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RESULTS OF SHALLOW SOIL AND GRAB GROUNDWATER SAMPLING AND UST CLOSURE REPORT

Former Charles Lowe Facility
1400 Park Avenue
Emeryville, California

Prepared for:

Emeryville Properties
1400 Park Avenue
Emeryville, CA 94608

Prepared by:

DUDEK
605 Third Street
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Gwen Tellegen, P.E.
Principal Engineer

AUGUST 2015

August 12, 2015

Mr. Mark E. Detterman,Senior Hazardous Materials Specialist
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1131Harbor Bay Parkway, Suite 250
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Re: Perjury Statement Request.

"I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge."

William W. Lewerenz, Partner

Emeryville Properties, LLC.

TABLE OF CONTENTS

Section **Page No.**

LIST OF TABLES

LIST OF FIGURES

APPENDICES

CERTIFICATION

I declare under penalty of perjury that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge. Information, conclusions, and recommendations in this document have been prepared by a California Professional Geologist and a California Professional Engineer.

8-12-15

Gwen Tellegen, P.E.
Principal Engineer

Date

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1.0 INTRODUCTION

This Soil Sampling and UST Closure Report (Report) for the Former Charles Lowe Facility (1400 Park Avenue, Emeryville, California) has been prepared by Dudek on behalf of Emeryville Properties, LLC.

In a letter dated April 8, 2015, the Alameda County Health Care Services Agency (ACHCSA) approved the Work Plan for Underground Storage Tank Closure prepared by Terraphase, dated February 9, 2015 (Terraphase, 2015). This approval included following provisions: the added analysis of total petroleum hydrocarbons as motor oil (TPHmo), the advancement of boreholes by a technology other than hand augering, borehole abandonment per County standards, and the collection of groundwater samples at each of the boring locations. These requirements were revised in an email from Mr. Mark Detterman dated May 5, 2015, in which the ACHCSA approved the original Work Plan's borehole advancement using a hand auger (with soil sample collection from intervals 0 to 5 feet below ground surface (bgs) and 5 to 10 feet bgs). The email required that a groundwater sample be collected only from location HA-1 if hydrocarbons were noted in that boring.

The purpose of the work described in this Report is to obtain Site closure for the property located at 1400 Park Avenue using the criteria outlined in the State Water Resources Control Board Low Threat Underground Storage Tank Policy (LTCP).

This Report includes:

- A description of the Underground Storage Tank (UST) investigation and removal work completed prior to the preparation of this Report;
- A description of field sampling activities for soil and groundwater conducted in July 2015;
- Laboratory analytical results;
- Conceptual Site Model Table and Surrounding Well Search (Terraphase 2015), and;
- Conclusion and recommendation for Site closure.

2.0 SITE DESCRIPTION

2.1 Location

The Site is located at 1400 Park Avenue in Emeryville, California (**Figure 1**). The site consists of approximately 2.15 acres of land located on Alameda County Assessor Parcel Number 49-1033-2. The Site is zoned MUR - Mixed Use with Residential. The Assessor's Use Code for the Site is "Industrial/Light/Manufacturing." The Site is developed with a 60,000 square foot building with an adjacent paved parking lot. With the exception of small planter boxes and hedges in the northeast portion of the property, the Site surface is covered with the building, asphalt, or concrete. The Site is currently occupied by the corporate offices of Peet's Coffee.

2.2 Site History

The focus of the subsurface investigation described in this report was the collection of final confirmation soil samples and a grab groundwater adjacent to the UST excavation area (the former location of three USTs) to allow for the regulatory agency closure of the UST case.

The site history, as presented in the Terraphase Work Plan for Underground Storage Tank Closure, is summarized below (Terraphase, 2015).

- Three USTs were discovered in 1995 during Site renovation activities, after the move out by the Charles Lowe at the termination of their lease.
- Charles Lowe occupied the Site from 1976 to 1991, producing and repairing marine and industrial equipment. (ASE, 1996). From 1973 to 1991, Charles Lowe also conducted minor electroplating and metal spraying activities in small portion of the Site under the name of Chromex. The portion of the facility used by Chromex was dismantled in 1992 and a former below grade concrete vault associated with these operations activities was removed. (Alton, 1995) The ACHCSA issued a "No Further Action" letter for the former chromium vault at the Site in December 1995 following a series of subsurface investigations.
- In 1995, under ACHCSA oversight, soils were excavated and sampled beneath the former honing pit area (ASE, 1995).
- Related to these activities, four groundwater monitoring wells (MW-1, MW-2, MW-3 and MW-4) were installed at the Site between 1994 and 1996. Groundwater from these monitoring wells was sampled intermittently between 1994 and 2007.

- In 1997, a half buried 700 gallon steel Above-Ground Storage Tank (AST) was abandoned in place after it was found to contain only rainwater. (ASE, 1997). With ACHSCA approval, MW-3 was properly abandoned to accommodate the construction of a loading dock in 1999.

Underground Storage Tanks

In October 1995, three 550-gallon USTs (2 gasoline and 1 diesel/waste oil) were discovered and removed under ACHSCA oversight. During the removal, the gasoline tanks were observed to be intact. The waste oil/diesel UST was observed to have several holes. Soil staining and odor in soils was noted at 9 feet bgs, or 12-24" beneath the bottoms of the former USTs (ASE, 1996). Soils were sampled from immediately below the tanks, at 9 feet bgs. These initial 9 feet bgs samples were found to contained TPH and BTEX (see Terraphase's **Table 1A,** attached). Visually-impacted soils were over-excavated to 12 feet bgs. A total of 65.29 tons of soil were removed from beneath and around the tanks.

Following the excavation of impacted soils around the USTs, final confirmation samples were collected from 12 feet bgs at the north and south end of the former USTs. The 12 feet bgs excavation confirmation samples had no detected levels of TPH -gasoline, diesel and motor oil, benzene, toluene, ethylbenzene or xylenes (BTEX), except a low detection of xylenes in the south sample, see Terraphase's **Table 1A** (ASE, 1996). ASE noted that groundwater began flowing into the excavation at 11 feet bgs, and that the soil below groundwater appeared to be free of staining.

Following the UST excavation, ASE collected a groundwater sample from MW-1, which is located 30 feet from the UST excavation. In 1997, ASE conducted groundwater monitoring of MW1 through MW4 establishing a groundwater gradient and direction of 0.0056 feet per foot towards the west. In 2006-2007, under ACHSCA oversight, The Reynolds Group (TRG) executed a groundwater well re-development and sampling program (TRG 2007).

Historical groundwater analyses for BTEX, TPH and Fuel Oxygenates for MW1-MW4 are compiled in Terraphase's **Table 1B,** which is attached. The results of 4 groundwater sampling events conducted between 1995 and 2007 demonstrate that no significant release of petroleum hydrocarbons to groundwater exists beneath the site.

Four previous groundwater samples have been collected from MW-1, which is located within 30 feet of the former USTs. No detectable levels of TPH gasoline, TPH Diesel or BTEX were found in the three samples collected from 1996 to 2007. In the initial sampling event by ASE on November 1995, very low levels of Toluene (4 µg/L) and Xylenes (7.8 µg/L) were detected (ASE, 1996) These initial detections of Toluene and Xylenes are far below the California

Maximum Contaminant Levels (MCLs) for drinking water of 150 µg/L and 1750 µg/L), respectively and were not seen in any subsequent sampling of the monitoring well.

Well ID	Date	TPH Gasoline (mg/L)	TPH Diesel (mg/L)	TPH Motor Oil (mg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)
MW-1	11/6/95	--	<50	<250	<2	4.0	<2	7.8	--	--	--	--	--
	12/13/96	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	<5	--	--	--	--
	3/21/97	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	<6	--	--	--	--
	1/15/07	<50	<0.1	--	<1	<5	<5	<5	<1	<1	<1	<1	<10

Notes:
mg/L - milligrams per liter, µg/L - micrograms per liter, BTEX - benzene, toluene, ethylbenzene, xylenes, MTBE - methyl tert-butyl ether, DIPE - diisopropyl ether, ETBE - ethyl tert-butyl ether, TAME - tert amyl-methyl ether, TBA - tert-butyl ether

A Conceptual Site Model (CSM) was presented in the Work Plan for Underground Storage Tank Closure (Terraphase, 2015). The Terraphase CSM is presented in **Appendix A**. The CSM describes the release of petroleum hydrocarbons discovered in 1995, excavation and proper off-site disposal of 65.29 tons of hydrocarbons impacted soils, lack of water supply wells within 2,000 feet of the Site, and the absence of TPH, BTEX, and oxygenates in groundwater samples collected in 2007. The one data gap identified in the CSM, the lateral extent of hydrocarbons in the soils in the immediate vicinity of three former USTs, is investigated in this work. The delineation of lateral extent of soils impact by hand auger sampling is presented herein, allowing for Site Closure.

3.0 SAMPLING ACTIVITIES AND RESULTS

The shallow soil and groundwater sampling in the immediate vicinity of the former UST was conducted at the Site on June 17, 2015. Three hand-auger borings were advanced around the northwest, west and southwest portions of the former UST excavation at the Site (**Figure 1**). A total of six soil samples were collected from the northwestern and southwestern borings; refusal was encountered at 1.5 feet in the middle (western) boring, so no samples were collected. One turbid grab groundwater sample was collected from a temporary monitoring well constructed in of the northwestern hand auger boring (HA1) at the Site, since hydrocarbons were noted in the deepest portion of that soil boring. The soil samples were submitted to Test America, a California-Certified analytical laboratory, for laboratory analysis. The sampling results are presented in **Tables 2 and 3**. The laboratory analytical report is attached in **Appendix B**.

3.1Field Methods

3.1.1 Utility Clearance

Dudek contacted Underground Service Alert 7 days prior to the commencement of subsurface work in order to identify public utilities that may be located on the Site (Underground Service

Alert Ticket No. 271909). The area of investigation had previously been cleared of utilities during the excavation of the USTs.

3.1.2 Permits

All field activities were performed under the supervision of a California Registered Professional Engineer. A permit for the soil borings and temporary well was obtained from the Alameda County Public Works Agency (Water Resources Well Permit No. W2015-0494, see **Appendix C**). A site specific Health and Safety Plan (HASP) was followed during all field activities.

3.2 Soil Borings

On June 17, 2015, three borings advanced at the Site using a hand-auger (**Figure 1**). Soil sample were field-screened for volatile organic compounds using a hand-held photoionization device (PID). Soil boring HA1 was advanced to approximately 12 feet bgs. Soil boring HA2 was advanced to approximately 1.5 feet bgs where refusal was encountered (concrete was observed in the borehole). Soil boring HA3 was advanced to approximately 10 feet bgs. The lithologies encountered in the soil borings are described below:

- HA1 – In boring HA1, gravel with brown silt and roots were noted from just below the concrete to about 2 ft bgs, followed by silt and silt with clay to 4.25 feet bgs, silty sand from 4.25 to 5 feet bgs, silt and silt with clay to 9.5 feet bgs, and silt with gravel from 9.5 to 12 feet bgs. Hydrocarbon staining and a slight odor were noted from 9.25 to 10 feet bgs. First groundwater was encountered at approximately 9.5 feet bgs. The highest PID reading was 0.2 ppm recorded at 4 feet bgs where a soil sample was collected..Two additional soil samples were collected at 7 and 9.5 ft bgs.
- HA2 – Soil boring HA2 included silt to 1.5 feet bgs. Refusal was encountered at 1.5 feet bgs when a piece of concrete or rock was observed in the borehole. The PID reading at 1.5 feet bgs was 0.0 ppm. No soil samples were collected from this boring.
- HA3 – Soil boring included silt with gravel to 2 feet bgs, silty with clay and silt to 9 feet bgs, and silt with gravel to 10 feet bgs. A swampy/sulfur-like odor was noted from 7.5 to 9 feet bgs and hydrocarbon odor was noted from 9 to 10 feet bgs. The PID readings to from 0 to 9 feet bgs were 0.0 ppm; the reading at 10 feet bgs was 8.2 ppm. Soils samples were collected from 3, 6 ant 10 ft bgs.
-

3.3 Soil Sampling

3.3.1Soil Sampling Activities

Three soil samples were collected from soil boring HA1 at 4, 7, and 9.5 feet bgs. Three soil samples were collected from soil boring HA3 at 3, 6, and 10 feet bgs. Intact soil samples were collected using a drive sampler lined with a stainless-steel sample sleeve. Samples to be analyzed for total petroleum hydrocarbons as gasoline (TPHg) and BTEX + oxygenates were collected from the sample sleeve using a Terracore kit following EPA Method 5035 procedures. The sample sleeve was then capped with Teflon squares and sealed with plastic end caps for soil samples to be analyzed for TPH as diesel (TPHd) and motor oil (TPHmo).

The samples were labeled with the date, time and sample point identification and placed in an ice chest cooled to approximately 4° Celsius for storage and transportation to Test America of Irvine, California, a State of California Certified laboratory. All sample shipments were accompanied by a chain-of-custody (COC) record form.Soil samples were analyzed for BTEX + oxygenates by EPA Method 8260B and TPH (gasoline, diesel, and motor oil) by EPA Method 8015M.

3.3.2 Soil Sampling Results

BTEX and oxygenates were not detected at or above the laboratory reporting limits in any of the soil samples analyzed. No TPH as gasoline was detected in the vadose zone soils, collected from above groundwater, which was first observed at approximately 9.5 ft bgs. The vadose zone soil samples had detections of low concentrations of TPH diesel (<5 to 53 mg/kg) and TPH motor oil (36-350 mg/kg). In the saturated zone soils collected from 9.5 and 10 ft bgs, TPH as gasoline, diesel, and/or motor oil were detected above the laboratory reporting limits in the soil samples analyzed. Reported concentrations of TPH are presented below and in **Table 2**.

