October 24, 2011

Mr. Jerry Wickham
Hazardous Materials Specialist
Alameda County Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Reference: ACEH Case No. RO0002959, Geotracker Global ID SLT19761201

Subject: Well Installation and Additional Soil Investigation
5901 MacArthur Blvd, Oakland, CA

Dear Mr. Wickham:

Attached is a report presenting well installation and additional soil investigation results (October 17, 2011) prepared by OTG EnviroEngineering Solutions, Inc. for the site located at 5901 MacArthur Blvd, Oakland, California. Funding for the project has been provided in full or in part by the American Recovery and Reinvestment Act of 2009 (ARRA) and the Orphan Site Cleanup Fund (OSCF), through an agreement with the California State Water Resources Control Board.

Certification

"I agree with the conclusions and recommendations presented in the attached document. I declare, under penalty of perjury, that the information and recommendations contained in the attached document is true and correct to the best of my knowledge".

Please contact the undersigned at (510) 301-1600 if you have questions or comments.

Sincerely,

Jeffrey C. Huynh, Trustee
Huynh Cheng Family Living Trust
1501 Darius Court
San Leandro, CA 94577

REPORT

MONITORING WELL INSTALLATION & ADDITIONAL SOIL INVESTIGATION

For Site Located At
5901 MACARTHUR BLVD.
OAKLAND, CALIFORNIA

Prepared for

Huynh Cheng Family Living Trust
1501 Darius Court
San Leandro, CA 94577

October 17, 2011

Prepared by

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7700 Edgewater Drive, Suite 260
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OTG EnviroEngineering Solutions, Inc.

October 17, 2011

Mr. Jerry Wickham, PG, CEG, CHG
Senior Hazardous Materials Specialist
Alameda County Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Reference: ACEH Case No. RO0002959, Geotracker Global ID SLT19761201

Subject: Monitoring Well Installation & Additional Soil Investigation
5901 MacArthur Blvd, Oakland, CA

Dear Mr. Wickham:

On behalf of the property owner – Huynh Cheng Family Living Trust, OTG EnviroEngineering Solutions, Inc. (OTG) is pleased to submit the Report for *Monitoring Well Installation and Additional Soil Investigation* for the site located at 5901 MacArthur Blvd, Oakland, California. Funding for the project has been provided in full or in part by the American Recovery and Reinvestment Act of 2009 (ARRA) and the Orphan Site Cleanup Fund (OSCF), through an agreement with the California State Water Resources Control Board.

Certification

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

Please contact the undersigned at (510) 465-8982 if you have questions or comments.

Sincerely,
OTG EnviroEngineering Solutions, Inc.

Xinggang Tong, PhD, PE
Project Manager

cc: Jeffrey Huynh, 1501 Darius Ct, San Leandro, CA 94577

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1. INTRODUCTION

This report presents the results of well installation and additional shallow soil sampling and analyses conducted in March and April 2011 at the site located at 5901 MacArthur Blvd, Oakland, California (the Site, Figure 1). The work was performed in accordance with a site investigation work plan (OTG, February 11, 2011), which was approved by the Alameda County Environmental Health (ACEH) in a February 23, 2011 letter.

Funding for this project has been provided in full or in part by the American Recovery and Reinvestment Act of 2009 (ARRA) and the Orphan Site Cleanup Fund (OSCF), through an agreement with the California State Water Resources Control Board (SWRCB). The contents of this document do not necessarily reflect the views and policies of the SWRCB, nor does mention of trade names or commercial products constitute endorsement or recommendation for use (Gov. Code §7550).

1.1 Site Location

This currently vacant lot is located in Alameda County at 5901 MacArthur Boulevard (Blvd.) in Oakland, California (Figure 1). It occupies the southwest corner of MacArthur Blvd. and Seminary Avenue intersection and has the size of approximately 0.3 acre. It is located in projected Section 10, T2S, R3W, of the Mount Diablo Baseline and Meridian (MDB&M) at an elevation of approximately 92 feet above mean sea level (msl).

As shown on Figure 2, the Site is located in a mixed use area. An active auto service station is located to the East-Northeast across MacArthur Blvd (currently a Valero branded station, but was formerly Chevron Service Station #9-9708). To the North-Northwest across Seminary Avenue is Mills College Campus. A paved parking lot is located next to and southwest of the Site, and a mix of shops and residential houses are to the south and southeast. The Site itself is zoned for commercial use. The owner of the property intends to redevelop the site for commercial use.

1.2 Site Geology and Hydrogeology

The site is situated at the base of the northwest-southeast trending foothills of the Coast Range. It is located on relatively flat lying sediments that slope southwest at a gradient of approximately 65 feet/mile.

Lion Creek historically ran through the site (Figure 2). A concrete culvert was constructed in the creek bed in the early 1900s and the creek was then filled to create the present Site and many other sites along the creek path. The section of the concrete culvert beneath the Site is about 12 feet in width and eight feet in height. The roof of the culvert is approximately nine feet below ground surface (bgs). The culvert was abandoned in place in 2000 when a new culvert was constructed beneath the Seminary Avenue to replace the old one (Figure 2).

As discussed in details in Section 2 below, environmental investigations were conducted at the site from 1987 to 1997 and then again from 2007 to current. The 30-foot section soil tested beneath the site generally consists of stiff dark brown to yellowish silty clay that is bisected by a thin sand and gravel layer, first encountered at approximately 15 feet bgs. Fill materials (base aggregates, sand and silt in various proportions and some debris such as wood and glass) are recognized at some drilling locations down to as deep as 15 feet bgs. The sand and gravel layer is approximately 2 feet thick and forms a shallow water-bearing zone between 9 feet and 17 feet bgs. This shallow water-bearing zone appears heavily influenced by the storm water systems. Prior to 2000, the storm water drained through the culvert beneath the site and the shallow zone water flowed in a direction similar to the storm water flow (west to southwest direction). However, after the new culvert was built off-site beneath the Seminary Avenue in 2000 and the old one was abandoned, the shallow zone water beneath the site appears to flow toward the new culvert (northwest direction).

2. HISTORY OF ENVIRONMENTAL INVESTIGATION AND REMEDIATION

Wickland Oil Company operated Regal Service Station #404 on the property from unknown time to May 1987 when fueling services ceased operation. All buildings, underground storage tanks (USTs) and associated piping, and pavement were removed by 1997. The site has since been vacant.

2.1 Environmental Activities from 1987 through 1997

According to the *Remedial Action Completion Certification* issued on August 29, 1997 by the Alameda County Environmental Health (ACEH), the following four USTs (single-walled steel tanks) once existed on the property (Figure 3):

Tank No:	Size (gallons)	Content	Date Removed
1	10,000	Regular gasoline	5/18/87
2	8,000	Unleaded gasoline	5/18/87
3	6,000	Premium gasoline	5/18/87
4	550	waste oil	2/24/93

Holes were noted on USTs #2 and #4 upon their removal. Six (6) soil samples were collected beneath the gasoline USTs (one from each end of the three USTs) and one soil sample was collected beneath the waste oil tank at the time of their removal. Sample locations are shown on Figure 3. Analytical results are summarized in Table 1. Gasoline (TPH-g) was reported up to 310 mg/kg and benzene up to 6.4 mg/kg in the gas tank excavation pit. The soil sample collected within the waste oil tank excavation pit was analyzed for gasoline (TPH-g), kerosene (TPH-k), and diesel (TPH-d) by modified EPA Method 8015; BTEX by EPA Method 8020; oil & grease by SM 5520; volatile organic compounds (VOCs) by EPA Method 8240; semi-VOCS (SVOCs) by EPA Method 8270; LUFT five metals by EPA 7000-Series Methods. Except toluene which was reported at 0.012 mg/kg, no other individual VOCs and SVOCs were

detected at or above their respective reporting limits (Table 1). TPH diesel was reported at 17 mg/kg, TPH kerosene at 4 mg/kg, and TPH gas at below reporting limit (<1.0 mg/kg).

No further investigation beyond the initial soil sampling within the gasoline-UST excavation pit was conducted until October 5, 1992 when the local regulatory agency ACEH issued a letter to the property owner (Wickland Properties) requesting a Preliminary Site Assessment. The following four shallow groundwater monitoring wells were installed and then destroyed:

Well ID	Total Depth (feet)	Well Dia (inches)	Screen Levels (feet, bgs)	Water Levels (feet, bgs)	Date of Installation	Date of Destruction
MW-1	25	4	9 – 24	13.2 – 14.5	10/27/93	11/11/97
MW-2	20	4	10 - 20	13.8 – 14.4	10/4/95	11/11/97
MW-3	20	4	10 – 20	13.4 – 14.6	10/4/95	11/11/97
MW-4	20	2	10 - 20	12.1 – 19.0	10/4/95	11/11/97

Soil samples were collected at various depths at the time of well installation and were analyzed for TPH gas, diesel and BTEX (Blakely Environmental Investigation, Inc, January 4, 1997). Results are summarized in Table 1. Except the soil sample collected at 10 feet bgs from MW-4, which had TPH gas at 5,100 mg/kg and TPH diesel at 840 mg/kg, all other soil samples had either no detection or minor detections of TPH gas (<30 mg/kg), TPH diesel (≤100 mg/kg), and benzene (<0.1 mg/kg). Results are summarized in Table 1.

Groundwater samples were collected from the four wells periodically by Western Geo-Engineers for TPH gas, diesel, and BTEX analysis and results are summarized in Table 2. The last round of groundwater samples were collected on September 4, 1996 (before well closure) and the highest reported TPH gas concentration was 1,100 ug/L from MW-1, the highest TPH diesel was 150 ug/L from MW-2, and the highest benzene was 51 ug/L from MW-1 (Western Geo-Engineers, September 19, 1996).

At the time of the waste oil tank removal on February 24, 1993, approximately 54 cubic yards of contaminated soil was removed and stockpiled on site. The soil was transported to B&J landfill in Vacaville, CA on November 19, 1997 for disposal. No other active soil and/or groundwater remediation was reported.

On behalf of Wickland Properties, Blakely Environmental Investigation, Inc. submitted a closure request on January 4, 1997 and again on April 29, 1997. ACEH approved the closure request by issuing a REMEDIAL ACTION COMPLETION CERTIFICATION dated August 29, 1997. When the State adopted the GeoTracker system, this case was assigned a Global ID T0600101300 and the case is listed as closed in the GeoTracker system. The four monitoring wells were destroyed on November 11, 1997 with the approval of ACEH. There were no site activities from December1997 through May 2007.

2.2 Environmental Activities from 2007 to Current

After the UST case was closed by ACEH, Wickland Properties (a subsidiary of Wickland Oil Company) sold the vacant lot to Daniel S. and Belia Franko, Sr. on April 7, 2000, who then sold the property to Jeffrey Huynh and Anna Cheng on September 27, 2002. When Jeffrey Huynh and Anna Cheng submitted a development plan to the City of Oakland in July 2006, the City requested a soil and groundwater sampling be conducted to verify the level of petroleum hydrocarbons remaining at the property.

On June 20, 2007, OTG EnviroEngineering Solutions, Inc. (OTG) drilled five boreholes (TB-1 through TB-5, Figure 3) using a Geoprobe 6600, a direct-push rig, and collected continuous cores of soil columns from each borehole. TB-1, TB-4, and TB-5 were drilled to 20 feet bgs, and TB-2 and TB-3 were to 24 feet bgs. Groundwater was first encountered at 15 feet bgs in TB-4, but it was dry at the other four boreholes. TPH-g was reported at 1,620 ug/L in groundwater and up to 2,890 ppm in soil, and TPH-d was reported at 1,000 ug/L in groundwater and up to 440 ppm in soil. Results are summarized in Table 3. After reviewing the June 2007 sampling data, the City of Oakland Fire Department referred the case back to the County (ACEH) and the County opened a new case number for the Site (County new case # RO0002959 and a new Geotracker Global ID SLT19761201). On June 25, 2008, ACEH issued a letter to Mr. Huynh and Ms. Cheng requiring further site characterization.

Based on the approval of a Site Investigation Work Plan (OTG, October 9, 2009) by ACEH and additional comments from ACEH and SWRCB Financial Assistance Division Technical Support Group, a comprehensive site investigation was conducted in August and September 2010. Results were documented in a *Site Assessment Report* (OTG, December 27, 2010). In summary, a total of 21 temporary borings were drilled across the site in depths from 15 to 27.5 feet bgs. Continuous cores of soil columns were collected for logging and volatile hydrocarbons screening. Soil samples from selected depths (total 85 samples) were sent to a TestAmerica environmental laboratory for analyses of BTEX, fuel oxygenates and additives, TPH-g, TPH-d and TPH-mo. Grab groundwater samples were also collected from seven boreholes where groundwater was encountered. Groundwater analytical data is summarized in Table 6 and soil data is included in Table 7.

During the August and September 2010 investigation, shallow groundwater was encountered in seven of the 21 boreholes between 14 and 15 feet bgs. The rest boreholes were dry. Because these were temporary boreholes and their elevations were not surveyed, groundwater gradient and flow direction could not be determined. TPH-g was reported from ND (<50 ug/L) at bore location NW-9 to 11,000 ug/L at NW-7, TPH-d was reported from 120 ug/L at SB-2 to 9,100 ug/L at NW-7. NW-7 is located upgradient based on historical groundwater flow direction and reported the highest TPH-g and TPH-d concentrations in groundwater. TPH-g and TPH-d in soil were much less extensive than in the groundwater. TPH-g was only detected in 13 out of the 85 soil samples analyzed, and of the 13 detected only two samples had TPH-g concentrations above its commercial ESL of 180 mg/kg (NW-4-15 at 280 mg/kg and NW-7-15 at 860 mg/kg). Only three soil samples reported TPH-d at concentrations above its commercial ESL of 180 mg/kg (SB-3-15 at 480 mg/kg, NW-4-15 at 740 mg/kg, and NW-8-5 at 340

mg/kg). TPH-mo was detected in six shallow soil locations (< 10 ft bgs), but none exceeded its commercial ESL of 2,500 mg/kg. BTEX, fuel oxygenates and additives in soil and groundwater were either below their respective reporting limits or at concentrations significantly lower than their respective commercial ESLs.

Under the direction of ACEH, a work plan for well installation and additional shallow soil characterization was prepared (OTG, February 11, 2011). ACEH approved the work plan with comments in a February 23, 2011 letter. This report presents the results of well installation and additional shallow soil investigation.

