



Mr. Keith Nowell
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502

Subject:
Expanded Work Plan for Free Product Delineation
8400 Pardee Drive, Oakland, CA 94621
Global ID #T0600100939
State ID #583
EPA ID #CAD 09707509

RECEIVED
By Alameda County Environmental Health 12:08 pm, Jul 22, 2015

Dear Mr. Nowell:

Attached please find the Expanded Work Plan For Free Product Delineation for the above-referenced site. The work plan, which was prepared for United Parcel Service by ARCADIS U.S., Inc., presents the request to delineate free product at the site.

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached Work Plan are true and correct.

Please feel free to contact me directly at 404.828.8991 if you have any questions or comments.

Sincerely,

United Parcel Service

A handwritten signature in blue ink, appearing to read "PH", with a long horizontal stroke extending to the right.

Paul Harper
Remediation and Assessment Manager

Enclosure



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Mr. Keith Nowell
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502

Subject:
Expanded Work Plan for Free Product Delineation
UPS Oakland Hub
8400 Pardee Drive, Oakland, California 94621
Global ID T0600100939; State ID #583; EPA ID #CAD 09707509

ENVIRONMENT

Date:
July 21, 2015

Dear Mr. Nowell:

Contact:
Hugh Devery

On behalf of United Parcel Service (UPS), ARCADIS U.S., Inc. (ARCADIS) is pleased to present this Expanded Work Plan for Free Product Delineation (Expanded Work Plan) for the UPS Oakland Hub (Site). This Expanded Work Plan has been modified in accordance with Alameda County Department of Environmental Health's (ACEH's) email of November 7, 2014, our meeting of February 11, 2015, at ACEH's office and several subsequent email correspondences. ARCADIS proposes the drilling of additional soil borings to delineate the extent of free product in three areas with detectable amounts of free product and two other areas potentially containing free product adjacent to the former diesel underground storage tank (UST) pit. In addition, several wells will be installed along the eastern edge of the dissolved petroleum hydrocarbon (DPH) plume to delineate the DPH plume in that direction. Lastly, as requested by ACEH, methane will be monitored in the area of investigation as a contaminant of potential concern (COPC); and, soil sampling will also be performed.

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Hugh.Devery@arcadis-us.com

The locations of the Site and surrounding properties are illustrated on **Figures 1, 2 and 3**, respectively, with the area of concern illustrated on **Figure 4**.

The original goal of this Expanded Work Plan was to delineate, to the extent possible, the mobile free product that has emanated from the former diesel UST pit. Currently, free product has been detected at the following three locations:

1. MW-2 Area, on the western side of the former diesel UST pit.
2. MW-3 and OW-1 Area, on the eastern side of the former diesel UST pit.
3. IW-1 and MW-12 Area, approximately 100 feet (ft) northeast of the former diesel UST pit; a location where the original release has appeared to settled.

ARCADIS proposes to advance additional borings to fully delineate, to the extent possible, free product in each of the three areas. Two additional areas are proposed for free product assessment as discussed below. Expanded Work Plan Site assessment activities emphasis is on free product delineation efforts because soil impacts above the water-table interface (non-smear zone) have not been detected and impacted DPH in groundwater have been delineated, with the exception of the area east of the plume where additional borings/wells are being proposed.

Groundwater impacts at the Site are limited to total petroleum hydrocarbon – diesel (TPH-D) and to a lesser extent total petroleum hydrocarbon – gasoline (TPH-G). Both the Subsurface Investigation Results Report (BBL 1996) and Summary of Soil and Groundwater Investigation Report (ARCADIS 2011) indicated detection of an additional heavier DPH plume at the Site. This heavier DPH plume is present farther to the northeast of the diesel UST area and the IW-1 and MW-12 free product area. Although the origins of this heavier DPH plume are unknown, this heavier DPH plume is suspected to be a remnant of the past heavy industrial use in the Bay area that existed prior to backfilling of the existing property. The DPH TPH-D and TPH-G plume is limited to the former diesel UST area and to the IW-1 and MW-12 free product area.

Groundwater elevations and groundwater quality data are provided in **Tables 1 and 2**, respectively.

As requested by ACEH, methane monitoring as well as soil sampling that meets the LTC (Low Threat Closure) policy will be performed.

Once free product delineation, mobility and recoverability are achieved, UPS and ARCADIS would like to discuss Site cleanup objectives and a closure strategy with ACEH; including closure under the LTC policy then possible with a Site Management Plan (SMP) to handle any residual petroleum impacts. The UPS Oakland facility is viable operation for UPS and plans on staying at this location for the foreseeable future and can maintain any SMP once approved.

Site Background and History

UPS is a tenant of the Port of Oakland at this Site and will remain so into the foreseeable future. A review of historical aerial photographs from 1937 to the present indicates that the Site was originally a tidal marsh until 1968 and was backfilled and graded in 1968 with imported fill material. Artificial fill has been documented across the Site at depths ranging from 2 to 10 ft in thickness. Fill material has been observed as sand and clay as well as debris and garbage. No structures were observed on the Site until 1975, when the current UPS facility was constructed. The Site includes the main UPS parcel sorting building, a parking lot, and smaller support structures. The area around the Site is characterized by medium to heavy industrial use and includes the nearby Oakland International Airport. Currently, the Site is approximately 10 ft above mean sea level and is located on a narrow peninsula south of San Leandro Bay.

In September 2002, 0.14 ft of free product was measured in monitoring well OW-1. Free product has been regularly monitored in monitoring wells MW-2 and OW-1 since 2002. The free product measured from 2002 to 2011 ranged from approximately 0.01 to 0.13 ft in MW-2 and 0.01 to 0.2 ft in OW-1, with some monthly gauging events measuring no free product. In November 2010, free product was measured in monitoring well MW-3 at a thickness of 0.02 ft. In April 2011, skimmers were installed in monitoring wells MW-2, MW-3, and OW-1. The free product post-skimmer installation ranged from 0.01 to 0.28 ft in MW-2, 0.01 to 0.05 ft in MW-3, and 0.01 to 0.3 ft in OW-1, with no free product or sheen being recorded during some monthly gauging events. Prior to installation of the skimmers, approximately 0.48 gallons of free product had been recovered from MW-2 and 1.57 gallons from OW-1. After installation of the skimmers in 2011, and through 2014, approximately 1.37 gallons of free product had been removed from MW-2, 1.76 gallons from MW-3, and 1.16 gallons from OW-1.

In January 2012, ARCADIS installed monitoring wells MW-12 through MW-14 and injection wells IW-1 through IW-6. Free product was discovered during the June 2012 gauging event in monitoring well MW-12 and injection well IW-1. Since June 2012, free product thickness has ranged from 0.14 to 1.4 ft in MW-12 and 0.11 to 1.23 ft in IW-1. Historically, free product thicknesses in the former diesel UST area have been less than 0.10 ft. A map showing the extent and thickness of free product is included as **Figure 4**. Monthly free product readings are provided in **Table 2**.

Free product bail-down tests were performed in April 2013 at monitoring wells MW-12 and IW-1. Two bail-down tests were performed at IW-1 with an initial product thickness of 0.84 ft during the first test and 0.42 ft during the second test. A single bail-down test was performed at MW-12 with an initial product thickness of 0.25 ft. Evaluation of bail-down test results for MW-12 indicated a free product transmissivity of 0.46 square ft per day (ft^2/day). Evaluation of the bail-down test results for IW-1 indicated a free product transmissivity of 0.52 ft^2/day for the first test and 0.20 ft^2/day for the second test. These measured transmissivity values fall within the Interstate Technology & Regulatory Council (ITRC) lower limit of practicable recoverability for remediation purposes.

In October 2013, ARCADIS advanced eight cone penetration test (CPT) borings with an ultraviolet optical screening tool (UVOST) to a maximum depth of 18 ft below ground surface (bgs) in an attempt to delineate free product around the former diesel UST pit area (CPT-1 through CPT-4) and the IW-1 and MW-12 Area (CPT-5 through CPT-7, CPT-8A). In addition, four direct push locations (SB-13 through SB-16) were advanced to a maximum depth of 15 ft bgs and soil samples were collected. Analytical results of soil sampling during the direct push investigation within shallow and deep soils on the Comcast property to the south of the former diesel UST area indicate no screening level exceedances for any Site constituents (e.g. diesel fuel).

Results of the UVOST investigation in the vicinity of the former diesel UST area indicate the presence of free product at CPT-4 between 5 and 10 ft bgs, which coincides with the range of historical water levels at the Site and associated smear zone. UVOST results from the area north/northeast of the former diesel UST pit area, near CPT-1, CPT-2, and CPT-3, were inconclusive due to possible interference with Site lithologies (i.e., lack of consistent lithology because the area consists of fill material).

Proposed Scope of Work: Soil Boring and Monitoring Well Installation

ARCADIS will supervise the installation of a minimum of 17 soil borings and conversion of 13 of those soil borings to monitoring wells to delineate the extent of free product that exists at the Site from the release from the former diesel UST pit. As indicated earlier, several monitoring wells will be installed to assist in better delineation of the DPH plume. The proposed locations of the soil borings are shown on **Figure 4** and discussed in more detail below. Additional soil borings and/or monitoring wells may be added based on field findings (stained soils, visual detection of free product, elevated photoionization detector [PID] readings, etc.).

Task 1: Pre-Field Activities

This section discusses the activities that will precede field activities, including revising the Health and Safety Plan (HASP), obtaining relevant permits, and clearing underground utility locations.

Site Health and Safety Plan

Prior to initiating drilling activities, the Site-specific HASP will be updated in accordance with UPS, state, and federal requirements for use during the proposed field activities.

Permitting

Following approval of this Expanded Work Plan by ACEH, ARCADIS will complete and submit applications to ACEH for drilling permits related to the approved scope of work.

Underground Utility Survey

Underground utilities at the Site have previously been located (**Figure 3**). Utilities in the vicinity of the proposed investigation locations will be marked with white paint prior to drilling. Underground Service Alert (USA-North) will be alerted at least 48 hours prior to drilling activities.

Task 2: Soil Boring Advancement and Monitoring Well Installation

Free product delineation activities are recommended for the following three areas that are known to contain mobile free product:

1. MW-2 Area, on the western side of the former diesel UST pit.
2. MW-3 and OW-1 Area, on the eastern side of the former diesel UST pit.
3. IW-1 and MW-12 Area, approximately 100 ft northeast of the former diesel UST pit.
4. Delineation of the DPH plume to the East

In addition, free product delineation activities are recommended for the following two areas:

1. CPT-4 Area: The CPT-4 Area was selected based on the UVOST field work performed in 2013, which indicated that free product may be present in this area.
2. Former MW-1 Area: Free product has been detected on the eastern and western sides of the UST pit. Therefore, a soil boring and monitoring well in the area of former MW-1 will allow the northern side along the former UST pit to be evaluated for the presence of free product. (Note that the southern side of the former diesel UST pit is being evaluated as part of the MW-3 and OW-1 Area investigation.)

MW-2 Area

A soil boring south, west, and north of MW-2 will be installed as borings FPB-1 through FPB-3, respectively. If petroleum impacts are detected, an additional soil boring will be drilled in the direction/orientation of the suspected soil boring (e.g., stepping out). One soil boring to the south, and one soil boring to the west will be converted into a shallow monitoring well to allow for complete coverage in each direction. Each well will be drilled 1 foot into the native bay muds. In the area of MW-2, native bay muds (clay) have been detected at 8 to 10 ft bgs. No soil boring and/or monitoring well is proposed to the east to avoid placement of a soil boring/monitoring well in the backfilled former diesel UST pit, which already contains several wells. As stated previously, free product has not been detected in the former diesel UST pit; however, high concentrations of DPH TPH-D have been detected.

MW-3 and OW-1 Area

A soil boring is proposed north of MW-3, east of MW-3/OW-1, west of OW-1 (which would also represent the south side of the former diesel UST pit, at the former location of SB-5, which contained elevated TPH-D soil concentrations [smear zone]), and two to the south across the property line in the adjacent grass island. Two borings are proposed to the south because groundwater flow direction has been predominantly to the southwest. Therefore, one boring is proposed directly south of the MW-3 and OW-1 Area and one to the southwest. These borings will assist in delineation of free product in this area. The soil borings would be designated as FPB-4 through FPB-8, respectively. If petroleum impacts are detected, an additional soil boring will be drilled in the direction/orientation of the suspected soil boring (e.g., stepping out).

One soil boring to the south, east, and west will be converted into a shallow monitoring well to allow for complete coverage in each direction. Each well will be drilled 1 foot into the native bay muds. In the area of OW-1, native bay muds (clay) have been detected at 9 to 12 ft bgs. No soil boring and/or monitoring well is proposed to the west of MW-3 to avoid placement of a soil boring/monitoring well in the backfilled former diesel UST pit.

IW-1 and MW-12 Area

Five soil borings are proposed for this area, beginning in the northeastern quadrant of this free product area and ending to the south of the area, in a counter-clock orientation. The borings planned are evenly spaced out (see **Figure 4**). The goal of these borings is to delineate the northern, western, and southern sides of this free product area. The proposed soil borings are designated FPB-11 through FPB-15, respectively. If petroleum impacts are detected, an additional soil boring will be drilled in the direction/orientation of the suspected soil boring (e.g., stepping out).

Four of the five soil borings are anticipated to be converted to shallow monitoring wells. These would be borings FPB-11, FPB-12, FPB-13, and FPB-15; to the north, west, and southwestern directions. These borings were selected to complete the monitoring well network in the area of IW-1 and MW-12. The IW-1 and MW-12 free product area would be surrounded by wells to assist in the evaluation of mobile free product in this area. The conversion of FPB-13 into a monitoring well is to evaluate the high TPH-D soil concentration (smear zone) detected in this area in 2010. Each well will be drilled 1 foot into the native bay muds. In the area of OW-1, native bay muds (clay) have been detected 10 to 12 ft bgs.

CPT-4 Area

A soil boring is proposed near the former CPT-4 location. This location was suspected to contain free product during the 2013 CPT assessment and is near SB-5, which contained elevated TPH-D soil concentrations (smear zone). The proposed boring is designated as FPB-10. If petroleum impacts are detected, an additional soil boring will be drilled in an outward direction. No additional soil borings would be drilled in the former diesel UST pit. This soil boring will be converted into a shallow monitoring well. The well will be drilled 1 foot into the native bay muds. In the area of CPT-4/SB-5, native bay muds (clay) have been detected 10 to 11 ft bgs.

Former MW-1 Area

A soil boring is proposed at the location of former MW-1, which represents the northern side of the former diesel UST pit. Free product has been detected in areas where wells are located near the edges of the former diesel UST pit (e.g., MW-2 to the west and MW-3 to the east). It would be prudent to install a soil boring at this location and convert it to a monitoring well to allow for the continued evaluation of possible mobile free product in this area. The proposed boring is designated as FPB-9. If petroleum impacts are detected, an additional soil boring will be drilled in an outward direction of former MW-1. No additional soil borings would be drilled in the former diesel UST pit. The well will be drilled 1 foot into the native bay muds. In the area of former MW-1, native bay muds (clay) have been detected 10 to 11 ft bgs.

