Transbay Transit Center Program

Phase II Soil Investigation Report

75 Natoma and 546 Howard Streets
San Francisco, California

June 2010

Transbay Transit Center

TRANSBAY TRANSIT CENTER PROGRAM

Phase II Soil Investigation Report
75 Natoma and 546 Howard Streets
San Francisco, California

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Prepared for the
Transbay Joint Powers Authority

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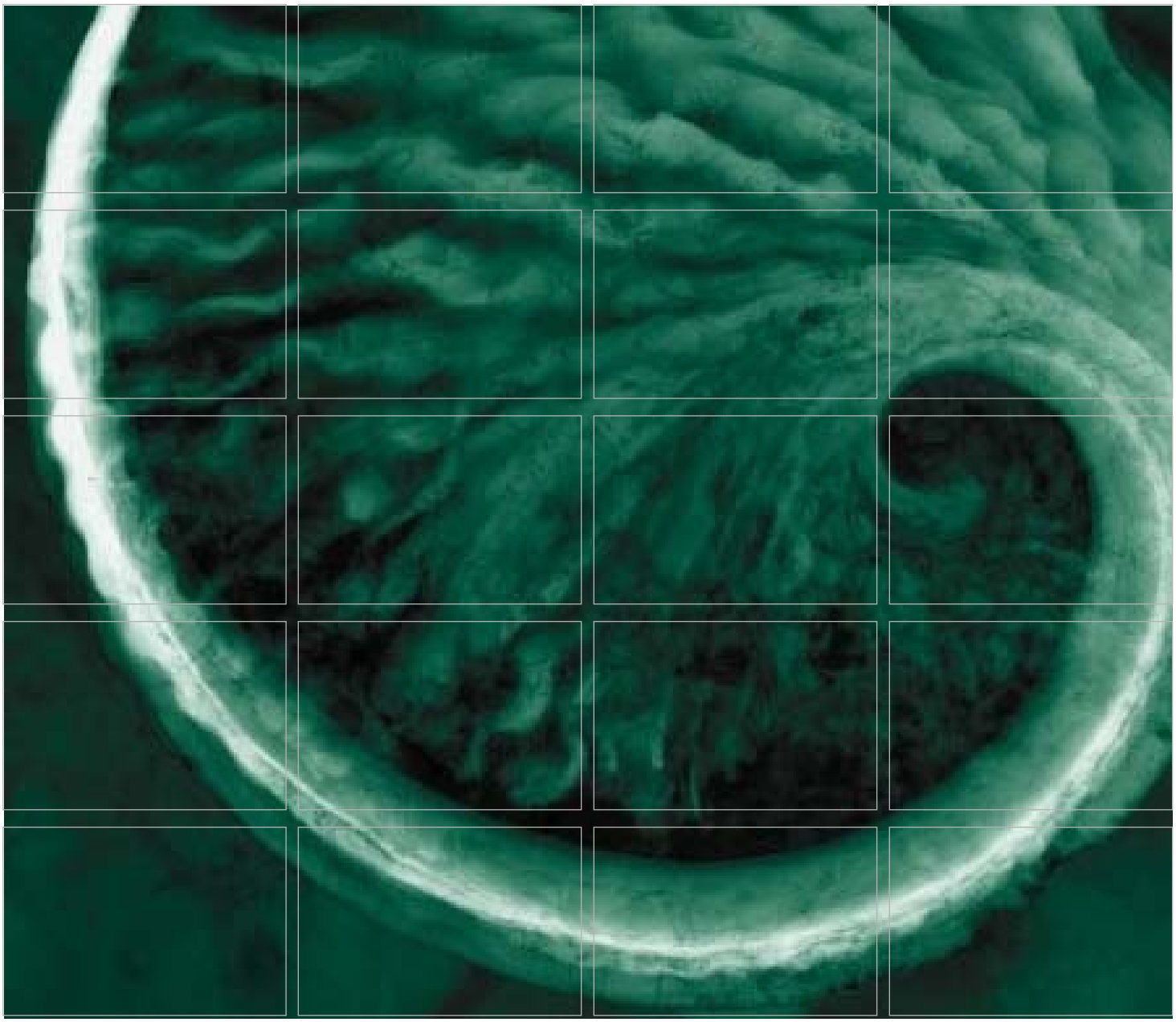

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Delivering sustainable solutions in a more competitive world

Transbay Joint Powers Authority

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San Francisco, California

June 2010

Project No. 0072420

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ERM-West, Inc. (ERM) conducted a Phase II Soil Investigation in anticipation of redevelopment of 75 Natoma Street (Block 3721 Lot 31) and 546 Howard Street (Block 3721 Lot 16).

Based on the information obtained during drilling, the subject property is underlain by 1906 earthquake fill, which consists of silts and sands with gravel, brick fragments, and debris. Beneath the 75 Natoma Street lot, the earthquake fill is approximately 0.5 to 8 feet thick and is underlain by fine Colma sand. Beneath the 546 Howard Street lot, the earthquake fill is at least 8 feet thick.

Soil analytical results were compared to the San Francisco Bay Regional Water Quality Control Board (Water Board) Environmental Screening Levels (ESLs), USEPA Regional Screening Levels (RSLs), and Total Threshold Limit Concentrations (TTLCs). Phase II Soil investigation results indicate that zinc is present within deep soils underlying the subject site area at concentrations exceeding the ESL, and lead is present within shallow and deep soils at concentrations classifying the soil as hazardous waste.

The results were consistent with previous investigations conducted within the subject area. Soil and groundwater contamination within the subject site is likely the result of historical industrial operations in the area, including a manufactured gas plant that operated at Fremont and Howard Streets. Imported fill materials may be also a source of impacts.

1.0 PROJECT BACKGROUND

In late 2007 and April 2008, ERM completed Phase I Environmental Site Assessments (ESA) of the subject property and several other nearby properties intended for redevelopment (Figure 1). The results of the Phase I ESA for the subject property were documented in *Phase I Environmental Site Assessment Group 5* (ERM, December 2007). The results of the Phase I ESAs for the other properties were documented in *Phase I Environmental Site Assessment Group 2* (ERM, November 2007), *Phase I Environmental Site Assessment Group 7* (ERM, December 2007), and *Phase I Environmental Site Assessment Group 4 and Group 8* (ERM, April 2008). Based on Phase I ESA findings, ERM conducted a Limited Phase II Soil and Groundwater Investigation of all of the properties in July 2008. The results of the Phase II Investigation were documented in *Limited Phase II Soil and Groundwater Investigation Report* (ERM, December 2008). ERM conducted this Phase II Soil Investigation for the subject property to characterize potential impacts in soil for the purpose of disposal.

The subject property is in the City of San Francisco, California on 75 Natoma Street (Block 3721 Lot 31) and 546 Howard Street (Block 3721 Lot 16) (Figure 2).

The subject property is in an area of San Francisco with known soil and groundwater impacts caused by historical backfilling with contaminated fill in the late 1800s, industrial activity subsequent to fill placement, including manufactured gas plants, such the one historically located near Fremont and Howard Streets, and the placement of earthquake fill. Environmental investigations of the subject property vicinity in the 1990s showed that soils are impacted with heavy metals, polycyclic aromatic hydrocarbons (PAHs), and petroleum hydrocarbons. The subject property is regulated under Article 22A of the City and County of San Francisco Municipal Code ("Maher Ordinance"), which was developed to address the known, widespread contamination in this area caused by contaminated fill material used to reclaim the area in the 1800s. The Maher Ordinance requires that site investigation and mitigation plans be developed if construction activities will disturb the contaminated fill material. The Maher Ordinance does not require additional remedial actions to address contamination caused by the fill material.

2.0 OBJECTIVES

The objective of this Phase II soil investigation was to understand material management options during excavation of the 75 Natoma Street and 546 Howard Street properties. Excavation of the properties to 10 feet below ground surface (bgs) is planned. This scope was limited to investigation of soil and groundwater that may be encountered during construction of the project.

3.0 PHASE II INVESTIGATION ACTIVITIES

As part of the Phase II soil investigation activities, eight borings were advanced to collect soil samples for laboratory analyses. Collection of a ground water sample was attempted at one boring location. Field investigation activities and methodologies are described below.

Prior to implementing the Phase II field investigation, the following activities were completed:

- A Health and Safety Plan was prepared;
- Drilling permits were obtained from the City and County of San Francisco Department of Public Health;
- Underground Services Alert, a notification service for marking underground utilities on public rights-of-way, was notified of the proposed work; and
- A private utility-locating service was contracted to mark underground utilities in the vicinity of the drilling locations.

3.1 SOIL SAMPLING

On 20 December 2008, eight soil borings (Natoma B-1 through Natoma B-4, and Howard B-1 through Howard B-4) were advanced to facilitate the collection of soil samples for physical characterization and chemical analysis. Additionally, collection of a ground water sample was attempted at boring location Natoma B-4. Boring locations are identified on Figure 2.

All borings were hand augered to 5 feet bgs to reduce the potential for encountering underground utilities during drilling activities. The borings were advanced with a direct-push rig to approximately 10 feet bgs; one boring (Natoma B-4) was advanced to 20 feet bgs. At four borings (Natoma B-1, Howard B-1 through Howard B-3), drilling could not be advanced below 8 feet bgs due to presence of gravels and fill debris. At one boring (Howard B-4) drilling could not be advanced below 3.5 feet bgs due to the presence of a hard rock debris layer. At this location, drilling of two additional step-out borings were attempted but could not be advanced below 3 feet bgs.

Soil samples were collected continuously at each boring. As part of the soil sampling activities, the soil samples were (1) visually examined to characterize the subsurface geology according to the Unified Soil Classification System, (2) evaluated for visible evidence of contamination, and (3) field-screened with a

photoionization detector (PID) for the presence of organic vapors. Soil descriptions and results of the PID screenings are documented on the soil boring logs included in Attachment A. Soil samples were collected from each boring at depths of approximately 1, 5, and 8 or 10 feet bgs, with the following exceptions: at borings Howard B-1 and Howard B-3, the presence of brick and wood debris below approximately 6-7 feet bgs prevented the collection of deeper soil samples from the bottom of the borings.

Ground water was not encountered in boring Natoma B-4, which was advanced to 20 feet bgs; thus, no ground water samples were collected. The borehole was left open for over 2 hours and did not yield water.

The soil samples were submitted under proper chain of custody to Accutest Laboratories in Santa Clara, California. Copies of the chain-of-custody forms are provided in Attachment B. The soil samples were analyzed for the following constituents:

- Diesel- and motor-oil-range total petroleum hydrocarbons (TPH-d/ TPH-mo) by United States Environmental Protection Agency (USEPA) Method 8015;
- Gasoline-range total petroleum hydrocarbons (TPH-g); benzene, toluene, ethyl benzene and xylenes (BTEX); and methyl-tertiary-butyl-ether (MTBE); by USEPA Method 8260; and
- LUFT 5 metals (cadmium, chromium, lead, nickel, and zinc) by USEPA Method 6010B.

Upon completion of sampling activities at each location, the borings were properly backfilled with a cement-bentonite grout and completed with concrete surfacing. The soil cuttings generated from the drilling activities were contained in one 55-gallon drum. The drum was temporarily stored on the 546 Howard Street lot and subsequently disposed of at a licensed water disposal facility following the completion of fieldwork.

4.0 PHASE II INVESTIGATION RESULTS

The results of the Phase II Soil investigation are presented in the following subsections.

4.1 GEOLOGY

Borings Natoma B-1 through Natoma B-4 and Howard B-1 through Howard B-4 were advanced to depths ranging from 3.5 to 20 feet bgs. Encountered fill material, which included silty sand, and gravelly/sandy silt with brick fragments, was approximately 0.5 to 8 feet thick. Beneath the 75 Natoma Street lot, the fill was underlain by brown, fine Colma sand. Sand was not encountered beneath the 546 Howard Street lot, as the borings on this property could not be advanced below the fill material. Refusal was encountered at 3.5 feet bgs at Howard B-4 and at 8 feet bgs at Natoma B-1 and Howard B-1 through Howard B-3.

PID readings ranged from 0 to 12.6 parts per million (ppm) on the 546 Howard Street lot. All PID readings from the 75 Natoma Street lot were zero.

4.2 SOIL RESULTS

Soil analytical results are summarized on Table 1. The laboratory analytical reports and the data quality review are provided in Attachment B.

Table 1 also includes the following remediation goals and screening levels for commercial/industrial land use, for comparison purposes only:

- **San Francisco Bay Regional Water Quality Control Board (Water Board) Environmental Screening Levels (ESLs)** - ESLs are screening levels that the Water Board developed to accelerate the preparation of environmental risk assessments at sites with soil and groundwater impacts. ESLs for shallow soil (less than or equal to 9.8 feet bgs), deep soil (greater than 9.8 feet bgs), and direct contact exposure by a trench worker are included on Table 1. ESLs set for commercial/industrial land use where groundwater is not a current or potential drinking water resource were used for comparison. ESLs are not cleanup goals, do not establish policy or regulation, and are not intended to be used as a stand-alone tool for decision-making. As stated in the ESL documentation, the presence of a chemical above an ESL does not necessarily indicate that adverse impacts to human health or the environment are occurring.

- **USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites (RSLs)** - RSLs are human health risk-based concentrations that are intended to assist risk assessors and others in initial screening-level evaluations of environmental impact. RSLs are not cleanup standards. The RSLs were used for comparison purposes in the absence of ESLs.
- **Total Threshold Limit Concentrations (TTLCs) and Soluble Threshold Limit Concentrations (STLCs)** - TTLCs and STLCs are included on Table 1 for the purpose of determining if soils could be characterized as a hazardous waste. These criteria were established by the State of California and are outlined in Title 22 of the California Code of Regulations. Soil with concentrations of a given element or compound in excess of its TTLC is characterized as a hazardous waste. In addition, if a soil concentration of a given element or compound exceeds 10 times its STLC, it is possible that the soil could contain a soluble fraction of the element or compound in question that would be in excess of its STLC and, therefore, a hazardous waste.

4.2.1 Metals

Chromium, lead, nickel, and zinc were detected in all soil samples. Cadmium was not detected above the method detection limit in any soil sample. Detected concentrations of chromium, lead, and nickel did not exceed the shallow or deep soil ESLs, RSLs, or TTLCs.

Zinc was detected in all soil samples between 15 and 5,260 milligrams per kilogram (mg/kg). Zinc was detected in one sample, Natoma B-4 (10-11 feet bgs) at a concentration of 5,260 mg/kg, exceeding the deep soil ESL and TTLC of 5,000 mg/kg.

4.2.2 Total Petroleum Hydrocarbons

TPH-d was detected in three soil samples at concentrations ranging from 5.72 to 162 mg/kg, below the ESL of 180 mg/kg set for shallow and deep soils.

TPH-mo was detected in the majority of the soil samples at concentrations ranging from 13 to 1,650 mg/kg. There were no exceedances of the shallow and deep soil ESLs set at 2,500 and 5,000 mg/kg, respectively.

TPH-g was detected in three soil samples at concentrations ranging from 0.0619 to 0.101 mg/kg, below the ESL of 180 mg/kg set for shallow and deep soils.

4.2.3 Volatile Organic Compounds

BTEX and MTBE were not detected above the method detection limit in any soil sample.

4.3 CAM 17 METALS RESULTS

Based on the initial metals results, samples collected from Natoma B-3 (5-6 feet bgs) and Natoma B-4 (10-11 feet bgs) were analyzed for California Assessment Manual (CAM) 17 metals by USEPA Method 6010B. CAM 17 analytical results are summarized on Table 2, with TTLCs shown for comparison purposes. Several metals (antimony, arsenic, barium, chromium, cobalt, copper, lead, mercury, nickel, vanadium, and zinc) were detected in both samples, but lead (3,480 mg/kg in Natoma B-4 [10-11 feet bgs]) was the only compound detected above its TTLC of 1,000 mg/kg.

4.4 STLC RESULTS

The 75 Natoma Street and 546 Howard Street properties will be excavated to 10 feet bgs during construction activities. Therefore, based on the lead analytical results reported for samples from the 75 Natoma Street lot and chromium analytical results reported for samples from the 546 Howard Street lot, 11 samples were chosen for the STLC analysis, and 8 samples were chosen for the Toxicity Characteristic Leaching Procedure (TCLP) analysis. STLC is used when determining the hazardous waste characterization under California State regulations as outlined in Title 22 of the California Code of Regulations. TCLP is the characterization based on federal guidelines.

All samples collected from the 75 Natoma Street lot were analyzed for lead and sample Howard B-4 (2 feet bgs) was analyzed for chromium for STLC comparison. Samples collected from Natoma B-1 (1 and 5-6 feet bgs), Natoma B-2 (2 and 5-6 feet bgs), Natoma B-3 (5-6 feet bgs), and Natoma B-4 (2, 5-6, and 10-11 feet bgs) were analyzed for lead for TCLP comparison. STLC and TCLP analytical results are shown in Table 2.

Lead exceeded the STLC value of 5 milligrams per liter (mg/L) in Natoma B-1 (1 and 5-6 feet bgs), Natoma B-2-2 (2, 5-6, and 9-10 feet bgs), Natoma B-3 (5-6 feet bgs), and Natoma B-4 (2 and 5-6 feet bgs). Therefore, upon excavation, the soil will have to be treated as hazardous waste under California State regulations.

Lead exceeded the TCLP value of 5 mg/L in Natoma B-4 (10-11 feet bgs). Therefore, upon excavation, the soil will have to be treated as hazardous waste under federal guidelines.

4.5 DATA QA/QC REVIEW

ERM performed a data quality review of the analytical results in accordance with the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review,* October 1999, and *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review,* October 2004. The data quality review evaluated holding times, preservation methods, method blank and trip blank sample results, laboratory control sample recoveries, and matrix and surrogate spike recoveries. A copy of the data quality review is provided in Attachment B along with the analytical laboratory report.

5.0 CONCLUSION AND RECOMMENDATIONS

Based on the information obtained during drilling, the subject property is underlain by 1906 earthquake fill, which consists of silts and sands with gravel, brick fragments, and debris. Beneath the 75 Natoma Street lot, the earthquake fill is approximately 0.5 to 8 feet thick and is underlain by fine Colma sand. Beneath the 546 Howard Street lot, the earthquake fill is at least 8 feet thick.

Soil analytical results were compared to Water Board ESLs, USEPA RSLs, and TTLCs. Phase II Soil investigation results indicate that zinc is present within deep soils (10-11 feet bgs) underlying the subject site area at concentrations exceeding the ESL, and lead is present within shallow and deep soils at concentrations classifying the soil as hazardous waste.

As indicated, results were consistent with previous investigations conducted within the subject area. Soil contamination within the subject site is likely the result of historical industrial operations in the area, including a manufactured gas plant at Fremont and Howard Streets. Imported fill materials may be also a source of impacts.

Due to the above findings, however, soils being excavated will need proper handling and disposal. ERM recommends a Materials Management Plan for handling and disposal of impacted soils within the subject site.

For protection of construction personnel, ERM recommends implementation of a site-specific Health and Safety Plan prior to initiation of construction activities. This plan should detail the nature and extent of potential contamination underlying the subject site, and should establish proper safety measures to be employed when performing activities within this area.

Figures

Project No. 0072420.03.201

Date: 12/31/08

Drawn By: J. Estrada

CAD File: g:\0072420\03\201\007242003201-01.dwg

SCALE 1: 24,000

1 1/2 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

References:
TOPO!® Software
U.S.G.S. 7.5 Minute Series (Topographic) Quadrangle,
San Francisco North, California
Dated: 1995

Figure 1
Site Location
Phase II Site Investigation
75 Natoma and 546 Howard Streets
TJPA
San Francisco, California

ERM *12/08*

CAD File:	Drawn By:	Date:	Project No.
g:\\0072420\03\201\007242003201-01.dwg	J. Estrada	12/31/08	0072420.03.201

Aerial Photo Source: © 2007 Google Earth Pro Ver 4.0.2737

LEGEND

- Soil Boring Sample Location
- Soil Boring and Attempted Ground Water Sample Location

N

0 40

Approx. Scale (feet)

Figure 2

Soil and Ground Water Sample Locations

Phase II Investigation

75 Natoma and 546 Howard Streets

TJPA

San Francisco, California

ERM 12/08

Tables

Table 1
Summary of Soil Analytical Results
Phase II Soil Investigation
75 Natoma and 546 Howard Streets
San Francisco, California

Sample ID	Sample Date	Sample Depth (ft bgs)	Total Petroleum Hydrocarbons (TPH)			LUFT 5 Metals				
			TPH as Diesel	TPH as Motor Oil	TPH as Gasoline	Cadmium	Chromium	Lead	Nickel	Zinc
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
75 Natoma Street										
Natoma B-1-1	12/20/2008	1	<10	<20	<0.099	<0.97	**33**	**208**	**18.1**	**90.6**
Natoma B-1-(5-6)	12/20/2008	5-6	<10	**13 J**	<0.1	<0.94	**35**	**107**	**19.4**	**70.8**
Natoma B-1-(7-8)	12/20/2008	7-8	<10	<20	<0.099	<0.98	**34.3**	**74.4**	**19.2**	**52.1**
Natoma B-2-2	12/20/2008	2	<10	**54.9**	<0.1	<0.96	**31.9**	**383**	**18.9**	**374**
Natoma B-2-(5-6)	12/20/2008	5-6	<10	**13.9 J**	<0.1	<0.98	**36.8**	**204**	**27.2**	**159**
Natoma B-2-(9-10)	12/20/2008	9-10	**28.6 [(a)] NJ**	**87.6 [(b)] NJ**	<0.099	<0.93	**29.2**	**55**	**19.6**	**58.3**
Natoma B-3-1	12/20/2008	1	<390	**1,650**	<0.099	<0.92	**19.7**	**27.4**	**30.2**	**63.7**
Natoma B-3-(5-6)	12/20/2008	5-6	<9.8	**62.4**	<0.1	<0.98	**33.9**	**403**	**21**	**338**
Natoma B-3-(9-10)	12/20/2008	9-10	**162 [(a)] NJ**	**360 [(b)] NJ**	<0.099	<0.98	**19.6**	**46.5**	**12.3**	**15**
Natoma B-4-2	12/20/2008	2	<19	**25 J**	<0.099	<0.94	**27.5**	**243**	**18.1**	**209**
Natoma B-4-(5-6)	12/20/2008	5-6	<9.9	**27.2**	<0.1	<0.97	**36.4**	**185**	**17.3**	**84.8**
Natoma B-4-(10-11)	12/20/2008	10-11	**5.72 [(a)] NJ**	**16.5 J**	<0.099	<0.95	**29.8**	**161**	**18.2**	**5,260**
546 Howard Street										
Howard B-1-1	12/20/2008	1	<100	**948**	**0.0787 J**	<0.97	**39.9**	**17.5**	**29.7**	**68.5**
Howard B-1-(5-6)	12/20/2008	5-6	<10	**32.8**	<0.1	<0.98	**35.2**	**30.9**	**26.7**	**197**
Howard B-2-2	12/20/2008	2	<50	**290**	**0.101 J**	<0.93	**44**	**15.1**	**28.6**	**56.6**
Howard B-2-(5-6)	12/20/2008	5-6	<10	**116**	<0.1	<0.99	**44.6**	**17.2**	**34.4**	**59**
Howard B-2-(7-8)	12/20/2008	7-8	<10	**38.4**	<0.1	<1.0	**32.3**	**7.8**	**32**	**33.9**
Howard B-3-1	12/20/2008	1	<100	**866**	**0.0619 J**	<0.95	**49.2**	**18.1**	**38.2**	**64.7**
Howard B-3-(5-6)	12/20/2008	5-6	<100	**701**	<0.099	<0.95	**48.1**	**20.2**	**84.5**	**59.6**
Howard B-4-2	12/20/2008	2	<100	**525**	<0.099	<1.0	**50.3**	**31**	**36.6**	**51.5**
ESL (<9.8 ft bgs)			180	2,500	180	7.4	2,500	750	150	600
ESL (>9.8 ft bgs)			*180*	*5,000*	*180*	*39*	*5,000*	*750*	*260*	*5,000*
ESL (Construction/Trench Worker Exposure Scenario)			4,200	12,000	4,200	39	-	750	260	230,000
RSL			-	-	-	810	1,400	800	20,000	310,000
TTLC (mg/kg)			-	-	-	100	2,500	1,000	2,000	5,000
STLC (mg/L)			-	-	-	1	5	5	20	250

Notes:

Only those constituents detected in at least one sample are shown.