Sample Name	Boring Location Description	Sample Depth (feet bgs)	Sample Date	EPA Method 8015B		
				TPH Gasoline (mg/kg)	TPH Diesel (mg/kg)	TPH Motor Oil (mg/kg)
HA1-4'	Northwest edge of former UST Excavation	4	6/17/15	<0.390	53	350
HA1-7'		7	6/17/15	<0.380	<5.0	36
HA1-9.5'		9.5	6/17/15	2.0	1,500	4,300
HA2	Western edge of former UST between HA1 and HA3	refusal due to rock or concrete debris at 1.5'	6/17/15	No sample collected		
HA3-3'	Southwest edge of former UST Excavation	3	6/17/15	<0.320	<10	35
HA3-6'		6	6/17/15	<0.290	14	56
HA3-10'		10	6/17/15	190	1400	4,200

3.4 Groundwater Sampling

3.4.1Groundwater Sampling Activities

As required by ACHCSA, soil boring HA1 was converted into a temporary groundwater monitoring well. Sand filter pack was placed from 7.5 to 12.75 feet bgs and temporary 2’ well screen was placed from 7.5-12.5 ft bgs. Approximately 10 gallons of water was purged from the temporary well using a disposable bailer. Grab groundwater samples were collected using a disposable bailer and placed into six VOA vials and one 1-liter amber bottle. The groundwatersamples were noted to be turbid.

The grab groundwater samples were analyzed for BTEX + oxygenates by EPA Method 8260B and TPH (gasoline, diesel, and motor oil) by EPA Method 8015M.

3.4.2 Groundwater Sampling Results

No BTEX or oxygenates were detected at or above the laboratory detection limits in the grab groundwater sample. TPH as gasoline was detected at a concentration of 130 micrograms per liter (µg/L). TPH as diesel was detected at a concentration of 0.67 mg/L. TPH as motor oil was detected at a concentration of 2.0 mg/L. Reported concentrations of TPH are presented in the **Table 3**.

3.4.3 Decontamination Procedures

Decontamination procedures included a three-bucket rinse, which consisted of an Alconox® and water wash, followed by a distilled water rinse, and a final distilled water rinse. All non-disposable equipment was washed in the three-bucket rinse between samples and boring locations. During well sampling, the water level sounder probe and tape were washed in the three-bucket rinse.

3.4.4 Investigation-Derived Waste Management

Soil cuttings and decontamination water was placed in labeled, sealable 55-gallon drums. The investigation-derived waste will be temporarily stored on-Site pending proper off-site disposal.

Used personal protective equipment, such as used Nitrile gloves, was double-bagged and placed in a municipal refuse dumpster.

3.4.5 Borehole Abandonment

The boreholes were backfilled by tremmie pipe with cement grout and were resurfaced to match the existing surface as required in the Permit from Alameda County Public Works Agency.

4.0 EVALUATION FOR LOW THREAT CLOSURE

As described in the Low-Threat Underground Storage Tank Closure Policy, there are General Criteria to be achieved in order to be a candidate for regulatory site closure (SWRCB, 2012a). The General and Media-Specific Criteria and the Site achievement are presented in the sections below.

4.1 General Criteria

The SWRCB Low-Threat UST Closure General Criteria are:

a. The unauthorized release is located within the service area of a public water system;
b. The unauthorized release consists only of petroleum;
c. The unauthorized ("primary") release from the UST system has been stopped;
d. Free product has been removed to the maximum extent practicable;
e. A conceptual site model that assesses the nature, extent, and mobility of the release has been developed;
f. Secondary source has been removed to the extent practicable;
g. Soil or groundwater has been tested for methyl tert-butyl ether (MTBE) and results reported in accordance with Health and Safety Code section 25296.15; and
h. Nuisance as defined by Water Code section 13050 does not exist at the site.

4.2 Site Response – Achievement of General Criteria

a. The release is located within the East Bay Municipal Utility District;
b. The release was of petroleum products only;
c. The primary release source was from three USTs which were excavated and removed from the Site in 1995;
d. No free product was ever reported at the Site;
e. A Conceptual Site Model (CSM) was presented in the Terraphase Work Plan for Underground Storage Tank Closure (Terraphase , 2015) and updated with the information obtained from this Report's sampling and analysis. The CSM described the release of petroleum hydrocarbons discovered in 1995, soil excavation and disposal, lack of water supply wells within 2,000 feet of the Site, and the absence of TPH, BTEX, and oxygenates in groundwater samples collected from on-site monitoring wells from 1996-2007. The lateral extent of hydrocarbons in the vadose zone soils around the three former USTs was defined by soil samples collected adjacent to the UST in June 2015. No BTEX was detected in a grab groundwater sample collected from immediately adjacent to the UST excavation in June 2015. Low concentrations of degraded TPH gasoline, diesel and motor oil were found in this grab groundwater sample. The

maximum extent of this degraded TPH plume was estimated using the SWRCB's April 24, 2012, Technical Justification for Groundwater Media-Specific Criteria. Based on this document the 90% maximum plume length for the TPH gasoline at the Site would be 413 feet. This maximum plume length is shown on **Figure 2**. An evaluation of receptors within this maximum plume length was carried out, to ensure that no occupied basements exist in the area. The Updated CSM for the Site is presented in **Appendix A (***modified* from Terraphase, 2015);

f. The secondary source was removed to the extent practicable in 1995 with the excavation and proper off-site disposal of approximately 65.29 tons of hydrocarbon-impacted soil. An approximately 12-foot deep excavation was made following the removal of the three USTs; groundwater infiltrated the excavation starting at approximately 11 feet bgs;
g. Soil and groundwater were analyzed for MTBE and oxygenates, none of which were detected; and
h. No nuisance has been created by this release. An analysis of groundwater receptors was previously conducted by Terraphase and no groundwater supply wells were identified within 2,000 feet of the Site (see **Section 3.3**). Using the SWRCB Technical Justification Document (2012b), the maximum (90%) TPH gasoline plume length is predicted to be 413 feet. An evaluation of potential receptors within 413 feet down-gradient of the Site was conducted and no occupied basement spaces were identified in this area, with no resulting nuisance from groundwater related vapor intrusion to subterranean receptors.

4.3 Groundwater Receptors

As noted in the Terraphase 2015 Work Plan, no groundwater receptors were identified within 2,000 feet of the Site. A figure depicting the locations of nearby wells is presented with the CSM in **Appendix A**.

4.4 Evaluation of TPH in Groundwater

The SWRCB Technical Justification for Groundwater Media-Specific Criteria dated April 24, 2012 is a supplemental document to the LTCP document (SWRCB, 2012b). The Technical Justification document presents information about plume length studies with benzene, MTBE, and TPHg as the key constituents for groundwater plume lengths. The document reports that studies show that for a TPHg concentration of 100 µg/L, the 90th percentile plume length is 413 feet from the source area.

Since low, residual concentrations of TPHg were detected in the grab groundwater sample, the 90th percentile plume is considered to be the model for the Site. Based on the historic groundwater flow directions, a 413-foot long plume is depicted on **Figure 2**. The plume extends

onto three adjacent properties. The surrounding properties and building construction types, as identified by Mr. William Lewerenz of Emeryville properties are described in the table below; the locations of the buildings are depicted on **Figure 2**.

Figure ID Number	Property Name/Tenant Name	Address	Direction from the Site	Building Construction	Current Building Use/Comments
1	Horton Street Lofts	4250 and 4300 Horton Street	North	Masonry brick with slab floor; no basement	Residential artist lofts
2a	VN Shipping	4225 Horton Street	West-northwest	Concrete tilt-up with slab floor; no basements observed	Warehouse
2b	VS Shipping	4221 Horton Street	West	Concrete tilt-up with slab floor; no basement observed	Warehouse
2c	Elemental Led, Inc.	1460 Park Avenue	West-southwest	Concrete tilt-up with slab floor; no basement observed	LED lighting distributor
3	T.D.P. East Bay Partners, LLC	1450 Sherwin Avenue	Northwest	Masonry brick with slab; no basement	Former Sherwin-Williams Paint manufacturing plant; currently awaiting planning and permit approval for redevelopment as office space and mixed use.

None of the structures within the 90th percentile plume length depicted on **Figure 2** have identified occupied basements. Thus, there are no identified concerns related to vapor intrusion in subterranean spaces at these locations.

5.0 REQUEST FOR SITE CLOSURE

A minor release of petroleum hydrocarbons at the Site was first discovered in 1995 during UST removal. The USTs at the Site were reportedly used to store gasoline, diesel, and used oil. The recent soil and groundwater sampling results did not contain BTEX or oxygenates at or above the laboratory reporting limits (**Tables 2 and 3**). Some soil samples contained low concentrations of TPHg, TPHd, and/or TPHmo. The groundwater sample collected contained concentrations of degraded hydrocarbons (TPHg, TPHd and TPHmo). **Figure 2** depicts an estimated TPHg plume length of 413 feet from the July 2015 sample locations (SWRCB, 2012). The plume extends toward the west, northwest, and southwest based on the varying historical groundwater flow directions. The 413-foot long plume extends beneath commercial buildings whose construction are described in Section 4.4. None of the structures within the estimated 413-foot long plume are constructed with basements. Based on the age of the release (20+ years), source area removal/remediation, degradation of the constituents of concern, absence of BTEX, absence of free product, and absence of basements in nearby structures within 413 feet downgradient of the former source area, the Site meets the criteria established in the LTCP guidelines. On behalf of Emeryville Properties LLC, Dudek requests that the Site closure be granted with a No Further Action Letter issued by ACHCA for the Site.

Upon the approval of Site closure, the remaining groundwater monitoring wells will be abandoned according to Alameda County Public Works Agency standards. All investigation-derived waste will be characterized, profiled and properly disposed of off Site.

6.0 REFERENCES

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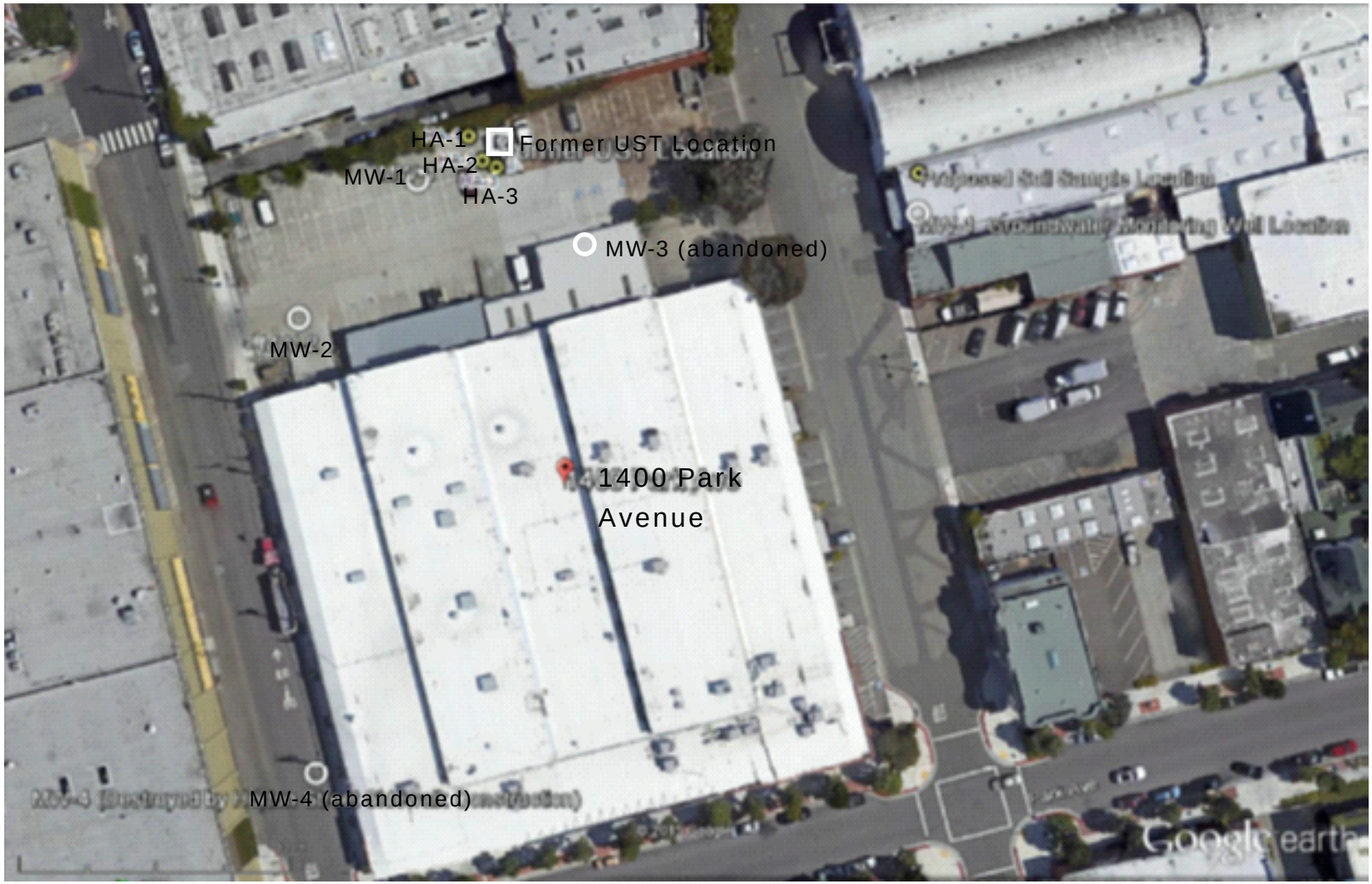
FIGURES