Delineation of DPH Plume

Two soil borings, FPB-16 and FPB-17 will be advanced to the east and southeast of the IW-1 and MW-12 area. Both of these soil borings will be converted to monitoring wells. The goal of these two monitoring wells is to delineate the DPH plume in this direction. These wells in conjunction with the above proposed wells will assist in both, delineation of the DPH plume, as well as assisting in the ecological evaluation of potential impacts to the Bay via the nearby San Leandro Channel.

Soil Sampling Procedures

During soil boring advancement, ARCADIS will collect soil samples for field examination as well as laboratory analyses. Field samples will be collected at 2-ft intervals to a depth of 8 ft bgs. A minimum of two selected soil samples will be also

collected from each soil boring. Criteria for the laboratory analysis of soil samples are as follows:

- Obvious signs of impacts, such as elevated PID readings, visual staining, lithology and/or grain size change
- Observed soil/groundwater interface
- LTC Policy Direct Contact criteria (e.g. collecting soil samples from two different depths in the 0- to 5-ft zone, as measured from land surface, and from within the 5- to 10-ft zone)

Soil samples will be submitted to the laboratory for the following analyses:

- Benzene, toluene, ethylbenzene, and xylenes (BTEX) by United States Environmental Protection Agency (EPA) Method 8260
- Polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270
- Methyl tertiary butyl ether (MTBE) by EPA Method 8260
- TPH-G (gasoline range organics -GRO) by EPA Method 8015B
- TPH-D (diesel range organics - DRO) by EPA Method 8015B (with and without silica gel cleanup [SGC] using a 10-gram column cleanup based on EPA Method 3630C).

ARCADIS will evaluate if PAHs are present at the Site, and if so whether they are COCs from the diesel release or are historical in nature (e.g. historical bay area releases).

As discussed above, additional soil samples may be collected based on field observations and readings. Therefore, if elevated PID readings and/or obvious field signs of impacts are observed, additional "step-out" borings will be performed, with soil samples collected using the same criteria. The goal of the step-out borings would be to delineate field observed potential impacts in both the vertical and horizontal directions.

Task 3: Monitoring Well Installation

Each well will be constructed as follows:

Well Type	Diameter	Total Depth (ft)	Screen Interval	Screen Size (inches)
Monitoring Well	2"	8-13*	3-13*	0.010 slotted

*total depth and bottom of screen will be dependent on elevation of the native bay muds (clay)

The anticipated depth to water is approximately 4 to 5 ft bgs. Wells will be screened across the top of the water table. Monitoring wells will be completed in accordance with the requirements set forth in the California State Water Resources Control Board Leaking Underground Fuel Tank Guidance Manual (September 2012) and Alameda County requirements, by placing the casing and screen assembly into the borehole, followed by installation of the annular filter pack and annular seal. Monitoring wells will be pre-developed by surging or agitating the water column within the well casing to promote settlement of the filter pack prior to placement of the seal. A transitional 1-foot-thick seal comprised of bentonite chips will be placed 1 foot above the screened interval, followed by a 1-foot-thick neat cement grout to ground surface. Following completion of the monitoring well installation, the well will be pumped until the water column is clear.

Each well will be surveyed and added to the existing monitoring well network. Wells will be gauged monthly to assist in the evaluation of mobile free product at the Site. Each new monitoring well will be sampled for Site COCs.

As indicated on **Table 3**, and air-tight well cap outfitted with a methane monitoring port will be installed in newly installed wells FPB-2, FPB-3, FPB-4, FPB- 6, FPB-8, FPB-13, FPB-14, FPB-16, and FPB-17; as well as existing wells MW-12, IW-1 and IW-4. These wells will have screen intervals that cross the water table and will allow for vapor to be pulled from the monitoring well air column.

Task 4: Methane Intrusion Evaluation

ARCADIS will evaluate methane concentrations in a step-wise approach, based on observed concentrations. First, methane concentrations will be collected from methane monitoring ports placed on new and existing monitoring wells. The selected monitoring

wells will be gauged to ensure at least one foot of screen is above the water table prior to methane screening. These readings are understood to represent worst-case concentrations, as the completed wells create a direct conduit from groundwater to the surface. Methane monitoring ports placed in monitoring wells will be opened and connected to a personal air sampling pump or syringe. One casing volume of air will be purged from the well prior to monitoring. A multi-gas meter with a carbon filter will be used for methane monitoring. Initial and stabilized concentrations will be recorded in a field notebook. Methane monitoring will be performed in accordance with ARCADIS' Standard Operating Procedure (SOP), included as **Attachment A**.

Because carbon filters cannot remove all hydrocarbon interferences, the results will represent a conservative high-biased estimate of methane concentrations in the subsurface. The lower explosive limit (LEL) for methane is 5% of volume (100% LEL). If concentrations in the monitoring wells exceed 20% LEL or 1% methane by volume, methane concentrations will be evaluated further via monitoring at punch bar locations.

Methane concentrations will be collected using a 0.5-inch diameter punch bar driven to a depth of 30 inches bgs at four locations along the warehouse and air express building perimeter. After the hole is completed to the desired depth, a 0.0625-inch to 0.125-inch diameter stainless steel probe tip attached to a multi-gas meter will immediately be inserted into the hole and the area at the surface sealed with clay or putty to prevent short-circuiting to the atmosphere.

Task 5: Investigation-Derived Waste

Extracted free product and other investigation-derived waste (IDW) generated during field activities, including soil cuttings, decontamination, purge or rinse water, and personal protective equipment, will be stored temporarily at the Site in labeled, Department of Transportation-approved 55-gallon drums or similar, until proper waste disposal is arranged.

Report

Results of the investigation will be summarized and presented in a report submitted 60 days after receipt of laboratory analytical data.

Schedule

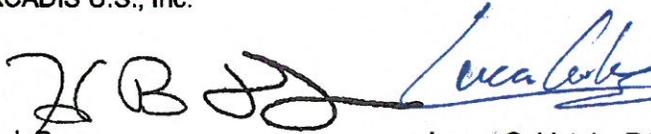
ARCADIS is prepared to initiate field activities immediately upon approval of this Expanded Work Plan.

A California registered civil engineer or a California registered professional geologist will supervise the activities conducted under this Expanded Work Plan.

If you have any questions, or require additional information, please do not hesitate to contact Hugh Devery at 404.952.1604 or Lucas Goldstein at 510.596.9535. Send any correspondence regarding this project to Mr. Paul Harper of UPS at the address provided below. Please copy ARCADIS on any such correspondence.

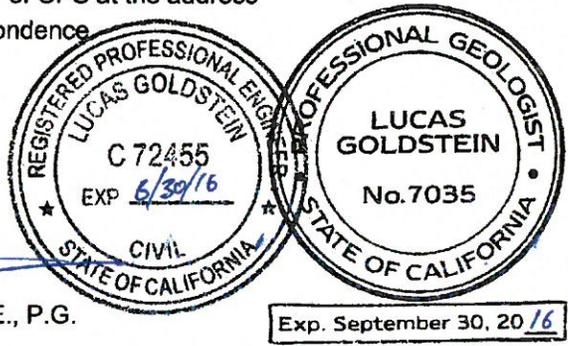
Sincerely,

ARCADIS U.S., Inc.



Hugh Devery
Senior Geologist

Lucas Goldstein, P.E., P.G.
Principal Engineer
PG-CA, #7035; PE-CA, #C72455



Copies:

Mr. Paul Harper – UPS Corporate Plant Engineering, 55 Glenlake Parkway NE, Atlanta, GA 30328

Tables

- 1 Historical Groundwater Elevation Summary
- 2 Historical Groundwater Monitoring Results and Baseline Sampling Summary
- 3 Free Product and Methane Monitoring Locations

Figures

- 1 Site Location Map
- 2 Facility Layout Map
- 3 Site Map

4 Free Product Extent and Thickness Map

Attachment

A ARCADIS SOP - Best Practice: Methane Screening

ARCADIS

Tables

Table 1
Historical Groundwater Elevation Summary
UPS-Oakland Hub
8400 Pardee Drive, Oakland, California
Global ID # T0600100939

Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
MW-1	7.43	8/28/1990	3.80	3.63	0.00	NR
		9/20/1990	3.99	3.44	0.00	NR
		6/19/1991	3.47	3.96	NM	NR
		7/23/1991	3.70	3.73	NM	NR
		8/26/1991	3.92	3.51	NM	NR
		11/18/1991	4.21	3.22	NM	NR
		2/3/1992	3.99	3.44	NM	NR
		6/29/1992	3.38	4.05	NM	NR
		6/23/1993	2.72	4.71	NM	NR
		10/11/1993	3.87	3.56	NM	NR
		1/4/1994	3.34	4.09	NM	NR
		5/10/1994	2.14	5.29	NM	NR
		2/1/1995	1.84	5.59	NM	NR
		8/2/1995	3.10	4.33	NM	NR
		10/16/1995	3.75	3.68	NM	NR
		12/28/1995	3.56	3.87	NM	NR
		6/4/1997	3.16	4.27	0.00	NR
		9/30/1999	3.75	3.68	0.00	NR
		10/11/2000	3.88	3.55	0.00	NR
		9/3/2002	3.73	3.70	0.00	NR
		10/22/2002	5.11	2.36	0.05	NR
		12/23/2002	3.51	3.92	0.00	NR
		3/28/2003	3.52	3.91	0.00	NR
		5/30/2003	3.37	4.06	0.00	NR
		6/20/2003	3.50	3.93	0.00	NR
		7/14/2003	3.65	3.78	0.00	NR
		8/25/2003	3.87	3.56	0.00	NR
		9/9/2003	4.02	3.41	0.00	NR
		9/25/2003	4.10	3.33	0.00	NR
		10/28/2003	4.29	3.14	0.00	NR
		11/18/2003	4.32	3.11	0.00	NR
		12/2/2003	4.34	3.09	0.00	NR
		1/27/2004	3.88	3.55	0.00	NR
		2/24/2004	2.75	4.68	0.00	NR
		3/29/2004	3.45	3.98	0.00	NR
		4/19/2004	3.55	3.88	0.00	NR
		5/20/2004	3.69	3.74	0.00	NR
		6/22/2004	3.81	3.62	0.00	NR
		7/27/2004	3.99	3.44	0.00	NR
		8/24/2004	4.14	3.29	0.00	NR
9/29/2004	4.32	3.11	0.00	NR		
10/25/2004	3.89	3.54	0.00	NR		
12/15/2004	3.18	4.25	0.00	NR		
1/24/2005	2.69	4.74	0.00	NR		
2/23/2005	2.48	4.95	0.00	NR		
3/23/2005	2.21	5.22	0.00	NR		
4/29/2005	2.57	4.86	0.00	NR		
5/27/2005	2.68	4.75	0.00	NR		

Table 1
Historical Groundwater Elevation Summary
UPS-Oakland Hub
8400 Pardee Drive, Oakland, California
Global ID # T0600100939

Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
MW-1	7.43	6/29/2005	2.97	4.46	0.00	NR
		7/20/2005	3.13	4.30	0.00	NR
		8/24/2005	3.48	3.95	0.00	NR
		9/27/2005	3.69	3.74	0.00	NR
		10/19/2005	3.87	3.56	0.00	NR
		11/29/2005	3.79	3.64	0.00	NR
		12/29/2005	3.08	4.35	0.00	NR
		1/31/2006	2.91	4.52	0.00	NR
		2/28/2006	2.84	4.59	0.00	NR
		3/27/2006	2.26	5.17	0.00	NR
		4/28/2006	2.40	5.03	0.00	NR
		6/27/2006	3.09	4.34	0.00	NR
		7/31/2006	3.35	4.08	0.00	NR
		8/29/2006	3.60	3.83	0.00	NR
		9/28/2006	3.90	3.53	0.00	NR
		10/27/2006	3.97	3.46	0.00	NR
		11/22/2006	3.64	3.79	0.00	NR
		12/26/2006	3.04	4.39	0.00	NR
		1/25/2007	3.26	4.17	0.00	NR
		2/16/2007	3.12	4.31	0.00	NR
		3/19/2007	2.91	4.52	0.00	NR
		4/26/2007	2.93	4.50	0.00	NR
		5/29/2007	3.15	4.28	0.00	NR
		6/28/2007	3.42	4.01	0.00	NR
		7/30/2007	3.60	3.83	0.00	NR
		8/30/2007	3.85	3.58	0.00	NR
		9/25/2007	4.00	3.43	0.00	NR
		10/29/2007	4.05	3.38	0.00	NR
		11/29/2007	4.10	3.33	0.00	NR
		12/28/2007	3.80	3.63	0.00	NR
		1/24/2008	3.14	4.29	0.00	NR
		2/21/2008	2.44	4.99	0.00	NR
		3/28/2008	2.84	4.59	0.00	NR
4/30/2008	3.00	4.43	0.00	NR		
5/29/2008	3.24	4.19	0.00	NR		
6/25/2008	3.39	4.04	0.00	NR		
7/29/2008	3.64	3.79	0.00	NR		
8/27/2008	3.85	3.58	0.00	NR		
9/30/2008	4.08	3.35	0.00	NR		
10/31/2008	4.20	3.23	0.00	NR		
11/26/2008	4.14	3.29	0.00	NR		
12/30/2008	3.94	3.49	0.00	NR		
1/22/2009	3.93	3.50	0.00	NR		
4/3/2009	ABANDONED					
MW-2	7.15	8/28/1990	4.98	2.17	0.00	NR
		9/20/1990	4.94	2.21	NA	NR
		6/19/1991	4.66	2.49	NA	NR
		7/23/1991	4.81	2.34	NA	NR

Table 1
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UPS-Oakland Hub
8400 Pardee Drive, Oakland, California
Global ID # T0600100939

Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
MW-2	7.15	8/26/1991	4.89	2.26	NA	NR
		11/18/1991	4.93	2.22	NA	NR
		2/3/1992	4.44	2.71	NA	NR
		6/29/1992	4.80	2.35	NA	NR
		6/23/1993	4.38	2.77	NA	NR
		10/11/1993	5.20	1.95	NA	NR
		1/4/1994	4.56	2.59	NA	NR
		5/10/1994	4.20	2.95	NA	NR
		2/1/1995	4.00	3.15	NA	NR
		8/2/1995	4.71	2.44	NA	NR
		10/16/1995	5.02	2.13	NA	NR
		12/28/1995	4.56	2.59	NA	NR
		6/12/1996	NM	--	0.25	NR
		6/4/1997	6.02	1.13	Small globules	NR
		9/30/1999	4.95	2.20	0.00	NR
		10/11/2000	4.97	2.25	0.08	NR
		2/12/2002	4.26	2.90	0.01	24.00
		9/3/2002	5.02	2.19	0.07	NR
		9/27/2002	4.89	2.34	0.09	222.30
		10/22/2002	5.11	2.08	0.05	125.00
		12/23/2002	4.25	2.93	0.04	99.00
		1/16/2003	4.28	2.89	0.02	49.00
		2/12/2003	4.26	2.90	0.01	24.00
		3/28/2003	4.35	2.81	0.01	25.00
		5/30/2003	3.60	3.57	0.02	49.00
		6/20/2003	4.55	2.61	0.01	NR
		7/14/2003	4.56	2.59	0.00	NR
		8/25/2003	4.79	2.37	0.01	25.00
		9/9/2003	4.90	2.26	0.01	NR
		9/25/2003	4.97	2.19	0.01	25.00
		10/28/2003	4.98	2.20	0.04	104.00
		11/18/2003	4.83	2.32	0.00	NR
		12/3/2003	4.87	2.28	0.00	NR
		1/27/2004	7.39	-0.24	0.00	NR
		2/24/2004	4.56	2.60	0.01	NR
		3/29/2004	4.24	2.92	0.01	NR
		4/19/2004	4.50	2.66	0.01	25.00
		5/20/2004	4.53	2.62	0.00	NR
		6/22/2004	4.65	2.50	0.00	NR
		7/27/2004	4.80	2.35	0.00	NR
		8/24/2004	5.93	1.22	0.00	NR
9/29/2004	5.00	2.17	0.02	50.00		
10/25/2004	4.68	2.47	0.00	NR		
12/15/2004	4.34	2.83	0.02	50.00		
1/24/2005	4.15	3.00	0.00	NR		
2/23/2005	4.95	2.23	0.03	74.00		
3/23/2005	4.96	2.21	0.02	49.00		
4/29/2005	4.23	3.01	0.10	246.00		