3. SITE INVESTIGATION PROGRAM

The investigation was performed in accordance with the approved work plan (OTG, February 11, 2011) and additional comments contained in the ACEH approval letter (February 23, 2011). Field activities were conducted in March and April 2011.

3.1 Well Installation and Groundwater Monitoring

Locations of the planned seven monitoring wells are shown on Figure 3. Their actual locations as installed are identified on Figure 4. In particular, NMW-7 significantly deviated from its planned location due to refusal during drilling. Eight boreholes were drilled in its planned area (the shaded area on Figure 4) and were all abandoned due to refusal at depths between 7 ft and 12 ft bgs. The tip of the drill bit had concrete powder when pulled out from the abandoned boreholes. Because the concrete culvert was constructed in the early 1900s and no records are available today, its location and dimensions as shown on Figure 4 are only approximate.

Details of the completed seven monitoring wells are summarized in Table 4. Well installation procedures are described below.

- Pre-drilling details include: developing a site health and safety plan; obtaining well construction permits from Alameda County Public Works Agency Water Resources Section (Appendix A); and underground utility clearance (contacting Underground Services Alert [USA], and contracting to an independent utility locator to clear proposed locations).
- OTG retained PeneCore Drilling Company of Woodland, CA for the well installation. The well boreholes were drilled with a Geoprobe 6600 Comb rig equipped with hollow stem augers (8-inch diameter for 2-inch diameter wells and 10-inch auger for 4-inch wells). Because the wells were installed within two feet of previous borehole locations (direct-push sampling conducted in August and September 2010), soil samples were not collected during the well installation for logging and chemical analysis.
- Wells were constructed in March 31 and April 1 and 4, 2011 in accordance with the approved Work Plan (OTG, February 11, 2011) and the well permit. Well construction

details are summarized in Table 4 and well construction logs are included in Appendix B. During the well construction, groundwater was initially encountered between approximately 13 and 15 ft bgs in NMW-2, NMW-4, NMW-6, NMW-7, and NMW-9. No free-water was encountered in NMW-1 and NMW-3. Ms. Vicky Hamlin from Alameda County Public Works Agency Water Resources Well Permit Division was present during the placement of well sealing. The wells were completed to grade with lockable wellhead in traffic rated bolted well boxes.

- A decontamination pad was set up on site for pressure steam cleaning all downhole drilling equipment with potable water before drilling began, between drilling locations, and before leaving the site.
- PLS Surveys, Inc. of Oakland, CA, surveyed the seven wells on April 22, 2011 for horizontal coordinates (NAD 83 Datum) and elevation (NAVD 88 Datum). Survey results are included in Table 4.
- Soil cuttings and decontamination water (along with well development and sampling activities generated water) were stored in a central on-site location in properly labeled DOT-approved 55-gallon drums, which were transported by Bayview Environmental Services on April 21, 2011 to Evergreen Oil Inc. of Newark, CA for recycling and disposal.

On April 8, 2011, the newly installed wells were developed by repeatedly surging and bailing. The bailed out water was monitored for pH, temperature, specific conductivity, and visual turbidity. No potable water was introduced into wells during development. NMW-3 was dry and was thus not developed. There was less than one foot of water in NMW-1 and this well could not be adequately developed. Well development logs are included in Appendix C.

Groundwater monitoring was conducted on April 20, 2011. Prior to purging, static groundwater levels were measured to the nearest 0.01 foot in each of the seven wells, using a Solinist™ water level sounder. The volume of water inside the casing of each well was calculated, and at least three casing volumes of water were removed from each well, except NMW-1 and NMW-3. Only 2.4 casing volumes of water was removed from NMW-1 when it was purged to near dry. The well recharged extremely slowly. NMW-3 had no water (dry) when measured on the day of well development (April 8) and it still had no water on the sampling day. The purged water was monitored for pH, temperature, specific conductance, and visual turbidity/color. All readings were recorded on field sampling logs, which are included in Appendix C. All purging and sampling equipment used at each well were either dedicated or made of new, disposable materials requiring no decontamination prior to usage. Each well was sampled using a new disposable polyethylene (PE) bailer. For quality control purposes, a duplicate water sample was collected from NMW-2 and a trip blank (TB-1) was included in the cooler in which the samples were stored and it was treated as a sample for chemical analysis.

TestAmerica Laboratory of Pleasanton, CA provided sample containers. Filled sample bottles were labeled, packed, and stored in an iced-cooler, and were delivered to TestAmerica

Laboratory under chain-of-custody protocols. Samples were analyzed by EPA Method 8260B for TPH-g, BTEX, fuel oxygenates and additives, and by modified EPA Method 8015 for TPH-d and TPH-mo. Laboratory analytical reports are included in Appendix D. The analytical data received from TestAmerica Laboratory was found to be of acceptable quality.

Purge and decontamination water was contained in DOT-approved 55-gallon drums, which were transported by Bayview Environmental Services on April 21, 2011 to Evergreen Oil Inc. of Newark, CA for recycling and disposal.

3.2 Additional Shallow Soil Investigation

Results from the 2010 investigation indicated potential shallow soil contamination with diesel and motor oil, which could be related to pre-1988 auto service activities on the Site. Ten additional soil boreholes were drilled this time using hand auger on March 28 and 29, 2011. Their locations are identified on Figure 4. Two soil samples were collected from each of the 10 boreholes from the depths of 0.5-1.0 ft and 3.5-4.0 ft bgs. The 0.5-1.0 ft soil samples were collected by first removing surface soil with a hand shovel to 6-inch deep and then collected soil samples from 0.5 -1.0 depth with a stainless steel (ss) hand trowel into a ss container. Gravels with diameters larger than ¼ inches were removed and the remaining samples were mixed and transferred into an 8-oz glass jar, which was then capped with a Teflon-sheet lined cap and labeled. After the first sample was collected, the hole was further drilled to 3.5 ft bgs with a hand auger. The 3.5-4.0 ft sample was collected by driving a 2-inch diameter x 6-inch long ss sleeve with a hand operated slide hammer. The soil sample was then extruded into a ss container for examination and removal of gravels with diameters larger than ¼ inches. The remaining samples were mixed and transferred into an 8-oz glass jar, which was then capped with a Teflon-sheet lined cap and labeled. Borehole logs are included in Appendix B.

Soil samples were labeled, packed, and stored in an iced-cooler, and were delivered to TestAmerica Laboratory under chain-of-custody protocols. Samples were analyzed by modified EPA Method 8015 for TPH-d and TPH-mo. Laboratory analytical reports are included in Appendix D. The analytical data received from TestAmerica Laboratory was found to be of acceptable quality

All hand tools and sampling equipment were cleaned on site before, between, and after each soil sample collection by first brushing in a 5-gallon bucket with tap water to move soil particles, then cleaning in another 5-gallon bucket with Liquinox ™ detergent solution and finally triple-rinsed with de-ionized water. Boreholes were backfilled with neat cement grout on the same day of drilling. Soil cuttings and decontamination water was contained in DOT-approved 55-gallon drums, which were transported by Bayview Environmental Services on April 21, 2011 to Evergreen Oil Inc. of Newark, CA for recycling and disposal.

4. RESULTS OF INVESTIGATION

Groundwater elevation data is presented in Table 5. Groundwater and soil analytical results are summarized in Tables 6 and 7, respectively, along with relevant Environmental Screening Levels (ESLs; RWQCB, May 2008) for commercial site use. Well installation logs and soil boring logs are included in Appendix B.

4.1 Hydrogeology

Groundwater levels and gradients as measured on April 20, 2011 are plotted on Figure 5. Major points are discussed below.

Groundwater's apparent flow direction is now northwest toward the new storm drain beneath the Seminary Avenue. Before the storm drain was rerouted in 2000, the shallow groundwater beneath the site flowed southwesterly in approximately the same direction as the storm water flowed inside the culvert.

The shallow water zone appears non-continuous and is influenced by the culvert running through the site. The five wells which are located close to the culvert (NMW-2, NMW-4, NMW-6. NMW-7, and NMW-9) all had groundwater during the initial soil boring in August 2010 and continued to have groundwater during the well installation, development, and sampling. Water levels in these wells varied between 12 and 15 ft bgs. However, as boreholes (SB-1, NW-1, NW-3, NW-5, NW-10 and SB-5) located away from the culvert the shallow groundwater zone disappeared. Both NMW-1 and NMW-3 were dry at the time of their installation. NMW-1 had only 0.88 ft of water on the well development day (April 8) and 2.6 ft of water on the sampling day (April 20). NMW-3 was still dry on the day of sampling. NMW-3 is located within 5 ft of the former monitoring well MW-4, which existed before the on-site culvert was abandoned and had groundwater during its entire life span. NMW-3 has a total depth of 23 ft and screened between 10 and 23 ft bgs versus MW-4's total depth of 20 ft and screened between 10 and 20 ft. It appears that significantly less water recharges into the on-site shallow zone after the old culvert was abandoned and the new culvert was constructed off site.

4.2 Groundwater Analytical Results

Groundwater analytical results are presented in Table 6. Concentrations of BTEX, fuel oxygenates and additives and motor oil were either below their respective laboratory reporting limits or significantly below their respective ESLs.

TPH-g and TPH-d detections and concentration contours are shown on Figures 6 and 7, respectively. NW-7, which is located upgradient from on-site USTs and fueling islands based

on historical shallow groundwater flow direction, reported the highest concentration of both TPH-g (5,700 ug/L) and TPH-d (2,500 ug/L). Their distribution in groundwater suggests offsite source(s) from historically upgradient area. A comparison of TPH-g and TPH-d concentrations reported this time with the historical concentrations summarized in Table 2 reveals that the concentrations have increased significantly since the original four wells were destroyed and the site was closed by ACEH. For example, at the last monitoring event on September 4, 1996 (before well destruction) MW-1 reported TPH-g at 1,100 ug/L and TPH-d at less than 50 ug/L, whereas NMW-4 reported this time (April 20, 2011) TPH-g at 1,800 ug/L and TPH-d at 1,200 ug/L. NMW-4 is located within five feet of MW-1. The on-site USTs were removed by February 1993 and no additional sources were identified during the course of investigation from 1993 through 1996. In addition, BTEX, TPH-g and TPH-d concentrations had shown a decreasing trend during the same period of time, which led to the case closure by ACEH on August 29, 1997. The concentrations should have been much lower after additional 14 years (from 1997 through 2011) of natural attenuation had there no off-site sources migrating to the Site.

4.3 Soil Analytical Results

Soil analytical results are summarized in Table 7. Shallow soil (≤ 5 ft bgs) TPH-d and TPH-mo data from this and previous investigations are plotted on Figure 8. Of the 41 shallow soil samples analyzed, only two samples had TPH-d concentrations exceed its commercial ESL of 180 mg/kg: NB-8-1 (0.5-1.0 ft bgs) at 400 mg/kg and NW-8-5 (4.5-5.0 ft bgs) at 340 mg/kg. None of the soil samples had TPH-mo concentrations exceed its commercial ESL of 2,500 mg/kg.

5. DISCUSSIONS AND RECOMMENDATIONS

A Valero-branded active gas station is located across the street from the Site at 5910 MacArthur Blvd (Figure 2). It was formerly Chevron Service Station #9-9708. A review of the ACEH and the State GeoTracker electronic files indicated that a leaking underground storage tank (LUST) case was opened for the Chevron Site in 1997, the same year the case for this Site was closed. The Chevron Site has a State GeoTracker No. T0600102093 and an ACEH Case # RO0000124.

Based on groundwater contour and potentiometric maps presented for the Chevron Site as measured on 7 September 1998, 29 December 1998, and 29 September 1999, the groundwater flowed in a southwestern direction and the Chevron Site is located upgradient. This is consistent with the groundwater gradient measured on the Site prior to its case closure in 1997. However, after the Lion Creek culvert was relocated to beneath the Seminary Avenue in 2000 (Figure 2), the groundwater flow appeared to have been altered toward the new culvert in west

to northwest directions based on groundwater monitoring conducted at the Chevron Site in recent years and the latest measurement on the Site.

MNW-7, which is located upgradient (pre-2000) from all former USTs on the Site, reported the highest groundwater concentration of TPH-g (5,700 ug/L) and TPH-d (2,500 ug/L). The TPH-g and TPH-d contamination contours shown on Figure 6 and 7 suggest that they could have came from the Chevron Site.

The Site provided only gasoline fueling services and the three former fuel USTs were all for gasoline storage (Figure 3). The former waste oil UST was located downgradient on the southeastern side of the culvert. An on-site groundwater monitoring well (MW-3) was located downgradient of the former waste oil UST. Prior to its closure in November 1997, its groundwater concentrations of TPH-g, TPH-d, and BTEX were all below their respective laboratory reporting limits. Therefore, the detected relatively high concentrations of TPH-d in groundwater were highly unlikely originated from the former on-site waste oil UST.

The Chevron Site monitoring well MW-5 is located upgradient of the Site on the southeastern side of the culvert (Figure 2). This well has been monitored regularly for TPH-g, BTEX, MTBE, and ethanol since March 2002. However, TPH-d was never analyzed. Since the shallow groundwater appears to have a preferential path near and along the northwestern side of the culvert, it is recommended that the Chevron Site install a new monitoring well on the opposite side of the culvert from its MW-5. Both the new well and MW-5 should be monitored for TPH-g, TPH-d, TPH-mo, BTEX, and other constituents as deemed necessary.

It is recommended that the seven newly installed on-site monitoring wells be monitored for water levels and concentrations of BTEX, MTBE, TPH-g, and TPH-d quarterly for one year to assess seasonal variations. Due to the potential of continued migration from the Chevron Site to this Site, coordinated actions of the two sites will be necessary for an effective groundwater remediation.

The Site is zoned for commercial use and the owner intends to keep the Site for commercial redevelopment. In order to evaluate potential health impact on commercial workers from exposure to petroleum hydrocarbon vapor, a soil vapor survey should be conducted as requested by ACEH in its January 12, 2011 letter to the property owner.

REFERENCES

From 2007 to Current

Alameda County Environmental Health, Letter, June 25, 2008.

Alameda County Environmental Health, Letter, January 26, 2010.

Alameda County Environmental Health, Letter on *Review of Site Investigation Report*, January 12, 2011.

