# ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY

ALEX BRISCOE, Agency Director



DEPARTMENT OF ENVIRONMENTAL HEALTH
OFFICE OF THE DIRECTOR
1131 HARBOR BAY PARKWAY
ALAMEDA, CA 94502
(510) 567-6777
FAX (510) 337-9135

#### REMEDIAL ACTION COMPLETION CERTIFICATION

May 29, 2014

Mr. Paul Dixon
San Lorenzo Unified School District
15510 Usher Street
San Lorenzo, CA 94580
(sent via electronic mail to PDixon@slzusd.org)

Subject:

Case Closure for Fuel Leak Case No. RO0003082 and GeoTracker Global ID T10000003424, San Lorenzo High School, 50 E. Lewelling Blvd, San Lorenzo, CA 94580

Dear Mr. Dixon:

This letter confirms the completion of a site investigation and remedial action for the underground storage tanks formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25296.10 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.3 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

Please be aware that claims for reimbursement of corrective action costs submitted to the Underground Storage Tank Cleanup Fund more than 365 days after the date of this letter or issuance or activation of the Fund's Letter of Commitment, whichever occurs later, will not be reimbursed unless one of the following exceptions applies:

- · Claims are submitted pursuant to Section 25299.57, subdivision (k) (reopened UST case); or
- Submission within the timeframe was beyond the claimant's reasonable control, ongoing work is
  required for closure that will result in the submission of claims beyond that time period, or that under the
  circumstances of the case, it would be unreasonable or inequitable to impose the 365-day time period.

This notice is issued pursuant to subdivision (g) of Section 25296.10 of the Health and Safety Code. Please contact our office if you have any questions regarding this matter.

Sincerely,

Ariu Levi Director



ENVIRONMENTAL HEALTH DEPARTMENT ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

May 29, 2014

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San Lorenzo Unified School District
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Subject:

Case Closure for Fuel Leak Case No. RO0003082 and GeoTracker Global ID T10000003424, San Lorenzo High School, 50 E. Lewelling Blvd, San Lorenzo, CA 94580

Dear Mr. Dixon:

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25296.10[g]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Alameda County Environmental Health (ACEH) is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed. This case closure letter and the case closure summary can also be viewed on the State Water Resources Control Board's Geotracker website (<a href="http://geotracker.waterboards.ca.gov">http://geotracker.waterboards.ca.gov</a>) and the Alameda County Environmental Health website (<a href="http://www.acgov.org/aceh/index.htm">http://geotracker.waterboards.ca.gov</a>) and the Alameda County

Due to residual contamination, the site was closed with Site Management Requirements that limit future land use to the current land use but limits redevelopment in the vicinity of the former remote fill. Site Management Requirements are further described in section IV of the attached Case Closure Summary.

If you have any questions, please call Mark Detterman at (510) 567--6876. Thank you.

Sincerely,

Dilan Roe, P.E.

LOP and SCP Program Manager

Enclosures:

1. Remedial Action Completion Certification

2. Case Closure Summary

Cc w/enc.:

Alameda County Public Works, Building Inspection Division, 399 Elmhurst Street, Room 141,

Hayward, CA 94544

Lee Dooley, EquoLogic Group, 15936 Barry Lane, Monte Sereno, CA 95030

(sent via electronic mail to <a href="mailto:ldooley@equologicgroup.com">ldooley@equologicgroup.com</a>)

Susan Garner, EquoLogic Group, 15936 Barry Lane, Monte Sereno, CA 95030

(sent via electronic mail to <a href="mailto:sgarner@equologicgroup.com">sgarner@equologicgroup.com</a>)

Dilan Roe (sent via electronic mail to dilan.roe@acgov.org)

Mark Detterman, ACEH, (sent via electronic mail to <a href="mark.detterman@acgov.org">mark.detterman@acgov.org</a>)

Geotracker, Electronic File

### Alameda County Environmental Health

## CASE CLOSURE SUMMARY LEAKING UNDERGROUND FUEL STORAGE TANK - LOCAL OVERSIGHT PROGRAM

#### I. AGENCY INFORMATION

Date: May 29, 2014

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	Phone: (510) 567-6876
Responsible Staff Person: Mark Detterman	Title: Senior Hazardous Materials Specialist

#### II. CASE INFORMATION

Site Facility Name: San Lorenzo High School							
Site Facility Address: 50 East Lev	welling Boulevard, San Lorenzo, CA 9458	30	9				
RB Case No.: STID: LOP Case No.: R00003082							
GeoTracker ID: T10000003424			APN: 413-19-2-7				
Current Land Use: School	# 1		2				
Responsible Parties	Addresses		Phone Numbers				
Ms. Karen Langmaid	San Lorenzo Unified School District 15510 Usher Street San Lorenzo, CA 94580		(510) 317-4837				

This Case Closure Summary along with the Case Closure Transmittal letter and the Remedial Action Completion Certification provides documentation of the case closure. This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions. Additional information on the case can be viewed in the online case file. The entire case file can be viewed over the Internet on the Alameda County Environmental Health (ACEH) website (<a href="http://www.acgov.org/aceh/lop/ust.htm">http://www.acgov.org/aceh/lop/ust.htm</a>) or the State of California Water Resources Control Board GeoTracker website (<a href="http://geotracker.waterboards.ca.gov">http://geotracker.waterboards.ca.gov</a>). Not all historic documents for the fuel leak case may be available on GeoTracker. A more complete historic case file for this site is located on the ACEH website.

#### III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Number of monitoring wells installed: 0	Number of monitoring wells destroyed: 0	Number of monitoring wells remaining: 0
Highest Groundwater Depth Below Ground Surface: 12 feet bgs *	Lowest Depth: 12 feet bgs *	Flow Direction: Southwest *

<sup>\*</sup> Groundwater monitoring wells were not installed, gradient from adjacent site RO#0000498.

#### Summary of Production Wells in Vicinity:

There are three water supply wells at the subject site. Two are classified as irrigation wells and are between 610 and 616 feet in total depth. A 194 foot well at the site is classified as domestic. The wells are located to the west of the release location at approximate distances of 600 feet northwest and 650 feet west, but are not considered to be receptors based on the limited magnitude of the release, the substance released, the distance, and the difference in screening intervals and the depth of the sanitary seal of the water supply wells. There are four additional domestic water supply wells within approximately 1,400 feet of the site. Each is located upgradient of the site to the northeast. These four wells are not considered to be potential receptors due to the distance and the upgradient position of the wells, the limited magnitude of the release, the substance released, and the difference in screening intervals and the depth of the sanitary seal of the water supply wells relative to the site.

Are drinking water wells affected? No	Aquifer Name: East Bay Plain
Is surface water affected? No	Nearest Surface Water Name: San Lorenzo Creek is approximately 680 feet south of the site.