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Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
MW-2	7.15	5/27/2005	4.20	2.97	0.02	50.00
		6/29/2005	4.29	2.86	0.00	NR
		7/20/2005	4.48	2.70	0.04	98.00
		8/24/2005	4.71	2.44	0.00	NR
		9/27/2005	4.98	2.20	0.03	70.00
		10/19/2005	5.08	2.07	0.00	NR
		11/29/2005	4.68	2.48	0.01	NR
		12/29/2005	4.19	2.97	0.01	NR
		1/31/2006	4.05	3.10	0.00	NR
		2/28/2006	4.16	2.99	0.00	25.00
		3/27/2006	4.11	3.05	0.01	NR
		4/28/2006	4.03	3.12	0.00	NR
		6/27/2006	4.45	2.71	0.01	NR
		7/31/2006	4.60	2.57	0.02	NR
		8/29/2006	4.84	2.32	0.01	NR
		9/28/2006	4.96	2.22	0.03	NR
		10/27/2006	4.98	2.17	0.00	NR
		11/22/2006	4.58	2.57	0.00	NR
		12/26/2006	4.22	2.95	0.02	NR
		1/25/2007	4.44	2.71	0.00	NR
		2/16/2007	4.13	3.02	0.00	NR
		3/19/2007	4.30	2.86	0.01	NR
		4/26/2007	4.17	3.01	0.03	NR
		5/29/2007	4.42	2.74	0.01	25.00
		6/28/2007	5.16	2.00	0.01	25.00
		7/30/2007	4.71	2.44	0.00	NR
		8/30/2007	4.94	2.24	0.03	NR
		9/25/2007	5.06	2.10	0.01	25.00
		10/29/2007	4.75	2.41	0.01	25.00
		11/29/2007	4.69	2.46	0.00	NR
		12/28/2007	4.35	2.80	0.00	NR
		1/24/2008	4.08	3.07	0.00	NR
		2/21/2008	3.97	3.19	0.01	25.00
3/28/2008	4.18	2.97	0.00	NR		
4/30/2008	4.40	2.75	0.00	NR		
5/29/2008	4.58	2.58	0.01	20.00		
6/25/2008	4.58	2.57	0.00	NR		
7/29/2008	4.85	2.30	0.00	NR		
8/27/2008	4.89	2.27	0.01	25.00		
9/30/2008	5.14	2.04	0.04	98.00		
10/31/2008	5.23	1.95	0.03	NR		
11/26/2008	4.74	2.44	0.04	NR		
12/30/2008	4.33	2.83	0.01	25.00		
1/22/2009	4.45	2.71	0.01	25.00		

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Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)	
MW-2	9.63	5/5/2010	4.03	5.71	0.13	NR	
		10/29/2010	4.98	4.72	0.08	NR	
		2/25/2011	3.73	5.90	0.00	NR	
		6/14/2011	4.23	5.40	0.00	0.00	
		7/19/2011	4.72	4.92	0.01	59.15	
		8/18/2011	4.80	4.83	sheen	0.00	
		9/1/2011	4.96	4.67	sheen	0.00	
		9/20/2011	5.08	4.55	0.01	591.47	
		10/19/2011	4.77	4.87	0.01	591.47	
		11/22/2011	4.92	4.72	0.01	532.32	
		12/26/2011	4.92	4.72	0.01	532.32	
		1/23/2012	5.20	4.67	0.28	561.83	
		2/15/2012	5.16	4.50	0.03	591.40	
		2/29/2012	4.75	4.90	0.02	NR	
		3/19/2012	4.42	5.21	0.00	NR	
		5/1/2012	4.18	5.48	0.03	532.32	
		6/5/2012	4.61	5.03	0.01	NR	
		7/3/2012	4.91	4.75	0.03	532.32	
		8/1/2012	4.93	4.71	0.01	NR	
		8/3/2012	4.985	4.69	0.05	591.47	
		10/25/2012	5.49	4.16	0.02	5.0	
		11/19/2012	5.21	4.42	0.00	25.0	
		12/20/2012	5.76	3.88	0.01	2.0	
		1/24/2013	4.81	4.82	0.00	0.0	
		2/25/2013		NM	--	--	--
		2/26/2013		4.73	4.90	0.00	5.0
		4/14/2013		NM	--	--	--
		4/22/2013		4.69	4.94	0.00	5.0
		5/15/2013		NM	-	-	-
		5/30/2013		4.99	4.65	0.01	5.0
		6/26/2013		5.23	4.40	0.00	NR
		7/22/2013		5.15	4.53	0.06	NR
		8/12/2013		5.15	4.50	0.02	0.0
		9/25/2013		5.13	4.50	0.00	0.0
		10/28/2013		5.39	4.25	0.01	5.0
		11/27/2013		5.20	4.45	0.02	NR
		12/27/2013		5.52	4.11	0.00	0.0
		1/29/2014		5.50	4.15	0.02	0.0
		2/5/2014		5.45	4.18	0.00	0.0
		3/28/2014		4.43	5.20	0.00	NR
4/29/2014		4.71	4.94	0.02	5.0		
5/28/2014		4.69	4.94	0.00	NR		
6/27/2014		5.01	4.73	0.13	NR		
7/31/2014		4.99	4.71	0.08	0.0		
8/29/2014		5.30	4.35	0.02	NR		
9/23/2014		4.82	4.89	0.09	5.0		
10/22/2014		5.08	4.63	0.09	0.0		
12/29/2014		4.44	5.19	0.00	0.0		

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Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
MW-2	9.63	1/30/2015	4.61	5.06	0.05	0.0
		2/5/2015	4.61	5.03	0.01	25
MW-2 Product recovered prior to skimmer installation (Pre 6/14/2011):						1826.30
MW-2 Product recovered post-skimmer installation (Post 6/14/2011):						5203.07
MW-2 Total product recovered:						7029.37
MW-3	7.42	8/28/1990	3.88	3.54	0.00	NR
		9/20/1990	3.99	3.43	0.00	NR
		6/19/1991	3.49	3.93	0.00	NR
		7/23/1991	3.71	3.71	0.00	NR
		8/26/1991	3.94	3.48	0.00	NR
		11/18/1991	4.23	3.19	0.00	NR
		2/3/1992	4.01	3.41	0.00	NR
		6/29/1992	3.40	4.02	0.00	NR
		6/23/1993	2.75	4.67	0.00	NR
		10/11/1993	3.84	3.58	0.00	NR
		1/4/1994	3.40	4.02	0.00	NR
		5/10/1994	2.25	5.17	0.00	NR
		2/1/1995	2.43	4.99	0.00	NR
		8/2/1995	3.20	4.22	0.00	NR
		10/16/1995	3.72	3.70	0.00	NR
		12/28/1995	3.56	3.86	0.00	NR
		6/4/1997	3.20	4.22	0.00	NR
		6/3/1998	NM	--	0.00	NM
		9/30/1999	3.72	3.70	0.00	NR
		10/11/2000	3.88	3.54	0.00	NR
		9/3/2002	3.75	3.67	0.00	NR
		12/23/2002	3.50	3.92	0.00	NR
		3/28/2003	3.56	3.86	0.00	NR
		5/30/2003	3.38	4.04	0.00	NR
		6/20/2003	3.52	3.90	0.00	NR
		7/14/2003	3.65	3.77	0.00	NR
		8/25/2003	3.99	3.43	0.00	NR
		9/9/2003	3.99	3.43	0.00	NR
		9/25/2003	4.06	3.36	0.00	NR
		10/28/2003	4.15	3.27	0.00	NR
		11/18/2003	4.28	3.14	0.00	NR
12/2/2003	4.31	3.11	0.00	NR		
1/27/2004	3.85	3.57	0.00	NR		
2/24/2004	3.70	3.72	0.00	NR		
3/29/2004	3.47	3.95	0.00	NR		
4/19/2004	3.55	3.87	0.00	NR		
5/20/2004	3.65	3.77	0.00	NR		
6/22/2004	3.83	3.59	0.00	NR		
7/27/2004	3.98	3.44	0.00	NR		
8/24/2004	4.14	3.28	0.00	NR		
9/29/2004	4.30	3.12	0.00	NR		
10/25/2004	3.85	3.57	0.00	NR		
12/15/2004	3.16	4.26	0.00	NR		

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MW-3	7.42	1/24/2005	2.65	4.77	0.00	NR
		2/23/2005	2.50	4.92	0.00	NR
		3/23/2005	2.48	4.94	0.00	NR
		4/29/2005	2.59	4.83	0.00	NR
		5/27/2005	2.75	4.67	0.00	NR
		6/29/2005	3.05	4.37	0.00	NR
		7/20/2005	3.10	4.32	0.00	NR
		8/24/2005	3.45	3.97	0.00	NR
		9/27/2005	3.71	3.71	0.00	NR
		10/19/2005	3.73	3.69	0.00	NR
		11/29/2005	3.75	3.67	0.00	NR
		12/29/2005	3.08	4.34	0.00	NR
		1/31/2006	2.99	4.43	0.00	NR
		2/28/2006	2.95	4.47	0.00	NR
		3/27/2006	2.60	4.82	0.00	NR
		4/28/2006	2.90	4.52	0.00	NR
		6/27/2006	3.01	4.41	0.00	NR
		7/31/2006	4.33	3.09	0.00	NR
		8/29/2006	3.62	3.80	0.00	NR
		9/28/2006	3.80	3.62	0.00	NR
		10/27/2006	3.90	3.52	0.00	NR
		11/22/2006	3.60	3.82	0.00	NR
		12/26/2006	3.07	4.35	0.00	NR
		1/25/2007	3.25	4.17	0.00	NR
		2/16/2007	3.09	4.33	0.00	NR
		3/19/2007	2.83	4.59	0.00	NR
		4/26/2007	2.94	4.48	0.00	NR
		5/29/2007	3.18	4.24	0.00	NR
		6/28/2007	3.41	4.01	0.00	NR
		7/30/2007	3.62	3.80	0.00	NR
		8/30/2007	3.84	3.58	0.00	NR
		9/25/2007	4.03	3.39	0.00	NR
		10/29/2007	4.06	3.36	0.00	NR
		11/29/2007	4.10	3.32	0.00	NR
12/28/2007	3.78	3.64	0.00	NR		
1/24/2008	3.16	4.26	0.00	NR		
2/21/2008	2.41	5.01	0.00	NR		
3/28/2008	2.94	4.48	0.00	NR		
4/30/2008	3.08	4.34	0.00	NR		
5/29/2008	3.24	4.18	0.00	NR		
6/25/2008	3.30	4.12	0.00	NR		
7/29/2008	3.50	3.92	0.00	NR		
8/27/2008	3.84	3.58	0.00	NR		
9/30/2008	4.03	3.39	0.00	NR		
10/31/2008	4.20	3.22	0.00	NR		
11/26/2008	4.23	3.19	0.00	NR		
12/30/2008	3.96	3.46	0.00	NR		
1/22/2009	3.96	3.46	0.00	NR		

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Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)	
MW-3	9.89	5/5/2010	3.13	6.78	0.02	NR	
		10/29/2010	4.70	5.19	0.00	NR	
		2/25/2011	1.54	8.37	0.02	NR	
		6/14/2011	3.25	6.68	0.05	NR	
		7/19/2011	3.53	6.38	0.02	532.32	
		8/18/2011	3.98	5.91	sheen	591.47	
		9/1/2011	4.12	5.77	sheen	591.47	
		9/20/2011	4.41	5.48	sheen	591.47	
		10/19/2011	4.34	5.55	sheen	561.90	
		11/22/2011	4.75	5.14	sheen	532.32	
		12/26/2011	4.70	5.19	sheen	532.32	
		1/23/2012	4.11	5.79	0.01	532.26	
		2/15/2012	4.90	5.01	0.02	591.40	
		2/29/2012	4.14	5.78	0.03	NR	
		3/19/2012	2.98	6.91	0.00	NR	
		5/1/2012	2.91	6.99	0.01	532.32	
		6/5/2012	3.80	6.09	0.00	NR	
		7/3/2012	4.22	5.68	0.01	532.32	
		8/1/2012	4.58	5.31	0.00	NR	
		8/3/2012	4.61	5.28	0.00	532.32	
		10/25/2012	5.20	4.69	0.00	NR	
		11/19/2012	4.90	4.99	0.00	NR	
		12/20/2012	4.00	5.89	0.00	NR	
		1/24/2013	3.95	5.94	0.00	NR	
		2/25/2013		NM	--	--	--
		2/26/2013		4.25	5.64	0.00	NR
		4/14/2013		NM	--	--	--
		4/22/2013		4.54	5.35	0.00	10.00
		5/15/2013		NM	-	-	-
		5/30/2013		5.01	4.89	0.01	10.00
		6/26/2013		5.13	4.77	0.01	NR
		7/22/2013		5.48	4.41	0.00	NR
		8/12/2013		5.44	4.45	0.00	NR
		9/25/2013		5.50	4.39	0.00	NR
		10/28/2013		5.62	4.27	0.00	NR
		11/27/2013		5.67	4.24	0.02	2.00
		12/27/2013		5.80	4.11	0.02	2.00
		1/29/2014		5.90	4.03	0.05	NR
		2/5/2014		5.84	4.08	0.04	2.00
		3/28/2014		4.74	5.16	0.01	NR
4/29/2014		4.12	5.77	0.00	NR		
5/28/2014		4.45	5.44	0.00	5.00		
6/27/2014		5.60	4.29	0.00	NR		
7/31/2014		4.74	5.15	0.00	NR		
8/29/2014		5.00	4.89	0.00	NR		
9/23/2014		5.20	4.69	0.00	NR		