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Table 1 - Summary of Historic Soil Data
5901 MacArthur Blvd, Oakland, CA

Sample ID	Date of Sampling	Depth (ft, bgs)	Location	TPH gas (mg/kg)	TPH kerosi (mg/kg)	TPH diesel (mg/kg)	Oil&grease (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzen (mg/kg)	Xylenes (mg/kg)	other VOCs (EPA 6240)	SVOCs (EPA 8270	Cd mg/kg	Cr, total mg/kg	Pb mg/kg	Ni mg/kg	Zn mg/kg
Soil Samples Collected from the Bottom of UST Excavation Pits:																		
A1	05/18/87	14' - 17.5'	UST #1	6.2		NA	NA	<0.1	<0.1	NA	<0.1							
A2	05/18/87	14' - 17.5'	UST #1	1.5		NA	NA	<0.1	<0.1	NA	<0.1							
B1	05/18/87	14' - 17.5'	UST #3	310		NA	NA	6.4	1	NA	15							
B2	05/18/87	14' - 17.5'	UST #3	2.3		NA	NA	<0.1	<0.1	NA	<0.1							
C1	05/18/87	14' - 17.5'	UST #2	50		NA	NA	5.9	3.7	NA	7.7							
C2	05/18/87	14' - 17.5'	UST #2	2.4		NA	NA	<0.1	<0.1	NA	<0.1							
WO#1	02/24/93	9.5'	UST #4	<1.0	4	17	<100	<0.005	0.012	<0.005	<0.015	ND	ND	1.2	52	12	170	40
Soil Samples Collected from Well Installations:																		
MW-1-10	10/27/93	10	MW-1	27		NA		0.081	0.055	0.36	0.099							
MW-1-15	10/27/93	15	MW-1	7		NA		0.052	0.019	0.22	0.13							
MW-1-20	10/27/93	20	MW-1	13		NA		0.014	0.033	0.15	0.11							
MW-2-10	10/04/95	10	MW-2	29		2		<0.01	<0.01	<0.01	<0.03							
MW-2-15	10/04/95	15	MW-2	<0.2		<1		<0.005	<0.005	<0.005	<0.005							
MW-3-10	10/04/95	10	MW-3	<0.2		<1		<0.005	<0.005	<0.005	<0.005							
MW-3-15	10/04/95	15	MW-3	<0.2		100		<0.005	<0.005	<0.005	<0.005							
MW-4-10	10/04/95	10	MW-4	5100		840		<1	7.7	33	0.3							
MW-4-15	10/04/95	15	MW-4	<0.2		<1		<0.005	<0.005	<0.005	<0.005							
bgs - below ground surface																		
NA - not analyzed																		
Data source: Blakely Environmental Investigation, Inc. (January 4, 1997), Request for Closure																		

Table 2 - Summary of Historic Groundwater Data
5901 MacArthur Blvd, Oakland, CA

Well ID	Date	Water Level (ft, bgs)	TPH gas (ug/L)	TPH diesel (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzen (ug/L)	Xylenes (ug/L)
MW-1	11/4/93	14.24	1900	610	210	2	0.6	7.8
	3/4/94	13.9	1700	610	220	4.9	2.9	10
	4/30/94	14.07	3200	<50	200	2	60	31
	9/6/94	13.96	3200	940	210	56	55	48
	1/12/95	13.68	500	500	13	<0.5	15	4
	3/13/95	13.2	50	400	8	<0.5	2	<2
	6/15/95	13.92	2000	<50	210	2	83	14
	10/18/95	14.22	1200	<50	110	5	8	6
	12/20/95	13.92	2600	200	320	4	180	55
	3/27/96	13.82	3500	NA	380	6.3	400	280
	6/11/96	13.83	1200	<20	120	1.5	7.7	2
	9/4/96	14.1	1100	<50	51	1.4	5.2	3
MW-2	10/18/95	14.36	500	650	59	1	28	13
	12/20/95	13.87	300	200	5	0.8	0.9	<2
	3/27/96	13.76	<50	NA	<0.5	<0.5	<0.5	<2
	6/11/96	13.9	<50	130	<0.5	<0.5	<0.5	<2
	9/4/96	14.24	240	150	0.7	0.7	9.7	3
MW-3	10/18/95	14.57	100	300	<0.5	<0.5	<0.5	<2
	12/20/95	13.85	<50	<50	<0.5	<0.5	<0.5	<2
	3/27/96	13.38	<50	NA	<0.5	<0.5	<0.5	<2
	6/11/96	14.1	<50	<50	<0.5	<0.5	<0.5	<2
	9/4/96	14.44	<50	<50	<0.5	<0.5	<0.5	<2
MW-4	12/2/95	19.02	2100	2200	20	0.9	5.8	8.4
	12/20/95	12.14	2000	300	17	1	4	7
	3/27/96	12.15	430	NA	0.6	<0.5	0.8	<2
	6/11/96	12.7	370	200	1.9	<0.5	1	<2
	9/4/96	14.16	290	<50	1.1	<0.5	1.4	<2
bgs - below ground surface								
NA - not analyzed								
The four wells were destroyed on 11/11/1997.								

Table 3 - Summary of June 20, 2007 Soil and Groundwater Investigation Results
5901 MacArthur Blvd, Oakland, CA

Sample ID	Depth (ft)	medium	unit	TPH gas	TPH diesel	TPH motor oil	Benzene	Toluene	ethylbezene	xylenes	MTBE	Cadmium	Chromium	Lead	Nickel	Zinc
TB-4-W	15	groundwater	ug/L	1,620 (a)	1,000 (b)	ND (246)	2.3	0.97	2.38	0.74	12.3	ND (5)	ND (5)	ND (15)	ND (10)	15
TB-1 (trip blank)				ND (28)	NA	NA	ND (0.34)	ND (0.3)	ND (0.25)	ND (0.74)	ND (0.39)					
TB-1-1	2.0 - 2.5	shallow soil	mg/kg		ND (2.0)	7.5						ND (1.0)	29	25	41	130
TB-1-10	10 - 10.5	deep soil	mg/kg	26.6	2.1	ND (4.0)	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.5)	ND (1.0)	ND (1.0)	78	11	210	76
TB-1-15	15 - 15.5	deep soil	mg/kg	ND (0.1)	ND (2.0)	ND (4.0)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.015)	ND (0.01)	ND (1.0)	27	8.8	38	32
TB-2-1	1.5 -2.0	shallow soil	mg/kg		ND (2.0)	ND (4.0)						ND (1.0)	34	24	37	42
TB-2-10	9.5 - 10	shallow soil	mg/kg	ND (0.1)	ND (2.0)	ND (4.0)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.015)	ND (0.01)	ND (1.0)	50	6.3	130	67
TB-2-15	15 - 15.5	deep soil	mg/kg	23	ND (2.0)	ND (4.0)	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.5)	ND (1.0)					
TB-3-1	1.5 - 2.0	shallow soil	mg/kg		ND (2.0)	73.8						ND (1.0)	29	48	41	97
TB-3-5	5.5 - 6.0	shallow soil	mg/kg	0.22	ND (2.0)	ND (4.0)	ND (0.005)	0.01	0.034	0.13	ND (0.01)	ND (1.0)	150	13	270	88
TB-3-10	10 - 10.5	deep soil	mg/kg	ND (0.1)	ND (2.0)	ND (4.0)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.015)	ND (0.01)	ND (1.0)	94	7.5	170	82
TB-3-15	15 - 15.5	deep soil	mg/kg	ND (0.1)	ND (2.0)	ND (4.0)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.015)	ND (0.01)					
TB-4-1	1.0 - 1.5	shallow soil	mg/kg		ND (2.0)	ND (4.0)						ND (1.0)	32	14	48	32
TB-4-10	9.5 - 10	shallow soil	mg/kg	ND (0.1)	ND (2.0)	9.97	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.015)	ND (0.01)	ND (1.0)	39	26	53	78
TB-4-15	15 - 15.5	deep soil	mg/kg	2,890 (c)	440	44.6	ND (5)	ND (5)	ND (5)	ND (15)	ND (10)	ND (1.0)	200	12	330	160
TB-5-1	1.0 - 1.5	shallow soil	mg/kg		ND (2.0)	ND (4.0)						ND (1.0)	33	7.2	43	29
TB-5-5	5.0 - 5.5	shallow soil	mg/kg	ND (0.1)	ND (2.0)	ND (4.0)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.015)	ND (0.01)	ND (1.0)	80	17	220	110
TB-5-10	10 - 10.5	deep soil	mg/kg	ND (0.1)	ND (2.0)	ND (4.0)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.015)	ND (0.01)	ND (1.0)	110	6.6	240	68
TB-5-15	15 - 15.5	deep soil	mg/kg	0.143	5.8	ND (4.0)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.015)	ND (0.01)					
Note: a - laboratory reported that the result is elevated due to presence of non-target compounds within the TPH gas quantitative range.																
Note: b - sample chromatogram does not resemble typical diesel pattern. Lighter end and unidentified hydrocarbon peaks within the diesel range quantitated as diesel.																
Note: c - sample chromatogram does not match typical gasoline pattern due to presence of heavier hydrocarbons within the TPH gas range.																

TABLE 4
Well Construction Details
5901 MacArthur Blvd, Oakland, California

Well ID	**NMW-1**	**NMW-2**	**NMW-3**	**NMW-4**	**NMW-6**	**NMW-7**	**NMW-9**
Original Borehole ID	**NW-1**	**NW-2**	**SB-5**	**NW-4**	**NW-6**	**NW-7**	**NW-9**
Date of Well Completion	4/1/2011	4/1/2011	3/31/2011	4/4/2011	3/31/2011	4/1/2011	3/31/2011
Well Casing Diameter (inch)	4	4	2	4	2	2	2
Flush threaded casing material	Sch 40 PVC	Sch 40 PVC	Sch 40 PVC	Sch 40 PVC	Sch 40 PVC	Sch 40 PVC	Sch 40 PVC
Borehole diameter (inch)	10	10	8	10	8	8	8
Total well depth (feet, btoc)	23	23	23	22	23	22	24
Screen location (0.01" slots, feet, btoc)	10-23	10-23	10-23	10-22	10-23	9-22	10-24
#2/12 sand pack (feet, btoc)	9-23	9-23	9-23	9-22	9-23	8-22	9-24
Bentonite seal (feet, btoc)	8-9	8-9	8-9	8-9	8-9	7-8	8-9
Cement seal (feet, btoc)	0-8	0-8	0-8	0-8	0-8	0-7	0-8
Coordinates (NAD 83 Datum)							
Latitude (dec.)	37.7763158	37.7762806	37.7763381	37.7762141	37.7761906	37.7763160	37.7761252
Longitude (dec.)	-122.1841406	-122.1841321	-122.1840322	-122.1842739	-122.1843248	-122.1840449	-122.1842652
Elevation (feet, NAVD 88 Datum)							
Top of PVC casing (TOC)	97.85	97.94	97.70	97.73	97.10	97.78	97.91
btoc - below top of casing							
One foot hydrated bentonite chips on top of sand packing and then cement grout to surface.							
Well completed with lockable wellhead in a traffic rated bolted well box mounted flush to surface.							
XYZ survey was conducted by PLS Surveys Inc. on April 22, 2011.							

Table 5
Groundwater Elevation Data
5901 MacArthur Blvd, Oakland, CA

	NMW-1		NMW-2		NMW-3		NMW-4		NMW-6		NMW-7		NMW-9	
	Depth to water (ft, btoc)	Water elev (88 Datum) (ft)	Depth to water (ft, btoc)	Water elev (88 Datum) (ft)	Depth to water (ft, btoc)	Water elev (88 Datum) (ft)	Depth to water (ft, btoc)	Water elev (88 Datum) (ft)	Depth to water (ft, btoc)	Water elev (88 Datum) (ft)	Depth to water (ft, btoc)	Water elev (88 Datum) (ft)	Depth to water (ft, btoc)	Water elev (88 Datum) (ft)
TOC elevation		97.85		97.94		97.70		97.73		97.10		97.78		97.91
Depth to well bottom, 4/20/11	22.70		21.84		22.64		21.47		22.61		21.61		23.48	
Date														
4/20/2011	20.10	77.75	14.01	83.93	dry		14.19	83.54	13.58	83.52	13.75	84.03	12.70	85.21
btoc - below top of casing														
TOC - top of casing														
* All wells were surveyed for xyz coordinates on 4/22/2011														

Table 6 - Summary of Groundwater Investigation Data (2010 to current)
5901 MacArthur Blvd, Oakland, CA

Sample ID	Date of collection	Depth (ft, bgs)	medium	unit	TPH gas	TPH diesel	TPH motor oil	Benzene	Toluene	ethylbezene	xylenes	MTBE	TBA	DIPE	TAME	ETBE	EDB	EDC	Ethanol
commercial ESLs	May-08		groundwater	ug/L	**210**	**210**	**210**	**46**	**130**	**43**	**100**	**1800**	**18000**	**NA**	**NA**	**NA**	**150**	**200**	**NA**
Groundwater samples collected from monitoring wells																			
NMW-1	4/20/11		groundwater	ug/L	ND (50)	ND (50)	ND (100)	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	13	ND (4.0)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (250)
NMW-2	4/20/11		groundwater	ug/L	**3,100**	**1,000**	ND (100)	0.84	0.72	7.7	1.9	ND (0.5)	7.6	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (250)
NMW-2D	4/20/11		groundwater	ug/L	**2,100**	**750**	ND (100)	ND (2.5)	ND (2.5)	ND (2.5)	ND (5.0)	ND (2.5)	ND (20)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (1200)
NMW-4	4/20/11		groundwater	ug/L	**1,800**	**1,200**	ND (100)	ND (1.0)	ND (1.0)	ND (1.0)	2.3	ND (1.0)	ND (8.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (500)
NMW-6	4/20/11		groundwater	ug/L	**880**	**230**	ND (100)	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)	ND (4.0)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (250)
NMW-7	4/20/11		groundwater	ugIL	**5,700**	**2,500**	ND (100)	ND (5.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	ND (40)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND(2500)
NMW-9	4/20/11		groundwater	ugIL	**2,600**	**250**	ND (100)	ND (5.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	ND (40)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND(2500)
TB-1	4/20/11		Lab D.I.water	ug/L	ND (50)	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)	ND (4.0)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (250)
Grab groundwater samples collected by Geoprobe direct-push method																			
NW-4-W	8/30/10	15	groundwater	ug/L	**1,700**	**2,400**	ND (600)	ND (5.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	ND (40)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	NA
NW-4-WD	8/30/10	15	groundwater	ug/L	**2,900**	NA	NA	ND (5.0)	ND (5.0)	**5.7**	ND (10)	ND (5.0)	ND (40)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	NA
NW-2-W	8/30/10	15	groundwater	ug/L	**1,600**	**2,200**	ND(650)	ND (5.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	ND (40)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	NA
NW-7-W	8/31/10	14	groundwater	ug/L	**11,000**	**9,100**	ND(1500)	ND (5.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	ND (40)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	NA
NW-9-W	8/31/10	15	groundwater	ug/L	ND (50)	**700**	**880**	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)	ND (4.0)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	NA
SB-2-W	8/30/10	15	groundwater	ug/L	**170**	**120**	ND (620)	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	**1.4**	ND (4.0)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	NA
SB-3-W	8/30/10	15	groundwater	ug/L	**340**	**360**	ND (630)	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	**10**	**7.2**	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	NA
ASB-4-W	9/1/10	15	groundwater	ug/L	**2,800**	**6,500**	ND(1500)	ND (5.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	ND (40)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	NA
ASB-4-Wd	9/1/10	15	groundwater	ug/L	**2,900**	NA	NA	ND (5.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)	ND (40)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	NA
TB-1	8/30/10		lab DI water	ug/L	ND (50)	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)	ND (4.0)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	NA
TB-2	8/31/10		lab DI water	ug/L	ND (50)	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)	ND (4.0)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	NA
TB-3	9/1/10		lab DI water	ug/L	ND (50)	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)	ND (4.0)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	NA