	LTCP G	ROUNDWATE	ER SPECIFIC C	RITERIA		
LTCP Groundwater Specific	Scenario under v	which case wa	s closed: Scen	ario 1		
Site	e Data		LTCP Scenario 1 Criteria (ppb)	LTCP Scenario 2 Criteria (ppb)	LTCP Scenario 3 Criteria (ppb)	LTCP Scenario 4 Criteria (ppb
Plume Length	<100	<100 feet		<250 feet	<250 feet	<1,000 feet
Free Product	No free p	No free product.		No free product	Removed to maximum extent practicable	No free product
Plume Stable or Decreasing	Stable		Stable or decreasing	Stable or decreasing	Stable or decreasing for minimum of 5 Years	Stable or decreasing
Distance to Nearest Water Supply Well	> 250	> 250 feet		>1,000 feet	>1,000 feet	>1,000 feet
Distance to Nearest Surface Water and Direction	680 feet cro	680 feet crossgradient		>1,000 feet	>1,000 feet	>1,000 feet
Property Owner Willing to Accept a Land Use Restriction?	groundwat	Not applicable for groundwater specific criteria.		Not applicable	Yes	Not applicable
	GRO	UNDWATER	CONCENTRAT	IONS		
Constituent	Historic Site Maximum (ppb)	Current Site Maximum (ppb)	LTCP Scenario 1 Criteria (ppb)	LTCP Scenario 2 Criteria (ppb)	LTCP Scenario 3 Criteria (ppb)	LTCP Scenario 4 Criteria (ppb)
Benzene	<0.20	<0.20	No criteria	3,000	No criteria	1,000
MTBE	<0.20	<0.20	No criteria	1,000	No criteria	1,000
Scenario 5: If the site does determination been made the future scenarios, the contain health and safety and to the be achieved within a reason	nat under current a ninant plume pose e environment and	and reasonables a low threat	y expected to human			

#### LTCP VAPOR SPECIFIC CRITERIA

LTCP Vapor Specific Scenario under which case was closed: There are no volatiles in soil and groundwater. This case should be closed in spite of not meeting the vapor specific media criteria.

Active Fueling Station	Active as of:	Not applicable
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		LTCP	LTCP	LTCP	LTCP	LTCP	LTCP
Site Data		Scenario 1	Scenario 2	Scenario 3A	Scenario 3B	Scenario 30	Scenario 4
			Criteria	Criteria	Criteria	Criteria	Criteria
Unweathered NAPL	No NAPL	LNAPL in groundwater	LNAPL in soil	No NAPL	No NAPL	No NAPL	No criteria
Thickness of Bioattenuation Zone Beneath Foundation	10 feet	≥30 feet	≥30 feet	≥5 feet	≥10 feet	≥5 feet	≥5 feet
Total TPH in Bioattenuation Zone	1,760 ppm	<100 ppm	<100 ppm	<100 ppm	<100 ppm	<100 ppm	<100 ppm
Maximum Current Benzene Concentration in Groundwater	< 0.20 ppb	No criteria	No criteria	<100 ppb	≥100 and <1,000 ppb	<1,000 ppb	No criteria
Oxygen Data within Bioattenuation Zone	No oxygen data.	No criteria	No criteria	No oxygen data or <4%	No oxygen data or <4%	≥4% at lower end of zone	≥4% at lower end of zone
Depth of soil vapor measurement beneath foundation		No criteria	No criteria	No criteria	No criteria	No criteria	≥5 feet

#### SCENARIO 4 DIRECT MEASUREMENT OF SOIL VAPOR CONCENTRATIONS

Site Soil Vapor Data		No Bioattenuation Zone		Bioattenuation Zone		
Constituent	Historic Maximum (µg/m³)	Current Maximum (µg/m³)	Residential	Commercial	Residential	Commercial
Benzene			<85	<280	<85,000	<280,000
Ethylbenzene			<1,100	<3,600	<1,100,000	<3,600,000
Naphthalene	4		<93	<310	<93,000	<310,000

If the site does not meet scenarios 1 through 4, does a site-specific risk assessment for the vapor intrusion pathway demonstrate that human health is protected?

If the site does not meet scenarios 1 through 4, has a determination been made that petroleum vapors from soil or groundwater will have no significant risk of adversely affecting human health as a result of controlling exposure through the use of mitigation measures or through the use of institutional controls?

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#### LTCP DIRECT CONTACT AND OUTDOOR AIR EXPOSURE CRITERIA

LTCP Direct Contact and Outdoor Air Exposure Specific Scenario under which case was closed: A determination has been made that the concentrations of petroleum in soil will have not significant risk of adversely affecting human health as a result of controlling exposure through the use of mitigation measures or through the use of institutional controls.

Are maximum concentrations less than those in Table 1 below?			Yes				
		Resi	dential	Commercial/Industrial		Utility Worker	
Cons	tituent	0 to 5 feet bgs (ppm)	Volatilization to outdoor air (5 to 10 feet bgs) ppm	0 to 5 feet bgs (ppm)	Volatilization to outdoor air (5 to 10 feet bgs) ppm	0 to 10 feet bgs (ppm)	
Site Maximum	Benzene	<0.0024	<0.0024	<0.0024	<0.0024	<0.0024	
LTCP Criteria	Benzene	≤1.9	≤2.8	≤8.2	≤12	≤14	
Site Maximum	Ethylbenzene	<0.0024	<0.0024	<0.0024	<0.0024	<0.0024	
LTCP Criteria	Ethylbenzene	≤21	≤32	≤89	≤134	≤314	
Site Maximum	Naphthalene				wa a va		
LTCP Criteria	Naphthalene	≤9.7	≤9.7	≤45	≤45	≤219	
Site Maximum	PAHs						
LTCP Criteria	PAHs	≤0.063	NA	≤0.68	NA	≤4.5	
If maximum concentrations are greater than those in Table 1, are they less than levels from a site-specific risk assessment?				NO AND NO.			
If maximum concentrations are greater than those in Table 1, has a determination been made that the concentrations of petroleum in soil will have no significant risk of adversely affecting human health as a result of controlling exposure through the use of mitigation measures or through the use of institutional controls?				Yes			

#### IV. CLOSURE

Does corrective action protect public health for current land use? Alameda County Environmental Health staff does not make specific determinations concerning public health risk. However, based upon the information available in our files to date, closure of this site appears to be consistent with the policies established by the State Water Resources Control Board Low-Threat Underground Storage Tank Closure Policy which became effective on August 17, 2012.

#### Site Management Requirements:

This fuel leak case has been evaluated for closure consistent with the State Water Resource Control Board Low-Threat Underground Storage Tank Closure Policy (LTCP). In a limited area at the site naphthalene concentrations in soil was not analyzed, and soil in this area contained the highest detected concentration of Total Petroleum Hydrocarbons as diesel (TPHd; as a substitute for heating oil) documented at the site.

Consequently, in order to manage these conditions, if a change in land use to any residential, or other conservative land use, or if any redevelopment occurs in the vicinity of the remote fill, Alameda County Environmental Health (ACEH) must be notified as required by Government Code Section 65850.2.2. Due to the potential for direct contact concerns ACEH will re-evaluate the case upon receipt of approved development/construction plans.

Excavation or construction activities in areas of residual contamination require planning and implementation of appropriate health and safety procedures by the responsible party prior to and during excavation and construction activities.

Should corrective action be reviewed if land use changes? Yes

Was a deed restriction or deed notification filed? No

Date Recorded: ----

#### V. ADDITIONAL COMMENTS AND CONCLUSION

#### Additional Comments:

This fuel leak case has been evaluated for closure consistent with the State Water Resource Control Board Low-Threat Underground Storage Tank Closure Policy (LTCP).

The site does not appear to meet any of the scenarios associated with Petroleum Vapor Intrusion to Indoor Air. However, due to the lack of volatile compounds in soil and groundwater, ACEH believes case closure is appropriate.