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Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
MW-3	9.89	10/22/2014	5.72	4.17	0.00	NR
		12/29/2014	3.58	6.31	0.00	NR
		1/30/2015	4.03	5.86	0.00	NR
		2/5/2015	4.22	5.67	0.00	NR
MW-3 Product recovered prior to skimmer installation (Pre 6/14/2011):						0.00
MW-3 Product recovered post-skimmer installation (Post 6/14/2011):						6684.89
MW-3 Total product recovered:						6684.89
MW-4	9.77	5/5/2010	2.96	6.81	0.00	NR
		10/29/2010	4.53	5.24	0.00	NR
		2/25/2011	1.34	8.43	0.00	NR
		9/1/2011	3.99	5.78	0.00	NR
		2/29/2012	3.91	5.86	0.00	NR
		3/19/2012	2.81	6.96	0.00	NR
		6/5/2012	3.59	6.18	0.00	NR
		8/1/2012	4.45	5.33	0.01	NR
		2/25/2013	NM	--	--	--
		2/26/2013	4.09	5.69	0.01	NR
		4/14/2013	NM	--	--	--
		5/15/2013	NM	--	--	--
		7/22/2013	5.10	4.67	0.00	NR
		8/12/2013	5.25	4.52	0.00	NR
		9/25/2013	NM	--	NM	--
		10/28/2013	NM	--	NM	--
		11/27/2013	NM	--	NM	--
		12/27/2013	NM	--	NM	--
		1/29/2014	6.03	3.74	0.00	NR
		2/5/2014	5.64	4.13	0.00	NR
		3/28/2014	4.57	5.20	0.00	NR
		4/29/2014	3.98	5.79	0.00	NR
		5/28/2014	4.72	5.05	0.00	NR
		6/27/2014	4.37	5.40	0.00	NR
		7/31/2014	4.61	5.16	0.00	NR
		8/29/2014	4.84	4.93	0.00	NR
9/23/2014	5.22	4.55	0.00	NR		
10/22/2014	5.25	4.52	0.00	NR		
12/29/2014	3.32	6.45	0.00	NR		
1/30/2015	3.98	5.79	0.00	NR		
2/5/2015	4.03	5.74	0.00	NR		

Table 1
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UPS-Oakland Hub
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Global ID # T0600100939

Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
MW-8	8.22	5/5/2010	2.56	5.66	0.00	NR
		10/29/2010	4.39	3.83	0.00	NR
		2/25/2011	2.69	5.53	0.00	NR
		9/1/2011	3.67	4.55	0.00	NR
		2/29/2012	3.63	4.59	0.00	NR
		3/19/2012	3.37	4.85	0.00	NR
		6/5/2012	3.15	5.07	0.00	NR
		8/1/2012	3.77	4.45	0.00	NR
		2/25/2013	NM	--	NM	--
		2/26/2013	3.38	4.84	0.00	NR
		4/14/2013	NM	--	NM	--
		5/15/2013	NM	--	NM	--
		7/22/2013	3.90	4.32	0.00	NR
		8/12/2013	4.08	4.14	0.00	NR
		9/25/2013	NM	--	NM	--
		10/28/2013	NM	--	NM	--
		11/27/2013	NM	--	NM	--
		12/27/2013	NM	--	NM	--
		1/29/2014	4.73	3.49	0.00	NR
		2/5/2014	4.50	3.72	0.00	NR
		3/28/2014	3.34	4.88	0.00	NR
		4/29/2014	2.98	5.24	0.00	NR
		5/28/2014	3.20	5.02	0.00	NR
		6/27/2014	3.53	4.69	0.00	NR
		7/31/2014	3.76	4.46	0.00	NR
		8/29/2014	4.03	4.19	0.00	NR
		9/23/2014	4.02	4.20	0.00	NR
		10/22/2014	4.39	3.83	0.00	NR
12/29/2014	3.87	4.35	0.00	NR		
1/30/2015	3.09	5.13	0.00	NR		
2/5/2015	3.36	4.86	0.00	NR		

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Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
MW-9	14.63	5/5/2010	6.28	8.35	0.00	NR
		10/29/2010	6.28	8.35	0.00	NR
		2/25/2011	5.55	9.08	0.00	NR
		9/1/2011	6.05	8.58	0.00	NR
		2/29/2012	5.98	8.65	0.00	NR
		3/19/2012	5.68	8.95	0.00	NR
		6/5/2012	3.76	10.87	0.00	NR
		8/1/2012	6.11	8.52	0.00	NR
		2/25/2013	NM	--	NM	--
		2/26/2013	5.91	8.72	0.00	NR
		4/14/2013	NM	--	NM	--
		5/15/2013	NM	--	NM	--
		7/22/2013	6.13	8.50	0.00	NR
		8/12/2013	6.29	8.34	0.00	NR
		9/25/2013	NM	--	NM	--
	10/28/2013	NM	--	NM	--	
	11/27/2013	NM	--	NM	--	
	12/27/2013	NM	--	NM	--	
	11.10	1/29/2014	7.15	3.95	0.00	NR
		2/5/2014	6.80	4.30	0.00	NR
		3/28/2014	5.13	5.97	0.00	NR
		4/29/2014	5.68	5.42	0.00	NR
		5/28/2014	5.57	5.53	0.00	NR
		6/27/2014	6.01	5.09	0.00	NR
		7/31/2014	6.12	4.98	0.00	NR
		8/29/2014	6.38	4.72	0.00	NR
		9/23/2014	6.29	4.81	0.00	NR
10/22/2014		7.15	3.95	0.00	NR	
12/29/2014		5.58	5.52	0.00	NR	
1/30/2015		5.62	5.48	0.00	NR	
2/5/2015	6.00	5.10	0.00	NR		

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Global ID # T0600100939

Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
MW-10	9.68	5/5/2010	8.28	1.40	0.00	NR
		10/29/2010	8.27	1.41	0.00	NR
		2/25/2011	4.45	5.23	0.00	NR
		9/1/2011	8.35	1.33	0.00	NR
		2/29/2012	8.32	1.36	0.00	NR
		3/19/2012	7.11	2.57	0.00	NR
		6/5/2012	8.20	1.48	0.00	NR
		8/1/2012	8.34	1.35	0.01	NR
		2/25/2013	NM	--	NM	--
		2/26/2013	8.28	1.40	0.00	NR
		4/14/2013	NM	--	NM	--
		5/15/2013	NM	--	NM	--
		7/22/2013	8.31	1.37	0.00	NR
		8/12/2013	8.64	1.04	0.00	NR
		9/25/2013	NM	--	NM	--
		10/28/2013	NM	--	NM	--
		11/27/2013	NM	--	NM	--
		12/27/2013	NM	--	NM	--
		1/29/2014	9.43	0.25	0.00	NR
		2/5/2014	9.41	0.27	0.00	NR
		3/28/2014	8.18	1.50	0.00	NR
		4/29/2014	8.21	1.47	0.00	NR
		5/28/2014	5.59	4.09	0.00	NR
		6/27/2014	8.29	1.39	0.00	NR
		7/31/2014	8.31	1.37	0.00	NR
		8/29/2014	8.30	1.38	0.00	NR
		9/23/2014	NM	--	NM	--
		10/22/2014	8.29	1.39	0.00	NR
12/29/2014	7.21	2.47	0.00	NR		
1/30/2015	7.88	1.80	0.00	NR		
2/5/2015	8.23	1.45	0.00	NR		
MW-11	9.49	5/5/2010	7.21	2.28	0.00	NR
		10/29/2010	6.83	2.66	0.00	NR
		2/25/2011	2.83	6.66	0.00	NR
		9/1/2011	6.05	3.44	0.00	NR
		2/29/2012	5.89	3.60	0.00	NR
		3/19/2012	8.88	0.61	0.00	NR
		6/5/2012	5.68	3.81	0.00	NR
		8/1/2012	6.16	3.34	0.01	NR
		2/25/2013	NM	--	NM	--
		2/26/2013	5.96	3.53	0.00	NR
		4/14/2013	NM	--	NM	--
		5/15/2013	NM	--	NM	--
7/22/2013	6.05	3.44	0.00	NR		

Table 1
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Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
MW-11	9.49	8/12/2013	6.43	3.06	0.00	NR
		9/25/2013	NM	--	NM	--
		10/28/2013	NM	--	NM	--
		11/27/2013	NM	--	NM	--
		12/27/2013	NM	--	NM	--
		1/29/2014	7.06	2.43	0.00	NR
		2/5/2014	6.98	2.51	0.00	NR
		3/28/2014	5.21	4.28	0.00	NR
		4/29/2014	5.43	4.06	0.00	NR
		5/28/2014	5.59	3.90	0.00	NR
		6/27/2014	5.84	3.65	0.00	NR
		7/31/2014	6.09	3.40	0.00	NR
		8/29/2014	6.30	3.19	0.00	NR
		9/23/2014	6.48	3.01	0.00	NR
		10/22/2014	6.03	3.46	0.00	NR
		12/29/2014	4.00	5.49	0.00	NR
		1/30/2015	5.44	4.05	0.00	NR
2/5/2015	5.69	3.80	0.00	NR		
MW-12	9.43	3/19/2012	4.40	5.18	0.18	NR
		6/5/2012	6.31	3.73	0.72	NR
		8/1/2012	7.39	3.23	1.40	NR
		8/3/2012	7.15	3.39	1.30	NR
		10/25/2012	6.74	3.30	0.72	NR
		11/19/2012	6.45	3.66	0.80	NR
		12/20/2012	5.90	4.30	0.90	NR
		1/24/2013	6.53	3.91	1.19	725.00
		2/25/2013	6.55	3.77	1.05	ND
		2/26/2013	7.75	1.72	0.05	30.00
		4/14/2013	5.70	3.94	0.25	ND
		4/22/2013	6.27	3.55	0.46	278.00
		5/15/2013	6.51	3.28	0.42	ND
		5/30/2013	6.67	2.97	0.25	151.00
		6/26/2013	6.82	2.89	0.33	200.00
		7/22/2013	6.69	2.88	0.16	97.00
		8/12/2013	6.73	2.84	0.17	0.00
		9/25/2013	6.83	3.04	0.52	322.00
		10/28/2013	6.83	2.93	0.39	236.00
		11/27/2013	6.86	3.09	0.61	606.00
		12/27/2013	6.75	2.80	0.14	84.00
		1/29/2014	6.80	2.93	0.35	200.00
		2/5/2014	6.82	2.91	0.35	212.00
		3/28/2014	5.95	3.82	0.40	242.00
		4/29/2014	5.49	4.20	0.31	188.00
		5/28/2014	5.37	4.28	0.26	157.00
6/27/2014	5.29	4.55	0.48	400.00		
7/31/2014	5.79	3.99	0.41	1009.00		
8/29/2014	5.80	3.84	0.25	151.00		

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Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
MW-12	9.43	9/23/2014	6.00	3.74	0.37	275.00
		10/22/2014	6.04	3.72	0.39	300.00
		12/29/2014	4.94	4.63	0.16	NR
		1/30/2015	5.00	4.81	0.45	200
		2/5/2015	4.87	4.65	0.11	66
MW-12 Total product recovered:						6129.00
MW-13	9.10	3/19/2012	3.56	5.54	--	NR
		6/5/2012	4.50	4.60	0.00	NR
		8/1/2012	5.15	3.96	0.01	NR
		2/25/2013	4.61	4.49	0.00	NR
		2/26/2013	3.40	5.70	--	NR
		4/14/2013	4.88	4.22	0.00	NR
		5/15/2013	5.26	3.84	0.00	NR
		7/22/2013	5.58	3.52	0.00	NR
		8/12/2013	5.69	3.41	0.00	NR
		9/25/2013	NM	--	NM	--
		10/28/2013	NM	--	NM	--
		11/27/2013	NM	--	NM	--
		12/27/2013	NM	--	NM	--
		1/29/2014	6.47	2.63	0.00	NR
		2/5/2014	5.80	3.30	0.00	NR
		3/28/2014	4.84	4.26	0.00	NR
		4/29/2014	4.35	4.75	0.00	NR
		5/28/2014	4.34	4.76	0.00	NR
		6/27/2014	4.58	4.52	0.00	NR
		7/31/2014	4.63	4.47	0.00	NR
		8/29/2014	4.86	4.24	0.00	NR
9/23/2014	4.91	4.19	0.00	NR		
10/22/2014	4.99	4.11	0.00	NR		
12/29/2014	4.24	4.86	0.00	NR		
1/30/2015	4.07	5.03	0.00	NR		
2/5/2015	4.12	4.98	0.00	NR		
MW-14	9.29	3/19/2012	1.86	7.43	--	NR
		6/5/2012	2.53	6.76	--	NR
		8/1/2012	3.69	5.61	0.01	NR
		2/25/2013	NM	--	--	--
		2/26/2013	2.66	6.63	--	NR
		4/14/2013	NM	--	--	--
		5/15/2012	NM	-	-	-
		7/22/2013	4.56	4.73	0.00	NR
		8/12/2013	6.05	3.24	0.00	NR
		9/25/2013	NM	--	NM	--
		10/28/2013	NM	--	NM	--
		11/27/2013	NM	--	NM	--
		12/27/2013	NM	--	NM	--
		1/29/2014	5.38	3.91	0.00	NR
2/5/2014	5.10	4.19	0.00	NR		

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Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
MW-14	9.29	3/28/2014	1.64	7.65	0.00	NR
		4/29/2014	1.74	7.55	0.00	NR
		5/28/2014	3.09	6.20	0.00	NR
		6/27/2014	3.49	5.80	0.00	NR
		7/31/2014	3.92	5.37	0.00	NR
		8/29/2014	4.50	4.79	0.00	NR
		9/23/2014	5.49	3.80	0.00	NR
		10/22/2014	4.00	5.29	0.00	NR
		12/29/2014	1.68	7.61	0.00	NR
		1/30/2015	3.03	6.26	0.00	NR
		2/5/2015	3.29	6.00	0.00	NR
OW-1	NA	6/4/1997	7.22	NC	0.01	NR
		9/30/1999	8.35	NC	0.01	NR
		10/11/2000	6.90	NC	0.09	NR
		2/12/2002	5.23	NC	0.01	38.00
		9/27/2002	7.02	NC	0.14	345.78
		10/22/2002	7.34	NC	0.01	40.00
		12/23/2002	5.17	NC	0.03	167.00
		1/16/2003	4.97	NC	0.01	40.00
		2/12/2003	5.23	NC	0.01	38.00
		3/28/2003	5.16	NC	0.01	25.00
		5/30/2003	4.41	NC	0.02	77.00
		6/20/2003	4.93	NC	0.01	NR
		7/14/2003	5.33	NC	0.00	NR
		8/25/2003	5.85	NC	0.00	NR
		9/9/2003	6.33	NC	0.00	NR
		9/25/2003	6.52	NC	0.01	25.00
		10/28/2003	7.26	NC	0.03	176.00
		11/18/2003	7.29	NC	0.00	NR
		12/2/2003	7.23	NC	0.03	NR
		1/27/2004	7.96	NC	0.01	NR
		2/24/2004	6.26	NC	0.02	NR
		3/29/2004	6.08	NC	0.02	NR
		4/19/2004	6.29	NC	0.03	116.00
		5/20/2004	6.16	NC	0.00	NR
		6/22/2004	6.37	NC	0.00	NR
		7/27/2004	5.67	NC	0.04	225.00
		8/24/2004	6.81	NC	0.00	NR
		9/29/2004	7.08	NC	0.04	153.00
		10/25/2004	6.74	NC	0.04	NR
		12/15/2004	5.33	NC	0.04	155.00
		1/24/2005	3.98	NC	0.00	NR
		2/23/2005	3.44	NC	0.01	NR ⁵
3/23/2005	3.34	NC	0.02	77.00		
4/29/2005	6.89	NC	0.13	501.00		
5/27/2005	7.18	NC	0.11	425.00		
6/29/2005	7.12	NC	0.10	450.00		
7/20/2005	7.20	NC	0.10	556.00		