All ESL standards cited above are for groundwater is not a current or potential source of drinking water (RWQCB, May 2008)

Table 7 - Summary of Soil Investigation Data (2010 to current)
5901 MacArthur Blvd, Oakland, CA

Sample ID	Date of collection	Depth (ft) (ft, bgs)	medium	unit	TPH gas	TPH diesel	TPH motor oil	Benzene	Toluene	ethylbezene	xylenes	MTBE	TBA	DIPE	TAME	ETBE	EDB	EDC
commercial ESLs	May-08	≤ 10	shallow soil	mg/kg	**180**	**180**	**2500**	**0.27**	**9.3**	**4.7**	**11**	**8.4**	**110**	**NA**	**NA**	**NA**	**0.044**	**0.48**
commercial ESLs	May-08	> 10	deep soil	mg/kg	**180**	**180**	**5000**	**2**	**9.3**	**4.7**	**11**	**8.4**	**110**	**NA**	**NA**	**NA**	**1**	**1.8**
NB-1-1 *	3/28/11	0.5-1.0	shallow soil	mg/kg	**NA**	**65**	**590**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
NB-1-4 *	3/28/11	3.5-4.0	shallow soil	mg/kg	**NA**	**46**	**210**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
NB-2-1 *	3/28/11	0.5-1.0	shallow soil	mg/kg	**NA**	**2.6**	**ND (49)**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
NB-2-4 *	3/28/11	3.5-4.0	shallow soil	mg/kg	**NA**	**ND (1.0)**	**ND (50)**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
NB-2-4-D	3/28/11	3.5-4.0	shallow soil	mg/kg	**NA**	**2.6**	**ND (50)**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
NB-3-1 *	3/29/11	0.5-1.0	shallow soil	mg/kg	**NA**	**11**	**61**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
NB-3-4 *	3/29/11	3.5-4.0	shallow soil	mg/kg	**NA**	**7.5**	**170**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
NB-4-1 *	3/29/11	0.5-1.0	shallow soil	mg/kg	**NA**	**3.2**	**ND (50)**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
NB-4-4 *	3/29/11	3.5-4.0	shallow soil	mg/kg	**NA**	**11**	**280**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
NB-4-4-D	3/29/11	3.5-4.0	shallow soil	mg/kg	**NA**	**53**	**320**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
NB-5-1 *	3/29/11	0.5-1.0	shallow soil	mg/kg	**NA**	**3**	**ND (50)**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
NB-5-4 *	3/29/11	3.5-4.0	shallow soil	mg/kg	**NA**	**1.9**	**ND (50)**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
NB-6-1 *	3/28/11	0.5-1.0	shallow soil	mg/kg	**NA**	**56**	**300**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
NB-6-4 *	3/28/11	3.5-4.0	shallow soil	mg/kg	**NA**	**32**	**220**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
NB-7-1 *	3/29/11	0.5-1.0	shallow soil	mg/kg	**NA**	**30**	**160**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
NB-7-4 *	3/29/11	3.5-4.0	shallow soil	mg/kg	**NA**	**15**	**62**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
NB-7-4-D	3/29/11	3.5-4.0	shallow soil	mg/kg	**NA**	**37**	**110**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
NB-8-1 *	3/28/11	0.5-1.0	shallow soil	mg/kg	**NA**	**400**	**1800**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
NB-8-4 *	3/28/11	3.5-4.0	shallow soil	mg/kg	**NA**	**ND (1.0)**	**ND (49)**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
NB-9-1 *	3/29/11	0.5-1.0	shallow soil	mg/kg	**NA**	**14**	**57**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
NB-9-4 *	3/29/11	3.5-4.0	shallow soil	mg/kg	**NA**	**2.7**	**ND (49)**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
NB-10-1 *	3/29/11	0.5-1.0	shallow soil	mg/kg	**NA**	**1.6**	**ND (49)**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
ND-10-4 *	3/29/11	3.5-4.0	shallow soil	mg/kg	**NA**	**ND (1.0)**	**ND (49)**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
* Samples went through selica gel cleanup to remove non-petroleum based hydrocarbons before analysis for TPH-d and TPH-mo																		
SB-1-5	8/30/10	4.5-5.0	shallow soil	mg/kg	ND(0.25)	**13**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
SB-1-15	8/30/10	15-15.5	deep soil	mg/kg	ND(0.25)	**2.3**	ND (49)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
SB-1-20	8/30/10	19.5-20	deep soil	mg/kg	ND(0.25)	**1.2**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
SB-2-5	8/30/10	4.5-5.0	shallow soil	mg/kg	ND(0.25)	**2**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
SB-2-15	8/30/10	14.5-15	deep soil	mg/kg	**2.1**	**14**	ND (50)	ND(0.025)	ND(0.025)	ND(0.025)	ND(0.05)	ND(0.025)	ND(0.05)	ND(0.025)	ND(0.025)	ND(0.025)	ND(0.025)	ND(0.025)
SB-2-20	8/30/10	19.5-20	deep soil	mg/kg	ND(0.25)	**1.4**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
SB-3-10	8/30/10	10-10.5	shallow soil	mg/kg	ND(0.25)	**9.3**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
SB-3-15	8/30/10	14.5-15	deep soil	mg/kg	**3.3**	**480**	ND (490)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
SB-3-20	8/30/10	19.5-20	deep soil	mg/kg	ND(0.25)	**1.1**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	**0.006**	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)

Table 7 - Summary of Soil Investigation Data (2010 to current)
5901 MacArthur Blvd, Oakland, CA

Sample ID	Date of collection	Depth (ft) (ft, bgs)	medium	unit	TPH gas	TPH diesel	TPH motor oil	Benzene	Toluene	ethylbezene	xylenes	MTBE	TBA	DIPE	TAME	ETBE	EDB	EDC
commercial ESLs	May-08	≤ 10	shallow soil	mg/kg	**180**	**180**	**2500**	**0.27**	**9.3**	**4.7**	**11**	**8.4**	**110**	**NA**	**NA**	**NA**	**0.044**	**0.48**
commercial ESLs	May-08	> 10	deep soil	mg/kg	**180**	**180**	**5000**	**2**	**9.3**	**4.7**	**11**	**8.4**	**110**	**NA**	**NA**	**NA**	**1**	**1.8**
SB-3-25	8/30/10	24.5-25	deep soil	mg/kg	ND(0.25)	NA	NA	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
SB-4-5	8/30/10	4.5-5.0	shallow soil	mg/kg	ND(0.25)	**23**	**120**	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
SB-4-10	8/30/10	9.5-10	shallow soil	mg/kg	ND(0.24)	NA	NA	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
SB-4-15	8/30/10	14.5-15	deep soil	mg/kg	**5.2**	**35**	ND (50)	ND(0.023)	ND(0.023)	ND(0.023)	ND(0.05)	ND(0.023)	ND(0.05)	ND(0.023)	ND(0.023)	ND(0.023)	ND(0.023)	ND(0.023)
SB-4-20	8/30/10	19.5-20	deep soil	mg/kg	ND(0.24)	NA	NA	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
SB-4-25	8/30/10	24.5-25	deep soil	mg/kg	ND(0.25)	**11**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	**0.049**	**0.040**	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
SB-5-8	8/31/10	8.0-8.5	shallow soil	mg/kg	ND(0.24)	**32**	**230**	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
SB-5-13	8/31/10	12.5-13	deep soil	mg/kg	**140**	**130**	ND(100)	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)	ND (1.0)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
SB-5-15	8/31/10	15-15.5	deep soil	mg/kg	ND(0.23)	**1.0**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
SB-5-20	8/31/10	19.5-20	deep soil	mg/kg	ND(0.24)	**2.1**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
SB-5-25	8/31/10	24.5-25	deep soil	mg/kg	ND(0.23)	NA	NA	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
NW-1-5	8/30/10	4.5-5.0	shallow soil	mg/kg	ND(0.25)	**5.9**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
NW-1-10	8/30/10	9.5-10	shallow soil	mg/kg	ND(0.25)	NA	NA	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
NW-1-15	8/30/10	14.5-15	deep soil	mg/kg	**130**	**13**	ND (50)	ND(0.024)	ND(0.024)	**0.840**	**0.990**	ND(0.024)	ND(0.05)	ND(0.024)	ND(0.024)	ND(0.024)	ND(0.024)	ND(0.024)
NW-1-20	8/30/10	19.5-20	deep soil	mg/kg	ND(0.25)	NA	NA	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
NW-1-25	8/30/10	24.5-25	deep soil	mg/kg	ND(0.24)	**1**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
NW-2-5	8/30/10	4.5-5.0	shallow soil	mg/kg	ND(0.24)	**11**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
NW-2-10	8/30/10	9.5-10	shallow soil	mg/kg	ND(0.24)	NA	NA	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
NW-2-15	8/30/10	15-15.5	deep soil	mg/kg	**82**	**88**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
NW-2-20	8/30/10	19.5-20	deep soil	mg/kg	ND(0.25)	**4.9**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
NW-3-5	8/31/10	4.5-5.0	shallow soil	mg/kg	ND(0.24)	**27**	**70**	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
NW-3-10	8/31/10	9.5-10	shallow soil	mg/kg	ND(0.23)	NA	NA	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
NW-3-15	8/31/10	14.5-15	deep soil	mg/kg	**8.4**	ND (1.0)	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	**0.05**	**0.014**	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
NW-3-20	8/31/10	19.5-20	deep soil	mg/kg	ND(0.24)	NA	NA	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
NW-4-5	8/30/10	4.5-5.0	shallow soil	mg/kg	ND(0.25)	**12**	ND (49)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
NW-4-10	8/30/10	9.5-10	shallow soil	mg/kg	ND(0.25)	NA	NA	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
NW-4-15	8/30/10	14.5-15	deep soil	mg/kg	**280**	**740**	ND (500)	ND(0.025)	ND(0.025)	ND(0.025)	ND(0.05)	ND(0.025)	ND(0.05)	ND(0.025)	ND(0.025)	ND(0.025)	ND(0.025)	ND(0.025)
NW-4-20	8/30/10	19.5-20	deep soil	mg/kg	ND(0.24)	NA	NA	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
NW-4-25	8/30/10	24.5-25	deep soil	mg/kg	ND(0.25)	**2.7**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	**0.006**	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
NW-5-5	8/31/10	4.5-5.0	shallow soil	mg/kg	ND(0.25)	**2.6**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)

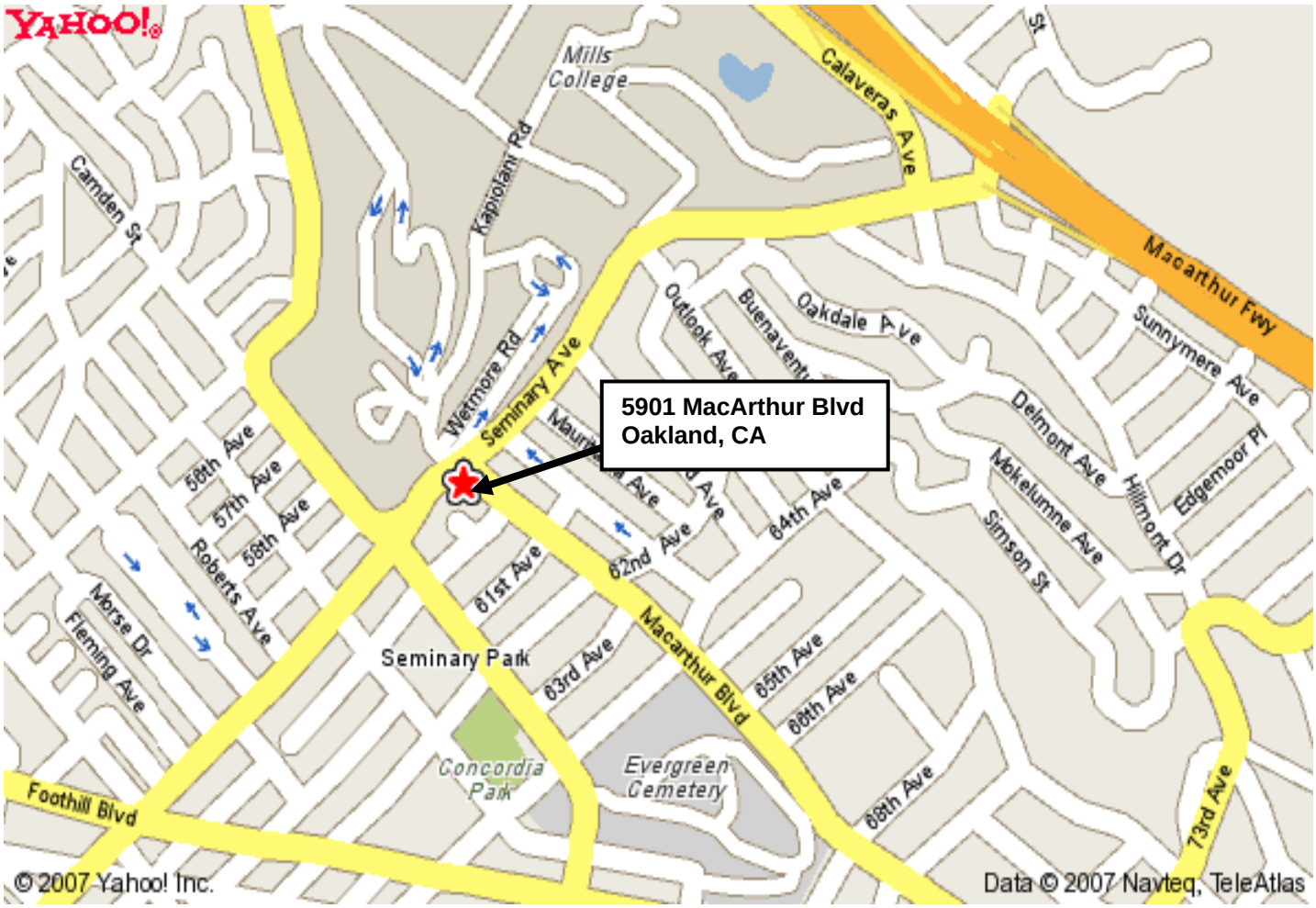
Table 7 - Summary of Soil Investigation Data (2010 to current)
5901 MacArthur Blvd, Oakland, CA

