RNC ENVIRONMENTAL LLC
Address: 3326 M STREET
City: SACRAMENTO State: CA Zip: 95816
Project Contact:
Phone #: 888.485.3330
Samplers's Name: RICH RYAN 530.925.4932

Project Information

Project Name: 1936 AR
Street:
City: State:
Project #:
EMAIL:
Client Purchase Order #:

Requested Analysis

SGS Accutest Sample ID	Sample ID / Field Point / Point of Collection	Collection Date	Time	Sampled by	Matrix	# of bottles	Preserved: HCl	H2SO4	HNO3	NaOH	MeOH	Encore	CAM 17 Metals SW846 6000/7000	Organochlorine Pest 8081A	TPH gas 8015m	TPH diesel 8015m	TPH motor oil 8015m	VOCs 8260	MADEP EPH	HOLD
1	B1: 14-19"	8/19		RLR	SOIL	1				✓			✓	✓			✓			
2	B2: 14-19"					1							✓	✓			✓			
3	B3: 14-19"					1							✓	✓			✓			
4	B4: 8-15"					2							✓	✓			✓		✓	
5	B5: 8-12"					1														✓
6	B5: 24'					2									✓	✓		✓		
7	B6: 7.5-8.0"					1														✓
8	B6: 24'					2									✓	✓		✓		
9	B7: 10-15"					1									[illegible]					✓
10	B7: 26'					2									✓	✓		✓		

Matrix Codes: WW- Wastewater; GW- Ground Water; SW- Surface Water; SO- Soil; OI-OJ WP-Wipe; LIQ - Non-aqueous Liquid; AIR; DW- Drinking Water (Perchlorate Only)

LAB USE ONLY

Turnaround Time (Business days)

Approved By / Date:

- [ ] 10 Day
- [x] 5 Day
- [ ] 3 Day
- [ ] 2 Day
- [ ] 1 Day
- [ ] Same Day

Emergency T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" - Results only
- [ ] Commercial "B" - Results with QC summaries
- [ ] Commercial "B+" - Results, QC, and chromatograms
- [ ] FULL1 - Level 4 data package
- [ ] EDF for Geotracker [ ] EDD Format
- Provide EDF Global ID:
- Provide EDF Logcode:

Comments / Remarks

EMAIL RESULTS TO:
NEIL@RNC-ENVIRO.COM
RICH@RYANGES.COM

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler	Date Time	Received By
1	[signature]	8/19/16 1305	1 [signature]
2	Relinquished by:	Date Time:	Received By: 2
3	Relinquished by:	Date Time:	Received By: 3
4	Relinquished by:	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5

Custody Seal #: NONE
Appropriate Bottle / Pres. Y / N
Labels match CoC? Y / N
Headspace Y / N
On Ice Y / N
Separate Receiving Check List used: Y / N
Cooler Temp: 15, 11, 14, 8

C46897: Chain of Custody
Page 1 of 2

SGS Accutest Sample Receipt Summary

Job Number: C46897 **Client:** RNC ENVIRONMENTAL LLC **Project:** 1936 AR

Date / Time Received: 8/19/2016 1:05:00 PM **Delivery Method:** Client **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1: (15.1/14.8);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☐		☑	3. COC Present:	☑		☐
2. Custody Seals Intact:	☐		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Therm ID:	IR1;		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☐	☑
2. Trip Blank listed on COC:	☐		☐	☑
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

C46897: Chain of Custody
Page 2 of 2

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: C46897
Account: RNCECAS RNC Environmental
Project: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1516-MB	L50470.D	1	08/19/16	JT	n/a	n/a	VL1516

The QC reported here applies to the following samples: **Method:** SW846 8260B

C46897-6, C46897-8, C46897-10

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	40	10	ug/kg	
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.50	ug/kg	
75-25-2	Bromoform	ND	5.0	0.50	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.0	1.0	ug/kg	
67-66-3	Chloroform	ND	5.0	0.50	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.50	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	0.50	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	5.0	0.50	ug/kg	

Method Blank Summary

Job Number: C46897
Account: RNCECAS RNC Environmental
Project: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1516-MB	L50470.D	1	08/19/16	JT	n/a	n/a	VL1516

The QC reported here applies to the following samples: **Method:** SW846 8260B

C46897-6, C46897-8, C46897-10

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	1.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.50	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	1.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	1.0	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.50	ug/kg	
75-09-2	Methylene chloride	ND	20	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	1.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/kg	
100-42-5	Styrene	ND	5.0	0.50	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	40	10	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	0.60	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	95%	72-140%

Method Blank Summary

Job Number: C46897
Account: RNCECAS RNC Environmental
Project: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1516-MB	L50470.D	1	08/19/16	JT	n/a	n/a	VL1516

The QC reported here applies to the following samples: **Method:** SW846 8260B

C46897-6, C46897-8, C46897-10

CAS No.	Surrogate Recoveries		Limits
2037-26-5	Toluene-D8	99%	87-113%
460-00-4	4-Bromofluorobenzene	98%	81-115%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C46897
Account: RNCECAS RNC Environmental
Project: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1516-BS	L50467.D	1	08/19/16	JT	n/a	n/a	VL1516
VL1516-BSD	L50468.D	1	08/19/16	JT	n/a	n/a	VL1516

The QC reported here applies to the following samples: **Method:** SW846 8260B

C46897-6, C46897-8, C46897-10

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	160	225	141	214	134	5	47-163/30
71-43-2	Benzene	40	47.5	119	46.5	116	2	72-122/18
108-86-1	Bromobenzene	40	47.6	119	46.5	116	2	68-122/19
74-97-5	Bromochloromethane	40	50.3	126	48.1	120	4	71-129/18
75-27-4	Bromodichloromethane	40	45.0	113	43.4	109	4	68-122/18
75-25-2	Bromoform	40	44.0	110	44.8	112	2	69-126/18
104-51-8	n-Butylbenzene	40	48.0	120	47.3	118	1	66-121/20
135-98-8	sec-Butylbenzene	40	48.7	122* [a]	48.0	120* [a]	1	69-118/20
98-06-6	tert-Butylbenzene	40	48.5	121* [a]	47.7	119* [a]	2	69-117/20
108-90-7	Chlorobenzene	40	45.7	114	45.3	113	1	68-117/17
75-00-3	Chloroethane	40	44.2	111	42.8	107	3	66-134/18
67-66-3	Chloroform	40	46.7	117	44.3	111	5	68-124/18
95-49-8	o-Chlorotoluene	40	47.6	119	45.3	113	5	65-120/22
106-43-4	p-Chlorotoluene	40	47.5	119	47.4	119	0	64-123/24
56-23-5	Carbon tetrachloride	40	49.7	124	48.0	120	3	68-130/20
75-34-3	1,1-Dichloroethane	40	48.0	120	45.5	114	5	69-122/19
75-35-4	1,1-Dichloroethylene	40	48.4	121* [a]	46.9	117	3	69-120/20
563-58-6	1,1-Dichloropropene	40	46.3	116	45.2	113	2	69-120/19
96-12-8	1,2-Dibromo-3-chloropropane	40	47.8	120	45.7	114	4	64-132/25
106-93-4	1,2-Dibromoethane	40	46.9	117	45.2	113	4	70-122/17
107-06-2	1,2-Dichloroethane	40	45.9	115	43.6	109	5	69-125/18
78-87-5	1,2-Dichloropropane	40	47.1	118	46.3	116	2	71-122/18
142-28-9	1,3-Dichloropropane	40	46.5	116	46.8	117	1	74-123/17
108-20-3	Di-Isopropyl ether	40	43.1	108	41.3	103	4	69-122/19
594-20-7	2,2-Dichloropropane	40	49.3	123	47.4	119	4	63-132/24
124-48-1	Dibromochloromethane	40	47.3	118	46.9	117	1	68-121/16
75-71-8	Dichlorodifluoromethane	40	40.0	100	38.4	96	4	53-119/22
156-59-2	cis-1,2-Dichloroethylene	40	51.6	129	48.4	121	6	72-130/18
10061-01-5	cis-1,3-Dichloropropene	40	48.7	122	45.4	114	7	71-130/18
541-73-1	m-Dichlorobenzene	40	47.1	118	45.8	115	3	67-119/18
95-50-1	o-Dichlorobenzene	40	47.9	120* [a]	46.2	116	4	68-119/17
106-46-7	p-Dichlorobenzene	40	46.9	117	46.0	115	2	67-119/17
156-60-5	trans-1,2-Dichloroethylene	40	46.4	116* [a]	44.3	111	5	66-113/19
10061-02-6	trans-1,3-Dichloropropene	40	45.9	115	45.4	114	1	70-118/17
100-41-4	Ethylbenzene	40	47.1	118	46.9	117	0	71-118/18
637-92-3	Ethyl tert-Butyl Ether	40	44.3	111	41.9	105	6	69-125/19

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C46897
Account: RNCECAS RNC Environmental
Project: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1516-BS	L50467.D	1	08/19/16	JT	n/a	n/a	VL1516
VL1516-BSD	L50468.D	1	08/19/16	JT	n/a	n/a	VL1516

The QC reported here applies to the following samples: **Method:** SW846 8260B

C46897-6, C46897-8, C46897-10

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	160	176	110	186	116	6	53-153/27
87-68-3	Hexachlorobutadiene	40	45.1	113	46.3	116	3	65-125/22
98-82-8	Isopropylbenzene	40	47.6	119	47.3	118	1	70-119/19
99-87-6	p-Isopropyltoluene	40	48.6	122* [a]	48.4	121* [a]	0	68-120/20
108-10-1	4-Methyl-2-pentanone	160	179	112	184	115	3	60-145/26
74-83-9	Methyl bromide	40	42.7	107	41.3	103	3	66-130/18
74-87-3	Methyl chloride	40	40.6	102	37.9	95	7	50-140/25
74-95-3	Methylene bromide	40	47.9	120	47.2	118	1	72-127/17
75-09-2	Methylene chloride	40	48.3	121	45.1	113	7	69-121/18
78-93-3	Methyl ethyl ketone	160	191	119	192	120	1	59-147/30
1634-04-4	Methyl Tert Butyl Ether	40	43.2	108	40.9	102	5	68-121/19
91-20-3	Naphthalene	40	48.4	121	47.1	118	3	68-129/22
103-65-1	n-Propylbenzene	40	47.3	118* [a]	46.4	116	2	67-116/20
100-42-5	Styrene	40	47.4	119	47.1	118	1	68-120/17
994-05-8	Tert-Amyl Methyl Ether	40	46.2	116	44.1	110	5	70-129/20
75-65-0	Tert Butyl Alcohol	200	223	112	225	113	1	50-163/30
630-20-6	1,1,1,2-Tetrachloroethane	40	50.1	125* [a]	47.6	119	5	70-123/18
71-55-6	1,1,1-Trichloroethane	40	50.0	125	48.4	121	3	71-128/20
79-34-5	1,1,2,2-Tetrachloroethane	40	49.7	124	50.2	126	1	69-126/18
79-00-5	1,1,2-Trichloroethane	40	46.0	115	46.0	115	0	70-120/17
87-61-6	1,2,3-Trichlorobenzene	40	48.3	121	45.7	114	6	65-125/23
96-18-4	1,2,3-Trichloropropane	40	47.8	120	47.2	118	1	69-128/18
120-82-1	1,2,4-Trichlorobenzene	40	48.0	120	45.6	114	5	65-125/22
95-63-6	1,2,4-Trimethylbenzene	40	48.6	122* [a]	47.1	118	3	67-118/19
108-67-8	1,3,5-Trimethylbenzene	40	49.2	123* [a]	47.8	120	3	68-120/20
127-18-4	Tetrachloroethylene	40	49.9	125	48.3	121	3	66-125/18
108-88-3	Toluene	40	47.1	118* [a]	46.4	116	1	72-116/18
79-01-6	Trichloroethylene	40	47.5	119	46.0	115	3	70-126/18
75-69-4	Trichlorofluoromethane	40	42.3	106	40.4	101	5	70-138/19
75-01-4	Vinyl chloride	40	44.1	110	42.0	105	5	55-146/22
1330-20-7	Xylene (total)	120	143	119* [a]	140	117	2	68-118/18