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Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
OW-1	NA	8/24/2005	7.15	NC	0.06	249.00
		9/27/2005	7.43	NC	0.12	450.00
		10/19/2005	7.48	NC	0.11	425.00
		11/29/2005	7.00	NC	0.04	NR
		12/29/2005	5.22	NC	0.00	NR
		1/31/2006	5.64	NC	0.00	NR
		2/28/2006	6.53	NC	0.01	39.00
		3/27/2006	5.80	NC	0.01	NR
		4/28/2006	6.39	NC	0.00	NR
		6/27/2006	7.82	NC	0.06	NR
		7/31/2006	5.82	NC	0.05	NR
		8/29/2006	7.05	NC	0.07	NR
		9/28/2006	7.10	NC	0.02	NR
		10/27/2006	7.27	NC	0.02	NR
		11/22/2006	7.05	NC	0.02	NR
		12/26/2006	6.73	NC	0.03	NR
		1/25/2007	7.15	NC	0.00	NR
		2/16/2007	7.71	NC	0.01	NR
		3/19/2007	6.77	NC	0.02	NR
		4/26/2007	6.66	NC	0.01	NR
		5/29/2007	6.86	NC	0.02	76.00
		6/28/2007	6.97	NC	0.20	75.00
		7/30/2007	7.06	NC	0.01	NR
		8/30/2007	7.25	NC	0.03	NR
		9/25/2007	7.25	NC	0.03	115.00
		10/29/2007	7.43	NC	0.02	78.00
		11/29/2007	7.37	NC	0.00	NR
		12/28/2007	7.28	NC	0.01	40.00
		1/24/2008	6.61	NC	0.01	38.00
		2/21/2008	6.33	NC	0.01	37.00
		3/28/2008	6.80	NC	0.01	NR
		4/30/2008	7.44	NC	0.03	166.90
		5/29/2008	7.09	NC	0.01	38.00
		6/25/2008	7.07	NC	0.02	112.00
		7/29/2008	7.34	NC	0.00	NR
		8/27/2008	7.28	NC	0.02	78.00
		9/30/2008	7.82	NC	0.03	167.00
		10/31/2008	7.31	NC	0.01	NR
		11/26/2008	6.93	NC	0.01	NR
		12/30/2008	7.25	NC	0.02	112.00
1/22/2009	7.05	NC	0.01	56.00		
9.55	5/5/2010	7.08	2.52	0.06	NR	
	10/29/2010	7.37	2.25	0.08	NR	
	2/25/2011	6.17	3.42	0.05	NR	
	6/14/2011	6.78	2.84	0.08	0.00	
	7/19/2011	7.30	2.42	0.20	118.29	

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Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
OW-1	9.55	8/18/2011	7.35	2.23	0.03	147.87
		9/1/2011	7.35	2.23	0.03	147.87
		9/20/2011	7.41	2.17	0.04	591.47
		10/19/2011	7.42	2.16	0.03	532.32
		11/22/2011	7.09	2.49	0.03	29.57
		12/26/2011	7.32	2.25	0.02	147.87
		1/23/2012	6.90	2.91	0.30	532.26
		2/15/2012	7.32	2.25	0.02	591.40
		2/29/2012	7.54	2.08	0.08	NR
		3/19/2012	7.25	2.31	0.01	NR
		5/1/2012	7.14	2.42	0.01	532.32
		6/5/2012	8.55	1.01	0.01	NR
		7/3/2012	7.63	1.95	0.04	295.70
		8/1/2012	7.81	1.74	0.00	NR
		8/3/2012	7.50	2.17	0.14	591.47
		10/25/2012	7.34	2.23	0.02	5.0
		11/19/2012	7.26	2.46	0.20	10.0
		12/20/2012	6.93	2.65	0.03	5.0
		1/24/2013	6.89	2.69	0.03	10.0
		2/25/2013	NM	--	--	--
		2/26/2013	7.72	1.86	0.03	15.0
		4/14/2013	NM	--	--	--
		4/22/2013	7.68	1.90	0.03	15.0
		5/15/2013	NM	-	-	-
		5/30/2013	7.50	2.09	0.05	20.0
		6/26/2013	7.56	2.03	0.05	NR
		7/22/2013	7.84	1.80	0.10	5.0
		8/12/2013	7.55	2.01	0.01	NR
		9/25/2013	7.36	2.22	0.03	10.0
		10/28/2013	7.10	2.50	0.06	5.0
		11/27/2013	7.16	2.44	0.06	10.0
		12/27/2013	7.33	2.25	0.04	5.0
		1/29/2014	7.02	2.57	0.05	25.0
		2/5/2014	8.40	1.18	0.03	10.0
		3/28/2014	7.15	2.41	0.01	2.0
		4/29/2014	5.48	4.08	0.01	5.0
5/28/2014	7.74	1.86	0.06	10.0		
6/27/2014	7.61	1.97	0.03	5.0		
7/31/2014	7.66	1.93	0.05	50.0		
8/29/2014	7.36	2.24	0.06	NR		
9/23/2014	7.25	2.34	0.05	5.0		
10/22/2014	7.83	1.73	0.01	0.0		
12/29/2014	7.34	2.21	0.00	NR		
1/30/2015	7.10	2.46	0.01	5.0		
2/5/2015	7.49	2.12	0.07	60		

Table 1
Historical Groundwater Elevation Summary
UPS-Oakland Hub
8400 Pardee Drive, Oakland, California
Global ID # T0600100939

Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
OW-1 Product recovered prior to skimmer installation (Pre 6/14/2011):						5943.68
OW-1 Product recovered post-skimmer installation (Post 6/14/2011):						4550.41
OW-1 Total product recovered:						10494.09
IW-1	9.50	3/19/2012	4.38	5.12	0.00	NR
		6/5/2012	6.24	3.76	0.59	NR
		8/1/2012	7.29	3.26	1.23	NR
		8/3/2012	7.01	3.43	1.10	NR
		10/25/2012	7.05	3.30	1.00	NR
		11/19/2012	6.50	3.77	0.90	NR
		12/20/2012	5.85	4.28	0.74	NR
		1/24/2013	6.54	3.92	1.13	690.00
		2/25/2013	6.50	3.72	0.85	ND
		2/26/2013	8.72	1.55	0.91	550.00
		4/14/2013	5.64	4.57	0.84	ND
		4/22/2013	6.56	3.50	0.66	400.00
		5/15/2013	6.79	2.91	0.23	ND
		5/30/2013	6.93	2.97	0.47	284.00
		6/26/2013	6.98	2.98	0.54	327.00
		7/22/2013	6.89	2.92	0.36	218.00
		8/12/2013	6.95	3.07	0.61	370.00
		9/25/2013	6.73	3.05	0.33	205.00
		10/28/2013	6.76	2.94	0.24	145.00
		11/27/2013	6.80	3.19	0.58	351.00
		12/27/2013	6.71	2.99	0.24	145.00
		1/29/2014	6.69	2.93	0.14	150.00
		2/5/2014	6.69	2.90	0.11	66.00
		3/28/2014	5.64	4.02	0.19	115.00
		4/29/2014	5.31	4.23	0.05	30.00
		5/28/2014	5.20	4.39	0.10	60.00
		6/27/2014	5.64	4.09	0.27	180.00
		7/31/2014	5.70	3.99	0.22	542.00
8/29/2014	5.77	3.85	0.14	NR		
9/23/2014	5.97	3.67	0.16	100.00		
10/22/2014	7.70	1.85	0.06	100.00		
12/29/2014	5.24	4.58	0.38	NR		
1/30/2015	5.10	4.49	0.10	20.00		
2/5/2015	5.15	4.62	0.32	844		
IW-1 Total product recovered:						5892.00
IW-2	9.02	3/19/2012	4.15	4.87	0.00	NR
		6/5/2012	4.76	4.26	0.00	NR
		8/1/2012	5.54	3.48	0.00	NR
		2/25/2013	7.04	1.98	0.00	NR
		2/26/2013	5.85	3.17	0.00	NR
		4/14/2013	5.16	3.86	0.00	NR
		5/15/2013	5.21	3.81	0.00	NR

Table 1
Historical Groundwater Elevation Summary
UPS-Oakland Hub
8400 Pardee Drive, Oakland, California
Global ID # T0600100939

Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
IW-2	9.02	7/22/2013	5.60	3.42	0.00	NR
		8/12/2013	5.71	3.31	0.00	NR
		9/25/2013	NM	--	NM	--
		10/28/2013	NM	--	NM	--
		11/27/2013	NM	--	NM	--
		12/27/2013	NM	--	NM	--
		1/29/2014	6.37	2.65	0.00	NR
		2/5/2014	6.05	2.97	0.00	NR
		3/28/2014	5.13	3.89	0.00	NR
		4/29/2014	4.63	4.39	0.00	NR
		5/28/2014	4.60	4.42	0.00	NR
		6/27/2014	4.94	4.08	0.00	NR
		7/31/2014	5.13	3.89	0.00	NR
		8/29/2014	5.31	3.71	0.00	NR
		9/23/2014	5.49	3.53	0.00	NR
		10/22/2014	5.60	3.46	0.05	25.00
		12/29/2014	4.88	4.14	0.00	NR
1/30/2015	4.20	5.02	0.23	250.00		
2/5/2015	4.67	4.36	0.01	6		
IW-2 Total product recovered:						281.00
IW-3	8.93	3/19/2012	4.23	4.70	0.00	NR
		6/5/2012	3.82	5.11	0.00	NR
		8/1/2012	4.77	4.16	0.00	NR
		2/25/2013	5.90	3.03	0.00	NR
		2/26/2013	4.42	4.51	0.00	NR
		4/14/2013	NM	--	--	--
		5/15/2012	NM	--	--	--
		7/22/2013	4.80	4.13	0.00	NR
		8/12/2013	5.23	3.70	0.00	NR
		9/25/2013	NM	--	NM	--
		10/28/2013	NM	--	NM	--
		11/27/2013	NM	--	NM	--
		12/27/2013	NM	--	NM	--
		1/29/2014	5.63	3.30	0.00	NR
		2/5/2014	5.83	3.10	0.00	NR
		3/28/2014	4.80	4.13	0.00	NR
		4/29/2014	4.24	4.69	0.00	NR
		5/28/2014	3.99	4.94	0.00	NR
		6/27/2014	4.33	4.60	0.00	NR
		7/31/2014	4.61	4.32	0.00	NR
		8/29/2014	4.86	4.07	0.00	NR
9/23/2014	4.99	3.94	0.00	NR		
10/22/2014	5.01	3.92	0.00	NR		
12/29/2014	4.70	4.23	0.00	NR		
1/30/2015	4.70	4.23	0.00	NR		
2/5/2015	4.37	4.56	0.00	NR		
IW-4	9.96	3/19/2012	3.00	6.96	0.00	NR

Table 1
Historical Groundwater Elevation Summary
UPS-Oakland Hub
8400 Pardee Drive, Oakland, California
Global ID # T0600100939

Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
IW-4	9.96	6/5/2012	3.77	6.19	0.00	NR
		8/1/2012	4.64	5.33	0.01	NR
		2/25/2013	NM	--	--	--
		2/26/2013	4.29	5.68	0.01	NR
		4/14/2013	NM	--	--	--
		5/15/2013	NM	--	--	--
		7/22/2013	NM	--	--	--
		8/12/2013	5.45	4.51	0.00	NR
		9/25/2013	NM	--	NM	--
		10/28/2013	NM	--	NM	--
		11/27/2013	NM	--	NM	--
		12/27/2013	NM	--	NM	--
		1/29/2014	5.87	4.09	0.00	NR
		2/5/2014	6.86	3.10	0.00	NR
		3/28/2014	5.24	4.72	0.00	NR
		4/29/2014	4.19	5.77	0.00	NR
		5/28/2014	4.79	5.17	0.00	NR
		6/27/2014	5.04	4.92	0.00	NR
		7/31/2014	4.78	5.18	0.00	NR
		8/29/2014	5.02	4.94	0.00	NR
		9/23/2014	5.14	4.82	0.00	NR
		10/22/2014	5.29	4.67	0.00	NR
12/29/2014	3.80	6.16	0.00	NR		
1/30/2015	4.49	5.47	0.00	NR		
2/5/2015	4.22	5.74	0.00	NR		
IW-5	9.88	3/19/2012	2.92	6.96	0.00	NR
		6/5/2012	3.68	6.20	0.00	NR
		8/1/2012	4.72	5.16	0.00	NR
		2/25/2013	NM	--	--	--
		2/26/2013	4.58	5.30	0.00	NR
		4/14/2013	NM	--	--	--
		5/15/2013	NM	--	--	--
		7/22/2013	5.38	4.50	0.00	NR
		8/12/2013	5.25	4.63	0.00	NR
		9/25/2013	NM	--	NM	--
		10/28/2013	NM	--	NM	--
		11/27/2013	NM	--	NM	--
		12/27/2013	NM	--	NM	--
		1/29/2014	6.15	3.73	0.00	NR
		2/5/2014	6.91	2.97	0.00	NR
		3/28/2014	5.13	4.75	0.00	NR
		4/29/2014	4.27	5.61	0.00	NR
		5/28/2014	4.44	5.44	0.00	NR
6/27/2014	4.65	5.23	0.00	NR		
7/31/2014	4.88	5.00	0.00	NR		
8/29/2014	5.10	4.78	0.00	NR		
9/23/2014	5.22	4.66	0.00	NR		

Table 1
Historical Groundwater Elevation Summary
UPS-Oakland Hub
8400 Pardee Drive, Oakland, California
Global ID # T0600100939

Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
IW-5	9.88	10/22/2014	4.79	5.09	0.00	NR
		12/29/2014	3.61	6.27	0.00	NR
		1/30/2015	4.11	5.77	0.00	NR
		2/5/2015	4.31	5.57	0.00	NR
IW-6	9.67	3/19/2012	3.15	6.52	0.00	NR
		6/5/2012	3.74	5.93	0.00	NR
		8/1/2012	4.36	5.32	0.01	NR
		2/25/2013	NM	--	NM	--
		2/26/2013	4.10	5.57	0.00	NR
		4/14/2013	NM	--	NM	--
		5/15/2013	NM	--	NM	--
		7/22/2013	5.09	4.58	0.00	NR
		8/12/2013	5.23	4.44	0.00	NR
		9/25/2013	NM	--	NM	--
		10/28/2013	NM	--	NM	--
		11/27/2013	NM	--	NM	--
		12/27/2013	NM	--	NM	--
		1/29/2014	5.75	3.92	0.00	NR
		2/5/2014	5.55	4.12	0.00	NR
		3/28/2014	3.93	5.74	0.00	NR
		4/29/2014	3.71	5.96	0.00	NR
		5/28/2014	3.90	5.77	0.00	NR
		6/27/2014	4.54	5.13	0.00	NR
		7/31/2014	4.81	4.86	0.00	NR
		8/29/2014	5.00	4.67	0.00	NR
		9/23/2014	5.03	4.64	0.00	NR
		10/22/2014	4.78	4.89	0.00	NR
		12/29/2014	3.20	6.47	0.00	NR
1/30/2015	4.04	5.63	0.00	NR		
2/5/2015	3.70	5.97	0.00	NR		
Total product recovered from skimmers (MW-2, MW-3, and OW-1):						
Total product recovered prior to skimmer installation (mL):						7,770.0
Total product recovered prior to skimmer installation (oz):						262.0
Total product recovered prior to skimmer installation (gal):						2.05
Total product recovered post-skimmer installation (mL):						16,438.4
Total product recovered post-skimmer installation (oz):						555.0
Total product recovered post-skimmer installation (gal):						4.34
Total product recovered from wells without skimmers (mL):						12,302.0
Total product recovered from wells without skimmers (oz):						420.0
Total product recovered from wells without skimmers (gal):						3.3

Table 1
Historical Groundwater Elevation Summary
UPS-Oakland Hub
8400 Pardee Drive, Oakland, California
Global ID # T0600100939

Monitoring Well	Reference Elevation* (ft amsl)	Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Product Thickness (feet)	Volume of Product Recovered (mL)
Total product recovered (mL):						36,510.4
Total product recovered (oz):						1,234.0
Total product recovered (gal):						9.64

Notes:

* Reference elevation surveyed relative to mean sea level and California State Coordinate System, Zone III.