Sample ID	Date of collection	Depth (ft) (ft, bgs)	medium	unit	TPH gas	TPH diesel	TPH motor oil	Benzene	Toluene	ethylbezene	xylenes	MTBE	TBA	DIPE	TAME	ETBE	EDB	EDC
commercial ESLs	May-08	≤ 10	shallow soil	mg/kg	**180**	**180**	**2500**	**0.27**	**9.3**	**4.7**	**11**	**8.4**	**110**	**NA**	**NA**	**NA**	**0.044**	**0.48**
commercial ESLs	May-08	> 10	deep soil	mg/kg	**180**	**180**	**5000**	**2**	**9.3**	**4.7**	**11**	**8.4**	**110**	**NA**	**NA**	**NA**	**1**	**1.8**
NW-5-10	8/31/10	9.5-10	shallow soil	mg/kg	ND(0.25)	**1.0**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
NW-5-15	8/31/10	14.5-15	deep soil	mg/kg	ND(0.25)	**2.2**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
NW-5-20	8/31/10	19.5-20	deep soil	mg/kg	ND(0.24)	**3.1**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
NW-5-25	8/31/10	24.5-25	deep soil	mg/kg	ND(0.25)	**2.0**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
NW-6-10	8/31/10	9.5-10	shallow soil	mg/kg	ND(0.24)	**1.0**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
NW-6-15	8/31/10	14.5-15	deep soil	mg/kg	ND(0.24)	**6.5**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
NW-7-5	8/31/10	4.5-5.0	shallow soil	mg/kg	ND(0.25)	**5.8**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
NW-7-10	8/31/10	9.5-10	shallow soil	mg/kg	ND(0.25)	**6.0**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
NW-7-15	8/31/10	14.5-15	deep soil	mg/kg	**860**	**110**	ND(100)	ND(2.5)	ND(2.5)	ND(2.5)	ND(5.0)	ND(2.5)	ND(5.0)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)
NW-7-20	8/31/10	19.5-20	deep soil	mg/kg	ND(0.24)	NA	NA	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
NW-8-5	8/31/10	4.5-5.0	shallow soil	mg/kg	ND(0.25)	**340**	**1700**	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
NW-8-10	8/31/10	9.5-10	shallow soil	mg/kg	ND(0.25)	NA	NA	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
NW-8-15	8/31/10	14.5-15	deep soil	mg/kg	ND(0.23)	ND (1.0)	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
NW-8-20	8/31/10	19.5-20	deep soil	mg/kg	ND(0.25)	ND (1.0)	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
NW-9-5	8/31/10	4.5-5.0	shallow soil	mg/kg	ND(0.25)	NA	NA	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
NW-9-10	8/31/10	9.5-10	shallow soil	mg/kg	ND(0.24)	ND (1.0)	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
NW-9-15	8/31/10	14.5-15	deep soil	mg/kg	ND(0.23)	**8.8**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
NW-9-20	8/31/10	19.5-20	deep soil	mg/kg	ND(0.25)	ND (1.0)	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
MW-10-5	9/1/10	4.5-5.0	shallow soil	mg/kg	ND(0.25)	ND (1.0)	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
MW-10-10	9/1/10	9.5-10	shallow soil	mg/kg	ND(0.24)	ND (1.0)	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
MW-10-15	9/1/10	14.5-15	deep soil	mg/kg	ND(0.25)	ND (1.0)	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
MW-10-20	9/1/10	20-20.5	deep soil	mg/kg	ND(0.25)	ND (1.0)	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
ASB-3-5	9/1/10	4.5-5.0	shallow soil	mg/kg	ND(0.24)	ND (1.0)	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
ASB-3-10	9/1/10	9.5-10	shallow soil	mg/kg	ND(0.25)	**15**	**83**	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
ASB-3-15	9/1/10	15-15.5	deep soil	mg/kg	ND(0.24)	ND (1.0)	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
ASB-3-20	9/1/10	19.5-20	deep soil	mg/kg	ND(0.25)	ND (1.0)	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
ASB-4-5	9/1/10	4.5-5.0	shallow soil	mg/kg	ND(0.25)	**8.1**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
ASB-4-10	9/1/10	10-10.5	shallow soil	mg/kg	ND(0.25)	**1.9**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
ASB-4-15	9/1/10	14.5-15	deep soil	mg/kg	**16**	**30**	ND (50)	ND(0.025)	ND(0.025)	ND(0.025)	ND(0.05)	ND(0.025)	ND(0.05)	ND(0.025)	ND(0.025)	ND(0.025)	ND(0.025)	ND(0.025)
ASB-4-20	9/1/10	19.5-20	deep soil	mg/kg	ND(0.24)	ND (1.0)	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)

Table 7 - Summary of Soil Investigation Data (2010 to current)
5901 MacArthur Blvd, Oakland, CA

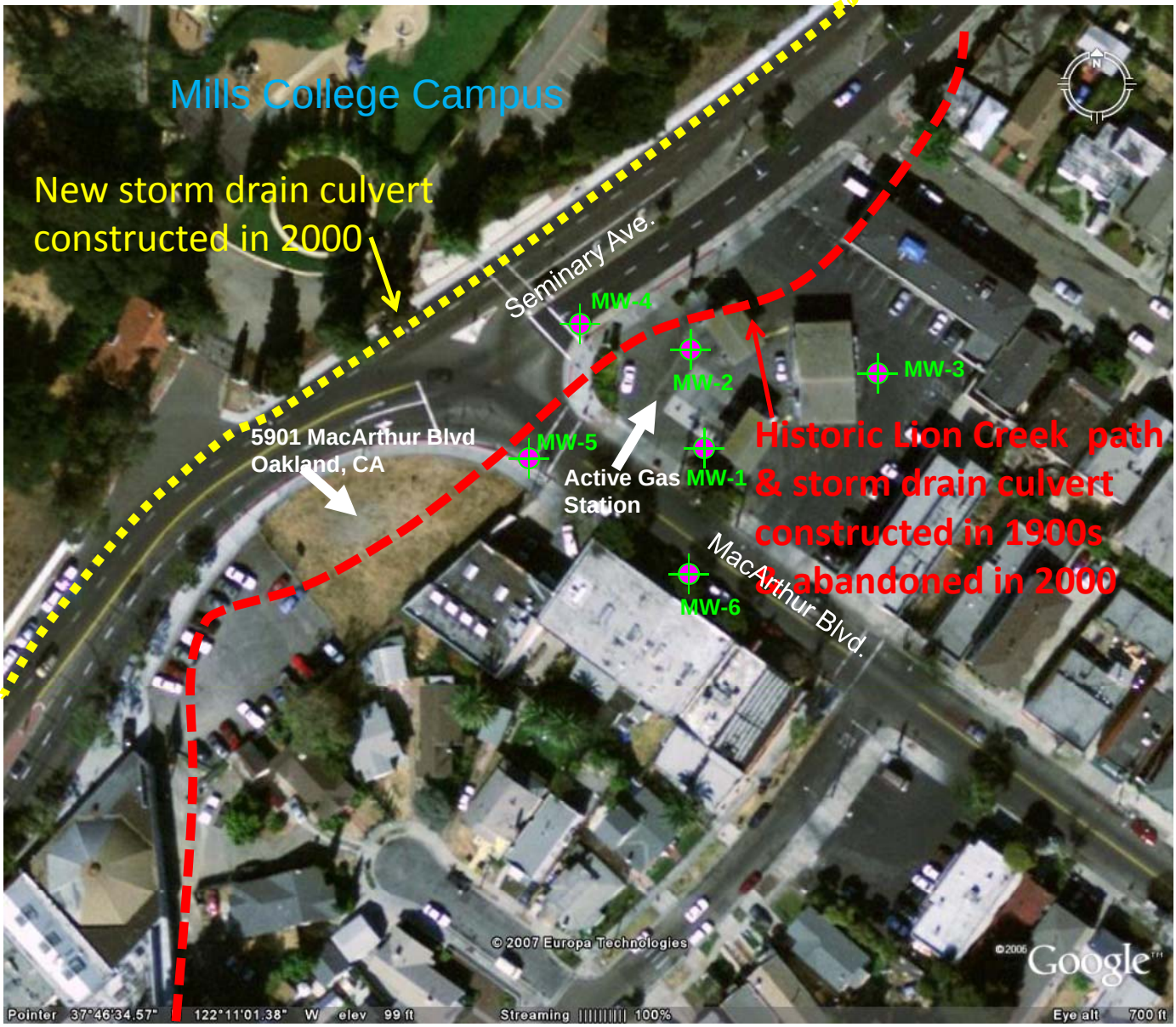
Sample ID	Date of collection	Depth (ft) (ft, bgs)	medium	unit	TPH gas	TPH diesel	TPH motor oil	Benzene	Toluene	ethylbenzene	xylenes	MTBE	TBA	DIPE	TAME	ETBE	EDB	EDC
commercial ESLs	May-08	≤ 10	shallow soil	mg/kg	**180**	**180**	**2500**	**0.27**	**9.3**	**4.7**	**11**	**8.4**	**110**	**NA**	**NA**	**NA**	**0.044**	**0.48**
commercial ESLs	May-08	> 10	deep soil	mg/kg	**180**	**180**	**5000**	**2**	**9.3**	**4.7**	**11**	**8.4**	**110**	**NA**	**NA**	**NA**	**1**	**1.8**
ASB-5-5	9/1/10	4.5-5.0	shallow soil	mg/kg	ND(0.23)	ND (1.0)	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
ASB-5-10	9/1/10	9.5-10	shallow soil	mg/kg	ND(0.25)	ND (1.0)	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
ASB-5-15	9/1/10	14.5-15	deep soil	mg/kg	ND(0.25)	1.4	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
ASB-5-20	9/1/10	19.5-20	deep soil	mg/kg	ND(0.24)	ND (1.0)	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
ASB-6-5	9/1/10	4.5-5.0	shallow soil	mg/kg	ND(0.25)	**140**	**890**	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
ASB-6-10	9/1/10	9.5-10	shallow soil	mg/kg	ND(0.24)	**4.2**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
ASB-6-15	9/1/10	14.5-15	deep soil	mg/kg	**110**	**26**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
ASB-6-20	9/1/10	19.5-20	deep soil	mg/kg	ND(0.23)	ND (1.0)	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
ASB-6-27	9/1/10	27-27.5	deep soil	mg/kg	ND(0.25)	ND (1.0)	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
ASB-7-10	9/1/10	9.5-10	shallow soil	mg/kg	ND(0.24)	ND (1.0)	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
ASB-7-15	9/1/10	14.5-20	deep soil	mg/kg	**0.39**	**1.4**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
ASB-7-20	9/1/10	19.5-20	deep soil	mg/kg	ND(0.24)	ND (1.0)	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
ASB-10-5	8/31/10	4.5-5.0	shallow soil	mg/kg	ND(0.24)	**1.9**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA
ASB-10-10	8/31/10	9.5-10	shallow soil	mg/kg	ND(0.24)	**1.5**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
ASB-10-15	8/31/10	14.5-15	deep soil	mg/kg	**47**	**6.1**	ND (50)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.01)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
ASB-10-20	8/31/10	19.5-20	deep soil	mg/kg	ND(0.24)	NA	NA	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	NA	NA	NA	NA	NA	NA	NA

All ESL standards cited above are for groundwater is not a current or potential source of drinking water (RWQCB, May 2008)



N

PROJECT NO. 10HCT02	5901 MacArthur Blvd Oakland, CA	SITE LOCATION MAP	FIGURE 1
OTG EnviroEngineering Solutions Inc.			