The UST held heating oil and naphthalene was generally analyzed for and was non-detectable at all locations, except one. At that location, naphthalene was not analyzed for in soil sample B-1, which documented 1,760 mg/kg TPHd (as a substitute for heating oil) at a depth of five feet. This is the highest concentration of TPHd that is documented at the site and it was collected in the vicinity of the remote fill area. The *Leaking Underground Fuel Tank Guidance Manual* (State Water Resource Control Board, September 2012) states that the average and highest concentrations of naphthalene documented in fresh diesel product are 0.26 and 0.8%. The average and highest concentration of naphthalene that would be expected from this concentration of TPHd would be between 3.52 and 14.08 mg/kg. The LTCP states that up to 9.7 mg/kg naphthalene will have no significant risk of adversely affecting human health at a residential site. ACEH concludes that the limited area of naphthalene concentrations over residential LTCP standards at this location can be managed by site management requirements.

#### Conclusion:

Alameda County Environmental Health staff believe that the site meets the conditions for case closure under the State Water Resources Control Board Low-Threat Underground Storage Tank Closure Policy. Based upon the information available in our files to date, no further investigation or cleanup for the fuel leak case is necessary at this time. However, as specified in the Site Management Requirements, re-evaluation of this case is required if land uses changes to any residential or other conservative land use, or any redevelopment occurs in the vicinity of the remote fill area.

#### VI. LOCAL AGENCY REPRESENTATIVE DATA

Prepared by: Mark Detterman, P.G., C.E.G.	Title: Senior Hazardous Materials Specialist		
Signature: Marker	Date: 5/29/2019		
Approved by: Dilar Roe	Title: LOP and SCP Program Manager		
Signature: Duan Roz	Date: 6/2/2014		

#### VII. REGIONAL BOARD AND PUBLIC NOTIFICATION

Regional Board Staff Name: Cherie McCaulou	Title: Engineering Geologist
Regional Board Notification Date: 12/5/2013	A
Public Notification Date: 12/5/2013	

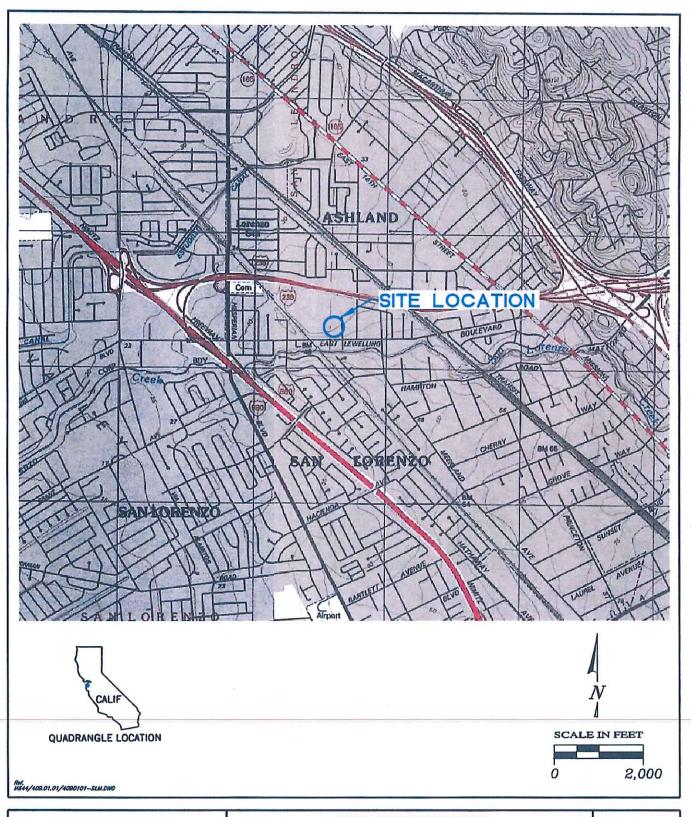
### **VIII. MONITORING WELL DESTRUCTION**

Date Requested by ACEH:	Date of Well Decommissioning Report:					
All Monitoring Wells Destroyed:	Number Destroyed: 0	Number Retained: 0				
Reason Wells Retained:						
Additional requirements for submittal of groundwater data from retained wells:						
ACEH Concurrence - Signature:		Date: 5/29/2014				

### Attachments:

- 1. Site Vicinity Map and Aerial Photo (2 pp)
- 2. Site Plan (1 p)
- 3. Soil Analytical Data (22 pp)
- 4. Groundwater Analytical Data (1 pp)