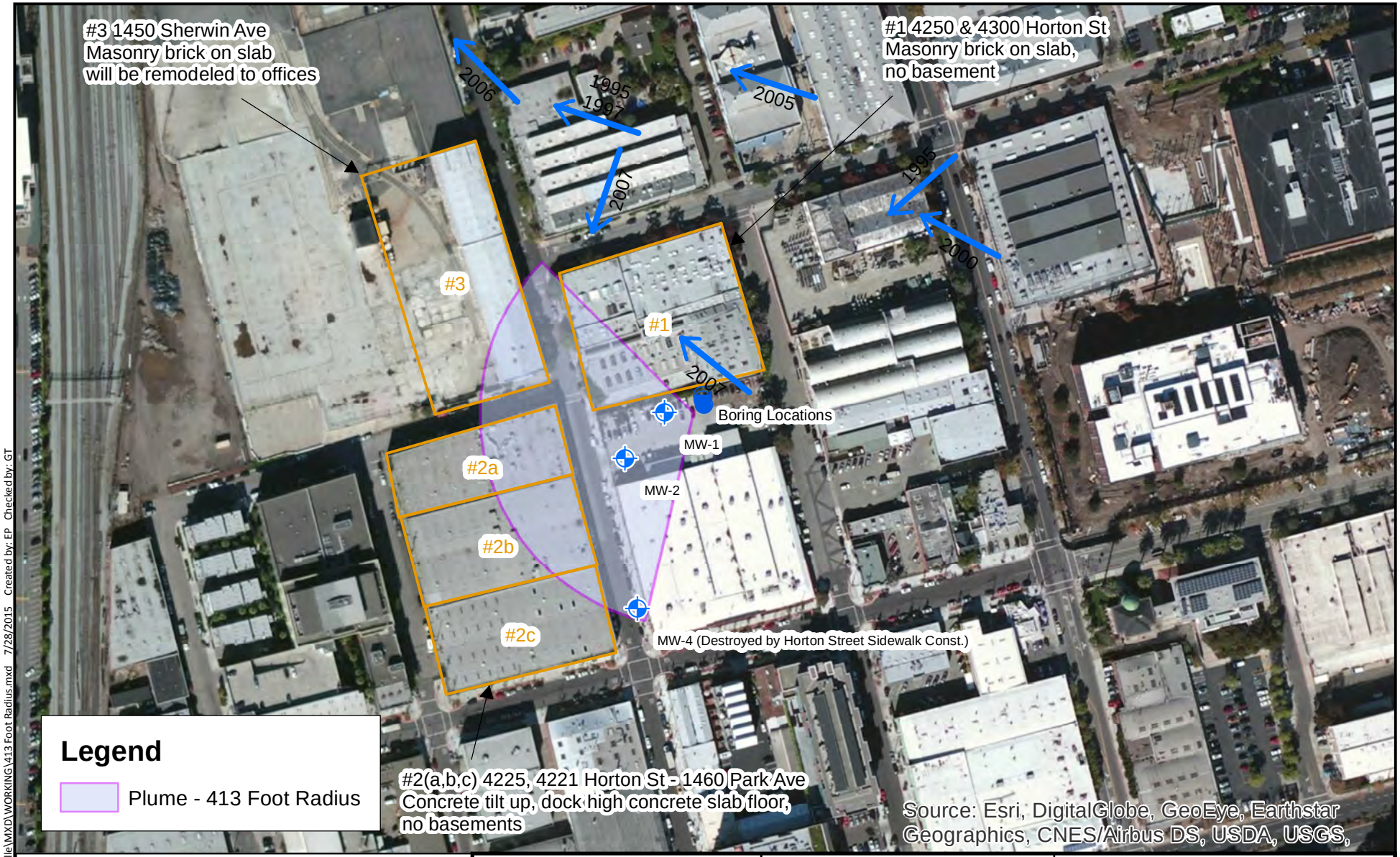


DUDEK

9029
August 2015

FIGURE 1
Site Map with Soil Boring Locations

1400 Park Avenue, Emeryville, California



N

0 120 240 360 480 Feet

Regional Groundwater Gradient
From Terraphase March 2015

90th Percentile Gasoline Plume Length of 413 feet from Technical Justification for Groundwater Media Specific Criteria - California Regional Water Quality Control Board 4/24/14

CLIENT: Emeryville Properties LLC

PROJECT: 1400 Park Ave Emeryville CA

PROJECT NUMBER: 9029

Estimated Gasoline Maximum Plume Length - 413 ft (90th Percentile)

FIGURE 2

File: Z:\Hydro\Projects\Emeryville\MXD\WORKING\413 Foot Radius.mxd 7/28/2015 Created by: EP Checked by: GT

Source:

TABLES

Table 1A - Historic Soil Samples Collected During UST Removal
1400 Park Avenue, Emeryville, CA

Sample Name	Sample Date	Sample Depth (feet bgs)	Sample Location Description	TPH Gasoline (mg/kg)	TPH Diesel (mg/kg)	TPH Motor Oil (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)
Removed Soil Samples from Bottom of UST Excavation, Before Overexcavation										
North, 9'	10/23/1995	9	North end, bottom of excavation, below gas UST	140	4,800	14,000	<0.005	0.55	0.81	7.4
Middle, 9'	10/23/1995	9	Middle, bottom of excavation below gas UST	1,300	2,600	8,000	0.41	6.1	13	110
South, 9'	10/23/1995	9	Southern end, bottom of excavation below diesel/motor oil UST	1,100	2,100	5,800	0.22	5.6	5	33
Soil Samples Remaining In Place, After Overexcavation										
North, 12'	10/23/1995	12	Northern end, bottom of excavation, after overexcavation	<1.0	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005
South, 12'	10/23/1995	12	Southern end, bottom of excavation after overexcavation	<1.0	<1.0	<5.0	<0.005	<0.005	<0.005	0.027

from (Terraphase, 2015)

Table 1B - Historic Groundwater Sample Results
1400 Park Avenue, Emeryville, CA

Well ID	Sampling Date	TPH Gasoline (ug/L)	TPH Diesel (ug/L)	TPH Motor Oil (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)
MW-1	11/6/1995	--	<50	<250	<2	**4.0**	<2	**7.8**	---	--	--	--	--
	12/13/1996	<50	<50	<500	<0.5	<0.5	<0.5	<0.5	<5	--	--	--	--
	3/21/1997	<50	<50	<500	<0.5	<0.5	<0.5	<0.5	<5	--	--	--	--
	1/15/2007	<50	<100	--	<1	<5	<5	<5	<1	<1	<1	<1	<10
MW-2	12/13/1996	--	--	--	<2	<2	<2	<2	--	--	--	--	--
	1/15/2007	<50	<100	--	<1	<5	<5	<5	<1	<1	<1	<1	<10
MW-3	12/13/1996	--	--	--	<2	<2	<2	<2	<5	--	--	--	--
	1/15/2007	D	D	D	D	D	D	D	D	D	D	D	D
MW-4	12/13/1996	<50	140**	<500	<2	<2	<2	<2	--	--	--	--	--
	1/15/2007	<50	<100	--	<1	<5	<5	<5	<1	<1	<1	<1	<10
California Drinking Water MCL		--	--	--	1	150	300	1750	<1	<1	<1	<1	<10

Notes:
MTBE- Methyl Tertiary Butyl Ether
DIPE-Diisopropyl Ether
ETBE- Ethyl tert-butyl ether
TAME- Tertiary-Amyl Methyl Ether
TBA- Tert-Butyl Alcohol
** = Chromatogram pattern does not resemble diesel standard
ddJHNWEO
D - Well Destroyed with ACHCA Approval

from (Terraphase, 2015)

Table 2 - Soil Sample Results - Hand Auger Borings around Former UST Excavation Area											
Sample Name	Boring Location Description	Sample Depth (feet bgs)	Sample Date	EPA Method 8015B			EPA Method 8260B				
				TPH Gasoline (mg/kg)	TPH Diesel (mg/kg)	TPH Motor Oil (mg/kg)	Benzene (ug/kg)	Toluene (ug/kg)	Ethylbenzene (ug/kg)	Xylenes (ug/kg)	MTBE (ug/kg)
HA1-4'	Northwest edge of former UST Excavation	4	6/17/15	<0.390	53	350	<1.8	<1.8	<1.8	<3.6	<4.4
HA1-7'		7	6/17/15	<0.380	<5.0	36	<1.9	<1.9	<1.9	<3.9	<4.8
HA1-9.5'		9.5	6/17/15	2.0	1,500	4,300	<1.7	<1.7	<1.7	<3.3	<4.2
HA2	Western edge of former UST between HA1 and HA3	refusal due to rock or concrete debris at 1.5'	6/17/15	*Unable to collect sample*							
HA3-3'	Southwest edge of former UST Excavation	3	6/17/15	<0.320	<10	35	<1.6	<1.6	<1.6	<3.2	<4.0
HA3-6'		6	6/17/15	<0.290	14	56	<1.5	<1.5	<1.5	<3.0	<3.8
HA3-10'		10	6/17/15	190	1400	4,200	<1.5	<1.5	<1.5	<3.1	<3.8

Table 3 - Grab Groundwater Sample Results - Hand Auger Borings around Former UST Excavation Area											
Sample Name	Boring Location Description	Sample Depth (feet bgs) and Turbidity (NTU)	Sample Date	EPA Method 8015M			EPA Method 8260B				
				TPH Gasoline (ug/L)	TPH Diesel (mg/L)	TPH Motor Oil (mg/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)
HA1-Grab-GW	Northwest edge of former UST Excavation	4 feet bgs 378 NTU	6/17/15	130	0.67	2.0	<0.50	<0.50	<0.50	<1.0	<0.50

APPENDICES

Appendix A

Site Conceptual Model and Surrounding Well Search

Modified from Terraphase 2015

Tabular Site Conceptual Model
UST Closure at the Former Charles Lowe Facility
1400 Park Avenue, Emeryville, CA

Site Conceptual Model Element	Sit Conceptual Model Sub-Element	Description	Data Gap	How To Address
Site location, History		The Site is located at 1400 Park Avenue in the City of Emeryville, County of Alameda, California. The Site is situated in an industrial area and is surrounded by commercial/industrial development on all sides (*see **Figure 1***). *The site is currently occupied by Peet's Coffee corporate offices. Historically, Charles Lowe Company assembled and repaired marine valves on the Site and also operated a minor electroplating and metal spraying facility in a small portion of the Site from 1973 until 1991. In 1992, the portion of the facility used by Chromex (a division of Charles Lowe Co.) was dismantled and a former below grade concrete vault associated with Chromex's activities was removed. (Alton, 1995) Based on a series of subsurface investigations, the ACHCSA issued a "No Further Action" letter for the former chromium vault at the Site in December 1995.* *In October 1995, ASE removed three 550 gallon USTs, two of which historically contained gasoline and one contained diesel/waste oil. During the removal, the gasoline tanks were noted to be intact, but several holes were observed in the waste oil/diesel UST.*	None	NA
Geology and Hydrogeology	Regional	The site is located on the tidal plane bounding the easten edge of the San Francisco Bay. The sediments are Holocene infterfluvial basin deposits consisting of poorly sorted silty clays overlying alluvial fan deposits of interfingered clayey gravel and sandy silty clay lenses (USGS, 1979) According to available geologic maps of the area, the Site is underlain by quaternary aged sediments classified as the Temescal Formation. The Temescal Formation consists of alluvial fan deposits comprised of interfingering lenses of clayey gravel, sandy silty clay and sand-clay-silt mixtures (USGS, 1957) Site is located within the Santa Clara Valley-East Bay Plain groundwater basin. Groundwater in this area has designated existing beneficial uses for municipal domestic supply, agricultural, industrial and industrial process supply. Research of nearby sites on the Website GeoTracker indicates that regional groundwater flow is generally towards the west, ranging from the northwest to the southwest and varies locally based on individual site conditions.	None	NA
	Site	The soil boring log of monitoring well 1 (MW-1), generated by Alton Geoscience During well construction at the site on December 12, 1994, indicates that Site soils are comprised of sandy clay to a depth of 10.5 feet bgs; and from 10.5 feet to 24 feet bgs, the material alternates between lenses of clayey gravel, gravel and sandy clay. The boring log indicates groundwater was encountered at a depth of approximately 10 feet bgs. Recent Groundwater gauging data, from January 2015, indicated depth to groundwater of 8.35 feet bgs at MW-1. Historical groundwater gradients at the site are relatively flat, with slow flows ranging from 0.0067-0.007 feet/foot. A gradient of 0.67 feet/foot was misreported by the Reynolds Group in 2007; the actual gradient at that time was 0.0067. Groundwater gradients have been reported to have a general trend towards the west. Earlier monitoring showed a northwest trend (Alton, 1995, ASE, 1996, 1997) but it appears that some of these reports did not adquately address the change in elevation between MW1 and MW4. In 2007 the groundwater gradient was found to be to the southwest (TRG, 2007) which was confirmed by a recent Terraphase gauging of just MW1 and MW2.	None	The groundwater gradient at the Site and surrounding areas varies in flow direction from southwest to west to the northwest.
Surface Water Bodies		The closest surface water body to site is the San Francisco Bay, located 0.45 miles west of the Site.	None	NA

