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By Alameda County Environmental Health 8:32 am, Jun 23, 2017

Mr. Lee Douglas
Douglas Parking Company
1721 Webster Street
Oakland, California 94612

Ms. Barbara Jakub
Alameda County Environmental Health
Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502-6577

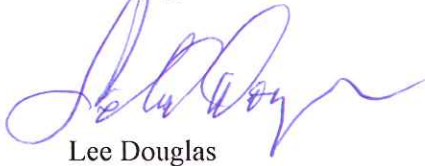
Re: Douglas Parking Company
1721 Webster Street
Oakland, California
ACEH File No. 129

Dear Ms. Jakub:

I, Mr. Lee Douglas, have retained Pangea Environmental Services, Inc. (Pangea) as the environmental consultant for the project referenced above. Pangea is submitting the attached report on my behalf.

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

Sincerely,



Lee Douglas



June 19, 2017

VIA ALAMEDA COUNTY FTP SITE

Ms. Karel Detterman
Alameda County Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

Re: **Soil Gas Sampling Report and Updated SCM**
Douglas Parking Company
1721 Webster Street
Oakland, California
ACEH File No. 129

Dear Ms. Detterman:

On behalf of the Douglas Parking Company, Pangea Environmental Services, Inc has prepared this *Soil Gas Sampling Report and Updated SCM* (Report). This Report documents implementation of the *Data Gap Workplan* dated June 21, 2016, which was approved in an Alameda County Environmental Health (ACEH) letter dated August 22, 2016 (Appendix B).

If you have any questions, please contact me at (510) 435-8664 or email briddell@pangeaenv.com.

Sincerely,
Pangea Environmental Services, Inc.

A handwritten signature in blue ink that reads "Bob Clark-Riddell". The signature is written in a cursive, flowing style.

Bob Clark-Riddell, P.E.
Principal Engineer

Attachment: *Soil Gas Sampling Report and Updated SCM*

cc: Mr. Lee Douglas, Douglas Parking Company, 1721 Webster Street, Oakland, California 94612
SWRCB Geotracker (electronic copy)

PANGEA Environmental Services, Inc.

1710 Franklin Street, Suite 200, Oakland, CA 94612 Telephone 510.836.3700 Facsimile 510.836.3709 www.pangeaenv.com



SOIL GAS SAMPLING REPORT AND UPDATED SCM

**Douglas Parking Company
1721 Webster Street
Oakland, California
File No. 4070**

June 19, 2017

Prepared for:


Mr. Lee Douglas
1721 Webster Street
Oakland, California 94612

Prepared by:


Pangea Environmental Services, Inc.
1710 Franklin Street, Suite 200
Oakland, California 94612

Written by:





Elizabeth Avery
Project Geologist



Bob Clark-Riddell, P.E.
Principal Engineer

PANGEA Environmental Services, Inc.

1710 Franklin Street, Suite 200, Oakland, CA 94612 Telephone 510.836.3700 Facsimile 510.836.3709 www.pangeaenv.com

INTRODUCTION

On behalf of property owner Andy Saberi, Pangea Environmental Services, Inc has prepared this *Soil Gas Sampling Report and Updated SCM* (Report). This Report documents implementation of the *Data Gap Workplan* dated June 21, 2016, which was approved in an Alameda County Environmental Health (ACEH) letter dated August 22, 2016 (Appendix B). The purpose of the investigation is to evaluate potential human health impacts.

SITE BACKGROUND

The site is currently being utilized as a parking garage, and is located between 17th and 19th Streets in downtown Oakland, California, approximately four miles east of San Francisco Bay and one quarter of a mile west of Lake Merritt (Figure 1). The site is relatively flat with an elevation of approximately 30 feet (ft) above mean sea level (msl).

Several former underground storage tank (UST) sites are located close to the site, including Prentiss Properties to the northeast at 1750 Webster Street, a former gas station to the east at 1700 Webster, and a former Chevron service station which is located approximately 400 feet to the southwest on the corner of 17th Street and Harrison Street.

On August 3 and 6, 1992, Parker Environmental Services removed one 1,000-gallon and two 500-gallon gasoline underground storage tanks (USTs) from the site. Up to 1,500 milligrams per kilogram (mg/kg) total petroleum hydrocarbons as gasoline (TPHg) and up to 12 mg/kg benzene were detected in the soil samples collected from the UST excavation.

Several investigations have been completed at the site. On July 8 and September 8, 1994, Gen Tech/Piers Environmental, Inc. (Gen Tech) of San Jose, California drilled six exploratory borings and installed three groundwater monitoring wells (MW-1 through MW-3). In February and May 1996, Cambria Environmental Technology (Cambria) of Emeryville, California advanced seven geoprobe soil borings and installed two groundwater monitoring wells (MW-4 and MW-5). On August 8, 2000, *Conduit Study and File Review Report* was submitted by Cambria Environmental Technology. The report provided significant information about offsite hydrocarbon impact and offsite sources, and concluded that there were no identified conduits for contaminant migration in groundwater. On June 27, 2003 Cambria installed two additional offsite monitoring wells (MW-6 and MW-7) to facilitate additional plume delineation.

Limited site remediation has been conducted at the site. In January 1998, Cambria installed ORC socks in well MW-2 to enhance the natural attenuation of dissolved-phase hydrocarbons. Dissolved oxygen (DO)

concentrations temporarily increased in well MW-2 following the ORC sock installation. In February and March 1999, a total of 120 gallons of 7.5% hydrogen peroxide solution was added into monitoring wells MW-2 and MW-3 to oxidize hydrocarbons and also increase DO levels to enhance biodegradation of dissolved-phase hydrocarbons. The hydrogen peroxide *temporarily* increased groundwater DO levels, but hydrocarbon concentrations remained at elevated levels.

On March 4, 2003, Cambria installed a co-axial air sparging/soil vapor extraction well (SV-1/AS-1) and two angled air sparging wells (AS-2 and AS-3) to approximately 30 ft bgs. The wells were installed to facilitate feasibility testing and future site remediation. Site remediation via soil vapor extraction and air sparging began in October 2007. To improve system performance and further evaluate site conditions, Pangea submitted an *Investigation and Remediation Workplan* dated March 5, 2009, which proposed additional investigation, remediation system expansion, and evaluation of groundwater geochemistry.

On November 19, 2010, ACEH issued a letter requesting a cross section, additional information regarding a potential offsite source and a preferential pathway survey. In December 2010, Pangea informed the ACEH that significant information about the offsite hydrocarbon impact was presented in the August 8, 2000 *Conduit Study and File Review Report* prepared by Cambria. In December 2010, the UST Cleanup Fund prepared a 5 Year Review that recommended a site conceptual model (SCM), risk assessment, and sensitive receptor survey to help facilitate selection of a remediation technique. In March 2011, Pangea provided information requested by the ACEH and proposed remediation and assessment tasks to help facilitate regulatory case closure. In a letter dated June 17, 2011, ACEH requested a site conceptual model with a preferential pathway evaluation. The UST Cleanup Fund 5-Year Review of March 12, 2012 also requested an SCM prior to any system modification. Pangea submitted a *Sensitive Receptor Survey, Conduit Study and Site Conceptual Model* dated March 26, 2012. In a letter dated December 21, 2012, ACEH requested a workplan to evaluate vapor intrusion and to investigate secondary source near well MW-2. Pangea submitted a *Workplan for Additional Assessment and Soil Gas Sampling* dated April 4, 2013. Following a meeting with ACEH on May 28, 2013, Pangea submitted a *Revised Data Gap Workplan* dated July 25, 2013.

Following approval of the workplan, Pangea installed two confirmation soil borings (CB-1 and CB-2) near the former UST excavation areas and three soil gas probes (SS-1 through SS-3). Pangea detailed the findings of this data gap investigation in the *Data Gap Site Assessment Report* dated January 22, 2014. Included in the report was an updated SCM in tabular format. Historic site soil and groundwater analytical data is summarized on Tables 2 and 3, respectively.

Pangea submitted a *Data Gap Workplan* (Workplan) dated June 21, 2016. This Workplan was requested by an Alameda County Environmental Health (ACEH) email dated April 20, 2016. The Workplan included a sensitive receptor survey, and identified vapor intrusion evaluation as a remaining data gap. The Workplan

proposed subslab and soil gas sampling to further evaluate potential vapor intrusion. The Workplan was approved in an Alameda County Environmental Health (ACEH) letter dated August 22, 2016 (Appendix B). The goal for implementation of this Workplan is to facilitate regulatory case closure in the very near future.

SITE ASSESSMENT PROCEDURES

The objective of the investigation is to evaluate shallow soil gas conditions and the potential for vapor intrusion for current site use and potential future site redevelopment.

Pre-Field Activities

Drilling permits were obtained from Alameda County Public Works Agency (ACPWA). A comprehensive site safety plan was prepared to protect site workers and the plan was kept onsite during all field activities. The proposed drilling locations were marked and Underground Service Alert was notified at least 48 hours before the proposed field activities.

Drilling Procedures

All soil gas probes were installed in general accordance with the procedures described in Pangea's June 21, 2016 Workplan. Pangea retained Confluence Environmental (Confluence) of Sacramento, California, to hand auger the borings and install the soil gas probes.

Soil Borings and Soil Gas Probe Installation

On September 8, 2016, Pangea coordinated installation of two soil gas probes (SG-1 and SG-2) to facilitate evaluation of shallow soil gas conditions. Soil gas probe SG-1 was installed near subslab probe SS-2 (in the entrance to the parking structure), and soil gas probe SG-2 was installed near subslab probe SS-3 (in the northeastern corner of the building). Soil gas probe locations are shown on Figure 2. The boring permit is included in Appendix C. Boring logs are included in Appendix D.

To facilitate probe construction, the soil gas probe boreholes were advanced with a 3.25-inch diameter hand auger to a total depth of approximately 6 ft bgs. All site investigation activities were performed under the supervision of a California Registered Civil Professional Engineer (P.E.).

After advancing the borings, two semi-permanent soil gas probes were constructed with a stainless steel Geoprobe™ soil vapor implant connected to new 1/4-inch diameter Teflon tubing and capped with a Swagelok® type fitting. The implant was placed in a 0.5 ft thick sand pack with 0.5 ft of dry granular bentonite above, followed by hydrated bentonite. Probe sampling intervals are approximately 5.0 to 6.0 ft bgs.

Waste Management and Disposal

Soil cuttings and other investigation-derived waste were stored onsite in Department of Transportation (DOT)-approved 55-gallon drums. Subsequently, the soil drum was transported to an appropriate disposal/recycling facility. The waste manifest is included in Appendix F.

SOIL GAS AND SUBSLAB GAS SAMPLING PROCEDURES

To evaluate shallow soil gas conditions, Pangea coordinated soil gas sampling from two semi-permanent soil gas probe locations (SG-1 and SG-2) and two existing subsurface vapor probes (SS-2 and SS-3) on September 23, 2016. Soil gas probe locations are shown on Figure 2. Soil gas analytical results are summarized on Table 1. Field data sheets are included in Appendix E and laboratory analytical reports are in Appendix G. The soil gas sampling was performed by Pangea staff under the supervision of Pangea's Bob Clark-Riddell, a California Registered Professional Civil Engineer.

An analytical laboratory provided sampling assemblies and certified Summa canisters for sampling. The Summa canisters came under a complete vacuum of approximately 30 inches of mercury. Prior to sample collection a shut in test was conducted on the sampling assembly to confirm no leak and the maintenance of the initial vacuum in the sampling manifold system. After shut in testing, the probe was connected to the sampling assembly using a Swagelok fitting and Teflon tubing, then a shroud was placed over the probe and isopropyl alcohol (tracer compound) was introduced into the shroud. The isopropyl alcohol concentration within the shroud was monitored periodically using a PID and purging summa canisters were used to purge the manifold/probe assembly. Upon completion of purging of approximately three times the ambient volume of air in the assembly/probe and void space, the sampling Summa canister was opened for sample collection. The pre-set valve regulated the vapor flow to approximately 150 milliliters of air per minute, which equates to approximately 5 minutes to fill the 1-liter canister. Sample collection is typically discontinued when the vacuum decreases to 5 inches of mercury.

The subsurface/soil gas sampling was also conducted in general accordance with procedures described in California EPA's *Advisory Active Soil Gas Investigations* July 2015. The soil gas samples were submitted for analysis to Sunstar Laboratories, Inc., of Lake Forest, California, a State-certified laboratory.

Soil Gas and Subslab Gas Analyses

Soil gas and subsurface gas samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) by Total Organics Method 3 (TO-3), benzene, toluene, ethylbenzene, xylene(s) (BTEX), methyl-tertiary butyl ether (MTBE), and isopropyl alcohol by Total Organics Method 15 (TO-15); methane by EPA Method 8015m; and for percent oxygen by Method ASTM D-1946. The oxygen analysis helps evaluate the potential for future

degradation and bio-attenuation of detected hydrocarbons, and helps assess soil column characteristics ($\geq 4\%$ oxygen in soil gas is referenced as a bio-attenuation zone in the SWRCB's Underground Storage Tank Low-Threat Site Closure Policy [LTCP]).

SITE ASSESSMENT RESULTS

Analytical results from soil gas sampling are described below.

Soil Gas Analytical Results

The only benzene concentration detected in site soil gas was $12 \mu\text{g}/\text{m}^3$ in probe SG-2. The only other hydrocarbon detected in probe SG-2 was xylenes at a concentration of $23.9 \mu\text{g}/\text{m}^3$. Relatively low concentrations of toluene ($5.7 \mu\text{g}/\text{m}^3$) and xylenes were detected in probe SG-1. All detected concentrations are below applicable ESLs. No other hydrocarbons were detected in soil gas probes SG-1 and SG-2 above reporting limits ('non-detect'). Methane concentrations were also below reporting limits in both samples. The lack of isopropyl alcohol detected in either soil gas sample suggests that the samples are representative of subsurface conditions. Soil gas analytical results are summarized on Table 1.

The percent oxygen detected in soil gas probes SG-1 and SG-2 was 17.7% and 19.8%, respectively. This data suggests that a bio-attenuation zone is present at the site as described in the SWRCB's LTCP.

Subslab Gas Analytical Results

No hydrocarbons were detected above reporting limits in the subslab gas sample from probe SS-2. Subslab gas from probe SS-3 contained toluene and xylene concentrations of $4.0 \mu\text{g}/\text{m}^3$ and $13 \mu\text{g}/\text{m}^3$, respectively, which are well below applicable ESLs. All other hydrocarbon concentrations were below reporting limits. Methane concentrations were below reporting limits in both subslab gas samples. The lack of isopropyl alcohol detected in either subslab gas sample suggests that the samples are representative of subsurface conditions. Subslab gas analytical results are summarized on Table 1.

The percent oxygen detected in subslab gas probes SS-2 and SS-3 was 20.4% and 20.5%, respectively.

UPDATED SITE CONCEPTUAL MODEL

An updated site conceptual model in tabular format is included in Appendix A. A chart showing potential exposure pathways for the current site use is shown on Figure 3.

CONCLUSIONS AND RECOMMENDATIONS

Based on the above information, Pangea offers the following conclusions and recommendations:

- Oxygen levels exceed the 4% level presented in the Low Threat UST Closure Policy as sufficient to represent a ‘bio-attenuation zone’ that provides biodegradation of residual hydrocarbon vapors.
- Based on the low concentrations of hydrocarbon contamination detected in soil gas and the presence of a bio-attenuation zone, Pangea concludes that there is an insignificant human health risk from vapor intrusion at the site for the current site use.
- Based on the SCM detailed below and results of this investigation, Pangea concludes that SCM data gaps have been addressed and the site is eligible for regulatory closure under the SWRCB LTCP.