ESL Industrial Soil - San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels for Industrial Sites with non-drinking water source, May 2008

Results of sample IDs in Italics are compared to ESL (>9.8 ft bgs)

RSL Industrial Soil - Regional Screening Levels for Chemical Contaminants at Superfund Sites, September 2008

Shaded cells indicate exceedance of ESL

<0.5 - not detected above the detection limit indicated

- not available

Laboratory Notes:

(a) Not a typical diesel pattern

(b) Estimated value due to discrete peaks mixed with motor oil

J = Indicates an estimated value

ERM Qualifiers:

NJ = Estimated value - chromatogram did not resemble the standard hydrocarbon pattern

Table 2
Summary of CAM 17, STLC, and TCLP Results
Phase II Soil Investigation
75 Natoma and 546 Howard Streets
San Francisco, California

Sample ID	Sample Date	Sample Depth	Antimony	Arsenic	Barium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Vanadium	Zinc
CAM17 Analysis		ft bgs	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Natoma B-3-(5-6)	12/20/2008	5-6	<2.0	**5.9**	**163**	**37.3**	**5.5**	**115**	**255**	**1.6**	**26**	**33.3**	**301**
Natoma B-4-(10-11)	12/20/2008	10-11	**4.4**	**7.1**	**608**	**32.8**	**5.5**	**324**	**3,480**	**0.17**	**23**	**29.3**	**4,990**
TTLC			500	500	10,000	2,500	8,000	2,500	1,000	20	2,000	2,400	5,000
STLC Analysis			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Natoma B-1-1	12/20/2008	1	--	--	--	--	--	--	**12.8**	--	--	--	--
Natoma B-1-(5-6)	12/20/2008	5-6	--	--	--	--	--	--	**10.5**	--	--	--	--
Natoma B-1-(7-8)	12/20/2008	7-8	--	--	--	--	--	--	**4**	--	--	--	--
Natoma B-2-2	12/20/2008	2	--	--	--	--	--	--	**27.5**	--	--	--	--
Natoma B-2-(5-6)	12/20/2008	5-6	--	--	--	--	--	--	**7.4**	--	--	--	--
Natoma B-2-(9-10)	12/20/2008	9-10	--	--	--	--	--	--	**6.9**	--	--	--	--
Natoma B-3-(5-6)	12/20/2008	5-6	--	--	--	--	--	--	**21.8**	--	--	--	--
Natoma B-4-2	12/20/2008	2	--	--	--	--	--	--	**9.5**	--	--	--	--
Natoma B-4-(5-6)	12/20/2008	5-6	--	--	--	--	--	--	**30.6**	--	--	--	--
Natoma B-4-(10-11)	12/20/2008	10-11	--	--	--	--	--	--	**4.6**	--	--	--	--
Howard B-4-2	12/20/2008	2	--	--	--	**0.71**	--	--	--	--	--	--	--
STLC			15	5	100	5	80	25	5	0.2	20	--	--
TCLP Analysis			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Natoma B-1-1	12/20/2008	1	--	--	--	--	--	--	**0.36**	--	--	--	--
Natoma B-1-(5-6)	12/20/2008	5-6	--	--	--	--	--	--	<0.25	--	--	--	--
Natoma B-2-2	12/20/2008	2	--	--	--	--	--	--	<0.25	--	--	--	--
Natoma B-2-(5-6)	12/20/2008	5-6	--	--	--	--	--	--	**0.27**	--	--	--	--
Natoma B-3-(5-6)	12/20/2008	5-6	--	--	--	--	--	--	**3.7**	--	--	--	--
Natoma B-4-2	12/20/2008	2	--	--	--	--	--	--	<0.25	--	--	--	--
Natoma B-4-(5-6)	12/20/2008	5-6	--	--	--	--	--	--	**0.32**	--	--	--	--
Natoma B-4-(10-11)	12/20/2008	10-11	--	--	--	--	--	--	**24.8**	--	--	--	--
TCLP			-	5	100	5	-	-	5	0.2	-	-	-

Notes:
CAM17 - Metals by EPA Method 3050B/6010B
TTLC - Total Threshold Limit Concentration
STLC - Soluble Threshold Limit Concentration
TCLP - Toxicity Characteristic Leaching Procedure
TTLC and STLC are used when determining the hazardous waste characterization under California State regulations as outlined in Title 22 of the California Code of Regulations.
TCLP is the characterization based on federal guidelines.
Shaded and boxed cells indicate exceedance of TTLC
Shaded cells indicate exceedance of STLC or TCLP
ND - note detected above the detection limit indicated
-- not analyzed
- not available

Attachment A
Soil Boring Logs

ERM

Drilling Log

Project TJPA Owner TJPA

Location SF, CA Project Number 007242.03.201

Boring Number Howard B-1 Total Depth ~~of Auger~~ 8' Auger Diameter _____

Surface Elevation _____ Water Level: Initial _____ 24-hrs _____

Total Depth of Soil Sampler 8' Total Depth of Ground Water Sampler —

Ground Water Sample Interval(s) —

Drilling Company Gregg Drilling Method direct push

Driller Brandon Log By CY Date Drilled 12-2008

Sketch Map

Notes 0-5' hand augered

Depth (Feet)	Graphic Log and USCS Designation	FID (ppm)	PID (ppm)	Sample Interval	Soil Description and Observations (Color, Texture, Structures, Odor, Foreign Matter)
0				—	ASPHALT. ~3"
1	ML		12.6	X	SANDY SILT, brn, dry, soft. fine to coarse sands, gravels 1/4". / Howard B-1-1 1014
2			3.5		as above.
3			3.3		as above
4			0.4		as above, increased gravels, trace brick pieces.
5	GM		0	X	Howard B-1-(5-6) 1021 / GRAVELLY / SANDY SILT, brown, dry, hard, gravels up to 1".
6			0		gray rock pieces.
7			0	X	Brick pieces ~~at~~ throughout.
8	—			X	refusal at 8'
9					
10				—	

Page 1 of 1

ERM

Drilling Log

Project TJPA Owner TJPA

Location SF, CA Project Number 0072420.03.201

Boring Number Howard B-2 Total Depth ~~of Auger~~ 8' Auger Diameter _____

Surface Elevation _____ Water Level: Initial – 24-hrs _____

Total Depth of Soil Sampler 8' Total Depth of Ground Water Sampler –

Ground Water Sample Interval(s) –

Drilling Company Gregg Drilling Method direct push

Driller Brandon Log By CY Date Drilled 12-20-08

Sketch Map

Notes 0-5' hand augered

Depth (Feet)	Graphic Log and USCS Designation	FID (ppm)	PID (ppm)	Sample Interval	Soil Description and Observations (Color, Texture, Structures, Odor, Foreign Matter)
0					Asphalt. ~3"
1	ML		2.4		SANDY SILT, light br, dry, soft, asphalt pieces.
2	ML		3.2	X	SANDY SILT, light brn, dry, soft, few gravels. Howard B-2-2 0942
3			0.3		
4			0.3		as above, gravels up to 1/2".
5	GM		0	X	Howard B-2-(5-6) 0950 / GRAVELLY / SANDY SILT, br, dry, soft, gravels up to 1", fine-coarse sand,
6			0		
7			0	X	as above Howard B-2 (7-8) 0958
8	GP				GRAVELS / rock, gray, hard, broken up into 1/2" pieces Refusal at 8'.
9					
10					

ERM

Drilling Log

Project TJPA Owner TJPA

Location SF, CA Project Number 007420.03.201

Boring Number Howard B-3 Total Depth ~~of Auger~~ 8' Auger Diameter ____

Surface Elevation ____ Water Level: Initial — 24-hrs ____

Total Depth of Soil Sampler 8' Total Depth of Ground Water Sampler —

Ground Water Sample Interval(s) —

Drilling Company Gregg Drilling Method direct push

Driller Brandon Log By CY Date Drilled 12-20-08

Sketch Map

Notes 0-5' hand augered

Depth (Feet)	Graphic Log and USCS Designation	FID (ppm)	PID (ppm)	Sample Interval	Soil Description and Observations (Color, Texture, Structures, Odor, Foreign Matter)
0					ASPHALT ~3"
1	ML		3	X	SANDY SILT, brn, dry, soft, few fine to coarse sands. / Howard B-3-1 0905
2			3.5	X	as above. / Below
3			3.1		as above
4	ML		3.6		SANDY SILT, brn, dry, soft, few fine-coarse sands. gravels.
5	GM		0	X	GRAVELLY/SANDY SILT, brn, dry, soft to mod stiff, gravels up to 1", fine-coarse sands. / Howard B-3 (5-6) 0914
6			0		Brick pieces
7			0		↓
8					wood pieces. up to 2". / Refusal at 8'
9					
10					

ERM

Drilling Log

Project TJPA Owner TJPA

Location SF, CA Project Number 0072420.03, Howard

Boring Number Howard B-4 Total Depth ~~of Auger~~ 3.5' Auger Diameter 201

Surface Elevation _____ Water Level: Initial _____ 24-hrs _____

Total Depth of Soil Sampler 3.5' Total Depth of Ground Water Sampler _____

Ground Water Sample Interval(s) —

Drilling Company Gregg Drilling Method direct push

Driller Brandon Log By CY Date Drilled 12-20-08

Sketch Map

Howard B-5
- Stepover ~3' to dbl bg.
→ hard layer at 3'.

Howard B-6
- stepover ~ 3' to dbl bg.
→ hard layer at 3'

Notes 0-5' h.a.

Depth (Feet)	Graphic Log and USCS Designation	FID (ppm)	PID (ppm)	Sample Interval	Soil Description and Observations (Color, Texture, Structures, Odor, Foreign Matter)
0				—	Asphalt ~3"
1	ML		0		SANDY SILT, br, dry, soft/loose, asphalt pieces
					Howard B-4-2 0940
2	ML		0	X	SANDY SILT, br, dry, soft/loose, trace brick pieces, trace gravels.
3	GM		0		GRAVELLY SILT, br, dry, soft, with brick pieces and gravels.
					← hard layer at 3.5' - cannot breakup w/drill bit.
4					
5				—	
6					
7					
8				—	
9					
10				—	

Drilling Log

ERM

Project TJPA Owner TJPA

Location SF, CA Project Number 0072420.03.20

Boring Number Natoma B-1 Total Depth ~~of Auger~~ 8' Auger Diameter _____

Surface Elevation _____ Water Level: Initial _____ 24-hrs _____

Total Depth of Soil Sampler 8' Total Depth of Ground Water Sampler _____

Ground Water Sample Interval(s) _____

Drilling Company Gregg Drilling Method direct push

Driller Brandon Log By cy Date Drilled 12-2008

Sketch Map

Notes 0-5' hand augured

Depth (Feet)	Graphic Log and USCS Designation	FID (ppm)	PID (ppm)	Sample Interval	Soil Description and Observations (Color, Texture, Structures, Odor, Foreign Matter)
0					Concrete 6".
1	SP		0	X	SAND, brown, dry, loose, fine sands, few silt. Natoma B-1-1 1145
2			0		as above, trace brick pieces, damp
3			0		as above
4			0		as above, burnt wood piece.
5	SP		0	X	Natoma B-1-(5-6) 1157 SAND, brown, dry, loose, fine sands, few brick pieces, trace gravels
6			0		
7			0	X	as above Natoma B-1-(7-8) 1159
8					refusal at 8'.
9					
10					

ERM

Drilling Log

Project TJPA Owner TJPA

Location SF, CA Project Number 007420.03.201

Boring Number Natoma B-2 Total Depth ~~of Auger~~ 10' Auger Diameter _____

Surface Elevation _____ Water Level: Initial _____ 24-hrs _____

Total Depth of Soil Sampler 10' Total Depth of Ground Water Sampler _____

Ground Water Sample Interval(s) —

Drilling Company Gregg Drilling Method direct push

Driller Brandon Log By cy Date Drilled 12-2008

Sketch Map

Notes 0-5' hand augered

Depth (Feet)	Graphic Log and USCS Designation	FID (ppm)	PID (ppm)	Sample Interval	Soil Description and Observations (Color, Texture, Structures, Odor, Foreign Matter)
0					Asphalt ~3"
1					Concrete ~2"
2	SM		0	X	(Fill) Silty SAND, br, dry, loose, fine sands w/ silts, trace brick pieces /Natoma B-2-2 0800
3			0		
4	SP		0		SAND, br, dry, loose, fine sands, few silts.
5			0	X	Natoma B-2-(5-6) 0820 / as above.
6			0		
7			0		
8			0		as above, trace clays.
9			0	X	Natoma B-2-(9-10) 0828
10			0		

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Drilling Log

Project TJPA Owner TJPA

Location SF, CA Project Number 0072420.03.201

Boring Number Natoma B-3 Total Depth ~~of Auger~~ 10' Auger Diameter _____

Surface Elevation _____ Water Level: Initial _____ 24-hrs _____

Total Depth of Soil Sampler 10' Total Depth of Ground Water Sampler _____

Ground Water Sample Interval(s) _____

Drilling Company Gregg Drilling Method direct push

Driller Brandon Log By CY Date Drilled 12-20-08

Sketch Map

Notes 0-5' hand augered

Depth (Feet)	Graphic Log and USCS Designation	FID (ppm)	PID (ppm)	Sample Interval	Soil Description and Observations (Color, Texture, Structures, Odor, Foreign Matter)
0	////				Concrete ~4".
1	GM		0	X	SANDY/GRAVELLY SILT, br, dry, soft/loose, gravels up to 1/2" / Natoma B-3-1 1118
2			0		as above
3			0		as above, gravels up to 1.5",
4			0		as above.
5	SM		0	X	SILTY SAND, brown, dry, ~~soft~~ loose, fine sands, trace bricks. / Natoma B-3-(5-6) 1131
6			0		
7			0		burnt wood piece. / gray rocks / brick.
8	SP		0		SAND, brown, dry, loose, with brick pieces, rock pieces
9			0	X	Natoma B-3-(9-10) 1133
10					

ERM

Drilling Log

Project TJPA Owner TJPA

Location SF, CA Project Number 0072420.03.201

Boring Number Natoma B-4 Total Depth ~~of Auger~~ 20' Auger Diameter ____

Surface Elevation ____ Water Level: Initial dry 24-hrs ____

Total Depth of Soil Sampler 20' Total Depth of Ground Water Sampler 20'

Ground Water Sample Interval(s) 15-20'

Drilling Company Gregg Drilling Method direct push

Driller Brandon Log By CY Date Drilled 12-20-08

Sketch Map

Notes 0-5' hand augered

Depth (Feet)	Graphic Log and USCS Designation	FID (ppm)	PID (ppm)	Sample Interval	Soil Description and Observations (Color, Texture, Structures, Odor, Foreign Matter)
0					Concrete @ 10"
1			0		SILTY SAND, br, dry, loose, fine sands, trace brick.
2	SM				as above. / Natoma B-4-2 1046
3			0		as above, few coarse sands, with brick pieces.
4					as above, damp.
5	SP		0		~~as above, damp.~~ SAND, br, damp-dry, fine sands, few silt, trace brick. / Natoma B-4-1052 (5-6)
6			0		
7			0		
8			0		Large brick piece.
9			0		as above, dark brown, burnt odor like wood,
10	SP		0		SAND, br, dry to slightly damp, fine sands, trace silt. / Natoma B-4-(10-11) 1100
11			0		
12			0		as above
13					

ERM

Drilling Log

Project_____ Owner_____

Location_____ Project Number_____

Boring Number Natoma B-4 Total Depth of Auger_____ Auger Diameter_____

Surface Elevation_____ Water Level: Initial_____ 24-hrs_____

Total Depth of Soil Sampler_____ Total Depth of Ground Water Sampler_____

Ground Water Sample Interval(s)_____

Drilling Company_____ Drilling Method_____

Driller_____ Log By_____ Date Drilled_____

Sketch Map

Notes

Depth (Feet)	Graphic Log and USCS Designation	FID (ppm)	PID (ppm)	Sample Interval	Soil Description and Observations (Color, Texture, Structures, Odor, Foreign Matter)
13			0		
14			0		
15			0		
16	SP				as above., damp.
17					
18					
19					
20					

ERM
1777 Botelho Drive, Suite 260
Walnut Creek, CA 94596
Phone: (925) 946-0455
Fax: (925) 946-9968

LOG OF BOREHOLE: Howard B-1

Project Number: 0072420
Project Name: Transbay, SF/TJPA
Client Name: CALTRANS
Location: San Francisco, California
Contractor: Gregg Drilling
Drilling Method: Direct Push
Logged By: C. Yi

Date Started: 12/20/2008
Date Completed: 12/20/2008
Total Depth: 8 feet
Borehole Diameter: 2.0"
Initial Water Level: NA
Notes: 0-5' hand augered, refusal at 8.0'.

Depth (ft)	Sample Interval	PID (ppm)	USCS Code	GRAPHIC LOG	Soil Descriptions and Observations
					Asphalt, ~3.0".
		12.6	ML		SANDY SILT (ML): brown, fine to coarse sand, gravel (1/4"), soft, dry. Howard B1-1
		3.5			SANDY SILT (ML): as above.
		3.3			SANDY SILT (ML): as above.
		0.4			SANDY SILT (ML): as above, increased gravel, trace brick pieces.
5		0.0	GM		GRAVELLY SANDY SILT (GM): brown, gravel up to 1.0", gray rock pieces, brick pieces, hard, dry.
		0.0			Howard B-1-(5-6)
		0.0			Brick pieces.
					Total Depth - 8 feet bgs
10					
15					
20					
25					
30					
35					

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LOG OF BOREHOLE: Howard B-2

Project Number: 0072420
Project Name: Transbay, SF/TJPA
Client Name: CALTRANS
Location: San Francisco, California
Contractor: Gregg Drilling
Drilling Method: Direct Push
Logged By: C. Yi

Date Started: 12/20/2008
Date Completed: 12/20/2008
Total Depth: 8 feet
Borehole Diameter: 2.0"
Initial Water Level: NA
Notes: 0-5' hand augered, refusal at 8.0'.

Depth (ft)	Sample Interval	PID (ppm)	USCS Code	GRAPHIC LOG	Soil Descriptions and Observations
					Asphalt, ~3.0".
		2.4	ML		SANDY SILT (ML): light brown, asphalt pieces, soft, dry.
		3.2			SANDY SILT (ML): light brown, few gravel, soft, dry. Howard B-2-2
		0.3			
		0.3			SANDY SILT (ML): as above, gravel up to 1/2" in size.
5		0.0	GM		GRAVELLY SANDY SILT (GM): brown, fine to coarse sand, gravel up to 1.0" in size, soft, dry. Howard B-2-(5-6)
		0.0			GRAVELLY SANDY SILT (GM): as above. Howard B-2-(7-8)
		0.0	GP		GRAVEL (GP): gray, broken, 1/2" pieces, hard.
					Total Depth - 8 feet bgs
10					
15					
20					
25					
30					
35					

BOREHOLE TO 40 FT WC - - 01/13/09 13:36 - G:\GINT BORING LOGS\CALTRANS-SF - 0072420\CALTRANS-SF.GPJ

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Walnut Creek, CA 94596
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Fax: (925) 946-9968

LOG OF BOREHOLE: Howard B-3

Project Number: 0072420
Project Name: Transbay, SF/TJPA
Client Name: CALTRANS
Location: San Francisco, California
Contractor: Gregg Drilling
Drilling Method: Direct Push
Logged By: C. Yi

Date Started: 12/20/2008
Date Completed: 12/20/2008
Total Depth: 8 feet
Borehole Diameter: 2.0"
Initial Water Level: NA
Notes: 0-5' hand augered, refusal at 8.0'.