Modified from Terraphase 2015

Tabular Site Conceptual Model
UST Closure at the Former Charles Lowe Facility
1400 Park Avenue, Emeryville, CA

Site Conceptual Model Element	Sit Conceptual Model Sub-Element	Description	Data Gap	How To Address
Nearby Wells		Terraphase mapped well search informaiton, provided by the Alameda County of Public Works, Water Resources Department, and determined that there are no water supply wells located within 2,000 feet of the Site. (see **Figure 3**)	None	NA
Past Releases		In October 1995, Aquascience Engineers (ASE) uncovered and removed three 550 gallon USTs from the north-central portion of the site (2 gasoline, 1 waste oil/diesel fuel) (see figure). No piping was discovered beyond the excavation. The two gas USTs appeared to be intact. Several holes were noted in the waste oil/diesel UST. Staining and odor were observed in soils 9 feet bgs, or 12-24" beneath the bottoms of the former USTs.	None	NA
Past Remediation, Sampling, and assessment	Soil	During the October 1995 UST removal by ASE, the soils below the USTs were sampled, at 9 feet bgs. After sample collection, those soils were overexcavated to a total depth of 12 feet bgs, removing a totalof 65.29 tons of contaminated soil. Although groundwater began to enter the excvavation at 11 feet bgs, ASE noted soil below groundwater appeared to be free of staining when visible. Two soil samples collected after overexcavation of visible contaminated soils, at 12' bgs, from the north and south ends of the tank excavation, were non detect for TPH - gasoline, diesel and motor oil; Benzene; Toluene; Ethylbenzene, and Total Xylenes. (ASE, 1996) See **Table 1A**. In 1997, ASE successfully abandoned a half buried 700 gallon steel Above-Ground Storage Tank (AST) which was found to contain only rainwater. In Soil sampled from the vicinity of the tank, liquid sampled from within the tank, and groundwater sampled from MW-3, no significant concentrations of petroleum hydrocarbons were detected (ASE, 1997).	None	NA
	Groundwater	Four previous groundwater samples, related to the UST investigation, have been collected from 1995 to 2007 from MW-1, which is located within 30 feet down-gradient of the former USTs, and no detectable levels of Benzene, Xylenes, Total Petroleum Hydrocarbons as gasoline (TPH gasoline) or TPH as diesel were found in the three samples collected from 1996 to 2007. Low levels of Toluene (4 ug/L) and Xylenes (7.8 ug/L) were detected in the initial sampling event by ASE on November 6, 1995. (ASE, 1996) These initial levels of Toluene Xylenes detected are far below the California Maximum Contaminant Levels (MCLs) for drinking water of 150 ug/L and 1750 ug/L) for these compounds. During the most recent groundwater sampling event In 2007, the Reynolds Group redeveloped and sampled MW-1, MW-2 and MW-4. No evidence of any release of hydrocarbons to the groundwater from the former on-site USTs and AST was found. No TPH gasoline, TPH diesel, BTEX, MTBE or other oxygenates were detected in the groundwater samples collected at the site in several montoring events conducted since 1996 -**See Table 1B**	None	NA

from Terraphase 2015

Tabular Site Conceptual Model
UST Closure at the Former Charles Lowe Facility
1400 Park Avenue, Emeryville, CA

Site Conceptual Model Element	Sit Conceptual Model Sub-Element	Description	Data Gap	How To Address
Plume	Soil	Petroleum Hydrocarbon impacted soils (staining/odor)soils were identified beneath the location of the three former USTs, located in the north central portion of the Site. Initial samples collected from below the USTs at 9 feet below ground surface were found to contained TPH and BTEX (see **Table 1A**). After the excavation of 65.29 tons of soil beneath and around the tanks, two final confirmation samples were collected at 12 feet below ground surface. These excavation confirmation had no detected levels TPH -gasoline, diesel and motor oil; Benzene; Toluene; Ethylbenzene see **Table 1A** (ASE, 1996). In June 2015 soil samples were collected from borings located northwest and southwest of the former UST excavation. No BTEX , MTBE or other oxygenates were detected in any of the soil samples analyzed. No TPH gasoline was detected in the samples collected from vadose zone soils which were collected above the shallow groundwater which was encountered at 9.5 ft bgs. Only low concentrations of TPH diesel (<5 mg/kg- 53 mg/kg) TPH motor oil (35 mg/kg-350 mg/kg) were detected in vadose zone soils In saturated soils (9.5 to 10 ft bgs) no BTEX, MTBE or oxygenates were detected. TPH as gasoline was detected at 2-190 mg/kg, TPH diesel was detected at 1400-1500 mg/kg and TPH motor oil was detected at 4,200 to 4,300 mg/kg)	None	*In June 2015, collected soil samples from three borings surrounding the former USTs. The borings were located on the northwest, west and southwest sides of the former USTs to address any potential impacts in the downgradient direction of the former USTs (See **Figure 1**). Six soil samples were collected from two soil borings (middle boring had refusal) at depths from 3-10 feet bgs based on the observation of higher PIDs discolored or odorous - see **Table 2 and Figure 1.***
	Groundwater	*Past groundwater monitoring sampling at the site have not evidenced any significant release of petroleum hydrocarbons from the former USTs to Site groundwater. No free product NAPL was ever observed in the excavation or the nearby groundwater monitoring wells, the closest of which (MW1) is located less than 50 feet from the UST excavation.* No TPH or BTEX have been detected in four monitoring events, with the exception of low levels of Toluene (4 ug/L) and Xylenes (7.8 ug/L) detected in the sampling event immediately following the UST removal in November 6, 1995. (ASE, 1996) The only detections of of Toluene and Xylenes are far below the California Maximum Contaminant Levels (MCLs) for drinking water of 150 ug/L and 1750 ug/L) for these compounds. *One turbid grab groundwater sample was collected from a temporary monitoring well in June 2015. No BTEX, MTBE or oxygenates were detected in the sample. Low concentrations of TPH gasoline (190 ug/L), TPH diesel (0.67 mg/L) and TPH Motor OIl (2 mg/L) were found in the grab sample.*	*No BTEX impacts to groundwater shown in grab sample immediately next to UST excavation.*	*The maximum down gradient extent of TPH impact to groundwater is estimated to be 413 feet based on SWRCB 2012b.*
Nearby Sites	Groundwater	Low levels of PCE, TCE and cis-1,2-DCE were detected in groundwater at concentrations consistent with other know offsite sources in the immediate vicinity of the Site, including the former Del Monte and Electro Coatings Inc. facilities. (Alton, 1996) These solvents were never used at the Site.	None	NA

Modified from Terraphase 2015

File: N:\GIS\Well Search.mxd 1/28/2015 Created by: Checked by:

SAFETY FIRST	CLIENT: Emeryville Properties LLC	Surrounding Well Search 1400 Park Avenue Site Emeryville California
	PROJECT: 1400 Park Ave Emeryville CA	
	PROJECT NUMBER: S016.001.001	Figure 3

Appendix B

Laboratory Analytical Results

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-113103-1
Client Project/Site: Emeryville

For:
Dudek & Associates
750 Second Street
Encinitas, California 92024

Attn: Gwen Tellegan

Authorized for release by:
6/24/2015 1:24:27 PM

Danielle Roberts, Senior Project Manager
(949)261-1022
danielle.roberts@testamericainc.com

Table of Contents

Sample Summary

Client: Dudek & Associates
Project/Site: Emeryville

TestAmerica Job ID: 440-113103-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-113103-1	HA1-4'	Solid	06/17/15 10:15	06/18/15 09:45
440-113103-2	HA1-7'	Solid	06/17/15 11:15	06/18/15 09:45
440-113103-3	HA1-9.5'	Solid	06/17/15 11:30	06/18/15 09:45
440-113103-4	HA3-3'	Solid	06/17/15 12:05	06/18/15 09:45
440-113103-5	HA3-6'	Solid	06/17/15 12:20	06/18/15 09:45
440-113103-6	HA3-10'	Solid	06/17/15 12:50	06/18/15 09:45
440-113103-7	HA1-Grab-GW	Water	06/17/15 15:30	06/18/15 09:45

Client Sample ID: HA1-4'

Date Collected: 06/17/15 10:15
Date Received: 06/18/15 09:45

Lab Sample ID: 440-113103-1
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.8		ug/Kg		06/19/15 11:24	06/19/15 15:39	1
Isopropyl Ether (DIPE)	ND		4.4		ug/Kg		06/19/15 11:24	06/19/15 15:39	1
Ethyl-t-butyl ether (ETBE)	ND		4.4		ug/Kg		06/19/15 11:24	06/19/15 15:39	1
Ethylbenzene	ND		1.8		ug/Kg		06/19/15 11:24	06/19/15 15:39	1
m,p-Xylene	ND		3.6		ug/Kg		06/19/15 11:24	06/19/15 15:39	1
Methyl-t-Butyl Ether (MTBE)	ND		4.4		ug/Kg		06/19/15 11:24	06/19/15 15:39	1
o-Xylene	ND		1.8		ug/Kg		06/19/15 11:24	06/19/15 15:39	1
Tert-amyl-methyl ether (TAME)	ND		4.4		ug/Kg		06/19/15 11:24	06/19/15 15:39	1
tert-Butyl alcohol (TBA)	ND		89		ug/Kg		06/19/15 11:24	06/19/15 15:39	1
Toluene	ND		1.8		ug/Kg		06/19/15 11:24	06/19/15 15:39	1
Xylenes, Total	ND		3.6		ug/Kg		06/19/15 11:24	06/19/15 15:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*110*		*79 - 123*	*06/19/15 11:24*	*06/19/15 15:39*	*1*
4-Bromofluorobenzene (Surr)	*106*		*79 - 120*	*06/19/15 11:24*	*06/19/15 15:39*	*1*
Dibromofluoromethane (Surr)	*112*		*60 - 120*	*06/19/15 11:24*	*06/19/15 15:39*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		390		ug/Kg		06/19/15 11:04	06/19/15 17:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*65 - 140*	*06/19/15 11:04*	*06/19/15 17:01*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C22)	**53**		5.0		mg/Kg		06/19/15 15:23	06/21/15 17:29	1
ORO (C23-C40)	**350**		5.0		mg/Kg		06/19/15 15:23	06/21/15 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*66*		*40 - 140*	*06/19/15 15:23*	*06/21/15 17:29*	*1*

Client Sample ID: HA1-7'

Date Collected: 06/17/15 11:15
Date Received: 06/18/15 09:45

Lab Sample ID: 440-113103-2
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.9		ug/Kg		06/19/15 11:24	06/19/15 16:07	1
Isopropyl Ether (DIPE)	ND		4.8		ug/Kg		06/19/15 11:24	06/19/15 16:07	1
Ethyl-t-butyl ether (ETBE)	ND		4.8		ug/Kg		06/19/15 11:24	06/19/15 16:07	1
Ethylbenzene	ND		1.9		ug/Kg		06/19/15 11:24	06/19/15 16:07	1
m,p-Xylene	ND		3.9		ug/Kg		06/19/15 11:24	06/19/15 16:07	1
Methyl-t-Butyl Ether (MTBE)	ND		4.8		ug/Kg		06/19/15 11:24	06/19/15 16:07	1
o-Xylene	ND		1.9		ug/Kg		06/19/15 11:24	06/19/15 16:07	1
Tert-amyl-methyl ether (TAME)	ND		4.8		ug/Kg		06/19/15 11:24	06/19/15 16:07	1
tert-Butyl alcohol (TBA)	ND		97		ug/Kg		06/19/15 11:24	06/19/15 16:07	1
Toluene	ND		1.9		ug/Kg		06/19/15 11:24	06/19/15 16:07	1
Xylenes, Total	ND		3.9		ug/Kg		06/19/15 11:24	06/19/15 16:07	1

Client Sample ID: HA1-7'

Date Collected: 06/17/15 11:15
Date Received: 06/18/15 09:45

Lab Sample ID: 440-113103-2
Matrix: Solid

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*110*		*79 - 123*	*06/19/15 11:24*	*06/19/15 16:07*	*1*
4-Bromofluorobenzene (Surr)	*107*		*79 - 120*	*06/19/15 11:24*	*06/19/15 16:07*	*1*
Dibromofluoromethane (Surr)	*110*		*60 - 120*	*06/19/15 11:24*	*06/19/15 16:07*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		380		ug/Kg		06/19/15 11:04	06/19/15 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*65 - 140*	*06/19/15 11:04*	*06/19/15 17:30*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C22)	ND		5.0		mg/Kg		06/19/15 15:23	06/21/15 17:51	1
ORO (C23-C40)	**36**		5.0		mg/Kg		06/19/15 15:23	06/21/15 17:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*73*		*40 - 140*	*06/19/15 15:23*	*06/21/15 17:51*	*1*

Client Sample ID: HA1-9.5'