REFERENCES

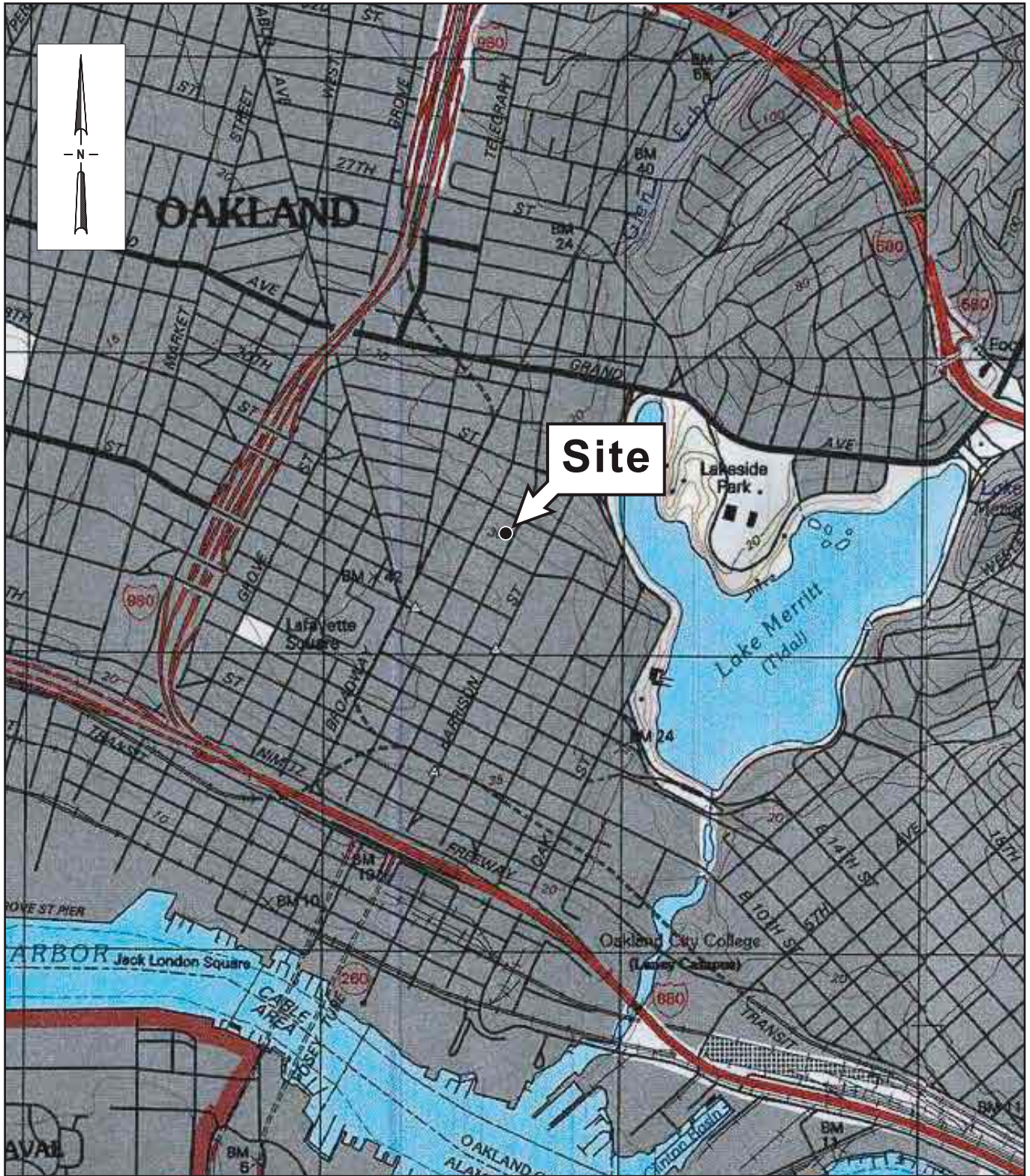
- AECOM, 2016, *Phase I Environmental Site Assessment*, Douglas Parking Property, 1721 Webster Street, Oakland, California, July 21.
- California EPA, 2015, *Advisory-Active Soil Gas Investigation*, California Environmental Protection Agency, Department of Toxic Substances Control, Los Angeles Regional Water Quality Control Board, San Francisco Regional Water Quality Control Board, July.
- Radbruch, D.H., 1957, *Areal and Engineering Geology of the Oakland West Quadrangle, California*, U.S. Geological Survey.

ATTACHMENTS

- Figure 1 – Vicinity Map
- Figure 2 – Soil Gas Sampling Locations
- Figure 3 – Conceptual Site Model Chart and Exposure Pathway Analysis

- Table 1 – Subslab/Soil Gas Analytical Data
- Table 2 – Soil Analytical Data
- Table 3 – Groundwater Elevation and Analytical Data

- Appendix A – Site Conceptual Model in Tabular Format
- Appendix B – Regulatory Correspondence
- Appendix C – Permit
- Appendix D – Boring Logs
- Appendix E – Soil Gas Sampling Field Data Sheets
- Appendix F – Waste Manifest
- Appendix G – Laboratory Analytical Reports



SOURCE: TOPOI MAPS

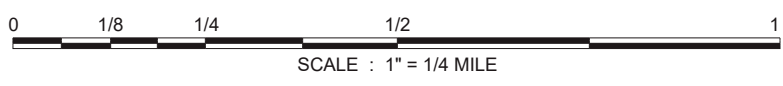
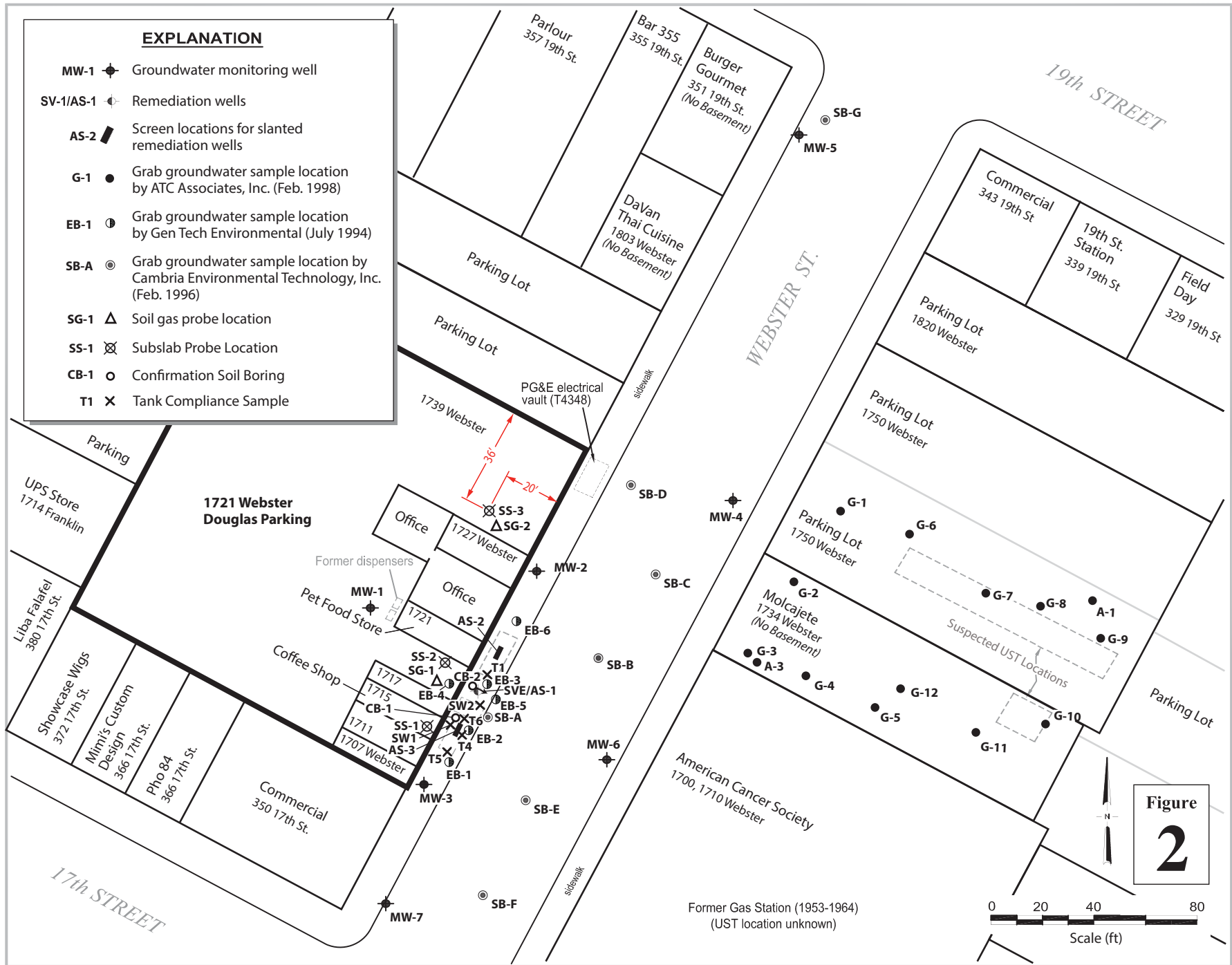


Figure 1

Douglas Parking Facility
1721 Webster Street
Oakland, California



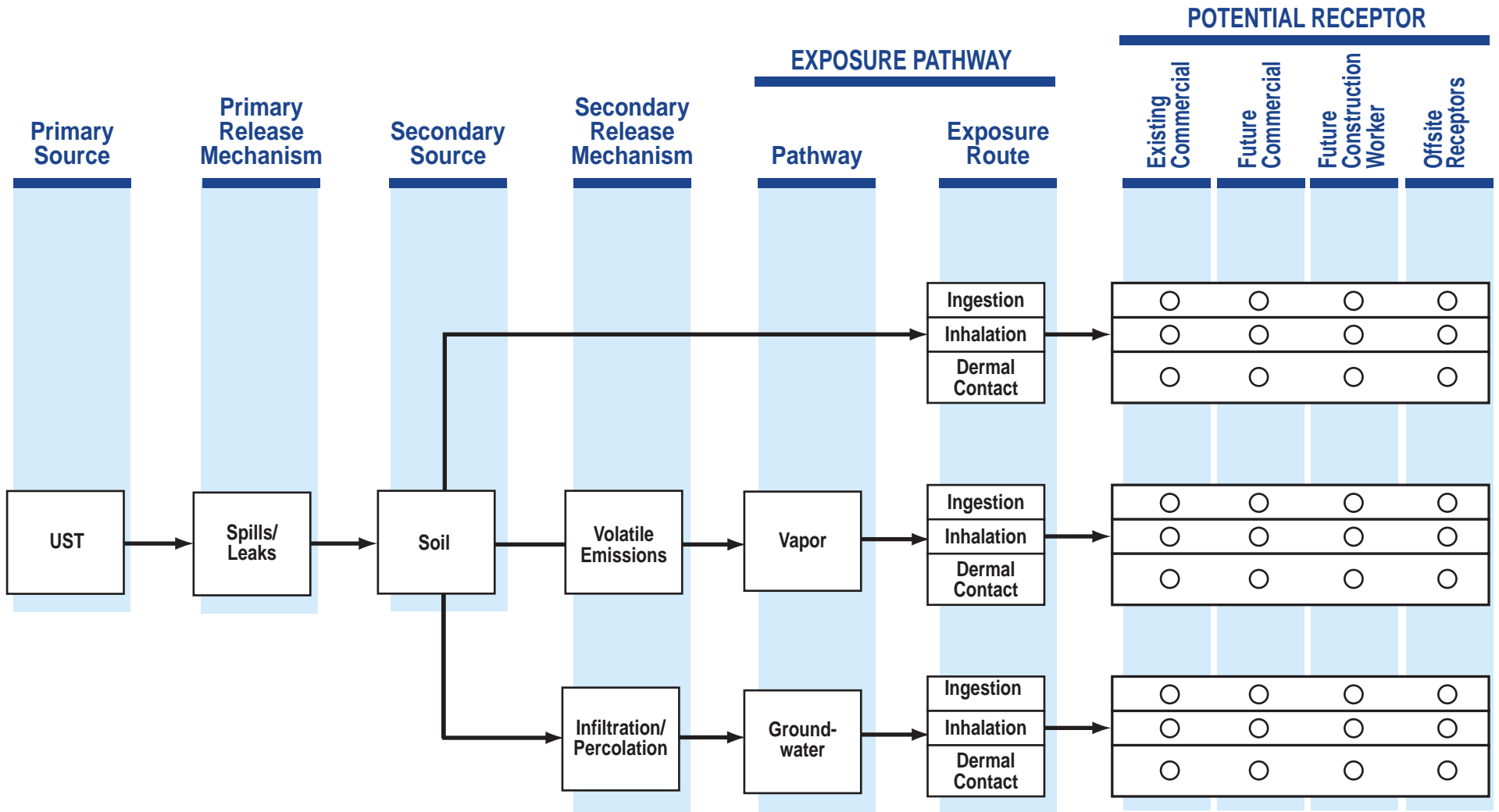
Vicinity Map



Douglas Parking
1721 Webster Street
Oakland, California



Site Map



○ Incomplete exposure pathway
 ☑ Complete exposure pathway

Figure
3

Pangea

Table 1. Subslab/Soil Gas Analytical Data - Douglas Parking, 1721 Webster Street, Oakland, California

Boring/ Sample ID	Date Sampled	Sample Depth (ft - ft bgs)	Benzene	Toluene	Ethylbenzene	Xylenes	TPH Gasoline	MTBE	Naphthalene	Isopropanol	Methane	Helium	Oxygen	Notes
			ug/m ³										%	
2016 Tier 1 ESL			48	160,000	560	52,000	50,000	5,400	41	--	--	--	--	For SG/SS samples
Residential ESL for subslab/soil gas; VI Human Health Risk:			48	160,000	560	52,000	300,000	5,400	41	--	--	--	--	For SG/SS samples
Commercial ESL for subslab/soil gas; VI Human Health Risk:			420	1,300,000	4,900	440,000	2,500,000	47,000	360	--	--	--	--	For SG/SS samples
No Bio-Attenuation Zone, Residential (LTCP)			85	--	1,100	--	--	--	93	--	--	--	--	
No Bio-Attenuation Zone, Commercial (LTCP)			280	--	3,600	--	--	--	310	--	--	--	--	
With Bio-Attenuation Zone, Residential (LTCP)			85,000	--	1,100,000	--	--	--	93,000	--	--	--	--	
With Bio-Attenuation Zone, Commercial (LTCP)			280,000	--	3,600,000	--	--	--	310,000	--	--	--	--	
Soil Gas Samples														
SG-1	9/23/2016	5 - 6	<3.3	5.7	<4.4	13.6	<7,170	<3.7	--	<13	<5,100	--	17.7	
SG-2	9/23/2016	5 - 6	12	<3.8	<4.4	23.9	<7,170	<3.7	--	<13	<5,100	--	19.8	
Subslab Gas Samples														
SS-1	11/14/2013 6/23/2015	0.5 - 0.7 0.5 - 0.7	<1.6	<1.9	<2.2	<6.6	2,300 --floor refinshed, probe covered--	<1.8	<5.3	--	--	0.13	17	For other VOC detections see the lab report.
SS-2	11/13/2013 6/23/2015 9/23/2016	0.5 - 0.7 0.5 - 0.7 0.5 - 0.7	58 <1.6 <3.3	2.7 3.7 <3.8	<2.2 2.3 <4.4	<6.6 14 <13.2	2,000 <720 <7,170	<1.8 <1.8 <3.7	<5.3 <5.3 --	-- <50 <13	-- -- <5,400	0.48 -- --	16 -- 20.4	For other VOC detections see the lab report. For other VOC detections see the lab report.
SS-3	11/13/2013 6/23/2015 9/23/2016	0.8 - 1.0 0.8 - 1.0 0.8 - 1.0	71 <1.6 <3.3	2.6 3.3 4.0	<2.2 <2.2 <4.4	<6.6 13 13	1,400 1,100 <7,170	<1.8 <1.8 <3.7	<5.3 <5.3 --	-- <50 <13	-- -- <5,000	0.12 -- --	17 -- 20.5	For other VOC detections see the lab report. For other VOC detections see the lab report.

Abbreviations:

SG-1 = Soil Gas Sample

SS-1 = Subslab Sample

ug/m³ = Micrograms per cubic meter of air results calculated by laboratory from parts per billion results using normal temperature and pressure (NPT).

ft - ft bgs = Depth interval below ground surface (bgs) in feet.

% = Percent of total sample volume.

Volatile organic compounds (VOCs) by EPA Method TO-15 (partial list), uses GC/MS scan.

Oxygen by Modified ASTM Method D-1946, uses GC/TCD scan.

< n = Chemical not present at a concentration in excess of detection limit shown.

MRL = Method reporting limit. Laboratory reporting limit based on parts per billion on volume to volume basis (ppbv/v) and converted to ug/m³.

ESL = Environmental Screening Level, from California Regional Water Quality Control Board - San Francisco Bay Region, Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Interim Revised February 2016 (Revision 3).

LTCP = Low Threat Closure Policy

Bold = Concentrations above Lowest ESLs for Commercial Land Use for shallow soil gas (SG & SS samples).