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	102%	99%	72-140%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C46897
Account: RNCECAS RNC Environmental
Project: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1516-BS	L50467.D	1	08/19/16	JT	n/a	n/a	VL1516
VL1516-BSD	L50468.D	1	08/19/16	JT	n/a	n/a	VL1516

The QC reported here applies to the following samples: **Method:** SW846 8260B

C46897-6, C46897-8, C46897-10

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	102%	99%	87-113%
460-00-4	4-Bromofluorobenzene	94%	98%	81-115%

(a) Outside laboratory control limits (high bias); not detected in associated samples. AZ:L1

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C46897
Account: RNCECAS RNC Environmental
Project: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C46849-1MS	L50478.D	1	08/19/16	JT	n/a	n/a	VL1516
C46849-1MSD	L50479.D	1	08/19/16	JT	n/a	n/a	VL1516
C46849-1	L50473.D	1	08/19/16	JT	n/a	n/a	VL1516

The QC reported here applies to the following samples: **Method:** SW846 8260B

C46897-6, C46897-8, C46897-10

CAS No.	Compound	C46849-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		8410	8660	103	8410	9050	108	4	47-163/30
71-43-2	Benzene	ND		2100	2530	120	2100	2380	113	6	72-122/18
108-86-1	Bromobenzene	ND		2100	2440	116	2100	2390	114	2	68-122/19
74-97-5	Bromochloromethane	ND		2100	2480	118	2100	2490	118	0	71-129/18
75-27-4	Bromodichloromethane	ND		2100	2490	118	2100	2260	107	10	68-122/18
75-25-2	Bromoform	ND		2100	2370	113	2100	2270	108	4	69-126/18
104-51-8	n-Butylbenzene	ND		2100	2460	117	2100	2430	116	1	66-121/20
135-98-8	sec-Butylbenzene	ND		2100	2490	118	2100	2470	117	1	69-118/20
98-06-6	tert-Butylbenzene	ND		2100	2460	117	2100	2450	117	0	69-117/20
108-90-7	Chlorobenzene	ND		2100	2490	118* [a]	2100	2300	109	8	68-117/17
75-00-3	Chloroethane	ND		2100	2310	110	2100	2140	102	8	66-134/18
67-66-3	Chloroform	ND		2100	2480	118	2100	2350	112	5	68-124/18
95-49-8	o-Chlorotoluene	ND		2100	2330	111	2100	2320	110	0	65-120/22
106-43-4	p-Chlorotoluene	ND		2100	2490	118	2100	2450	117	2	64-123/24
56-23-5	Carbon tetrachloride	ND		2100	2710	129	2100	2470	117	9	68-130/20
75-34-3	1,1-Dichloroethane	ND		2100	2500	119	2100	2390	114	4	69-122/19
75-35-4	1,1-Dichloroethylene	ND		2100	2440	116	2100	2380	113	2	69-120/20
563-58-6	1,1-Dichloropropene	ND		2100	2530	120	2100	2340	111	8	69-120/19
96-12-8	1,2-Dibromo-3-chloropropane	ND		2100	2430	116	2100	2400	114	1	64-132/25
106-93-4	1,2-Dibromoethane	ND		2100	2530	120	2100	2340	111	8	70-122/17
107-06-2	1,2-Dichloroethane	ND		2100	2570	122	2100	2330	111	10	69-125/18
78-87-5	1,2-Dichloropropane	ND		2100	2530	120	2100	2370	113	7	71-122/18
142-28-9	1,3-Dichloropropane	ND		2100	2580	123	2100	2420	115	6	74-123/17
108-20-3	Di-Isopropyl ether	ND		2100	2220	106	2100	2150	102	3	69-122/19
594-20-7	2,2-Dichloropropane	ND		2100	2440	116	2100	2280	108	7	63-132/24
124-48-1	Dibromochloromethane	ND		2100	2550	121	2100	2370	113	7	68-121/16
75-71-8	Dichlorodifluoromethane	ND		2100	2380	113	2100	2060	98	14	53-119/22
156-59-2	cis-1,2-Dichloroethylene	ND		2100	2560	122	2100	2500	119	2	72-130/18
10061-01-5	cis-1,3-Dichloropropene	ND		2100	2540	121	2100	2370	113	7	71-130/18
541-73-1	m-Dichlorobenzene	ND		2100	2390	114	2100	2340	111	2	67-119/18
95-50-1	o-Dichlorobenzene	ND		2100	2370	113	2100	2360	112	0	68-119/17
106-46-7	p-Dichlorobenzene	ND		2100	2360	112	2100	2360	112	0	67-119/17
156-60-5	trans-1,2-Dichloroethylene	ND		2100	2340	111	2100	2250	107	4	66-113/19
10061-02-6	trans-1,3-Dichloropropene	ND		2100	2590	123* [a]	2100	2380	113	8	70-118/17
100-41-4	Ethylbenzene	ND		2100	2550	121* [a]	2100	2390	114	6	71-118/18
637-92-3	Ethyl tert-Butyl Ether	ND		2100	2280	108	2100	2200	105	4	69-125/19

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C46897
Account: RNCECAS RNC Environmental
Project: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C46849-1MS	L50478.D	1	08/19/16	JT	n/a	n/a	VL1516
C46849-1MSD	L50479.D	1	08/19/16	JT	n/a	n/a	VL1516
C46849-1	L50473.D	1	08/19/16	JT	n/a	n/a	VL1516

The QC reported here applies to the following samples: **Method:** SW846 8260B

C46897-6, C46897-8, C46897-10

CAS No.	Compound	C46849-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	ND		8410	9680	115	8410	9100	108	6	53-153/27
87-68-3	Hexachlorobutadiene	ND		2100	2480	118	2100	2480	118	0	65-125/22
98-82-8	Isopropylbenzene	ND		2100	2570	122* [a]	2100	2410	115	6	70-119/19
99-87-6	p-Isopropyltoluene	ND		2100	2490	118	2100	2450	117	2	68-120/20
108-10-1	4-Methyl-2-pentanone	ND		8410	9550	114	8410	9080	108	5	60-145/26
74-83-9	Methyl bromide	ND		2100	2230	106	2100	2010	96	10	66-130/18
74-87-3	Methyl chloride	ND		2100	2230	106	2100	1960	93	13	50-140/25
74-95-3	Methylene bromide	ND		2100	2610	124	2100	2410	115	8	72-127/17
75-09-2	Methylene chloride	ND		2100	2400	114	2100	2300	109	4	69-121/18
78-93-3	Methyl ethyl ketone	ND		8410	9380	112	8410	9310	111	1	59-147/30
1634-04-4	Methyl Tert Butyl Ether	ND		2100	2220	106	2100	2140	102	4	68-121/19
91-20-3	Naphthalene	ND		2100	2390	114	2100	2410	115	1	68-129/22
103-65-1	n-Propylbenzene	ND		2100	2380	113	2100	2380	113	0	67-116/20
100-42-5	Styrene	ND		2100	2560	122* [a]	2100	2400	114	6	68-120/17
994-05-8	Tert-Amyl Methyl Ether	ND		2100	2350	112	2100	2300	109	2	70-129/20
75-65-0	Tert Butyl Alcohol	ND		10500	10800	103	10500	11900	113	10	50-163/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		2100	2610	124* [b]	2100	2460	117	6	70-123/18
71-55-6	1,1,1-Trichloroethane	ND		2100	2640	126	2100	2510	119	5	71-128/20
79-34-5	1,1,2,2-Tetrachloroethane	ND		2100	2380	113	2100	2390	114	0	69-126/18
79-00-5	1,1,2-Trichloroethane	ND		2100	2510	119	2100	2350	112	7	70-120/17
87-61-6	1,2,3-Trichlorobenzene	ND		2100	2400	114	2100	2340	111	3	65-125/23
96-18-4	1,2,3-Trichloropropane	ND		2100	2570	122	2100	2460	117	4	69-128/18
120-82-1	1,2,4-Trichlorobenzene	ND		2100	2350	112	2100	2300	109	2	65-125/22
95-63-6	1,2,4-Trimethylbenzene	ND		2100	2420	115	2100	2380	113	2	67-118/19
108-67-8	1,3,5-Trimethylbenzene	ND		2100	2470	117	2100	2450	117	1	68-120/20
127-18-4	Tetrachloroethylene	ND		2100	2600	124	2100	2500	119	4	66-125/18
108-88-3	Toluene	ND		2100	2510	119* [b]	2100	2370	113	6	72-116/18
79-01-6	Trichloroethylene	ND		2100	2590	123	2100	2420	115	7	70-126/18
75-69-4	Trichlorofluoromethane	ND		2100	2390	114	2100	2080	99	14	70-138/19
75-01-4	Vinyl chloride	ND		2100	2070	98	2100	2040	97	1	55-146/22
1330-20-7	Xylene (total)	ND		6310	7680	122* [b]	6310	7160	114	7	68-118/18

CAS No.	Surrogate Recoveries	MS	MSD	C46849-1	Limits
1868-53-7	Dibromofluoromethane	98%	97%	94%	72-140%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C46897
Account: RNCECAS RNC Environmental
Project: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C46849-1MS	L50478.D	1	08/19/16	JT	n/a	n/a	VL1516
C46849-1MSD	L50479.D	1	08/19/16	JT	n/a	n/a	VL1516
C46849-1	L50473.D	1	08/19/16	JT	n/a	n/a	VL1516

The QC reported here applies to the following samples: **Method:** SW846 8260B

C46897-6, C46897-8, C46897-10

CAS No.	Surrogate Recoveries	MS	MSD	C46849-1	Limits
2037-26-5	Toluene-D8	101%	99%	101%	87-113%
460-00-4	4-Bromofluorobenzene	104%	99%	97%	81-115%

(a) Outside laboratory control limits (high bias); not detected in associated samples. AZ:M1
(b) Outside laboratory control limits (high bias); not detected in associated samples. AZ:L1

* = Outside of Control Limits.

Misc. Forms

Custody Documents and Other Forms

(SGS Accutest Southeast)

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

SGS ACCUTEST

2105 Lundy Avenue, San Jose, CA 95131
TEL: 408-588-0200 FAX: 408-588-0201
www.sgs.com

Page 1 of 1

FED-EX Tracking #: | Bottle Order Control #:
SGS Accutest Quote #: | Accutest Job #: C46897

Client / Reporting Information

Company Name: SGS Accutest Laboratories
Street Address: 2105 Lundy Avenue
City: San Jose, State: CA Zip: 9513
Project Contact: nutan.kabir@sgs.com E-mail:
Phone #: 408-588-0200 Fax #:
Sampler(s) Name(s): RLR Phone:

Project Information

Project Name: 1936 AR
Street:
City: State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

AG,AS,B8015ORO,BA,BE,CD,CO,CR,CU,HG,MO,NI,P8081PESTPPL,PB,SB,SE,TL,V,ZN
B8015ORO,V8015GRO,V8260BSTD,

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	AG,AS,B8015ORO,BA,BE,CD,CO,CR,CU,HG,MO,NI,P8081PESTPPL,PB,SB,SE,TL,V,ZN	B8015ORO,V8015GRO,V8260BSTD,	LAB USE ONLY
1	B1:14-19"		8/19/16	12:00:00 AM	RLR	SO										X		
2	B2:14-19"		8/19/16	12:00:00 AM	RLR	SO										X		
3	B3:14-19"		8/19/16	12:00:00 AM	RLR	SO										X		
4	B4:8-15"		8/19/16	12:00:00 AM	RLR	SO										X		
6	B5:24"		8/19/16	12:00:00 AM	RLR	SO											X	
8	B6:24"		8/19/16	12:00:00 AM	RLR	SO											X	
10	B7:26"		8/19/16	12:00:00 AM	RLR	SO											X	

Turnaround Time (Business days)

Approved By (SGS Accutest PM): / Date:

- [ ] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [X] other Due 8/26/2016

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULL T1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [X] Other COMMB

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Please sub to ALSE for CAM17 (6010B),8260B.