Date Collected: 06/17/15 11:30
Date Received: 06/18/15 09:45

Lab Sample ID: 440-113103-3
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.7		ug/Kg		06/19/15 11:24	06/19/15 16:36	1
Isopropyl Ether (DIPE)	ND		4.2		ug/Kg		06/19/15 11:24	06/19/15 16:36	1
Ethyl-t-butyl ether (ETBE)	ND		4.2		ug/Kg		06/19/15 11:24	06/19/15 16:36	1
Ethylbenzene	ND		1.7		ug/Kg		06/19/15 11:24	06/19/15 16:36	1
m,p-Xylene	ND		3.3		ug/Kg		06/19/15 11:24	06/19/15 16:36	1
Methyl-t-Butyl Ether (MTBE)	ND		4.2		ug/Kg		06/19/15 11:24	06/19/15 16:36	1
o-Xylene	ND		1.7		ug/Kg		06/19/15 11:24	06/19/15 16:36	1
Tert-amyl-methyl ether (TAME)	ND		4.2		ug/Kg		06/19/15 11:24	06/19/15 16:36	1
tert-Butyl alcohol (TBA)	ND		83		ug/Kg		06/19/15 11:24	06/19/15 16:36	1
Toluene	ND		1.7		ug/Kg		06/19/15 11:24	06/19/15 16:36	1
Xylenes, Total	ND		3.3		ug/Kg		06/19/15 11:24	06/19/15 16:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*111*		*79 - 123*	*06/19/15 11:24*	*06/19/15 16:36*	*1*
4-Bromofluorobenzene (Surr)	*148*	*X*	*79 - 120*	*06/19/15 11:24*	*06/19/15 16:36*	*1*
Dibromofluoromethane (Surr)	*111*		*60 - 120*	*06/19/15 11:24*	*06/19/15 16:36*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	**2000**		340		ug/Kg		06/19/15 11:04	06/19/15 17:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*65 - 140*	*06/19/15 11:04*	*06/19/15 17:59*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C22)	**1500**		250		mg/Kg		06/19/15 15:23	06/22/15 12:47	50

Client Sample ID: HA1-9.5'

Lab Sample ID: 440-113103-3

Date Collected: 06/17/15 11:30

Matrix: Solid

Date Received: 06/18/15 09:45

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ORO (C23-C40)	**4300**		250		mg/Kg		06/19/15 15:23	06/22/15 12:47	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*11*	*X*	*40 - 140*	*06/19/15 15:23*	*06/22/15 12:47*	*50*

Client Sample ID: HA3-3'

Lab Sample ID: 440-113103-4

Date Collected: 06/17/15 12:05

Matrix: Solid

Date Received: 06/18/15 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.6		ug/Kg		06/19/15 11:24	06/19/15 17:04	1
Isopropyl Ether (DIPE)	ND		4.0		ug/Kg		06/19/15 11:24	06/19/15 17:04	1
Ethyl-t-butyl ether (ETBE)	ND		4.0		ug/Kg		06/19/15 11:24	06/19/15 17:04	1
Ethylbenzene	ND		1.6		ug/Kg		06/19/15 11:24	06/19/15 17:04	1
m,p-Xylene	ND		3.2		ug/Kg		06/19/15 11:24	06/19/15 17:04	1
Methyl-t-Butyl Ether (MTBE)	ND		4.0		ug/Kg		06/19/15 11:24	06/19/15 17:04	1
o-Xylene	ND		1.6		ug/Kg		06/19/15 11:24	06/19/15 17:04	1
Tert-amyl-methyl ether (TAME)	ND		4.0		ug/Kg		06/19/15 11:24	06/19/15 17:04	1
tert-Butyl alcohol (TBA)	ND		79		ug/Kg		06/19/15 11:24	06/19/15 17:04	1
Toluene	ND		1.6		ug/Kg		06/19/15 11:24	06/19/15 17:04	1
Xylenes, Total	ND		3.2		ug/Kg		06/19/15 11:24	06/19/15 17:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*112*		*79 - 123*	*06/19/15 11:24*	*06/19/15 17:04*	*1*
4-Bromofluorobenzene (Surr)	*108*		*79 - 120*	*06/19/15 11:24*	*06/19/15 17:04*	*1*
Dibromofluoromethane (Surr)	*111*		*60 - 120*	*06/19/15 11:24*	*06/19/15 17:04*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		320		ug/Kg		06/20/15 14:20	06/20/15 17:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*57*	*X*	*65 - 140*	*06/20/15 14:20*	*06/20/15 17:05*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C22)	ND		10		mg/Kg		06/19/15 15:23	06/22/15 11:19	1
ORO (C23-C40)	**35**		10		mg/Kg		06/19/15 15:23	06/22/15 11:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*73*		*40 - 140*	*06/19/15 15:23*	*06/22/15 11:19*	*1*

Client Sample ID: HA3-6'

Lab Sample ID: 440-113103-5

Date Collected: 06/17/15 12:20

Matrix: Solid

Date Received: 06/18/15 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.5		ug/Kg		06/19/15 11:24	06/19/15 17:32	1
Isopropyl Ether (DIPE)	ND		3.8		ug/Kg		06/19/15 11:24	06/19/15 17:32	1

Client Sample ID: HA3-6'

Date Collected: 06/17/15 12:20
Date Received: 06/18/15 09:45

Lab Sample ID: 440-113103-5

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl-t-butyl ether (ETBE)	ND		3.8		ug/Kg		06/19/15 11:24	06/19/15 17:32	1
Ethylbenzene	ND		1.5		ug/Kg		06/19/15 11:24	06/19/15 17:32	1
m,p-Xylene	ND		3.0		ug/Kg		06/19/15 11:24	06/19/15 17:32	1
Methyl-t-Butyl Ether (MTBE)	ND		3.8		ug/Kg		06/19/15 11:24	06/19/15 17:32	1
o-Xylene	ND		1.5		ug/Kg		06/19/15 11:24	06/19/15 17:32	1
Tert-amyl-methyl ether (TAME)	ND		3.8		ug/Kg		06/19/15 11:24	06/19/15 17:32	1
tert-Butyl alcohol (TBA)	ND		76		ug/Kg		06/19/15 11:24	06/19/15 17:32	1
Toluene	ND		1.5		ug/Kg		06/19/15 11:24	06/19/15 17:32	1
Xylenes, Total	ND		3.0		ug/Kg		06/19/15 11:24	06/19/15 17:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*110*		*79 - 123*	*06/19/15 11:24*	*06/19/15 17:32*	*1*
4-Bromofluorobenzene (Surr)	*106*		*79 - 120*	*06/19/15 11:24*	*06/19/15 17:32*	*1*
Dibromofluoromethane (Surr)	*111*		*60 - 120*	*06/19/15 11:24*	*06/19/15 17:32*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		290		ug/Kg		06/19/15 11:04	06/19/15 19:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*65 - 140*	*06/19/15 11:04*	*06/19/15 19:55*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C22)	**14**		5.0		mg/Kg		06/19/15 15:23	06/21/15 18:56	1
ORO (C23-C40)	**56**		5.0		mg/Kg		06/19/15 15:23	06/21/15 18:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*71*		*40 - 140*	*06/19/15 15:23*	*06/21/15 18:56*	*1*

Client Sample ID: HA3-10'

Date Collected: 06/17/15 12:50
Date Received: 06/18/15 09:45

Lab Sample ID: 440-113103-6

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.5		ug/Kg		06/19/15 11:24	06/20/15 00:34	1
Isopropyl Ether (DIPE)	ND		3.8		ug/Kg		06/19/15 11:24	06/20/15 00:34	1
Ethyl-t-butyl ether (ETBE)	ND		3.8		ug/Kg		06/19/15 11:24	06/20/15 00:34	1
Ethylbenzene	ND		1.5		ug/Kg		06/19/15 11:24	06/20/15 00:34	1
m,p-Xylene	ND		3.1		ug/Kg		06/19/15 11:24	06/20/15 00:34	1
Methyl-t-Butyl Ether (MTBE)	ND		3.8		ug/Kg		06/19/15 11:24	06/20/15 00:34	1
o-Xylene	ND		1.5		ug/Kg		06/19/15 11:24	06/20/15 00:34	1
Tert-amyl-methyl ether (TAME)	ND		3.8		ug/Kg		06/19/15 11:24	06/20/15 00:34	1
tert-Butyl alcohol (TBA)	ND		77		ug/Kg		06/19/15 11:24	06/20/15 00:34	1
Toluene	ND		1.5		ug/Kg		06/19/15 11:24	06/20/15 00:34	1
Xylenes, Total	ND		3.1		ug/Kg		06/19/15 11:24	06/20/15 00:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*108*		*79 - 123*	*06/19/15 11:24*	*06/20/15 00:34*	*1*
4-Bromofluorobenzene (Surr)	*112*	*	*79 - 120*	*06/19/15 11:24*	*06/20/15 00:34*	*1*

Client Sample ID: HA3-10'

Date Collected: 06/17/15 12:50
Date Received: 06/18/15 09:45

Lab Sample ID: 440-113103-6
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*118*		*60 - 120*	*06/19/15 11:24*	*06/20/15 00:34*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	**190000**		120000		ug/Kg		06/19/15 08:35	06/21/15 15:15	400

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*65 - 140*	*06/19/15 08:35*	*06/21/15 15:15*	*400*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C22)	**1400**		250		mg/Kg		06/19/15 15:23	06/22/15 14:58	50
ORO (C23-C40)	**4200**		250		mg/Kg		06/19/15 15:23	06/22/15 14:58	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*19*	*X*	*40 - 140*	*06/19/15 15:23*	*06/22/15 14:58*	*50*

Client Sample ID: HA1-Grab-GW

Date Collected: 06/17/15 15:30
Date Received: 06/18/15 09:45

Lab Sample ID: 440-113103-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			06/22/15 23:58	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			06/22/15 23:58	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			06/22/15 23:58	1
Ethylbenzene	ND		0.50		ug/L			06/22/15 23:58	1
m,p-Xylene	ND		1.0		ug/L			06/22/15 23:58	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			06/22/15 23:58	1
o-Xylene	ND		0.50		ug/L			06/22/15 23:58	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			06/22/15 23:58	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			06/22/15 23:58	1
Toluene	ND		0.50		ug/L			06/22/15 23:58	1
Xylenes, Total	ND		1.0		ug/L			06/22/15 23:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*06/22/15 23:58*	*1*
Dibromofluoromethane (Surr)	*95*		*76 - 132*		*06/22/15 23:58*	*1*
Toluene-d8 (Surr)	*106*		*80 - 128*		*06/22/15 23:58*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	**130**		50		ug/L			06/19/15 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*65 - 140*		*06/19/15 16:07*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C22)	**0.67**		0.50		mg/L		06/19/15 11:19	06/22/15 11:19	1
ORO (C23-C40)	**2.0**		0.50		mg/L		06/19/15 11:19	06/22/15 11:19	1

Client Sample Results

Client: Dudek & Associates
Project/Site: Emeryville

TestAmerica Job ID: 440-113103-1

Client Sample ID: HA1-Grab-GW
Date Collected: 06/17/15 15:30
Date Received: 06/18/15 09:45

Lab Sample ID: 440-113103-7
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	62		45 - 120	06/19/15 11:19	06/22/15 11:19	1

Method Summary

Client: Dudek & Associates
Project/Site: Emeryville

TestAmerica Job ID: 440-113103-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
8015B	Gasoline Range Organics - (GC)	SW846	TAL IRV
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL IRV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Lab Chronicle

Client: Dudek & Associates
Project/Site: Emeryville

TestAmerica Job ID: 440-113103-1

Client Sample ID: HA1-4'
Date Collected: 06/17/15 10:15
Date Received: 06/18/15 09:45

Lab Sample ID: 440-113103-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.62 g	10 mL	262444	06/19/15 11:24	HR	TAL IRV
Total/NA	Analysis	8260B		1	5.62 g	10 mL	262372	06/19/15 15:39	AL	TAL IRV
Total/NA	Prep	5035			5.15 g	10 mL	262436	06/19/15 11:04	TL	TAL IRV
Total/NA	Analysis	8015B		1	5.15 g	10 mL	262450	06/19/15 17:01	AK	TAL IRV
Total/NA	Prep	3546			15.04 g	1 mL	262514	06/19/15 15:23	QCT	TAL IRV
Total/NA	Analysis	8015B		1	15.04 g	1 mL	262628	06/21/15 17:29	KW	TAL IRV

Client Sample ID: HA1-7'
Date Collected: 06/17/15 11:15
Date Received: 06/18/15 09:45

Lab Sample ID: 440-113103-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.17 g	10 mL	262444	06/19/15 11:24	HR	TAL IRV
Total/NA	Analysis	8260B		1	5.17 g	10 mL	262372	06/19/15 16:07	AL	TAL IRV
Total/NA	Prep	5035			5.28 g	10 mL	262436	06/19/15 11:04	TL	TAL IRV
Total/NA	Analysis	8015B		1	5.28 g	10 mL	262450	06/19/15 17:30	AK	TAL IRV
Total/NA	Prep	3546			15.02 g	1 mL	262514	06/19/15 15:23	QCT	TAL IRV
Total/NA	Analysis	8015B		1	15.02 g	1 mL	262628	06/21/15 17:51	KW	TAL IRV

Client Sample ID: HA1-9.5'
Date Collected: 06/17/15 11:30
Date Received: 06/18/15 09:45

Lab Sample ID: 440-113103-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.02 g	10 mL	262444	06/19/15 11:24	HR	TAL IRV
Total/NA	Analysis	8260B		1	6.02 g	10 mL	262372	06/19/15 16:36	AL	TAL IRV
Total/NA	Prep	5035			5.91 g	10 mL	262436	06/19/15 11:04	TL	TAL IRV
Total/NA	Analysis	8015B		1	5.91 g	10 mL	262450	06/19/15 17:59	AK	TAL IRV
Total/NA	Prep	3546			14.99 g	1 mL	262514	06/19/15 15:23	QCT	TAL IRV
Total/NA	Analysis	8015B		50	14.99 g	1 mL	262721	06/22/15 12:47	KW	TAL IRV

Client Sample ID: HA3-3'
Date Collected: 06/17/15 12:05
Date Received: 06/18/15 09:45