Pangea

Table 2. Soil Analytical Data: Petroleum Hydrocarbons - 1721 Webster Street, Oakland, California

Sample ID	Date Sampled	Sample Depth (ft)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	Notes
			mg/kg							
Tier 1 ESL			100	0.044	2.9	1.4	2.3	0.023	0.033	
ESL Direct Exposure: Residential Shallow Soil			740	0.23	970	5.1	560	42	3.3	
ESL Direct Exposure: Commercial Shallow Soil			3,900	1.0	4,600	22.0	2,400	180	14	
ESL Direct Exposure: Any Depth, Any Land Use			2,800	24	4,100	480.0	2,400	3,700	350	
ESL Leaching to Groundwater - Drinking Water			770	0.044	2.9	1.4	2.3	0.023	0.033	
ESL Leaching to Groundwater - Nondrinking Water			3,400	0.049	9.3	1.4	11	0.84	3.9	
Residential LTCP outdoor air criteria (0 to 5 ft bgs):			--	1.9	--	21	--	--	9.7	
Residential LTCP outdoor air criteria (5 to 10 ft bgs):			--	2.8	--	32	--	--	9.7	
Commercial LTCP outdoor air criteria (0 to 5 ft bgs):			--	8.2	--	89	--	--	45	
Commercial LTCP outdoor air criteria (5 to 10 ft bgs):			--	12	--	134	--	--	219	

Pangea Environmental Services, Inc. - 2013

Confirmation Soil Borings

CB-1-4	12/10/2013	4.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
CB-1-8	12/10/2013	8.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
CB-1-12	12/10/2013	12.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
CB-2-4	12/10/2013	3.5 - 4.0*	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
CB-2-8	12/10/2013	7.0 - 7.5*	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
CB-2-10	12/10/2013	8.5 - 9.0*	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Cambria Environmental Technology, Inc. - 2003

MW-6	6/27/2003	20.0	220	<0.10	0.14	<0.10	0.35	<1.0	--
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Cambria Environmental Technology, Inc. - 1996

SB-A	2/22/1996	19.5	<1.0	<0.005	0.007	<0.005	<0.005	--	--
SB-B	2/22/1996	20.5	580	<0.3	1.3	1.8	4.2	--	--
SB-C	2/22/1996	19.5	1.4	<0.005	0.013	0.027	0.12	--	--
SB-D	2/22/1996	20.5	660	<0.2	2.3	<0.2	5.2	--	--
SB-E	2/23/1996	20.5	<1.0	<0.005	0.009	<0.005	<0.005	--	--
SB-F	2/23/1996	20.0	<1.0	<0.005	0.006	<0.005	<0.005	--	--
SB-G	2/23/1996	20.0	<1.0	<0.005	0.009	<0.005	<0.005	--	--
SB-H	5/3/1996	20.5	1.2	<0.005	0.006	0.025	0.038	--	--
(MW-4)	5/3/1996	31.0	<1.0	<0.005	<0.005	<0.005	<0.005	--	--
SB-I	5/3/1996	15.5	<1.0	<0.005	<0.005	<0.005	<0.005	--	--
(MW-5)	5/3/1996	26.0	<1.0	<0.005	<0.005	<0.005	<0.005	--	--

Gen-Tech Environmental - 1994

EB-1@20	7/8/1994	20.0	<1.0	<0.005	<0.005	<0.005	<0.005	--	--
EB-2@20	7/8/1994	20.0	300	0.2	17	0.26	3.0	--	--
EB-3@20	7/8/1994	20.0	51	0.039	0.56	0.32	2.9	--	--
EB-4@20	7/8/1994	20.0	<1.0	<0.005	<0.005	<0.005	<0.005	--	--
EB-5@20	7/8/1994	20.0	650	0.17	5.2	4.4	48	--	--
EB-6@20	7/8/1994	20.0	68	<0.005	22	4.3	23	--	--

Pangea

Table 2. Soil Analytical Data: Petroleum Hydrocarbons - 1721 Webster Street, Oakland, California

Sample ID	Date Sampled	Sample Depth (ft)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	Notes
			mg/kg							
Tier 1 ESL			100	0.044	2.9	1.4	2.3	0.023	0.033	
ESL Direct Exposure: Residential Shallow Soil			740	0.23	970	5.1	560	42	3.3	
ESL Direct Exposure: Commercial Shallow Soil			3,900	1.0	4,600	22.0	2,400	180	14	
ESL Direct Exposure: Any Depth, Any Land Use			2,800	24	4,100	480.0	2,400	3,700	350	
ESL Leaching to Groundwater - Drinking Water			770	0.044	2.9	1.4	2.3	0.023	0.033	
ESL Leaching to Groundwater - Nondrinking Water			3,400	0.049	9.3	1.4	11	0.84	3.9	
Residential LTCP outdoor air criteria (0 to 5 ft bgs):			--	1.9	--	21	--	--	9.7	
Residential LTCP outdoor air criteria (5 to 10 ft bgs):			--	2.8	--	32	--	--	9.7	
Commercial LTCP outdoor air criteria (0 to 5 ft bgs):			--	8.2	--	89	--	--	45	
Commercial LTCP outdoor air criteria (5 to 10 ft bgs):			--	12	--	134	--	--	219	

Parker Environmental - 1992

Beneath UST Samples

T-1	8/3/1992	9.0	150	2.2	2.9	1.8	13	--	--	
T-2	8/3/1992	9.0	120	0.62	0.56	0.87	2.2	--	--	
T-3	8/6/1992	8.0	580	1.7	5.9	5.6	43	--	--	Overexcavated
T-4	8/6/1992	8.0	1,500	11	140	48	280	--	--	Overexcavated
T-5	8/6/1992	8.0	410	6.7	22	6.2	35	--	--	Overexcavated
T-6	8/6/1992	12.0	1,400	12	70	29	150	--	--	
T-7	8/6/1992	14.0	2.3	0.11	0.19	0.05	0.31	--	--	

South Excavation Sidewall Samples

SW1	8/6/1992	9.5	280	2.9	5.8	3.2	15	--	--	
SW2	8/6/1992	7.0	1,500	5.7	40	18	150	--	--	
SW3	8/6/1992	8.0	400	2.7	5.8	4.0	21	--	--	
SW4	8/6/1992	9.0	2.3	0.42	0.028	0.077	0.18	--	--	

Piping and Dispenser Samples

L-1	8/3/1992	1.5	2.6	<0.005	0.01	<0.005	0.03	--	--	
L-2	8/3/1992	1.5	<1.0	<0.005	<0.005	<0.005	<0.005	--	--	
L-3	8/3/1992	1.5	<1.0	<0.005	<0.005	<0.005	<0.005	--	--	
L-4	8/3/1992	1.5	<1.0	<0.005	<0.005	<0.005	<0.005	--	--	
L-5	8/3/1992	2.0	8.2	0.01	0.02	0.012	0.092	--	--	
L-6	8/3/1992	2.0	<1.0	<0.005	0.007	<0.005	<0.034	--	--	

Stockpile Samples

C1	8/6/1992	1.5	560	<0.1	5.0	3.1	24	--	--	
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Notes, Abbreviations and Methods:

mg/kg = Milligrams per kilogram, approximately equivalent to parts per million (ppm).

TPHd = Total petroleum hydrocarbons as diesel by modified EPA Method 8015.

TPHg = Total petroleum hydrocarbons by EPA Method 8015.

BTEX = Benzen, toluene, ethylbenzene, xylenes by EPA Method 8020/8021.

MTBE = Methyl tertiary-butyl ether by EPA Method 8020.

ESL = Environmental Screening Levels for shallow soil with commercial/industrial land use where groundwater is a current or potential drinking water resource from Table A-2, established by the SFBRWQCB, Interim Final - November 2007 (Revised May 2013).

LTCP = Low Threat Closure Policy

-- = Not available or not analyzed.

< n = Chemical not present at a concentration in excess of detection limit shown.

* Boring installed at 25° angle from vertical. Listed and calculated sample depth is rounded to the nearest 0.5 ft.

PANGEA

Table 3 - Groundwater Elevation and Analytical Data.

Douglas Parking Company, 1721 Webster Street, Oakland, California

Boring / Well ID <i>TOC</i>	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)	TPHg	Benzene	Toluene	Ethylbenzene (µg/L)	Xylenes	MTBE
Monitoring Wells									
MW-1	12/2/1994	19.42	9.83	ND	ND	ND	ND	ND	-
29.25	3/6/1995	20.69	9.04	ND	ND	ND	ND	ND	-
29.73	7/11/1995	20.65	9.16	ND	ND	ND	ND	ND	-
29.81	5/10/1996	20.80	9.01	ND	ND	ND	ND	ND	-
	10/2/1996	21.35	8.46	-	-	-	-	-	-
	2/28/1997	20.57	9.24	-	-	-	-	-	-
	9/16/1997	21.50	8.31	-	-	-	-	-	-
	2/5/1998	20.91	8.90	-	-	-	-	-	-
	8/11/1998	20.50	9.31	-	-	-	-	-	-
	2/8/1999	21.42	8.39	-	-	-	-	-	-
	2/24/1999	22.99	6.82	-	-	-	-	-	-
	3/3/1999	20.84	8.97	-	-	-	-	-	-
	3/10/1999	20.89	8.92	-	-	-	-	-	-
	3/17/1999	20.84	8.97	-	-	-	-	-	-
	5/4/1999	20.80	9.01	-	-	-	-	-	-
	7/20/1999	21.25	8.56	-	-	-	-	-	-
	10/5/1999	21.37	8.44	-	-	-	-	-	-
	1/7/2000	21.65	8.16	-	-	-	-	-	-
	4/6/2000	21.05	8.76	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/31/2000	21.13	8.68	-	-	-	-	-	-
	10/3/2000	21.69	8.12	-	-	-	-	-	-
	1/12/2001	22.00	7.81	-	-	-	-	-	-
	4/11/2001	22.16	7.65	-	-	-	-	-	-
	7/6/2001	22.57	7.24	-	-	-	-	-	-
	10/25/2001	22.71	7.10	-	-	-	-	-	-
	3/4/2002	22.53	7.28	-	-	-	-	-	-
	4/18/2002	22.81	7.00	-	-	-	-	-	-
	7/9/2002	22.95	6.86	-	-	-	-	-	-
	10/4/2002	23.13	6.68	-	-	-	-	-	-
	1/12/2003	22.05	7.76	-	-	-	-	-	-
	4/21/2003	21.17	8.64	-	-	-	-	-	-
32.75	7/21/2003	21.39	11.36	-	-	-	-	-	-
	10/2/2003	21.64	11.11	-	-	-	-	-	-
	1/15/2004	21.10	11.65	-	-	-	-	-	-
	4/5/2004	21.20	11.55	-	-	-	-	-	-
	8/9/2004	22.97	9.78	-	-	-	-	-	-
	10/7/2004	23.55	9.20	-	-	-	-	-	-
	2/7/2005	20.90	11.85	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/5/2005	20.60	12.15	-	-	-	-	-	-
	7/6/2005	20.66	12.09	-	-	-	-	-	-
	10/10/2005	21.16	11.59	-	-	-	-	-	-
	1/26/2006	20.73	12.02	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/10/2006	20.05	12.70	-	-	-	-	-	-
	7/6/2006	20.90	11.85	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/26/2006	21.80	10.95	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	1/19/2007	22.02	10.73	--	--	--	--	--	--
	4/17/2007	22.13	10.62	--	--	--	--	--	--
	7/6/2007	21.83	10.92	--	--	--	--	--	--
	10/15/2007	22.28	10.47	--	--	--	--	--	--
	1/17/2008	22.33	10.42	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/9/2008	22.11	10.64	--	--	--	--	--	--

PANGEA

Table 3 - Groundwater Elevation and Analytical Data.

Douglas Parking Company, 1721 Webster Street, Oakland, California

Boring / Well ID TOC	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)	Groundwater Analytical Data (µg/L)					
				TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
MW-1 (cont'd)	7/17/2008	22.50	10.25	--	--	--	--	--	--
	10/27/2008	22.75	10.00	--	--	--	--	--	--
	1/9/2009	22.89	9.86	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/27/2009	22.40	10.35	--	--	--	--	--	--
	7/9/2009	22.55	10.20	--	--	--	--	--	--
	2/3/2010	22.08	10.67	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/13/2010	21.20	11.55	---	---	---	---	---	---
	1/17/2011			Well Inaccessible					
	7/12/2011	20.72	12.03	--	--	--	--	--	--
	1/11/2012	21.33	11.42	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/25/2012	20.94	11.81	--	--	--	--	--	--
	1/25/2013	21.41	11.34	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/29/2013	22.14	10.61	--	--	--	--	--	--
	1/28/2014	22.75	10.00	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/24/2014	22.84	9.91	--	--	--	--	--	--
	1/22/2015	22.45	10.30	<50	<0.5	<0.5	<0.5	<1.5	<5.0
	7/20/2015	22.87	9.88	--	--	--	--	--	--
	8/3/2016	22.27	10.48	<50	<0.5	<0.5	<0.5	<1.5	<5.0
	1/20/2017	21.83	10.92	<50	<0.5	<0.5	<0.5	<1.5	<5.0
	MW-2 27.10 27.40	12/2/1994	19.50	7.60	61,300	3,000	3,900	160	4,500
3/6/1995		18.49	8.61	98,000	8,400	16,000	2,000	2,600	-
7/11/1995		18.45	8.95	38,000	3,100	7,500	940	3,700	-
5/10/1996		18.56	8.84	63,000	7,400	16,000	1,500	6,000	-
10/2/1996		19.15	8.25	21,000	2,200	3,400	430	1,600	-
2/28/1997		18.43	8.97	39,000	4,700	9,600	950	4,200	ND
9/16/1997		19.26	8.14	29,000	3,300	5,800	690	2,900	<620
2/5/1998		18.66	8.74	10,000	1,000	2,000	170	860	<330
8/11/1998		18.41	8.99	12,000	1,200	2,300	260	1,400	300
2/8/1999		19.84	7.56	5,500	740	1,200	150	780	60
2/17/1999		18.94	8.46	-	-	-	-	-	-
2/24/1999		20.76	6.64	-	-	-	-	-	-
3/3/1999		18.55	8.85	-	-	-	-	-	-
3/10/1999		20.74	6.66	-	-	-	-	-	-
3/17/1999		18.57	8.83	-	-	-	-	-	-
5/4/1999		18.55	8.85	90,000	9,200	21,000	1,600	10,000	560
7/20/1999		18.98	8.42	28,000	2,100	3,700	900	4,200	<860
10/5/1999		19.10	8.30	11,000	870	180	30	1,400	<110
1/7/2000		19.41	7.99	15,000	1,300	2,100	440	1,800	<14
4/6/2000		18.80	8.60	17,000	1,800	3,100	500	2,200	<50
7/31/2000		18.87	8.53	17,000	1,500	2,700	430	2,100	<200
10/3/2000		19.45	7.95	27,000	2,500	4,000	660	2,900	<50
1/12/2001		19.80	7.60	25,000	2,700	4,100	670	3,000	<200
4/11/2001		20.03	7.37	97,000	9,500	21,000	2,200	7,900	<200
7/6/2001		20.19	7.21	3,500	500	150	11	420	<5.0
10/25/2001		20.35	7.05	3,800	620	230	70	400	<50
3/4/2002		20.37	7.03	46,000	7,300	12,000	870	3,200	<500
4/18/2002	20.15	7.25	68,000	5,100	8,900	1,100	4,000	<1,000	
7/9/2002	21.09	6.31	1,000	200	8.9	0.67	82	<10	
10/4/2002	21.28	6.12	270	100	3.4	0.53	10	<5.0	
1/12/2003	20.59	6.81	67,000	7,600	13,000	1,400	5,600	<500	
4/21/2003	19.98	7.42	78,000	7,700	12,000	1,900	6,900	<500	
30.40	7/21/2003	20.08	10.32	1,800	360	16	<5.0	190	<50
	10/2/2003	20.41	9.99	4,000	790	110	60	350	<50

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Table 3 - Groundwater Elevation and Analytical Data.