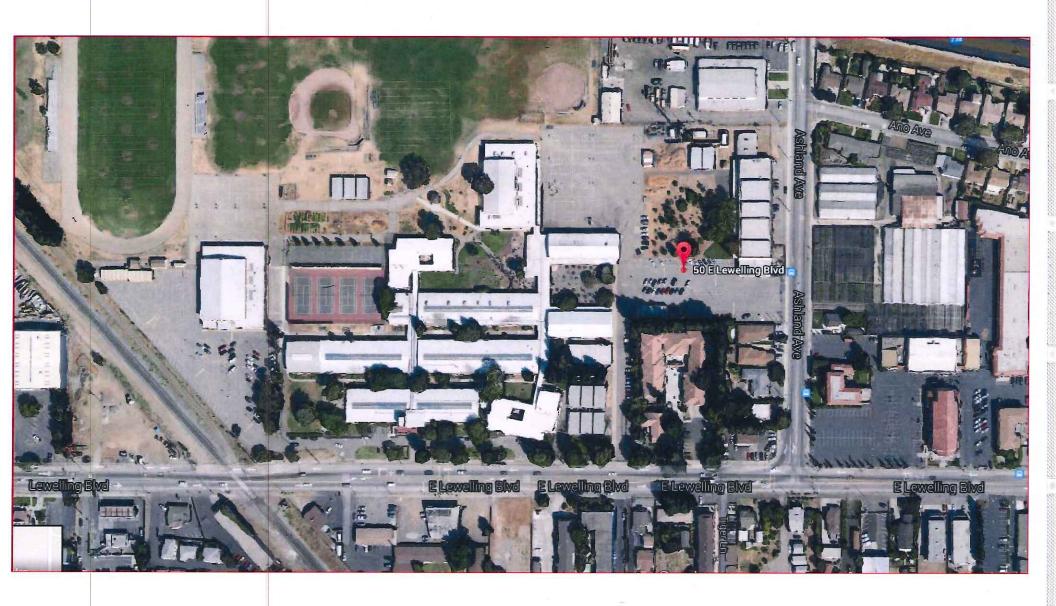
## **ATTACHMENT 1**



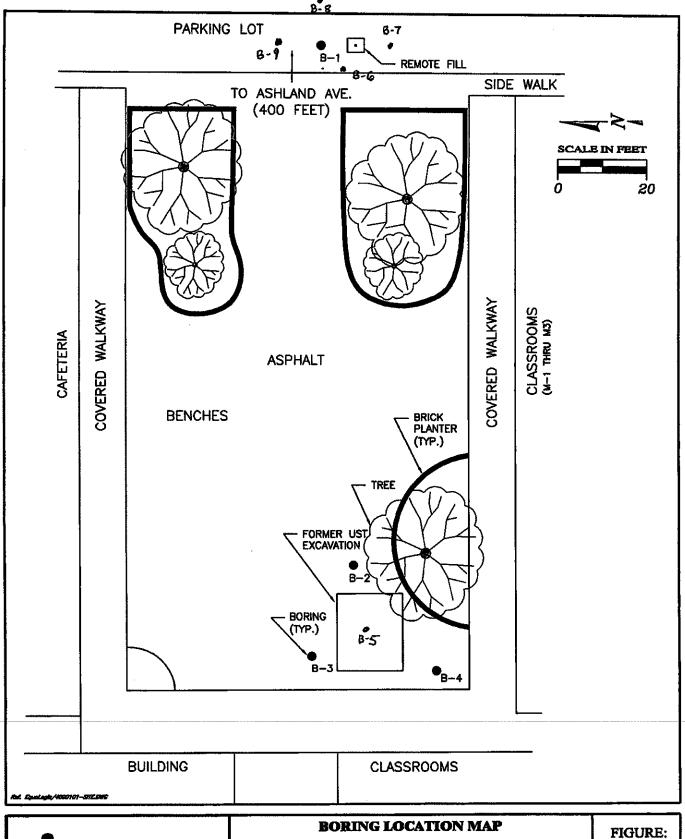


#### SITE LOCATION MAP

SAN LORENZO HIGH SCHOOL 50 E. LOWELLING BLVD SAN LORENZO, CALIFORNIA FIGURE: 1 PROJECT: 409.01.01



## **ATTACHMENT 2**





SAN LORENZO HIGH SCHOOL 50 EAST LOWELLING BLVD. SAN LORENZO, CALIFORNIA FIGURE: 2
PROJECT: 409.01.01

## **ATTACHMENT 3**

Table 1 - Summary of Soil Analytical Data San Lorenzo High School

Boring	Date	Depth (feet)	TPH-d (mg/kg)	TPH-mo (mg/kg)	Benzene (ug/kg)	Toluene (ug/kg)	Ethylbenzene (ug/kg)	Xylene (ug/kg)	MTBE (ug/kg)	PAHs (ug/kg)
B-1	6/12/2012	5	1760	1610	<2.4	<2.4	<2.4	17.2	<4.7	NA
		10	<5.0	<10.0	<0.50	<0.50	<0.50	<0.99	<0.99	NA
2		15	<5.0	<10.0	<0.50	<0.50	<0.50	<0.99	<0.99	NA
		20	<5.0	<9.9	<0.50	<0.50	<0.50	<0.99	<0.99	NA
B-2	6/12/2012	5	<5.0	39.7	<0.49	<0.49	<0.49	<0.98	<0.98	NA
		10	<4.9	<9.9	< 0.49	< 0.49	< 0.49	<0.99	< 0.99	NA
		15	<5.0	<10.0	< 0.49	< 0.49	< 0.49	<0.98	<0.98	NA
		20	<5.0	41	<0.50	<0.50	<0.50	<1.0	<1.0	NA
		24	<5.0	<10.0	<0.50	<0.50	<0.50	<0.99	<0.99	NA
B-3	6/12/2012	10	<5.0	<10.0	<0.50	<0.50	<0.50	<0.99	<0.99	NA
		15	5	<9.9	< 0.49	< 0.49	< 0.49	<0.98	<0.98	NA
		20	<4.9	<9.8	<0.50	<0.50	<0.50	<1.0	<1.0	NA
		24	5.8	<9.9	<0.49	<0.49	<0.49	<0.98	<0.98	NA
B-4	6/12/2012	5	<5.0	<9.9	<0.49	<0.49	<0.49	<0.97	<0.97	NA
		10	<5.0	<10.0	<0.48	< 0.48	<0.48	<0.97	< 0.97	NA
		15	<4.9	<9.9	<0.50	<0.50	<0.50	<1.0	<1.0	NA
E.		20	<5.0	<9.9	<0.49	<0.49	<0.49	<0.98	<0.98	NA
B-5	1/26/2013	5	<5.0	19.0	<0.50	<0.50	<0.50	<0.99	<0.99	ND
		15	<5.0	<9.9	< 0.49	< 0.49	< 0.49	<0.98	<0.98	ND
		20	<4.9	<9.9	< 0.49	< 0.49	< 0.49	<0.98	<0.98	ND
-		25	8.69	<9.9	<0.50	<0.50	<0.50	<1.0	<1.0	ND

Boring	Date	Depth (feet)	TPH-d (mg/kg)	TPH-mo (mg/kg)	Benzene (ug/kg)	Toluene (ug/kg)	Ethylbenzene (ug/kg)	Xylene (ug/kg)	MTBE (ug/kg)	PAHs (ug/kg)
B-6	1/26/2013	2.5	<50.0	375	<0.48	<0.48	<0.48	<0.97	<0.97	ND
	-11	5	<5.0	<10	<0.49	<0.49	2.2	13.4	<0.98	ND
		10	<5.0	<10	<0.49	<0.49	7.9	53.5	<0.97	ND
		15	<5.0	<9.9	<0.48	<0.48	<0.48	<0.96	<0.96	ND
B-7	1/26/2013	2.5	69.7	183	<0.50	<0.50	<0.50	<0.99	<0.99	ND
		5	<5.0	55.6	<0.50	<0.50	<0.50	<1.0	<1.0	ND
4.	11	10	<5.0	30.2	< 0.50	<0.50	<0.50	<1.0	<1.0	ND
		15	<5.0	18.4	<0.49	<0.49	<0.49	<0.98	<0.98	ND
B-8	1/26/2013	2.5	<5.0	<9.9	<0.50	<0.50	<0.50	<1.0	<1.0	ND
		5	<5.0	22.5	< 0.49	< 0.49	< 0.49	< 0.99	< 0.99	ND
		10	<5.0	17.9	< 0.50	< 0.50	< 0.50	<1.0	<1.0	ND
		15	<5.0	15.7	<0.49	<0.49	<0.49	<0.97	<0.97	ND
B-9	1/26/2013	2.5	<15	138	<0.50	<0.50	<0.50	<0.99	<0.99	ND
		5	<5.0	<9.9	< 0.49	< 0.49	< 0.49	<0.98	<0.98	ND
		10	<5.0	<9.9	<0.50	<0.50	<0.50	<0.99	< 0.99	ND
		15	<5.0	<9.9	< 0.50	<0.50	<0.50	<1.0	<1.0	ND

#### Notes

TPH-d = Total petroleum hydrocarbons as diesel

TPH-mo = Total petroleum hydrocarbons as motor oil

Heating oil is not a unique pattern. Historically heating oil has been various petroleum hydrocarbon mixtures from C10-C40; this includes the diesel and motor oil ranges. Therefore, TPH in either range could be heating oil.

MTBE = Methyl tert-butyl ether

PAHs = Polynuclear aromatic hydrocarbons

NA = Not analyzed

ND = No PAHs detected

## Report of Analysis

Page 1 of 1

Client Sample ID: B-5@5' Lab Sample ID:

C25941-1

**Date Sampled:** 01/26/13

Matrix:

SO - Soil

Date Received: 01/28/13

Method:

SW846 8270C SW846 3550B

Percent Solids: n/a a

Project:

T10000003424-San Lorenzo, CA

**Analytical Batch** 

Run #1

File ID Y18818.D DF

Analyzed By MT 01/30/13

**Prep Date** 01/28/13

Prep Batch OP7407

EY883

Run #2

**Initial Weight** 

30.1 g

Final Volume

Run #1

1.0 ml

Run #2

#### **BN PAH List**

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
120-12-7	Anthracene	ND	170	54	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
218-01-9	Chrysene	ND	170	33	ug/kg	
53-70-3	Dibenzo(a, h)anthracene	ND	170	41	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	43	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	79	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 2 Limits		
4165-60-0	Nitrobenzene-d5	81%		15-1	01%	
321-60-8	2-Fluorobiphenyl	85%		15-1	04%	
1718-51-0	Terphenyl-d14	108%		56-1	23%	

(a) All results reported on a wet weight basis.