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Ali Zeighami	8/22/16 15:00	Fedex	Fedex	8-23-16	Courier (ALSE) 09:15
3		Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Intact / Not Intact	Preserved where applicable / On Ice / Cooler Temp. 36

SGS ACCUTEST - ORLANDO SAMPLE RECEIPT CONFIRMATION

SGS ACCUTEST'S JOB NUMBER: C46897 CLIENT: ALNC PROJECT: 1936 AR

DATE/TIME RECEIVED: 8-23-16 09:15 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER DELIVERY OTHER: _____

AIRBILL NUMBERS: 7770 5263 0864

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- [ ] TRIP BLANK PROVIDED
- [X] TRIP BLANK NOT PROVIDED
- [X] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM_____ 5-GRAM_____

NUMBER OF 5035 FIELD KITS ? _____

NUMBER OF LAB FILTERED METALS ? _____

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR -0.4
- [ ] OBSERVED TEMPS: 4.0
- [ ] CORRECTED TEMPS: 3.6 (USED FOR LIMS)

SAMPLE INFORMATION

- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [X] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- [X] BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] RESIDUAL CHLORINE PRESENT LOT#_____

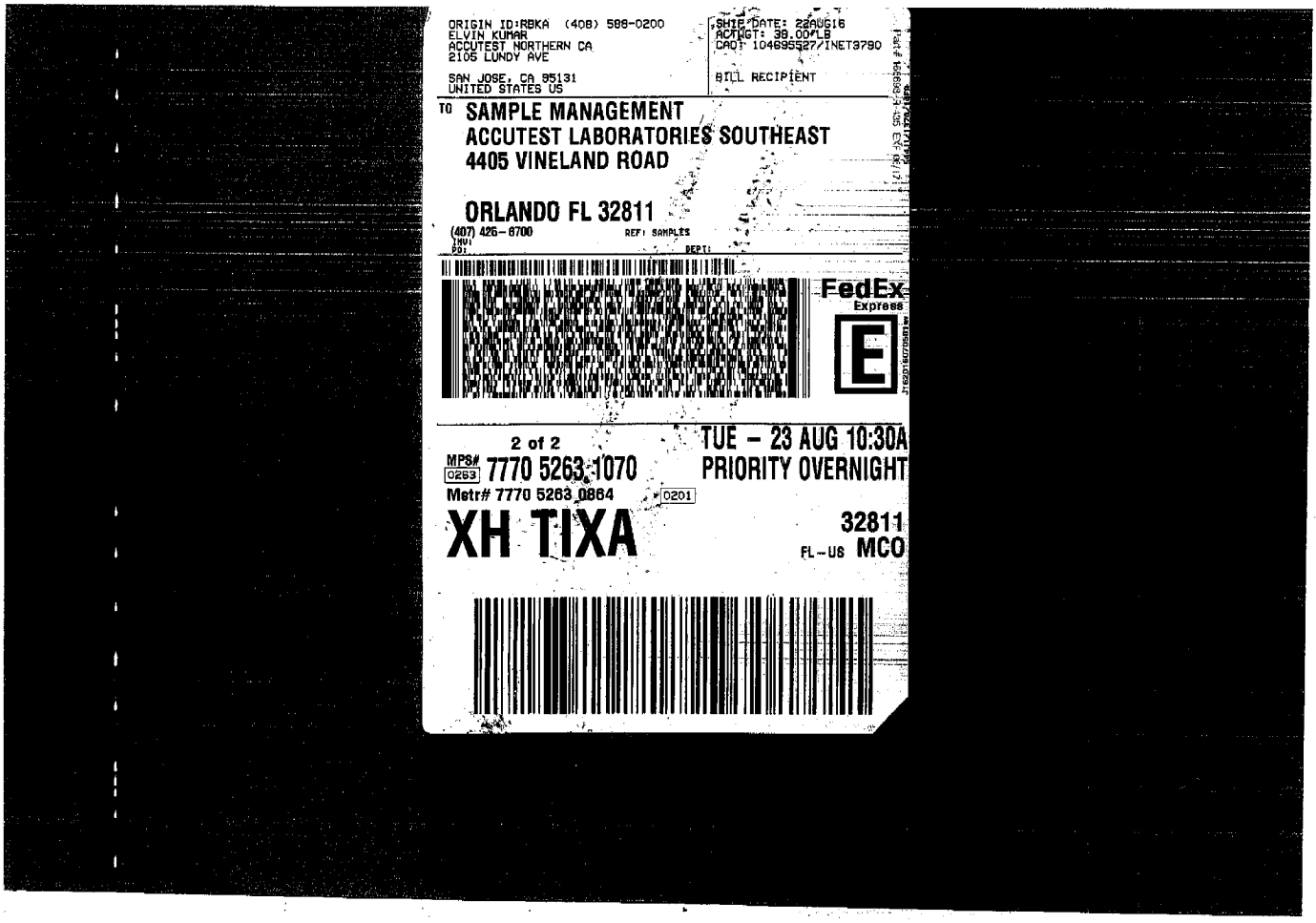
{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

TEST STRIP LOT#s pH 0-3 230315 pH 10-12 219813A OTHER (specify) _____

SUMMARY OF COMMENTS: RECEIVED SAMPLES C46897 5,7,9 NOT REQUESTED ON COC

TECHNICIAN SIGNATURE/DATE: 8-23-16 REVIEWER SIGNATURE/DATE: 8-23-16

NF 02/16 receipt confirmation 020116.xls



C46897: Chain of Custody
Page 3 of 3

GC/MS Volatiles

QC Data Summaries

(SGS Accutest Southeast)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: C46897
Account: ALNCA SGS Accutest Northern California
Project: RNCECAS: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1236-MB	Y30723.D	1	08/24/16	AD	n/a	n/a	VY1236

The QC reported here applies to the following samples: **Method:** SW846 8260B

C46897-6, C46897-8, C46897-10

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	10	ug/kg	
71-43-2	Benzene	ND	5.0	1.3	ug/kg	
108-86-1	Bromobenzene	ND	5.0	1.2	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	1.1	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	25	9.1	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	1.0	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	1.0	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	1.0	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.0	1.8	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.2	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	1.0	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	2.2	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	1.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	2.5	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.0	1.0	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.0	1.0	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.0	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.7	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.2	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.5	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.6	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	1.0	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	1.0	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	1.3	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.9	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
108-20-3	Di-Isopropyl Ether	ND	5.0	1.2	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.1	ug/kg	

Method Blank Summary

Job Number: C46897
Account: ALNCA SGS Accutest Northern California
Project: RNCECAS: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1236-MB	Y30723.D	1	08/24/16	AD	n/a	n/a	VY1236

The QC reported here applies to the following samples: **Method:** SW846 8260B

C46897-6, C46897-8, C46897-10

CAS No.	Compound	Result	RL	MDL	Units	Q
637-92-3	Ethyl Tert Butyl Ether	ND	5.0	1.3	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	2.2	ug/kg	
591-78-6	2-Hexanone	ND	25	8.7	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	1.4	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	1.0	ug/kg	
74-83-9	Methyl Bromide	ND	5.0	2.6	ug/kg	
74-87-3	Methyl Chloride	ND	5.0	2.4	ug/kg	
74-95-3	Methylene Bromide	ND	5.0	1.8	ug/kg	
75-09-2	Methylene Chloride	7.8	10	4.0	ug/kg	J
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	11	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.1	ug/kg	
91-20-3	Naphthalene	ND	5.0	2.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	1.2	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	1.4	ug/kg	
75-65-0	Tert-Butyl Alcohol	ND	50	14	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.1	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	2.2	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.3	ug/kg	
108-88-3	Toluene	ND	5.0	1.1	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.8	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.2	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.9	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.6	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl Chloride	ND	5.0	1.7	ug/kg	
1330-20-7	Xylene (total)	ND	15	2.9	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	106%	75-124%

Method Blank Summary

Job Number: C46897
Account: ALNCA SGS Accutest Northern California
Project: RNCECAS: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1236-MB	Y30723.D	1	08/24/16	AD	n/a	n/a	VY1236

The QC reported here applies to the following samples: **Method:** SW846 8260B

C46897-6, C46897-8, C46897-10

CAS No.	Surrogate Recoveries		Limits
17060-07-0	1,2-Dichloroethane-D4	105%	72-135%
2037-26-5	Toluene-D8	98%	75-126%
460-00-4	4-Bromofluorobenzene	98%	71-133%

Blank Spike Summary

Job Number: C46897
Account: ALNCA SGS Accutest Northern California
Project: RNCECAS: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1236-BS	Y30735.D	1	08/24/16	AD	n/a	n/a	VY1236

The QC reported here applies to the following samples: **Method:** SW846 8260B

C46897-6, C46897-8, C46897-10

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	285	114	61-152
71-43-2	Benzene	50	49.5	99	76-126
108-86-1	Bromobenzene	50	44.6	89	76-122
74-97-5	Bromochloromethane	50	55.0	110	77-120
75-27-4	Bromodichloromethane	50	51.4	103	74-130
75-25-2	Bromoform	50	48.4	97	76-127
78-93-3	2-Butanone (MEK)	250	234	94	75-137
104-51-8	n-Butylbenzene	50	34.7	69*	71-128
135-98-8	sec-Butylbenzene	50	42.8	86	79-135
98-06-6	tert-Butylbenzene	50	45.5	91	77-133
56-23-5	Carbon Tetrachloride	50	56.2	112	78-133
108-90-7	Chlorobenzene	50	48.7	97	81-129
75-00-3	Chloroethane	50	48.1	96	68-133
67-66-3	Chloroform	50	52.5	105	72-123
95-49-8	o-Chlorotoluene	50	41.4	83	77-129
106-43-4	p-Chlorotoluene	50	39.1	78*	80-134
124-48-1	Dibromochloromethane	50	50.6	101	76-127
96-12-8	1,2-Dibromo-3-chloropropane	50	44.5	89	70-137
106-93-4	1,2-Dibromoethane	50	49.4	99	77-126
75-71-8	Dichlorodifluoromethane	50	44.2	88	68-168
95-50-1	1,2-Dichlorobenzene	50	43.3	87	80-129
541-73-1	1,3-Dichlorobenzene	50	40.5	81	81-129
106-46-7	1,4-Dichlorobenzene	50	40.5	81	76-130
75-34-3	1,1-Dichloroethane	50	50.7	101	73-125
107-06-2	1,2-Dichloroethane	50	52.0	104	74-128
75-35-4	1,1-Dichloroethylene	50	46.6	93	81-136
156-59-2	cis-1,2-Dichloroethylene	50	50.3	101	74-126
156-60-5	trans-1,2-Dichloroethylene	50	47.6	95	70-127
78-87-5	1,2-Dichloropropane	50	49.0	98	74-125
142-28-9	1,3-Dichloropropane	50	48.5	97	76-122
594-20-7	2,2-Dichloropropane	50	59.0	118	77-133
563-58-6	1,1-Dichloropropene	50	47.9	96	75-130
10061-01-5	cis-1,3-Dichloropropene	50	50.0	100	80-123
10061-02-6	trans-1,3-Dichloropropene	50	49.1	98	75-131
108-20-3	Di-Isopropyl Ether	50	48.7	97	75-122
100-41-4	Ethylbenzene	50	44.6	89	77-123

* = Outside of Control Limits.