Douglas Parking Company, 1721 Webster Street, Oakland, California

Boring / Well ID <i>TOC</i>	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)	TPHg	Benzene	Toluene	Ethylbenzene (µg/L)	Xylenes	MTBE
MW-2	1/15/2004	19.93	10.47	8,100	6.1	23	44	530	<50
(cont'd)	4/5/2004	18.99	11.41	14,000	1,600	2,100	550	2,500	<500
	8/9/2004	19.79	10.61	1,200	210	16	14	100	<20
	10/7/2004	20.26	10.14	1,100	2.3	9.8	2.9	36	<5.0
	2/7/2005	18.80	11.60	45,000	4,400	4,800	1,400	5,800	<200
	4/5/2005	18.40	12.00	34,000	3,700	3,600	1,200	5,300	<500 (<5.0)
	7/6/2005	18.48	11.92	24,000	1,600	1,700	570	2,800	<500
	10/10/2005	19.00	11.40	25,000	1,700	2,100	710	3,200	<500
	1/26/2006	18.58	11.82	60,000	4,600	7,200	1,600	6,900	<1,000
	4/10/2006	17.84	12.56	56,000	4,900	7,500	1,200	7,400	<500
	7/6/2006	18.76	11.64	28,000	1,900	1,700	720	2,900	<500
	10/26/2006	19.60	10.80	43,000	2,800	2,500	1,700	7,600	<500
	1/19/2007	19.84	10.56	31,000	2,700	2,400	1,400	5,800	<150
	4/17/2007	19.90	10.50	37,000	3,200	2,900	1,600	6,400	<400
	7/6/2007	19.63	10.77	30,000	3,200	2,000	1,500	5,200	<250
	10/15/2007	20.11	10.29	20,000	1,200	990	650	2,300	<500
	1/17/2008	20.10	10.30	38,000	2,900	5,100	1,200	5,000	<210
	4/9/2008	20.12	10.28	51,000	3,000	6,400	1,700	6,500	<250
	7/17/2008	20.01	10.39	22,000	180	500	660	2,100	<250
	10/27/2008	20.61	9.79	26,000	570	2,100	670	3,400	<50
	1/9/2009	20.80	9.60	16,000	240	680	460	3,000	<100
	4/27/2009	20.17	10.23	16,000	130	660	570	3,600	<500
	7/9/2009	20.36	10.04	8,500	30	110	250	1,400	<100
	2/3/2010	19.84	10.56	22,000	47	140	500	3,000	<100
	7/13/2010	19.08	11.32	1,900	3.5	5.8	38	110	<5.0
	1/17/2011	19.02	11.38	17,000	23	100	330	2,200	<100
	7/12/2011	18.52	11.88	15,000	22	30	190	740	<50
	1/12/2011	19.18	11.22	20,000	17	47	250	2,100	<84
	7/25/2012	18.83	11.57	440	<0.5	2.2	1.0	39	<5.0
	1/25/2013	19.21	11.19	8,300	17	11	140	510	<50
	7/29/2013	19.94	10.46	8,000	13	13	200	100	<25
	1/28/2014	20.56	9.84	5,900	10	7.3	100	80	<50
	7/24/2014	20.61	9.79	2,100	1.5	3.1	21	37	<5.0
	1/22/2015	20.24	10.16	1,700	3.3	3.0	8.0	25	<10
	7/20/2015	20.66	9.74	770	0.57	0.69	9.2	10	<5.0
	8/3/2016	20.03	10.37	980	0.9	1.9	9.4	9.9	<5.0
	1/20/2017	19.49	10.91	3,000	2.7	3.7	19	29	<5.0
MW-3	12/2/1994	22.15	7.35	394,000	1,200	ND	1,800	4,000	-
29.50	3/6/1995	20.09	9.16	21,000	400	150	24	62	-
29.25	7/11/1995	19.99	9.57	12,000	ND	10	16	99	-
29.56	5/10/1996	20.24	9.32	8,600	ND	7.6	16	84	-
	10/2/1996	20.90	8.66	11,000	ND	7.4	19	92	-
	2/28/1997	20.12	9.44	6,000	ND	4.4	17	88	50
	9/16/1997	20.97	8.59	6,500	<0.5	0.69	1.2	6.7	<5.0
	2/5/1998	20.39	9.17	5,400	<0.5	6.3	15	86	<63
	8/11/1998	19.95	9.61	2,700	<0.5	3.5	3.2	12	<10
	2/8/1999	20.58	8.98	6,100	<0.5	8.1	18	80	<140
	2/17/1999	20.53	9.03	-	-	-	-	-	-
	2/24/1999	22.53	7.03	-	-	-	-	-	-
	3/3/1999	20.28	9.28	-	-	-	-	-	-
	3/10/1999	22.45	7.11	-	-	-	-	-	-
	3/17/1999	20.26	9.30	-	-	-	-	-	-
	5/4/1999	20.24	9.32	11,000	<2	<2	9.8	140	<10

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Table 3 - Groundwater Elevation and Analytical Data.

Douglas Parking Company, 1721 Webster Street, Oakland, California

Boring / Well ID TOC	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)	TPHg	Benzene	Toluene	Ethylbenzene (µg/L)	Xylenes	MTBE
MW-3	7/20/1999	20.68	8.88	11,000	<0.5	3.1	13	88	<80
(cont'd)	10/5/1999	20.81	8.75	31,000	62	<0.5	21	170	<90
	1/7/2000	21.09	8.47	13,000	<0.5	<2	21	140	<80
	4/6/2000	20.48	9.08	5,300	1.5	1.4	9.8	60	<30
	7/31/2000	20.62	8.94	7,100	3.5	1.0	12	66	<5.0
	10/3/2000	21.13	8.43	8,000	<0.5	3.3	11	70	<40
	1/12/2001	21.45	8.11	11,000	4.3	6.7	11	73	<70
	4/11/2001	21.69	7.87	10,000	<0.5	<0.5	11	65	<10
	7/6/2001	21.60	7.96	13,000	5.3	1.6	11	58	<5.0
	10/25/2001	21.70	7.86	11,000	<0.5	3.0	15	70	<10
	3/4/2002	21.65	7.91	1,900	1.3	0.8	<0.5	15	<5.0
	4/18/2002	21.77	7.79	1,500	1.0	0.97	1.3	5.8	<5
	7/9/2002	22.03	7.53	13,000	6.8	5.7	13	59	<90
	10/4/2002	22.15	7.41	8,400	<10	<10	<10	42	<100
	1/12/2003	21.13	8.43	9,000	9.5	5.1	8.5	46	<90
	4/21/2003	20.63	8.93	10,000	<5.0	<5.0	8.5	32	<50
32.56	7/21/2003	20.68	11.88	9,600	<2.5	<2.5	7.4	39	48 (<1.0)
	10/2/2003	20.99	11.57	12,000	<5.0	<5.0	10	40	<90
	1/15/2004	20.74	11.82	13,000	37	41	78	930	<50
	4/5/2004	20.59	11.97	4,500	<1.7	<1.7	<1.7	12	<17
	8/9/2004	22.18	10.38	2,100	<1.0	3.7	<1.0	8.1	<10
	10/7/2004	22.79	9.77	2,400	6.5	26	7.5	89	<15
	2/7/2005	20.35	12.21	6,800	2.2	5.6	2.0	12	<30
	4/5/2005	19.95	12.61	6,100	2.3	2.6	1.3	8.3	<45 (<0.5)
	7/6/2005	19.93	12.63	4,500	<1.0	1.5	1.0	8.3	<10
	10/10/2005	20.45	12.11	3,800	0.73	<0.5	0.98	5.7	<15
	1/26/2006	20.05	12.51	5,100	<0.5	1.1	<0.5	6.6	<15
	4/10/2006	19.39	13.17	1,900	0.55	1.6	0.51	4.1	<10
	7/6/2006	20.25	12.31	5,600	<1.0	2.3	<1.0	6.4	<20
	10/26/2006	21.07	11.49	8,000	2.5	1.0	2.3	12	<35
	1/19/2007	21.38	11.18	77,000	19	40	9.5	130	<300
	4/17/2007	21.45	11.11	7,400	2.7	6.6	1.1	12	<40
	7/6/2007	21.29	11.27	7,100	2.4	5.6	0.85	10	<30
	10/15/2007	21.62	10.94	10,000	<5.0	<5.0	<5.0	14	<50
	1/17/2008	21.68	10.88	6,400	1.8	<0.5	1.0	8.4	23
	4/9/2008	21.42	11.14	4,700	1.7	2.2	<0.5	3.8	<18
	7/17/2008	22.10	10.46	7,700	2.9	3.1	1.4	11	<60
	10/27/2008	22.13	10.43	9,700	<1.7	1.8	2.3	11	<17
	1/9/2009	22.27	10.29	9,800	1.7	2.0	3.0	14	<17
	4/27/2009	21.74	10.82	8,700	1.9	3.3	<1.7	11	<50
	7/9/2009	21.92	10.64	10,000	<2.5	4.1	2.6	11	<60
	2/3/2010	21.55	11.01	5,300	1.5	2.3	<0.5	2.7	<25
	7/13/2010	21.31	11.25	4,400	<2.5	9.0	<2.5	4.6	<25
	1/17/2011	20.75	11.81	4,100	1.2	1.8	<0.5	2.7	<20
	7/12/2011	20.14	12.42	4,500	2.4	2.8	<0.5	5.0	<25
	1/11/2012	20.80	11.76	3,000	1.1	1.6	<0.5	1.9	<15
	7/25/2012	20.44	12.12	5,400	<1.7	<1.7	<1.7	4.1	<17
	1/25/2013	20.84	11.72	4,900	<1.7	2.7	<1.7	3.5	<17
	7/29/2013	21.48	11.08	9,700	<2.5	<2.5	<2.5	<2.5	<25
	1/28/2014	22.08	10.48	12,000	2.8	2.8	<2.5	4.6	<25
	7/24/2014	22.15	10.41	6,700	2.2	<1.7	1.9	5.2	<35
	1/22/2015	21.76	10.80	8,900	<5.0	<5.0	<5.0	<5.0	<50

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Table 3 - Groundwater Elevation and Analytical Data.

Douglas Parking Company, 1721 Webster Street, Oakland, California

Boring / Well ID <i>TOC</i>	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)	TPHg	Benzene	Toluene	Ethylbenzene (µg/L)	Xylenes	MTBE
MW-4	1/9/2009	19.12	9.17	4,400	180	34	180	93	<150
(cont'd)	4/27/2009	18.52	9.77	2,500	110	24	190	69	<150
	7/9/2009	18.78	9.51	5,600	150	34	270	83	<250
	2/3/2010	18.24	10.05	2,900	38	20	69	54	<50
	7/13/2010	17.59	10.70	1,100	20	7.6	43	26	<60
	1/17/2011	17.42	10.87	2,900	16	43	60	99	<15
	7/12/2011	17.01	11.28	<50	<0.5	0.56	0.52	0.93	<5.0
	1/11/2012	17.68	10.61	4,100	52	52	49	130	<90
	7/25/2012	17.26	11.03	100	1.2	<0.5	<0.5	<0.5	<5.0
	1/25/2013	17.58	10.71	3,500	33	20	23	65	<35
	7/29/2013	18.34	9.95	97	4.7	<0.5	<0.5	0.70	<10
	1/28/2014	18.99	9.30	<50	1.2	<0.5	<0.5	<0.5	<5.0
	7/24/2014	19.05	9.24	4,200	83	19	40	32	<50
	1/22/2015	18.57	9.72	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/20/2015	--	--				--well paved over--		
	8/3/2016	--	--				--well paved over--		
	1/20/2017	--	--				--well paved over--		
MW-5	5/10/1996	14.60	7.37	ND	ND	ND	ND	ND	-
21.97	10/2/1996	15.25	6.72	ND	ND	ND	ND	ND	-
	2/28/1997	14.31	7.66	ND	ND	ND	ND	ND	ND
	9/17/1997	15.18	6.79	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0
	2/5/1998	13.64	8.33	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	8/11/1998	13.92	8.05	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	2/8/1999	14.19	7.78	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	2/24/1999	16.18	5.79	-	-	-	-	-	-
	3/3/1999	14.23	7.74	-	-	-	-	-	-
	3/10/1999	14.32	7.65	-	-	-	-	-	-
	3/17/1999	14.25	7.72	-	-	-	-	-	-
	5/4/1999	14.41	7.56	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/20/1999	14.44	7.53	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/5/1999	14.79	7.18	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	1/7/2000*	15.23	6.74	-	-	-	-	-	-
	4/6/2000	14.74	7.23	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/31/2000	14.52	7.45	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/3/2000	15.37	6.60	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	1/12/2001	15.70	6.27	6,400	13	290	450	1,100	<40
	4/11/2001	15.78	6.19	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/6/2001	15.97	6.00	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/25/2001	16.05	5.92	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	3/4/2002	16.21	5.76	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/18/2002	16.59	5.38	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/9/2002	16.94	5.03	170	1.0	0.65	2.1	4.0	<15
	10/4/2002	17.14	4.83	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	1/12/2003	16.58	5.39	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/21/2003	15.90	6.07	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/21/2003	16.03	8.96	<50	<0.5	<0.5	<0.5	<0.5	<5.0
24.99	10/2/2003	16.33	8.66	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	1/15/2004	16.21	8.78	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/5/2004	15.01	9.98	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	8/9/2004	16.85	8.14	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/7/2004	17.48	7.51	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	2/7/2005	16.52	8.47	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/5/2005	14.45	10.54	<50	<0.5	<0.5	<0.5	<0.5	<5.0 (<0.5)

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Table 3 - Groundwater Elevation and Analytical Data.

Douglas Parking Company, 1721 Webster Street, Oakland, California

Boring / Well ID TOC	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)	TPHg	Benzene	Toluene	Ethylbenzene (µg/L)	Xylenes	MTBE
MW-5	7/6/2005	14.85	10.14	<50	<0.5	<0.5	<0.5	<0.5	<5.0
(cont'd)	10/10/2005	15.44	9.55	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	1/26/2006	14.96	10.03	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/10/2006	14.01	10.98	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/6/2006	15.17	9.82	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/26/2006	15.94	9.05	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	1/19/2007	16.05	8.94	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/17/2007	15.99	9.00	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/6/2007	15.50	9.49	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/15/2007	16.27	8.72	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	1/17/2008	15.10	9.89	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/9/2008	15.96	9.03	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/17/2008	16.44	8.55	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/27/2008	16.78	8.21	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	1/9/2009	16.75	8.24	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/27/2009	16.21	8.78	--	--	--	--	--	--
	7/9/2009	16.48	8.51	--	--	--	--	--	--
	2/3/2010	15.77	9.22	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/13/2010	15.34	9.65	---	---	---	---	---	---
	1/17/2011	14.93	10.06	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/12/2011	14.81	10.18	--	--	--	--	--	--
	1/11/2012	15.44	9.55	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/25/2012	14.79	10.20	--	--	--	--	--	--
	1/25/2013	15.21	9.78	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/29/2013	16.03	8.96	--	--	--	--	--	--
	1/28/2014	16.65	8.34	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/24/2014	16.75	8.24	--	--	--	--	--	--
	1/22/2015	16.25	8.74	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/20/2015	16.82	8.17	--	--	--	--	--	--
	8/3/2016	16.23	8.76	<50	<0.5	<0.5	<0.5	<1.5	<5.0
	1/20/2017	14.98	10.01	<50	<0.5	<0.5	<0.5	<1.5	<5.0
MW-6	6/30/2003	19.60	11.39	68,000	950	6,000	2,400	10,000	<1,000
30.99	7/21/2003	19.67	11.32	120,000	170	1,400	1,100	10,000	<1,000
	10/2/2003	19.97	11.02	16,000	7.6	200	38	1,800	<100
	1/15/2004	19.55	11.44	14,000	48	51	94	1,100	<50
	4/5/2004	19.17	11.82	24,000	180	900	430	1,800	<500
	8/9/2004	20.98	10.01	5,300	6.4	25	5.3	69	<17 (<0.5)
	10/7/2004	21.52	9.47	5,600	11	58	18	210	<50 (<0.5)
	2/7/2005	19.00	11.99	31,000	120	620	310	1,200	<500
	4/5/2005	18.60	12.39	21,000	170	1,100	350	1,300	<500 (<5.0)
	7/6/2005	18.56	12.43	26,000	130	920	320	1,200	<500
	10/10/2005	19.99	11.00	19,000	140	840	250	980	<500
	1/26/2006	18.70	12.29	10,000	140	1,100	270	1,200	<170
	4/10/2006	18.04	12.95	13,000	140	1,000	280	1,000	<250
	7/6/2006	18.80	12.19	17,000	150	1,000	290	1,000	<250
	10/26/2006	19.62	11.37	23,000	230	660	470	1,500	<500
	1/19/2007	19.92	11.07	18,000	190	620	350	1,100	<150
	4/17/2007	19.97	11.02	23,000	380	1,400	590	2,000	<450
	7/6/2007	19.81	11.18	28,000	600	3,000	900	2,700	<500
	10/15/2007	20.15	10.84	25,000	290	680	410	1,100	<250
	10/15/2007	20.15	10.84	25,000	290	680	410	1,100	<250
	1/17/2007	20.22	10.77	16,000	200	130	130	460	<150
	4/9/2008	19.86	11.13	18,000	320	870	480	1,500	<250

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Douglas Parking Company, 1721 Webster Street, Oakland, California