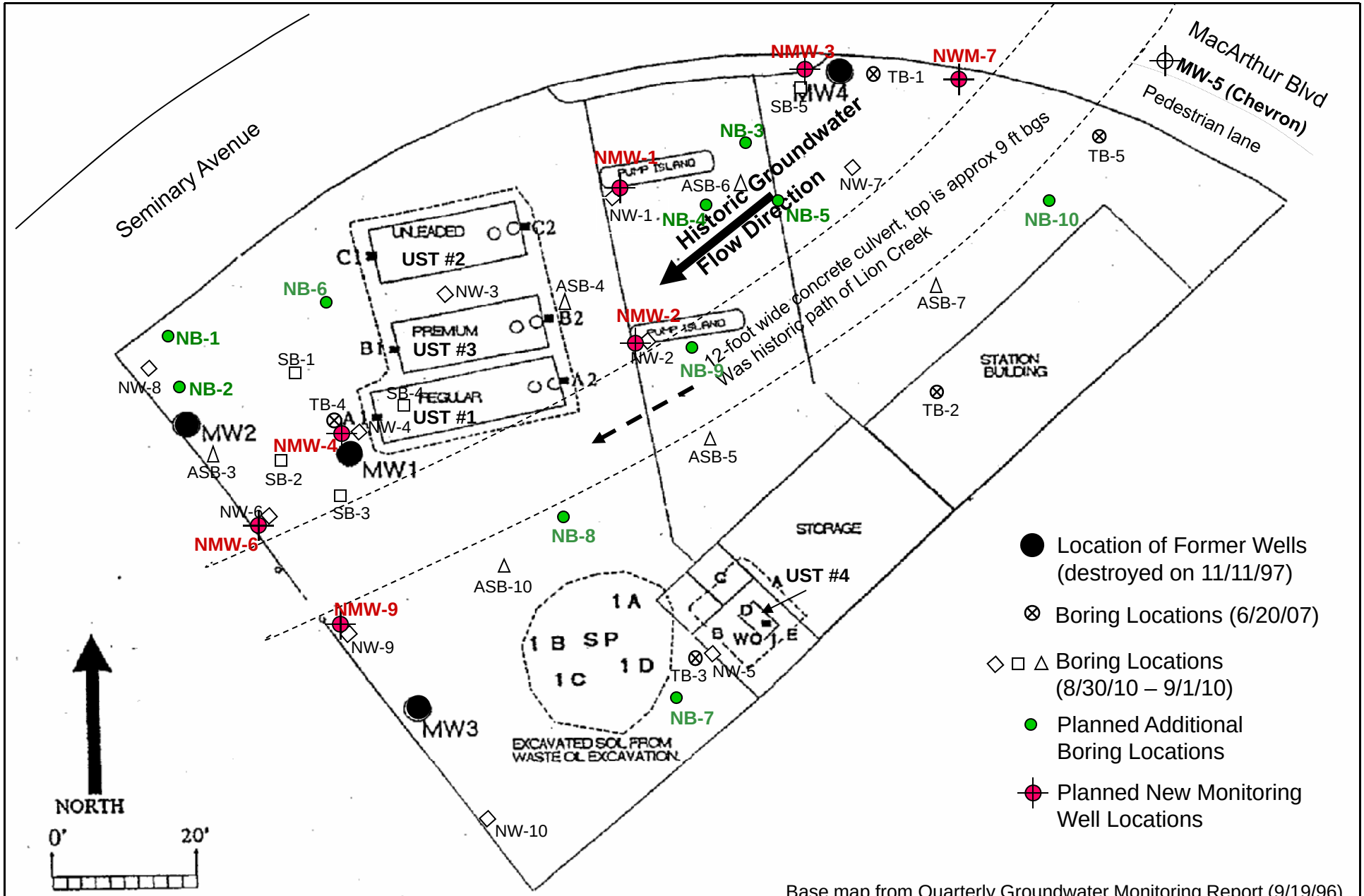
N

LEGEND:

Existing groundwater monitoring wells installed by the active gas station at 5910 MacArthur Blvd. (Chevron Service Station #9-9708)

October 2010

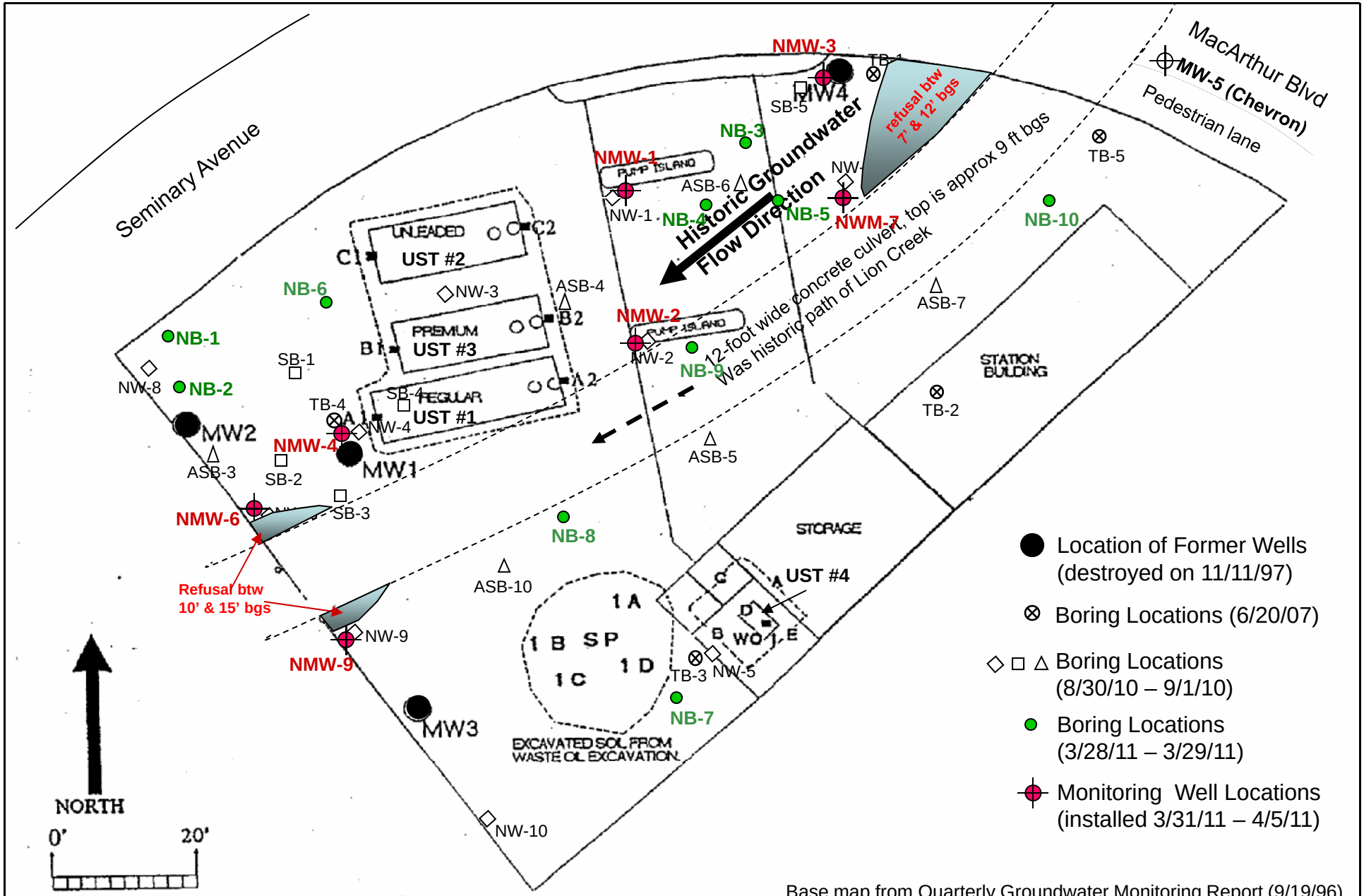
PROJECT NO. 10HCT02.2000	**5901 MacArthur Blvd Oakland, CA**	**VICINITY AERIAL MAP** & Locations of Storm Drain Culverts & Active Monitoring Wells from the Gas Station Across MacArthur Blvd.	**FIGURE 2**
OTG EnviroEngineering Solutions Inc.			



Base map from Quarterly Groundwater Monitoring Report (9/19/96)
By Western Geo-Engineers

February 11, 2011

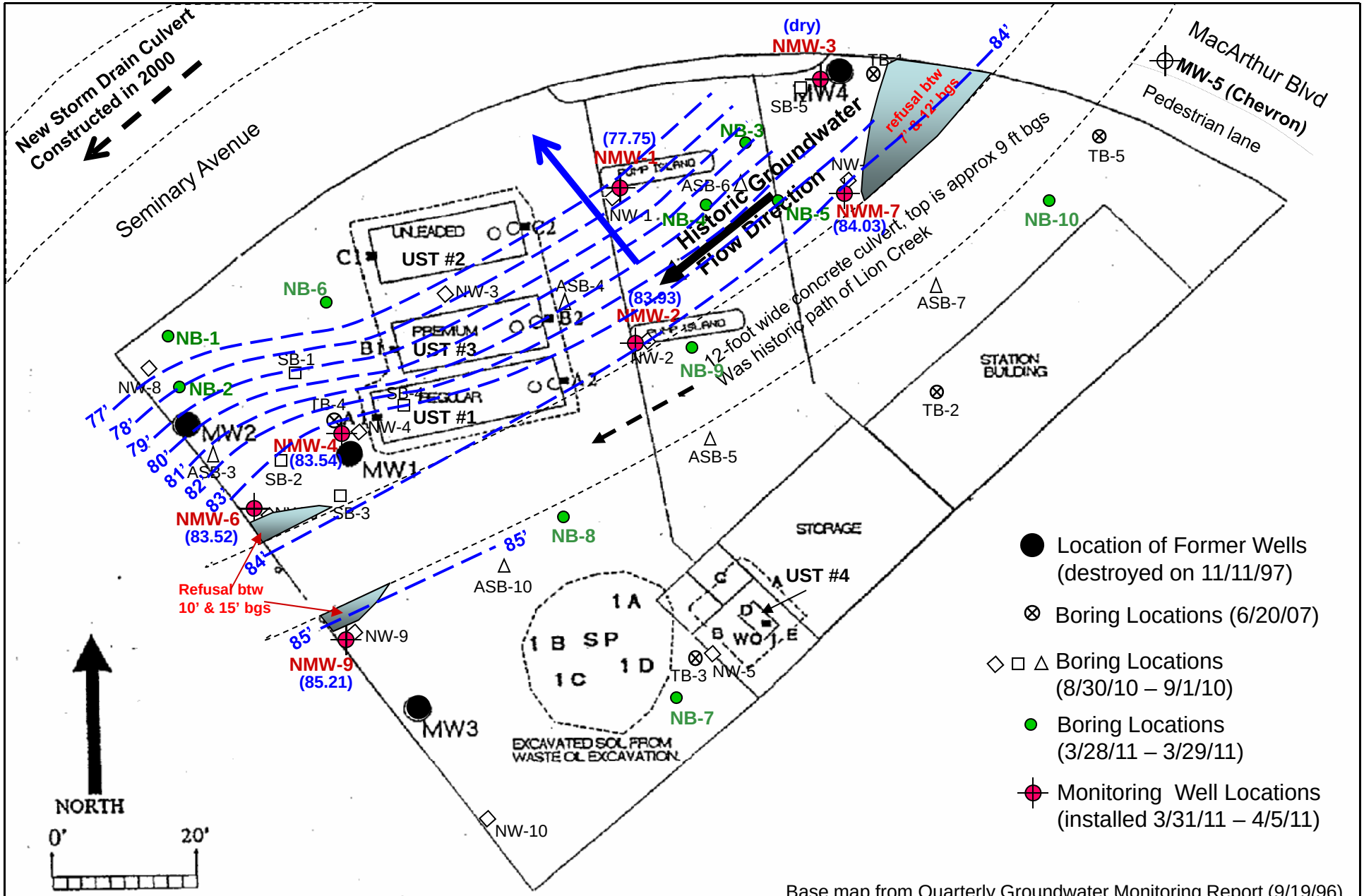
PROJECT # 10HCT02	5901 MacArthur Blvd Oakland, CA	SITE PLAN & PLANNED BORING & WELL LOCATIONS	FIGURE 3
OTG EnviroEngineering Solutions, Inc.			



August 25, 2011

Base map from Quarterly Groundwater Monitoring Report (9/19/96)
By Western Geo-Engineers

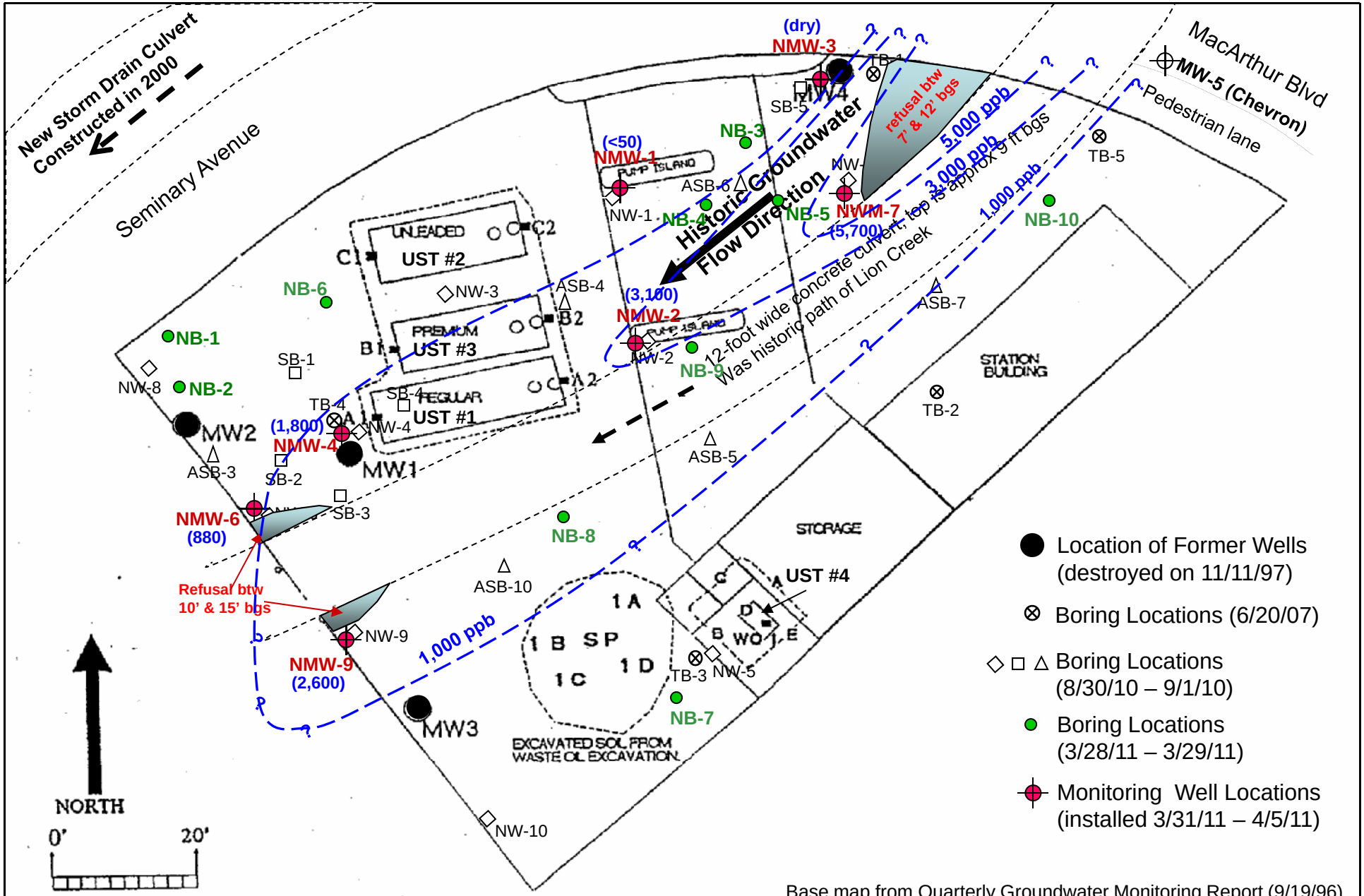
PROJECT # 11HCT03	**5901 MacArthur Blvd Oakland, CA**	**SITE PLAN & LOCATIONS OF NEW BORINGS & WELLS**	**FIGURE 4**
OTG EnviroEngineering Solutions, Inc.			