Blank Spike Summary

Job Number: C46897
Account: ALNCA SGS Accutest Northern California
Project: RNCECAS: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1236-BS	Y30735.D	1	08/24/16	AD	n/a	n/a	VY1236

The QC reported here applies to the following samples: **Method:** SW846 8260B

C46897-6, C46897-8, C46897-10

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
637-92-3	Ethyl Tert Butyl Ether	50	51.4	103	75-117
87-68-3	Hexachlorobutadiene	50	40.6	81	74-136
591-78-6	2-Hexanone	250	238	95	72-133
98-82-8	Isopropylbenzene	50	46.1	92	80-136
99-87-6	p-Isopropyltoluene	50	40.1	80	77-131
74-83-9	Methyl Bromide	50	49.8	100	65-139
74-87-3	Methyl Chloride	50	43.9	88	71-144
74-95-3	Methylene Bromide	50	50.4	101	74-124
75-09-2	Methylene Chloride	50	52.8	106	74-137
108-10-1	4-Methyl-2-pentanone (MIBK)	250	236	94	76-132
1634-04-4	Methyl Tert Butyl Ether	50	54.4	109	77-120
91-20-3	Naphthalene	50	44.0	88	79-129
103-65-1	n-Propylbenzene	50	39.9	80	80-135
100-42-5	Styrene	50	47.0	94	78-125
994-05-8	Tert-Amyl Methyl Ether	50	51.9	104	69-130
75-65-0	Tert-Butyl Alcohol	500	540	108	58-136
630-20-6	1,1,1,2-Tetrachloroethane	50	51.4	103	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	44.5	89	71-126
127-18-4	Tetrachloroethylene	50	45.7	91	79-130
108-88-3	Toluene	50	48.1	96	76-124
87-61-6	1,2,3-Trichlorobenzene	50	43.6	87	77-128
120-82-1	1,2,4-Trichlorobenzene	50	35.4	71*	78-130
71-55-6	1,1,1-Trichloroethane	50	53.9	108	70-129
79-00-5	1,1,2-Trichloroethane	50	48.1	96	74-124
79-01-6	Trichloroethylene	50	48.9	98	75-128
75-69-4	Trichlorofluoromethane	50	51.1	102	73-145
96-18-4	1,2,3-Trichloropropane	50	46.3	93	74-127
95-63-6	1,2,4-Trimethylbenzene	50	41.6	83	74-123
108-67-8	1,3,5-Trimethylbenzene	50	41.6	83	73-122
75-01-4	Vinyl Chloride	50	46.0	92	76-141
1330-20-7	Xylene (total)	150	133	89	80-129

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	108%	75-124%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: C46897
Account: ALNCA SGS Accutest Northern California
Project: RNCECAS: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1236-BS	Y30735.D	1	08/24/16	AD	n/a	n/a	VY1236

The QC reported here applies to the following samples: **Method:** SW846 8260B

C46897-6, C46897-8, C46897-10

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	103%	72-135%
2037-26-5	Toluene-D8	97%	75-126%
460-00-4	4-Bromofluorobenzene	92%	71-133%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C46897
Account: ALNCA SGS Accutest Northern California
Project: RNCECAS: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA36316-4MS	Y30725.D	1	08/24/16	AD	n/a	n/a	VY1236
FA36316-4MSD	Y30726.D	1	08/24/16	AD	n/a	n/a	VY1236
FA36316-4	Y30724.D	1	08/24/16	AD	n/a	n/a	VY1236

The QC reported here applies to the following samples: **Method:** SW846 8260B

C46897-6, C46897-8, C46897-10

CAS No.	Compound	FA36316-4 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		2310000	2190000	95	2310000	2060000	89	6	61-152/27
71-43-2	Benzene	ND		462000	432000	94	462000	427000	92	1	76-126/26
108-86-1	Bromobenzene	ND		462000	446000	97	462000	451000	98	1	76-122/32
74-97-5	Bromochloromethane	ND		462000	492000	106	462000	491000	106	0	77-120/24
75-27-4	Bromodichloromethane	ND		462000	461000	100	462000	468000	101	2	74-130/25
75-25-2	Bromoform	ND		462000	443000	96	462000	450000	97	2	76-127/26
78-93-3	2-Butanone (MEK)	ND		2310000	1990000	86	2310000	1820000	79	9	75-137/25
104-51-8	n-Butylbenzene	ND		462000	428000	93	462000	421000	91	2	71-128/35
135-98-8	sec-Butylbenzene	ND		462000	420000	91	462000	426000	92	1	79-135/34
98-06-6	tert-Butylbenzene	ND		462000	423000	92	462000	426000	92	1	77-133/34
56-23-5	Carbon Tetrachloride	ND		462000	442000	96	462000	448000	97	1	78-133/29
108-90-7	Chlorobenzene	ND		462000	456000	99	462000	460000	100	1	81-129/29
75-00-3	Chloroethane	ND		462000	380000	82	462000	384000	83	1	68-133/29
67-66-3	Chloroform	ND		462000	462000	100	462000	433000	94	6	72-123/26
95-49-8	o-Chlorotoluene	ND		462000	415000	90	462000	424000	92	2	77-129/33
106-43-4	p-Chlorotoluene	ND		462000	443000	96	462000	432000	94	3	80-134/33
124-48-1	Dibromochloromethane	ND		462000	456000	99	462000	465000	101	2	76-127/27
96-12-8	1,2-Dibromo-3-chloropropane	ND		462000	393000	85	462000	416000	90	6	70-137/29
106-93-4	1,2-Dibromoethane	ND		462000	444000	96	462000	453000	98	2	77-126/26
75-71-8	Dichlorodifluoromethane	ND		462000	310000	67*	462000	304000	66*	2	68-168/29
95-50-1	1,2-Dichlorobenzene	ND		462000	460000	100	462000	451000	98	2	80-129/32
541-73-1	1,3-Dichlorobenzene	ND		462000	465000	101	462000	461000	100	1	81-129/33
106-46-7	1,4-Dichlorobenzene	ND		462000	476000	103	462000	472000	102	1	76-130/32
75-34-3	1,1-Dichloroethane	ND		462000	448000	97	462000	441000	95	2	73-125/27
107-06-2	1,2-Dichloroethane	ND		462000	485000	105	462000	466000	101	4	74-128/23
75-35-4	1,1-Dichloroethylene	ND		462000	390000	84	462000	398000	86	2	81-136/28
156-59-2	cis-1,2-Dichloroethylene	ND		462000	435000	94	462000	429000	93	1	74-126/26
156-60-5	trans-1,2-Dichloroethylene	ND		462000	444000	96	462000	441000	95	1	70-127/27
78-87-5	1,2-Dichloropropane	ND		462000	425000	92	462000	430000	93	1	74-125/25
142-28-9	1,3-Dichloropropane	ND		462000	425000	92	462000	424000	92	0	76-122/26
594-20-7	2,2-Dichloropropane	ND		462000	474000	103	462000	462000	100	3	77-133/28
563-58-6	1,1-Dichloropropene	ND		462000	413000	89	462000	411000	89	0	75-130/28
10061-01-5	cis-1,3-Dichloropropene	ND		462000	460000	100	462000	456000	99	1	80-123/26
10061-02-6	trans-1,3-Dichloropropene	ND		462000	459000	99	462000	466000	101	2	75-131/28
108-20-3	Di-Isopropyl Ether	ND		462000	413000	89	462000	422000	91	2	75-122/25
100-41-4	Ethylbenzene	ND		462000	414000	90	462000	410000	89	1	77-123/31

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C46897
Account: ALNCA SGS Accutest Northern California
Project: RNCECAS: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA36316-4MS	Y30725.D	1	08/24/16	AD	n/a	n/a	VY1236
FA36316-4MSD	Y30726.D	1	08/24/16	AD	n/a	n/a	VY1236
FA36316-4	Y30724.D	1	08/24/16	AD	n/a	n/a	VY1236

The QC reported here applies to the following samples: **Method:** SW846 8260B

C46897-6, C46897-8, C46897-10

CAS No.	Compound	FA36316-4 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
637-92-3	Ethyl Tert Butyl Ether	ND		462000	456000	99	462000	453000	98	1	75-117/24
87-68-3	Hexachlorobutadiene	ND		462000	476000	103	462000	482000	104	1	74-136/38
591-78-6	2-Hexanone	ND		2310000	2000000	87	2310000	1970000	85	2	72-133/26
98-82-8	Isopropylbenzene	ND		462000	421000	91	462000	415000	90	1	80-136/32
99-87-6	p-Isopropyltoluene	ND		462000	437000	95	462000	433000	94	1	77-131/34
74-83-9	Methyl Bromide	ND		462000	405000	88	462000	406000	88	0	65-139/31
74-87-3	Methyl Chloride	ND		462000	347000	75	462000	357000	77	3	71-144/27
74-95-3	Methylene Bromide	ND		462000	480000	104	462000	479000	104	0	74-124/24
75-09-2	Methylene Chloride	145000	B	462000	611000	101	462000	587000	96	4	74-137/28
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		2310000	2010000	87	2310000	1950000	84	3	76-132/26
1634-04-4	Methyl Tert Butyl Ether	ND		462000	483000	105	462000	478000	103	1	77-120/24
91-20-3	Naphthalene	ND		462000	460000	100	462000	482000	104	5	79-129/33
103-65-1	n-Propylbenzene	ND		462000	428000	93	462000	422000	91	1	80-135/33
100-42-5	Styrene	ND		462000	465000	101	462000	450000	97	3	78-125/30
994-05-8	Tert-Amyl Methyl Ether	ND		462000	447000	97	462000	448000	97	0	69-130/23
75-65-0	Tert-Butyl Alcohol	ND		4620000	4190000	91	4620000	4280000	93	2	74-126/32
630-20-6	1,1,1,2-Tetrachloroethane	ND		462000	457000	99	462000	450000	97	2	78-126/27
79-34-5	1,1,2,2-Tetrachloroethane	ND		462000	413000	89	462000	415000	90	0	71-126/30
127-18-4	Tetrachloroethylene	ND		462000	461000	100	462000	468000	101	2	79-130/31
108-88-3	Toluene	ND		462000	433000	94	462000	429000	93	1	76-124/30
87-61-6	1,2,3-Trichlorobenzene	ND		462000	503000	109	462000	512000	111	2	77-128/35
120-82-1	1,2,4-Trichlorobenzene	ND		462000	512000	111	462000	515000	111	1	78-130/34
71-55-6	1,1,1-Trichloroethane	ND		462000	439000	95	462000	431000	93	2	70-129/27
79-00-5	1,1,2-Trichloroethane	ND		462000	450000	97	462000	439000	95	2	74-124/28
79-01-6	Trichloroethylene	287000		462000	718000	93	462000	741000	98	3	75-128/27
75-69-4	Trichlorofluoromethane	ND		462000	384000	83	462000	385000	83	0	73-145/31
96-18-4	1,2,3-Trichloropropane	ND		462000	415000	90	462000	425000	92	2	74-127/27
95-63-6	1,2,4-Trimethylbenzene	ND		462000	434000	94	462000	434000	94	0	74-123/34
108-67-8	1,3,5-Trimethylbenzene	ND		462000	423000	92	462000	419000	91	1	73-122/33
75-01-4	Vinyl Chloride	ND		462000	336000	73*	462000	346000	75*	3	76-141/27
1330-20-7	Xylene (total)	ND		1390000	1290000	93	1390000	1250000	90	3	80-129/30

CAS No.	Surrogate Recoveries	MS	MSD	FA36316-4	Limits
1868-53-7	Dibromofluoromethane	107%	108%	111%	75-124%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C46897
Account: ALNCA SGS Accutest Northern California
Project: RNCECAS: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA36316-4MS	Y30725.D	1	08/24/16	AD	n/a	n/a	VY1236
FA36316-4MSD	Y30726.D	1	08/24/16	AD	n/a	n/a	VY1236
FA36316-4	Y30724.D	1	08/24/16	AD	n/a	n/a	VY1236

The QC reported here applies to the following samples: **Method:** SW846 8260B

C46897-6, C46897-8, C46897-10

CAS No.	Surrogate Recoveries	MS	MSD	FA36316-4	Limits
17060-07-0	1,2-Dichloroethane-D4	105%	103%	105%	72-135%
2037-26-5	Toluene-D8	97%	96%	96%	75-126%
460-00-4	4-Bromofluorobenzene	97%	101%	95%	71-133%

* = Outside of Control Limits.