Depth (ft)	Sample Interval	PID (ppm)	USCS Code	GRAPHIC LOG	Soil Descriptions and Observations
					Asphalt, ~3.0".
		3.0	ML		SANDY SILT (ML): brown, fine to coarse sand, soft, dry. Howard B-3-1
		3.5			SANDY SILT (ML): as above.
		3.1			SANDY SILT (ML): as above.
		3.6			SANDY SILT (ML): brown, few fine to coarse sands, few gravel, soft, dry.
5		0.0	GM		GRAVELLY SANDY SILT (ML): brown, gravel up to 1.0" in size, fine to coarse sand, soft to medium stiff, dry. Howard B-3-(5-6)
		0.0			
		0.0			Wood pieces, up to 2.0" in size.
					Total Depth - 8 feet bgs
10					
15					
20					
25					
30					
35					

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LOG OF BOREHOLE: Howard B-4

Project Number: 0072420
Project Name: Transbay, SF/TJPA
Client Name: CALTRANS
Location: San Francisco, California
Contractor: Gregg Drilling
Drilling Method: Hand Auger
Logged By: C. Yi

Date Started: 12/20/2008
Date Completed: 12/20/2008
Total Depth: 3.5 feet
Borehole Diameter: 2.0"
Initial Water Level: NA
Notes: Attempted two stepover locations and encountered refusal at 3.5'.

Depth (ft)	Sample Interval	PID (ppm)	USCS Code	GRAPHIC LOG	Soil Descriptions and Observations
					Asphalt, ~3.0".
		0.0	ML		SANDY SILT (ML): brown, asphalt pieces, soft to loose, dry.
		0.0			SANDY SILT (ML): brown, trace brick pieces and gravel, soft to loose, dry. Howard B-4-2
		0.0	GM		GRAVELLY SILT (GM): brown, with brick pieces and gravel, soft, dry.
					Total Depth - 3.5 feet bgs
5					
10					
15					
20					
25					
30					
35					

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Fax: (925) 946-9968

LOG OF BOREHOLE: Natoma B-1

Project Number: 0072420
Project Name: Transbay, SF/TJPA
Client Name: CALTRANS
Location: San Francisco, California
Contractor: Gregg Drilling
Drilling Method: Direct Push
Logged By: C. Yi

Date Started: 12/20/2008
Date Completed: 12/20/2008
Total Depth: 8 feet
Borehole Diameter: 2.0"
Initial Water Level: NA
Notes: 0-5' hand augered, refusal at 8.0'.

Depth (ft)	Sample Interval	PID (ppm)	USCS Code	GRAPHIC LOG	Soil Descriptions and Observations
					Concrete, 6.0".
		0.0	SP		SAND (SP): brown, fine sand, some silt, loose, dry. Natoma B-1-1
		0.0			SAND (SP): as above, trace brick pieces, damp.
		0.0			SAND (SP): as above.
		0.0			SAND (SP): as above, burnt wood piece.
5		0.0			SAND (SP): brown, fine sand, trace gravel, few brick pieces, loose, dry. Natoma B-1-(5-6)
		0.0			
		0.0			SAND (SP): as above. Natoma B-1-(7-8)
					Total Depth - 8 feet bgs
10					
15					
20					
25					
30					
35					

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LOG OF BOREHOLE: Natoma B-2

Project Number: 0072420
Project Name: Transbay, SF/TJPA
Client Name: CALTRANS
Location: San Francisco, California
Contractor: Gregg Drilling
Drilling Method: Direct Push
Logged By: C. Yi

Date Started: 12/20/2008
Date Completed: 12/20/2008
Total Depth: 10 feet
Borehole Diameter: 2.0"
Initial Water Level: NA
Notes: 0-5' hand augered.

Depth (ft)	Sample Interval	PID (ppm)	USCS Code	GRAPHIC LOG	Soil Descriptions and Observations
					Asphalt, ~3.0", and Concrete, 2.0".
		0.0	SM		SILTY SAND (SM): brown, fine sand with silt, trace brick pieces, loose, dry (fill).
		0.0			Natoma B-2-2
		0.0	SP		SAND (SP): brown, fine sand, some silt, loose, dry.
5		0.0			SAND (SP): as above. Natoma B-2-(5-6)
		0.0			
		0.0			
		0.0			SAND (SP): as above, trace clay.
		0.0			Natoma B-2-(9-10)
10					Total Depth - 10 feet bgs
15					
20					
25					
30					
35					

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LOG OF BOREHOLE: Natoma B-3

Project Number: 0072420
Project Name: Transbay, SF/TJPA
Client Name: CALTRANS
Location: San Francisco, California
Contractor: Gregg Drilling
Drilling Method: Direct Push
Logged By: C. Yi

Date Started: 12/20/2008
Date Completed: 12/20/2008
Total Depth: 10 feet
Borehole Diameter: 2.0"
Initial Water Level: NA
Notes: 0-5' hand augered.

Depth (ft)	Sample Interval	PID (ppm)	USCS Code	GRAPHIC LOG	Soil Descriptions and Observations
					Concrete, ~4.0".
		0.0	GM		SANDY GRAVELLY SILT (GM): brown, gravel up to 1/2" in size, soft to loose, dry. Natoma B-3-1
		0.0			SANDY GRAVELLY SILT (GM): as above.
		0.0			SANDY GRAVELLY SILT (GM): as above, gravel up to 1.5" in size.
		0.0			SANDY GRAVELLY SILT (GM): as above.
5		0.0	SM		SILTY SAND (SM): brown, fine sand, trace brick pieces, loose, dry. Natoma B-3-(5-6)
		0.0			
		0.0			SILTY SAND (SM): as above, burnt wood piece, gray rocks, brick.
		0.0	SP		SAND (SP): brown, with brick and rock pieces, loose, dry.
		0.0			Natoma B-3-(9-10)
10					Total Depth - 10 feet bgs
15					
20					
25					
30					
35					

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LOG OF BOREHOLE: Natoma B-4

Project Number: 0072420
Project Name: Transbay, SF/TJPA
Client Name: CALTRANS
Location: San Francisco, California
Contractor: Gregg Drilling
Drilling Method: Direct Push
Logged By: C. Yi

Date Started: 12/20/2008
Date Completed: 12/20/2008
Total Depth: 20 feet
Borehole Diameter: 2.0"
Initial Water Level: NA
Notes: 0-5' hand augered.

Depth (ft)	Sample Interval	PID (ppm)	USCS Code	GRAPHIC LOG	Soil Descriptions and Observations
					Concrete, 10".
		0.0	SM		SILTY SAND (SM): brown, fine sand, trace brick, loose, dry.
		0.0			SILTY SAND (SM): as above. Natoma B-4-2
					SILTY SAND (SM): as above, few coarse sand, with brick pieces.
					SILTY SAND (SM): as above, damp.
5		0.0	SP		SAND (SP): brown, fine sand, some silt, trace brick, damp to dry. Natoma B-4-(5-6)
		0.0			
		0.0			
		0.0			SAND (SP): as above, large brick piece, dark brown, burnt odor like wood.
		0.0			
10		0.0			SAND (SP): brown, fine sand, trace silt, dry to slightly damp. Natoma B-4-(10-11)
		0.0			
		0.0			SAND (SP): as above.
		0.0			
		0.0			
15		0.0			SAND (SP): as above, damp.
20					Total Depth - 20 feet bgs
25					
30					
35					

Attachment B
Analytical Laboratory Report and Data Quality Review

Northern California
ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

01/28/09

Technical Report for

ERM-West, Inc.

TJPA - San Francisco, CA

0072420

Accutest Job Number: C3538

Sampling Date: 12/20/08

Report to:

ERM-West, Inc.
1777 Botelho Drive Suite 260
Walnut Creek, CA 94596
mark.litzau@erm.com; chimi.yi@erm.com

ATTN: Mark Litzau

Total number of pages in report: 172

ACCREDITED IN ACCORDANCE WITH nelac

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

Laurie Glantz-Murphy
Laboratory Director

Client Service contact: Diane Theesen 408-588-0200

Certifications: CA (08258CA)

Test results relate only to samples analyzed.

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Table of Contents

Table of Contents

Sample Summary

ERM-West, Inc.

Job No: C3538

TJPA - San Francisco, CA
Project No: 0072420

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
C3538-1	12/20/08	11:45	CY	12/23/08	SO	Soil	NATOMA B-1-1
C3538-1T	12/20/08	11:45	CY	12/23/08	SO	Soil	NATOMA B-1-1
C3538-1W	12/20/08	11:45	CY	12/23/08	SO	Soil	NATOMA B-1-1
C3538-2	12/20/08	11:57	CY	12/23/08	SO	Soil	NATOMA B-1-(5-6)
C3538-2T	12/20/08	11:57	CY	12/23/08	SO	Soil	NATOMA B-1-(5-6)
C3538-2W	12/20/08	11:57	CY	12/23/08	SO	Soil	NATOMA B-1-(5-6)
C3538-3	12/20/08	11:59	CY	12/23/08	SO	Soil	NATOMA B-1-(7-8)
C3538-3W	12/20/08	11:59	CY	12/23/08	SO	Soil	NATOMA B-1-(7-8)
C3538-4	12/20/08	08:00	CY	12/23/08	SO	Soil	NATOMA B-2-2
C3538-4T	12/20/08	08:00	CY	12/23/08	SO	Soil	NATOMA B-2-2
C3538-4W	12/20/08	08:00	CY	12/23/08	SO	Soil	NATOMA B-2-2
C3538-5	12/20/08	08:20	CY	12/23/08	SO	Soil	NATOMA B-2-(5-6)
C3538-5T	12/20/08	08:20	CY	12/23/08	SO	Soil	NATOMA B-2-(5-6)

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

Sample Summary
(continued)

ERM-West, Inc.

Job No: C3538

TJPA - San Francisco, CA
Project No: 0072420

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
C3538-5W	12/20/08	08:20	CY	12/23/08	SO	Soil	NATOMA B-2-(5-6)
C3538-6	12/20/08	08:28	CY	12/23/08	SO	Soil	NATOMA B-2-(9-10)
C3538-6W	12/20/08	08:28	CY	12/23/08	SO	Soil	NATOMA B-2-(9-10)
C3538-7	12/20/08	11:18	CY	12/23/08	SO	Soil	NATOMA B-3-1
C3538-8	12/20/08	11:31	CY	12/23/08	SO	Soil	NATOMA B-3-(5-6)
C3538-8A	12/20/08	11:31	CY	12/23/08	SO	Soil	NATOMA B-3-(5-6)
C3538-8T	12/20/08	11:31	CY	12/23/08	SO	Soil	NATOMA B-3-(5-6)
C3538-8W	12/20/08	11:31	CY	12/23/08	SO	Soil	NATOMA B-3-(5-6)
C3538-9	12/20/08	11:33	CY	12/23/08	SO	Soil	NATOMA B-3-(9-10)
C3538-10	12/20/08	10:46	CY	12/23/08	SO	Soil	NATOMA B-4-2
C3538-10T	12/20/08	10:46	CY	12/23/08	SO	Soil	NATOMA B-4-2
C3538-10W	12/20/08	10:46	CY	12/23/08	SO	Soil	NATOMA B-4-2
C3538-11	12/20/08	10:52	CY	12/23/08	SO	Soil	NATOMA B-4-(5-6)

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

Sample Summary
(continued)

ERM-West, Inc.

Job No: C3538

TJPA - San Francisco, CA
Project No: 0072420

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
C3538-11T	12/20/08	10:52	CY	12/23/08	SO	Soil	NATOMA B-4-(5-6)
C3538-11W	12/20/08	10:52	CY	12/23/08	SO	Soil	NATOMA B-4-(5-6)
C3538-12	12/20/08	11:00	CY	12/23/08	SO	Soil	NATOMA B-4-(10-11)
C3538-12A	12/20/08	11:00	CY	12/23/08	SO	Soil	NATOMA B-4-(10-11)
C3538-12T	12/20/08	11:00	CY	12/23/08	SO	Soil	NATOMA B-4-(10-11)
C3538-12W	12/20/08	11:00	CY	12/23/08	SO	Soil	NATOMA B-4-(10-11)
C3538-13	12/20/08	10:14	CY	12/23/08	SO	Soil	HOWARD B-1-1
C3538-14	12/20/08	10:21	CY	12/23/08	SO	Soil	HOWARD B-1-(5-6)
C3538-15	12/20/08	09:42	CY	12/23/08	SO	Soil	HOWARD B-2-2
C3538-16	12/20/08	09:50	CY	12/23/08	SO	Soil	HOWARD B-2-(5-6)
C3538-17	12/20/08	09:58	CY	12/23/08	SO	Soil	HOWARD B-2-(7-8)
C3538-18	12/20/08	09:05	CY	12/23/08	SO	Soil	HOWARD B-3-1
C3538-19	12/20/08	09:14	CY	12/23/08	SO	Soil	HOWARD B-3-(5-6)

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

Sample Summary
(continued)

ERM-West, Inc.

Job No: C3538

TJPA - San Francisco, CA
Project No: 0072420

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
C3538-20	12/20/08	08:40	CY	12/23/08	SO	Soil	HOWARD B-4-2
C3538-20W	12/20/08	08:40	CY	12/23/08	SO	Soil	HOWARD B-4-2
C3538-21	12/20/08	14:00	CY	12/23/08	SO	Soil	DRUM
C3538-21W	12/20/08	14:00	CY	12/23/08	SO	Soil	DRUM
C3538-22	12/20/08	00:00	CY	12/23/08	AQ	Trip Blank Water	TRIP BLANK

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

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-1-1		
Lab Sample ID:	C3538-1	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8260B	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O03043.D	1	12/26/08	MF	n/a	n/a	VO152
Run #2							

	Initial Weight
Run #1	5.05 g
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.5	ug/kg	
108-88-3	Toluene	ND	5.0	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.5	ug/kg	
1330-20-7	Xylene (total)	ND	9.9	4.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	0.99	ug/kg	
	TPH-GRO (C6-C10)	ND	99	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		60-130%
2037-26-5	Toluene-D8	104%		60-130%
460-00-4	4-Bromofluorobenzene	98%		60-130%

(a) All results reported on wet weight basis.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-1-1		
Lab Sample ID:	C3538-1	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8015B M SW846 3545A	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG2918.D	1	12/24/08	JH	12/24/08	OP600	GGG119
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	5.0	mg/kg	
	TPH (>C28-C40)	ND	20	10	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	79%		45-140%

(a) All results reported on wet weight basis.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-1-1		
Lab Sample ID:	C3538-1	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	< 0.97	0.97	mg/kg	1	12/30/08	12/30/08 CT	SW846 6010B [1]	SW846 3050B [2]
Chromium	33.0	0.97	mg/kg	1	12/30/08	12/30/08 CT	SW846 6010B [1]	SW846 3050B [2]
Lead	208	0.97	mg/kg	1	12/30/08	12/30/08 CT	SW846 6010B [1]	SW846 3050B [2]
Nickel	18.1	0.97	mg/kg	1	12/30/08	12/30/08 CT	SW846 6010B [1]	SW846 3050B [2]
Zinc	90.6	1.9	mg/kg	1	12/30/08	12/30/08 CT	SW846 6010B [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA438
(2) Prep QC Batch: MP729

(a) All results reported on wet weight basis.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-1-1		
Lab Sample ID:	C3538-1T	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a
Project:	TJPA - San Francisco, CA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	0.36	D008	5.0	0.25	mg/l	5	01/14/09	01/15/09	CT	SW846 6010B [1]	SW3010A [2]

(1) Instrument QC Batch: MA467
(2) Prep QC Batch: MP783

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-1-1		
Lab Sample ID:	C3538-1W	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a
Project:	TJPA - San Francisco, CA		

Metals Analysis, STLC Leachate CA WET

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	12.8	D008		0.25	mg/l	5	01/14/09	01/14/09	CT	SW846 6010B [1]	SW3010A [2]

(1) Instrument QC Batch: MA464
(2) Prep QC Batch: MP782

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-1-(5-6)		
Lab Sample ID:	C3538-2	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8260B	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O03044.D	1	12/26/08	MF	n/a	n/a	VO152
Run #2							

	Initial Weight
Run #1	5.02 g
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.5	ug/kg	
108-88-3	Toluene	ND	5.0	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.5	ug/kg	
1330-20-7	Xylene (total)	ND	10	4.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		60-130%
2037-26-5	Toluene-D8	105%		60-130%
460-00-4	4-Bromofluorobenzene	101%		60-130%

(a) All results reported on wet weight basis.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-1-(5-6)		
Lab Sample ID:	C3538-2	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8015B M SW846 3545A	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG2922.D	1	12/24/08	JH	12/24/08	OP600	GGG119
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	5.0	mg/kg	
	TPH (>C28-C40) [b]	13.0	20	10	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	75%		45-140%

(a) All results reported on wet weight basis.
(b) Motor Oil Pattern.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-1-(5-6)		
Lab Sample ID:	C3538-2	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Cadmium	< 0.94	0.94	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Chromium	35.0	0.94	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Lead	107	0.94	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Nickel	19.4	0.94	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Zinc	70.8	1.9	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA438
(2) Prep QC Batch: MP729

(a) All results reported on wet weight basis.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-1-(5-6)		
Lab Sample ID:	C3538-2T	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a
Project:	TJPA - San Francisco, CA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	<0.25	D008	5.0	0.25	mg/l	5	01/14/09	01/15/09	CT	SW846 6010B [1]	SW3010A [2]

(1) Instrument QC Batch: MA467
(2) Prep QC Batch: MP783

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-1-(5-6)		
Lab Sample ID:	C3538-2W	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a
Project:	TJPA - San Francisco, CA		

Metals Analysis, STLC Leachate CA WET

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	10.5	D008		0.25	mg/l	5	01/14/09	01/14/09	CT	SW846 6010B [1]	SW3010A [2]

(1) Instrument QC Batch: MA464
(2) Prep QC Batch: MP782

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-1-(7-8)		
Lab Sample ID:	C3538-3	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8260B	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O03045.D	1	12/26/08	MF	n/a	n/a	VO152
Run #2							

	Initial Weight
Run #1	5.05 g
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.5	ug/kg	
108-88-3	Toluene	ND	5.0	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.5	ug/kg	
1330-20-7	Xylene (total)	ND	9.9	4.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	0.99	ug/kg	
	TPH-GRO (C6-C10)	ND	99	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		60-130%
2037-26-5	Toluene-D8	104%		60-130%
460-00-4	4-Bromofluorobenzene	101%		60-130%

(a) All results reported on wet weight basis.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-1-(7-8)		
Lab Sample ID:	C3538-3	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8015B M SW846 3545A	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG2919.D	1	12/24/08	JH	12/24/08	OP600	GGG119
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	5.0	mg/kg	
	TPH (>C28-C40)	ND	20	10	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	70%		45-140%

(a) All results reported on wet weight basis.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-1-(7-8)		
Lab Sample ID:	C3538-3	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Cadmium	< 0.98	0.98	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Chromium	34.3	0.98	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Lead	74.4	0.98	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Nickel	19.2	0.98	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Zinc	52.1	2.0	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA438
(2) Prep QC Batch: MP729

(a) All results reported on wet weight basis.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-1-(7-8)		
Lab Sample ID:	C3538-3W	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a
Project:	TJPA - San Francisco, CA		

Metals Analysis, STLC Leachate CA WET

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	4.0	D008		0.25	mg/l	5	01/14/09	01/14/09	CT	SW846 6010B [1]	SW3010A [2]

(1) Instrument QC Batch: MA464
(2) Prep QC Batch: MP782

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-2-2		
Lab Sample ID:	C3538-4	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8260B	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O03046.D	1	12/26/08	MF	n/a	n/a	VO152
Run #2							

	Initial Weight
Run #1	5.01 g
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.5	ug/kg	
108-88-3	Toluene	ND	5.0	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.5	ug/kg	
1330-20-7	Xylene (total)	ND	10	4.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		60-130%
2037-26-5	Toluene-D8	108%		60-130%
460-00-4	4-Bromofluorobenzene	101%		60-130%

(a) All results reported on wet weight basis.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-2-2		
Lab Sample ID:	C3538-4	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8015B M SW846 3545A	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG2979.D	1	12/29/08	JH	12/24/08	OP600	GGG121
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	5.0	mg/kg	
	TPH (>C28-C40) [b]	54.9	20	10	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	86%		45-140%

(a) All results reported on wet weight basis.
(b) Motor Oil Pattern.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-2-2		
Lab Sample ID:	C3538-4	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Cadmium	<0.96	0.96	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Chromium	31.9	0.96	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Lead	383	0.96	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Nickel	18.9	0.96	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Zinc	374	1.9	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA438
(2) Prep QC Batch: MP729

(a) All results reported on wet weight basis.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-2-2		
Lab Sample ID:	C3538-4T	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a
Project:	TJPA - San Francisco, CA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	< 0.25	D008	5.0	0.25	mg/l	5	01/14/09	01/15/09 CT	SW846 6010B [1]	SW3010A [2]

(1) Instrument QC Batch: MA467
(2) Prep QC Batch: MP783

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-2-2		
Lab Sample ID:	C3538-4W	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a
Project:	TJPA - San Francisco, CA		

Metals Analysis, STLC Leachate CA WET

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	27.5	D008		0.25	mg/l	5	01/14/09	01/14/09	CT	SW846 6010B [1]	SW3010A [2]

(1) Instrument QC Batch: MA464
(2) Prep QC Batch: MP782

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-2-(5-6)		
Lab Sample ID:	C3538-5	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8260B	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O03047.D	1	12/26/08	MF	n/a	n/a	VO152
Run #2							

	Initial Weight
Run #1	5.00 g
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.5	ug/kg	
108-88-3	Toluene	ND	5.0	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.5	ug/kg	
1330-20-7	Xylene (total)	ND	10	4.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		60-130%
2037-26-5	Toluene-D8	108%		60-130%
460-00-4	4-Bromofluorobenzene	102%		60-130%