Boring / Well ID <i>TOC</i>	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)	TPHg	Benzene	Toluene	Ethylbenzene (µg/L)	Xylenes	MTBE
MW-6	7/17/2008	20.36	10.63	18,000	320	510	420	1,200	<500
(cont'd)	10/27/2008	20.69	10.30	31,000	320	320	410	990	<350
	1/9/2009	20.83	10.16	22,000	340	390	560	1,400	<250
	4/27/2009	20.27	10.72	13,000	110	97	380	1,100	<350
	7/9/2009	20.43	10.56	18,000	250	520	470	1,300	<450
	2/3/2010	20.14	10.85	6,200	82	180	190	550	<150
	7/13/2010	19.29	11.70	12,000	260	420	480	1,600	<450
	1/17/2011	19.31	11.68	4,900	70	52	210	500	<50
	7/12/2011	18.73	12.26	1,400	20	8.5	64	130	<30
	1/11/2012	19.39	11.60	6,000	100	38	310	700	<210
	7/25/2012	19.02	11.97	2,800	31	13	140	240	<75
	1/25/2013	19.35	11.64	5,400	86	34	310	620	<100
	7/29/2013	19.97	11.02	82	1.2	<0.5	<0.5	<0.5	<5.0
	1/28/2014	20.60	10.39	2,600	36	11	52	53	<50
	7/24/2014	20.70	10.29	9,600	160	53	410	590	<70
	1/22/2015	20.31	10.68	7,600	25	13	53	86	<50
	7/20/2015	20.68	10.31	12,000	160	73	540	650	<450
	8/3/2016	20.02	10.97	12,000	710	67	3,800	3,100	450
	1/20/2017	19.56	11.43	13,000	120	71	760	760	260
MW-7	6/30/2003	21.40	11.71	170	<0.5	2.1	2.0	8.7	<5.0
33.11	7/21/2003	21.44	11.67	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/2/2003	21.73	11.38	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	1/15/2004	21.57	11.54	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/5/2004	20.84	12.27	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	8/9/2004	22.68	10.43	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/7/2004	23.27	9.84	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	2/7/2005	20.60	12.51	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/5/2005	20.22	12.89	<50	<0.5	0.75	<0.5	<0.5	<5.0 (<0.5)
	7/6/2005	20.25	12.86	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/10/2005	20.70	12.41	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	1/26/2006	20.32	12.79	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/10/2006	19.62	13.49	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/6/2006	20.47	12.64	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/26/2006	21.30	11.81	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	1/19/2007	21.62	11.49	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/17/2007		11.49	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/6/2007	21.59	11.52	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/15/2007	21.85	11.26	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	1/17/2007	21.90	11.21	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/9/2008	21.61	11.50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/17/2008	22.09	11.02	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/27/2008	22.39	10.72	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	1/9/2009	22.52	10.59	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/27/2009	21.98	11.13	--	--	--	--	--	--
	7/9/2009	22.18	10.93	--	--	--	--	--	--
	2/3/2010	21.87	11.24	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/13/2010	21.01	12.10	---	---	---	---	---	---
	1/17/2011	21.07	12.04	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/12/2011	20.72	12.39	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	1/11/2012	21.13	11.98	<50	<0.5	<0.5	<0.5	<0.5	<5.0

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Table 3 - Groundwater Elevation and Analytical Data.

Douglas Parking Company, 1721 Webster Street, Oakland, California

Boring / Well ID <i>TOC</i>	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)	TPHg	Benzene	Toluene	Ethylbenzene (µg/L)	Xylenes	MTBE
MW-7	7/25/2012	20.75	12.36	--	--	--	--	--	--
<i>(cont'd)</i>	1/25/2013	21.10	12.01	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/29/2013	21.70	11.41	--	--	--	--	--	--
	1/28/2014	22.34	10.77	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/24/2014	22.41	10.70	--	--	--	--	--	--
	1/22/2015	21.99	11.12	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/20/2015	--	--			--well paved over--			
	8/3/2016	--	--			--well paved over--			
	1/20/2017	--	--			--well paved over--			
AS-1	7/6/2006	19.53	--	18,000	2,700	570	700	1,900	<500
	10/26/2006	20.33	--	15,000	1,900	340	360	1,400	<250
	1/19/2007	20.64	--	5,700	1,100	110	88	630	<50
	1/19/2007	20.64	--	5,700	1,100	110	88	630	<50
	4/17/2007	20.71	--	--	--	--	--	--	--
	7/16/2007	--	--	--	--	--	--	--	--
	10/15/2007	--	--	--	--	--	--	--	--
	1/17/2008	--	--	--	--	--	--	--	--
	4/9/2008	--	--	--	--	--	--	--	--
	1/25/2013	--	--	70	10	<0.5	<0.5	<0.5	<5.0
AS-2	7/6/2006	22.26	--	2,100	6.1	<0.5	33	200	<20
	10/26/2006	23.25	--	280	1.1	<0.5	<0.5	6.0	<15
	1/19/2007	23.61	--	2,100	2.3	<0.5	96	310	<35
	4/17/2007	23.70	--	--	--	--	--	--	--
	7/16/2007	--	--	--	--	--	--	--	--
	10/15/2007	--	--	--	--	--	--	--	--
	1/17/2008	--	--	--	--	--	--	--	--
	4/9/2008	--	--	--	--	--	--	--	--
	1/25/2013	22.02	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
AS-3	7/6/2006	21.77	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/26/2006	22.66	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	1/19/2007	22.97	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/17/2007	23.06	--	--	--	--	--	--	--
	7/16/2007	--	--	--	--	--	--	--	--
	10/15/2007	--	--	--	--	--	--	--	--
	1/17/2008	--	--	--	--	--	--	--	--
	4/9/2008	--	--	--	--	--	--	--	--
	1/25/2013	22.60	--	<50	<0.5	<0.5	0.55	<0.5	<5.0
Trip Blank	01/12/01	-	-	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/11/2001	-	-	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/6/2001	-	-	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	3/4/2002	-	-	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/2/2003	-	-	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/15/2007	--	--	--	--	--	--	--	--

PANGEA

Table 3 - Groundwater Elevation and Analytical Data.

Douglas Parking Company, 1721 Webster Street, Oakland, California

Boring / Well ID <i>TOC</i>	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)	TPHg	Benzene	Toluene	Ethylbenzene (µg/L)	Xylenes	MTBE
Grab Groundwater									
SB-A	2/22/1996	--	--	16,000	38	16	180	620	--
SB-B	2/22/1996	--	--	20,000	100	29	320	590	--
SB-C	2/22/1996	--	--	1,200	130	100	68	230	--
SB-D	2/22/1996	--	--	7,400	550	110	160	89	--
SB-E	2/23/1996	--	--	16,000	31	160	390	1,400	--
SB-F	2/23/1996	--	--	<50	<0.5	1.4	<0.5	2.3	--
SB-G	2/23/1996	--	--	5,200	1.3	<0.5	0.7	<0.5	--
EB-1GWS	7/8/1994	--	--	62,000	<0.5	26	850.0	8,900	--
EB-2GWS	7/8/1994	--	--	160,000	5,300	20,000	2,100	17,000	--
EB-3GWS	7/8/1994	--	--	87,000	1,400	21,000	1,700	19,000	--
EB-4GWS	7/8/1994	--	--	350,000	290	1,300	3,200	31,000	--
EB-5GWS	7/8/1994	--	--	120,000	2,100.0	13,000	1,300.0	16,000	--
EB-6GWS	7/8/1994	--	--	230,000	10,000	34,000	2,300	16,000	--

Notes and Abbreviations:

TOC = Top of casing elevations in feet above mean sea level.

ft amsl = Measured in feet above mean sea level

µg/L = Micrograms per liter.

TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015C.

BTEX = Benzene, toluene, ethylbenzene, and xylenes by EPA Method 8021B.

MTBE = Methyl tertiary butyl ether by EPA Method 8021B, and by EPA Method 8260 in parenthesis.

<0.5 = Concentration not detected above specific laboratory reporting limit.

-- = Not analyzed, not sampled, or not applicable.

ND = Not detected.

Data prior to 7/11/95 from Gen Tech and Piers Environmental Quarterly Groundwater Monitoring Reports dated December 2, 1994 and March 6, 1995, respectively.

On July 31, 2003, Virgil Chavez Land Surveying of Vallejo, California surveyed monitoring wells using a benchmark in the top of the curb near the SW return of the NW corner of 34th and Broadway.

APPENDIX A

Site Conceptual Model

SITE CONCEPTUAL MODEL AND DATA GAP EVALUATION

The following table presents the site conceptual model (SCM) and data gap evaluation in tabular format. This table summarizes the risk for petroleum hydrocarbon impact (TPHg and benzene) at this site, providing detailed media-specific numerical concentration goals and a numerical assessment of progress in achieving those goals. Since hydrocarbons are the primary risk driver, assessment of the hydrocarbon goals alone provides a valid assessment of human health risks at the site.

Site Address:	1721 Webster Street	ACEH Case No.	RO0000129	
City:	Oakland	Regulator:	Karel Detterman	
SCM Element/ Sub-Element	Description	Data Gap No. and Description	Proposed Investigation	Rationale
	Site Description			
Land Use and Site History	<p>The site is currently being utilized as a parking garage, and is located between 17th and 19th Streets in Oakland, California, approximately four miles east of San Francisco Bay and one quarter of a mile west of Lake Merritt (Figure 1). The site is relatively flat with an elevation of approximately 30 feet (ft) above mean sea level (msl).</p> <p>According to reviews of historical documentation by AECOM in their 2016 Phase I ESA the site was initially developed as a residence and greenhouse in the late 1800s. The property was converted to residences in the early 1900s and to the current configuration by the 1930s. The site was used for parking and automotive services such as repair and painting in the 1950s and 1960s.</p>	None	NA	NA
Nearby Sites	Based on Geotracker information, several former underground storage tank (UST) sites are located close to the site, including Prentiss Properties to the northeast at 1750 Webster Street, a former gas station to the east at 1700 Webster, and a former Chevron service station which is located approximately 450 feet to the southwest on the corner of 17 th Street and Harrison Street. There are also several closed leaking underground storage tank (LUST) sites within a 1,000 foot radius of the site.	None	NA	NA

Building Characteristics	The subject property consists primarily of a parking garage with small retail businesses such as a coffee shop and pet food store fronting Webster Street (Figure 2).	None	NA	NA
Geology and Hydrogeology				
Regional	<p>The site is situated in the Coast Range Physiographic Province, which is an area characterized by northwest-southeast running valleys and ridges. Geologic formations of the San Francisco Bay Region range from the Jurassic Period to the Holocene epoch (end of the Pleistocene era).</p> <p>Tectonic activity during the Plio-Pleistocene era formed a structural depression (San Francisco Bay) through subsidence and uplift along the San Andreas, Hayward and Calaveras fault zones. The Bay filled with alluvial deposits of gravel, sand, silt and clay from the surrounding highlands and sea level fluctuation deposited bay muds all around San Francisco Bay (Radbruch, 1957). The alluvial deposits generally become finer closer to the Bay, where they interbed with predominately fine-grain sediment deposited by the Bay.</p>	None	NA	NA
Local Geology	Soil from site borings consists of a mixture of clay, silt and sand to a depth of approximately 14 ft bgs, underlain by sand and/or silty sand to a depth of 25 to 30 ft bgs. The shallow water-bearing zone is present within the primarily sandy soil beneath 14 feet bgs. Between 25 and 30 ft bgs a silty clay layer was encountered.	None.	NA	NA
Local Hydrogeology	Unconfined groundwater conditions exist at the site. A shallow water-bearing zone consisting of highly permeable sand is present beneath 14 feet bgs to a depth of 25 to 30 feet bgs, and is underlain by a silty clay layer. Since 1994, the depth to groundwater beneath and surrounding the site has ranged from approximately 13.6 feet bgs (MW-5) to 23.6 feet bgs (MW-1) equivalent to a groundwater elevation range from 9 to 11 feet above msl over twenty-three years of monitoring. Rainfall in this area occurs primarily between November and March and the average rainfall is approximately 23 inches per year.	None.	NA	NA

	<p>Groundwater elevation data indicates that the groundwater beneath the site generally flows <i>northwards</i> to <i>northeastwards</i>, consistent with the local topography. The recent groundwater flow direction is shown on Figure 2. The <i>northwards</i> to <i>northeastwards</i> flow direction is generally consistent with the inferred groundwater flow directions at the nearby LUST site at 1633 Harrison Street.</p>			
<p>Surface Water</p>	<p>The closest surface water to the site is Lake Merritt, which is located approximately 1,295 feet (approximately ¼ mile) east-northeast of the site.</p>	<p>None</p>	<p>NA</p>	<p>NA</p>
<p>Nearby Wells</p>	<p>Based on our review of well information provided by the Department of Water Resources (DWR) and Alameda County Public Works Agency (ACPWA), Pangea identified several permitted wells within approximately a ¼ mile radius of the site. Permitted domestic well information provided by the DWR and ACPWA is considered confidential and is not disclosed herein. Two locations are listed as irrigation wells. One location is listed as having 10 irrigation wells with total depths of approximately 280 ft bgs and is situated approximately 1,360 ft northeast (downgradient) of the site. The second is listed as having 6 irrigation wells with total depths of approximately 95 ft bgs and is situated approximately 1,080 ft east (crossgradient) of the site.</p> <p>Pangea identified thirteen additional permitted well locations within the ¼ mile radius search of the site using DWR/ACPWA information. Seven of the thirteen locations were listed as groundwater monitoring wells and 6 are listed as test wells for the City of Oakland Redevelopment Agency.</p> <p>Pangea also reviewed the State Water Resources Control Board (SWRCB) GeoTracker database for nearby wells. Two sites with groundwater monitoring wells were identified on Geotracker within a ¼ mile of the site. The identified monitoring wells are across Webster Street from the subject site. The wells are associated with 1700-1710</p>	<p>None</p>	<p>NA</p>	<p>NA</p>

	Webster Street (MW-1 through MW-4) and 1750 Webster Street (A-1 through A-3).			
Groundwater Beneficial Use	According to the Basin Plan from the California Regional Water Quality Control Board (RWQCB), the site lies near the northern end of the East Bay Plain Subbasin of the Santa Clara Valley Basin. The <i>existing</i> beneficial uses for this basin include (1) municipal and domestic water supply, (2) industrial process water supply, (3) industrial service water supply and (4) agricultural water supply.	None	NA	NA
	Contaminant Source and Release Information			
Source/ Release Information	On August 3 and 6, 1992, Parker Environmental Services removed one 1,000-gallon and two 500-gallon gasoline underground storage tanks (USTs) from the site. Up to 1,500 milligrams per kilogram (mg/kg) total petroleum hydrocarbons as gasoline (TPHg) and up to 12 mg/kg benzene were detected in the soil samples collected from the UST excavation (Parker, 1992). An unauthorized release was reported on January 7, 1993, which is the same day the RWQCB and ACEH opened this case (#01-0151 and RO#4070, respectively).	None	NA	NA
Chemicals of Concern	The chemicals of concern (COC) in site soil and groundwater are the following petroleum hydrocarbons: TPHg; benzene, toluene, ethylbenzene, and xylenes (BTEX).	None	NA	NA
Soil and Groundwater Investigations	Several investigations have been completed at the site. On July 8 and September 8, 1994, Gen Tech/Piers Environmental, Inc. (Gen Tech) of San Jose, California drilled six exploratory borings and installed three groundwater monitoring wells (MW 1 through MW 3). Gen Tech reported the investigation work in its Soil and Groundwater Investigation and Quarterly Monitoring Report dated December 2, 1994. In February and May 1996, Cambria Environmental Technology (Cambria) of Emeryville, California advanced seven geoprobe soil borings and installed two groundwater monitoring wells (MW 4 and MW 5), which was reported in the Subsurface Investigation Report dated July 16, 1996. On August 8, 2000, Conduit Study and File Review Report was	None	NA	NA

	submitted by Cambria Environmental Technology. The report provided significant information about offsite hydrocarbon impact and offsite sources, and concluded that there were no identified conduits for contaminant migration in groundwater. On June 27, 2003 Cambria installed two additional offsite monitoring wells (MW-6 and MW-7) to facilitate additional plume delineation. Pangea began periodic groundwater monitoring at the site in July 2006. In November and December 2013, Pangea installed and sampled three subslab gas probes and drilled two confirmation soil borings. The subslab gas probes contained no contaminant concentrations above commercial Environmental Screening Levels (ESLs) for shallow soil gas. Soil samples collected from the two borings contained no detectable concentrations of contaminants.			
Free Product	No free product has been encountered in any site monitoring wells, but a sheen was noted historically by the laboratory in several grab groundwater samples collected from site borings. Based on results from site borings and monitoring wells it appears that no free product is currently present at the site.	None	NA	NA
Soil	In August 1992, elevated contaminant concentrations were detected in source area soil near the former USTs. In July 1994, elevated contaminant concentrations were detected east and northeast of the USTs at depths of approximately 20 and 20.5 ft bgs in predominately sandy soil. In February and May 1996, soil samples from borings SB-A through SB-I did not contain any contaminant concentrations above applicable ESLs. Additionally, source area confirmation soil borings CB-1 and CB-2, drilled in December 2013 and analyzed for TPHg, BTEX, MTBE and Naphthalene did not contain any detectable contaminant concentrations. The extent of soil contamination at the site is well defined by the existing soil sample data. Soil analytical results are summarized on Table 2.	None	NA	NA
Groundwater	The downgradient extent of TPHg and benzene contamination in groundwater is fairly well defined by monitoring well MW-5. Contaminant concentrations are	None	NA	NA