GC Volatiles

QC Data Summaries

(SGS Accutest Southeast)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: C46897
Account: ALNCA SGS Accutest Northern California
Project: RNCECAS: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GUV4019-MB	UV075452.D	1	08/23/16	CG	n/a	n/a	GUV4019

The QC reported here applies to the following samples: **Method:** SW846 8015C

C46897-6, C46897-8, C46897-10

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	100%	56-149%
98-08-8	aaa-Trifluorotoluene	98%	66-132%

Blank Spike Summary

Job Number: C46897
Account: ALNCA SGS Accutest Northern California
Project: RNCECAS: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GUV4019-BS	UV075451.D	1	08/23/16	CG	n/a	n/a	GUV4019

The QC reported here applies to the following samples: **Method:** SW846 8015C

C46897-6, C46897-8, C46897-10

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	20	17.3	87	74-128

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	105%	56-149%
98-08-8	aaa-Trifluorotoluene	102%	66-132%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C46897
Account: ALNCA SGS Accutest Northern California
Project: RNCECAS: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA36318-10MS	UV075466.D	1	08/24/16	CG	n/a	n/a	GUV4019
FA36318-10MSD	UV075467.D	1	08/24/16	CG	n/a	n/a	GUV4019
FA36318-10	UV075465.D	1	08/24/16	CG	n/a	n/a	GUV4019

The QC reported here applies to the following samples: **Method:** SW846 8015C

C46897-6, C46897-8, C46897-10

CAS No.	Compound	FA36318-10 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		32.7	26.2	80	32.7	25.7	79	2	74-128/17

CAS No.	Surrogate Recoveries	MS	MSD	FA36318-10	Limits
460-00-4	4-Bromofluorobenzene	105%	105%	102%	56-149%
98-08-8	aaa-Trifluorotoluene	102%	101%	99%	66-132%

* = Outside of Control Limits.

Misc. Forms

Custody Documents and Other Forms

(SGS Accutest New England)

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

SGS ACCUTEST

2105 Lundy Avenue, San Jose, CA 95131
TEL 408-588-0200 FAX: 408-588-0201
www.sgs.com

FED-EX Tracking #: | Bottle Order Control #:
SGS Accutest Quote #: | Accutest Job #: C46897

Client / Reporting Information

Company Name: SGS Accutest Laboratories
Street Address: 2105 Lundy Avenue
City: San Jose, State: CA Zip: 9513
Project Contact: nutan.kabir@sgs.com E-mail:
Phone #: 408-588-0200 Fax #:
Sampler(s) Name(s): RLR Phone:

Project Information

Project Name: 1936 AR
Street:
City: State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	BMAEPH	LAB USE ONLY
4	B4:8-15"		8/19/16	12:00:00 AM	RLR	SO										X	

1113

Turnaround Time (Business days)

Approved By (SGS Accutest PM): / Date:

- [ ] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [X] other Due 8/26/2016

RUSH!

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [X] Other COMMB

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Please sub to ALNE for MA EPH.
INITIAL ASESSMENT
LABEL VERIFICATION

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Tir	Received By:	Relinquished By:	Date Time:	Received By:
1	Hi Zeigh Nami	8/23/16 15:9	Fedex	Fedex	8/24/16 9:30	
2						
3	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
4						
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Intact / Not intact	Preserved where applicable / On Ice / Cooler Temp.
						3.2c

C46897: Chain of Custody
Page 1 of 2
SGS Accutest New England

SGS Accutest Sample Receipt Summary

Job Number: C46897 **Client:** CA **Project:** 1936 AR

Date / Time Received: 8/24/2016 9:30:00 AM **Delivery Method:** FedEx **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1: (3.2/3.2);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Thermometer ID:	IRGUN1;		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☐	☑
2. Trip Blank listed on COC:	☐		☐	☑
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

9.1

9

C46897: Chain of Custody
Page 2 of 2

GC Semi-volatiles

QC Data Summaries

(SGS Accutest New England)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: C46897
Account: ALNCA SGS Accutest Northern California
Project: RNCECAS: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48512-MB	DE15306.D	1	08/24/16	TA	08/23/16	OP48512	GDE854

The QC reported here applies to the following samples: **Method:** MADEP EPH REV 1.1

C46897-4

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	420	28	ug/kg	
208-96-8	Acenaphthylene	ND	420	17	ug/kg	
120-12-7	Anthracene	ND	420	23	ug/kg	
56-55-3	Benzo(a)anthracene	ND	420	15	ug/kg	
50-32-8	Benzo(a)pyrene	ND	420	13	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	420	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	420	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	420	16	ug/kg	
218-01-9	Chrysene	ND	420	14	ug/kg	
53-70-3	Dibenz(a,h)anthracene	ND	420	15	ug/kg	
206-44-0	Fluoranthene	ND	420	18	ug/kg	
86-73-7	Fluorene	ND	420	17	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	420	17	ug/kg	
91-57-6	2-Methylnaphthalene	ND	420	28	ug/kg	
91-20-3	Naphthalene	ND	420	31	ug/kg	
85-01-8	Phenanthrene	ND	420	18	ug/kg	
129-00-0	Pyrene	ND	420	15	ug/kg	
	C11-C22 Aromatics (Unadj.)	ND	17000	3900	ug/kg	
	C9-C18 Aliphatics	ND	8300	2500	ug/kg	
	C19-C36 Aliphatics	ND	17000	6800	ug/kg	
	C11-C22 Aromatics	ND	17000	3900	ug/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	86%	40-140%
321-60-8	2-Fluorobiphenyl	91%	40-140%
580-13-2	2-Bromonaphthalene	100%	40-140%
3386-33-2	1-Chlorooctadecane	95%	40-140%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C46897
Account: ALNCA SGS Accutest Northern California
Project: RNCECAS: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48512-BS	DE15304.D	1	08/24/16	TA	08/23/16	OP48512	GDE854
OP48512-BSD	DE15305.D	1	08/24/16	TA	08/23/16	OP48512	GDE854

The QC reported here applies to the following samples: **Method:** MADEP EPH REV 1.1

C46897-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	4480	2790	62	2950	65	6	40-140/25
208-96-8	Acenaphthylene	4480	2550	57	2710	60	6	40-140/25
120-12-7	Anthracene	4480	2670	60	2810	62	5	40-140/25
56-55-3	Benzo(a)anthracene	4480	3310	74	3400	75	3	40-140/25
50-32-8	Benzo(a)pyrene	4480	3250	73	3290	73	1	40-140/25
205-99-2	Benzo(b)fluoranthene	4480	3340	75	3430	76	3	40-140/25
191-24-2	Benzo(g,h,i)perylene	4480	3650	82	3610	80	1	40-140/25
207-08-9	Benzo(k)fluoranthene	4480	3290	73	3180	70	3	40-140/25
218-01-9	Chrysene	4480	3200	71	3240	72	1	40-140/25
53-70-3	Dibenz(a,h)anthracene	4480	3530	79	3520	78	0	40-140/25
206-44-0	Fluoranthene	4480	3180	71	3290	73	3	40-140/25
86-73-7	Fluorene	4480	2730	61	2850	63	4	40-140/25
193-39-5	Indeno(1,2,3-cd)pyrene	4480	3380	76	3330	74	1	40-140/25
91-57-6	2-Methylnaphthalene	4480	2820	63	2970	66	5	40-140/25
91-20-3	Naphthalene	4480	2370	53	2600	58	9	40-140/25
85-01-8	Phenanthrene	4480	2940	66	3000	66	2	40-140/25
129-00-0	Pyrene	4480	3150	70	3230	72	3	40-140/25
	C11-C22 Aromatics (Unadj.)	71600	57700	81	58800	81	2	40-140/25
	C9-C18 Aliphatics	26900	17000	63	18500	68	8	40-140/25
	C19-C36 Aliphatics	35800	30400	85	31400	87	3	40-140/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	74%	75%	40-140%
321-60-8	2-Fluorobiphenyl	73%	78%	40-140%
580-13-2	2-Bromonaphthalene	75%	81%	40-140%
3386-33-2	1-Chlorooctadecane	82%	78%	40-140%

Sample	Compound	Col #1	Col #2	Breakthrough	Limit
OP48512-BS	2-Methylnaphthalene	2820	ND	0.0%	5.0
OP48512-BS	Naphthalene	2370	ND	0.0%	5.0
OP48512-BSD	2-Methylnaphthalene	2970	ND	0.0%	5.0
OP48512-BSD	Naphthalene	2600	ND	0.0%	5.0

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C46897
Account: ALNCA SGS Accutest Northern California
Project: RNCECAS: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48512-MS	DE15346.D	1	08/26/16	TA	08/23/16	OP48512	GDE856
OP48512-MSD	DE15347.D	1	08/26/16	TA	08/23/16	OP48512	GDE856
C46897-4	DE15342.D	1	08/26/16	TA	08/23/16	OP48512	GDE856

The QC reported here applies to the following samples: **Method:** MADEP EPH REV 1.1

C46897-4

CAS No.	Compound	C46897-4 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		4340	2160	50	4370	1890	43	13	40-140/25
208-96-8	Acenaphthylene	42.8	J	4340	2060	46	4370	1730	39* [a]	17	40-140/25
120-12-7	Anthracene	ND		4340	2250	52	4370	1870	43	18	40-140/25
56-55-3	Benzo(a)anthracene	ND		4340	2930	68	4370	2370	54	21	40-140/25
50-32-8	Benzo(a)pyrene	43.8	J	4340	3020	69	4370	2480	56	20	40-140/25
205-99-2	Benzo(b)fluoranthene	ND		4340	2960	68	4370	2640	60	11	40-140/25
191-24-2	Benzo(g,h,i)perylene	ND		4340	3320	76	4370	2750	63	19	40-140/25
207-08-9	Benzo(k)fluoranthene	ND		4340	2980	69	4370	2390	55	22	40-140/25
218-01-9	Chrysene	ND		4340	2830	65	4370	2240	51	23	40-140/25
53-70-3	Dibenz(a,h)anthracene	ND		4340	3260	75	4370	2610	60	22	40-140/25
206-44-0	Fluoranthene	ND		4340	2740	63	4370	2260	52	19	40-140/25
86-73-7	Fluorene	96.1	J	4340	2240	49	4370	1890	41	17	40-140/25
193-39-5	Indeno(1,2,3-cd)pyrene	ND		4340	3100	71	4370	2570	59	19	40-140/25
91-57-6	2-Methylnaphthalene	183	J	4340	2090	44	4370	1710	35* [a]	20	40-140/25
91-20-3	Naphthalene	ND		4340	1680	39* [a]	4370	1360	31* [a]	21	40-140/25
85-01-8	Phenanthrene	37.5	J	4340	2430	55	4370	2030	46	18	40-140/25
129-00-0	Pyrene	ND		4340	2690	62	4370	2230	51	19	40-140/25
	C11-C22 Aromatics (Unadj.)	30100		69400	51800	31* [a]	69900	43300	19* [a]	18	40-140/25
	C9-C18 Aliphatics	82900		26000	18100	-249* [b]	26200	15700	-256* [b]	14	40-140/25
	C19-C36 Aliphatics	29500		34700	32500	9* [a]	35000	26800	-8* [a]	19	40-140/25