(a) All results reported on wet weight basis.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-2-(5-6)		
Lab Sample ID:	C3538-5	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8015B M SW846 3545A	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG2920.D	1	12/24/08	JH	12/24/08	OP600	GGG119
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	5.0	mg/kg	
	TPH (>C28-C40) [b]	13.9	20	10	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	78%		45-140%

(a) All results reported on wet weight basis.
(b) Motor Oil Pattern.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-2-(5-6)		
Lab Sample ID:	C3538-5	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Cadmium	< 0.98	0.98	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Chromium	36.8	0.98	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Lead	204	0.98	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Nickel	27.2	0.98	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Zinc	159	2.0	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA438
(2) Prep QC Batch: MP729

(a) All results reported on wet weight basis.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-2-(5-6)		
Lab Sample ID:	C3538-5T	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a
Project:	TJPA - San Francisco, CA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	0.27	D008	5.0	0.25	mg/l	5	01/14/09	01/15/09	CT	SW846 6010B [1]	SW3010A [2]

(1) Instrument QC Batch: MA467
(2) Prep QC Batch: MP783

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-2-(5-6)		
Lab Sample ID:	C3538-5W	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a
Project:	TJPA - San Francisco, CA		

Metals Analysis, STLC Leachate CA WET

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	7.4	D008		0.25	mg/l	5	01/14/09	01/14/09	CT	SW846 6010B [1]	SW3010A [2]

(1) Instrument QC Batch: MA464
(2) Prep QC Batch: MP782

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-2-(9-10)		
Lab Sample ID:	C3538-6	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8260B	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O03048.D	1	12/26/08	MF	n/a	n/a	VO152
Run #2							

	Initial Weight
Run #1	5.04 g
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.5	ug/kg	
108-88-3	Toluene	ND	5.0	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.5	ug/kg	
1330-20-7	Xylene (total)	ND	9.9	4.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	0.99	ug/kg	
	TPH-GRO (C6-C10)	ND	99	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		60-130%
2037-26-5	Toluene-D8	104%		60-130%
460-00-4	4-Bromofluorobenzene	102%		60-130%

(a) All results reported on wet weight basis.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-2-(9-10)		
Lab Sample ID:	C3538-6	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8015B M SW846 3545A	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG2921.D	1	12/24/08	JH	12/24/08	OP600	GGG119
Run #2							

	Initial Weight	Final Volume
Run #1	10.2 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28) [b]	28.6	9.8	4.9	mg/kg	
	TPH (>C28-C40) [c]	87.6	20	9.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	63%		45-140%

(a) All results reported on wet weight basis.
(b) Not a typical Diesel pattern.
(c) Estimate value due to discrete peaks mixed with Motor Oil.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-2-(9-10)		
Lab Sample ID:	C3538-6	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Cadmium	<0.93	0.93	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Chromium	29.2	0.93	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Lead	55.0	0.93	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Nickel	19.6	0.93	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Zinc	58.3	1.9	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA438
(2) Prep QC Batch: MP729

(a) All results reported on wet weight basis.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-2-(9-10)		
Lab Sample ID:	C3538-6W	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a
Project:	TJPA - San Francisco, CA		

Metals Analysis, STLC Leachate CA WET

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	6.9	D008		0.25	mg/l	5	01/14/09	01/14/09	CT	SW846 6010B [1]	SW3010A [2]

(1) Instrument QC Batch: MA464
(2) Prep QC Batch: MP782

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-3-1		
Lab Sample ID:	C3538-7	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8260B	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O03049.D	1	12/26/08	MF	n/a	n/a	VO152
Run #2							

	Initial Weight
Run #1	5.05 g
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.5	ug/kg	
108-88-3	Toluene	ND	5.0	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.5	ug/kg	
1330-20-7	Xylene (total)	ND	9.9	4.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	0.99	ug/kg	
	TPH-GRO (C6-C10)	ND	99	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		60-130%
2037-26-5	Toluene-D8	105%		60-130%
460-00-4	4-Bromofluorobenzene	101%		60-130%

(a) All results reported on wet weight basis.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-3-1		
Lab Sample ID:	C3538-7	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8015B M SW846 3545A	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG2998.D	4	12/30/08	JH	12/24/08	OP600	GGG122
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	390	200	mg/kg	
	TPH (>C28-C40) [b]	1650	780	390	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	109%		45-140%

(a) All results reported on wet weight basis.
(b) Motor Oil Pattern.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-3-1		
Lab Sample ID:	C3538-7	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Cadmium	< 0.92	0.92	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Chromium	19.7	0.92	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Lead	27.4	0.92	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Nickel	30.2	0.92	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Zinc	63.7	1.8	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA438
(2) Prep QC Batch: MP729

(a) All results reported on wet weight basis.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-3-(5-6)		
Lab Sample ID:	C3538-8	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8260B	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O03050.D	1	12/26/08	MF	n/a	n/a	VO152
Run #2							

	Initial Weight
Run #1	5.02 g
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.5	ug/kg	
108-88-3	Toluene	ND	5.0	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.5	ug/kg	
1330-20-7	Xylene (total)	ND	10	4.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		60-130%
2037-26-5	Toluene-D8	105%		60-130%
460-00-4	4-Bromofluorobenzene	102%		60-130%

(a) All results reported on wet weight basis.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-3-(5-6)		
Lab Sample ID:	C3538-8	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8015B M SW846 3545A	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG2986.D	1	12/30/08	JH	12/24/08	OP600	GGG121
Run #2							

	Initial Weight	Final Volume
Run #1	10.2 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.8	4.9	mg/kg	
	TPH (>C28-C40) [b]	62.4	20	9.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	85%		45-140%

(a) All results reported on wet weight basis.
(b) Motor Oil Pattern.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-3-(5-6)		
Lab Sample ID:	C3538-8	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Cadmium	< 0.98	0.98	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Chromium	33.9	0.98	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Lead	403	0.98	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Nickel	21.0	0.98	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Zinc	338	2.0	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA438
(2) Prep QC Batch: MP729

(a) All results reported on wet weight basis.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-3-(5-6)		
Lab Sample ID:	C3538-8A	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Antimony	< 2.0	2.0	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Arsenic	5.9	2.0	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Barium	163	0.99	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Beryllium	< 0.99	0.99	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Cadmium	< 0.99	0.99	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Chromium	37.3	0.99	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Cobalt	5.5	0.99	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Copper	115	0.99	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Lead	255	0.99	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Mercury	1.6	0.082	mg/kg	2	01/14/09	01/14/09	RW	SW846 7471A [1]	SW846 7471A [4]
Molybdenum	< 0.99	0.99	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Nickel	26.0	0.99	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Selenium	< 2.0	2.0	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Silver	< 0.99	0.99	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Thallium	< 2.0	2.0	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Vanadium	33.3	0.99	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Zinc	301	2.0	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA463
(2) Instrument QC Batch: MA466
(3) Prep QC Batch: MP778
(4) Prep QC Batch: MP780

(a) All results reported on wet weight basis.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-3-(5-6)		
Lab Sample ID:	C3538-8T	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a
Project:	TJPA - San Francisco, CA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	3.7	D008	5.0	0.25	mg/l	5	01/14/09	01/15/09	CT	SW846 6010B [1]	SW3010A [2]

(1) Instrument QC Batch: MA467
(2) Prep QC Batch: MP783

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-3-(5-6)		
Lab Sample ID:	C3538-8W	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a
Project:	TJPA - San Francisco, CA		

Metals Analysis, STLC Leachate CA WET

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	21.8	D008		0.25	mg/l	5	01/14/09	01/14/09 CT	SW846 6010B [1]	SW3010A [2]

(1) Instrument QC Batch: MA464
(2) Prep QC Batch: MP782

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-3-(9-10)		
Lab Sample ID:	C3538-9	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8260B	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O03051.D	1	12/26/08	MF	n/a	n/a	VO152
Run #2							

	Initial Weight
Run #1	5.04 g
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.5	ug/kg	
108-88-3	Toluene	ND	5.0	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.5	ug/kg	
1330-20-7	Xylene (total)	ND	9.9	4.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	0.99	ug/kg	
	TPH-GRO (C6-C10)	ND	99	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		60-130%
2037-26-5	Toluene-D8	105%		60-130%
460-00-4	4-Bromofluorobenzene	104%		60-130%

(a) All results reported on wet weight basis.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-3-(9-10)		
Lab Sample ID:	C3538-9	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8015B M SW846 3545A	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG2917.D	1	12/24/08	JH	12/24/08	OP600	GGG119
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	10.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28) [b]	162	99	50	mg/kg	
	TPH (>C28-C40) [c]	360	200	99	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	78%		45-140%

(a) All results reported on wet weight basis.
(b) Not a typical Diesel pattern.
(c) Estimate value due to discrete peaks mixed with Motor Oil.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-3-(9-10)		
Lab Sample ID:	C3538-9	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Cadmium	<0.98	0.98	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Chromium	19.6	0.98	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Lead	46.5	0.98	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Nickel	12.3	0.98	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Zinc	15.0	2.0	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA438
(2) Prep QC Batch: MP729

(a) All results reported on wet weight basis.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-4-2		
Lab Sample ID:	C3538-10	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8260B	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O03052.D	1	12/26/08	MF	n/a	n/a	VO152
Run #2							

	Initial Weight
Run #1	5.04 g
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.5	ug/kg	
108-88-3	Toluene	ND	5.0	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.5	ug/kg	
1330-20-7	Xylene (total)	ND	9.9	4.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	0.99	ug/kg	
	TPH-GRO (C6-C10)	ND	99	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		60-130%
2037-26-5	Toluene-D8	106%		60-130%
460-00-4	4-Bromofluorobenzene	103%		60-130%

(a) All results reported on wet weight basis.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-4-2		
Lab Sample ID:	C3538-10	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8015B M SW846 3545A	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [b]	GG2923.D	1	12/24/08	JH	12/24/08	OP600	GGG119
Run #2							

	Initial Weight	Final Volume
Run #1	5.20 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	19	9.6	mg/kg	
	TPH (>C28-C40) [c]	25.0	38	19	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	80%		45-140%

(a) All results reported on wet weight basis.
(b) Reporting Limit increased due to high moisture in the sample. 5grams prepared instead of the standard 10grams.
(c) Motor Oil Pattern.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-4-2		
Lab Sample ID:	C3538-10	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Cadmium	< 0.94	0.94	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Chromium	27.5	0.94	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Lead	243	0.94	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Nickel	18.1	0.94	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Zinc	209	1.9	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA438
(2) Prep QC Batch: MP729

(a) All results reported on wet weight basis.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-4-2		
Lab Sample ID:	C3538-10T	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a
Project:	TJPA - San Francisco, CA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	<0.25	D008	5.0	0.25	mg/l	5	01/14/09	01/15/09	CT	SW846 6010B [1]	SW3010A [2]

(1) Instrument QC Batch: MA467
(2) Prep QC Batch: MP783

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-4-2		
Lab Sample ID:	C3538-10W	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a
Project:	TJPA - San Francisco, CA		

Metals Analysis, STLC Leachate CA WET

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	9.5	D008		0.25	mg/l	5	01/14/09	01/14/09	CT	SW846 6010B [1]	SW3010A [2]

(1) Instrument QC Batch: MA464
(2) Prep QC Batch: MP782

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-4-(5-6)		
Lab Sample ID:	C3538-11	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8260B	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O03053.D	1	12/26/08	MF	n/a	n/a	VO152
Run #2							

	Initial Weight
Run #1	5.00 g
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.5	ug/kg	
108-88-3	Toluene	ND	5.0	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.5	ug/kg	
1330-20-7	Xylene (total)	ND	10	4.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		60-130%
2037-26-5	Toluene-D8	106%		60-130%
460-00-4	4-Bromofluorobenzene	102%		60-130%

(a) All results reported on wet weight basis.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-4-(5-6)		
Lab Sample ID:	C3538-11	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8015B M SW846 3545A	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG2977.D	1	12/29/08	JH	12/24/08	OP600	GGG121
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.9	5.0	mg/kg	
	TPH (>C28-C40) [b]	27.2	20	9.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	70%		45-140%

(a) All results reported on wet weight basis.
(b) Motor Oil Pattern.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-4-(5-6)		
Lab Sample ID:	C3538-11	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Cadmium	<0.97	0.97	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Chromium	36.4	0.97	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Lead	185	0.97	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Nickel	17.3	0.97	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Zinc	84.8	1.9	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA438
(2) Prep QC Batch: MP729

(a) All results reported on wet weight basis.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-4-(5-6)		
Lab Sample ID:	C3538-11T	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a
Project:	TJPA - San Francisco, CA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	0.32	D008	5.0	0.25	mg/l	5	01/14/09	01/15/09	CT	SW846 6010B [1]	SW3010A [2]

(1) Instrument QC Batch: MA467
(2) Prep QC Batch: MP783

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-4-(5-6)		
Lab Sample ID:	C3538-11W	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a
Project:	TJPA - San Francisco, CA		

Metals Analysis, STLC Leachate CA WET

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	30.6	D008		0.25	mg/l	5	01/14/09	01/15/09	CT	SW846 6010B [1]	SW3010A [2]

(1) Instrument QC Batch: MA464
(2) Prep QC Batch: MP782

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-4-(10-11)		
Lab Sample ID:	C3538-12	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8260B	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O03054.D	1	12/26/08	MF	n/a	n/a	VO152
Run #2							

	Initial Weight
Run #1	5.05 g
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.5	ug/kg	
108-88-3	Toluene	ND	5.0	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.5	ug/kg	
1330-20-7	Xylene (total)	ND	9.9	4.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	0.99	ug/kg	
	TPH-GRO (C6-C10)	ND	99	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		60-130%
2037-26-5	Toluene-D8	105%		60-130%
460-00-4	4-Bromofluorobenzene	102%		60-130%

(a) All results reported on wet weight basis.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-4-(10-11)		
Lab Sample ID:	C3538-12	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8015B M SW846 3545A	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG2924.D	1	12/24/08	JH	12/24/08	OP600	GGG119
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28) [b]	5.72	9.9	5.0	mg/kg	J
	TPH (>C28-C40) [c]	16.5	20	9.9	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	75%		45-140%

(a) All results reported on wet weight basis.
(b) Not a typical Diesel pattern.
(c) Motor Oil Pattern.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-4-(10-11)		
Lab Sample ID:	C3538-12	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Cadmium	<0.95	0.95	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [3]
Chromium	29.8	0.95	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [3]
Lead	161	0.95	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [3]
Nickel	18.2	0.95	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [3]
Zinc	5260	9.5	mg/kg	5	12/30/08	01/02/09	CT	SW846 6010B [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA438
(2) Instrument QC Batch: MA442
(3) Prep QC Batch: MP729

(a) All results reported on wet weight basis.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-4-(10-11)		
Lab Sample ID:	C3538-12A	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Antimony	4.4	2.0	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Arsenic	7.1	2.0	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Barium	608	1.0	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Beryllium	<1.0	1.0	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Cadmium	<1.0	1.0	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Chromium	32.8	1.0	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Cobalt	5.5	1.0	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Copper	324	1.0	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Lead	3480	1.0	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Mercury	0.17	0.039	mg/kg	1	01/14/09	01/14/09	RW	SW846 7471A [1]	SW846 7471A [4]
Molybdenum	<1.0	1.0	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Nickel	23.0	1.0	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Selenium	<2.0	2.0	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Silver	<1.0	1.0	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Thallium	<2.0	2.0	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Vanadium	29.3	1.0	mg/kg	1	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]
Zinc	4990	10	mg/kg	5	01/13/09	01/15/09	CT	SW846 6010B [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA463
(2) Instrument QC Batch: MA466
(3) Prep QC Batch: MP778
(4) Prep QC Batch: MP780

(a) All results reported on wet weight basis.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-4-(10-11)		
Lab Sample ID:	C3538-12T	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a
Project:	TJPA - San Francisco, CA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	24.8	D008	5.0	0.25	mg/l	5	01/14/09	01/15/09	CT	SW846 6010B [1]	SW3010A [2]

(1) Instrument QC Batch: MA467
(2) Prep QC Batch: MP783

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Accutest Laboratories

Report of Analysis

Client Sample ID:	NATOMA B-4-(10-11)		
Lab Sample ID:	C3538-12W	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a
Project:	TJPA - San Francisco, CA		

Metals Analysis, STLC Leachate CA WET

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	4.6	D008		0.25	mg/l	5	01/14/09	01/15/09	CT	SW846 6010B [1]	SW3010A [2]

(1) Instrument QC Batch: MA464
(2) Prep QC Batch: MP782

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Accutest Laboratories

Report of Analysis

Client Sample ID:	HOWARD B-1-1		
Lab Sample ID:	C3538-13	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8260B	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [b]	O03055.D	1	12/26/08	MF	n/a	n/a	VO152
Run #2							

	Initial Weight
Run #1	5.03 g
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.5	ug/kg	
108-88-3	Toluene	ND	5.0	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.5	ug/kg	
1330-20-7	Xylene (total)	ND	9.9	4.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	0.99	ug/kg	
	TPH-GRO (C6-C10)	78.7	99	50	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	48% [c]		60-130%
2037-26-5	Toluene-D8	104%		60-130%
460-00-4	4-Bromofluorobenzene	105%		60-130%

(a) All results reported on wet weight basis.
(b) Sample was not preserved to a pH < 2.
(c) Outside control limits due to matrix interference.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	HOWARD B-1-1		
Lab Sample ID:	C3538-13	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8015B M SW846 3545A	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG2975.D	10	12/29/08	JH	12/24/08	OP600	GGG121
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	100	50	mg/kg	
	TPH (>C28-C40) [b]	948	200	100	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	86%		45-140%

(a) All results reported on wet weight basis.
(b) Motor Oil Pattern.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	HOWARD B-1-1		
Lab Sample ID:	C3538-13	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Cadmium	< 0.97	0.97	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Chromium	39.9	0.97	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Lead	17.5	0.97	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Nickel	29.7	0.97	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Zinc	68.5	1.9	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA438
(2) Prep QC Batch: MP729

(a) All results reported on wet weight basis.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	HOWARD B-1-(5-6)		
Lab Sample ID:	C3538-14	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8260B	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O03073.D	1	12/29/08	MF	n/a	n/a	VO153
Run #2							

	Initial Weight
Run #1	5.02 g
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.5	ug/kg	
108-88-3	Toluene	ND	5.0	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.5	ug/kg	
1330-20-7	Xylene (total)	ND	10	4.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	10% [b]		60-130%
2037-26-5	Toluene-D8	101%		60-130%
460-00-4	4-Bromofluorobenzene	100%		60-130%

(a) All results reported on wet weight basis.
(b) Outside control limits due to matrix interference.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	HOWARD B-1-(5-6)		
Lab Sample ID:	C3538-14	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8015B M SW846 3545A	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG2978.D	1	12/29/08	JH	12/24/08	OP600	GGG121
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	5.0	mg/kg	
	TPH (>C28-C40) [b]	32.8	20	10	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	82%		45-140%

(a) All results reported on wet weight basis.
(b) Motor Oil Pattern.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	HOWARD B-1-(5-6)		
Lab Sample ID:	C3538-14	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Cadmium	<0.98	0.98	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Chromium	35.2	0.98	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Lead	30.9	0.98	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Nickel	26.7	0.98	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Zinc	197	2.0	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA438
(2) Prep QC Batch: MP729

(a) All results reported on wet weight basis.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	HOWARD B-2-2		
Lab Sample ID:	C3538-15	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8260B	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O03074.D	1	12/29/08	MF	n/a	n/a	VO153
Run #2							

	Initial Weight
Run #1	5.05 g
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.5	ug/kg	
108-88-3	Toluene	ND	5.0	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.5	ug/kg	
1330-20-7	Xylene (total)	ND	9.9	4.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	0.99	ug/kg	
	TPH-GRO (C6-C10)	101	99	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	30% [b]		60-130%
2037-26-5	Toluene-D8	103%		60-130%
460-00-4	4-Bromofluorobenzene	105%		60-130%

(a) All results reported on wet weight basis.
(b) Outside control limits due to matrix interference.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	HOWARD B-2-2		
Lab Sample ID:	C3538-15	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8015B M SW846 3545A	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG2957.D	5	12/29/08	JH	12/24/08	OP600	GGG121
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	50	25	mg/kg	
	TPH (>C28-C40) [b]	290	99	50	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	79%		45-140%

(a) All results reported on wet weight basis.
(b) Motor Oil Pattern.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	HOWARD B-2-2		
Lab Sample ID:	C3538-15	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Cadmium	< 0.93	0.93	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Chromium	44.0	0.93	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Lead	15.1	0.93	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Nickel	28.6	0.93	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Zinc	56.6	1.9	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA438
(2) Prep QC Batch: MP729

(a) All results reported on wet weight basis.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	HOWARD B-2-(5-6)		
Lab Sample ID:	C3538-16	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8260B	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O03075.D	1	12/29/08	MF	n/a	n/a	VO153
Run #2							

	Initial Weight
Run #1	5.01 g
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.5	ug/kg	
108-88-3	Toluene	ND	5.0	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.5	ug/kg	
1330-20-7	Xylene (total)	ND	10	4.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	67%		60-130%
2037-26-5	Toluene-D8	104%		60-130%
460-00-4	4-Bromofluorobenzene	106%		60-130%

(a) All results reported on wet weight basis.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	HOWARD B-2-(5-6)		
Lab Sample ID:	C3538-16	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8015B M SW846 3545A	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG2980.D	1	12/29/08	JH	12/24/08	OP600	GGG121
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	5.0	mg/kg	
	TPH (>C28-C40) [b]	116	20	10	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	72%		45-140%

(a) All results reported on wet weight basis.
(b) Motor Oil Pattern.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	HOWARD B-2-(5-6)		
Lab Sample ID:	C3538-16	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Cadmium	< 0.99	0.99	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Chromium	44.6	0.99	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Lead	17.2	0.99	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Nickel	34.4	0.99	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Zinc	59.0	2.0	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA438
(2) Prep QC Batch: MP729