Lab Sample ID: 440-113103-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.3 g	10 mL	262444	06/19/15 11:24	HR	TAL IRV
Total/NA	Analysis	8260B		1	6.3 g	10 mL	262372	06/19/15 17:04	AL	TAL IRV
Total/NA	Prep	5035			6.23 g	10 mL	262611	06/20/15 14:20	AK	TAL IRV
Total/NA	Analysis	8015B		1	6.23 g	10 mL	262606	06/20/15 17:05	TL	TAL IRV
Total/NA	Prep	3546			7.51 g	1 mL	262514	06/19/15 15:23	QCT	TAL IRV
Total/NA	Analysis	8015B		1	7.51 g	1 mL	262721	06/22/15 11:19	KW	TAL IRV

Lab Chronicle

Client: Dudek & Associates
Project/Site: Emeryville

TestAmerica Job ID: 440-113103-1

Client Sample ID: HA3-6'

Date Collected: 06/17/15 12:20
Date Received: 06/18/15 09:45

Lab Sample ID: 440-113103-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.56 g	10 mL	262444	06/19/15 11:24	HR	TAL IRV
Total/NA	Analysis	8260B		1	6.56 g	10 mL	262372	06/19/15 17:32	AL	TAL IRV
Total/NA	Prep	5035			6.87 g	10 mL	262436	06/19/15 11:04	TL	TAL IRV
Total/NA	Analysis	8015B		1	6.87 g	10 mL	262450	06/19/15 19:55	AK	TAL IRV
Total/NA	Prep	3546			15.03 g	1 mL	262514	06/19/15 15:23	QCT	TAL IRV
Total/NA	Analysis	8015B		1	15.03 g	1 mL	262628	06/21/15 18:56	KW	TAL IRV

Client Sample ID: HA3-10'

Date Collected: 06/17/15 12:50
Date Received: 06/18/15 09:45

Lab Sample ID: 440-113103-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.52 g	10 mL	262444	06/19/15 11:24	HR	TAL IRV
Total/NA	Analysis	8260B		1	6.52 g	10 mL	262533	06/20/15 00:34	WK	TAL IRV
Total/NA	Prep	5035			6.44 g	5 mL	262396	06/19/15 08:35	HR	TAL IRV
Total/NA	Analysis	8015B		400	6.44 g	5 mL	262640	06/21/15 15:15	IM	TAL IRV
Total/NA	Prep	3546			15.00 g	1 mL	262514	06/19/15 15:23	QCT	TAL IRV
Total/NA	Analysis	8015B		50	15.00 g	1 mL	262721	06/22/15 14:58	KW	TAL IRV

Client Sample ID: HA1-Grab-GW

Date Collected: 06/17/15 15:30
Date Received: 06/18/15 09:45

Lab Sample ID: 440-113103-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	262829	06/22/15 23:58	LB	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	262391	06/19/15 16:07	AK	TAL IRV
Total/NA	Prep	3510C			1000 mL	1 mL	262375	06/19/15 11:19	AP	TAL IRV
Total/NA	Analysis	8015B		1	1000 mL	1 mL	262726	06/22/15 11:19	KW	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-262372/4
Matrix: Solid
Analysis Batch: 262372

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/Kg			06/19/15 08:06	1
Isopropyl Ether (DIPE)	ND		5.0		ug/Kg			06/19/15 08:06	1
Ethyl-t-butyl ether (ETBE)	ND		5.0		ug/Kg			06/19/15 08:06	1
Ethylbenzene	ND		2.0		ug/Kg			06/19/15 08:06	1
m,p-Xylene	ND		4.0		ug/Kg			06/19/15 08:06	1
Methyl-t-Butyl Ether (MTBE)	ND		5.0		ug/Kg			06/19/15 08:06	1
o-Xylene	ND		2.0		ug/Kg			06/19/15 08:06	1
Tert-amyl-methyl ether (TAME)	ND		5.0		ug/Kg			06/19/15 08:06	1
tert-Butyl alcohol (TBA)	ND		100		ug/Kg			06/19/15 08:06	1
Toluene	ND		2.0		ug/Kg			06/19/15 08:06	1
Xylenes, Total	ND		4.0		ug/Kg			06/19/15 08:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*107*		*79 - 123*		*06/19/15 08:06*	*1*
4-Bromofluorobenzene (Surr)	*104*		*79 - 120*		*06/19/15 08:06*	*1*
Dibromofluoromethane (Surr)	*109*		*60 - 120*		*06/19/15 08:06*	*1*

Lab Sample ID: LCS 440-262372/5
Matrix: Solid
Analysis Batch: 262372

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	47.1		ug/Kg		94	65 - 120
Isopropyl Ether (DIPE)	50.0	51.3		ug/Kg		103	60 - 140
Ethyl-t-butyl ether (ETBE)	50.0	50.0		ug/Kg		100	60 - 140
Ethylbenzene	50.0	48.6		ug/Kg		97	70 - 125
m,p-Xylene	50.0	47.8		ug/Kg		96	70 - 125
Methyl-t-Butyl Ether (MTBE)	50.0	49.4		ug/Kg		99	60 - 140
o-Xylene	50.0	47.9		ug/Kg		96	70 - 125
Tert-amyl-methyl ether (TAME)	50.0	49.1		ug/Kg		98	60 - 145
tert-Butyl alcohol (TBA)	500	535		ug/Kg		107	70 - 135
Toluene	50.0	48.9		ug/Kg		98	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*105*		*79 - 123*
4-Bromofluorobenzene (Surr)	*100*		*79 - 120*
Dibromofluoromethane (Surr)	*107*		*60 - 120*

Lab Sample ID: LCSD 440-262372/9
Matrix: Solid
Analysis Batch: 262372

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	50.0	48.3		ug/Kg		97	65 - 120	3	20
Isopropyl Ether (DIPE)	50.0	52.1		ug/Kg		104	60 - 140	2	20
Ethyl-t-butyl ether (ETBE)	50.0	50.2		ug/Kg		100	60 - 140	0	20
Ethylbenzene	50.0	49.0		ug/Kg		98	70 - 125	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 440-262372/9
Matrix: Solid
Analysis Batch: 262372

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
m,p-Xylene			50.0	48.2		ug/Kg		96	70 - 125	1	20
Methyl-t-Butyl Ether (MTBE)			50.0	49.2		ug/Kg		98	60 - 140	0	25
o-Xylene			50.0	47.2		ug/Kg		94	70 - 125	1	20
Tert-amyl-methyl ether (TAME)			50.0	48.6		ug/Kg		97	60 - 145	1	20
tert-Butyl alcohol (TBA)			500	535		ug/Kg		107	70 - 135	0	20
Toluene			50.0	48.9		ug/Kg		98	70 - 125	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*104*		*79 - 123*
4-Bromofluorobenzene (Surr)	*102*		*79 - 120*
Dibromofluoromethane (Surr)	*106*		*60 - 120*

Lab Sample ID: MB 440-262533/3
Matrix: Solid
Analysis Batch: 262533

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/Kg			06/19/15 18:51	1
Isopropyl Ether (DIPE)	ND		5.0		ug/Kg			06/19/15 18:51	1
Ethyl-t-butyl ether (ETBE)	ND		5.0		ug/Kg			06/19/15 18:51	1
Ethylbenzene	ND		2.0		ug/Kg			06/19/15 18:51	1
m,p-Xylene	ND		4.0		ug/Kg			06/19/15 18:51	1
Methyl-t-Butyl Ether (MTBE)	ND		5.0		ug/Kg			06/19/15 18:51	1
o-Xylene	ND		2.0		ug/Kg			06/19/15 18:51	1
Tert-amyl-methyl ether (TAME)	ND		5.0		ug/Kg			06/19/15 18:51	1
tert-Butyl alcohol (TBA)	ND		100		ug/Kg			06/19/15 18:51	1
Toluene	ND		2.0		ug/Kg			06/19/15 18:51	1
Xylenes, Total	ND		4.0		ug/Kg			06/19/15 18:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*79 - 123*		*06/19/15 18:51*	*1*
4-Bromofluorobenzene (Surr)	*101*		*79 - 120*		*06/19/15 18:51*	*1*
Dibromofluoromethane (Surr)	*102*		*60 - 120*		*06/19/15 18:51*	*1*

Lab Sample ID: LCS 440-262533/4
Matrix: Solid
Analysis Batch: 262533

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			50.0	50.1		ug/Kg		100	65 - 120		
Isopropyl Ether (DIPE)			50.0	56.0		ug/Kg		112	60 - 140		
Ethyl-t-butyl ether (ETBE)			50.0	57.7		ug/Kg		115	60 - 140		
Ethylbenzene			50.0	51.4		ug/Kg		103	70 - 125		
m,p-Xylene			50.0	53.8		ug/Kg		108	70 - 125		
Methyl-t-Butyl Ether (MTBE)			50.0	53.9		ug/Kg		108	60 - 140		
o-Xylene			50.0	52.2		ug/Kg		104	70 - 125		
Tert-amyl-methyl ether (TAME)			50.0	58.8		ug/Kg		118	60 - 145		
tert-Butyl alcohol (TBA)			500	563		ug/Kg		113	70 - 135		

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-262533/4
Matrix: Solid
Analysis Batch: 262533

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Toluene			50.0	51.6		ug/Kg		103	70 - 125		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*103*		*79 - 123*
4-Bromofluorobenzene (Surr)	*98*		*79 - 120*
Dibromofluoromethane (Surr)	*103*		*60 - 120*

Lab Sample ID: LCSD 440-262533/5
Matrix: Solid
Analysis Batch: 262533

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			50.0	50.1		ug/Kg		100	65 - 120	0	20
Isopropyl Ether (DIPE)			50.0	56.5		ug/Kg		113	60 - 140	1	20
Ethyl-t-butyl ether (ETBE)			50.0	58.1		ug/Kg		116	60 - 140	1	20
Ethylbenzene			50.0	51.2		ug/Kg		102	70 - 125	0	20
m,p-Xylene			50.0	53.2		ug/Kg		106	70 - 125	1	20
Methyl-t-Butyl Ether (MTBE)			50.0	53.7		ug/Kg		107	60 - 140	1	25
o-Xylene			50.0	51.9		ug/Kg		104	70 - 125	1	20
Tert-amyl-methyl ether (TAME)			50.0	59.1		ug/Kg		118	60 - 145	1	20
tert-Butyl alcohol (TBA)			500	555		ug/Kg		111	70 - 135	1	20
Toluene			50.0	50.6		ug/Kg		101	70 - 125	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*102*		*79 - 123*
4-Bromofluorobenzene (Surr)	*97*		*79 - 120*
Dibromofluoromethane (Surr)	*104*		*60 - 120*

Lab Sample ID: 440-113063-A-15 MS
Matrix: Solid
Analysis Batch: 262533

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	ND		50.2	51.0		ug/Kg		102	65 - 130		
Isopropyl Ether (DIPE)	ND		50.2	56.3		ug/Kg		112	60 - 150		
Ethyl-t-butyl ether (ETBE)	ND		50.2	60.4		ug/Kg		120	60 - 145		
Ethylbenzene	ND		50.2	51.1		ug/Kg		102	70 - 135		
m,p-Xylene	ND		50.2	52.8		ug/Kg		105	70 - 130		
Methyl-t-Butyl Ether (MTBE)	ND		50.2	57.2		ug/Kg		114	55 - 155		
o-Xylene	ND		50.2	52.1		ug/Kg		104	65 - 130		
Tert-amyl-methyl ether (TAME)	ND		50.2	62.7		ug/Kg		125	60 - 150		
tert-Butyl alcohol (TBA)	ND		502	562		ug/Kg		112	65 - 145		
Toluene	ND		50.2	51.3		ug/Kg		102	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Toluene-d8 (Surr)	*99*		*79 - 123*
4-Bromofluorobenzene (Surr)	*100*		*79 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-113063-A-15 MS
Matrix: Solid
Analysis Batch: 262533

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	*99*		*60 - 120*

Lab Sample ID: 440-113063-A-15 MSD
Matrix: Solid
Analysis Batch: 262533

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		50.3	51.5		ug/Kg		102	65 - 130	1	20
Isopropyl Ether (DIPE)	ND		50.3	57.7		ug/Kg		115	60 - 150	2	25
Ethyl-t-butyl ether (ETBE)	ND		50.3	62.3		ug/Kg		124	60 - 145	3	30
Ethylbenzene	ND		50.3	52.7		ug/Kg		105	70 - 135	3	25
m,p-Xylene	ND		50.3	54.5		ug/Kg		108	70 - 130	3	25
Methyl-t-Butyl Ether (MTBE)	ND		50.3	60.8		ug/Kg		121	55 - 155	6	35
o-Xylene	ND		50.3	54.4		ug/Kg		108	65 - 130	4	25
Tert-amyl-methyl ether (TAME)	ND		50.3	65.1		ug/Kg		129	60 - 150	4	25
tert-Butyl alcohol (TBA)	ND		503	567		ug/Kg		113	65 - 145	1	30
Toluene	ND		50.3	52.6		ug/Kg		105	70 - 130	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Toluene-d8 (Surr)	*100*		*79 - 123*
4-Bromofluorobenzene (Surr)	*97*		*79 - 120*
Dibromofluoromethane (Surr)	*103*		*60 - 120*