CAS No.	Surrogate Recoveries	MS	MSD	C46897-4	Limits
84-15-1	o-Terphenyl	67%	55%	73%	40-140%
321-60-8	2-Fluorobiphenyl	73%	70%	71%	40-140%
580-13-2	2-Bromonaphthalene	73%	71%	88%	40-140%
3386-33-2	1-Chlorooctadecane	91%	71%	101%	40-140%

(a) Outside control limits due to possible matrix interference.
(b) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Misc. Forms

Custody Documents and Other Forms

(SGS Accutest Southeast)

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

Page 1 of 1

SGS ACCUTEST

2105 Lundy Avenue, San Jose, CA 95131
TEL: 408-588-0200 FAX: 408-588-0201
www.sgs.com

FED-EX Tracking #: | Bottle Order Control #:
SGS Accutest Quote #: | Accutest Job #: C46897

Client / Reporting Information	Project Information	Billing Information (if different from Report to)
Company Name: SGS Accutest Laboratories	Project Name: 1936 AR	
Street Address: 2105 Lundy Avenue	Street	Company Name
City: San Jose, State: CA Zip: 9513	City State	Street Address
Project Contact: nutan.kabir@sgs.com E-mail	Project #	City State Zip
Phone #: 408-588-0200 Fax #	Client Purchase Order #	Attention:
Sampler(s) Name(s): RLR Phone	Project Manager	

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	AG,AS,B8015ORO,BA,BE,CD,CO,CR,CU,HG,MO,NI,P8081PESTPPL,PB,SB,SE,TL,V,ZN	B8015ORO,V8015GRO,V8260BSTD,	LAB USE ONLY
1	B1:14-19"		8/19/16	12:00:00 AM	RLR	SO										X		
2	B2:14-19"		8/19/16	12:00:00 AM	RLR	SO										X		
3	B3:14-19"		8/19/16	12:00:00 AM	RLR	SO										X		
4	B4:8-15"		8/19/16	12:00:00 AM	RLR	SO										X		
6	B5:24"		8/19/16	12:00:00 AM	RLR	SO											X	
8	B6:24"		8/19/16	12:00:00 AM	RLR	SO											X	
10	B7:26"		8/19/16	12:00:00 AM	RLR	SO											X	

Turnaround Time (Business days)

Approved By (SGS Accutest PM) / Date:

- [ ] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [X] other Due 8/26/2016

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULL T1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [X] Other COMMB

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions: Please sub to ALSE for CAM17 (6010B),8260B.

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Ali Zeighami	8/22/16 15:00	Fedex	Fedex	8-23-16	Courier (ALSE) 09:15
3						
5						

Custody Seal # | [ ] Intact [ ] Not intact | Preserved where applicable [ ] | On Ice [ ] | Cooler Temp. 36

11.1 11

C46897: Chain of Custody
Page 1 of 3
SGS Accutest Southeast

SGS ACCUTEST - ORLANDO SAMPLE RECEIPT CONFIRMATION

SGS ACCUTEST'S JOB NUMBER: C46897 CLIENT: ALNC PROJECT: 1936 AR

DATE/TIME RECEIVED: 8-23-16 09:15 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER DELIVERY OTHER: _____

AIRBILL NUMBERS: 7770 5263 0864

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- [ ] TRIP BLANK PROVIDED
- [X] TRIP BLANK NOT PROVIDED
- [X] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM_____ 5-GRAM_____

NUMBER OF 5035 FIELD KITS ? _____

NUMBER OF LAB FILTERED METALS ? _____

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR -0.4
- [ ] OBSERVED TEMPS: 4.0
- [ ] CORRECTED TEMPS: 3.6 (USED FOR LIMS)

SAMPLE INFORMATION

- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [X] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- [X] BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] RESIDUAL CHLORINE PRESENT LOT#_____

{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

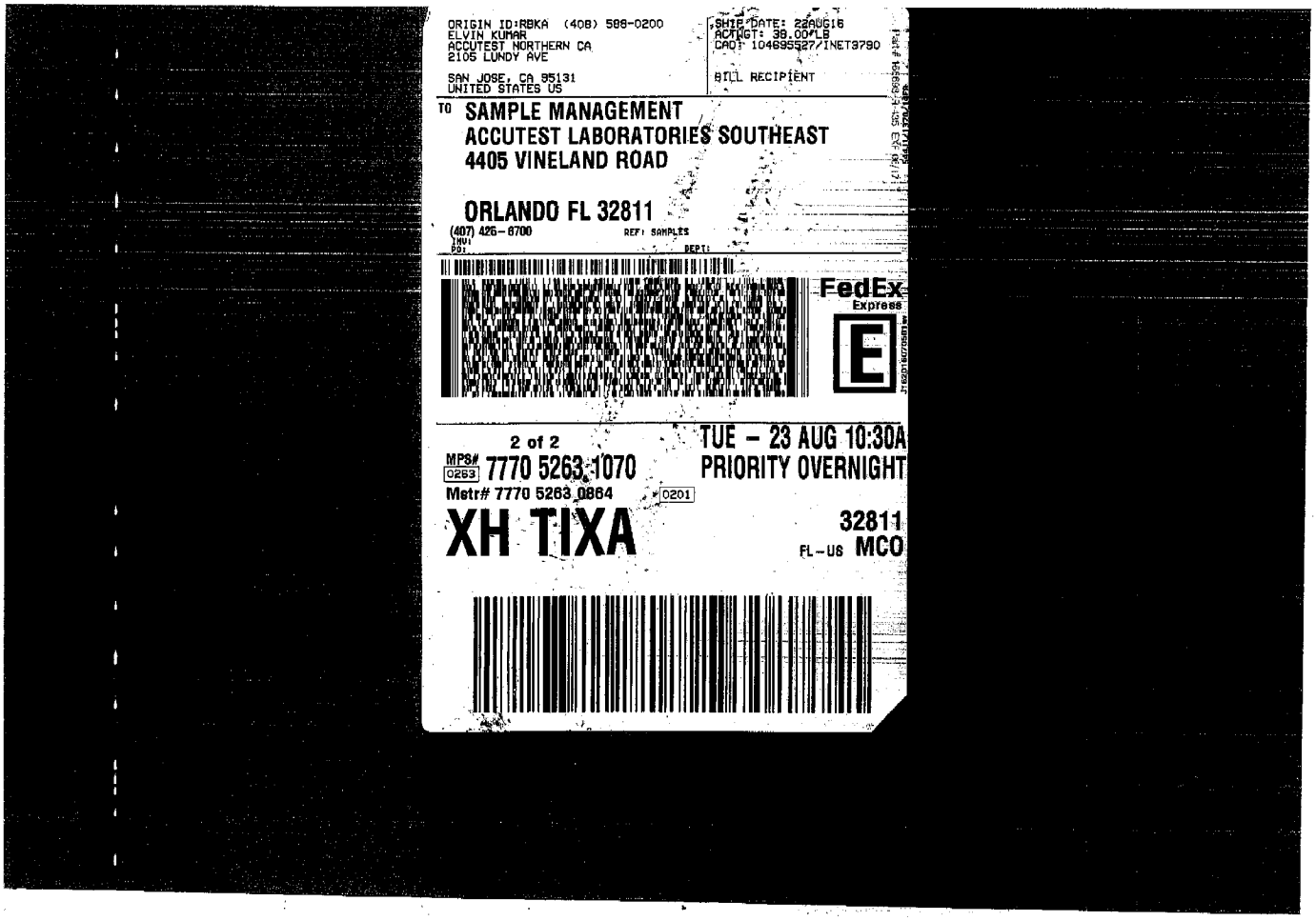
TEST STRIP LOT#s pH 0-3 230315 pH 10-12 219813A OTHER (specify) _____

SUMMARY OF COMMENTS: RECEIVED SAMPLES C46897 5,7,9 NOT REQUESTED ON COC

TECHNICIAN SIGNATURE/DATE: 8-23-16 REVIEWER SIGNATURE/DATE: 8-23-16

NF 02/16 receipt confirmation 020116.xls

11.1 11



C46897: Chain of Custody
Page 3 of 3

GC Semi-volatiles

QC Data Summaries

(SGS Accutest Southeast)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: C46897
Account: ALNCA SGS Accutest Northern California
Project: RNCECAS: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP61612-MB	TT378855.D	1	08/25/16	NG	08/24/16	OP61612	GTT1846

The QC reported here applies to the following samples: **Method:** SW846 8081B

C46897-1, C46897-2, C46897-3, C46897-4

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	1.7	0.51	ug/kg	
319-84-6	alpha-BHC	ND	1.7	0.51	ug/kg	
319-85-7	beta-BHC	ND	1.7	0.51	ug/kg	
319-86-8	delta-BHC	ND	1.7	0.49	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	1.7	0.51	ug/kg	
12789-03-6	Chlordane	ND	17	6.7	ug/kg	
60-57-1	Dieldrin	ND	1.7	0.63	ug/kg	
72-54-8	4,4'-DDD	ND	3.3	0.57	ug/kg	
72-55-9	4,4'-DDE	ND	3.3	0.54	ug/kg	
50-29-3	4,4'-DDT	ND	3.3	0.65	ug/kg	
72-20-8	Endrin	ND	3.3	0.62	ug/kg	
1031-07-8	Endosulfan sulfate	ND	3.3	0.62	ug/kg	
7421-93-4	Endrin aldehyde	ND	3.3	0.62	ug/kg	
959-98-8	Endosulfan-I	ND	1.7	0.49	ug/kg	
33213-65-9	Endosulfan-II	ND	1.7	0.62	ug/kg	
76-44-8	Heptachlor	ND	1.7	0.57	ug/kg	
1024-57-3	Heptachlor epoxide	ND	1.7	0.58	ug/kg	
72-43-5	Methoxychlor	ND	3.3	0.86	ug/kg	
8001-35-2	Toxaphene	ND	83	33	ug/kg	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	87%	50-122%
2051-24-3	Decachlorobiphenyl	86%	50-133%

Method Blank Summary

Job Number: C46897
Account: ALNCA SGS Accutest Northern California
Project: RNCECAS: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP61615-MB	YR4650.D	1	08/31/16	FEA	08/24/16	OP61615	GYR115

The QC reported here applies to the following samples: **Method:** SW846 8015C

C46897-1, C46897-2, C46897-3, C46897-4, C46897-6, C46897-8, C46897-10

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	5.0	2.5	mg/kg	
	TPH (> C28-C40)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	87%	56-122%

Blank Spike Summary

Job Number: C46897
Account: ALNCA SGS Accutest Northern California
Project: RNCECAS: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP61612-BS	TT378853.D	1	08/25/16	NG	08/24/16	OP61612	GTT1846