(a) All results reported on wet weight basis.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	HOWARD B-2-(7-8)		
Lab Sample ID:	C3538-17	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8260B	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O03076.D	1	12/29/08	MF	n/a	n/a	VO153
Run #2							

	Initial Weight
Run #1	5.02 g
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.5	ug/kg	
108-88-3	Toluene	ND	5.0	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.5	ug/kg	
1330-20-7	Xylene (total)	ND	10	4.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	16% [b]		60-130%
2037-26-5	Toluene-D8	103%		60-130%
460-00-4	4-Bromofluorobenzene	105%		60-130%

(a) All results reported on wet weight basis.
(b) Outside control limits due to matrix interference.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	HOWARD B-2-(7-8)		
Lab Sample ID:	C3538-17	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8015B M SW846 3545A	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG2981.D	1	12/29/08	JH	12/24/08	OP600	GGG121
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	5.0	mg/kg	
	TPH (>C28-C40) [b]	38.4	20	10	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	66%		45-140%

(a) All results reported on wet weight basis.
(b) Motor Oil Pattern.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	HOWARD B-2-(7-8)		
Lab Sample ID:	C3538-17	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Cadmium	<1.0	1.0	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Chromium	32.3	1.0	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Lead	7.8	1.0	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Nickel	32.0	1.0	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Zinc	33.9	2.0	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA438
(2) Prep QC Batch: MP729

(a) All results reported on wet weight basis.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	HOWARD B-3-1		
Lab Sample ID:	C3538-18	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8260B	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O03077.D	1	12/29/08	MF	n/a	n/a	VO153
Run #2							

	Initial Weight
Run #1	5.03 g
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.5	ug/kg	
108-88-3	Toluene	ND	5.0	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.5	ug/kg	
1330-20-7	Xylene (total)	ND	9.9	4.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	0.99	ug/kg	
	TPH-GRO (C6-C10)	61.9	99	50	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	51% [b]		60-130%
2037-26-5	Toluene-D8	103%		60-130%
460-00-4	4-Bromofluorobenzene	107%		60-130%

(a) All results reported on wet weight basis.
(b) Outside control limits due to matrix interference.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	HOWARD B-3-1		
Lab Sample ID:	C3538-18	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8015B M SW846 3545A	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG2976.D	10	12/29/08	JH	12/24/08	OP600	GGG121
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	100	50	mg/kg	
	TPH (>C28-C40) [b]	866	200	100	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	83%		45-140%

(a) All results reported on wet weight basis.
(b) Motor Oil Pattern.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	HOWARD B-3-1		
Lab Sample ID:	C3538-18	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Cadmium	<0.95	0.95	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Chromium	49.2	0.95	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Lead	18.1	0.95	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Nickel	38.2	0.95	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Zinc	64.7	1.9	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA438
(2) Prep QC Batch: MP729

(a) All results reported on wet weight basis.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	HOWARD B-3-(5-6)		
Lab Sample ID:	C3538-19	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8260B	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O03078.D	1	12/29/08	MF	n/a	n/a	VO153
Run #2							

	Initial Weight
Run #1	5.03 g
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.5	ug/kg	
108-88-3	Toluene	ND	5.0	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.5	ug/kg	
1330-20-7	Xylene (total)	ND	9.9	4.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	0.99	ug/kg	
	TPH-GRO (C6-C10)	ND	99	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	71%		60-130%
2037-26-5	Toluene-D8	103%		60-130%
460-00-4	4-Bromofluorobenzene	106%		60-130%

(a) All results reported on wet weight basis.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	HOWARD B-3-(5-6)		
Lab Sample ID:	C3538-19	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8015B M SW846 3545A	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG2973.D	10	12/29/08	JH	12/24/08	OP600	GGG121
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	100	50	mg/kg	
	TPH (> C28-C40) [b]	701	200	100	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	79%		45-140%

(a) All results reported on wet weight basis.
(b) Motor Oil Pattern.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	HOWARD B-3-(5-6)		
Lab Sample ID:	C3538-19	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Cadmium	<0.95	0.95	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Chromium	48.1	0.95	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Lead	20.2	0.95	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Nickel	84.5	0.95	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Zinc	59.6	1.9	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA438
(2) Prep QC Batch: MP729

(a) All results reported on wet weight basis.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	HOWARD B-4-2		
Lab Sample ID:	C3538-20	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8260B	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O03079.D	1	12/29/08	MF	n/a	n/a	VO153
Run #2							

	Initial Weight
Run #1	5.03 g
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.5	ug/kg	
108-88-3	Toluene	ND	5.0	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.5	ug/kg	
1330-20-7	Xylene (total)	ND	9.9	4.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	0.99	ug/kg	
	TPH-GRO (C6-C10)	ND	99	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	84%		60-130%
2037-26-5	Toluene-D8	104%		60-130%
460-00-4	4-Bromofluorobenzene	107%		60-130%

(a) All results reported on wet weight basis.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	HOWARD B-4-2		
Lab Sample ID:	C3538-20	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8015B M SW846 3545A	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG2997.D	10	12/30/08	JH	12/29/08	OP610	GGG122
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	100	50	mg/kg	
	TPH (>C28-C40) [b]	525	200	100	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	80%		45-140%

(a) All results reported on wet weight basis.
(b) Motor Oil Pattern.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	HOWARD B-4-2		
Lab Sample ID:	C3538-20	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Cadmium	<1.0	1.0	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Chromium	50.3	1.0	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Lead	31.0	1.0	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Nickel	36.6	1.0	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]
Zinc	51.5	2.0	mg/kg	1	12/30/08	12/30/08	CT	SW846 6010B [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA438
(2) Prep QC Batch: MP729

(a) All results reported on wet weight basis.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	HOWARD B-4-2		
Lab Sample ID:	C3538-20W	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a
Project:	TJPA - San Francisco, CA		

Metals Analysis, STLC Leachate CA WET

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Chromium	0.71	D007		0.10	mg/l	5	01/14/09	01/15/09	CT	SW846 6010B [1]	SW3010A [2]

(1) Instrument QC Batch: MA464
(2) Prep QC Batch: MP782

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Accutest Laboratories

Report of Analysis

Client Sample ID:	DRUM		
Lab Sample ID:	C3538-21	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8260B	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O03117.D	1	12/31/08	MF	n/a	n/a	VO156
Run #2							

	Initial Weight
Run #1	5.01 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.5	ug/kg	
108-88-3	Toluene	ND	5.0	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.5	ug/kg	
1330-20-7	Xylene (total)	ND	10	4.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		60-130%
2037-26-5	Toluene-D8	102%		60-130%
460-00-4	4-Bromofluorobenzene	98%		60-130%

(a) All results reported on wet weight basis.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	DRUM		
Lab Sample ID:	C3538-21	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
Method:	SW846 8015B M SW846 3545A	Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [b]	GG3052.D	10	01/06/09	JH	01/05/09	OP621	GGG124
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	100	50	mg/kg	
	TPH (>C28-C40) [c]	505	200	100	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	82%		45-140%

(a) All results reported on wet weight basis.
(b) Sample extracted beyond hold time(1 day)due to schedule error. Motor Oil hit confirmed by MS/MSD.
(c) Motor Oil Pattern.

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	DRUM		
Lab Sample ID:	C3538-21	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a [a]
Project:	TJPA - San Francisco, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Cadmium	<0.93	0.93	mg/kg	1	01/05/09	01/05/09	CT	SW846 6010B [1]	SW846 3050B [2]
Chromium	33.7	0.93	mg/kg	1	01/05/09	01/05/09	CT	SW846 6010B [1]	SW846 3050B [2]
Lead	204	0.93	mg/kg	1	01/05/09	01/05/09	CT	SW846 6010B [1]	SW846 3050B [2]
Nickel	21.4	0.93	mg/kg	1	01/05/09	01/05/09	CT	SW846 6010B [1]	SW846 3050B [2]
Zinc	1140	1.9	mg/kg	1	01/05/09	01/05/09	CT	SW846 6010B [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA445
(2) Prep QC Batch: MP741

(a) All results reported on wet weight basis.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	DRUM		
Lab Sample ID:	C3538-21W	Date Sampled:	12/20/08
Matrix:	SO - Soil	Date Received:	12/23/08
		Percent Solids:	n/a
Project:	TJPA - San Francisco, CA		

Metals Analysis, STLC Leachate CA WET

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	15.6	D008		0.25	mg/l	5	01/26/09	01/27/09 CT	SW846 6010B [1]	SW3010A [2]

(1) Instrument QC Batch: MA487
(2) Prep QC Batch: MP831

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	C3538-22	Date Sampled:	12/20/08
Matrix:	AQ - Trip Blank Water	Date Received:	12/23/08
Method:	SW846 8260B	Percent Solids:	n/a
Project:	TJPA - San Francisco, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M3575.D	1	12/26/08	XB	n/a	n/a	VM114
Run #2							

	Purge Volume
Run #1	10.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	10	ug/l	
71-43-2	Benzene	ND	1.0	0.30	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.30	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.30	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.30	ug/l	
75-00-3	Chloroethane	ND	1.0	0.30	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.30	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.30	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	5.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.30	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.30	ug/l	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.30	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.30	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.30	ug/l	

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	C3538-22	Date Sampled:	12/20/08
Matrix:	AQ - Trip Blank Water	Date Received:	12/23/08
Method:	SW846 8260B	Percent Solids:	n/a
Project:	TJPA - San Francisco, CA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	5.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	20	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	20	5.0	ug/l	
74-83-9	Methyl bromide	ND	5.0	1.5	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	20	5.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	20	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.30	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.70	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		60-130%
2037-26-5	Toluene-D8	106%		60-130%

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	C3538-22	Date Sampled:	12/20/08
Matrix:	AQ - Trip Blank Water	Date Received:	12/23/08
Method:	SW846 8260B	Percent Solids:	n/a
Project:	TJPA - San Francisco, CA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%		60-130%

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

Environmental Resources Management

CHAIN OF CUSTODY RECORD

NO: 5802

1777 Botelho Drive, Suite 260 • Walnut Creek, CA • 94596 • (925) 946-0455 • FAX (925) 946-9968

C3538 Page 1 of 3

PROJECT #	PROJECT NAME
0072420.3.201	TJPA

SAMPLER: (PRINT NAME)	(SIGNATURE)
Chimi Yi	Chimi Yi

RECEIVING LABORATORY: Accutest

SAMPLE I.D.	DATE	TIME	COMP	GRAB	SAMPLING METHOD	PRESERVATIVE	ICE (Y/N)	SAMPLING VOLUME	# OF CONTAINERS	MATRIX: SOIL	MATRIX: WATER	MATRIX: GAS	TPH-diesel + TPH-motor oil 8015m	TPH-gas, BTEX, MTBE 8260	Luft 5 Metals 6010B	REQUESTED PARAMETERS
Natoma B-1-1	12-20-08	1145		X	hand auger	—	Y	4oz	3	X			X	X	X	-1
Natoma B-1-(5-6)		1157			direct push			2"x6"	2	X			X	X	X	-2
Natoma B-1-(7-8)		1159			"			"	2	X			X	X	X	-3 only (1) Acetate Tube Recvd.
Natoma B-2-2		0800			hand auger			4oz	3	X			X	X	X	-4
Natoma B-2-(5-6)		0820			direct push			2"x6"	2	X			X	X	X	-5
Natoma B-2-(9-10)		0828			"			"	2	X			X	X	X	-6 (26) x 4oz glass jars
Natoma B-3-1		1118			hand auger			4oz	3	X			X	X	X	-7 (23) x Acetate Tubes
Natoma B-3-(5-6)		1131			direct push			2"x6"	2	X			X	X	X	-8
Natoma B-3-(9-10)		1133			"			"	2	X			X	X	X	-9 3 vials (w/ HCl)
Natoma B-4-2		1046			hand auger			4oz	3	X			X	X	X	-10 Cooler Temp: 4.3°C & 1.4°C

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME	FIELD REMARKS
Chimi Yi	12-20-08	0900	ERM WC Office	12-22-08	0900	-Standard TAT
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME	✓ Please save soil samples for potential STLC analysis.
WC Office Ambassador	12/23/08	0928		12/23/08	0928	
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME	
	12/23/08	1300		12/23/08	13:05	

REMARKS ON SAMPLE RECEIPT
☐ BOTTLE INTACT ☐ CUSTODY SEALS ☐ CHILLED
☐ PRESERVED ☐ SEALS INTACT ☐ SEE REMARKS

ERM REMARKS

SEND REPORT TO: Mark.Litzau@erm.com

WHITE – LABORATORY COPY CANARY – FIELD COPY PINK – DATABASE GOLD – PROJECT FILE

3.1 B

C3538: Chain of Custody
Page 1 of 4

Environmental Resources Management

CHAIN OF CUSTODY RECORD

NO: 5803

1777 Botelho Drive, Suite 260 • Walnut Creek, CA • 94596 • (925) 946-0455 • FAX (925) 946-9968 C3538 Page 2 of 3

PROJECT #	PROJECT NAME
0072420.3.201	TJPA

SAMPLER: (PRINT NAME)	(SIGNATURE)
Chimi Yi	Chimi Yi

RECEIVING LABORATORY: Accutest

SAMPLE I.D.	DATE	TIME	COMP	GRAB	SAMPLING METHOD	PRESERVATIVE	ICE (Y/N)	SAMPLING VOLUME	# OF CONTAINERS	MATRIX: SOIL	WATER	GAS	TPH-d + TPH-mo 8015M	TPH-gas, BTEX, MTBE 8260	LUFT 5 Metals	REQUESTED PARAMETERS
Natoma B-4-(5-6)	12-20-08	1052		X	direct push	—	Y	2"x6"	2	X			X	X	X	-11
Natoma B-4-(10-11)		1100			"			"	2				X	X	X	-12
Howard B-1-1		1014			hand auger			4oz	3				X	X	X	-13
Howard B-1-(5-6)		1021			direct push			2"x6"	2				X	X	X	-14
~~Howard B-1-(7-8)~~					"			"	2				X	X	X	~~-15~~
Howard B-2-2		0942			hand auger			4oz	3				X	X	X	-15
Howard B-2-(5-6)		0950			direct push			2"x6"	2				X	X	X	-16
Howard B-2-(7-8)		0958			"			"	2				X	X	X	-17
Howard B-3-1		0905			hand auger			4oz	3				X	X	X	-18
Howard B-3-(5-6)		0914			direct push			2"x6"	2				X	X	X	-19

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME	FIELD REMARKS
Chimi Yi	12-22-08	0900	ERM WC office	12-22-08	0900	see page 1
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME	
AM Bonnevelle WC office	12/23/08	0928		12/23/8	0928	
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME	
	12/23/08	1300		12/23/08	13:05	

REMARKS ON SAMPLE RECEIPT: ☐ BOTTLE INTACT ☐ CUSTODY SEALS ☐ CHILLED ☐ PRESERVED ☐ SEALS INTACT ☐ SEE REMARKS

ERM REMARKS

SEND REPORT TO:

WHITE – LABORATORY COPY CANARY – FIELD COPY PINK – DATABASE GOLD – PROJECT FILE

3.1 B

C3538: Chain of Custody
Page 2 of 4

Environmental Resources Management

CHAIN OF CUSTODY RECORD

NO: 5804

1777 Botelho Drive, Suite 260 • Walnut Creek, CA • 94596 • (925) 946-0455 • FAX (925) 946-9968 C3538 Page 3 of 3

PROJECT #	PROJECT NAME
0072420.3.201	TJPA

SAMPLER: (PRINT NAME)	(SIGNATURE)
Chimi Yi	Chimi Yi

RECEIVING LABORATORY: Accutest

SAMPLE I.D.	DATE	TIME	COMP	GRAB	SAMPLING METHOD	PRESERVATIVE	ICE (Y/N)	SAMPLING VOLUME	# OF CONTAINERS	MATRIX: SOIL	MATRIX: WATER	MATRIX: GAS	REQUESTED PARAMETERS: TPH-d, 1-TPH-MO 8015M	TPH-gas, BTEX, MTBE 8260	LUFT 5 Metals	VOCs 8260		
Howard B4-2	12-20-08	0840		X	hand auger	—	Y	4oz	3	X			X	X	X		-20	
Drum	↓	1400		X	hand	—	Y	4oz	2	X			HOLD				-21	
Trip Blank	—	—	—	—	—	HCl	Y	40mL	3		X					X	-22	

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME	FIELD REMARKS
Chimi Yi	12-22-08	0900	ERM WC Office	12-22-08	0900	See page 1
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME	
WC office Ann Bonnarsh	12/23/08	0928		12/23/08	0928	
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME	
	12/23/08	1300		12/23/08	13:05	

REMARKS ON SAMPLE RECEIPT: ☐ BOTTLE INTACT ☐ CUSTODY SEALS ☐ CHILLED ☐ PRESERVED ☑ SEALS INTACT ☐ SEE REMARKS

ERM REMARKS

SEND REPORT TO:

WHITE – LABORATORY COPY CANARY – FIELD COPY PINK – DATABASE GOLD – PROJECT FILE

C3538: Chain of Custody
Page 3 of 4

Northern California ACCUTEST Laboratories

Sample Receiving Checklist

Job # C3538

3.1 C

Review Chain of Custody: The Chain of Custody is to be completely and legibly filed out by Client.

- ☑ Are these regulatory (NPDES) samples? Yes / (No) circle one ☑ Is pH requested? Yes / (No) circle one
- ☐ Was Client informed that the hold time is 15mins Yes / No circle one If yes, did they consent to continue? _____
- ☐ Are sample within one-half hold-time? Yes / No circle one If no, was the lab informed? _____
- ☑ Report to info is complete and legible, including;
  - ☑ Type of Deliverable needed ☑ name ☑ address ☑ phone ☑ email
- ☐ Bill to info is complete and legible, including: ☐ PO# ☐ Credit card ☐ contact ☐ address ☐ phone ☐ email
- ☑ Contact and/or Project Mgr identified, including; ☑ phone ☑ email
- ☑ Project name / number ☐ Special requirements? (Yes) / No circle one
- ☑ Sample IDs / date & time of collection provided? (Yes) / No circle one
- ☑ Matrix listed and correct? (Yes) / No circle one
- ☑ Analyses listed are those we do or client has authorized a subcontract? (Yes) / No circle one
- ☑ Chain is signed / dated by both client and sample custodian? (Yes) / No circle one
- ☑ TAT requested available? Approved by ELK

Review Coolers: 4.3°C | 1.4°C --> 2 Coolers

- ☑ Samples / Coolers are at 0-6°C? If sampled within 4hrs, then "on ice" is acceptable.

If a cooler is outside the 0-6°C range; note below the bottles in that cooler below.
Note that ANC does NOT accept evidentiary samples. (We do not lock refrigerators)
Shipment Method: AC
Custody Seals Present: Yes / (No) circle one Un-broken: Yes / No circle one

Review of Sample Bottles: If you answer no, explain below

- ☑ IDs / bottle number / Date / Time of bottle labels match CoC?
- ☑ Sample bottle intact? (Yes) / No circle one
- ☑ Proper containers and volumes? (Yes) / No circle one
- ☑ Proper preservatives? Check pH on preserved samples except 1664, 625, 8270, and (VOAs) and list below.
- ☑ VOAs received without headspace? (Yes) / No circle one

Lab #	Client Sample ID	pH Check:	Other Comments / Issues
			26 x 4oz glass jars
			23 x Acetate Tubes
			(3) vials only (w/HCl)
			"Hold Soil Samples" For
			Further analysis.