ND = Not detected

MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range



## Report of Analysis

Page 1 of 1

Client Sample ID: B-5@15'

Lab Sample ID:

C25941-2

Matrix:

SO - Soil SW846 8270C SW846 3550B

Method: Project:

T10000003424-San Lorenzo, CA

**Date Sampled:** 01/26/13

Date Received: 01/28/13

Percent Solids: n/a a

DF **Prep Date Prep Batch Analytical Batch** File ID Analyzed By OP7407 EY882 MT 01/28/13 Run #1 Y18786.D 01/30/13

Run #2

Final Volume **Initial Weight** 

Run #1

30.0 g

1.0 ml

Run #2

#### **BN PAH List**

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
120-12-7	Anthracene	ND	170	54	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
218-01-9	Chrysene	ND	170	33	ug/kg	
53-70-3	Dibenzo(a, h)anthracene	ND	170	41	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	43	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	80	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lin	nits	
4165-60-0	Nitrobenzene-d5	63%		15-	101%	
321-60-8	2-Fluorobiphenyl	64%		15-	104%	
1718-51-0	Terphenyl-d14	102%		56-	123%	

(a) All results reported on a wet weight basis.

ND = Not detected

MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range



## Report of Analysis

Page 1 of 1

Client Sample ID: B-5@20'

Lab Sample ID:

C25941-3

Matrix:

SO - Soil

Method: Project:

SW846 8270C SW846 3550B T10000003424-San Lorenzo, CA **Date Sampled:** 01/26/13 Date Received: 01/28/13

Percent Solids: n/a a

Prep Date File ID DF Analyzed By **Prep Batch Analytical Batch** Run #1 Y18819.D 01/30/13 MT 01/28/13 OP7407 EY883

Run #2

**Initial Weight** 

30.0 g

**Final Volume** 

Run #1

Run #2

1.0 ml

#### **BN PAH List**

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
120-12-7	Anthracene	ND	170	54	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
218-01-9	Chrysene	ND	170	33	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	41	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	43	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	80	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
a.a.v	~	** " 4	- " -	-	1000 TE	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
4165-60-0	Nitrobenzene-d5	70%		15-1	01%	
321-60-8	2-Fluorobiphenyl	75%		15-1	04%	
1718-51-0	Terphenyl-d14	109%		56-1	23%	

(a) All results reported on a wet weight basis.

ND = Not detected

MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range



## Report of Analysis

By

MT

Page 1 of 1

Client Sample ID: B-5@25'

Lab Sample ID:

C25941-4

**Date Sampled:** 01/26/13

Matrix:

SO - Soil SW846 8270C SW846 3550B Date Received: 01/28/13

Method: Project:

T10000003424-San Lorenzo, CA

Analyzed

01/30/13

Percent Solids: n/a a

**Prep Date Prep Batch** 01/28/13 OP7407

**Analytical Batch** EY883

Run #1 Run #2

**Initial Weight** 

File ID

30.0 g

Y18820.D

Final Volume

Run #1

1.0 ml

DF

1

Run #2

#### **BN PAH List**

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
120-12-7	Anthracene	ND	170	54	ug/kg	-
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
218-01-9	Chrysene	ND ·	170	33	ug/kg	
53-70-3	Dibenzo(a, h)anthracene	ND	170	41	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	43	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	80	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
4165-60-0	Nitrobenzene-d5	80%		15-1	01%	
321-60-8	2-Fluorobiphenyl	84%		15-1	04%	
1718-51-0	Terphenyl-d14	109%		56-1	23%	

(a) All results reported on a wet weight basis.

ND = Not detected

MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range



## Report of Analysis

Page 1 of 1

Client Sample ID: B-6@2 1/2' Lab Sample ID:

C25941-5

SO - Soil

**Date Sampled:** 01/26/13 Date Received: 01/28/13

Matrix: Method: Project:

SW846 8270C SW846 3550B T10000003424-San Lorenzo, CA Percent Solids: n/a a

File ID Y18813.D DF 4

Analyzed By 01/30/13

Prep Date MT 01/28/13

**Prep Batch** OP7407

**Analytical Batch** EY883

Run #1 b Run #2

Initial Weight

**Final Volume** 

Run #1

30.1 g

1.0 ml

Run #2

#### **BN PAH List**

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	660	290	ug/kg	
208-96-8	Acenaphthylene	ND	660	310	ug/kg	
120-12-7	Anthracene	ND	660	210	ug/kg	
56-55-3	Benzo(a)anthracene	ND	660	130	ug/kg	
50-32-8	Benzo(a)pyrene	ND	660	130	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	660	130	ug/kg	
191-24-2	Benzo(g, h, i)perylene	ND	660	170	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	660	130	ug/kg	
218-01-9	Chrysene	ND	660	130	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	660	160	ug/kg	
206-44-0	Fluoranthene	ND	660	130	ug/kg	
86-73-7	Fluorene	ND	660	290	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	660	170	ug/kg	
90-12-0	1-Methylnaphthalene	ND	660	300	ug/kg	
91-57-6	2-Methylnaphthalene	ND	660	320	ug/kg	
91-20-3	Naphthalene	ND	660	310	ug/kg	
85-01-8	Phenanthrene	ND	660	230	ug/kg	
129-00-0	Pyrene	ND	660	130	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	ts	
4165-60-0	Nitrobenzene-d5	82%		15-10	01%	
321-60-8	2-Fluorobiphenyl	87%		15-10	)4%	
1718-51-0	Terphenyl-d14	110%		56-12	23%	

(a) All results reported on a wet weight basis.

(b) Dilution required due to matrix interference (dark and viscous extract; high concentration of non-target hydrocarbons).

ND = Not detected

J = Indicates an estimated value

RL = Reporting Limit E = Indicates value exceeds calibration range B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

C25941

MDL - Method Detection Limit

## **Report of Analysis**

Page 1 of 1

Client Sample ID: B-6@5' Lab Sample ID:

C25941-6 SO - Soil

By

MT

Date Sampled: Date Received: 01/28/13

01/26/13

Matrix: Method:

SW846 8270C SW846 3550B

Percent Solids: n/a a

Project:

T10000003424-San Lorenzo, CA

Analyzed

01/30/13

**Prep Date** 01/28/13

Prep Batch OP7407

**Analytical Batch** EZ105

Run #1 Run #2

**Initial Weight** 

Final Volume

30.1 g

File ID

Z2061.D

1.0 ml

Run #1 Run #2

DF

1

#### **BN PAH List**

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
120-12-7	Anthracene	ND	170	54	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
218-01-9	Chrysene	ND	170	33	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	41	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	43	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	80	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Li	mits	
4165-60-0	Nitrobenzene-d5	92%		15	-101%	
321-60-8	2-Fluorobiphenyl	82%		15	-104%	
1718-51-0	Terphenyl-d14	103%		56	-123%	

(a) All results reported on a wet weight basis.