The QC reported here applies to the following samples: **Method:** SW846 8081B

C46897-1, C46897-2, C46897-3, C46897-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
309-00-2	Aldrin	16.7	16.1	97	57-120
319-84-6	alpha-BHC	16.7	16.0	96	60-117
319-85-7	beta-BHC	16.7	16.6	100	57-125
319-86-8	delta-BHC	16.7	16.8	101	42-126
58-89-9	gamma-BHC (Lindane)	16.7	16.7	100	60-123
60-57-1	Dieldrin	16.7	15.4	92	63-125
72-54-8	4,4'-DDD	16.7	14.5	87	55-135
72-55-9	4,4'-DDE	16.7	15.9	95	61-129
50-29-3	4,4'-DDT	16.7	15.2	91	60-136
72-20-8	Endrin	16.7	15.9	95	67-138
1031-07-8	Endosulfan sulfate	16.7	15.6	94	59-119
7421-93-4	Endrin aldehyde	16.7	15.2	91	37-110
959-98-8	Endosulfan-I	16.7	14.8	89	62-122
33213-65-9	Endosulfan-II	16.7	15.1	91	62-122
76-44-8	Heptachlor	16.7	16.0	96	58-123
1024-57-3	Heptachlor epoxide	16.7	15.6	94	60-122
72-43-5	Methoxychlor	16.7	16.0	96	57-133

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	89%	50-122%
2051-24-3	Decachlorobiphenyl	84%	50-133%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: C46897
Account: ALNCA SGS Accutest Northern California
Project: RNCECAS: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP61612-BS2	TT378854.D	1	08/25/16	NG	08/24/16	OP61612	GTT1846

The QC reported here applies to the following samples: **Method:** SW846 8081B

C46897-1, C46897-2, C46897-3, C46897-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12789-03-6	Chlordane	83.3	80.1	96	52-146
8001-35-2	Toxaphene	167	161	97	48-155

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	93%	50-122%
2051-24-3	Decachlorobiphenyl	87%	50-133%

12.2.2
12

* = Outside of Control Limits.

Blank Spike Summary

Job Number: C46897
Account: ALNCA SGS Accutest Northern California
Project: RNCECAS: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP61615-BS	YR4649.D	1	08/31/16	FEA	08/24/16	OP61615	GYR115

The QC reported here applies to the following samples: **Method:** SW846 8015C

C46897-1, C46897-2, C46897-3, C46897-4, C46897-6, C46897-8, C46897-10

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C28)	50	39.6	79	62-116
	TPH (> C28-C40)	50	40.6	81	47-138

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	84%	56-122%

12.2.3
12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C46897
Account: ALNCA SGS Accutest Northern California
Project: RNCECAS: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP61612-MS	TT378857.D	1	08/25/16	NG	08/24/16	OP61612	GTT1846
OP61612-MSD	TT378858.D	1	08/25/16	NG	08/24/16	OP61612	GTT1846
C46897-1	TT378856.D	1	08/25/16	NG	08/24/16	OP61612	GTT1846

The QC reported here applies to the following samples: **Method:** SW846 8081B

C46897-1, C46897-2, C46897-3, C46897-4

CAS No.	Compound	C46897-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	ND		16.7	15.2	91	16.9	17.3	102	13	57-120/28
319-84-6	alpha-BHC	ND		16.7	15.8	95	16.9	18.0	107	13	60-117/24
319-85-7	beta-BHC	ND		16.7	16.4	98	16.9	18.9	112	14	57-125/26
319-86-8	delta-BHC	ND		16.7	16.5	99	16.9	19.2	114	15	42-126/24
58-89-9	gamma-BHC (Lindane)	ND		16.7	16.1	97	16.9	18.6	110	14	60-123/29
60-57-1	Dieldrin	ND		16.7	14.5	87	16.9	16.4	97	12	63-125/29
72-54-8	4,4'-DDD	ND		16.7	14.6	88	16.9	16.9	100	15	55-135/31
72-55-9	4,4'-DDE	ND		16.7	15.3	92	16.9	17.3	102	12	61-129/31
50-29-3	4,4'-DDT	ND		16.7	14.9	89	16.9	16.9	100	13	60-136/39
72-20-8	Endrin	ND		16.7	15.0	90	16.9	17.1	101	13	67-138/28
1031-07-8	Endosulfan sulfate	ND		16.7	14.3	86	16.9	16.1	95	12	59-119/28
7421-93-4	Endrin aldehyde	ND		16.7	12.8	77	16.9	14.5	86	12	37-110/25
959-98-8	Endosulfan-I	ND		16.7	14.0	84	16.9	15.8	94	12	62-122/29
33213-65-9	Endosulfan-II	ND		16.7	14.0	84	16.9	15.7	93	11	62-122/31
76-44-8	Heptachlor	ND		16.7	15.2	91	16.9	17.5	104	14	58-123/30
1024-57-3	Heptachlor epoxide	ND		16.7	14.8	89	16.9	16.8	99	13	60-122/33
72-43-5	Methoxychlor	ND		16.7	14.5	87	16.9	16.3	96	12	57-133/31

CAS No.	Surrogate Recoveries	MS	MSD	C46897-1	Limits
877-09-8	Tetrachloro-m-xylene	89%	99%	92%	50-122%
2051-24-3	Decachlorobiphenyl	68%	74%	72%	50-133%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C46897
Account: ALNCA SGS Accutest Northern California
Project: RNCECAS: 1936 AR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP61615-MS	YR4652.D	1	08/31/16	FEA	08/24/16	OP61615	GYR115
OP61615-MSD	YR4653.D	1	08/31/16	FEA	08/24/16	OP61615	GYR115
C46897-6	YR4651.D	1	08/31/16	FEA	08/24/16	OP61615	GYR115

The QC reported here applies to the following samples: **Method:** SW846 8015C

C46897-1, C46897-2, C46897-3, C46897-4, C46897-6, C46897-8, C46897-10

CAS No.	Compound	C46897-6 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	ND		48.8	42.7	88	48.8	38.1	78	11	62-116/35
	TPH (> C28-C40)	ND		48.8	43.8	90	48.8	39.7	81	10	47-138/29

CAS No.	Surrogate Recoveries	MS	MSD	C46897-6	Limits
84-15-1	o-Terphenyl	90%	79%	95%	56-122%

12.3.2
12

* = Outside of Control Limits.

Metals Analysis

QC Data Summaries

(SGS Accutest Southeast)

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C46897
Account: ALNCA - SGS Accutest Northern California
Project: RNCECAS: 1936 AR

QC Batch ID: MP30749 Methods: SW846 7471B
Matrix Type: SOLID Units: mg/kg

Prep Date: 08/24/16

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.042	.0025	.0042	0.00068	<0.042

Associated samples MP30749: C46897-1, C46897-2, C46897-3, C46897-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C46897
Account: ALNCA - SGS Accutest Northern California
Project: RNCECAS: 1936 AR

QC Batch ID: MP30749 Methods: SW846 7471B
Matrix Type: SOLID Units: mg/kg

Prep Date: 08/24/16 08/24/16

Metal	FA36141-1R Original	DUP	RPD	QC Limits	FA36141-1R Original	MS	Spikelot HGFLWS1	% Rec	QC Limits
Mercury	0.075	0.056	29.0 (a)	0-20	0.075	0.28	0.243	84.3	80-120

Associated samples MP30749: C46897-1, C46897-2, C46897-3, C46897-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C46897
Account: ALNCA - SGS Accutest Northern California
Project: RNCECAS: 1936 AR

QC Batch ID: MP30749 Methods: SW846 7471B
Matrix Type: SOLID Units: mg/kg

Prep Date: 08/24/16

Metal	FA36141-1R Original	MSD	Spikelot HGFLWS1	% Rec	MSD RPD	QC Limit
Mercury	0.075	0.29	0.247	87.1	3.5	20

Associated samples MP30749: C46897-1, C46897-2, C46897-3, C46897-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C46897
Account: ALNCA - SGS Accutest Northern California
Project: RNCECAS: 1936 AR

QC Batch ID: MP30749
Matrix Type: SOLID

Methods: SW846 7471B
Units: mg/kg

Prep Date: 08/24/16

Metal	BSP Result	Spikelot HGFLWS1	% Rec	QC Limits
Mercury	0.26	0.25	104.0	80-120

Associated samples MP30749: C46897-1, C46897-2, C46897-3, C46897-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: C46897
Account: ALNCA - SGS Accutest Northern California
Project: RNCECAS: 1936 AR

QC Batch ID: MP30749
Matrix Type: SOLID

Methods: SW846 7471B
Units: ug/l

Prep Date: 08/24/16

Metal	FA36141-1R Original	SDL 1:5	%DIF	QC Limits
Mercury	0.949	0.790	16.8 (a)	0-10

Associated samples MP30749: C46897-1, C46897-2, C46897-3, C46897-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C46897
Account: ALNCA - SGS Accutest Northern California
Project: RNCECAS: 1936 AR

QC Batch ID: MP30752 Methods: SW846 6010C
Matrix Type: SOLID Units: mg/kg

Prep Date: 08/24/16

Metal	RL	IDL	MDL	MB raw	final
Aluminum	10	.7	1.8		
Antimony	1.0	.05	.065	0.030	<1.0
Arsenic	0.50	.065	.1	-0.080	<0.50
Barium	10	.05	.05	0.015	<10
Beryllium	0.25	.01	.025	0.0050	<0.25
Cadmium	0.20	.01	.025	-0.0050	<0.20
Calcium	250	2.5	2.5		
Chromium	0.50	.05	.05	0.055	<0.50
Cobalt	2.5	.01	.025	-0.0050	<2.5
Copper	1.3	.05	.05	0.0050	<1.3
Iron	15	.85	.85		
Lead	1.0	.05	.05	0.0	<1.0
Magnesium	250	1.8	1.8		
Manganese	0.75	.025	.025		
Molybdenum	2.5	.015	.025	0.015	<2.5
Nickel	2.0	.02	.025	0.0	<2.0
Potassium	500	10	10		
Selenium	1.0	.12	.12	0.010	<1.0
Silver	0.50	.035	.041	-0.010	<0.50
Sodium	500	25	25		
Strontium	0.50	.025	.025		
Thallium	0.50	.055	.055	-0.075	<0.50
Tin	2.5	.045	.045		
Titanium	0.50	.025	.025		
Vanadium	2.5	.025	.025	0.015	<2.5
Zinc	1.0	.15	.15	0.090	<1.0

Associated samples MP30752: C46897-1, C46897-2, C46897-3, C46897-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C46897
Account: ALNCA - SGS Accutest Northern California
Project: RNCECAS: 1936 AR

QC Batch ID: MP30752
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 08/24/16 08/24/16

Metal	FA36308-4 Original	DUP	RPD	QC Limits	FA36308-4 Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum									
Antimony	0.0	0.0	NC	0-20	0.0	13.7	22.3	61.4N(c)	80-120
Arsenic	0.37	0.40	7.8	0-20	0.37	82.3	89.3	91.8	80-120
Barium	3.3	3.5	5.9	0-20	3.3	96.0	89.3	103.8	80-120
Beryllium	0.032	0.027	16.9	0-20	0.032	2.3	2.23	101.6	80-120
Cadmium	0.046	0.058	23.1 (a)	0-20	0.046	2.2	2.23	96.5	80-120
Calcium									
Chromium	2.8	2.5	11.3	0-20	2.8	11.1	8.93	93.0	80-120
Cobalt	0.10	0.094	6.2	0-20	0.10	20.4	22.3	91.0	80-120
Copper	4.9	2.5	64.9*(b)	0-20	4.9	14.3	11.2	84.2	80-120
Iron									
Lead	2.8	2.0	33.3 (a)	0-20	2.8	24.3	22.3	96.3	80-120
Magnesium									
Manganese									
Molybdenum	0.15	0.11	30.8 (a)	0-20	0.15	20.7	22.3	92.1	80-120
Nickel	0.43	0.40	7.2	0-20	0.43	20.4	22.3	89.5	80-120
Potassium									
Selenium	0.35	0.35	0.0	0-20	0.35	83.5	89.3	93.1	80-120
Silver	0.0	0.0	NC	0-20	0.0	2.1	2.23	94.1	80-120
Sodium									
Strontium									
Thallium	0.0	0.0	NC	0-20	0.0	85.9	89.3	96.2	80-120
Tin									
Titanium									
Vanadium	2.0	1.7	16.2	0-20	2.0	22.9	22.3	93.7	80-120
Zinc	5.2	2.1	84.9*(b)	0-20	5.2	23.0	22.3	79.8N(c)	80-120