August 25, 2011

Base map from Quarterly Groundwater Monitoring Report (9/19/96) By Western Geo-Engineers

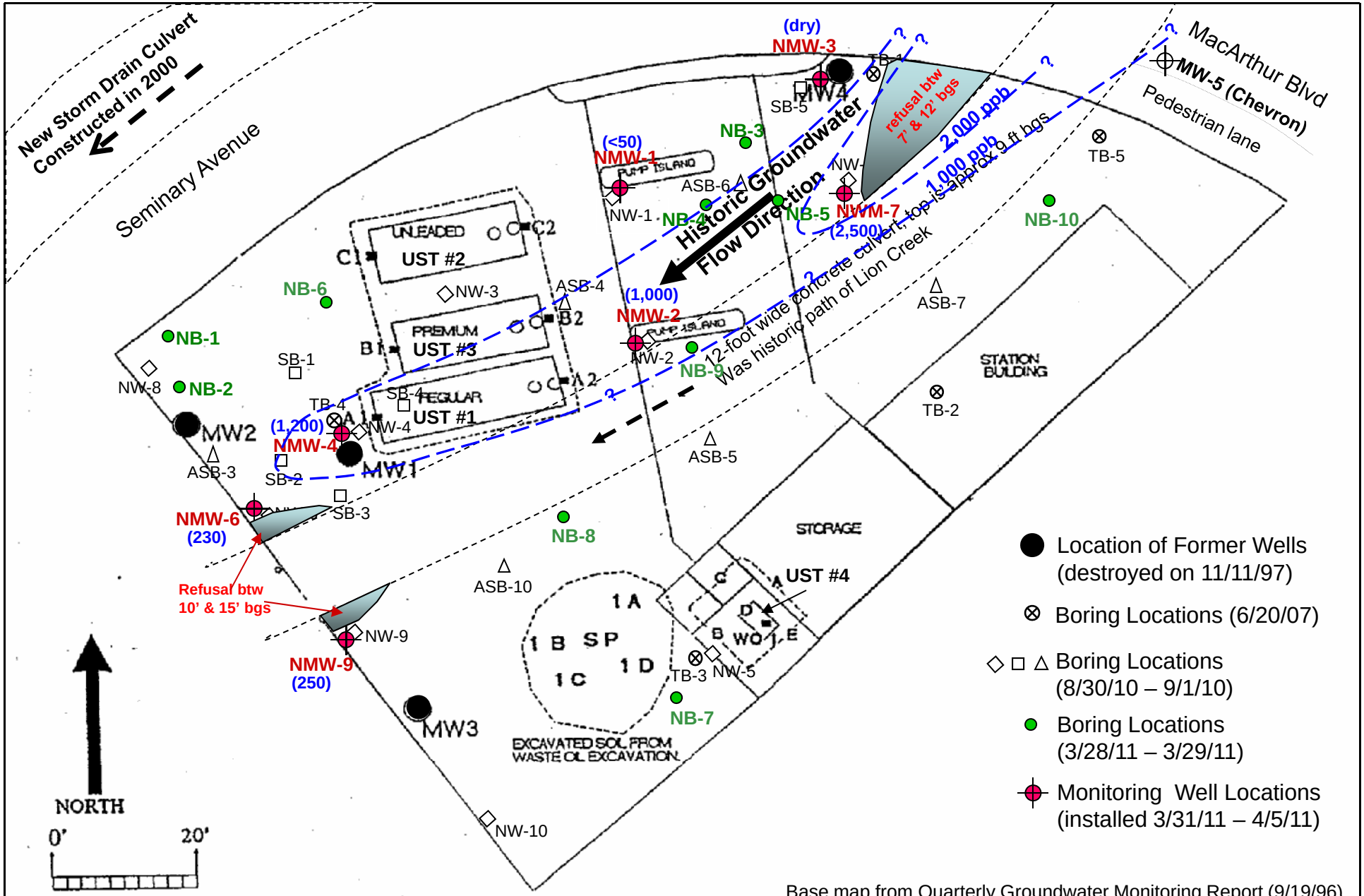
PROJECT # 11HCT03	5901 MacArthur Blvd Oakland, CA	Groundwater Elevation Contour Map (measurement on April 20, 2011)	FIGURE 5
OTG EnviroEngineering Solutions, Inc.			



August 25, 2011

Base map from Quarterly Groundwater Monitoring Report (9/19/96) By Western Geo-Engineers

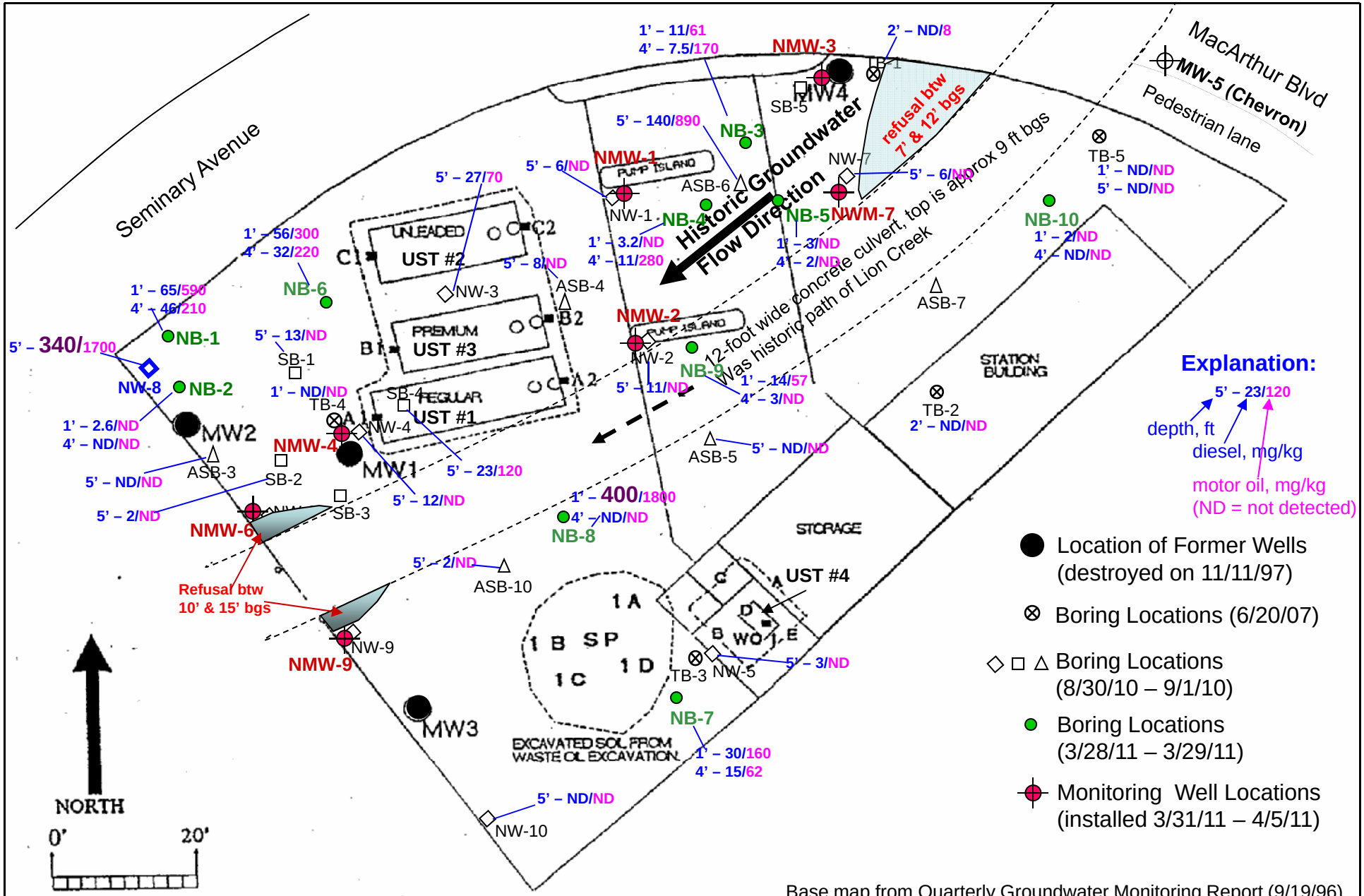
PROJECT # 11HCT03	**5901 MacArthur Blvd Oakland, CA**	**TPH-g (GRO) Concentration in Shallow Groundwater (ug/L, April 20, 2011 data)**	**FIGURE 6**
OTG EnviroEngineering Solutions, Inc.			



August 25, 2011

Base map from Quarterly Groundwater Monitoring Report (9/19/96) By Western Geo-Engineers

PROJECT # 11HCT03	**5901 MacArthur Blvd Oakland, CA**	**TPH-d (DRO) Concentration in Shallow Groundwater (ug/L, April 20, 2011 data)**	**FIGURE 7**
OTG EnviroEngineering Solutions, Inc.			



Base map from Quarterly Groundwater Monitoring Report (9/19/96)
By Western Geo-Engineers

August 25, 2011

PROJECT # 11HCT03	5901 MacArthur Blvd Oakland, CA	Diesel and Motor Oil Concentrations in Shallow Soil, mg/kg (0 to 5 ft below grade)	FIGURE 8
OTG EnviroEngineering Solutions, Inc.			

APPENDIX A

Well Construction 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: 03/17/2011 By jamesy

Permit Numbers: W2011-0158 to W2011-0164
Permits Valid from 03/31/2011 to 04/06/2011

Application Id: 1300298812036 **City of Project Site:** Oakland
Site Location: 5901 MacArthur Blvd, Oakland, CA

a vacant lot, formerly Regal Service Station #404
Project Start Date: 03/31/2011 **Completion Date:** 04/06/2011
Assigned Inspector: Contact Vicky Hamlin at (510) 670-5443 or vickyh@acpwa.org

Applicant: OTG EnviroEngineering Solutions, Inc. - Xinggang Tong
7700 Edgewater Drive, Suite 260, Oakland, CA 94621 **Phone:** 510-465-8982

Property Owner: Jeffrey Huynh
1501 Darius Court, Oakland, CA 94577 **Phone:** 510-301-1600

Client: Xinggang Tong
7700 Edgewater Drive, Suite 260, Oakland, CA 94621 **Phone:** 510-465-8982

Contact: Xinggang Tong **Phone:** 510-465-8982 **Cell:** 510-612-0857

Total Due: $2779.00
Receipt Number: WR2011-0073 **Total Amount Paid:** $2779.00
Payer Name : Xinggang Tong Paid By: VISA **PAID IN FULL**

Works Requesting Permits:

Well Construction-Monitoring-Monitoring - 7 Wells
Driller: PeneCore Drilling - Lic #: 906899 - Method: hstem **Work Total: $2779.00**

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2011-0158	03/17/2011	06/29/2011	NMW-1	10.00 in.	4.00 in.	9.00 ft	25.00 ft
W2011-0159	03/17/2011	06/29/2011	NMW-2	10.00 in.	4.00 in.	9.00 ft	25.00 ft
W2011-0160	03/17/2011	06/29/2011	NMW-3	8.00 in.	2.00 in.	9.00 ft	25.00 ft
W2011-0161	03/17/2011	06/29/2011	NMW-4	10.00 in.	4.00 in.	9.00 ft	25.00 ft
W2011-0162	03/17/2011	06/29/2011	NMW-6	8.00 in.	2.00 in.	9.00 ft	25.00 ft
W2011-0163	03/17/2011	06/29/2011	NMW-7	8.00 in.	2.00 in.	9.00 ft	25.00 ft
W2011-0164	03/17/2011	06/29/2011	NMW-9	8.00 in.	2.00 in.	9.00 ft	25.00 ft

Specific Work Permit Conditions

1. 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.

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

3. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an 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.

4. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Including permit number and site map.

5. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.

6. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@acpwa.org 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.

7. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.

8. Minimum surface seal thickness is two inches of cement grout placed by tremie

9. Minimum seal (Neat Cement seal) depth for monitoring wells is 5 feet below ground surface(BGS) or the maximum depth practicable or 20 feet.

10. 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.

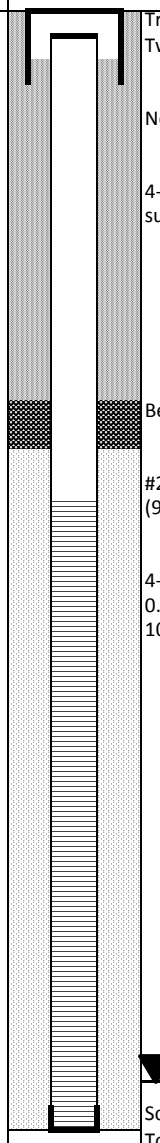
APPENDIX B

Well Installation Logs and Soil Boring Logs

OTG EnviroEngineering Solutions, Inc.	Monitoring Well Log	Well ID	NMW-1
Site Location:	5901 MacArthur Blvd, Oakland, CA	Borehole ID	NW-1
Owner:	Huynh Cheng Family Living Trust		

Borehole Information		Well Construction Information		
				Top of Casing Elevation: 97.85 ft
Drilling Contractor:	PeneCore Drilling Co.	Drilling Contractor:	PeneCore Drilling Co.	Well Casing Diameter: 4 inches
Drilling Method:	Direct Push, GeoProbe7822DT	Drilling Equipment:	GeoProbe 6600 Comb rig	Casing Material: Sch 40 PVC
Borehole Diameter:	DualCore, 2.25"OD/1"ID	Drilling Method:	Hollow-stem auger, 10" O.D.	Total Depth of Well: 23 feet
Date Drilled:	8/30/2010	Date Drilled:	4/1/2011	Boring Diameter: 10 inches
Advanced borehole with 5-ft sections of DualCore lines			Well was installed appr 12" from original borehole location	
Neat cement sealed borehole at end of the same day			Sch 40 PVC casing 0 to 10 ft; 0.01" standard screen 10 to 23 ft.	