ND = Not detected

MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

E = Indicates value exceeds calibration range





## Report of Analysis

Page 1 of 1

Client Sample ID: B-6@10'

Lab Sample ID:

C25941-7

Matrix: Method: SO - Soil

SW846 8270C SW846 3550B

Project:

T10000003424-San Lorenzo, CA

**Date Sampled:** 01/26/13 Date Received: 01/28/13

Percent Solids: n/a a

File ID DF Analyzed By **Prep Date Prep Batch Analytical Batch** Run #1 b Y18814.D 01/30/13 MT 01/28/13 OP7407 EY883

Run #2

**Initial Weight** Final Volume

Run #1

30.1 g

1.0 ml

Run #2

**BN PAH List** 

CAS No.	Compound	compound Result RL		MDL	Units	Q
83-32-9	Acenaphthene	ND	330	150	ug/kg	
208-96-8	Acenaphthylene	ND	330	160	ug/kg	
120-12-7	Anthracene	ND	330	110	ug/kg	
56-55-3	Benzo(a)anthracene	ND	330	67	ug/kg	
50-32-8	Benzo(a)pyrene	ND	330	67	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	330	67	ug/kg	
191-24-2	Benzo(g, h, i)perylene	ND	330	86	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	330	67	ug/kg	
218-01-9	Chrysene	ND	330	67	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	330	82	ug/kg	
206-44-0	Fluoranthene	ND	330	67	ug/kg	
86-73-7	Fluorene	ND	330	140	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	330	85	ug/kg	
90-12-0	1-Methylnaphthalene	ND	330	150	ug/kg	
91-57-6	2-Methylnaphthalene	ND	330	160	ug/kg	
91-20-3	Naphthalene	ND	330	150	ug/kg	
85-01-8	Phenanthrene	ND	330	120	ug/kg	
129-00-0	Pyrene	ND	330	67	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	ts	
4165-60-0	Nitrobenzene-d5	71%		15-10	01%	
321-60-8	2-Fluorobiphenyl	76%		15-1	04%	
1718-51-0	Terphenyl-d14	106%		56-12	23%	

(a) All results reported on a wet weight basis.

(b) Dilution required due to matrix interference (dark and viscous extract; high concentration of non-target hydrocarbons).

ND = Not detected

MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range



### Report of Analysis

Page 1 of 1

Client Sample ID: B-6@15' Lab Sample ID:

C25941-8

Date Sampled:

01/26/13

Matrix:

SO - Soil SW846 8270C SW846 3550B

Date Received: 01/28/13

Method: Project:

T10000003424-San Lorenzo, CA

Percent Solids: n/a a

Run #1

File ID Z2062.D Analyzed 01/30/13

By MT **Prep Date** 01/28/13

**Prep Batch** OP7407

**Analytical Batch** EZ105

Run #2

Initial Weight

**Final Volume** 1.0 ml

DF

1

Run #1 Run #2 30.0 g

#### **BN PAH List**

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
120-12-7	Anthracene	ND	170	54	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	.170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
218-01-9	Chrysene	ND	170	33	ug/kg	
53-70-3	Dibenzo(a, h)anthracene	ND	170	41	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	43	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	80	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lin	nits	
4165-60-0	Nitrobenzene-d5	93%		15-	101%	
321-60-8	2-Fluorobiphenyl			104%		
1718-51-0	Terphenyl-d14	101%		56-	123%	

(a) All results reported on a wet weight basis.

E = Indicates value exceeds calibration range

ND = Not detected

MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank



### Report of Analysis

Page 1 of 1

Client Sample ID: B-7@2 1/2' Lab Sample ID:

C25941-9

SO - Soil

**Date Sampled:** 01/26/13 Date Received: 01/28/13

Matrix: Method:

SW846 8270C SW846 3550B

Percent Solids: n/a a

Project:

T10000003424-San Lorenzo, CA

**Analytical Batch** 

Run #1 b

Y18815.D

DF 10

By Analyzed MT 01/30/13

**Prep Date** 01/28/13

Prep Batch OP7407

EY883

Run #2

Initial Weight

File ID

**Final Volume** 

Run #1 30.0 g 1.0 ml

Run #2

#### **BN PAH List**

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	1700	730	ug/kg	
208-96-8	Acenaphthylene	ND	1700	780	ug/kg	
120-12-7	Anthracene	ND	1700	540	ug/kg	
56-55-3	Benzo(a)anthracene	ND	1700	330	ug/kg	
50-32-8	Benzo(a)pyrene	ND	1700	330	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	1700	330	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	1700	430	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	1700	330	ug/kg	
218-01-9	Chrysene	ND	1700	330	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	1700	410	ug/kg	
206-44-0	Fluoranthene	ND	1700	330	ug/kg	
86-73-7	Fluorene	ND	1700	720	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1700	430	ug/kg	
90-12-0	1-Methylnaphthalene	ND	1700	760	ug/kg	
91-57-6	2-Methylnaphthalene	ND	1700	800	ug/kg	
91-20-3	Naphthalene	ND	1700	770	ug/kg	
85-01-8	Phenanthrene	ND	1700	580	ug/kg	
129-00-0	Pyrene	ND	1700	330	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2 Limits		its	
4165-60-0	Nitrobenzene-d5	69%		15-1	01%	
321-60-8	2-Fluorobiphenyl	82%		15-1	04%	
1718-51-0	Terphenyl-d14	106%		56-1	23%	

(a) All results reported on a wet weight basis.

(b) Dilution required due to matrix interference (dark and viscous extract; high concentration of non-target hydrocarbons).

ND = Not detected

MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range



## Report of Analysis

Page 1 of 1

Client Sample ID: B-7@5'

30.1 g

Lab Sample ID:

C25941-10

Matrix:

SO - Soil

Method:

SW846 8270C SW846 3550B

Project:

T10000003424-San Lorenzo, CA

**Date Sampled:** 01/26/13 Date Received: 01/28/13

Percent Solids: n/a a

-							
	File ID	DF	Analyzed	By	<b>Prep Date</b>	Prep Batch	<b>Analytical Batch</b>
Run #1 b	V18816 D	2	01/30/13	MT	01/28/13	OP7407	EY883

Run #2

Final Volume **Initial Weight** 

Run #1

1.0 ml

Run #2

#### **BN PAH List**

CAS No.	Compound	Result	$\mathbf{RL}$	MDL	Units	Q
83-32-9	Acenaphthene	ND	330	150	ug/kg	
208-96-8	Acenaphthylene	ND	330	160	ug/kg	
120-12-7	Anthracene	ND	330	110	ug/kg	
56-55-3	Benzo(a)anthracene	ND	330	66	ug/kg	
50-32-8	Benzo(a)pyrene	ND	330	66	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	330	66	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	330	86	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	330	66	ug/kg	
218-01-9	Chrysene	ND	330	66	ug/kg	
53-70-3	Dibenzo(a, h)anthracene	ND	330	82	ug/kg	
206-44-0	Fluoranthene	ND	330	66	ug/kg	
86-73-7	Fluorene	ND	330	140	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	330	85	ug/kg	
90-12-0	1-Methylnaphthalene	ND	330	150	ug/kg	
91-57-6	2-Methylnaphthalene	ND	330	160	ug/kg	
91-20-3	Naphthalene	ND	330	150	ug/kg	
85-01-8	Phenanthrene	ND	330	120	ug/kg	
129-00-0	Pyrene	ND	330	66	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	2 Limits		
4165-60-0	Nitrobenzene-d5	81%		15-1	01%	
321-60-8	2-Fluorobiphenyl	85%		15-1	04%	
1718-51-0	Terphenyl-d14	103%		56-1	123%	

(a) All results reported on a wet weight basis.