Associated samples MP30752: C46897-1, C46897-2, C46897-3, C46897-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) RPD acceptable due to low duplicate and sample concentrations.
(b) High RPD due to possible sample non-homogeneity.
(c) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C46897
Account: ALNCA - SGS Accutest Northern California
Project: RNCECAS: 1936 AR

QC Batch ID: MP30752
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 08/24/16

Metal	FA36308-4 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	0.0	14.7	24.1	61.0N(a)	7.0	20
Arsenic	0.37	87.7	96.5	90.5	6.4	20
Barium	3.3	101	96.5	101.3	5.1	20
Beryllium	0.032	2.4	2.41	98.2	4.3	20
Cadmium	0.046	2.2	2.41	89.3	0.0	20
Calcium						
Chromium	2.8	11.6	9.65	91.2	4.4	20
Cobalt	0.10	21.5	24.1	88.7	5.3	20
Copper	4.9	14.4	12.1	78.8N(a)	0.7	20
Iron						
Lead	2.8	24.8	24.1	91.2	2.0	20
Magnesium						
Manganese						
Molybdenum	0.15	21.9	24.1	90.2	5.6	20
Nickel	0.43	21.5	24.1	87.4	5.3	20
Potassium						
Selenium	0.35	89.3	96.5	92.2	6.7	20
Silver	0.0	2.3	2.41	95.4	9.1	20
Sodium						
Strontium						
Thallium	0.0	89.9	96.5	93.2	4.6	20
Tin						
Titanium						
Vanadium	2.0	24.1	24.1	91.6	5.1	20
Zinc	5.2	23.8	24.1	77.1N(a)	3.4	20

Associated samples MP30752: C46897-1, C46897-2, C46897-3, C46897-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C46897
Account: ALNCA - SGS Accutest Northern California
Project: RNCECAS: 1936 AR

QC Batch ID: MP30752
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 08/24/16

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony	23.8	25	95.2	80-120
Arsenic	93.9	100	93.9	80-120
Barium	107	100	107.0	80-120
Beryllium	2.6	2.5	104.0	80-120
Cadmium	2.5	2.5	100.0	80-120
Calcium				
Chromium	10.4	10	104.0	80-120
Cobalt	25.0	25	100.0	80-120
Copper	13.1	12.5	104.8	80-120
Iron				
Lead	23.6	25	94.4	80-120
Magnesium				
Manganese				
Molybdenum	25.3	25	101.2	80-120
Nickel	24.6	25	98.4	80-120
Potassium				
Selenium	95.9	100	95.9	80-120
Silver	2.3	2.5	92.0	80-120
Sodium				
Strontium				
Thallium	94.8	100	94.8	80-120
Tin				
Titanium				
Vanadium	25.4	25	101.6	80-120
Zinc	25.4	25	101.6	80-120

Associated samples MP30752: C46897-1, C46897-2, C46897-3, C46897-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: C46897
Account: ALNCA - SGS Accutest Northern California
Project: RNCECAS: 1936 AR

QC Batch ID: MP30752
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date: 08/24/16

Metal	FA36308-4 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	0.00	0.00	NC	0-10
Arsenic	8.10	6.50	19.8 (a)	0-10
Barium	72.3	78.2	8.2	0-10
Beryllium	0.700	1.10	57.1 (a)	0-10
Cadmium	1.00	1.10	10.0	0-10
Calcium				
Chromium	60.9	69.4	14.0*(b)	0-10
Cobalt	2.20	2.50	13.6 (a)	0-10
Copper	107	115	7.7	0-10
Iron				
Lead	60.8	62.6	3.0	0-10
Magnesium				
Manganese				
Molybdenum	3.20	3.10	3.1	0-10
Nickel	9.50	11.4	20.0 (a)	0-10
Potassium				
Selenium	7.60	0.00	100.0(a)	0-10
Silver	0.00	0.00	NC	0-10
Sodium				
Strontium				
Thallium	0.00	0.00	NC	0-10
Tin				
Titanium				
Vanadium	44.3	48.7	9.9	0-10
Zinc	114	164	44.0 (a)	0-10

Associated samples MP30752: C46897-1, C46897-2, C46897-3, C46897-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
(b) Serial dilution indicates possible matrix interference.

POST DIGESTATE SPIKE SUMMARY

Login Number: C46897
Account: ALNCA - SGS Accutest Northern California
Project: RNCECAS: 1936 AR

QC Batch ID: MP30752
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date: 08/24/16

Metal	Sample ml	Final ml	FA36308-4 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony	9.8	10			100	0.2	5	100	100.0	80-120
Arsenic	9.8	10	8.1	7.938	105.7	0.2	5	100	97.8	80-120
Barium	9.8	10	72.3	70.854	336.7	0.2	12.5	250	106.3	80-120
Beryllium	9.8	10	.7	.686	49.1	0.2	2.5	50	96.8	80-120
Cadmium	9.8	10	1	.98	48	0.2	2.5	50	94.0	80-120
Calcium										
Chromium	9.8	10	60.9	59.682	109.1	0.2	2.5	50	98.8	80-120
Cobalt	9.8	10	2.2	2.156	49.9	0.2	2.5	50	95.5	80-120
Copper	9.8	10	106.5	104.37	208.7	0.2	5	100	104.3	80-120
Iron										
Lead	9.8	10	60.8	59.584	108.6	0.2	2.5	50	98.0	80-120
Magnesium										
Manganese										
Molybdenum	9.8	10	3.2	3.136	101.2	0.2	5	100	98.1	80-120
Nickel	9.8	10	9.5	9.31	101.1	0.2	5	100	91.8	80-120
Potassium										
Selenium	9.8	10	7.6	7.448	101.5	0.2	5	100	94.1	80-120
Silver	9.8	10			47.5	0.2	2.5	50	95.0	80-120
Sodium										
Strontium										
Thallium	9.8	10			94.9	0.2	5	100	94.9	80-120
Tin										
Titanium										
Vanadium	9.8	10	44.3	43.414	92.7	0.2	2.5	50	98.6	80-120
Zinc	9.8	10	113.7	111.426	356.7	0.2	12.5	250	98.1	80-120

Associated samples MP30752: C46897-1, C46897-2, C46897-3, C46897-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

REVIEW SUMMARY REPORT – CONCUR
PRELIMINARY REVIEW – AUGUST 2016

Agency Information

Agency Name: Santa Clara County Environmental Health Department (County)	Address: 1555 Berger Drive, Suite 300 San Jose, CA 95112
Agency Caseworker: Aaron Costa	Case No.: 07S1E03F03f

Case Information

Cleanup Fund (Fund) Claim No.: 19660	GeoTracker Global ID: T10000001657
Site Name: Farmers Supply	Site Address: 1936 Alum Rock Avenue San Jose, CA 95116
Responsible Party: Farmers Supply, Inc. Attn: David Mijares	Address: PO Box 7865 San Jose, CA 95150
Fund Expenditures to Date: $43,575	Number of Years Case Open: 10
Fund Budget Category: Verification Monitoring	

To view all public documents for this case available on GeoTracker use the following URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000001657

Summary

The Low-Threat Underground Storage Tank (UST) Case Closure Policy (Policy) contains general and media-specific criteria, and cases that meet those criteria are appropriate for closure pursuant to the Policy. This case does not meet all of the required criteria of the Policy. Highlights of the case follow:

This case consists of a retail building and several sheds. One gasoline UST was removed in April 1985. An unauthorized release was reported in March 2006 following a site investigation. Dual phase extraction pilot tests were conducted in October 2010 and June 2015 which indicated dual phase extraction would not be an effective remedial technology for this Site. Approximately 20 cubic yards of impacted soil were over-excavated to a depth of 14 feet below ground surface (bgs) and disposed offsite in January 2016. No other active remediation has been conducted at the Site. Since 2007, four groundwater monitoring wells have been installed and monitored. According to groundwater data, water quality objectives have not been achieved.

The petroleum release is limited to the soil and shallow groundwater. According to data available in GeoTracker, there are no public water supply wells within 1,000 feet of the Site. No other water supply wells have been identified within 1,000 feet of the Site in files reviewed. Silver Creek lies approximately 150 feet east of the Site. According to GeoTracker there are no nearby or impacted wells. The unauthorized release is located within the service area of a public water system, as defined in the Policy. The affected shallow groundwater is not currently being used as a source of drinking water, and it is highly unlikely that the affected shallow groundwater will be used as a source of drinking water in the foreseeable future. Other designated beneficial uses of impacted

groundwater are not threatened, and it is highly unlikely that they will be, considering these factors in the context of the site setting

Rationale for Closure under the Policy

- General Criteria: The case meets seven of eight Policy general criteria. The status of free product removal is unknown.
- Groundwater Specific Criteria: The case does not meet Policy criteria because the contaminant plume that exceeds water quality objectives is not defined, the nearest surface water body is less than 250 feet from the Site, while the maximum dissolved concentration of benzene is greater than 3,000 micrograms per liter (µg/L).
- Vapor Intrusion to Indoor Air: The case does not meet Policy criteria because the maximum benzene concentration in groundwater is greater than 1,000 µg/L, while the minimum depth to groundwater is less than 30 feet. Soil vapor samples collected in February and August 2013 contained high helium concentrations; suggesting soil vapor samples were invalid.
- Direct Contact and Outdoor Air Exposure: The case meets Policy Criterion 3a. Maximum concentrations in soil are less than those in Policy Table 1 for Commercial/Industrial use, and the concentration limits for a Utility Worker are not exceeded. There are no soil samples results in the case record for naphthalene. However, the relative concentration of naphthalene in soil can be conservatively estimated using the published relative concentrations of naphthalene and benzene in gasoline. Taken from Potter and Simmons (1998), gasoline mixtures contain approximately 2 percent benzene and 0.25 percent naphthalene. Therefore, benzene concentrations can be used as a surrogate for naphthalene concentrations with a safety factor of eight. Benzene concentrations from the Site are below the naphthalene thresholds in Table 1 of the Policy. Therefore, estimated naphthalene concentrations meet the thresholds in Table 1 and the Policy criteria for direct contact with a safety factor of eight. It is highly unlikely that naphthalene concentrations in the soil, if any, exceed the threshold.

Outcome of Conference Call

Based on a conference call conducted on August 30, 2016, State Water Board staff concur with County staff that the Responsible Party should:

- Conduct regular groundwater monitoring to assess current groundwater quality and to calculate groundwater trends,
- Define the extent of groundwater contamination to the northwest, southwest, and east, and
- Collect an additional round of soil vapor samples to assess vapor intrusion with recognition that tight soil conditions may increase cross contamination with atmospheric air.

8/30/16

Kirk Larson, P.G. Date
Engineering Geologist
Technical Review Unit
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8/6/16

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