1. Volume of product recovered on 9/27/02 and 3/23/05 calculated based on measurements from field data sheets.
2. Corrected groundwater elevation = top of casing elevation - depth to water + (product thickness x 0.85)
3. Sources: Geraghty and Miller, 1996; BBL

-- = no data

ft amsl = feet above mean sea level

ft btoc = feet below top of casing

gal = gallons

HVE = high vacuum extraction

mL = milliliters

oz = ounces

NA = not available

NC = not calculated

ND = not determined; due to the method used for HVE, a distinction could not be made between the volume of water and volume of product recovered

NM = not measured

NR = not recovered

Table 2
 Historical Groundwater Monitoring Results and Baseline Sampling Summary
 UPS-Oakland Hub
 8400 Pardee Drive, Oakland, California
 Global ID # T0600100939

Monitoring Well	Date	Benzene µg/L	Toluene µg/L	Ethyl- benzene µg/L	Total Xylenes µg/L	MTBE µg/L	TPH as Gasoline µg/L	TPH as Diesel µg/L	DO mg/L	Temperature °C	pH	Conductivity µS	Methane µg/L	Sulfate µg/L	Sulfide µg/L	Iron µg/L	TDS mg/L
Field Analysis	--	--	--	--	--	--	--	--	--	--	--	5,000	--	--	--	--	3,000
ESL - Drinking Water	--	1	40	30	20	5	100	100	--	--	--	--	--	--	--	--	--
ESL - Non-Drinking Water	--	46	130	43	100	1,800	500	640	--	--	--	--	--	--	--	--	--
MW-2	5/5/2010	NA	NA	NA	NA	NA	<50	3,700	NA	NM	NM	NM	NA	NA	NA	NA	2,800
	2/25/2011	<0.50	<0.50	<0.50	<1.0	<0.50	360	37,000	NA	NM	NM	3,236	NA	NA	NA	NA	NA
	9/1/2011	0.59	4.90	0.98	10.0	<0.50	140	4,600	NA	NM	NM	4,240	NA	NA	NA	NA	NA
	2/29/2012	<0.50	0.52	<0.50	1.7	<0.50	510	13,000	NA	NM	NM	NM	NA	NA	NA	NA	NA
	3/19/2012	NA	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NA	3,300	NA	9,500	2,400 H
	4/19/2012	NA	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NA	NA	NA	NA	NA
	8/1/2012	<0.50	<0.50	<0.50	2.0	<0.50	110	13,000	NA	NM	NM	3,682	810	<1,000	<1,000	1,800	2,700
	2/26/2013	<0.50	<0.50	<0.50	1.1	<0.50	910	38,000	NA	18.20	7.62	2,847	1,400	<1,000	<1,000	4,100	2,900
	7/23/2013	NS	NS	NS	NS	NS	NS	NS	NS	NM	NM	NM	NS	NS	NS	NS	NS
	2/5/2014	<0.50	<0.50	<0.50	<1.0	<0.50	74	9,100	NA	18.40	7.63	5,554	4,100	<1,000	<1,000	5,200	3,200
	8/29/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/5/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	MW-3	5/5/2010	NA	NA	NA	NA	NA	<150	24,000	NA	NM	NM	NM	NA	NA	NA	NA
2/25/2011		NA	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NA	NA	NA	NA	NA
9/1/2011		<0.50	1.70	<0.50	2.1	<0.50	450	24,000	NA	NM	NM	1,378	NA	NA	NA	NA	NA
2/29/2012		<0.50	<0.50	<0.50	1.3	<0.50	520	13,000	NA	NM	NM	NM	NA	NA	NA	NA	NA
3/19/2012		NA	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NA	7,900	NA	5,800	770 H
4/19/2012		NA	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NA	NA	NA	NA	NA
8/1/2012		<0.50	<0.50	<0.50	1.1	<0.50	1,200	43,000	NA	NM	NM	NM	3,200	<1,000	<1,000	4,600	780
2/26/2013		<0.50	<0.50	<0.50	<1.0	<0.50	200	12,000	NA	16.70	7.96	1,407	4,100	<1,000	<1,000	3,800	630
7/23/2013		<0.50	<0.50	<0.50	<1.0	<0.50	290	7,000	NA	25.28	7.16	1,696	8,200	<1,000	<1,000	4,700	720
2/5/2014		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
8/29/2014		<5.0	<5.0	<5.0	<10	<5.0	<500	2,800	NM	24.4	6.31	1,746	5,400	1,200	<1,000	8,000	1,100
2/5/2015		<0.50	<0.50	<0.50	<1.0	<0.50	140	9,500	NM	18.4	6.89	1,212	5,800	10,000	<1,000	5,900	770
MW-4		5/5/2010	NA	NA	NA	NA	NA	<50	5,200	NA	NM	NM	NM	NA	NA	NA	NA
	10/29/2010	<0.5	<0.5	<0.5	<1.0	<0.5	150	2,000	NA	NM	NM	1,940	NA	NA	NA	NA	NA
	2/25/2011	<0.50	<0.50	<0.50	<1.0	<0.50	250	24,000	NA	NM	NM	2,006	NA	NA	NA	NA	NA
	9/1/2011	<0.50	<0.50	<0.50	<1.0	<0.50	430	7,700	NA	NM	NM	1,470	NA	NA	NA	NA	NA
	2/29/2012	<0.50	<0.50	<0.50	<1.0	<0.50	150	12,000	NA	NM	NM	NA	NA	NA	NA	NA	NA
	3/19/2012	NA	NA	NA	NA	NA	NA	NA	NA	NM	NM	NA	NA	4,400	NA	22,000	1,200 H
	4/19/2012	NA	NA	NA	NA	NA	NA	NA	0.56	NM	NM	1,952	NA	NA	NA	NA	
	8/1/2012	<0.50	<0.50	<0.50	<1.0	<0.50	69	6,400	NA	NM	NM	NM	6,600	1,400	<1,000	2,400	1,000
	2/26/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	9,900	NA	16.70	7.85	1,995	3,700	1,600	<1,000	3,400	1,400
	7/22/2013	<0.50	<0.50	<0.50	<1.0	<0.50	86	1,100	NA	24.56	7.05	1,789	8,000	<1,000	<1,000	3,600	1,100
	2/5/2014	<0.50	<0.50	<0.50	<1.0	<0.50	90	19,000	NA	18.40	8.20	2,221	6,400	<1,000	<1,000	3,200	1,100
	8/29/2014	<0.5	<0.5	<0.5	<1.0	<0.5	430	7,300	NM	24.1	6.78	1,739	7,600	2,500	<1,000	3,800	1,200
	2/5/2015	<0.50	<0.50	<0.50	<1.0	<0.50	<50	970	NM	18.2	7.07	1,798	5,000	1,400	<1,000	4,900	960
MW-8	5/5/2010	NA	NA	NA	NA	NA	<50	70	NA	NM	NM	NM	NA	NA	NA	NA	2,900
	10/29/2010	<0.5	<0.5	<0.5	<1.0	<0.5	<50	1,100	NA	NM	NM	9,599	NA	NA	NA	NA	NA
	2/25/2011	<0.50	<0.50	<0.50	<1.0	<0.50	<50	280	NA	NM	NM	9,379	NA	NA	NA	NA	NA
	9/1/2011	<0.50	<0.50	<0.50	<1.0	<0.50	<50	200	NA	NM	NM	9,900	NA	NA	NA	NA	NA
	2/29/2012	<0.50	<0.50	<0.50	<1.0	<0.50	<50	120	NA	NM	NM	NM	NA	NA	NA	NA	
	3/19/2012	NA	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NA	1,600	NA	1,900	5,800 H
	4/19/2012	NA	NA	NA	NA	NA	NA	NA	0.85	NM	NM	3,634	NA	NA	NA	NA	
	8/1/2012	<0.50	<0.50	<0.50	<1.0	<0.50	<50	160	NA	NM	NM	NM	1,100	<1,000	1,600	5,600	4,900
	2/26/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	280	NA	18.10	6.94	1,057	2,000	<1,000	1,500	810	2,900
	7/22/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	170	NA	22.56	6.81	4,408	5,100	<1,000	1,600	2,900	5,300
	2/5/2014	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<49	NA	19.00	6.78	9,672	3,700	<1,000	3,600	3,500	6,500
	8/29/2014	<0.5	<0.5	<0.5	<1.0	<0.5	<50	<50	NM	22.1	6.84	10,210	2,000	<1,000	3,500	2,800	5,000
	2/5/2015	<0.50	<0.50	<0.50	<1.0	<0.50	<50	170	NM	15.9	7.01	4,275	2,900	<1,000	<1,000	4,400	2,600
MW-9	5/5/2010	NA	NA	NA	NA	NA	<50	110	NA	NM	NM	NM	NA	NA	NA	NA	6,200
	2/25/2011	<0.50	<0.50	<0.50	<1.0	<0.50	<50	580	NA	NM	NM	6,065	NA	NA	NA	NA	NA
	9/1/2011	<0.50	0.55	<0.50	<1.0	<0.50	<50	240	NA	NM	NM	2,358	NA	NA	NA	NA	NA
	2/29/2012	<0.50	<0.50	<0.50	<1.0	<0.50	<50	160	NA	NM	NM	NM	NA	NA	NA	NA	NA
	3/19/2012	NA	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NA	4,000	NA	9,600	10,000 H
	4/19/2012	NA	NA	NA	NA	NA	NA	NA	0.87	NM	NM	5,322	NA	NA	NA	NA	NA
	8/1/2012	<0.50	<0.50	<0.50	<1.0	<0.50	<50	210	NA	NM	NM	NM	2,100	<1,000	<1,000	13,000	11,000
	2/26/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	320	NA	19.30	6.75	22.83	2,600	<1,000	1,400	4,000	8,900
	7/23/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<52	NA	24.44	6.51	12,700	5,400	<1,000	<1,000	11,000	16,000
	2/5/2014	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<52	NA	20.30	6.73	2,109	3,100	NA	NA	NA	NA
	8/29/2014	<0.5	<0.5	<0.5	<1.0	<0.5	<50	<51	NM	23.8	6.7	9,842	2,700	<1,000	<1,000	20,000	13,000
	2/5/2015	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<50	NM	16.3	6.98	12,580	4,100	<1,000	<1,000	14,000	9,100

Table 2
Historical Groundwater Monitoring Results and Baseline Sampling Summary
UPS-Oakland Hub
8400 Pardee Drive, Oakland, California
Global ID # T0600100939