C3538: Chain of Custody
Page 4 of 4

☐ Client informed of irregularities at receiving ☐ Project Mgr needs to contact Client for issues

Comments:

:T:\Laboratory\Forms\SampleControl\Form_SampleReceiving_2008-04-12.doc

4

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: C3538
Account: ERMCAWC ERM-West, Inc.
Project: TJPA - San Francisco, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM114-MB	M3574.D	1	12/26/08	XB	n/a	n/a	VM114

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

C3538-22

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	10	ug/l	
71-43-2	Benzene	ND	1.0	0.30	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.30	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.30	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.30	ug/l	
75-00-3	Chloroethane	ND	1.0	0.30	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.30	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.30	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	5.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.30	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.30	ug/l	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.30	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.30	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.30	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	5.0	0.50	ug/l	

Method Blank Summary

Job Number: C3538
Account: ERMCAWC ERM-West, Inc.
Project: TJPA - San Francisco, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM114-MB	M3574.D	1	12/26/08	XB	n/a	n/a	VM114

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

C3538-22

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	20	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	20	5.0	ug/l	
74-83-9	Methyl bromide	ND	5.0	1.5	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	20	5.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	20	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.30	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.70	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	101%	60-130%

Method Blank Summary

Job Number: C3538
Account: ERMCAWC ERM-West, Inc.
Project: TJPA - San Francisco, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM114-MB	M3574.D	1	12/26/08	XB	n/a	n/a	VM114

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

C3538-22

CAS No.	Surrogate Recoveries		Limits
2037-26-5	Toluene-D8	105%	60-130%
460-00-4	4-Bromofluorobenzene	99%	60-130%

Method Blank Summary

Job Number: C3538
Account: ERMCAWC ERM-West, Inc.
Project: TJPA - San Francisco, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO152-MB	O03040.D	1	12/26/08	MF	n/a	n/a	VO152

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

C3538-1, C3538-2, C3538-3, C3538-4, C3538-5, C3538-6, C3538-7, C3538-8, C3538-9, C3538-10, C3538-11, C3538-12, C3538-13

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.5	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
108-88-3	Toluene	ND	5.0	1.5	ug/kg	
1330-20-7	Xylene (total)	ND	10	4.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	105%	60-130%
2037-26-5	Toluene-D8	103%	60-130%
460-00-4	4-Bromofluorobenzene	100%	60-130%

Method Blank Summary

Job Number: C3538
Account: ERMCAWC ERM-West, Inc.
Project: TJPA - San Francisco, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO153-MB	O03070.D	1	12/29/08	MF	n/a	n/a	VO153

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

C3538-14, C3538-15, C3538-16, C3538-17, C3538-18, C3538-19, C3538-20

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.5	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
108-88-3	Toluene	ND	5.0	1.5	ug/kg	
1330-20-7	Xylene (total)	ND	10	4.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	99%	60-130%
2037-26-5	Toluene-D8	101%	60-130%
460-00-4	4-Bromofluorobenzene	99%	60-130%

Method Blank Summary

Job Number: C3538
Account: ERMCAWC ERM-West, Inc.
Project: TJPA - San Francisco, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO156-MB	O03114.D	1	12/31/08	MF	n/a	n/a	VO156

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

C3538-21

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.5	ug/kg	
108-88-3	Toluene	ND	5.0	1.5	ug/kg	
1330-20-7	Xylene (total)	ND	10	4.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	101%	60-130%
2037-26-5	Toluene-D8	101%	60-130%
460-00-4	4-Bromofluorobenzene	100%	60-130%

Blank Spike Summary

Job Number: C3538
Account: ERMCAWC ERM-West, Inc.
Project: TJPA - San Francisco, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM114-BS	M3571.D	1	12/26/08	XB	n/a	n/a	VM114

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

C3538-22

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	80	68.7	86	60-130
71-43-2	Benzene	20	18.2	91	60-130
108-86-1	Bromobenzene	20	18.9	95	60-130
74-97-5	Bromochloromethane	20	19.1	96	60-130
75-27-4	Bromodichloromethane	20	18.8	94	60-130
75-25-2	Bromoform	20	18.6	93	60-130
104-51-8	n-Butylbenzene	20	20.8	104	60-130
135-98-8	sec-Butylbenzene	20	20.3	102	60-130
98-06-6	tert-Butylbenzene	20	19.7	99	60-130
108-90-7	Chlorobenzene	20	19.0	95	60-130
75-00-3	Chloroethane	20	20.3	102	60-130
67-66-3	Chloroform	20	19.2	96	60-130
95-49-8	o-Chlorotoluene	20	18.2	91	60-130
106-43-4	p-Chlorotoluene	20	22.1	111	60-130
56-23-5	Carbon tetrachloride	20	18.7	94	60-130
75-34-3	1,1-Dichloroethane	20	18.5	93	60-130
75-35-4	1,1-Dichloroethylene	20	17.2	86	60-130
563-58-6	1,1-Dichloropropene	20	18.1	91	60-130
96-12-8	1,2-Dibromo-3-chloropropane	20	17.9	90	60-130
106-93-4	1,2-Dibromoethane	20	18.3	92	60-130
107-06-2	1,2-Dichloroethane	20	18.2	91	60-130
78-87-5	1,2-Dichloropropane	20	18.5	93	60-130
142-28-9	1,3-Dichloropropane	20	18.2	91	60-130
108-20-3	Di-Isopropyl ether	20	20.0	100	60-130
594-20-7	2,2-Dichloropropane	20	19.5	98	60-130
124-48-1	Dibromochloromethane	20	19.7	99	60-130
75-71-8	Dichlorodifluoromethane	20	24.3	122	60-130
156-59-2	cis-1,2-Dichloroethylene	20	18.9	95	60-130
10061-01-5	cis-1,3-Dichloropropene	20	19.2	96	60-130
541-73-1	m-Dichlorobenzene	20	19.3	97	60-130
95-50-1	o-Dichlorobenzene	20	19.5	98	60-130
106-46-7	p-Dichlorobenzene	20	19.6	98	60-130
156-60-5	trans-1,2-Dichloroethylene	20	18.1	91	60-130
10061-02-6	trans-1,3-Dichloropropene	20	19.3	97	60-130
100-41-4	Ethylbenzene	20	19.1	96	60-130
637-92-3	Ethyl Tert Butyl Ether	20	19.2	96	60-130

Blank Spike Summary

Job Number: C3538
Account: ERMCAWC ERM-West, Inc.
Project: TJPA - San Francisco, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM114-BS	M3571.D	1	12/26/08	XB	n/a	n/a	VM114

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

C3538-22

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
591-78-6	2-Hexanone	80	71.0	89	60-130
87-68-3	Hexachlorobutadiene	20	23.1	116	60-130
98-82-8	Isopropylbenzene	20	19.4	97	60-130
99-87-6	p-Isopropyltoluene	20	20.3	102	60-130
108-10-1	4-Methyl-2-pentanone	80	71.1	89	60-130
74-83-9	Methyl bromide	20	21.0	105	60-130
74-87-3	Methyl chloride	20	20.3	102	60-130
74-95-3	Methylene bromide	20	18.4	92	60-130
75-09-2	Methylene chloride	20	18.4	92	60-130
78-93-3	Methyl ethyl ketone	80	70.6	88	60-130
1634-04-4	Methyl Tert Butyl Ether	20	19.2	96	60-130
91-20-3	Naphthalene	20	17.5	88	60-130
103-65-1	n-Propylbenzene	20	20.2	101	60-130
100-42-5	Styrene	20	19.5	98	60-130
994-05-8	Tert-Amyl Methyl Ether	20	20.1	101	60-130
75-65-0	Tert-Butyl Alcohol	100	91.3	91	60-130
630-20-6	1,1,1,2-Tetrachloroethane	20	18.6	93	60-130
71-55-6	1,1,1-Trichloroethane	20	19.0	95	60-130
79-34-5	1,1,2,2-Tetrachloroethane	20	18.5	93	60-130
79-00-5	1,1,2-Trichloroethane	20	18.5	93	60-130
87-61-6	1,2,3-Trichlorobenzene	20	18.5	93	60-130
96-18-4	1,2,3-Trichloropropane	20	18.0	90	60-130
120-82-1	1,2,4-Trichlorobenzene	20	19.3	97	60-130
95-63-6	1,2,4-Trimethylbenzene	20	19.9	100	60-130
108-67-8	1,3,5-Trimethylbenzene	20	20.1	101	60-130
127-18-4	Tetrachloroethylene	20	17.8	89	60-130
108-88-3	Toluene	20	17.8	89	60-130
79-01-6	Trichloroethylene	20	18.5	93	60-130
75-69-4	Trichlorofluoromethane	20	20.8	104	60-130
75-01-4	Vinyl chloride	20	19.9	100	60-130
1330-20-7	Xylene (total)	60	56.5	94	60-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	103%	60-130%

Blank Spike Summary

Job Number: C3538
Account: ERMCAWC ERM-West, Inc.
Project: TJPA - San Francisco, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM114-BS	M3571.D	1	12/26/08	XB	n/a	n/a	VM114

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

C3538-22

CAS No.	Surrogate Recoveries	BSP	Limits
2037-26-5	Toluene-D8	100%	60-130%
460-00-4	4-Bromofluorobenzene	99%	60-130%

Blank Spike Summary

Job Number: C3538
Account: ERMCAWC ERM-West, Inc.
Project: TJPA - San Francisco, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO152-BS	O03041.D	1	12/26/08	MF	n/a	n/a	VO152

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

C3538-1, C3538-2, C3538-3, C3538-4, C3538-5, C3538-6, C3538-7, C3538-8, C3538-9, C3538-10, C3538-11, C3538-12, C3538-13

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	40	41.7	104	60-130
100-41-4	Ethylbenzene	40	41.6	104	60-130
1634-04-4	Methyl Tert Butyl Ether	40	42.9	107	60-130
108-88-3	Toluene	40	39.7	99	60-130
1330-20-7	Xylene (total)	120	123	103	60-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	103%	60-130%
2037-26-5	Toluene-D8	99%	60-130%
460-00-4	4-Bromofluorobenzene	99%	60-130%

Blank Spike Summary

Job Number: C3538
Account: ERMCAWC ERM-West, Inc.
Project: TJPA - San Francisco, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO152-BS	O03042.D	1	12/26/08	MF	n/a	n/a	VO152

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

C3538-1, C3538-2, C3538-3, C3538-4, C3538-5, C3538-6, C3538-7, C3538-8, C3538-9, C3538-10, C3538-11, C3538-12, C3538-13

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
	TPH-GRO (C6-C10)	250	281	112	60-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	60-130%
2037-26-5	Toluene-D8	102%	60-130%
460-00-4	4-Bromofluorobenzene	102%	60-130%

Blank Spike Summary

Job Number: C3538
Account: ERMCAWC ERM-West, Inc.
Project: TJPA - San Francisco, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO153-BS	O03071.D	1	12/29/08	MF	n/a	n/a	VO153

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

C3538-14, C3538-15, C3538-16, C3538-17, C3538-18, C3538-19, C3538-20

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	40	37.6	94	60-130
100-41-4	Ethylbenzene	40	36.7	92	60-130
1634-04-4	Methyl Tert Butyl Ether	40	40.0	100	60-130
108-88-3	Toluene	40	37.3	93	60-130
1330-20-7	Xylene (total)	120	110	92	60-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	60-130%
2037-26-5	Toluene-D8	96%	60-130%
460-00-4	4-Bromofluorobenzene	99%	60-130%

Blank Spike Summary

Job Number: C3538
Account: ERMCAWC ERM-West, Inc.
Project: TJPA - San Francisco, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO153-BS	O03072.D	1	12/29/08	MF	n/a	n/a	VO153

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

C3538-14, C3538-15, C3538-16, C3538-17, C3538-18, C3538-19, C3538-20

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
	TPH-GRO (C6-C10)	250	295	118	60-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	103%	60-130%
2037-26-5	Toluene-D8	102%	60-130%
460-00-4	4-Bromofluorobenzene	101%	60-130%

Blank Spike Summary

Job Number: C3538
Account: ERMCAWC ERM-West, Inc.
Project: TJPA - San Francisco, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO156-BS	O03115.D	1	12/31/08	MF	n/a	n/a	VO156

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

C3538-21

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	40	42.7	107	60-130
100-41-4	Ethylbenzene	40	43.3	108	60-130
108-88-3	Toluene	40	41.5	104	60-130
1330-20-7	Xylene (total)	120	128	107	60-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	105%	60-130%
2037-26-5	Toluene-D8	96%	60-130%
460-00-4	4-Bromofluorobenzene	100%	60-130%

Blank Spike Summary

Job Number: C3538
Account: ERMCAWC ERM-West, Inc.
Project: TJPA - San Francisco, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO156-BS	O03116.D	1	12/31/08	MF	n/a	n/a	VO156

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

C3538-21

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
	TPH-GRO (C6-C10)	250	281	112	60-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	60-130%
2037-26-5	Toluene-D8	102%	60-130%
460-00-4	4-Bromofluorobenzene	102%	60-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C3538
Account: ERMCAWC ERM-West, Inc.
Project: TJPA - San Francisco, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C3542-1MS	M3585.D	1	12/26/08	XB	n/a	n/a	VM114
C3542-1MSD	M3586.D	1	12/26/08	XB	n/a	n/a	VM114
C3542-1	M3576.D	1	12/26/08	XB	n/a	n/a	VM114

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

C3538-22

CAS No.	Compound	C3542-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		80	51.8	65	51.1	64	1	60-130/25
71-43-2	Benzene	ND		20	18.3	92	18.7	94	2	60-130/25
108-86-1	Bromobenzene	ND		20	18.6	93	19.1	96	3	60-130/25
74-97-5	Bromochloromethane	ND		20	18.5	93	18.6	93	1	60-130/25
75-27-4	Bromodichloromethane	ND		20	18.5	93	18.9	95	2	60-130/25
75-25-2	Bromoform	ND		20	16.2	81	17.3	87	7	60-130/25
104-51-8	n-Butylbenzene	ND		20	21.8	109	21.6	108	1	60-130/25
135-98-8	sec-Butylbenzene	ND		20	20.5	103	20.9	105	2	60-130/25
98-06-6	tert-Butylbenzene	ND		20	20.1	101	20.5	103	2	60-130/25
108-90-7	Chlorobenzene	ND		20	18.7	94	19.3	97	3	60-130/25
75-00-3	Chloroethane	ND		20	21.6	108	20.9	105	3	60-130/25
67-66-3	Chloroform	ND		20	19.7	99	19.9	100	1	60-130/25
95-49-8	o-Chlorotoluene	ND		20	19.7	99	19.4	97	2	60-130/25
106-43-4	p-Chlorotoluene	ND		20	20.7	104	22.0	110	6	60-130/25
56-23-5	Carbon tetrachloride	ND		20	18.9	95	18.7	94	1	60-130/25
75-34-3	1,1-Dichloroethane	0.44	J	20	19.3	94	19.2	94	1	60-130/25
75-35-4	1,1-Dichloroethylene	ND		20	16.7	84	16.7	84	0	60-130/25
563-58-6	1,1-Dichloropropene	ND		20	18.3	92	18.4	92	1	60-130/25
96-12-8	1,2-Dibromo-3-chloropropane	ND		20	15.0	75	16.4	82	9	60-130/25
106-93-4	1,2-Dibromoethane	ND		20	16.6	83	17.1	86	3	60-130/25
107-06-2	1,2-Dichloroethane	ND		20	17.8	89	18.0	90	1	60-130/25
78-87-5	1,2-Dichloropropane	ND		20	18.6	93	19.1	96	3	60-130/25
142-28-9	1,3-Dichloropropane	ND		20	17.3	87	17.8	89	3	60-130/25
108-20-3	Di-Isopropyl ether	ND		20	19.4	97	19.9	100	3	60-130/25
594-20-7	2,2-Dichloropropane	ND		20	20.0	100	19.7	99	2	60-130/25
124-48-1	Dibromochloromethane	ND		20	18.0	90	18.6	93	3	60-130/25
75-71-8	Dichlorodifluoromethane	ND		20	26.0	130	25.4	127	2	60-130/25
156-59-2	cis-1,2-Dichloroethylene	10.7		20	29.8	96	29.7	95	0	60-130/25
10061-01-5	cis-1,3-Dichloropropene	ND		20	18.9	95	19.1	96	1	60-130/25
541-73-1	m-Dichlorobenzene	ND		20	19.4	97	20.1	101	4	60-130/25
95-50-1	o-Dichlorobenzene	ND		20	18.9	95	20.0	100	6	60-130/25
106-46-7	p-Dichlorobenzene	ND		20	19.5	98	20.4	102	5	60-130/25
156-60-5	trans-1,2-Dichloroethylene	ND		20	18.3	92	18.2	91	1	60-130/25
10061-02-6	trans-1,3-Dichloropropene	ND		20	18.6	93	19.1	96	3	60-130/25
100-41-4	Ethylbenzene	ND		20	19.3	97	19.9	100	3	60-130/25
637-92-3	Ethyl Tert Butyl Ether	ND		20	19.2	96	19.2	96	0	60-130/25

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C3538
Account: ERMCAWC ERM-West, Inc.
Project: TJPA - San Francisco, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C3542-1MS	M3585.D	1	12/26/08	XB	n/a	n/a	VM114
C3542-1MSD	M3586.D	1	12/26/08	XB	n/a	n/a	VM114
C3542-1	M3576.D	1	12/26/08	XB	n/a	n/a	VM114

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

C3538-22

CAS No.	Compound	C3542-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	ND		80	60.4	76	64.5	81	7	60-130/25
87-68-3	Hexachlorobutadiene	ND		20	24.2	121	24.6	123	2	60-130/25
98-82-8	Isopropylbenzene	ND		20	19.5	98	20.3	102	4	60-130/25
99-87-6	p-Isopropyltoluene	ND		20	20.7	104	21.1	106	2	60-130/25
108-10-1	4-Methyl-2-pentanone	ND		80	62.4	78	65.1	81	4	60-130/25
74-83-9	Methyl bromide	ND		20	23.9	120	23.0	115	4	60-130/25
74-87-3	Methyl chloride	ND		20	24.3	122	22.4	112	8	60-130/25
74-95-3	Methylene bromide	ND		20	17.5	88	17.9	90	2	60-130/25
75-09-2	Methylene chloride	ND		20	18.1	91	18.0	90	1	60-130/25
78-93-3	Methyl ethyl ketone	ND		80	58.3	73	59.6	75	2	60-130/25
1634-04-4	Methyl Tert Butyl Ether	ND		20	18.2	91	18.1	91	1	60-130/25
91-20-3	Naphthalene	ND		20	16.6	83	18.0	90	8	60-130/25
103-65-1	n-Propylbenzene	ND		20	20.5	103	20.9	105	2	60-130/25
100-42-5	Styrene	ND		20	18.8	94	18.9	95	1	60-130/25
994-05-8	Tert-Amyl Methyl Ether	ND		20	19.3	97	19.4	97	1	60-130/25
75-65-0	Tert-Butyl Alcohol	ND		100	76.8	77	78.2	78	2	60-130/25
630-20-6	1,1,1,2-Tetrachloroethane	ND		20	18.3	92	19.1	96	4	60-130/25
71-55-6	1,1,1-Trichloroethane	4.9		20	23.7	94	23.7	94	0	60-130/25
79-34-5	1,1,2,2-Tetrachloroethane	ND		20	16.4	82	17.8	89	8	60-130/25
79-00-5	1,1,2-Trichloroethane	ND		20	17.3	87	18.0	90	4	60-130/25
87-61-6	1,2,3-Trichlorobenzene	ND		20	18.7	94	20.3	102	8	60-130/25
96-18-4	1,2,3-Trichloropropane	ND		20	15.9	80	16.7	84	5	60-130/25
120-82-1	1,2,4-Trichlorobenzene	ND		20	19.7	99	20.6	103	4	60-130/25
95-63-6	1,2,4-Trimethylbenzene	ND		20	19.9	100	20.2	101	1	60-130/25
108-67-8	1,3,5-Trimethylbenzene	ND		20	20.0	100	20.4	102	2	60-130/25
127-18-4	Tetrachloroethylene	21.5		20	37.0	78	37.8	82	2	60-130/25
108-88-3	Toluene	ND		20	17.8	89	18.3	92	3	60-130/25
79-01-6	Trichloroethylene	4.0		20	22.2	91	22.7	94	2	60-130/25
75-69-4	Trichlorofluoromethane	ND		20	21.7	109	21.1	106	3	60-130/25
75-01-4	Vinyl chloride	ND		20	22.5	113	21.5	108	5	60-130/25
1330-20-7	Xylene (total)	ND		60	56.4	94	58.0	97	3	60-130/25

CAS No.	Surrogate Recoveries	MS	MSD	C3542-1	Limits
1868-53-7	Dibromofluoromethane	101%	99%	103%	60-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C3538
Account: ERMCAWC ERM-West, Inc.
Project: TJPA - San Francisco, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C3542-1MS	M3585.D	1	12/26/08	XB	n/a	n/a	VM114
C3542-1MSD	M3586.D	1	12/26/08	XB	n/a	n/a	VM114
C3542-1	M3576.D	1	12/26/08	XB	n/a	n/a	VM114

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

C3538-22

CAS No.	Surrogate Recoveries	MS	MSD	C3542-1	Limits
2037-26-5	Toluene-D8	100%	100%	105%	60-130%
460-00-4	4-Bromofluorobenzene	100%	99%	97%	60-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C3538
Account: ERMCAWC ERM-West, Inc.
Project: TJPA - San Francisco, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C3538-2MS	O03086.D	1	12/30/08	MF	n/a	n/a	VO152
C3538-2MSD	O03087.D	1	12/30/08	MF	n/a	n/a	VO152
C3538-2	O03044.D	1	12/26/08	MF	n/a	n/a	VO152

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

C3538-1, C3538-2, C3538-3, C3538-4, C3538-5, C3538-6, C3538-7, C3538-8, C3538-9, C3538-10, C3538-11, C3538-12, C3538-13

CAS No.	Compound	C3538-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		40	35.5	89	37.1	93	4	60-130/30
100-41-4	Ethylbenzene	ND		40	34.9	87	35.2	88	1	60-130/30
1634-04-4	Methyl Tert Butyl Ether	ND		40	35.7	89	38.2	96	7	60-130/30
108-88-3	Toluene	ND		40	35.0	88	35.5	89	1	60-130/30
1330-20-7	Xylene (total)	ND		120	98.9	82	101	84	2	60-130/30

CAS No.	Surrogate Recoveries	MS	MSD	C3538-2	Limits
1868-53-7	Dibromofluoromethane	98%	101%	99%	60-130%
2037-26-5	Toluene-D8	99%	98%	105%	60-130%
460-00-4	4-Bromofluorobenzene	101%	102%	101%	60-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C3538
Account: ERMCAWC ERM-West, Inc.
Project: TJPA - San Francisco, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C3538-21MS	O03118.D	1	12/31/08	MF	n/a	n/a	VO156
C3538-21MSD	O03119.D	1	12/31/08	MF	n/a	n/a	VO156
C3538-21	O03117.D	1	12/31/08	MF	n/a	n/a	VO156

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

C3538-21

CAS No.	Compound	C3538-21 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		39.8	38.9	98	37.5	94	4	60-130/30
100-41-4	Ethylbenzene	ND		39.8	30.9	78	26.1	65	17	60-130/30
108-88-3	Toluene	ND		39.8	33.8	85	31.2	78	8	60-130/30
1330-20-7	Xylene (total)	ND		120	88.8	74	75.4	63	16	60-130/30

CAS No.	Surrogate Recoveries	MS	MSD	C3538-21	Limits
1868-53-7	Dibromofluoromethane	100%	97%	101%	60-130%
2037-26-5	Toluene-D8	96%	98%	102%	60-130%
460-00-4	4-Bromofluorobenzene	96%	99%	98%	60-130%

GC Semi-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: C3538
Account: ERMCAWC ERM-West, Inc.
Project: TJPA - San Francisco, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP600-MB	GG2899.D	1	12/23/08	JH	12/23/08	OP600	GGG118

The QC reported here applies to the following samples: Method: SW846 8015B M

C3538-1, C3538-2, C3538-3, C3538-4, C3538-5, C3538-6, C3538-7, C3538-8, C3538-9, C3538-10, C3538-11, C3538-12, C3538-13, C3538-14, C3538-15, C3538-16, C3538-17, C3538-18, C3538-19

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	5.0	mg/kg	
	TPH (> C28-C40)	ND	20	10	mg/kg	