(b) Dilution required due to matrix interference (dark and viscous extract; high concentration of non-target hydrocarbons).

ND = Not detected

MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range



## Report of Analysis

Page 1 of 1

Client Sample ID: B-7@10'

Lab Sample ID:

C25941-11

Matrix:

SO - Soil

Method:

Project:

SW846 8270C SW846 3550B T10000003424-San Lorenzo, CA **Date Sampled:** 01/26/13 Date Received: 01/28/13

Percent Solids: n/a a

File ID Z2063.D Run #1

DF 1

Analyzed 01/30/13

 $\mathbf{B}\mathbf{y}$ MT **Prep Date** 01/28/13

**Prep Batch** OP7407

**Analytical Batch** 

EZ105

Run #2

**Initial Weight** 

30.0 g

**Final Volume** 

Run #1 Run #2 1.0 ml

#### **BN PAH List**

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
120-12-7	Anthracene	ND	170	54	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	43	ug/kg	5
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
218-01-9	Chrysene	ND	170	33	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	41	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	43	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	80	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	nits	
4165-60-0	Nitrobenzene-d5	96%			101%	
321-60-8	2-Fluorobiphenyl	87%		15-1	104%	
1718-51-0	Terphenyl-d14	105%	56-123%			

(a) All results reported on a wet weight basis.

ND = Not detected

MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range





## **Report of Analysis**

Page 1 of 1

Client Sample ID: B-7@15'

Lab Sample ID:

C25941-12

Matrix: Method: SO - Soil

SW846 8270C SW846 3550B

Project:

T10000003424-San Lorenzo, CA

**Date Sampled:** 01/26/13

Percent Solids: n/a a

Date Received: 01/28/13

**Prep Date Prep Batch** File ID DF Analyzed By **Analytical Batch** Run #1 Z2064.D 1 01/30/13 MT 01/28/13 OP7407 EZ105

Run #2

Initial Weight Final Volume 30.1 g

Run #1

1.0 ml

Run #2

#### **BN PAH List**

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
120-12-7	Anthracene	ND	170	53	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
218-01-9	Chrysene	ND	170	33	ug/kg	
53-70-3	Dibenzo(a, h)anthracene	ND	170	41	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	42	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	79	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lin	nits	
4165-60-0	Nitrobenzene-d5	81%		15-	101%	
321-60-8	2-Fluorobiphenyl	75%		15-	104%	
1718-51-0	Terphenyl-d14	97% 56-123%			123%	

(a) All results reported on a wet weight basis.

ND = Not detected

MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range



## Report of Analysis

By

MT

Page 1 of 1

Client Sample ID: B-8@2 1/2' Lab Sample ID:

C25941-13

Matrix: Method: SO - Soil

SW846 8270C SW846 3550B

**Date Sampled:** 01/26/13

Percent Solids: n/a a

Date Received: 01/28/13

Project:

T10000003424-San Lorenzo, CA

Analyzed

01/30/13

**Prep Date** 01/28/13

Prep Batch OP7407

**Analytical Batch** 

EZ105

Run #1 Run #2

**Initial Weight** 

File ID

30.1 g

Z2065.D

Final Volume

Run #1

1.0 ml

DF

1

Run #2

RN PAH List

DIA	PAH	LIST

CAS No.	Compound	Result	RL	MDL	Units	Q
	© 1000000 ■ 1000000000000000000000000000					20.5
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
120-12-7	Anthracene	ND	170	54	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g, h, i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
218-01-9	Chrysene	ND	170	33	ug/kg	
53-70-3	Dibenzo(a, h)anthracene	ND	170	41	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	43	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	79	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	nits	
4165-60-0	Nitrobenzene-d5	80%		15-1	101%	
321-60-8	2-Fluorobiphenyl	74%		15-1	104%	
1718-51-0	Terphenyl-d14	96%		56-1	123%	

(a) All results reported on a wet weight basis.

ND = Not detected

MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit E = Indicates value exceeds calibration range B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

> ACCUTEST: C25941

## Report of Analysis

Page 1 of 1

Client Sample ID: B-8@5' Lab Sample ID:

C25941-14

Matrix:

SO - Soil

Method:

SW846 8270C SW846 3550B

T10000003424-San Lorenzo, CA

**Date Sampled:** 01/26/13 Date Received: 01/28/13

Percent Solids: n/a a

Project:

File ID Run #1 Y18827.D DF 1

Analyzed 01/31/13

 $\mathbf{B}\mathbf{y}$ MT **Prep Date** 01/28/13

Prep Batch OP7407

**Analytical Batch** 

EY883

Run #2

Run #2

Initial Weight

**Final Volume** 

Run #1

30.1 g

1.0 ml

#### **BN PAH List**

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
120-12-7	Anthracene	ND	170	54	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
218-01-9	Chrysene	ND	170	33	ug/kg	
53-70-3	Dibenzo(a, h)anthracene	ND	170	41	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	43	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	80	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	nits	
4165-60-0	Nitrobenzene-d5	73%		15-	101%	
321-60-8	2-Fluorobiphenyl	78%		15-	104%	
1718-51-0	Terphenyl-d14	109% 56-12			123%	

(a) All results reported on a wet weight basis.

ND = Not detected

MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

E = Indicates value exceeds calibration range

ACCUTEST. C25941

## **Report of Analysis**

Page 1 of 1

Client Sample ID: B-8@10'

Lab Sample ID:

C25941-15

Matrix:

SO - Soil

1

Method: Project:

SW846 8270C SW846 3550B

T10000003424-San Lorenzo, CA

**Date Sampled:** 01/26/13 Date Received: 01/28/13

Percent Solids: n/a a

Prep Batch **Analytical Batch** 

Run #1

File ID Y18821.D DF Analyzed 01/30/13

By MT **Prep Date** 01/29/13

OP7411

EY883

Run #2

**Initial Weight Final Volume** 

Run #1 Run #2 30.1 g

1.0 ml

#### **BN PAH List**

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
120-12-7	Anthracene	ND	170	54	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g, h, i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
218-01-9	Chrysene	ND	170	33	ug/kg	
53-70-3	Dibenzo(a, h)anthracene	ND	170	41	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	43	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	79	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
4165-60-0	Nitrobenzene-d5	79%		15-1	.01%	
321-60-8	2-Fluorobiphenyl	82%		15-1	.04%	
1718-51-0	Terphenyl-d14	107% 56-123		23%		

(a) All results reported on a wet weight basis.