	<p>generally highest in source wells MW-2 and MW-3, which are both located near the former USTs, and in offsite wells MW-4 and MW-6 located down/crossgradient from the source area. Hydrocarbons detected in wells MW-4 and MW-6 located across the street may be from an offsite source. Groundwater analytical data indicates that the contaminant plume is stable to decreasing.</p> <p>The vertical extent of contamination at the site is fairly well defined by samples collected from wells AS-1 through AS-3 in January 2013. Wells AS-1 through AS-3 are screened from approximately 27 to 30 ft bgs and did not contain any contaminant concentrations above applicable ESLs except 10 µg/L benzene in well AS-1. The maximum explored depth at the site is approximately 30 ft bgs. There is a layer of clay at approximately 30 ft bgs near the former USTs. This clay layer may be preventing contaminants from migrating into deeper water-bearing zones. Groundwater analytical results are summarized on Table 3.</p>			
<p>Subslab/Soil Gas</p>	<p>On November 6, 2013, Pangea installed three subslab probes at the subject site. Subslab probe SS-1 was installed near the source area in an adjacent retail building. Probe SS-2 was installed in the driveway near the source area onsite and probe SS-3 was installed near key well MW-2 inside the parking garage near the office.</p> <p>The first round of subslab vapor sampling (cold season) was completed on November 13 and 14, 2013. The only site constituents of concern detected during this sampling event were TPHg and benzene: these concentrations were below applicable commercial ESLs. Additional subslab gas sampling was conducted on June 23, 2015. TPHg concentrations were below applicable commercial ESLs and benzene concentrations were below detection limits.</p> <p>To further evaluate shallow soil gas conditions, Pangea coordinated soil gas sampling from two semi-permanent soil gas probe locations (SG-1 and SG-2) and two existing subslab vapor probes (SS-2 and SS-3) on September 23, 2016. Soil gas from probe SG-1 contained a toluene concentration of 5.7 µg/m³ and xylene concentration of 13.6</p>	<p>None</p>	<p>NA</p>	<p>NA</p>

	<p>µg/m³. Soil gas from probe SG-2 contained a benzene concentration of 12 µg/m³ and xylene concentration of 23.9 µg/m³. All detected concentrations are below applicable ESLs. All other hydrocarbons and VOCs in samples from soil gas probes SG-1 and SG-2 were below method reporting limits ('non-detect'). The percent oxygen detected in soil gas probes SG-1 and SG-2 was 17.7% and 19.8%, respectively. All hydrocarbons and VOCs in samples from subslab gas probe SS-2 were below method reporting limits ('non-detect'). Subslab gas from probe SS-3 contained toluene and xylene concentrations of 4.0 µg/m³ and 13 µg/m³, respectively. The percent oxygen detected in subslab gas probes SS-2 and SS-3 was 20.4% and 20.5%, respectively. Methane concentrations were below reporting limits in all samples. Subslab/soil gas analytical results are summarized on Table 1.</p>			
	<p>Remediation Activities</p>			
<p>Remedial Activities</p>	<p>Several remedial techniques have been utilized at the subject site. In January 1998, Cambria installed ORC socks in well MW-2 to enhance the natural attenuation of dissolved-phase hydrocarbons. Dissolved oxygen (DO) concentrations temporarily increased in well MW-2 following the ORC sock installation. In February and March 1999, a total of 120 gallons of 7.5% hydrogen peroxide solution was added into monitoring wells MW-2 and MW-3 to oxidize hydrocarbons and also increase DO levels to enhance biodegradation of dissolved-phase hydrocarbons. While hydrogen peroxide <i>temporarily</i> increased groundwater DO levels, hydrocarbon concentrations fluctuated (even increased) before returning to pre-remediation levels.</p> <p>On March 4, 2003, Cambria installed a co-axial air sparging/soil vapor extraction well (SV-1/AS-1) and two angled air sparging wells (AS-2 and AS-3) to approximately 30 ft bgs. The wells were installed to facilitate feasibility testing and remediation via soil vapor extraction (SVE) and air sparging (AS). The SVE system ran from October 2007 to November 2010 and the AS system operated from November 2007 to April 2010. The SVE remediation system</p>	<p>None</p>	<p>NA</p>	<p>NA</p>

	<p>consisted of a blower that extracted soil vapor from well SVE-1. Extracted vapors were routed through a moisture separator then treated by two 2,000-lb canisters of granular activated carbon plumbed in series. The treated vapor was discharged to the atmosphere in accordance with Bay Area Air Quality Management District (BAAQMD) requirements. The AS system consisted of a compressor for injecting air into wells AS-1, AS-2 and/or AS-3. Injection into AS wells was controlled by timer-activated solenoid valves.</p> <p>On August 8, 2008, air sparge wells AS-1 and AS-3 were disconnected from the air compressor and air sparging was conducted solely in well AS-2 to target hydrocarbons in nearby well MW-2. As of October 26, 2010, the SVE system operated for a total of about 19,396 hours (approximately 808 days). Laboratory analytical data indicates that the system removed a total of approximately 3,212 lbs TPHg and 6.88 lbs benzene. The SVE system was briefly restarted and subsequently shutdown on November 23, 2010 due to low removal rates.</p>			
	<p>Risk Pathways</p>			
<p>Prior Risk Evaluation</p>	<p>On August 3 and 6, 1992, Parker Environmental Services removed one 1,000-gallon and two 500-gallon gasoline underground storage tanks (USTs) from the site. Thus, there is no threat of a future release or continuing source.</p> <p>To evaluate the potential for contaminant migration via preferential pathways, Pangea surveyed subsurface utilities beneath the site and nearby vicinity and compared utility depths to groundwater depth and contaminants in site monitoring wells. To conduct the conduit study, Pangea first reviewed a prior conduit study for the site from August 2000 and compared sewer and storm drain depths/locations from the conduit study with maps provided by the City of Oakland. On August 2, 2011, Pangea conducted a site visit to locate and measure depths of subsurface utilities within nearby manholes. The conduit study identified several subsurface utilities at or near the site. The identified subsurface utilities near the site include water supply lines,</p>	<p>None</p>	<p>NA</p>	<p>NA</p>

	<p>electrical lines, telecommunication lines, sanitary sewers and storm drains.</p> <p>The primary conduits of concern were the two 18” diameter sanitary sewer lines adjacent to the site, which are the deepest of the identified conduits. Given the historical range of depth to water in site wells of approximately 18 to 22 ft bgs near the USTs and primary impact area, the 18” diameter sanitary sewer lines have very limited potential to intersect groundwater. Although the potentiometric surface of groundwater could occasionally be shallower than the bottom of these conduits, groundwater was first encountered at approximately 20 ft depth or deeper in site borings near the primary impact area. This information suggests that the sanitary sewer and storm drain lines do <i>not</i> likely act as preferential pathways for <i>significant</i> contaminant migration.</p>			
<p>Risk Pathway Summary</p>	<p>Based on the characterization data provided under the Contaminant Source and Release Information SCM Elements above, the following risk pathways are NOT considered to be potentially complete for the Site:</p> <p>Soil:</p> <ul style="list-style-type: none"> • Vapor intrusion to indoor air • Migration of contaminants to groundwater through leaching and vapor flow. • Direct exposure to construction workers or to potential future residents and biota. • Gross contamination concerns (primarily odors) <p>Groundwater:</p> <ul style="list-style-type: none"> • Vapor intrusion to indoor air • Ingestion of groundwater impacting wells, sumps or basements at nearby properties • Impacts to aquatic biota in surface water bodies <p>Soil Vapor:</p> <ul style="list-style-type: none"> • Vapor intrusion to indoor air 	<p>None</p>	<p>NA</p>	<p>NA</p>

<p>Indoor Air</p>	<p>Commercial properties dominate both sides of Webster Street and most of the surrounding areas. Residential properties are present above the commercial properties near the site, but are predominantly located northeast and southeast of the site, adjacent to Lake Merritt. In June 2016, Pangea surveyed surrounding businesses for subgrade structures. ACEH expressed concern that VOCs from the residual groundwater plume could pose a potential vapor intrusion risk if basements were present. No basements were identified in nearby buildings downgradient (north-northwest) of the site.</p>	<p>None</p>	<p>NA</p>	<p>NA</p>
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APPENDIX B

Regulatory Correspondence

Elizabeth Avery

From: Bob Clark-Riddell
Sent: Wednesday, August 24, 2016 11:26 PM
To: Elizabeth Avery
Cc: Morgan Gillies
Subject: FW: Work Plan Approval for Fuel Leak Case No. RO0000129 and GeoTracker Global ID T0600100140, Douglas Parking Company, 1721 Webster Street, Oakland, CA 94612
Attachments: Attachment_1_and_ftpUploadInstructions_2014-05-15.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Please save this notice on server. Put on schedule. We can discuss.

Bob Clark-Riddell, P.E.
Pangea Environmental Services, Inc.
510.435.8664 direct

From: Detterman, Karel, Env. Health [mailto:Karel.Detterman@acgov.org]
Sent: Monday, August 22, 2016 5:25 PM
To: lee@douglasparking.com
Cc: 'MCcaulou, Cherie@Waterboards' <Cherie.MCcaulou@waterboards.ca.gov>; Bob Clark-Riddell <briddell@pangeaenv.com>; Roe, Dilan, Env. Health <Dilan.Roe@acgov.org>
Subject: Work Plan Approval for Fuel Leak Case No. RO0000129 and GeoTracker Global ID T0600100140, Douglas Parking Company, 1721 Webster Street, Oakland, CA 94612

Hello Mr. Douglas:

Alameda County Department of Environmental Health (ACDEH) staff has reviewed the case file including the *Data Gap Work Plan* (Work Plan) dated June 21, 2016, prepared and submitted on your behalf by Pangea Environmental Services, Inc. (Pangea) in conjunction with the State Water Resources Control Board's (SWRCBs) Low Threat Underground Storage Tank Case Closure Policy (LTCP). The Work Plan was submitted in response to a meeting with you and Pangea representatives on March 16, 2016. Thank you for submitting the Work Plan.

Based on ACEH staff review of the work plan, the proposed scope of work is conditionally approved for implementation provided that the technical comment below is incorporated during the proposed work. Submittal of a revised work plan or a work plan addendum is not required unless an alternate scope of work outside that described in the work plan or these technical comments is proposed. We request that you address the following technical comments, perform the proposed work, and send us the report described below. Please provide 72-hour advance written notification to this office (e-mail preferred to: karel.detterman@acgov.org) prior to the start of field activities.

TECHNICAL COMMENTS

- 1. Methane Analysis:** Please include methane as an analyte for the soil gas samples.
- 2. Updated Site Conceptual Model (SCM) Table:** Please include an updated SCM including the new data with the Report requested below.
- 3. Groundwater Monitoring and Sampling Event:** The Work Plan states that the groundwater sampling event was scheduled to be conducted in July 2016. Please coordinate the next groundwater sampling event with Ms. Cherie MCcaulou of the Regional Water Quality Control Board, who has expressed an interest in coordinating a joint sampling event between neighboring cases at 1700 Webster Street, 1721 Webster Street, and 1750 Webster Street. ACDEH will also contact and coordinate with the property owner of 1750 Webster Street.

TECHNICAL REPORT REQUEST

Please upload technical reports to the ACDEH ftp site (Attention: Karel Detterman), and to the State Water Resources Control Board's Geotracker website, in accordance with the following specified file naming convention and schedule:

- **October 24, 2016** – Soil and Groundwater Investigation Report
File to be named: RO129_SWI_R_yyyy-mm-dd

This report is being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

Thank you for your cooperation. Should you have any questions or concerns regarding this correspondence or your case, please send me an e-mail message at karel.detterman@acgov.org or call me at (510) 567-6708.

Karel Detterman, PG
Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
Direct: 510.567.6708
Fax: 510.337.9335
Email: karel.detterman@acgov.org

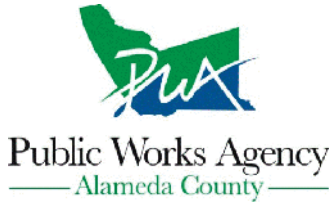
PDF copies of case files can be downloaded at:

<http://www.acgov.org/aceh/lop/ust.htm>

APPENDIX C

Permit

Alameda County Public Works Agency - Water Resources Well Permit



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

Application Approved on: 09/06/2016 By jamesy

Permit Numbers: W2016-0649
Permits Valid from 09/08/2016 to 09/08/2016

Application Id: 1472488748782
Site Location: 1721 Webster Street
Project Start Date: 09/08/2016
Assigned Inspector: Contact Marcelino Vialpando at (510) 670-5760 or Marcelino@acpwa.org

City of Project Site:Oakland

Completion Date:09/08/2016

Applicant: Pangea Environmental Services, Inc. - Patrick Groff
1710 Franklin ST #200, Oakland, CA 94612
Phone: 925-818-0010

Property Owner: Lee Douglas
1721 Webster Street, Oakland, CA 94612
Phone: --

Client: Lee Douglas
1721 Webster Street, Oakland, CA 94612
Phone: --

	Total Due:	\$265.00
Receipt Number: WR2016-0437	Total Amount Paid:	\$265.00
Payer Name : Robert Clark-Riddell	Paid By: VISA	PAID IN FULL

Works Requesting Permits:

Borehole(s) for Geo Probes-Sampling 24 to 72 hours only - 2 Boreholes
Driller: Penecore Drilling - Lic #: 906899 - Method: Hand

Work Total: \$265.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2016-0649	09/06/2016	12/07/2016	2	3.25 in.	6.00 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. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or

Alameda County Public Works Agency - Water Resources Well Permit

waterways or be allowed to move off the property where work is being completed.

6. 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.

7. 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.

8. 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.

9. 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.

APPENDIX D

Boring Logs



Client: Douglas Parking
 Project:
 Address: 1721 Webster St, Oakland

BORING LOG
 Boring No. - SG-1
 Page: 1 of 1

Drilling Start Date: 9.8.16	Boring Depth (ft): 6'
Drilling End Date: 9.8.16	Boring Diameter (in): 3.5"
Drilling Company: Confluence	Sampling Method(s): none
Drilling Method: Hand Auger	DTW During Drilling (ft): -
Drilling Equipment: Hand Auger	DTW After Drilling (ft): -
Driller: Jesus	Ground Surface Elev. (ft): -
Logged By: E. Lervaaq	Location (X,Y): see map

DEPTH (ft)	LITHOLOGY	WATER LEVEL	BORING COMPLETION	COLLECT				SOIL/ROCK VISUAL DESCRIPTION	MEASURE		DEPTH (ft)
				Sample Type	Date & Time	Blow Counts	Recovery (ft)		PID (ppm)	Lab Sample	
0								6" concrete			0
			Hydrated bent.					Dark brown sand, poorly graded no odor, dry			
								- 2.5'			
			Dry Bent					Brown sandy silt (), no odor dry			
5			1 ft sand					- 6.0 Boring terminated			5
								SG-1 Construction.			
								1 foot sand			
								6" dry bentonite			
								Hydrated bent. to surface			
								3.5" diameter			
								- 1/4" (0.175 ID) Teflon tubing			
								- 1" screen.			
								- 6" well box			
								- Probe tip set at 5.5' bgs L middle of sand pack.			
20											20

NOTES:



Client: Douglas Parking
 Project:
 Address: 1721 Webster St, Oakland

BORING LOG
 Boring No. - SG-2
 Page: 1 of 1

Drilling Start Date: 9.8.16
 Drilling End Date: 9.8.16
 Drilling Company: Confluence
 Drilling Method: Hand Auger
 Drilling Equipment: Hand Auger
 Driller: Jesus
 Logged By: E. Lervag

Boring Depth (ft): 6'
 Boring Diameter (in): 3.5"
 Sampling Method(s): none
 DTW During Drilling (ft): —
 DTW After Drilling (ft): —
 Ground Surface Elev. (ft): —
 Location (X,Y): see map.