Monitoring Well	Date	Benzene µg/L	Toluene µg/L	Ethyl- benzene µg/L	Total Xylenes µg/L	MTBE µg/L	TPH as Gasoline µg/L	TPH as Diesel µg/L	DO mg/L	Temperature °C	pH	Conductivity µS	Methane µg/L	Sulfate µg/L	Sulfide µg/L	Iron µg/L	TDS mg/L	
Field Analysis	--	--	--	--	--	--	--	--	--	--	--	5,000	--	--	--	--	3,000	
ESL - Drinking Water	--	1	40	30	20	5	100	100	--	--	--	--	--	--	--	--	--	
ESL - Non-Drinking Water	--	46	130	43	100	1,800	500	640	--	--	--	--	--	--	--	--	--	
MW-10	5/5/2010	NA	NA	NA	NA	NA	<50	110	NA	NM	NM	NM	NA	NA	NA	NA	2,100	
	10/29/2010	<0.5	<0.5	<0.5	<1.0	<0.5	<50	650	NA	NM	NM	9,550	NA	NA	NA	NA	NA	
	2/25/2011	<0.50	<0.50	<0.50	<1.0	<0.50	<50	5,600	NA	NM	NM	3,508	NA	NA	NA	NA	NA	
	9/1/2011	<0.50	<0.50	<0.50	<1.0	<0.50	<50	250	NA	NM	NM	9,334	NA	NA	NA	NA	NA	
	2/29/2012	<0.50	<0.50	<0.50	<1.0	<0.50	<50	170	NA	NM	NM	NM	NA	NA	NA	NA	NA	
	3/19/2012	NA	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NA	NA	NA	NA	NA	NA
	4/19/2012	NA	NA	NA	NA	NA	NA	NA	0.61	NM	NM	3,540	NA	NA	NA	NA	NA	
	8/1/2012	<0.50	<0.50	<0.50	<1.0	<0.50	<50	280	NA	NM	NM	NM	2,800	<1,000	<1,000	4,200	3,700	
	2/26/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	440	NA	18.20	7.43	9,646	2,000	<1,000	<1,000	2,300	3,000	
	7/22/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	62	NA	22.83	6.84	9,721	7,700	1,900	<1,000	7,700	5,200	
	2/5/2014	<0.50	<0.50	<0.50	<1.0	<0.50	<50	130	NA	17.60	6.73	3,139	3,700	40,000	<1,000	10,000	7,000	
	8/29/2014	<0.5	<0.5	<0.5	<1.0	<0.5	<50	<54	NM	23.6	6.68	11,800	4,400	<1,000	1,200	6,500	5,200	
	2/5/2015	<0.50	<0.50	<0.50	<1.0	<0.50	<50	89	NM	19.5	6.98	9,361	3,000	82,000	<1,000	5,600	3,800	
	MW-11	5/5/2010	NA	NA	NA	NA	NA	<50	430	NA	NM	NM	NM	NA	NA	NA	NA	10,000
		10/29/2010	<0.5	<0.5	<0.5	<1.0	<0.5	<50	7,200	NA	NM	NM	17,500	NA	NA	NA	NA	NA
2/25/2011		<0.50	<0.50	<0.50	<1.0	<0.50	<50	1,900	NA	NM	NM	525	NA	NA	NA	NA	NA	
9/1/2011		<0.50	<0.50	<0.50	<1.0	<0.50	<50	1,100	NA	NM	NM	7,444	NA	NA	NA	NA	NA	
2/29/2012		0.53	<0.50	<0.50	<1.0	<0.50	<50	1,200	NA	NM	NM	NM	NA	NA	NA	NA	NA	
3/19/2012		NA	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NA	NA	NA	NA	NA	
4/19/2012		NA	NA	NA	NA	NA	NA	NA	0.91	NM	NM	3,097	NA	NA	NA	NA	NA	
8/1/2012		<0.50	<0.50	<0.50	<1.0	<0.50	<50	860	NA	NM	NM	NM	2,800	<1,000	1,400	3,900	4,900	
2/26/2013		<0.50	<0.50	<0.50	<1.0	<0.50	<50	1,200	NA	17.80	7.32	8,974	2,100	<1,000	3,100	630	4,700	
7/23/2013		<0.50	<0.50	<0.50	<1.0	<0.50	<50	78	NA	21.83	6.76	9,905	7,000	<1,000	<1,000	5,900	5,700	
2/5/2014		<0.50	<0.50	<0.50	<1.0	<0.50	<50	78	NA	16.30	7.08	11,440	2,900	NA	NA	NA	NA	
8/29/2014		<0.5	<0.5	<0.5	<1.0	<0.5	<50	150	NM	24.5	6.67	7,817	3,900	<1,000	<1,000	13,000	6,100	
2/5/2015		<0.50	<0.50	<0.50	<1.0	<0.50	<50	360	NM	18.9	6.75	2,599	2,500	5,000	1,200	4,600	2,300	
MW-12		3/19/2012	NA	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NA	NA	NA	NA	NA
		4/19/2012	NA	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NA	NA	NA	NA	NA
	8/1/2012	NS	NS	NS	NS	NS	NS	NS	NS	NM	NM	NM	NS	NS	NS	NS	NS	
	2/26/2013	<0.50	<0.50	<0.50	<1.0	<0.50	2,500	24,000	NA	18.50	7.37	2,377	1,600	1,300	<1,000	9,200	1,500	
	7/23/2013	NS	NS	NS	NS	NS	NS	NS	NS	NM	NM	NM	NS	NS	NS	NS	NS	
	2/5/2014	NS	NS	NS	NS	NS	NS	NS	NS	NM	NM	NM	NS	NS	NS	NS	NS	
	8/29/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	2/5/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-13	3/19/2012	NA	NA	NA	NA	NA	NA	690	NA	NM	NM	NM	NA	100,000	NA	390,000	2,000 H	
	4/19/2012	NA	NA	NA	NA	NA	NA	NA	0.52	NM	NM	2,972	NA	NA	NA	NA	NA	
	8/1/2012	<0.50	<0.50	<0.50	1.0	<0.50	<50	750	NA	NM	NM	NM	4,500	3,300	4,300	1,100	1,400	
	2/26/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	890	NA	17.70	7.46	2,056	3,600	1,300	3,800	560	1,300	
	7/23/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	88	NA	25.78	6.90	2,022	13,000	2,100	<1,000	3,200	1,400	
	2/5/2014	<0.50	<0.50	<0.50	<1.0	<0.50	<50	96	NA	18.10	7.03	2,787	6,500	<1,000	1,800	2,500	1,800	
	8/29/2014	<0.5	<0.5	<0.5	<1.0	<0.5	<50	100	NM	24.9	7.05	2,287	4,700	<1,000	<1,000	5,600	1,500	
2/5/2015	<0.50	<0.50	<0.50	<1.0	<0.50	<50	130	NM	15.5	7.57	1,746	7,900	<1,000	<1,000	9,300	960		
MW-14	3/19/2012	NA	NA	NA	NA	NA	NA	260	NA	NM	NM	NM	NA	94,000	NA	9,100	8,400	
	4/19/2012	NA	NA	NA	NA	NA	NA	NA	0.96	NM	NM	4,872	NA	NA	NA	NA	NA	
	8/1/2012	<0.50	<0.50	<0.50	<1.0	<0.50	<50	370	NA	NM	NM	NM	2,200	53,000	4,500	9,100	8,700	
	2/26/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	230	NA	15.80	6.36	5,600	3,700	66,000	<1,000	990	3,700	
	7/23/2013	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<56	NA	26.00	6.53	5,497	6,000	NA	NA	NA	NA	
	2/5/2014	<0.50	<0.50	<0.50	<1.0	<0.50	<50	52	NA	17.60	6.62	9,975	3,700	NA	NA	NA	NA	
	8/29/2014	<0.5	<0.5	<0.5	<1.0	<0.5	<50	<53	NM	25.1	6.50	8,731	2,700	<1,000	<1,000	24,000	8,600	
	2/5/2015	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<50	NM	14.3	7.18	2,231	3,700	55,000	<1,000	25,000	1,900	
OW-1	6/23/1993	<0.5	<0.5	<0.5	31.00	NA	NA	34,000,000	NA	NA	NM	NM	NA	NA	NA	NA	NA	
	6/4/1997	NS	NS	NS	NS	NS	NS	NS	NS	NM	NM	NM	NA	NA	NA	NA	NA	
	9/30/1999	<2.0	<2.0	<2.0	4.20	<12.0	8,300	28,000,000	9.70	NM	NM	NM	NA	NA	NA	NA	NA	
	9/30/1999	<1.0	<1.0	1.90	8.90	<6.0	2,900	340,000	NA	NM	NM	NM	NA	NA	NA	NA	NA	
	10/11/2000	<0.5	<0.5	<0.5	<1.0	<5.0	2,100	58,000	0.74	NM	NM	NM	NA	NA	NA	NA	NA	
	9/27/2002	0.6J	<2.5	<2.5	<2.5	<2.5	17,000	23,000	NA	NM	NM	NM	NA	NA	NA	NA	NA	
	3/28/2003	<50	<50	<50	<100	<50	820	81,000	NA	NM	NM	NM	NA	NA	NA	NA	NA	
	9/25/2003	<50	530	500	6200	<50	220	91,000	NA	NM	NM	NM	NA	NA	NA	NA	NA	
	3/29/2004	<0.50	<0.50	<0.50	<1.0	<0.50	510	280,000 ndp	NA	NM	NM	NM	NA	NA	NA	NA	NA	
	9/29/2004	<2.5	<2.5	<2.5	<5.0	<2.5	2,800 g	440,000 ndp	NA	NM	NM	NM	NA	NA	NA	NA	NA	
	1/24/2005	<0.50	<0.50	<0.50	<1.0	<0.50	220 Q1	16,000 Q2	NA	NM	NM	NM	NA	NA	NA	NA	NA	
	11/29/2005	<0.50	<0.50	<0.50	<1.0	<0.50	650	30,000	NA	NM	NM	NM	NA	NA	NA	NA	NA	
	3/27/2006	<13	<13	<13	<25	<13	<1,300	58,000	NA	NM	NM	NM	NA	NA	NA	NA	NA	
	9/28/2006	<2.5	<2.5	<2.5	<5.0	<2.5	820	130,000	NA	NM	NM	NM	NA	NA	NA	NA	NA	
	3/19/2007	<2.5	<2.5	<2.5	<5.0	<2.5	460	76,000	NA	NM	NM	NM	NA	NA	NA	NA	NA	
	9/25/2007	<2.0	<2.0	<2.0	<4.0	<2.0	<200	42,000	NA	NM	NM	NM	NA	NA	NA	NA	NA	
	3/28/2008	<0.50	<0.50	<0.50	<1.0	<0.50	1,700	120,000	NA	NM	NM	NM	NA	NA	NA	NA	NA	
	9/30/2008	<0.50	<0.50	<0.50	<1.0	<0.50	340	180,000	NA	NM	NM	NM	NA	NA	NA	NA	NA	
	5/5/2010	NA	NA	NA	NA	NA	74	7,000	NA	NM	NM	NM	NA	NA	NA			

Table 2
Historical Groundwater Monitoring Results and Baseline Sampling Summary
UPS-Oakland Hub
8400 Pardee Drive, Oakland, California
Global ID # T0600100939

Monitoring Well	Date	Benzene µg/L	Toluene µg/L	Ethyl- benzene µg/L	Total Xylenes µg/L	MTBE µg/L	TPH as Gasoline µg/L	TPH as Diesel µg/L	DO mg/L	Temperature °C	pH	Conductivity µS	Methane µg/L	Sulfate µg/L	Sulfide µg/L	Iron µg/L	TDS mg/L
Field Analysis	--	--	--	--	--	--	--	--	--	--	--	5,000	--	--	--	--	3,000
ESL - Drinking Water	--	1	40	30	20	5	100	100	--	--	--	--	--	--	--	--	--
ESL - Non-Drinking Water	--	46	130	43	100	1,800	500	640	--	--	--	--	--	--	--	--	--
IW-1	3/19/2012	NA	NA	NA	NA	NA	NA	16,000	NA	NM	NM	NM	NA	4,500	NA	210,000	1,500 H
	4/19/2012	NA	NA	NA	NA	NA	NA	NA	0.48	NM	NM	2,639	NA	NA	NA	NA	NA
	8/1/2012	NS	NS	NS	NS	NS	NS	NS	NA	NM	NM	NM	NS	NS	NS	NS	NS
	2/26/2013	<5.0	<5.0	<5.0	<10	<5.0	32,000	59,000	NA	18.80	7.28	2,468	2,500	<1,000	<1,000	15,000	1,500
	7/23/2013	NS	NS	NS	NS	NS	NS	NS	NA	NM	NM	NM	NS	NS	NS	NS	NS
	2/5/2014	NS	NS	NS	NS	NS	NS	NS	NA	NM	NM	NM	NS	NS	NS	NS	NS
	8/29/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/5/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
IW-2	3/19/2012	NA	NA	NA	NA	NA	NA	2,500	NA	NM	NM	NM	NA	99,000	NA	8,200	3,000
	4/19/2012	NA	NA	NA	NA	NA	NA	NA	0.51	NM	NM	1,443	NA	NA	NA	NA	NA
	8/1/2012	<5.0	<5.0	0.74	1.4	<0.50	130	3,000	NA	NM	NM	NM	4,500	4,000	6,400	8,000	2,800
	2/26/2013	<5.0	<5.0	<5.0	<10	<5.0	<500	6,200	NA	17.90	7.45	4,494	1,500	<1,000	5,400	6,400	3,500
	7/23/2013	<5.0	<5.0	<5.0	<10	<5.0	<500	3,400	NA	25.28	6.46	5,531	3,900	<1,000	3,500	13,000	3,700
	2/5/2014	<5.0	<5.0	<5.0	<10	<5.0	<500	8,700	NA	18.60	6.97	5,472	5,200	<1,000	3,900	14,000	3,300
	8/29/2014	<0.5	<0.5	<0.5	<1.0	<0.5	490	7,500	NM	24.1	6.84	7,183	3,000	<1,000	3,100	10,000	3,400
	2/5/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
IW-3	3/19/2012	NA	NA	NA	NA	NA	NA	2,400	NA	NM	NM	NM	NA	43,000	NA	30,000	3,100
	4/19/2012	NA	NA	NA	NA	NA	NA	NA	0.61	NM	NM	2,471	NA	NA	NA	NA	NA
	8/1/2012	<0.50	<0.50	<0.50	<1.0	<0.50	91	650	NA	NM	NM	NM	3,800	<1,000	2,200	16,000	2,700
	2/26/2013	<0.50	<0.50	0.58	<1.0	<0.50	<50	1,100	NA	17.70	7.02	3,890	2,800	<1,000	8,200	20,000	2,800
	7/23/2013	<2.5	<2.5	<2.5	<5.0	<2.5	<250	95	NA	25.56	6.79	3,475	4,400	<1.0	5,400	15,000	2,800
	2/5/2014	<0.50	<0.50	<0.50	<1.0	<0.50	<50	190	NA	17.80	7.01	4,035	4,800	<1,000	4,600	22,000	2,900
	8/29/2014	<0.5	<0.5	<0.5	<1.0	<0.5	<50	160	NM	24.1	6.77	7,112	3,600	<1,000	2,000	16,000	2,400
	2/5/2015	<0.50	<0.50	<0.50	<1.0	<0.50	<50	<50	NM	15.7	7.14	3,633	5,300	<1,000	1,500	28,000	2,300
IW-4	3/19/2012	NA	NA	NA	NA	NA	NA	110,000	NA	NM	NM	NM	NA	17,000	NA	350,000	1,400 H
	4/19/2012	NA	NA	NA	NA	NA	NA	NA	0.45	NM	NM	1,809	NA	NA	NA	NA	NA
	8/1/2012	<0.50	0.76	<0.50	<1.0	<0.50	160	250,000	NA	NM	NM	NM	1,900	5,300	12,000	1,700	1,100
	2/26/2013	<5.0	<5.0	<5.0	<10	<5.0	5,600	34,000	NA	17.00	7.02	2,058	3,900	5,100	1,000	3,500	1,200
	7/23/2013	NS	NS	NS	NS	NS	NS	NS	NA	NM	NM	NM	NS	NS	NS	NS	NS
	2/5/2014	<5.0	<5.0	<5.0	<10	<5.0	600	170,000	NA	18.10	7.15	1,948	2,700	<1,000	5,800	3,700	1,200
	8/29/2014	<5.0	<5.0	<5.0	<10	<5.0	2,500	46,000	NM	24.1	6.78	1,885	5,000	<1,000	2,400	4,900	1,200
	2/5/2015	<2.5	<2.5	<2.5	<5.0	<2.5	340	55,000	NM	14.8	7.36	2,731	4,600	2,400	<1,000	4,900	1,200
IW-5	3/19/2012	NA	NA	NA	NA	NA	NA	220,000	NA	NM	NM	NM	NA	25,000	NA	270,000	910 H
	4/19/2012	NA	NA	NA	NA	NA	NA	NA	0.70	NM	NM	1,253	NA	NA	NA	NA	NA
	8/1/2012	<0.50	<0.50	<0.50	<1.0	<0.50	920	36,000	NA	NM	NM	NM	6,200	<1,000	2,300	4,900	810 H
	2/26/2013	<0.50	<0.50	<0.50	<1.0	<0.50	3,200	25,000	NA	16.10	7.17	1,469	3,200	<1,000	<1,000	6,000	730
	7/23/2013	<0.50	<0.50	<0.50	<1.0	<0.50	3,500	35,000	NA	26.06	6.75	1,316	13,000	<1,000	5,800	7,400	830
	8/12/2013	NA	NA	NA	NA	NA	NA	39,000	NA	NM	NM	NM	NA	NA	NA	NA	NA
	2/5/2014	<0.50	<0.50	<0.50	<1.0	<0.50	770	88,000	NA	18.50	6.77	1,725.00	6,600	1,200	<1,000	10,000	950
	8/29/2014	<0.5	<0.5	<0.5	<1.0	<0.5	1,600	86,000	NM	25.8	6.74	2,147	6,400	<1,000	<1,000	9,000	1,200
2/5/2015	<0.50	<0.50	<0.50	<1.0	<0.50	530	98,000	NM	15.7	7.24	1,908	5,500	<1,000	<1,000	6,700	860	
IW-6	3/19/2012	NA	NA	NA	NA	NA	NA	6,100	NA	NM	NM	NM	NA	48,000	NA	270,000	6,200
	4/19/2012	NA	NA	NA	NA	NA	NA	NA	0.77	17.9	6.67	7,377	NA	NA	NA	NA	NA
	8/1/2012	<0.50	<0.50	<0.50	<1.0	<0.50	280	5,600	NA	NM	NM	NM	2,500	2,100	10,000	43,000	8,500
	2/26/2013	0.50	<0.50	<0.50	<1.0	<0.50	120	4,800	NA	16.10	6.56	9,861	3,300	8,100	2,200	42,000	6,600
	7/23/2013	<0.50	<0.50	<0.50	<1.0	<0.50	110	970	NA	25.17	6.48	14,451	8,200	<1,000	6,200	45,000	10,000
	2/5/2014	<0.50	<0.50	<0.50	<1.0	<0.50	110	2,000	NA	17.20	6.36	15,960	4,900	<1,000	<1,000	52,000	10,000
	8/29/2014	<0.5	<0.5	<0.5	<1.0	<0.5	1,200	1,200	NM	23.8	6.61	12,810	2,400	<1,000	1,100	54,000	10,000
	2/5/2015	<0.50	<0.50	<0.50	<1.0	<0.50	71	5,000	NM	13.8	6.52	11,860	4,700	<1,000	<1,000	65,000	6,100