Lab Sample ID: MB 440-262829/4
Matrix: Water
Analysis Batch: 262829

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			06/22/15 21:11	1
Isopropyl Ether (DIPE)	ND		0.50		ug/L			06/22/15 21:11	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			06/22/15 21:11	1
Ethylbenzene	ND		0.50		ug/L			06/22/15 21:11	1
m,p-Xylene	ND		1.0		ug/L			06/22/15 21:11	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			06/22/15 21:11	1
o-Xylene	ND		0.50		ug/L			06/22/15 21:11	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			06/22/15 21:11	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			06/22/15 21:11	1
Toluene	ND		0.50		ug/L			06/22/15 21:11	1
Xylenes, Total	ND		1.0		ug/L			06/22/15 21:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*06/22/15 21:11*	*1*
Dibromofluoromethane (Surr)	*98*		*76 - 132*		*06/22/15 21:11*	*1*
Toluene-d8 (Surr)	*102*		*80 - 128*		*06/22/15 21:11*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-262829/5
Matrix: Water
Analysis Batch: 262829

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	24.8		ug/L		99	68 - 130
Isopropyl Ether (DIPE)	25.0	25.5		ug/L		102	58 - 139
Ethyl-t-butyl ether (ETBE)	25.0	22.1		ug/L		88	60 - 136
Ethylbenzene	25.0	24.7		ug/L		99	70 - 130
m,p-Xylene	25.0	26.2		ug/L		105	70 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	23.6		ug/L		95	63 - 131
o-Xylene	25.0	25.0		ug/L		100	70 - 130
Tert-amyl-methyl ether (TAME)	25.0	21.4		ug/L		85	57 - 139
tert-Butyl alcohol (TBA)	250	278		ug/L		111	70 - 130
Toluene	25.0	24.4		ug/L		98	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*76 - 132*
Toluene-d8 (Surr)	*97*		*80 - 128*

Lab Sample ID: 440-113141-A-1 MS
Matrix: Water
Analysis Batch: 262829

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		25.0	24.6		ug/L		99	66 - 130
Isopropyl Ether (DIPE)	47		25.0	73.3		ug/L		105	64 - 138
Ethyl-t-butyl ether (ETBE)	ND		25.0	23.3		ug/L		93	70 - 130
Ethylbenzene	ND		25.0	25.7		ug/L		103	70 - 130
m,p-Xylene	ND		25.0	25.9		ug/L		104	70 - 133
Methyl-t-Butyl Ether (MTBE)	0.59		25.0	25.5		ug/L		100	70 - 130
o-Xylene	ND		25.0	24.9		ug/L		99	70 - 133
Tert-amyl-methyl ether (TAME)	ND		25.0	22.2		ug/L		89	68 - 133
tert-Butyl alcohol (TBA)	13		250	304		ug/L		116	70 - 130
Toluene	ND		25.0	24.3		ug/L		97	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*76 - 132*
Toluene-d8 (Surr)	*97*		*80 - 128*

Lab Sample ID: 440-113141-A-1 MSD
Matrix: Water
Analysis Batch: 262829

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		25.0	25.1		ug/L		100	66 - 130	2	20
Isopropyl Ether (DIPE)	47		25.0	74.3		ug/L		109	64 - 138	1	25
Ethyl-t-butyl ether (ETBE)	ND		25.0	23.6		ug/L		94	70 - 130	1	25
Ethylbenzene	ND		25.0	27.2		ug/L		109	70 - 130	6	20
m,p-Xylene	ND		25.0	27.8		ug/L		111	70 - 133	7	25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-113141-A-1 MSD
Matrix: Water
Analysis Batch: 262829

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl-t-Butyl Ether (MTBE)	0.59		25.0	26.1		ug/L		102	70 - 130	2	25
o-Xylene	ND		25.0	26.4		ug/L		106	70 - 133	6	20
Tert-amyl-methyl ether (TAME)	ND		25.0	23.3		ug/L		93	68 - 133	5	30
tert-Butyl alcohol (TBA)	13		250	295		ug/L		113	70 - 130	3	25
Toluene	ND		25.0	26.0		ug/L		104	70 - 130	7	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*76 - 132*
Toluene-d8 (Surr)	*100*		*80 - 128*

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 440-262391/5
Matrix: Water
Analysis Batch: 262391

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			06/19/15 12:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*65 - 140*		*06/19/15 12:01*	*1*

Lab Sample ID: LCS 440-262391/4
Matrix: Water
Analysis Batch: 262391

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
GRO (C4-C12)			800	771		ug/L		96	80 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*65 - 140*

Lab Sample ID: 440-113067-B-3 MS
Matrix: Water
Analysis Batch: 262391

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
GRO (C4-C12)	210		800	988		ug/L		97	65 - 140		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*78*		*65 - 140*

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: 440-113067-B-3 MSD
Matrix: Water
Analysis Batch: 262391

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)	210		800	969		ug/L		95	65 - 140	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*65 - 140*

Lab Sample ID: MB 440-262450/5
Matrix: Solid
Analysis Batch: 262450

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		400		ug/Kg			06/19/15 13:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*65 - 140*		*06/19/15 13:37*	*1*

Lab Sample ID: LCS 440-262450/3
Matrix: Solid
Analysis Batch: 262450

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
GRO (C4-C12)			1600	1730		ug/Kg		108	70 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*126*		*65 - 140*

Lab Sample ID: LCSD 440-262450/4
Matrix: Solid
Analysis Batch: 262450

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)			1600	1730		ug/Kg		108	70 - 135	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*129*		*65 - 140*

Lab Sample ID: MB 440-262606/5
Matrix: Solid
Analysis Batch: 262606

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		400		ug/Kg			06/20/15 14:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*65 - 140*		*06/20/15 14:16*	*1*

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: LCS 440-262606/3
Matrix: Solid
Analysis Batch: 262606

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
GRO (C4-C12)			1600	1560		ug/Kg		97	70 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*65 - 140*

Lab Sample ID: LCSD 440-262606/4
Matrix: Solid
Analysis Batch: 262606

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)			1600	1560		ug/Kg		97	70 - 135	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*65 - 140*

Lab Sample ID: 440-113176-A-1 MS
Matrix: Solid
Analysis Batch: 262606

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
GRO (C4-C12)	ND		1600	1410		ug/Kg		88	60 - 140		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*65 - 140*

Lab Sample ID: 440-113176-A-1 MSD
Matrix: Solid
Analysis Batch: 262606

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)	ND		1530	1330		ug/Kg		87	60 - 140	6	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*65 - 140*

Lab Sample ID: MB 440-262640/5
Matrix: Solid
Analysis Batch: 262640

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		40000		ug/Kg			06/21/15 14:48	100

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*65 - 140*		*06/21/15 14:48*	*100*

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: LCS 440-262640/3
Matrix: Solid
Analysis Batch: 262640

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
GRO (C4-C12)			160000	177000		ug/Kg		110	70 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*125*		*65 - 140*

Lab Sample ID: LCSD 440-262640/4
Matrix: Solid
Analysis Batch: 262640

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)			160000	171000		ug/Kg		107	70 - 135	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*120*		*65 - 140*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 440-262375/1-A
Matrix: Water
Analysis Batch: 262721

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 262375

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C22)	ND		0.50		mg/L		06/19/15 06:34	06/22/15 08:42	1
ORO (C23-C40)	ND		0.50		mg/L		06/19/15 06:34	06/22/15 08:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*60*		*45 - 120*	*06/19/15 06:34*	*06/22/15 08:42*	*1*

Lab Sample ID: LCS 440-262375/2-A
Matrix: Water
Analysis Batch: 262721

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 262375

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C10-C28			1.00	0.534		mg/L		53	40 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane	*61*		*45 - 120*

Lab Sample ID: LCSD 440-262375/3-A
Matrix: Water
Analysis Batch: 262721

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 262375

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C10-C28			1.00	0.657		mg/L		66	40 - 115	21	25

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 440-262375/3-A
Matrix: Water
Analysis Batch: 262721

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 262375

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-Octacosane	*75*		*45 - 120*

Lab Sample ID: MB 440-262514/1-A
Matrix: Solid
Analysis Batch: 262628

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 262514

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C13-C22)	ND		5.0		mg/Kg		06/19/15 15:23	06/21/15 10:34	1
ORO (C23-C40)	ND		5.0		mg/Kg		06/19/15 15:23	06/21/15 10:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*89*		*40 - 140*	*06/19/15 15:23*	*06/21/15 10:34*	*1*

Lab Sample ID: LCS 440-262514/2-A
Matrix: Solid
Analysis Batch: 262628

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 262514

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C10-C28			66.7	62.2		mg/Kg		93	45 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane	*92*		*40 - 140*

Lab Sample ID: 440-113063-A-23-C MS
Matrix: Solid
Analysis Batch: 262628

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 262514

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
C10-C28	210	F1	65.9	189	F1	mg/Kg		-26	40 - 120		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
n-Octacosane	*74*		*40 - 140*

Lab Sample ID: 440-113063-A-23-D MSD
Matrix: Solid
Analysis Batch: 262628

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 262514

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C10-C28	210	F1	66.4	198	F1	mg/Kg		-13	40 - 120	5	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
n-Octacosane	*76*		*40 - 140*

QC Association Summary

Client: Dudek & Associates
Project/Site: Emeryville

TestAmerica Job ID: 440-113103-1

GC/MS VOA

Analysis Batch: 262372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-113103-1	HA1-4'	Total/NA	Solid	8260B	262444
440-113103-2	HA1-7'	Total/NA	Solid	8260B	262444
440-113103-3	HA1-9.5'	Total/NA	Solid	8260B	262444
440-113103-4	HA3-3'	Total/NA	Solid	8260B	262444
440-113103-5	HA3-6'	Total/NA	Solid	8260B	262444
LCS 440-262372/5	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 440-262372/9	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 440-262372/4	Method Blank	Total/NA	Solid	8260B	

Prep Batch: 262444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-113103-1	HA1-4'	Total/NA	Solid	5035	
440-113103-2	HA1-7'	Total/NA	Solid	5035	
440-113103-3	HA1-9.5'	Total/NA	Solid	5035	
440-113103-4	HA3-3'	Total/NA	Solid	5035	
440-113103-5	HA3-6'	Total/NA	Solid	5035	
440-113103-6	HA3-10'	Total/NA	Solid	5035	

Analysis Batch: 262533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-113063-A-15 MS	Matrix Spike	Total/NA	Solid	8260B	
440-113063-A-15 MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	
440-113103-6	HA3-10'	Total/NA	Solid	8260B	262444
LCS 440-262533/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 440-262533/5	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 440-262533/3	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 262829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-113103-7	HA1-Grab-GW	Total/NA	Water	8260B	
440-113141-A-1 MS	Matrix Spike	Total/NA	Water	8260B	
440-113141-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-262829/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-262829/4	Method Blank	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 262391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-113067-B-3 MS	Matrix Spike	Total/NA	Water	8015B	
440-113067-B-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	
440-113103-7	HA1-Grab-GW	Total/NA	Water	8015B	
LCS 440-262391/4	Lab Control Sample	Total/NA	Water	8015B	
MB 440-262391/5	Method Blank	Total/NA	Water	8015B	

Prep Batch: 262396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-113103-6	HA3-10'	Total/NA	Solid	5035	

GC VOA (Continued)

Prep Batch: 262436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-113103-1	HA1-4'	Total/NA	Solid	5035	
440-113103-2	HA1-7'	Total/NA	Solid	5035	
440-113103-3	HA1-9.5'	Total/NA	Solid	5035	
440-113103-5	HA3-6'	Total/NA	Solid	5035	

Analysis Batch: 262450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-113103-1	HA1-4'	Total/NA	Solid	8015B	262436
440-113103-2	HA1-7'	Total/NA	Solid	8015B	262436
440-113103-3	HA1-9.5'	Total/NA	Solid	8015B	262436
440-113103-5	HA3-6'	Total/NA	Solid	8015B	262436
LCS 440-262450/3	Lab Control Sample	Total/NA	Solid	8015B	
LCSD 440-262450/4	Lab Control Sample Dup	Total/NA	Solid	8015B	
MB 440-262450/5	Method Blank	Total/NA	Solid	8015B	

Analysis Batch: 262606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-113103-4	HA3-3'	Total/NA	Solid	8015B	262611
440-113176-A-1 MS	Matrix Spike	Total/NA	Solid	8015B	
440-113176-A-1 MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	
LCS 440-262606/3	Lab Control Sample	Total/NA	Solid	8015B	
LCSD 440-262606/4	Lab Control Sample Dup	Total/NA	Solid	8015B	
MB 440-262606/5	Method Blank	Total/NA	Solid	8015B	

Prep Batch: 262611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-113103-4	HA3-3'	Total/NA	Solid	5035	

Analysis Batch: 262640

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-113103-6	HA3-10'	Total/NA	Solid	8015B	262396
LCS 440-262640/3	Lab Control Sample	Total/NA	Solid	8015B	
LCSD 440-262640/4	Lab Control Sample Dup	Total/NA	Solid	8015B	
MB 440-262640/5	Method Blank	Total/NA	Solid	8015B	

GC Semi VOA

Prep Batch: 262375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-113103-7	HA1-Grab-GW	Total/NA	Water	3510C	
LCS 440-262375/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 440-262375/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 440-262375/1-A	Method Blank	Total/NA	Water	3510C	

Prep Batch: 262514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-113063-A-23-C MS	Matrix Spike	Total/NA	Solid	3546	
440-113063-A-23-D MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	
440-113103-1	HA1-4'	Total/NA	Solid	3546	
440-113103-2	HA1-7'	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 262514 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-113103-3	HA1-9.5'	Total/NA	Solid	3546	
440-113103-4	HA3-3'	Total/NA	Solid	3546	
440-113103-5	HA3-6'	Total/NA	Solid	3546	
440-113103-6	HA3-10'	Total/NA	Solid	3546	
LCS 440-262514/2-A	Lab Control Sample	Total/NA	Solid	3546	
MB 440-262514/1-A	Method Blank	Total/NA	Solid	3546	

Analysis Batch: 262628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-113063-A-23-C MS	Matrix Spike	Total/NA	Solid	8015B	262514
440-113063-A-23-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	262514
440-113103-1	HA1-4'	Total/NA	Solid	8015B	262514
440-113103-2	HA1-7'	Total/NA	Solid	8015B	262514
440-113103-5	HA3-6'	Total/NA	Solid	8015B	262514
LCS 440-262514/2-A	Lab Control Sample	Total/NA	Solid	8015B	262514
MB 440-262514/1-A	Method Blank	Total/NA	Solid	8015B	262514

Analysis Batch: 262721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-113103-3	HA1-9.5'	Total/NA	Solid	8015B	262514
440-113103-4	HA3-3'	Total/NA	Solid	8015B	262514
440-113103-6	HA3-10'	Total/NA	Solid	8015B	262514
LCS 440-262375/2-A	Lab Control Sample	Total/NA	Water	8015B	262375
LCSD 440-262375/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	262375
MB 440-262375/1-A	Method Blank	Total/NA	Water	8015B	262375

Analysis Batch: 262726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-113103-7	HA1-Grab-GW	Total/NA	Water	8015B	262375

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
*	ISTD response or retention time outside acceptable limits

GC VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: Dudek & Associates
Project/Site: Emeryville

TestAmerica Job ID: 440-113103-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-15
Arizona	State Program	9	AZ0671	10-13-15
California	LA Cty Sanitation Districts	9	10256	01-31-16 *
California	State Program	9	2706	06-30-16
Guam	State Program	9	Cert. No. 12.002r	01-23-16
Hawaii	State Program	9	N/A	01-29-16
Nevada	State Program	9	CA015312007A	07-31-15
New Mexico	State Program	6	N/A	01-29-15 *
Northern Mariana Islands	State Program	9	MP0002	01-29-15 *
Oregon	NELAP	10	4005	01-29-16

* Certification renewal pending - certification considered valid.

TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614
Phone: 949.261.1022 Fax:

Chain of Custody Record

066415

TestAmerica — THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other: ACHCA

Client Contact			
Company Name: Dudek	Project Manager: Gwen Tellegen	Site Contact: Gwen Tellegen	Date: 6-17-15
Address: 750 Second	Tel/Fax: 949 378 8448	Lab Contact: Danielle Roberts	Carrier: FedEx
City/State/Zip: Encinitas CA 92024	Analysis Turnaround Time: ☐ CALENDAR DAYS ☐ WORKING DAYS		
Phone: 949 378 8448	TAT if different from Below ______		
Fax:	☐ 2 weeks		
Project Name: Emeryville Property	☒ 1 week — normal		
Site: 1400 Park Ave, Emeryville	☐ 2 days		
P O #	☐ 1 day		

COC No: 1 of 2 COCs
Sampler:
For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job / SDG No.:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	8260 BTEX oxygenates	8015 Gasoline	8015 Diesel	8015 Motor oil	Sample Specific Notes:
HA1-4'	6/17/15	10:15	G	Soil	3 vocs			X	X			
HA1-4'	6/17/15	10:15	G	S	1 sleeve					X	X	
HA1-7'	6/17/15	11:15	G	S	3 vocs			X	X			
HA1-7'	6/17/15	11:15	G	S	sleeve					X	X	
HA1-9.5'	6/17/15	11:30	G	S	3 vocs			X	X			
HA1-9.5'	6/17/15	11:30	G	S	sleeve					X	X	
HA3-3'	6/17/15	12:05	G	S	3 vocs			X	X			
HA3-3'	6/17/15	12:05	G	S	1 sleeve					X	X	
HA3*-6'	6/17/15	12:20	G	S	3 VOAs			X	X			
HA3*-6'	6/17/15	12:20	G	Soil	1 sleeve					X	X	
HA3-10'	6/17/15	12:50	G	Soil	3 VOAs			X	X			
HA3-10'	6/17/15	12:50	G	Soil	1 sleeve					X	X	

00 6/18/15 17:05

440-113103 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ______

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal by Lab ☐ Archive for ______ Months

Special Instructions/QC Requirements & Comments:
Fed: 6111 1269 8964 (CS)

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 6.8 Corr'd: 5.6 | Therm ID No.: IR-71

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Dudek	6/17/15 5pm			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: [signature]	TAI	6/18/15 9:45

TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614
Phone: 949.261.1022 Fax:

Chain of Custody Record

066730

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Gwen Jellegen	Site Contact: Gwen Jellegen	Date: 6-17-15	COC No: 2 of 2 COCs
Company Name: Dudek	Tel/Fax: 949 378-8448	Lab Contact: Danielle Roberts	Carrier: FedEx	Sampler:
Address: 750 Second	Analysis Turnaround Time			For Lab Use Only:
City/State/Zip: Encinitas CA 92024	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
Phone: 949 378 8448	TAT if different from Below			Lab Sampling:
Fax:	☐ 2 weeks			
Project Name: Emeryville	☒ 1 week Normal TAT			Job / SDG No.:
Site: 1400 Park Ave Emeryville	☐ 2 days			
PO# 9029	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	8260b BTEX & oxygenates	8015 gas	8015 diesel	8015 motor oil	Sample Specific Notes:
HA1-Grab-GW	6/17/15	330	G	Water	3voa			X				please sample water not sediment
HA1-Grab-GW	6/17/15	330	G	water	3voa				X			please sample water not sediment
HA1-Grab-GW	6/17/15	330	G	water	1 Liter amber					XX		please sample water not sediment

Page 29 of 30

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
please settle sediment & sample only water (CS)

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 6.8 Corr'd: 5.6 | Therm ID No.: IR171

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Dudek	6/17/15			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: VuBanh	Company: TAI	Date/Time: 6/18/15 9:45

6/24/2015

Login Sample Receipt Checklist

Client: Dudek & Associates

Job Number: 440-113103-1

Login Number: 113103
List Number: 1
Creator: Escalante, Maria I

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Appendix C

Alameda County Drilling Permits

Alameda County Public Works Agency - Water Resources Well Permit

Public Works Agency
Alameda County

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 06/10/2015 By jamesy

Permit Numbers: W2015-0494
Permits Valid from 06/17/2015 to 06/17/2015

Application Id:	1433886654421	**City of Project Site:**	Emeryville
Site Location:	1400 Park Ave		
Project Start Date:	06/17/2015	**Completion Date:**	06/17/2015
Assigned Inspector:	Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org		
Applicant:	Dudek - Gwen Tellegen 605 3rd Street, Encinitas, CA 92024	**Phone:**	949-378-8448
Property Owner:	Emeryville Properties LLC 3963 Woodside Ct, Lafayette, CA 94549	**Phone:**	510-356-4192
Client:	William Lewerenz 3963 Woodside Ct, Lafayette, CA 94549	**Phone:**	415-793-3311
Contact:	Khristina Leyba	**Phone:** **Cell:**	760-479-4157 --

	Total Due:	$265.00
Receipt Number: WR2015-0282	**Total Amount Paid:**	$265.00
Payer Name : Derek Reed	Paid By: VISA	**PAID IN FULL**

Works Requesting Permits:

Borehole(s) for Investigation-Environmental/Monitorinig Study - 3 Boreholes
Driller: BLAINE TECH SERVICES INC - Lic #: 746684 - Method: Hand **Work Total: $265.00**

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2015-0494	06/10/2015	09/15/2015	3	4.00 in.	10.00 ft

Specific Work Permit Conditions

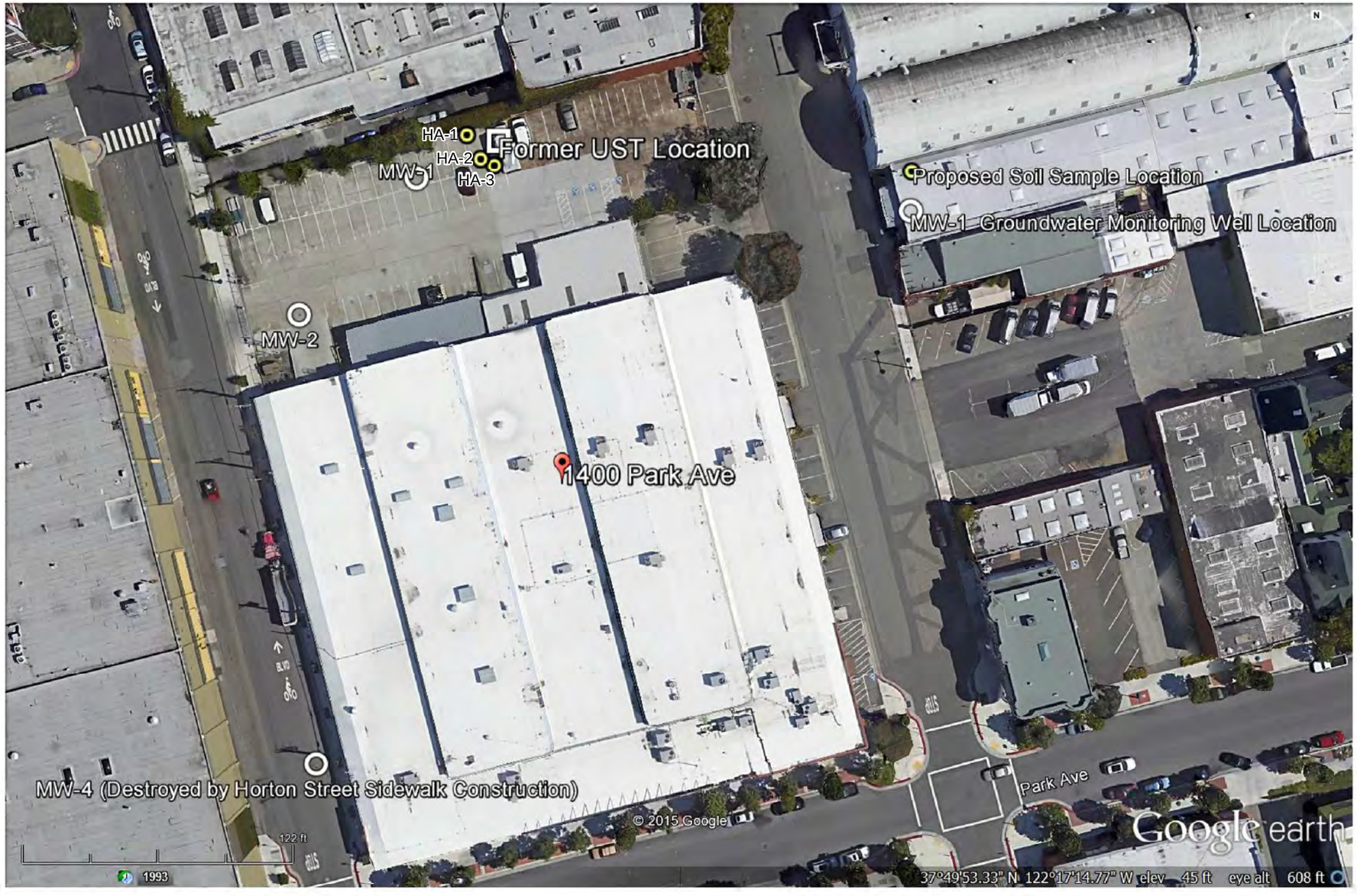
1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.

2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

4. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

5. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.



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SAFETY FIRST	CLIENT: Emeryville Properties LLC	UST Location & Proposed Sample Locations
terraphase engineering	PROJECT: 1400 Park Ave Emeryville, CA	
	PROJECT NUMBER: S016.001.001	FIGURE 5

File: N:\GIS\Emeryville\UST and Sample Locations.mxd 2/6/2015 Created by: Checked by:

6. NOTE:
Under California laws, the owner/operator are responsible for reporting the contamination to the governmental regulatory agencies under Section 25295(a). The owner/operator is liable for civil penalties under Section 25299(a)(4) and criminal penalties under Section 25299(d) for failure to report a leak. The owner/operator is liable for civil penalties under Section 25299(b)(4) for knowing failure to ensure compliance with the law by the operator. These penalty provisions do not apply to a potential buyer.

7. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

8. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

Gwen Tellegen

From: wells@acpwa.org
Sent: Wednesday, June 10, 2015 11:39 AM
To: Gwen Tellegen
Cc: Khristina Leyba
Subject: Alameda County Well Permit Approval Notification
Attachments: 1433886654421.pdf

Thank you for your Online Request for Wells Permits.
Your Application Id is: 1433886654421
Application submitted on: 06/09/2015
Project Site City/Location: Emeryville / 1400 Park Ave
Project Start Date: 06/17/2015 **Completion Date:** 06/17/2015

Your Permit Application has been approved.
Permit Number(s) Issued: W2015-0494 Valid from 06/17/2015 to 06/17/2015

Inspection is REQUIRED.
To avoid possible delay of your project, you must contact your assigned inspector, Steve Miller at stevem@acpwa.org or (510) 670-5517, no later than 5 days before the Project Start Date listed on your permit to schedule your inspection.

The attached PDF file serves as your receipt and permit(s), please print for your record.
Note: You need to have the free Adobe Reader to open the pdf file.

Conditions of Permit:
Please follow instructions stated on our website.
In addition, you must comply with all specific conditions listed in your permit.

If you need further assistance regarding your permit, please visit our website at: http://www.acgov.org/pwa/wells/ or contact us at wells@acpwa.org, and include your application id number.

Thank you,
Public Works Agency-Water Resources