DEPTH (ft)	LITHOLOGY	WATER LEVEL	BORING COMPLETION	COLLECT				SOIL/ROCK VISUAL DESCRIPTION	MEASURE		DEPTH (ft)
				Sample Type	Date & Time	Blow Counts	Recovery (ft)		PID (ppm)	Lab Sample	
0								4" concrete			0
								Brown Sand () poorly graded dry, no odor			
								-3.0 Light brown sandy silt () dry, no odor			
5								-6.0 boring terminated			5
								SG-2 Construction 3.5" diameter			
								1 Ft Sand 5'-6'			
								6" dry Bentonite (4.5'-5')			
								Hydrated bent to surface			
								- 1/4 (0.171 id) teflon tubing			
								- 1" screened probe tip			
15								- 6" well box to match surface elev.			15
								- probe tip set at 5.5' bgs (middle of sand pack)			
20											20

NOTES:

APPENDIX E

Soil Gas Sampling Field Data Sheets

APPENDIX F

Waste Manifest

Manifest

SOIL SAFE OF CA - TPST Non-Hazardous Soils

↓ Manifest # ↓

Date of Shipment: / / Responsible for Payment: Transport Truck #: Facility #: A07 Approval Number: 46074 Load #: 10011

Generator's Name and Billing Address:
DOUGLAS PARKING CO.
1721 WEBSTER ST.
OAKLAND, CA 94612

Generator's Phone #: _____
Person to Contact: _____
FAX#: _____ Customer Account Number: _____

Consultant's Name and Billing Address: _____
Consultant's Phone #: _____
Person to Contact: _____
FAX#: _____ Customer Account Number: _____

Generation Site (Transport from): (name & address)
DOUGLAS PARKING
1721 WEBSTER ST.
OAKLAND, CA 94612

Site Phone #: _____
Person to Contact: _____
FAX#: _____

Designated Facility (Transport to): (name & address)
SOIL SAFE
12328 HIBISCUS AVENUE
ADELANTO, CA 92301

Facility Phone #: (800) 862-8001
Person to Contact: JOE PROVANSAL
FAX#: (760) 246-8004

Transporter Name and Mailing Address:
BELSHIRE
25971 TOWNE CENTRE DRIVE
FOOTHILL RANCH, CA 92610
BESI: 275381

Transporter's Phone #: 949-460-5200
Person to Contact: LARRY MOOTHART
FAX#: 949-460-5210

CAR000183913
450647
Customer Account Number

Description of Soil	Moisture Content	Contaminated by:	Approx. Qty:	Description of Delivery	Gross Weight	Tare Weight	Net Weight
Sand <input type="checkbox"/> Organic <input type="checkbox"/> Clay <input type="checkbox"/> Other <input type="checkbox"/>	0 - 10% <input type="checkbox"/> 10 - 20% <input type="checkbox"/> 20% - over <input type="checkbox"/>	Gas <input type="checkbox"/> Diesel <input type="checkbox"/> Other <input type="checkbox"/>	1 DM	SOIL	38000	37400	600
Sand <input type="checkbox"/> Organic <input type="checkbox"/> Clay <input type="checkbox"/> Other <input type="checkbox"/>	0 - 10% <input type="checkbox"/> 10 - 20% <input type="checkbox"/> 20% - over <input type="checkbox"/>	Gas <input type="checkbox"/> Diesel <input type="checkbox"/> Other <input type="checkbox"/>					30

List any exception to items listed above: _____ Scale Ticket # 130580

Generator's and/or consultant's certification: I/We certify that the soil referenced herein is taken entirely from those soils described in the Soil Data Sheet completed and certified by me/us for the Generation Site shown above and nothing has been added or done to such soil that would alter it in any way.

Print or Type Name: Generator Consultant
Larry Moothart of BESI on behalf of generator

Signature and date: _____ Month Day Year 11 29 10

Transporter's certification: I/We acknowledge receipt of the soil referenced above and certify that such soil is being delivered in exactly the same condition as when received. I/We further certify that the soil is being directly transported from the Generation Site to the Designated Facility without off-loading, adding to, subtracting from or in any way delaying delivery to such site.

Print or Type Name: _____ Signature and date: _____ Month Day Year 11 29 10

Discrepancies: _____

Recycling Facility certifies the receipt of the soil covered by this manifest except as noted above.

Print or Type Name: J. PROVANSAL Signature and date: _____ 1-3-17





Please print or type.

TRANSPORTER COPY

1721WEBSTER/1524500

NON-HAZARDOUS WASTE DATA FORM

BESI # 275381

GENERATOR	Generator's Name and Mailing Address DOUGLAS PARKING CO. 1721 WEBSTER ST. OAKLAND, CA 94612		Generator's Site Address (if different than mailing address) DOUGLAS PARKING 1721 WEBSTER ST. OAKLAND, CA 94612																		
	Generator's Phone:																				
	Container type removed from site: <input checked="" type="checkbox"/> Drums <input type="checkbox"/> Vacuum Truck <input type="checkbox"/> Roll-off Truck <input type="checkbox"/> Dump Truck <input type="checkbox"/> Other _____		Container type transported to receiving facility: <input type="checkbox"/> Drums <input checked="" type="checkbox"/> Vacuum Truck <input type="checkbox"/> Roll-off Truck <input type="checkbox"/> Dump Truck <input type="checkbox"/> Other _____																		
	Quantity <u>1</u>		Quantity <u>1</u> Volume <u>28 gallons</u>																		
WASTE DESCRIPTION <u>NON-HAZARDOUS WATER</u>		GENERATING PROCESS <u>WELL PURGING / DECON WATER</u>																			
<table border="0" style="width:100%;"> <tr> <td style="text-align: center;">COMPONENTS OF WASTE</td> <td style="text-align: center;">PPM</td> <td style="text-align: center;">%</td> </tr> <tr> <td>1. <u>WATER</u></td> <td></td> <td style="text-align: center;"><u>99-100%</u></td> </tr> <tr> <td>2. <u>TPH</u></td> <td></td> <td style="text-align: center;"><u><1%</u></td> </tr> </table>		COMPONENTS OF WASTE	PPM	%	1. <u>WATER</u>		<u>99-100%</u>	2. <u>TPH</u>		<u><1%</u>	<table border="0" style="width:100%;"> <tr> <td style="text-align: center;">COMPONENTS OF WASTE</td> <td style="text-align: center;">PPM</td> <td style="text-align: center;">%</td> </tr> <tr> <td>3. _____</td> <td></td> <td></td> </tr> <tr> <td>4. _____</td> <td></td> <td></td> </tr> </table>		COMPONENTS OF WASTE	PPM	%	3. _____			4. _____		
COMPONENTS OF WASTE	PPM	%																			
1. <u>WATER</u>		<u>99-100%</u>																			
2. <u>TPH</u>		<u><1%</u>																			
COMPONENTS OF WASTE	PPM	%																			
3. _____																					
4. _____																					
Waste Profile _____		PROPERTIES: pH <u>7-10</u> <input type="checkbox"/> SOLID <input checked="" type="checkbox"/> LIQUID <input type="checkbox"/> SLUDGE <input type="checkbox"/> SLURRY <input type="checkbox"/> OTHER _____																			
HANDLING INSTRUCTIONS: _____																					
Generator Printed/typed Name <u>Larry Moothart of BESI on behalf of generator</u>		Signature 	Month Day Year <u>11 29 16</u>																		
The Generator certifies that the waste as described is 100% non-hazardous																					
TRANSPORTER	Transporter 1 Company Name <u>BELSHIRE</u>		Phone# <u>949-460-5200</u>																		
	Transporter 1 Printed/Typed Name <u>LARRY MOOTHART</u>		Signature 	Month Day Year <u>11 29 16</u>																	
	Transporter Acknowledgment of Receipt of Materials																				
	Transporter 2 Company Name <u>NIETO & SONS TRUCKING, INC.</u>		Phone# <u>714-990-8855</u>																		
Transporter 2 Printed/Typed Name <u>GILBERT GARCIA</u>		Signature 	Month Day Year <u>12 21 16</u>																		
Transporter Acknowledgment of Receipt of Materials																					
RECEIVING FACILITY	Designated Facility Name and Site Address <u>DEMENNO KERDOON</u> <u>2000 N. ALAMEDA ST.</u> <u>COMPTON, CA 90222</u>		Phone# <u>310-537-7100</u>																		
	Printed/typed Name <u>JOSE RAMOS</u>		Signature 	Month Day Year <u>12 21 16</u>																	
	Designated Facility Owner or Operator: Certification of receipt of materials covered by this data form.																				

1721 WEBS
1456578

APPENDIX G

Laboratory Analytical Report



25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

05 October 2016

Patrick Groff
Pangea Environmental Services, Inc.
1710 Franklin Street, Suite 200
Oakland, CA 94612
RE: Douglas 1721 Webster Street

Enclosed are the results of analyses for samples received by the laboratory on 09/24/16 09:05. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Rose Fasheh
Project Manager



25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Pangea Environmental Services, Inc.
1710 Franklin Street, Suite 200
Oakland CA, 94612

Project: Douglas 1721 Webster Street
Project Number: 1135.001
Project Manager: Patrick Groff

Reported:
10/05/16 16:54

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SG-1	T162363-01	Air	09/23/16 05:47	09/24/16 09:05
SG-2	T162363-02	Air	09/23/16 06:22	09/24/16 09:05
SS-2	T162363-03	Air	09/23/16 07:21	09/24/16 09:05
SS-3	T162363-04	Air	09/23/16 06:58	09/24/16 09:05

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rose Fasheh, Project Manager

Pangea Environmental Services, Inc.
1710 Franklin Street, Suite 200
Oakland CA, 94612

Project: Douglas 1721 Webster Street
Project Number: 1135.001
Project Manager: Patrick Groff

Reported:
10/05/16 16:54

DETECTIONS SUMMARY

Sample ID: SG-1 **Laboratory ID:** T162363-01

Analyte	Reporting		Units	Method	Notes
	Result	Limit			
Toluene	5.7	3.8	ug/m ³ Air	TO-15	
m,p-Xylene	9.0	8.8	ug/m ³ Air	TO-15	
o-Xylene	4.6	4.4	ug/m ³ Air	TO-15	
Oxygen	17.7	1.54	%	GC	

Sample ID: SG-2 **Laboratory ID:** T162363-02

Analyte	Reporting		Units	Method	Notes
	Result	Limit			
Benzene	12	3.3	ug/m ³ Air	TO-15	
m,p-Xylene	9.9	8.8	ug/m ³ Air	TO-15	
o-Xylene	14	4.4	ug/m ³ Air	TO-15	
Oxygen	19.8	1.54	%	GC	

Sample ID: SS-2 **Laboratory ID:** T162363-03

Analyte	Reporting		Units	Method	Notes
	Result	Limit			
Oxygen	20.4	1.63	%	GC	

Sample ID: SS-3 **Laboratory ID:** T162363-04

Analyte	Reporting		Units	Method	Notes
	Result	Limit			
Toluene	4.0	3.8	ug/m ³ Air	TO-15	
m,p-Xylene	13	8.8	ug/m ³ Air	TO-15	
Oxygen	20.5	1.49	%	GC	

SunStar Laboratories, Inc.

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Rose Fasheh, Project Manager

Pangea Environmental Services, Inc.
1710 Franklin Street, Suite 200
Oakland CA, 94612

Project: Douglas 1721 Webster Street
Project Number: 1135.001
Project Manager: Patrick Groff

Reported:
10/05/16 16:54

**SG-1
T162363-01 (Air)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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SunStar Laboratories, Inc.

TO-15

Isopropyl alcohol	ND	13	ug/m ³ Air	1.54	6092946	09/29/16	10/03/16	TO-15	
Benzene	ND	3.3	"	"	"	"	"	"	
Toluene	5.7	3.8	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	9.0	8.8	"	"	"	"	"	"	
o-Xylene	4.6	4.4	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	3.7	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		102 %	40-160		"	"	"	"	

Methane by GC

Methane	ND	5100	ug/m ³ Air	1.54	6092683	09/26/16	09/30/16	8015M	
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Total Volatile Organic Compounds by TO-3 (modified)

C6-C12 (GRO)	ND	7170	ug/m ³ Air	1.54	6092947	09/29/16	09/30/16	TO-3/TO-14 m	
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Fixed Gases ASTM D1946-90

Oxygen	17.7	1.54	%	1.54	6092684	09/26/16	09/29/16	GC	
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SunStar Laboratories, Inc.

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Rose Fasheh, Project Manager



25712 Commercentre Drive
 Lake Forest, California 92630
 949.297.5020 Phone
 949.297.5027 Fax

Pangea Environmental Services, Inc. 1710 Franklin Street, Suite 200 Oakland CA, 94612	Project: Douglas 1721 Webster Street Project Number: 1135.001 Project Manager: Patrick Groff	Reported: 10/05/16 16:54
---	--	-----------------------------

SG-2
T162363-02 (Air)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

SunStar Laboratories, Inc.

TO-15

Isopropyl alcohol	ND	13	ug/m ³ Air	1.54	6092946	09/29/16	10/03/16	TO-15	
Benzene	12	3.3	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	9.9	8.8	"	"	"	"	"	"	
o-Xylene	14	4.4	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	3.7	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		93.3 %	40-160		"	"	"	"	

Methane by GC

Methane	ND	5100	ug/m ³ Air	1.54	6092683	09/26/16	09/30/16	8015M	
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Total Volatile Organic Compounds by TO-3 (modified)

C6-C12 (GRO)	ND	7170	ug/m ³ Air	1.54	6092947	09/29/16	09/30/16	TO-3/TO-14 m	
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Fixed Gases ASTM D1946-90

Oxygen	19.8	1.54	%	1.54	6092684	09/26/16	09/29/16	GC	
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SunStar Laboratories, Inc.

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Rose Fasheh, Project Manager

Pangea Environmental Services, Inc.
1710 Franklin Street, Suite 200
Oakland CA, 94612

Project: Douglas 1721 Webster Street
Project Number: 1135.001
Project Manager: Patrick Groff

Reported:
10/05/16 16:54

SS-2
T162363-03 (Air)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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SunStar Laboratories, Inc.

TO-15

Isopropyl alcohol	ND	13	ug/m ³ Air	1.63	6092946	09/29/16	10/03/16	TO-15	
Benzene	ND	3.3	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	3.7	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		86.1 %	40-160		"	"	"	"	

Methane by GC

Methane	ND	5400	ug/m ³ Air	1.63	6092683	09/26/16	09/30/16	8015M	
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Total Volatile Organic Compounds by TO-3 (modified)

C6-C12 (GRO)	ND	7170	ug/m ³ Air	1.63	6092947	09/29/16	09/30/16	TO-3/TO-14 m	
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Fixed Gases ASTM D1946-90

Oxygen	20.4	1.63	%	1.63	6092684	09/26/16	09/29/16	GC	
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SunStar Laboratories, Inc.

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Rose Fasheh, Project Manager



25712 Commercentre Drive
 Lake Forest, California 92630
 949.297.5020 Phone
 949.297.5027 Fax

Pangea Environmental Services, Inc. 1710 Franklin Street, Suite 200 Oakland CA, 94612	Project: Douglas 1721 Webster Street Project Number: 1135.001 Project Manager: Patrick Groff	Reported: 10/05/16 16:54
---	--	-----------------------------

SS-3
T162363-04 (Air)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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SunStar Laboratories, Inc.

TO-15

Isopropyl alcohol	ND	13	ug/m ³ Air	1.49	6092946	09/29/16	10/03/16	TO-15	
Benzene	ND	3.3	"	"	"	"	"	"	
Toluene	4.0	3.8	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	13	8.8	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	3.7	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		92.2 %	40-160		"	"	"	"	

Methane by GC

Methane	ND	5000	ug/m ³ Air	1.49	6092683	09/26/16	09/30/16	8015M	
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Total Volatile Organic Compounds by TO-3 (modified)

C6-C12 (GRO)	ND	7170	ug/m ³ Air	1.49	6092947	09/29/16	09/30/16	TO-3/TO-14 m	
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Fixed Gases ASTM D1946-90

Oxygen	20.5	1.49	%	1.49	6092684	09/26/16	09/29/16	GC	
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SunStar Laboratories, Inc.