Notes:

- Bold values indicate analytical detections above drinking water but below non-drinking water ESL.**
 - Bold and italicized values indicate analytical detections above non-drinking water ESL.**
 - Shading = most recent groundwater monitoring data
 - Results collected between 8/28/90 and 12/28/95 are based on prior reporting by Geraghty & Miller, Inc. (1996).
 - The 9/96, 10/96 Blasland, Bouck & Lee, Inc. reports revealed concentrations reported as TPH as diesel did not resemble the diesel chromatogram standard, containing > C26.
 - ESLs = Regional Water Quality Control Board Environmental Screening Levels for Environmental Concerns at Sites with Contaminated Soil and Groundwater INTERIM FINAL - December 2013, San Francisco Bay Region, CA
- = no data
< = less than
> = greater than
1,2-DCA = 1,2-dichloroethane
°C = degrees Celsius
DO = dissolved oxygen
EDB = ethylene dibromide
ESL = environmental screening level
H = Sample was prepped or analyzed beyond the specified holding time.
J = Estimated value between method detection limit and practical quantitation limit.
mg/L = milligrams per liter
MTBE = methyl tertiary butyl ether
NA = not analyzed
ndp = Hydrocarbon reported does not match the pattern of laboratory diesel standard.
NM = not measured
NS = not sampled
Q2 = Quantity of unknown hydrocarbon(s) in sample based on diesel.
Q1 = Quantity of unknown hydrocarbon(s) in sample based on gasoline.
TDS = total dissolved solid
TPH = total petroleum hydrocarbon
µg/L = micrograms per liter
µS = microSiemens

TABLE 3
FREE PRODUCT AND METHANE MONITORING LOCATIONS
 UPS OAKLAND HUB
 8400 PARDEE DRIVE, OAKLAND, CALIFORNIA

Proposed Soil Boring	Area of Interest	Planned Monitoring Well	Methane Monitoring Tube Installed	Soil Sample Analysis
FPB-1	MW-2	No	--	Yes
FPB-2	MW-2	Yes	Yes	#
FPB-3	MW-2	Yes	Yes	Yes
FPB-4	OW-1 & MW-3	Yes	Yes	Yes
FPB-5	OW-1 & MW-3	No	--	#
FPB-6	Southern Edge of UST Pit; OW-1 & MW-3	Yes	Yes	#
FPB-7	OW-1 & MW-3	No	--	Yes
FPB-8	OW-1 & MW-3	Yes	Yes	#
FPB-9	Northern Edge of UST Pit	Yes	No	Yes
FPB-10	Former CPT-4	Yes	No	Yes
FPB-11	IW-1 & MW-12	Yes	No	Yes
FPB-12	IW-1 & MW-12	No	--	#
FPB-13	IW-1 & MW-12	Yes	Yes	Yes
FPB-14	IW-1 & MW-12	Yes	Yes	Yes
FPB-15	IW-1 & MW-12	Yes	No	#
FPB-16	DPH Plume Delineation	Yes	Yes	Yes
FPB-17	DPH Plume Delineation	Yes	Yes	#
IW-4*	Tank Pit	Yes	Yes	NA
IW-2*	IW-1 & MW-12	Yes	Yes	NA
MW-12*	IW-1 & MW-12	Yes	Yes	NA

Notes:

Total number of borings, 17

Total number of monitoring wells, 13

Total number of methane points, 12

* = wells previously installed

-- = not installed because no well present (boring only)

= no analyses planned; soil samples from the vadose zone will be submitted for analysis based on field evidence of petroleum impacts.

FPB = free product boring

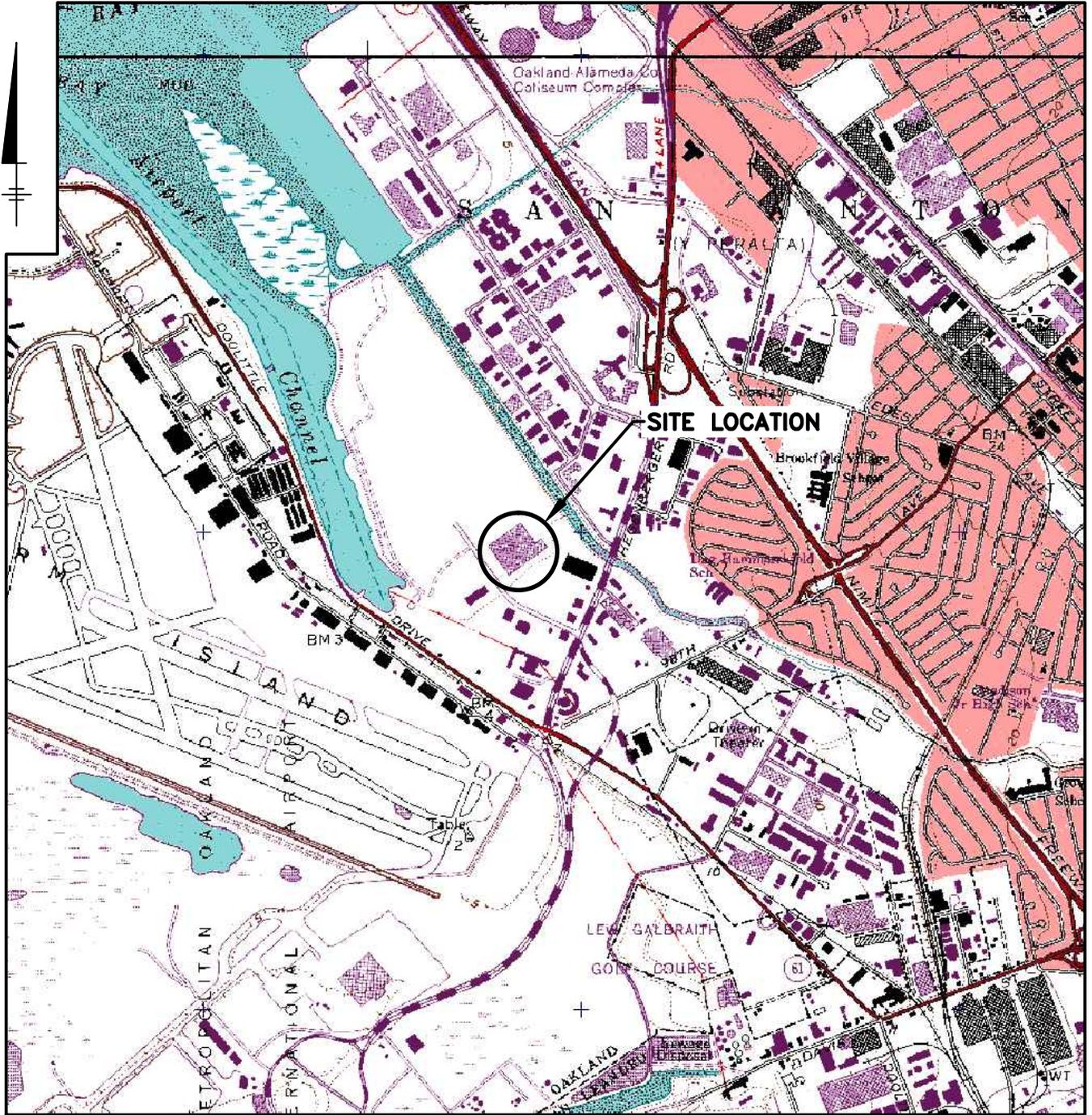
IW = injection well

MW = monitoring well

ARCADIS

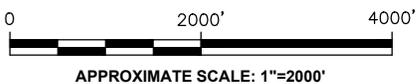
Figures

CITY:TMAPA-FL DIV:GROUP-85 DB:JAR LD:(Opt) PIC:(Opt) PM:(Read) TM:(Opt) LYR:(Opt)ONL="OFF"-REF'
 G:\ENV\CAD\TMAPA\ACT\B01038398 UPS Oakland\2015\new folder\B01038398_20_300-SLM.dwg LAYOUT: 1 SAVED: 7/16/2015 1:24 PM ACADVER: 19.1.S (LMS TECH) PAGES: 1 PLOTSTYLETABLE: PLT\FULL.CTB PAGES: 1 PLOTTED: 7/16/2015 1:25 PM BY: RICHARDS, JIM
 XREFS: IMAGES: PROJECTNAME: UPS-OAK.bmp



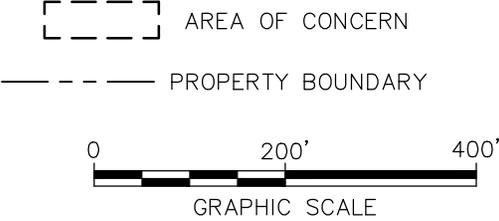
NOTES:

1. Base Map Source: USGS 7.5 Min. Topo. Quad., San Leandro, Calif.(1993)
2. Property Location is Approximate Only.



UPS-OAKLAND HUB 8400 PARDEE DRIVE, OAKLAND, CALIFORNIA GLOBAL ID # T0600100939	
SITE LOCATION MAP	
	FIGURE 1

CITY: TAMPA DIV: GROUP: ENV-141 DE: JAR LD: (Opt) PIC: (Opt) PM: (Reqd) TM: (Opt) LVR: (Option) OFF: REF
 G:\ENV\CAD\TAMPACT\16038398 UPS Oakland\2015New folder\16038398_20_300-AERIAL.dwg LAYOUT: 2 SAVED: 7/16/2015 1:25 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 7/16/2015 1:26 PM BY: RICHARDS, JIM



SOURCE: AERIAL PHOTOGRAPH PROVIDED BY GOOGLE EARTH PRO.

UPS-OAKLAND HUB
 8400 PARDEE DRIVE, OAKLAND, CALIFORNIA
GLOBAL ID # T0600100939

FACILITY LAYOUT MAP



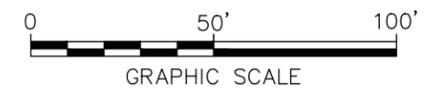
 FIGURE
2

CITY:TAMPA DIV:GROUP:85 DB:JAR LD:(Opt) PIC:(Opt) PM:(Recd) TM:(Opt) LVR:(Opt) ON="OFF" REF="G:\ENV\CADTAMPA\ACT1600\38398 UPS Oakland\2015\New folder\B0038398_20_300-FreeProduct.dwg LAYOUT: 3 SAVED: 7/16/2015 1:23 PM ACADVER: 19.1 S (LMS TECH) PAGES: 7 PLOTSTYLETABLE: PLT\FULLCTB PLOTTED: 7/21/2015 1:18 PM BY: RICHARDS, JIM



LEGEND

- MONITORING WELL
- TEMPORARY VACUUM TEST WELL
- PHASE I INJECTION WELL
- ABANDONED MONITORING WELL
- SOIL BORING LOCATION (2010)
- PROPERTY BOUNDARY
- UNDERGROUND ELECTRICAL LINE
- WATER/FIRE SERVICE/IRRIGATION
- ELECTRIC/WATER LINE
- LIGHT POST/ POWER POLE



UPS-OAKLAND HUB
8400 PARDEE DRIVE, OAKLAND, CALIFORNIA
GLOBAL ID # T0600100939

SITE MAP



CITY:TAMPA DIV:GROUP:85 DB:JAR LD:(Opt) PIC:(Opt) PM:(Recd) TM:(Opt) LVR:(Opt)ON="OFF"REF="G:\ENV\CADTAMPA\ACT1600\38398 UPS Oakland\2015\New folder\B0038398_20_300-FreeProductLog_LAYOUT: 4 SAVED: 7/21/2015 1:21 PM ACADVER: 19.1.S (LMS TECH) PAGES: 4 PLOTSTYLETABLE: PLT\FULLCTB PLOTTED: 7/21/2015 3:19 PM BY: RICHARDS, JIM



LEGEND

- MONITORING WELL
- TEMPORARY VACUUM TEST WELL
- PHASE I INJECTION WELL
- ABANDONED MONITORING WELL
- PROPERTY BOUNDARY
- UNDERGROUND ELECTRICAL LINE
- STORM WATER/SEWER LINE
- WATER/FIRE SERVICE/IRRIGATION
- ELECTRIC/WATER LINE
- CATCH BASIN/STORM DRAIN
- LIGHT POST/ POWER POLE
- (0.02)** HISTORICAL MAXIMUM FREE PRODUCT EXTENT AND THICKNESS OVER 5 YEAR PERIOD
- <0.1 THICKNESS
- 0.1 – 0.5 FT THICKNESS
- 0.5 – 1.0 FT THICKNESS
- >1.0 FT THICKNESS
- PROPOSED SOIL BORING
- SOIL BORING LOCATION (2010)
- POTENTIAL PUNCH BAR MONITORING LOCATION

0 50' 100'
GRAPHIC SCALE

UPS-OAKLAND HUB
8400 PARDEE DRIVE, OAKLAND, CALIFORNIA
GLOBAL ID # T0600100939

FREE PRODUCT EXTENT AND THICKNESS MAP

ARCADIS

FIGURE 4

ARCADIS

Appendix A

Best Practice: Methane Screening

These methods are suggested for most sites. Based on client or state specific requirements you may need to use slightly different parts and procedures. Consult the TKI vapor intrusion group with any questions.

Goal: Test soil gas monitoring points (external and sub-slab) for the presence of methane. The lower explosive limit (LEL) of methane is 5 percent (%) by volume. If soil gas concentrations exceed this threshold alternative handling and shipping procedures must be used. Further investigation of potential methane intrusion to indoor air may be considered.



Materials

- Multi-gas meter capable of measuring methane up to 5% by volume (100% LEL).
Note: Multi-gas meters are prone to multiple interferences including hydrocarbons. Work with technical staff to determine the appropriate field meter to use for your project.
- Carbon filters
Note: The carbon filters used for calibration of multi-gas meters will not remove all organic hydrocarbons from purged air. The carbon filter will however remove enough hydrocarbons to make conservative decisions about sample handling and shipment.
- Calibrator for Personal Air Sampling Pump
- 1-liter Tedlar Bags
- 1/4-inch Inner Diameter Flexible Tubing



GEM 2000 Multi-Gas Meter

Leak Testing

- Turn on multi-gas meter and allow to warm-up and self-calibrate (3 to 5 minutes).
- Calibrate personal air sampling pump to a flow rate of less than (<) 200 milliliters per minute (ml/min)
- Remove any plugs placed into the concrete slab or on the external soil gas probe tubing.
- Connect personal air sampling pump or syringe to sample port.
- Remove approximately 1-liter of soil gas from the sample port and transfer to a tedlar bag for screening.
Note: It is important to consider purge volume if testing for methane prior to sampling. If possible test for methane after sampling soil vapor. If methane screening to be done first and purge volume exceeds soil vapor purge volume, soil vapor point should be allowed to sit and equilibrate for 4 to 24-hours prior to sampling.
- Connect the Tedlar bag to the multi-gas meter via flexible tubing and carbon filter. Verify the correct flow direction for the carbon filter. Begin screening the Tedlar bag for methane.
- Record the initial concentration detected within the Tedlar bag and the stabilized concentration in field documents.
- If concentrations are greater than 5%, refer to the attached shipping guide on how to properly handle and ship samples at this location.