ND = Not detected

MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

E = Indicates value exceeds calibration range

53 of 282 C25941

## Report of Analysis

Page 1 of 1

Client Sample ID: B-8@15'

Lab Sample ID:

C25941-16

Matrix: Method: SO - Soil

SW846 8270C SW846 3550B

**Date Sampled:** 01/26/13

Percent Solids: n/a a

Date Received: 01/28/13

Project:

T10000003424-San Lorenzo, CA

**Prep Batch** 

**Analytical Batch** 

Run #1

Y18810.D

File ID

DF 1

Analyzed 01/30/13

By MT **Prep Date** 01/29/13

OP7411

EY883

Run #2

Initial Weight

30.2 g

Final Volume 1.0 ml

Run #1 Run #2

**BN PAH List** 

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	50
120-12-7	Anthracene	ND	170	53	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
218-01-9	Chrysene	ND	170	33	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	41	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	42	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	79	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
4165-60-0	Nitrobenzene-d5	81%		15-1	01%	
321-60-8	2-Fluorobiphenyl	85%		15-1	.04%	
1718-51-0	Terphenyl-d14	110%		56-1	23%	

(a) All results reported on a wet weight basis.

ND = Not detected

MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit E = Indicates value exceeds calibration range

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound



## Report of Analysis

By

MT

Page 1 of 1

Client Sample ID: B-9@2 1/2'

Lab Sample ID:

C25941-17

Matrix: Method: SO - Soil

SW846 8270C SW846 3550B

T10000003424-San Lorenzo, CA

**Date Sampled:** 01/26/13 Date Received: 01/28/13

Percent Solids: n/a a

Project:

File ID Y18817.D DF 10

Analyzed 01/30/13

01/29/13

**Prep Date** 

**Prep Batch** OP7411

**Analytical Batch** 

EY883

Run #1 b Run #2

**Initial Weight** 

**Final Volume** 

Run #1 Run #2 30.0 g

1.0 ml

**BN PAH List** 

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	1700	730	ug/kg	
208-96-8	Acenaphthylene	ND	1700	780	ug/kg	
120-12-7	Anthracene	ND	1700	540	ug/kg	
56-55-3	Benzo(a)anthracene	ND	1700	330	ug/kg	
50-32-8	Benzo(a)pyrene	ND	1700	330	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	1700	330	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	1700	430	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	1700	330	ug/kg	
218-01-9	Chrysene	ND	1700	330	ug/kg	
53-70-3	Dibenzo(a, h)anthracene	ND	1700	410	ug/kg	
206-44-0	Fluoranthene	ND	1700	330	ug/kg	
86-73-7	Fluorene	ND	1700	720	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1700	430	ug/kg	
90-12-0	1-Methylnaphthalene	ND	1700	760	ug/kg	
91-57-6	2-Methylnaphthalene	ND	1700	800	ug/kg	
91-20-3	Naphthalene	ND	1700	770	ug/kg	
85-01-8	Phenanthrene	ND	1700	580	ug/kg	
129-00-0	Pyrene	ND	1700	330	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
4165-60-0	Nitrobenzene-d5	77%		15-1	01%	
321-60-8	2-Fluorobiphenyl	83%		15-1	04%	
1718-51-0	Terphenyl-d14	99%	56-123%			

(a) All results reported on a wet weight basis.

(b) Dilution required due to matrix interference (dark and viscous extract; high concentration of non-target hydrocarbons).

ND = Not detected

MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range



## Report of Analysis

Page 1 of 1

Client Sample ID: B-9@5'

Lab Sample ID:

C25941-18

Matrix:

SO - Soil

SW846 8270C SW846 3550B

DF

1

Method:

**Date Sampled:** 01/26/13

Date Received: 01/28/13

Percent Solids: n/a a

Project:

T10000003424-San Lorenzo, CA

Analyzed

01/30/13

By MT

**Prep Date** 01/29/13

Prep Batch OP7411

**Analytical Batch** EY883

Run #1 Run #2

Initial Weight

File ID

Y18811.D

Run #1 Run #2

Final Volume 30.1 g

1.0 ml

#### **BN PAH List**

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
120-12-7	Anthracene	ND	170	54	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g, h, i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
218-01-9	Chrysene	ND	170	33	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	41	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	43	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	79	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	# 2 Limits		
4165-60-0	Nitrobenzene-d5	77%		15-1	01%	
321-60-8	2-Fluorobiphenyl	81%		15-1	04%	
1718-51-0	Terphenyl-d14	111%		56-123%		

(a) All results reported on a wet weight basis.

ND = Not detected

MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit E = Indicates value exceeds calibration range B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound



## Report of Analysis

Page 1 of 1

Client Sample ID: B-9@10'

Lab Sample ID:

C25941-19

Matrix:

SO - Soil

SW846 8270C SW846 3550B

Method:

**Date Sampled:** 01/26/13

Date Received: 01/28/13

Percent Solids: n/a a

Project:

T10000003424-San Lorenzo, CA

File ID Run #1 Y18812.D DF Analyzed 1 01/30/13

By MT **Prep Date** 01/29/13

**Prep Batch** OP7411

**Analytical Batch** 

EY883

Run #2

Initial Weight

**Final Volume** 

Run #1 30.0 g 1.0 ml

Run #2

#### **BN PAH List**

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
120-12-7	Anthracene	ND	170	54	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
218-01-9	Chrysene	ND	170	33	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	41	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	43	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	80	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
4165-60-0	Nitrobenzene-d5	75%		15-	101%	
321-60-8	2-Fluorobiphenyl	77%		15-	104%	
1718-51-0	Terphenyl-d14	108% 56-123		123%		

(a) All results reported on a wet weight basis.

ND = Not detected

MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range



## Report of Analysis

Page 1 of 1

Client Sample ID: B-9@15'

Lab Sample ID:

C25941-20

Matrix:

SO - Soil

Method:

SW846 8270C SW846 3550B

Project:

T10000003424-San Lorenzo, CA

Analyzed

01/30/13

**Date Sampled:** 01/26/13

Date Received: 01/28/13 Percent Solids: n/a a

Run #1

File ID Y18783.D

DF 1

By MT **Prep Date** 01/29/13

Prep Batch OP7411

**Analytical Batch** 

EY882

Run #2

**Initial Weight** 

**Final Volume** 

Run #1 Run #2 30.0 g 1.0 ml

#### **BN PAH List**

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
120-12-7	Anthracene	ND	170	54	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
218-01-9	Chrysene	ND	170	33	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	41	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	43	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	80	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
4165-60-0	Nitrobenzene-d5	77%		15-1	01%	
321-60-8	2-Fluorobiphenyl	80%		15-1	04%	
1718-51-0	Terphenyl-d14	110%		56-1	23%	

(a) All results reported on a wet weight basis.

ND = Not detected

MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range



## ATTACHMENT 4

Table 2 - Summary of Groundwater Analytical Data San Lorenzo High School

Boring	Date	TPH-d (mg/l)	TPH-mo (mg/I)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylene (ug/l)	MTBE (ug/l)
B-1	6/12/2012	0.157	<0.10	<0.20	<0.20	<0.20	<0.46	<0.20
B- <mark>2</mark>	6/12/2012	<0.053	<0.11	<0.20	<0.20	<0.20	<0.46	<0.20
B-3	6/12/2012	0.0588	<0.11	<0.20	<0.20	0.25	0.78	<0.20
B-4	6/12/2012	<0.063	<0.13	<0.20	<0.20	<0.20	<0.46	<0.20

#### Notes

TPH-d = Total petroleum hydrocarbons as diesel

TPH-mo = Total petroleum hydrocarbons as motor oil

Heating oil is not a unique pattern. Historically heating oil has been various petroleum hydrocarbon mixtures from

C10-C40; this includes the diesel and motor oil ranges. Therefore, TPH in either range could be heating oil.

MTBE = Methyl tert-butyl ether