CAS No.	Surrogate Recoveries		Limits
630-01-3	Hexacosane	69%	45-140%

Method Blank Summary

Job Number: C3538
Account: ERMCAWC ERM-West, Inc.
Project: TJPA - San Francisco, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP610-MB	GG2953.D	1	12/29/08	JH	12/29/08	OP610	GGG121

The QC reported here applies to the following samples: Method: SW846 8015B M

C3538-20

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	5.0	mg/kg	
	TPH (> C28-C40)	ND	20	10	mg/kg	

CAS No.	Surrogate Recoveries		Limits
630-01-3	Hexacosane	70%	45-140%

Method Blank Summary

Job Number: C3538
Account: ERMCAWC ERM-West, Inc.
Project: TJPA - San Francisco, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP621-MB	HH1722.D	1	01/06/09	JH	01/05/09	OP621	GHH96

The QC reported here applies to the following samples: Method: SW846 8015B M

C3538-21

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	5.0	mg/kg	
	TPH (>C28-C40)	ND	20	10	mg/kg	

CAS No.	Surrogate Recoveries		Limits
630-01-3	Hexacosane	79%	45-140%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C3538
Account: ERMCAWC ERM-West, Inc.
Project: TJPA - San Francisco, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP600-BS	GG2900.D	1	12/23/08	JH	12/23/08	OP600	GGG118
OP600-BSD	GG2901.D	1	12/23/08	JH	12/23/08	OP600	GGG118

The QC reported here applies to the following samples: Method: SW846 8015B M

C3538-1, C3538-2, C3538-3, C3538-4, C3538-5, C3538-6, C3538-7, C3538-8, C3538-9, C3538-10, C3538-11, C3538-12, C3538-13, C3538-14, C3538-15, C3538-16, C3538-17, C3538-18, C3538-19

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	100	66.1	66	66.2	66	0	45-140/30
	TPH (>C28-C40)	100	77.6	78	80.0	80	3	45-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	77%	80%	45-140%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C3538
Account: ERMCAWC ERM-West, Inc.
Project: TJPA - San Francisco, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP610-BS	GG2954.D	1	12/29/08	JH	12/29/08	OP610	GGG121
OP610-BSD	GG2955.D	1	12/29/08	JH	12/29/08	OP610	GGG121

The QC reported here applies to the following samples: Method: SW846 8015B M

C3538-20

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	100	103	103	94.5	95	9	45-140/30
	TPH (>C28-C40)	100	115	115	108	108	6	45-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	82%	75%	45-140%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C3538
Account: ERMCAWC ERM-West, Inc.
Project: TJPA - San Francisco, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP621-BS	HH1723.D	1	01/06/09	JH	01/05/09	OP621	GHH96
OP621-BSD	HH1724.D	1	01/06/09	JH	01/05/09	OP621	GHH96

The QC reported here applies to the following samples: Method: SW846 8015B M

C3538-21

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	100	81.3	81	85.3	85	5	45-140/30
	TPH (>C28-C40)	100	74.8	75	78.4	78	5	45-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	82%	85%	45-140%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C3538
Account: ERMCAWC ERM-West, Inc.
Project: TJPA - San Francisco, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP600-MS	GG2915.D	10	12/24/08	JH	12/23/08	OP600	GGG119
OP600-MSD	GG2916.D	10	12/24/08	JH	12/23/08	OP600	GGG119
C3466-1	GG2894.D	10	12/23/08	JH	12/23/08	OP600	GGG118

The QC reported here applies to the following samples: Method: SW846 8015B M

C3538-1, C3538-2, C3538-3, C3538-4, C3538-5, C3538-6, C3538-7, C3538-8, C3538-9, C3538-10, C3538-11, C3538-12, C3538-13, C3538-14, C3538-15, C3538-16, C3538-17, C3538-18, C3538-19

CAS No.	Compound	C3466-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	ND		100	97.7	98	88.9	89	9	45-140/30
	TPH (>C28-C40)	979		100	1040	61	996	17* [a]	4	45-140/30

CAS No.	Surrogate Recoveries	MS	MSD	C3466-1	Limits
630-01-3	Hexacosane	66%	58%	62%	45-140%

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

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C3538
Account: ERMCAWC ERM-West, Inc.
Project: TJPA - San Francisco, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP610-MS	GG2989.D	40	12/30/08	JH	12/29/08	OP610	GGG121
OP610-MSD	GG2990.D	40	12/30/08	JH	12/29/08	OP610	GGG121
C3547-3	GG2958.D	50	12/29/08	JH	12/29/08	OP610	GGG121

The QC reported here applies to the following samples: Method: SW846 8015B M

C3538-20

CAS No.	Compound	C3547-3 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	48100		99	68400	20503* [a]	59400	11413* [a]	14	45-140/30
	TPH (>C28-C40)	ND		99	ND	0* [b]	ND	0* [b]	nc	45-140/30

CAS No.	Surrogate Recoveries	MS	MSD	C3547-3	Limits
630-01-3	Hexacosane	209%* [c]	177%* [c]	157%* [c]	45-140%

(a) Outside control limits due to high level in sample relative to spike amount.
(b) Not recoverable due to dilution required (high levels of Diesel in the sample).
(c) Outside control limits due to dilution.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C3538
Account: ERMCAWC ERM-West, Inc.
Project: TJPA - San Francisco, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP621-MS	GG3053.D	10	01/06/09	JH	01/05/09	OP621	GGG124
OP621-MSD	GG3054.D	10	01/06/09	JH	01/05/09	OP621	GGG124
C3538-21 [a]	GG3052.D	10	01/06/09	JH	01/05/09	OP621	GGG124

The QC reported here applies to the following samples: Method: SW846 8015B M

C3538-21

CAS No.	Compound	C3538-21 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	ND		100	88.5	89	88.9	89	0	45-140/30
	TPH (>C28-C40)	505		100	861	356* [b]	726	221* [b]	17	45-140/30

CAS No.	Surrogate Recoveries	MS	MSD	C3538-21	Limits
630-01-3	Hexacosane	82%	86%	82%	45-140%

(a) Sample extracted beyond hold time(1 day)due to schedule error. Motor Oil hit confirmed by MS/MSD.
(b) Outside control limits due to high level in sample relative to spike amount.

Metals Analysis

QC Data Summaries

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: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP729
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 12/30/08

Metal	RL	IDL	MB raw	final
Aluminum	10	1.3		
Antimony	2.0	.67		
Arsenic	2.0	.96		
Barium	1.0	.02		
Beryllium	1.0	.04		
Boron	1.0	.7		
Cadmium	1.0	.03	0.020	<1.0
Calcium	10	.52		
Chromium	1.0	.05	0.15	<1.0
Cobalt	1.0	.04		
Copper	1.0	.07		
Iron	10	.33		
Lead	1.0	.24	0.080	<1.0
Lithium	1.0	.19		
Magnesium	10	1.3		
Manganese	1.0	.12		
Molybdenum	1.0	.13		
Nickel	1.0	.09	0.020	<1.0
Potassium	20	5.1		
Selenium	2.0	.98		
Silicon	10	1.4		
Silver	1.0	.08		
Sodium	200	1.6		
Strontium	1.0	.02		
Thallium	2.0	.4		
Tin	5.0	.26		
Titanium	1.0	.02		
Vanadium	1.0	.02		
Zinc	2.0	.35	0.070	<2.0

Associated samples MP729: C3538-1, C3538-2, C3538-3, C3538-4, C3538-5, C3538-6, C3538-7, C3538-8, C3538-9, C3538-10, C3538-11, C3538-12, C3538-13, C3538-14, C3538-15, C3538-16, C3538-17, C3538-18, C3538-19, C3538-20

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: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP729
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 12/30/08

Metal	C3538-1 Original	MS	Spikelot MPIR1	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic					
Barium					
Beryllium					
Boron					
Cadmium	0.15	47.1	49.5	94.8	80-120
Calcium					
Chromium	33.0	81.2	49.5	97.4	80-120
Cobalt					
Copper					
Iron					
Lead	208	206	49.5	-4.0 (a)	80-120
Lithium					
Magnesium					
Manganese					
Molybdenum					
Nickel	18.1	66.5	49.5	97.8	80-120
Potassium					
Selenium					
Silicon					
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Vanadium					
Zinc	90.6	133	49.5	85.6	80-120

Associated samples MP729: C3538-1, C3538-2, C3538-3, C3538-4, C3538-5, C3538-6, C3538-7, C3538-8, C3538-9, C3538-10, C3538-11, C3538-12, C3538-13, C3538-14, C3538-15, C3538-16, C3538-17, C3538-18, C3538-19, C3538-20

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP729
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date:

Metal

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP729
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 12/30/08

Metal	C3538-1 Original	MSD	Spikelot MPIR1	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Boron						
Cadmium	0.15	48.4	50	96.5	2.7	20
Calcium						
Chromium	33.0	81.1	50	96.2	0.1	20
Cobalt						
Copper						
Iron						
Lead	208	186	50	-44.0(a)	10.2	20
Lithium						
Magnesium						
Manganese						
Molybdenum						
Nickel	18.1	67.0	50	97.8	0.7	20
Potassium						
Selenium						
Silicon						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc	90.6	164	50	146.8N(b	20.9 (c)	20

Associated samples MP729: C3538-1, C3538-2, C3538-3, C3538-4, C3538-5, C3538-6, C3538-7, C3538-8, C3538-9, C3538-10, C3538-11, C3538-12, C3538-13, C3538-14, C3538-15, C3538-16, C3538-17, C3538-18, C3538-19, C3538-20

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP729
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date:

Metal

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
(b) Spike recovery indicates possible matrix interference.
(c) RPD acceptable due to low duplicate and sample concentrations.

6.1.2

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP729
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 12/30/08 12/30/08

Metal	BSP Result	Spikelot MPIR1	% Rec	QC Limits	BSD Result	Spikelot MPIR1	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Boron									
Cadmium	46.7	50	93.4	80-120	48.0	50	96.0	2.7	
Calcium									
Chromium	48.1	50	96.2	80-120	49.5	50	99.0	2.9	
Cobalt									
Copper									
Iron									
Lead	47.8	50	95.6	80-120	49.1	50	98.2	2.7	
Lithium									
Magnesium									
Manganese									
Molybdenum									
Nickel	47.7	50	95.4	80-120	48.8	50	97.6	2.3	
Potassium									
Selenium									
Silicon									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	46.5	50	93.0	80-120	48.2	50	96.4	3.6	

Associated samples MP729: C3538-1, C3538-2, C3538-3, C3538-4, C3538-5, C3538-6, C3538-7, C3538-8, C3538-9, C3538-10, C3538-11, C3538-12, C3538-13, C3538-14, C3538-15, C3538-16, C3538-17, C3538-18, C3538-19, C3538-20

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP729
Matrix Type: SOLID

Methods: SW846 6010B
Units: ug/l

Prep Date: 12/30/08

Metal	C3538-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium	1.50	2.50	66.7 (a)	0-10
Calcium				
Chromium	340	341	0.1	0-10
Cobalt				
Copper				
Iron				
Lead	2140	2170	1.1	0-10
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	187	189	1.3	0-10
Potassium				
Selenium				
Silicon				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	933	945	1.3	0-10

Associated samples MP729: C3538-1, C3538-2, C3538-3, C3538-4, C3538-5, C3538-6, C3538-7, C3538-8, C3538-9, C3538-10, C3538-11, C3538-12, C3538-13, C3538-14, C3538-15, C3538-16, C3538-17, C3538-18, C3538-19, C3538-20

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: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP741
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 01/05/09

Metal	RL	IDL	MB raw	final
Aluminum	10	1.3		
Antimony	2.0	.67	anr	
Arsenic	2.0	.96	anr	
Barium	1.0	.02	anr	
Beryllium	1.0	.04	anr	
Boron	1.0	.7		
Cadmium	1.0	.03	0.0	<1.0
Calcium	10	.52		
Chromium	1.0	.05	0.14	<1.0
Cobalt	1.0	.04	anr	
Copper	1.0	.07	anr	
Iron	10	.33		
Lead	1.0	.24	0.14	<1.0
Lithium	1.0	.19		
Magnesium	10	1.3		
Manganese	1.0	.12		
Molybdenum	1.0	.13	anr	
Nickel	1.0	.09	0.030	<1.0
Potassium	20	5.1		
Selenium	2.0	.98	anr	
Silicon	10	1.4		
Silver	1.0	.08	anr	
Sodium	200	1.6		
Strontium	1.0	.02		
Thallium	2.0	.4	anr	
Tin	5.0	.26		
Titanium	1.0	.02		
Vanadium	1.0	.02	anr	
Zinc	2.0	.35	0.36	<2.0

Associated samples MP741: C3538-21

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

6.2.1
9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP741
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 01/05/09

Metal	C3599-1 Original	MS	Spikelot MPIR1	% Rec	QC Limits
Aluminum					
Antimony	anr				
Arsenic	anr				
Barium	anr				
Beryllium	anr				
Boron					
Cadmium	0.58	45.5	50	89.8	80-120
Calcium					
Chromium	40.5	82.8	50	84.6	80-120
Cobalt	anr				
Copper	anr				
Iron					
Lead	474	81.9	50	-784.2(a	80-120
Lithium					
Magnesium					
Manganese					
Molybdenum	anr				
Nickel	46.3	88.4	50	84.2	80-120
Potassium					
Selenium	anr				
Silicon					
Silver	anr				
Sodium					
Strontium					
Thallium	anr				
Tin					
Titanium					
Vanadium	anr				
Zinc	98.4	141	50	85.2	80-120

Associated samples MP741: C3538-21

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 amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP741
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 01/05/09

Metal	C3599-1 Original	MSD	Spikelot MPIR1	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	anr					
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Boron						
Cadmium	0.58	45.4	50	89.6	0.2	20
Calcium						
Chromium	40.5	82.8	50	84.6	0.0	20
Cobalt	anr					
Copper	anr					
Iron						
Lead	474	87.2	50	-773.6(a	6.3	20
Lithium						
Magnesium						
Manganese						
Molybdenum	anr					
Nickel	46.3	88.0	50	83.4	0.5	20
Potassium						
Selenium	anr					
Silicon						
Silver	anr					
Sodium						
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	98.4	141	50	85.2	0.0	20

Associated samples MP741: C3538-21

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 amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP741
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 01/05/09 01/05/09

Metal	BSP Result	Spikelot MPIR1	% Rec	QC Limits	BSD Result	Spikelot MPIR1	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Boron									
Cadmium	46.9	50	93.8	80-120	47.3	50	94.6	0.8	
Calcium									
Chromium	48.3	50	96.6	80-120	48.6	50	97.2	0.6	
Cobalt	anr								
Copper	anr								
Iron									
Lead	48.0	50	96.0	80-120	48.1	50	96.2	0.2	
Lithium									
Magnesium									
Manganese									
Molybdenum	anr								
Nickel	47.5	50	95.0	80-120	48.0	50	96.0	1.0	
Potassium									
Selenium	anr								
Silicon									
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	46.9	50	93.8	80-120	47.2	50	94.4	0.6	

Associated samples MP741: C3538-21

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP741
Matrix Type: SOLID

Methods: SW846 6010B
Units: ug/l

Prep Date: 01/05/09

Metal	C3599-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	6.00	6.00	0.0	0-10
Calcium				
Chromium	421	448	6.4	0-10
Cobalt	anr			
Copper	anr			
Iron				
Lead	4930	5370	8.9	0-10
Lithium				
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	481	528	9.7	0-10
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	1020	1090	6.5	0-10

Associated samples MP741: C3538-21

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

POST DIGESTATE SPIKE SUMMARY

Login Number: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP741
Matrix Type: SOLID

Methods: SW846 6010B
Units: ug/l

Prep Date: 01/05/09

Metal	Sample ml	Final ml	C3599-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Boron										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Lithium										
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silicon										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP741: C3538-21

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP778
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 01/13/09

Metal	RL	IDL	MB raw	final
Aluminum	10	1.3		
Antimony	2.0	.67	0.050	<2.0
Arsenic	2.0	.96	0.060	<2.0
Barium	1.0	.02	0.060	<1.0
Beryllium	1.0	.04	0.010	<1.0
Boron	1.0	.7		
Cadmium	1.0	.03	0.010	<1.0
Calcium	10	.52		
Chromium	1.0	.05	0.15	<1.0
Cobalt	1.0	.04	-0.020	<1.0
Copper	1.0	.07	0.28	<1.0
Iron	10	.33		
Lead	1.0	.24	0.27	<1.0
Lithium	1.0	.19		
Magnesium	10	1.3		
Manganese	1.0	.12		
Molybdenum	1.0	.13	-0.050	<1.0
Nickel	1.0	.09	0.020	<1.0
Potassium	20	5.1		
Selenium	2.0	.98	-0.25	<2.0
Silicon	10	1.4		
Silver	1.0	.08	-0.11	<1.0
Sodium	200	1.6		
Strontium	1.0	.02		
Thallium	2.0	.4	0.17	<2.0
Tin	5.0	.26		
Titanium	1.0	.02		
Vanadium	1.0	.02	0.010	<1.0
Zinc	2.0	.35	0.16	<2.0

Associated samples MP778: C3538-8A, C3538-12A

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: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP778
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 01/13/09

Metal	C3673-27 Original	MS	Spikelot MPIR1	% Rec	QC Limits
Aluminum					
Antimony	0.0	16.8	50	33.6N(a)	80-120
Arsenic	2.5	51.1	50	97.2	80-120
Barium	134	190	50	112.0	80-120
Beryllium	0.97	49.0	50	96.1	80-120
Boron					
Cadmium	0.0	48.8	50	97.6	80-120
Calcium					
Chromium	25.9	75.8	50	99.8	80-120
Cobalt	8.0	56.1	50	96.2	80-120
Copper	26.0	78.2	50	104.4	80-120
Iron					
Lead	7.3	57.1	50	99.6	80-120
Lithium					
Magnesium					
Manganese					
Molybdenum	0.36	45.0	50	89.3	80-120
Nickel	28.5	79.5	50	102.0	80-120
Potassium					
Selenium	3.0	53.0	50	100.0	80-120
Silicon					
Silver	0.0	45.8	50	91.6	80-120
Sodium					
Strontium					
Thallium	0.0	46.6	50	93.2	80-120
Tin					
Titanium					
Vanadium	42.9	96.0	50	106.2	80-120
Zinc	66.4	122	50	111.2	80-120

Associated samples MP778: C3538-8A, C3538-12A

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.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP778
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 01/13/09

Metal	C3673-27 Original	MSD	Spikelot MPIR1	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	0.0	17.8	50	35.6N(a)	5.8	20
Arsenic	2.5	49.4	50	93.8	3.4	20
Barium	134	183	50	98.0	3.8	20
Beryllium	0.97	48.4	50	94.9	1.2	20
Boron						
Cadmium	0.0	48.0	50	96.0	1.7	20
Calcium						
Chromium	25.9	75.1	50	98.4	0.9	20
Cobalt	8.0	55.0	50	94.0	2.0	20
Copper	26.0	76.9	50	101.8	1.7	20
Iron						
Lead	7.3	55.1	50	95.6	3.6	20
Lithium						
Magnesium						
Manganese						
Molybdenum	0.36	44.1	50	87.5	2.0	20
Nickel	28.5	77.2	50	97.4	2.9	20
Potassium						
Selenium	3.0	51.6	50	97.2	2.7	20
Silicon						
Silver	0.0	45.5	50	91.0	0.7	20
Sodium						
Strontium						
Thallium	0.0	45.2	50	90.4	3.1	20
Tin						
Titanium						
Vanadium	42.9	92.2	50	98.6	4.0	20
Zinc	66.4	117	50	101.2	4.2	20

Associated samples MP778: C3538-8A, C3538-12A

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.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP778
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date:			01/13/09					01/13/09	
Metal	BSP Result	Spikelot MPIR1	% Rec	QC Limits	BSD Result	Spikelot MPIR1	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony	47.0	50	94.0	80-120	48.6	50	97.2	3.3	
Arsenic	51.2	50	102.4	80-120	52.2	50	104.4	1.9	
Barium	45.4	50	90.8	80-120	46.4	50	92.8	2.2	
Beryllium	48.0	50	96.0	80-120	48.3	50	96.6	0.6	
Boron									
Cadmium	48.8	50	97.6	80-120	49.2	50	98.4	0.8	
Calcium									
Chromium	50.2	50	100.4	80-120	49.5	50	99.0	1.4	
Cobalt	49.0	50	98.0	80-120	49.2	50	98.4	0.4	
Copper	48.6	50	97.2	80-120	48.7	50	97.4	0.2	
Iron									
Lead	51.1	50	102.2	80-120	51.5	50	103.0	0.8	
Lithium									
Magnesium									
Manganese									
Molybdenum	48.9	50	97.8	80-120	49.6	50	99.2	1.4	
Nickel	49.4	50	98.8	80-120	50.1	50	100.2	1.4	
Potassium									
Selenium	50.5	50	101.0	80-120	50.8	50	101.6	0.6	
Silicon									
Silver	47.8	50	95.6	80-120	48.1	50	96.2	0.6	
Sodium									
Strontium									
Thallium	47.7	50	95.4	80-120	48.6	50	97.2	1.9	
Tin									
Titanium									
Vanadium	48.2	50	96.4	80-120	48.5	50	97.0	0.6	
Zinc	49.2	50	98.4	80-120	49.8	50	99.6	1.2	

Associated samples MP778: C3538-8A, C3538-12A

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP778
Matrix Type: SOLID

Methods: SW846 6010B
Units: ug/l

Prep Date: 01/13/09

Metal	C3673-27 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	0.00	0.00	NC	0-10
Arsenic	25.5	0.00	100.0(a)	0-10
Barium	1370	1380	0.3	0-10
Beryllium	9.90	10.5	6.1	0-10
Boron				
Cadmium	0.00	1.50		0-10
Calcium				
Chromium	264	268	1.6	0-10
Cobalt	82.1	84.0	2.3	0-10
Copper	265	256	3.7	0-10
Iron				
Lead	74.8	85.0	13.6 (a)	0-10
Lithium				
Magnesium				
Manganese				
Molybdenum	3.70	0.00	100.0(a)	0-10
Nickel	291	303	4.1	0-10
Potassium				
Selenium	30.7	0.00	100.0(a)	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Sodium				
Strontium				
Thallium	0.00	0.00	NC	0-10
Tin				
Titanium				
Vanadium	438	442	0.8	0-10
Zinc	677	683	0.8	0-10

Associated samples MP778: C3538-8A, C3538-12A

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).