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Rose Fasheh, Project Manager



25712 Commercentre Drive
 Lake Forest, California 92630
 949.297.5020 Phone
 949.297.5027 Fax

Pangea Environmental Services, Inc. 1710 Franklin Street, Suite 200 Oakland CA, 94612	Project: Douglas 1721 Webster Street Project Number: 1135.001 Project Manager: Patrick Groff	Reported: 10/05/16 16:54
---	--	-----------------------------

TO-15 - Quality Control
SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 6092946 - Canister Analysis

Blank (6092946-BLK1)

Prepared & Analyzed: 09/29/16

Isopropyl alcohol	ND	13	ug/m ³ Air							TO-14
Benzene	ND	3.3	"							TO-14
Toluene	ND	3.8	"							TO-14
Ethylbenzene	ND	4.4	"							TO-14
m,p-Xylene	ND	8.8	"							TO-14
o-Xylene	ND	4.4	"							TO-14
Methyl tert-butyl ether	ND	3.7	"							TO-14

Duplicate (6092946-DUP1)

Source: T162362-01

Prepared & Analyzed: 09/29/16

Isopropyl alcohol	ND	13	ug/m ³ Air		ND			30		TO-14
Benzene	ND	3.3	"		ND			30		TO-14
Toluene	2970	3.8	"		2890		2.77	30		TO-14
Ethylbenzene	55.0	4.4	"		49.3		10.9	30		TO-14
m,p-Xylene	264	8.8	"		233		12.3	30		TO-14
o-Xylene	60.1	4.4	"		54.6		9.65	30		TO-14
Methyl tert-butyl ether	ND	3.7	"		ND			30		TO-14

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rose Fasheh, Project Manager



25712 Commercentre Drive
 Lake Forest, California 92630
 949.297.5020 Phone
 949.297.5027 Fax

Pangea Environmental Services, Inc. 1710 Franklin Street, Suite 200 Oakland CA, 94612	Project: Douglas 1721 Webster Street Project Number: 1135.001 Project Manager: Patrick Groff	Reported: 10/05/16 16:54
---	--	------------------------------------

Methane by GC - Quality Control
SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 6092683 - General Prep VOC-GC

Blank (6092683-BLK1)		Prepared: 09/26/16 Analyzed: 09/30/16								
Methane	ND	3300	ug/m ³ Air							
Duplicate (6092683-DUP1)		Source: T162363-01 Prepared: 09/26/16 Analyzed: 09/30/16								
Methane	ND	5100	ug/m ³ Air		ND				20	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rose Fasheh, Project Manager



25712 Commercentre Drive
 Lake Forest, California 92630
 949.297.5020 Phone
 949.297.5027 Fax

Pangea Environmental Services, Inc. 1710 Franklin Street, Suite 200 Oakland CA, 94612	Project: Douglas 1721 Webster Street Project Number: 1135.001 Project Manager: Patrick Groff	Reported: 10/05/16 16:54
---	--	-----------------------------

Total Volatile Organic Compounds by TO-3 (modified) - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 6092947 - Canister Analysis

Blank (6092947-BLK1)		Prepared & Analyzed: 09/29/16								
C6-C12 (GRO)	ND	7170	ug/m ³ Air							
Duplicate (6092947-DUP1)		Source: T162362-01		Prepared & Analyzed: 09/29/16						
C6-C12 (GRO)	4010	7170	ug/m ³ Air		3640			9.84	30	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rose Fasheh, Project Manager



25712 Commercentre Drive
 Lake Forest, California 92630
 949.297.5020 Phone
 949.297.5027 Fax

Pangea Environmental Services, Inc. 1710 Franklin Street, Suite 200 Oakland CA, 94612	Project: Douglas 1721 Webster Street Project Number: 1135.001 Project Manager: Patrick Groff	Reported: 10/05/16 16:54
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Fixed Gases ASTM D1946-90 - Quality Control
SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 6092684 - General Prep VOC-GC

Blank (6092684-BLK1)	Prepared: 09/26/16 Analyzed: 09/29/16									
Oxygen	ND	1.00	%							
Duplicate (6092684-DUP1)	Source: T162347-01 Prepared: 09/26/16 Analyzed: 09/29/16									
Oxygen	20.8	1.59	%		20.8			0.145	20	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rose Fasheh, Project Manager



25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Pangea Environmental Services, Inc.
1710 Franklin Street, Suite 200
Oakland CA, 94612

Project: Douglas 1721 Webster Street
Project Number: 1135.001
Project Manager: Patrick Groff

Reported:
10/05/16 16:54

Notes and Definitions

- TO-14 TO-15 analysis of sample was not performed due to high concentration of analyte(s). Sample was analyzed utilizing method TO-14 and reporting limit has been adjusted accordingly.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rose Fasheh, Project Manager

AIR LABORATORY

Chain of Custody Record



SunStar Laboratories, Inc.

PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE
25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Client: Pangea Env. Svs
Address: 1710 Franklin St, Oakland
Phone: 510-836-3700 Fax: _____
Project Manager: Patrick Groff

Date: 9-23-16 Page: 1 Of 1
Project Name: _____
Collector: _____ Client Project #: _____
Batch #: 7162263 EDF #: _____

Sample ID	Date Sampled	Start Time	Finish Time	Sample Type : Soil Gas / Indoor Air	Container Type: Summa Can / Tedlar	Initial Pressure	Final Pressure	TO-3	TO-14	TO-15	8015m Methane	8015m Gasoline	Fixed Gases by TCD	Summa Can # / Comments	Laboratory ID #
	p.groff@pangeaenv.com														
SG-1	9-23-16	0547	0553	SG	Summa	30	5			X				SSAT-0084	01
SG-2	"	0622	0629	SG	Summa	30	5			X				SSAT-0107	02
SS-2	"	0721	0728	SG	Summa	30	5			X				SSAT-0183 0138 etc	03
SS-3	"	0658	0705	SG	Summa	30	5			X				SSAT-0007	04
Relinquished by: (signature) _____ Date / Time _____						Received by: (signature) _____ Date / Time _____						Total # of containers _____			Notes
Relinquished by: (signature) _____ Date / Time _____						Received by: (signature) _____ Date / Time _____						Chain of Custody seals <input checked="" type="checkbox"/> Y/N/NA			
Relinquished by: (signature) _____ Date / Time _____						Received by: (signature) _____ Date / Time _____						Seals intact? <input checked="" type="checkbox"/> Y/N/NA			
Relinquished by: (signature) _____ Date / Time _____						Received by: (signature) _____ Date / Time _____						Received good condition/cold _____			
						Turn around time: <u>5</u>									

* TO-15 SIM analysis available upon prior notification. (Precertified Summa cans needed)

COCAL 146050

SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: 776236B

Client Name: PANHEA Project: 9-24-16

Delivered by: Client SunStar Courier GSO FedEx Other

If Courier, Received by: _____ Date/Time Courier Received: _____

Lab Received by: SUNNY Date/Time Lab Received: 9-24-16 / 9:05

Total number of coolers received: 0

Temperature: Cooler #1	-	°C +/- the CF (- 0.2°C) = -	°C corrected temperature
Temperature: Cooler #2		°C +/- the CF (- 0.2°C) =	°C corrected temperature
Temperature: Cooler #3		°C +/- the CF (- 0.2°C) =	°C corrected temperature
Temperature criteria = ≤ 6°C (no frozen containers)		Within criteria?	<input type="checkbox"/> Yes <input type="checkbox"/> No
If NO:			
Samples received on ice?	<input type="checkbox"/> Yes	<input type="checkbox"/> No →	Complete Non-Conformance Sheet
If on ice, samples received same day collected?	<input type="checkbox"/> Yes → Acceptable	<input type="checkbox"/> No →	Complete Non-Conformance Sheet

Custody seals intact on cooler/sample Yes No* N/A

Sample containers intact Yes No*

Sample labels match Chain of Custody IDs Yes No*

Total number of containers received match COC Yes No*

Proper containers received for analyses requested on COC Yes No*

Proper preservative indicated on COC/containers for analyses requested Yes No* N/A

Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times Yes No*

* Complete Non-Conformance Receiving Sheet if checked Cooler/Sample Review - Initials and date: SL 9-24-16

Comments: _____



Project Name:			
Company: PANGEA		Name:	PATRICK
		Phone:	925-818-0010
Item	Quantity		Unit
2 oz Jars 24/CS			
4 oz Jars 24/CS			
8 oz Jars 12/CS			
40 ml unpreserved VOAs 100/box			
40 ml HCL-preserved VOAs 72/box			
250 ml Poly 24/CS			
1 Liter Poly 12/CS			
500 ml Poly 16/CS			
500 ml Amber Bottle Wide 12/CS			
1 Liter Amber Bottle 12/CS			
1 Gallon Poly 4/box			
5035 kits:(2)Sodium Bisulfate VOAs 72/box			
	(1) Methanol VOA 72/box		
	(1)Syringe 50/pack		
Lock-N-Load Handle 1/pack			
Tedlar Bags 10/pack			
Manifold, Inst. Sampler, Variable Sampler	2-MANIFOLDS (150)		CHARGE - 2
Sub Slab Insert w/ washer & N/F			
Soil Gas SS 16" Drop Tubes			
Gas Extraction Fittings			
Soil Gas Filters			
	# SENT	USED	UNUSED
Batch Certified Summa Canisters	400cc		
	1L	6 (3-PURGE)	3
	3L		
	6L	1 (1-PURGE)	CHARGE - 1
Individually Certified Summa Canisters	400cc		
	1L		
	3L		
	6L		
Cooler (Small, Medium, Large) Number & Quantity			
Swagelok Fittings: Nuts/Ferrules, Ts	3-NUTS/FERRULES		3 RETURNED
Other: Poly Tube, Valves,Silicon Tape, etc.			
Prepared By: SUNNY	Date: 9-19-16		
Reviewed By:	Date :		



Project Name:			
Company: PANGEA		Name: PATRICK	
		Phone:	
Item	Quantity	Unit	
2 oz Jars 24/CS			
4 oz Jars 24/CS			
8 oz Jars 12/CS			
40 ml unpreserved VOAs 100/box			
40 ml HCL-preserved VOAs 72/box			
250 ml Poly 24/CS			
1 Liter Poly 12/CS			
500 ml Poly 16/CS			
500 ml Amber Bottle Wide 12/CS			
1 Liter Amber Bottle 12/CS			
1 Gallon Poly 4/box			
5035 kits:(2)Sodium Bisulfate VOAs 72/box			
	(1) Methanol VOA 72/box		
	(1)Syringe 50/pack		
Lock-N-Load Handle 1/pack			
Tedlar Bags 10/pack			
Manifold, Inst. Sampler, Variable Sampler	1 (150-Manifold)		
Sub Slab Insert w/ washer & N/F			
Soil Gas SS 16" Drop Tubes			
Gas Extraction Fittings			
Soil Gas Filters			
	# SENT	USED	UNUSED
Batch Certified Summa Canisters	400cc		
	1L	1	1
	3L		
	6L		
Individually Certified Summa Canisters	400cc		
	1L		
	3L		
	6L		
Cooler (Sm, Med, Lrg) Number & Quantity			
Swagelok Fittings: Nuts/Ferrules, Ts	1 (Nuts/Ferrules)	RETURNED	
Other: Poly Tube, Valves, Silicon Tape, etc.			
Prepared By: Aaron	Date: 9/21/16		
Reviewed By:	Date :		

Asset Check-In Receipt

SunStar Laboratories Inc.

Check-In Date: 9/24/2016

User Name: Lounethone, Sunny

Asset Tag	Asset Type	Serial No	Location	Customer No.	Customer Name
0007	1000cc: 1000cc Summa	0007	Sunstar Labs, Tustin Air Lab	Pangea-Patrick	Patrick
0107	1000cc: 1000cc Summa	0107	Sunstar Labs, Tustin Air Lab	Pangea-Patrick	Patrick
0138	1000cc: 1000cc Summa	0138	Sunstar Labs, Tustin Air Lab	Pangea-Patrick	Patrick
0140	1000cc: 1000cc Summa	0140	Sunstar Labs, Tustin Air Lab	Pangea-Patrick	Patrick
0143	1000cc: 1000cc Summa	0143	Sunstar Labs, Tustin Air Lab	Pangea-Patrick	Patrick
0217	1000cc: 1000cc Summa	0217	Sunstar Labs, Tustin Air Lab	Pangea-Patrick	Patrick
2037	Vapor Manifold: Vapor Manifold	2037	Sunstar Labs, Lake Forest Air Lab	Pangea-Patrick	Patrick
2045	Vapor Manifold: Vapor Manifold	2045	Sunstar Labs, Lake Forest Air Lab	Pangea-Patrick	Patrick
2059	Vapor Manifold: Vapor Manifold	2059	Sunstar Labs, Lake Forest Air Lab	Pangea-Patrick	Patrick
6006	6 L: 6 L Summa	6006	Sunstar Labs, Lake Forest Air Lab	Pangea-Patrick	Patrick

Brian Charon

From: Bill [bill@sunstarlabs.com]
Sent: Friday, September 23, 2016 11:01 AM
To: Rose@sunstarlabs.com
Cc: Brian Charon
Subject: Fwd: Vapor/Subslab analysis

See email below

Bill

Sent from my iPhone.

Bill Hannell
Vice President of Operations
SunStar Labs
530-304-5525
ELAP # 2250

Begin forwarded message:

From: Patrick Groff <pgroff@pangeaenv.com>
Date: September 23, 2016 at 10:34:01 AM PDT
To: Bill Hannell <bill@sunstarlabs.com>
Subject: Vapor/Subslab analysis

Good Morning Bill,

We had our vapor sampling equipment picked up this morning, and I'd like to add to the COC. These are for summa can #'s **SSAT - 0084, SSAT - 0107, SSAT - 0138 ecl, and SSAT - 0007.**

Methane + O2 by ASTM D 1946

TO-3 for GRO

TO-15 for BTEX, MTBE, Naphthaline, and IPA.

Thanks,

Patrick Groff
pgroff@Pangeaenv.com
O: (510) 836-3700
C: (925) 818-0010

No virus found in this message.

Checked by AVG - www.avg.com

Version: 2016.0.7797 / Virus Database: 4656/13069 - Release Date: 09/23/16

WORK ORDER

T162363

Client: Pangea Environmental Services, Inc.
Project: Douglas 1721 Webster Street

Project Manager: Rose Fasheh
Project Number: 1135.001

Report To:

Pangea Environmental Services, Inc.
 Patrick Groff
 1710 Franklin Street, Suite 200
 Oakland, CA 94612

Date Due: 10/03/16 17:00 (5 day TAT)

Received By: Sunny Lounethone

Date Received: 09/24/16 09:05

Logged In By: Sunny Lounethone

Date Logged In: 09/24/16 11:10

Samples Received at:

Custody Seals	Yes	Received On Ice	No
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confir	No		

Analysis	Due	TAT	Expires	Comments
T162363-01 SG-1 [Air] Sampled 09/23/16 05:47 (GMT-08:00) Pacific Time (US &				
8015m Methane	10/03/16 15:00	5	09/26/16 05:47	
Fixed Gases	10/03/16 15:00	5	10/21/16 05:47	Oxygen ONLY
TO-15	10/03/16 15:00	5	10/23/16 05:47	BTEX, MTBE, IPA, Naphthaline
TO-3	10/03/16 15:00	5	10/23/16 05:47	
T162363-02 SG-2 [Air] Sampled 09/23/16 06:22 (GMT-08:00) Pacific Time (US &				
8015m Methane	10/03/16 15:00	5	09/26/16 06:22	
Fixed Gases	10/03/16 15:00	5	10/21/16 06:22	Oxygen ONLY
TO-15	10/03/16 15:00	5	10/23/16 06:22	BTEX, MTBE, IPA, Naphthaline
TO-3	10/03/16 15:00	5	10/23/16 06:22	
T162363-03 SS-2 [Air] Sampled 09/23/16 07:21 (GMT-08:00) Pacific Time (US &				
8015m Methane	10/03/16 15:00	5	09/26/16 07:21	
Fixed Gases	10/03/16 15:00	5	10/21/16 07:21	Oxygen ONLY
TO-15	10/03/16 15:00	5	10/23/16 07:21	BTEX, MTBE, IPA, Naphthaline
TO-3	10/03/16 15:00	5	10/23/16 07:21	

WORK ORDER

T162363

Client: Pangea Environmental Services, Inc.
Project: Douglas 1721 Webster Street

Project Manager: Rose Fasheh
Project Number: 1135.001

Analysis	Due	TAT	Expires	Comments
T162363-04 SS-3 [Air] Sampled 09/23/16 06:58 (GMT-08:00) Pacific Time (US &				
8015m Methane	10/03/16 15:00	5	09/26/16 06:58	
Fixed Gases	10/03/16 15:00	5	10/21/16 06:58	Oxygen ONLY
TO-15	10/03/16 15:00	5	10/23/16 06:58	BTEX, MTBE, IPA, Naphthaline
TO-3	10/03/16 15:00	5	10/23/16 06:58	