POST DIGESTATE SPIKE SUMMARY

Login Number: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP778
Matrix Type: SOLID

Methods: SW846 6010B
Units: ug/l

Prep Date: 01/13/09

Metal	Sample ml	Final ml	C3673-27 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony	10	10.05	0	0	488.4	0.05	100	497.5124	98.2	-
Arsenic										
Barium										
Beryllium										
Boron										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Lithium										
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silicon										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP778: C3538-8A, C3538-12A

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP780
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 01/14/09

Metal	RL	IDL	MB raw	final
Mercury	0.042	.0017	-0.0021	<0.042

Associated samples MP780: C3538-8A, C3538-12A

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

6.4.1

9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP780
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 01/14/09

Metal	C3707-1 Original	MS	Spikelot HGPWS1	% Rec	QC Limits
Mercury	0.15	0.48	0.328	100.7	75-125

Associated samples MP780: C3538-8A, C3538-12A

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

6.4.2

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP780
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 01/14/09

Metal	C3707-1 Original	MSD	Spikelot HGPWS1	% Rec	MSD RPD	QC Limit
Mercury	0.15	0.50	0.333	105.0	4.1	20

Associated samples MP780: C3538-8A, C3538-12A

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

6.4.2

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP780
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 01/14/09 01/14/09

Metal	BSP Result	Spikelot HGPWS1	% Rec	QC Limits	BSD Result	Spikelot HGPWS1	% Rec	BSD RPD	QC Limit
Mercury	0.17	0.167	102.0	80-120	0.19	0.167	114.0	11.1	

Associated samples MP780: C3538-8A, C3538-12A

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

6.4.3

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP782
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date: 01/14/09

Metal	RL	IDL	MB raw	final
Aluminum	0.50	.063		
Antimony	0.25	.034		
Arsenic	0.25	.048		
Barium	0.10	.001		
Beryllium	0.10	.002		
Boron	0.25	.035		
Cadmium	0.10	.0015		
Calcium	25	.026		
Chromium	0.10	.0025	0.0035	<0.10
Cobalt	0.10	.002		
Copper	0.10	.0035		
Iron	0.50	.017		
Lead	0.25	.012	0.026	<0.25
Lithium	0.10	.0095		
Magnesium	0.50	.066		
Manganese	0.10	.006		
Molybdenum	0.10	.0065		
Nickel	0.10	.0045		
Potassium	25	.25		
Selenium	0.25	.049		
Silicon	0.25	.071		
Silver	0.10	.004		
Sodium	25	.081		
Strontium	0.10	.001		
Thallium	0.25	.02		
Tin	0.25	.013		
Titanium	0.10	.001		
Vanadium	0.10	.001		
Zinc	0.25	.018		

Associated samples MP782: C3538-1W, C3538-2W, C3538-3W, C3538-4W, C3538-5W, C3538-6W, C3538-8W, C3538-10W, C3538-11W, C3538-12W, C3538-20W

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: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP782
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date: 01/14/09

Metal	C3538-1W Original	MS	Spikelot MPIR1	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic					
Barium					
Beryllium					
Boron					
Cadmium					
Calcium					
Chromium	0.14	2.6	2.5	98.4	80-120
Cobalt					
Copper					
Iron					
Lead	12.8	15.7	2.50	116.0	80-120
Lithium					
Magnesium					
Manganese					
Molybdenum					
Nickel					
Potassium					
Selenium					
Silicon					
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Vanadium					
Zinc					

Associated samples MP782: C3538-1W, C3538-2W, C3538-3W, C3538-4W, C3538-5W, C3538-6W, C3538-8W, C3538-10W, C3538-11W, C3538-12W, C3538-20W

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP782
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date: 01/14/09

Metal	C3538-1W Original	MSD	Spikelot MPIR1	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Boron						
Cadmium						
Calcium						
Chromium	0.14	2.6	2.5	98.4	0.0	20
Cobalt						
Copper						
Iron						
Lead	12.8	16.1	2.50	132.0(a)	2.5	20
Lithium						
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium						
Silicon						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP782: C3538-1W, C3538-2W, C3538-3W, C3538-4W, C3538-5W, C3538-6W, C3538-8W, C3538-10W, C3538-11W, C3538-12W, C3538-20W

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 amount low relative to the sample amount. Refer to lab control or spike blank for recovery

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP782
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date:

Metal

information.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP782
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date: 01/14/09 01/14/09

Metal	BSP Result	Spikelot MPIR1	% Rec	QC Limits	BSD Result	Spikelot MPIR1	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Boron									
Cadmium									
Calcium									
Chromium	2.6	2.5	104.0	80-120	2.5	2.5	100.0	3.9	
Cobalt									
Copper									
Iron									
Lead	2.7	2.5	108.0	80-120	2.7	2.5	108.0	0.0	
Lithium									
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silicon									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

Associated samples MP782: C3538-1W, C3538-2W, C3538-3W, C3538-4W, C3538-5W, C3538-6W, C3538-8W, C3538-10W, C3538-11W, C3538-12W, C3538-20W

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP782
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: ug/l

Prep Date: 01/14/09

Metal	C3538-1W Original	SDL 5:15	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium	141	144	2.5	0-10
Cobalt				
Copper				
Iron				
Lead	12800	13000	1.4	0-10
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silicon				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP782: C3538-1W, C3538-2W, C3538-3W, C3538-4W, C3538-5W, C3538-6W, C3538-8W, C3538-10W, C3538-11W, C3538-12W, C3538-20W

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP783
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date: 01/14/09

Metal	RL	IDL	MB raw	final
Aluminum	0.50	.063		
Antimony	0.25	.034		
Arsenic	0.25	.048		
Barium	0.10	.001		
Beryllium	0.10	.002		
Boron	0.25	.035		
Cadmium	0.10	.0015		
Calcium	25	.026		
Chromium	0.10	.0025		
Cobalt	0.10	.002		
Copper	0.10	.0035		
Iron	0.50	.017		
Lead	0.25	.012	0.0025	<0.25
Lithium	0.10	.0095		
Magnesium	0.50	.066		
Manganese	0.10	.006		
Molybdenum	0.10	.0065		
Nickel	0.10	.0045		
Potassium	25	.25		
Selenium	0.25	.049		
Silicon	0.25	.071		
Silver	0.10	.004		
Sodium	25	.081		
Strontium	0.10	.001		
Thallium	0.25	.02		
Tin	0.25	.013		
Titanium	0.10	.001		
Vanadium	0.10	.001		
Zinc	0.25	.018		

Associated samples MP783: C3538-1T, C3538-2T, C3538-4T, C3538-5T, C3538-8T, C3538-10T, C3538-11T, C3538-12T

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: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP783
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date: 01/14/09

Metal	C3538-1T Original	MS	Spikelot MPIR1	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic					
Barium					
Beryllium					
Boron					
Cadmium					
Calcium					
Chromium					
Cobalt					
Copper					
Iron					
Lead	0.36	2.9	2.5	101.6	80-120
Lithium					
Magnesium					
Manganese					
Molybdenum					
Nickel					
Potassium					
Selenium					
Silicon					
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Vanadium					
Zinc					

Associated samples MP783: C3538-1T, C3538-2T, C3538-4T, C3538-5T, C3538-8T, C3538-10T, C3538-11T, C3538-12T

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP783
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date: 01/14/09

Metal	C3538-1T Original	MSD	Spikelot MPIR1	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Boron						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead	0.36	2.9	2.5	101.6	0.0	20
Lithium						
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium						
Silicon						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP783: C3538-1T, C3538-2T, C3538-4T, C3538-5T, C3538-8T, C3538-10T, C3538-11T, C3538-12T

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: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP783
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date: 01/14/09 01/14/09

Metal	BSP Result	Spikelot MPIR1	% Rec	QC Limits	BSD Result	Spikelot MPIR1	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Boron									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead	2.7	2.5	108.0	80-120	2.6	2.5	104.0	3.8	
Lithium									
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silicon									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

Associated samples MP783: C3538-1T, C3538-2T, C3538-4T, C3538-5T, C3538-8T, C3538-10T, C3538-11T, C3538-12T

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP783
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: ug/l

Prep Date: 01/14/09

Metal	C3538-1T Original	SDL 5:15	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	362	326	10.1 (a)	0-10
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silicon				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP783: C3538-1T, C3538-2T, C3538-4T, C3538-5T, C3538-8T, C3538-10T, C3538-11T, C3538-12T

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: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP831
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date: 01/26/09

Metal	RL	IDL	MB raw	final
Aluminum	0.50	.063		
Antimony	0.25	.034		
Arsenic	0.25	.048	anr	
Barium	0.10	.001		
Beryllium	0.10	.002		
Boron	0.25	.035		
Cadmium	0.10	.0015		
Calcium	25	.026		
Chromium	0.10	.0025		
Cobalt	0.10	.002		
Copper	0.10	.0035		
Iron	0.50	.017		
Lead	0.25	.012	0.0090	<0.25
Lithium	0.10	.0095		
Magnesium	0.50	.066		
Manganese	0.10	.006		
Molybdenum	0.10	.0065		
Nickel	0.10	.0045		
Potassium	25	.25		
Selenium	0.25	.049		
Silicon	0.25	.071		
Silver	0.10	.004		
Sodium	25	.081		
Strontium	0.10	.001		
Thallium	0.25	.02		
Tin	0.25	.013		
Titanium	0.10	.001		
Vanadium	0.10	.001		
Zinc	0.25	.018		

Associated samples MP831: C3538-21W

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: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP831
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date: 01/26/09

Metal	C3131-7W Original	MS	Spikelot MPIR1	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic	anr				
Barium					
Beryllium					
Boron					
Cadmium					
Calcium					
Chromium					
Cobalt					
Copper					
Iron					
Lead	1.3	3.7	2.5	96.0	80-120
Lithium					
Magnesium					
Manganese					
Molybdenum					
Nickel					
Potassium					
Selenium					
Silicon					
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Vanadium					
Zinc					

Associated samples MP831: C3538-21W

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP831
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date: 01/26/09

Metal	C3131-7W Original	MSD	Spikelot MPIR1	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	anr					
Barium						
Beryllium						
Boron						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead	1.3	3.7	2.5	96.0	0.0	20
Lithium						
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium						
Silicon						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP831: C3538-21W

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: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP831
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date: 01/26/09 01/26/09

Metal	BSP Result	Spikelot MPIR1	% Rec	QC Limits	BSD Result	Spikelot MPIR1	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony									
Arsenic	anr								
Barium									
Beryllium									
Boron									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead	2.5	2.5	100.0	80-120	2.6	2.5	104.0	3.9	
Lithium									
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silicon									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

Associated samples MP831: C3538-21W

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: C3538
Account: ERMCAWC - ERM-West, Inc.
Project: TJPA - San Francisco, CA

QC Batch ID: MP831
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: ug/l

Prep Date: 01/26/09

Metal	C3131-7W Original	SDL 5:1	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium				
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	1280	1280	0.3	0-10
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silicon				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP831: C3538-21W

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

Memorandum

Environmental Resources Management

2875 Michelle Drive
Suite 200
Irvine, CA 92606
(949) 623-4700
(949) 623-2940 (fax)

To: Chimi Yi

From: Irene Lavigne

Date: 16 January 2009

Subject: Data Review of TJPA, San Francisco - Soil Samples Collected 20 December 2008

Project Number: 0072420.03.201

Data Package: Accutest Laboratories Data Package C3538

The quality of the data was assessed and any necessary qualifiers were applied following the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review,* June 2008 and *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review,* October 2004.

HOLDING TIME AND PRESERVATION EVALUATION

The sample shipments were received at the laboratory within the method prescribed temperature and pH preservation requirements with one exception. The laboratory noted that one sample was not preserved at a pH below 2, as required; however, since the sample was analyzed within the 7-day holding time requirement for unpreserved samples, qualification of sample data was not required. The sample that exceeded preservation requirements is shown in Table 1.

The samples were prepared and analyzed within the method prescribed time period from the date of collection with one exception. One sample was analyzed for total petroleum hydrocarbons three days beyond the acceptable holding time. Detected and nondetected results for this sample were qualified as estimated (J/UJ), as shown in Table 2.

BLANK EVALUATION

The method blank sample results were nondetected for each of the target analytes. No sample data were qualified on the basis of blank detections.

BLANK SPIKE EVALUATION

The laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) recoveries were within the laboratory's limits of acceptance. No sample data were qualified as a result of LCS recoveries. The LCS recoveries indicate acceptable laboratory accuracy and precision.

MATRIX SPIKE EVALUATION

The matrix spike (MS)/matrix spike duplicate (MSD) recoveries were within the laboratory's limits of acceptance with limited exceptions; however, no sample data were qualified as a result of MS outliers. Data were not qualified if the sample used to prepare the spike sample was not a client sample, if the sample data could be verified by an associated in-control LCS recovery, or if only one recovery in a MS/MSD pair was outside control limits. Also, if the amount of a given compound in the spiked sample was greater than four times the spiked amount, or if the spike sample was diluted by a factor of 10 times or more, then sample data were not qualified. Outlying MS recoveries are presented in Table 3.

SURROGATE SPIKE EVALUATION

The surrogate recoveries were within acceptable limits with limited exceptions. Sample data for five samples were qualified as estimated (J and/or UJ) due to low surrogate recoveries. Outlying surrogate recoveries are presented in Table 4.

TPH EVALUATION

The laboratory noted that the sample chromatograms for five TPH analyses either did not resemble the typical patterns for the respective compounds or were representative of a mixture of TPH compounds. ERM qualified the affected samples as tentatively identified and estimated (NJ) as shown in Table 3.

The laboratory also noted that results for TPH analyses in the >C28 – C40 carbon range resembled a motor oil pattern. These samples are listed in Table 3; however, no qualifications were made to the data as a result of this information.

OVERALL ASSESSMENT

No data were determined to be unusable. All of the data, including qualified data, can be used for decision-making purposes; however, the limitations indicated by the applied qualifiers should be considered when using the data. The quality of the data generated during this investigation is acceptable for the preparation of technically defensible documents.

Table 1
Samples with Exceeded Preservation Requirements
TJPA - Soil Investigation
San Francisco, CA

Lab Package	Sample ID	Analysis Method	Sample pH (pH units)	pH Limits	ERM Qualifier
C3538	HOWARD B-1-1	BTEX	> 2	< 2	HT

Data package reviewed: C3538

Key:
BTEX = Benzene, toluene, ethylbenzene and xylenes
HT = No qualification required; sample was analyzed within holding time for unpreserved samples

Table 2
Samples with Exceeded Holding Times
TJPA - Soil Investigation
San Francisco, CA

Lab Package	Sample ID	Method	Holding Time (days)	# of Days Exceeded	ERM Qualifier
C3538	DRUM	TPH (C10-C28), TPH (>C28-C40)	14	3	J/UJ

Data package reviewed: C3538

Key:
TPH (C10-C28) = Total petroleum hydrocarbons (C10-C28 carbon range)
TPH (>C28-C40) = Total petroleum hydrocarbons (greater than 28 carbons in range)
J = Detected results qualified as estimated
UJ = Nondetected results qualified as estimated

Table 3
Spike Recoveries Outside of Acceptable Limits
TJPA - Soil Investigation
San Francisco, CA

Lab Package	Spike Sample ID	Associated Sample	Compound	Recovery (%)	Limit (%)	RPD	RPD Limit	Sample Result	ERM Qualifier
MS/MSD									
C3538	Batch MS/MSD	NA	Benzene	27/44	60-130	48	30	NA	--
C3538	Batch MS/MSD	NA	Ethylbenzene	17/34	60-130	67	30	NA	--
C3538	Batch MS/MSD	NA	Toluene	23/42	60-130	58	30	NA	--
C3538	Batch MS/MSD	NA	Xylene	18/32	60-130	58	30	NA	--
C3538	Batch MS/MSD	NA	TPH (>C28-C40)	61/17	45-140	4	30	NA	--
C3538	Batch MS/MSD	NA	TPH (C10-C28)	20503/11413	45-140	14	30	NA	4X
C3538	Batch MS/MSD	NA	TPH (>C28-C40)	0/0	45-140	NR	30	NA	SDO
C3538	DRUM MS/MSD	NA	TPH (>C28-C40)	356/221	45-140	17	30	NA	--
C3538	NATOMA B-1-1 MS/MSD	NA	Lead	-4/-44	80-120	10	20	NA	4X
C3538	NATOMA B-1-1 MS/MSD	NA	Zinc	86/147	80-120	21	20	NA	--
C3538	Batch MS/MSD	NA	Lead	-784/-773	80-120	6	20	NA	--

Data package reviewed: C3538

Key:
MS/MSD = Matrix spike/matrix spike duplicate
RPD = Relative percent difference
Batch = Spike sample was prepared using a non-client sample
NA = Not applicable; qualification of sample data not required
TPH (>C28-C40) = Total petroleum hydrocarbons (greater than 28 carbons in range)
TPH (C10-C28) = Total petroleum hydrocarbons (C10-C28 carbon range)
NR = Not reported
4X = The concentration of the unspiked sample was greater than 4 times the amount spiked; no qualifications necessary
SDO = No qualification required; spiked compound diluted out of sample due to dilution factor > 10

Table 4
Surrogate Recovery Results out of Acceptable Limits
TJPA - Soil Investigation
San Francisco, CA

Lab Package	Sample ID	Method	Surrogate	Recovery (%)	Limit (%)	ERM Qualifier
C3538	HOWARD B-1-1	BTEX, TPH-GRO	Dibromofluoromethane	48	60-130	J/UJ
C3538	HOWARD B-1-(5-6)	BTEX, TPH-GRO	Dibromofluoromethane	10	60-130	UJ
C3538	HOWARD B-2-2	BTEX, TPH-GRO	Dibromofluoromethane	30	60-130	J/UJ
C3538	HOWARD B-2-(7-8)	BTEX, TPH-GRO	Dibromofluoromethane	16	60-130	UJ
C3538	HOWARD B-3-1	BTEX, TPH-GRO	Dibromofluoromethane	51	60-130	J/UJ

Data package reviewed: C3538

Key:
BTEX = Benzene, toluene, ethylbenzene and xylenes
TPH-GRO = Total petroleum hydrocarbons - gasoline range organics (C6 - C10 carbon range)
J = Detected result is estimated
UJ = Nondetected result is estimated

Table 5
TPH Results
TJPA - Soil Investigation
San Francisco, CA

Lab Package	Sample ID	Compound	Reported Concentration	Units	ERM Qualifier	Notes
C3538	NATOMA B-1-(5-6)	TPH (>C28-C40)	13.0	mg/kg	--	Motor oil pattern
C3538	NATOMA B-2-2	TPH (>C28-C40)	54.9	mg/kg	--	Motor oil pattern
C3538	NATOMA B-2-(5-6)	TPH (>C28-C40)	13.9	mg/kg	--	Motor oil pattern
C3538	NATOMA B-2-(9-10)	TPH (C10-C28)	28.6	mg/kg	NJ	Not a typical diesel pattern
C3538	NATOMA B-2-(9-10)	TPH (>C28-C40)	87.6	mg/kg	NJ	Discrete peaks mixed with motor oil
C3538	NATOMA B-3-1	TPH (>C28-C40)	1650	mg/kg	--	Motor oil pattern
C3538	NATOMA B-3-(5-6)	TPH (>C28-C40)	62.4	mg/kg	--	Motor oil pattern
C3538	NATOMA B-3-(9-10)	TPH (C10-C28)	162	mg/kg	NJ	Not a typical diesel pattern
C3538	NATOMA B-3-(9-10)	TPH (>C28-C40)	360	mg/kg	NJ	Discrete peaks mixed with motor oil
C3538	NATOMA B-4-2	TPH (>C28-C40)	25.0	mg/kg	--	Motor oil pattern
C3538	NATOMA B-4-(5-6)	TPH (>C28-C40)	27.2	mg/kg	--	Motor oil pattern
C3538	NATOMA B-4-(10-11)	TPH (C10-C28)	5.72	mg/kg	NJ	Not a typical diesel pattern
C3538	NATOMA B-4-(10-11)	TPH (>C28-C40)	16.5	mg/kg	--	Motor oil pattern
C3538	HOWARD B-1-1	TPH (>C28-C40)	948	mg/kg	--	Motor oil pattern
C3538	HOWARD B-1-(5-6)	TPH (>C28-C40)	32.8	mg/kg	--	Motor oil pattern
C3538	HOWARD B-2-2	TPH (>C28-C40)	290	mg/kg	--	Motor oil pattern
C3538	HOWARD B-2-(5-6)	TPH (>C28-C40)	116	mg/kg	--	Motor oil pattern
C3538	HOWARD B-2-(7-8)	TPH (>C28-C40)	38.4	mg/kg	--	Motor oil pattern
C3538	HOWARD B-3-1	TPH (>C28-C40)	866	mg/kg	--	Motor oil pattern
C3538	HOWARD B-3-(5-6)	TPH (>C28-C40)	701	mg/kg	--	Motor oil pattern
C3538	HOWARD B-4-2	TPH (>C28-C40)	525	mg/kg	--	Motor oil pattern
C3538	DRUM	TPH (>C28-C40)	505	mg/kg	--	Motor oil pattern

Data package reviewed: C3538

Key:
TPH (>C28-C40) = Total petroleum hydrocarbons (greater than 28 carbons in range)
TPH (C10-C28) = Total petroleum hydrocarbons (C10-C28 carbon range)
mg/kg = Milligrams per kilogram
NJ = Estimated value - chromatogram did not resemble the standard hydrocarbon pattern