Depth (feet, bgs)	Sampling location & ID	Blow counts	Recovery, %	PID reading (ppm)	Odor	Graphic log	Lithology/Remarks
0				0.1	no		Gravel-sand-silt fill (GM) very dense, non-plastic brown color
1							
2			70				
3							
4							
5	NW-1-5			1	no		
6							
7							Silty sand fill (SM), non-plastic <10% gravels, brown
8			70				
9							Aggregates-sand-silt fill (GM) very dense, non-plastic brown color
10	NW-1-10			3.5	no		
11							Clayey silt - Silty clay (ML/CL) brown
12			100				
13							
14							Clayey silt (ML), soft, no free water dark green to dark gray
15	NW-1-15			316	strong petro		Silty clay (CL), medium plasticity firm to stiff, light brown to yellowish brown
16							
17			100				
18							
19							
20	NW-1-20			2	no		
21							
22			100				
23							
24							
25	NW-1-25			0.5	no		Total Boring Depth = 25 feet no groundwater encountered
26							
27							



Well Construction

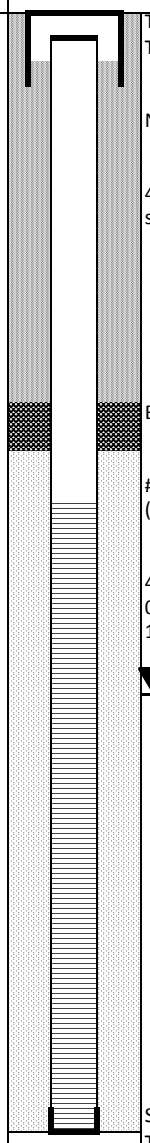
- Traffic rated well box, bolted cover
- Twist & lock well cap
- Neat cement grout (0 to 8 ft bgs)
- 4-inch dia, Sch 40 PVC casing surface to 10 feet bgs
- Bentonite chip seal (8 to 9 ft bgs)
- #2/12 filter pack sand (9 to 22 ft bgs)
- 4-inch dia, Sch 40 PVC well screen 0.01-inch factory slotted standard 10 to 23 feet bgs
- 4/8/11, dry on 4/1/11
- Schedule 40 PVC end cap
- Total Well Depth = 23 feet

logged by: X. Tong Date: 4/11/2011

OTG EnviroEngineering Solutions, Inc.	Monitoring Well Log	Well ID	NMW-2
Site Location:	5901 MacArthur Blvd, Oakland, CA	Borehole ID	NW-2
Owner:	Huynh Cheng Family Living Trust		

Borehole Information		Well Construction Information		
				Top of Casing Elevation: 97.94 ft
Drilling Contractor:	PeneCore Drilling Co.	Drilling Contractor:	PeneCore Drilling Co.	Well Casing Diameter: 4 inches
Drilling Method:	Direct Push, GeoProbe7822DT	Drilling Equipment:	GeoProbe 6600 Comb rig	Casing Material: Sch 40 PVC
Borehole Diameter:	DualCore, 2.25"OD/1"ID	Drilling Method:	Hollow-stem auger, 10" O.D.	Total Depth of Well: 23 feet
Date Drilled:	8/30/2010	Date Drilled:	4/1/2011	Boring Diameter: 10 inches
Advanced borehole with 5-ft sections of DualCore lines			Well was installed appr 12" from original borehole location	
Neat cement sealed borehole at end of the same day			Sch 40 PVC casing 0 to 10 ft; 0.01" standard screen 10 to 23 ft.	

Depth (feet, bgs)	Sampling location & ID	Blow counts	Recovery, %	PID reading (ppm)	Odor	Graphic log	Lithology/Remarks
0				0	no		Base aggregates fill (GW)
1							Aggregates-sand-silt fill (GM) very dense, non-plastic brown color
2			70				
3							
4							
5	NW-2-5			1.3	no		
6							
7			70				
8							
9							
10	NW-2-10			1	no		Silty sand (SM), dark brown
11							
12			15				
13						?	
14							
15	NW-2-W						▽ 8/30/10, NW-2-W is a gw sample
	NW-2-15			160	petro		Silty sand (SM), dark green to dark gray gw first encountered at apprx 15 ft
16							
17							Silty clay (CL), medium plasticity firm to stiff, brown to yellowish brown
18			90				
19							
20	NW-2-20			1.5	no		
21							
22							
23			100				
24							
25				0.5	no		Total Boring Depth = 25 feet
26							
27							



Well Construction

Traffic rated well box, bolted cover
Twist & lock well cap

Neat cement grout (0 to 8 ft bgs)

4-inch dia, Sch 40 PVC casing surface to 10 feet bgs

Bentonite chip seal (8 to 9 ft bgs)

#2/12 filter pack sand (9 to 22 ft bgs)

4-inch dia, Sch 40 PVC well screen 0.01-inch factory slotted standard 10 to 23 feet bgs

▼ 4/8/11

Schedule 40 PVC end cap
Total Well Depth = 23 feet

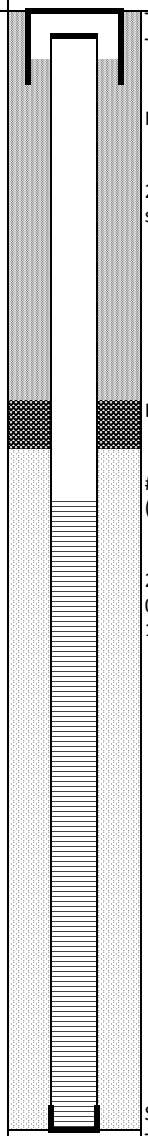
logged by: X Tong

Date: 4/11/2011

OTG EnviroEngineering Solutions, Inc.	Monitoring Well Log	Well ID	NMW-3
Site Location:	5901 MacArthur Blvd, Oakland, CA	Borehole ID	SB-5
Owner:	Huynh Cheng Family Living Trust		

Borehole Information		Well Construction Information		
				Top of Casing Elevation: 97.70 ft
Drilling Contractor:	PeneCore Drilling Co.	Drilling Contractor:	PeneCore Drilling Co.	Well Casing Diameter: 2 inches
Drilling Method:	Direct Push, GeoProbe7822DT	Drilling Equipment:	GeoProbe 6600 Comb rig	Casing Material: Sch 40 PVC
Borehole Diameter:	DualCore, 2.25"OD/1"ID	Drilling Method:	Hollow-stem auger, 8" O.D.	Total Depth of Well: 23 feet
Date Drilled:	8/31/2010	Date Drilled:	3/31/2011	Boring Diameter: 8 inches
Advanced borehole with 5-ft sections of DualCore lines			Well was installed appr 18" from original borehole location	
Neat cement sealed borehole at end of the same day			Sch 40 PVC casing 0 to 10 ft; 0.01" standard screen 10 to 23 ft.	

Depth (feet, bgs)	Sampling location & ID	Blow counts	Recovery, %	PID reading (ppm)	Odor	Graphic log	Lithology/Remarks
0				0.1	no		aggregates-sand-silt fill (GM)
1							very dense, non-plastic
2			50				brown color
3							
4							
5				0.2	no		
6							
7			50				
8	SB-5-8			1.5	no		
9							Clayey silt (ML), dark green
10					no		
11							
12							Gravelly sands (SP), brown
13	SB-5-13		60	69	faint petro		
14							
15	SB-5-15			1.7	no		moist at approx 15 ft, no free water Silty clay (CL), medium plasticity
16							firm to stiff,
17							light brown to yellowish brown
18			100				
19							
20	SB-5-20			0.8	no		
21							
22							
23			100				
24							
25	SB-5-25			0.5	no		Total Boring Depth = 25 feet no groundwater encountered
26							
27							



Well Construction

- Traffic rated well box, bolted cover
- Twist & lock well cap
- Neat cement grout (0 to 8 ft bgs)
- 2-inch dia, Sch 40 PVC casing surface to 10 feet bgs
- Bentonite chip seal (8 to 9 ft bgs)
- #2/12 filter pack sand (9 to 23 ft bgs)
- 2-inch dia, Sch 40 PVC well screen 0.01-inch factory slotted standard 10 to 23 feet bgs
- Schedule 40 PVC end cap
- Total Well Depth = 23 feet
- dry when completed on 3/31/11

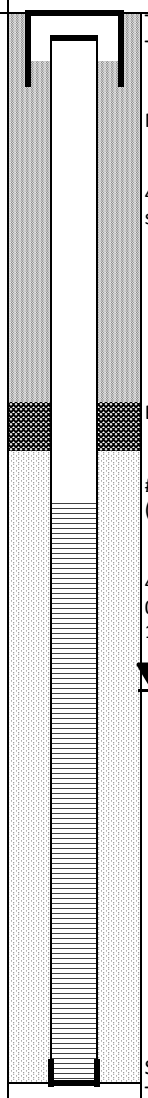
logged by: X Tong

Date: 4/11/2011

OTG EnviroEngineering Solutions, Inc.	Monitoring Well Log	Well ID	NMW-4
Site Location:	5901 MacArthur Blvd, Oakland, CA	Borehole ID	NW-4
Owner:	Huynh Cheng Family Living Trust		

Borehole Information		Well Construction Information		
				Top of Casing Elevation: 97.73 ft
Drilling Contractor:	PeneCore Drilling Co.	Drilling Contractor:	PeneCore Drilling Co.	Well Casing Diameter: 4 inches
Drilling Method:	Direct Push, GeoProbe7822DT	Drilling Equipment:	GeoProbe 6600 Comb rig	Casing Material: Sch 40 PVC
Borehole Diameter:	DualCore, 2.25"OD/1"ID	Drilling Method:	Hollow-stem auger, 10" O.D.	Total Depth of Well: 22 feet
Date Drilled:	8/30/2010	Date Drilled:	4/4/2011	Boring Diameter: 10 inches
Advanced borehole with 5-ft sections of DualCore lines			Well was installed appr 12" from original borehole location	
Neat cement sealed borehole at end of the same day			Sch 40 PVC casing 0 to 10 ft; 0.01" standard screen 10 to 22 ft.	

Depth (feet, bgs)	Sampling location & ID	Blow counts	Recovery, %	PID reading (ppm)	Odor	Graphic log	Lithology/Remarks
0				0.1	no		Gravel-sand-silt fill (GM) very dense, non-plastic brown color
1							
2			70				Silty sand fill (SM), non-plastic <10% gravels, brown
3							
4							Silty clay (CL), medium plasticity firm to stiff, brown to dark brown
5	NW-4-5			0.1	no		
6							
7			70				
8							
9							
10	NW-4-10			3.5	no		
11							
12			60				
13							
14							
15	NW-4-15			178	strong petro		▽ 8/30/10 Silty sand with gravels (<20%) (SM/SP), dark green to dark gray gw first encountered at apprx 15 ft
	NW-4-W						NW-4-W is a gw sample
16	NW-4-Wd						NW-4-W is a duplicate gw sample
17							Silty clay (CL), medium plasticity firm to stiff, brown to yellowish brown
18			90				
19							
20	NW-4-20			1.2	no		
21							
22							
23			100				
24							
25	NW-4-25			0.5	no		Total Boring Depth = 25 feet
26							
27							



Well Construction

- Traffic rated well box, bolted cover
- Twist & lock well cap
- Neat cement grout (0 to 8 ft bgs)
- 4-inch dia, Sch 40 PVC casing surface to 10 feet bgs
- Bentonite chip seal (8 to 9 ft bgs)
- #2/12 filter pack sand (9 to 22 ft bgs)
- 4-inch dia, Sch 40 PVC well screen 0.01-inch factory slotted standard 10 to 22 feet bgs
- ▽ 4/8/11
- Schedule 40 PVC end cap
- Total Well Depth = 22 feet

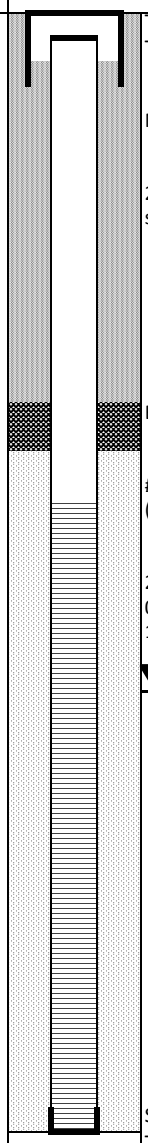
logged by: X Tong

Date: 4/11/2011

OTG EnviroEngineering Solutions, Inc.	Monitoring Well Log	Well ID	NMW-6
Site Location:	5901 MacArthur Blvd, Oakland, CA	Borehole ID	NW-6
Owner:	Huynh Cheng Family Living Trust		

Borehole Information		Well Construction Information		
				Top of Casing Elevation: 97.10 ft
Drilling Contractor:	PeneCore Drilling Co.	Drilling Contractor:	PeneCore Drilling Co.	Well Casing Diameter: 2 inches
Drilling Method:	Direct Push, GeoProbe7822DT	Drilling Equipment:	GeoProbe 6600 Comb rig	Casing Material: Sch 40 PVC
Borehole Diameter:	DualCore, 2.25"OD/1"ID	Drilling Method:	Hollow-stem auger, 8" O.D.	Total Depth of Well: 23 feet
Date Drilled:	8/31/2010	Date Drilled:	3/31/2011	Boring Diameter: 8 inches
Advanced borehole with 5-ft sections of DualCore lines			Well was installed appr 18" from original borehole location	
Neat cement sealed borehole at end of the same day			Sch 40 PVC casing 0 to 10 ft; 0.01" standard screen 10 to 23 ft.	

Depth (feet, bgs)	Sampling location & ID	Blow counts	Recovery, %	PID reading (ppm)	Odor	Graphic log	Lithology/Remarks
0				0.1	no		aggregates-sand-silt fill (GM)
1							very dense, non-plastic
2			70				brown color
3							
4							
5				0.2	no		Gravelly sands fill (SP)
6							dark brown
7			60				
8							
9							
10	NW-6-10			0.5	no		Silty clay (CL), medium plasticity
11							medium soft, dark brown
12			70				
13							
14							
15	NB-6-15			0.5	no		refusal at 15 ft on 3/31/11
16							Silty sand (SM), non-plastic
17							dark green to dark gray
18							free water at 15 ft
19							Slity clay (CL), medium plasticity
20							firm to stiff
21							yellowish brown to brown
22							Soil logging from 15 to 23 ft bgs was
23							on 3/31/11 during well installation
24							
25							
26							
27							



Well Construction

Traffic rated well box, bolted cover
Twist & lock well cap

Neat cement grout (0 to 8 ft bgs)

2-inch dia, Sch 40 PVC casing surface to 10 feet bgs

Bentonite chip seal (8 to 9 ft bgs)

#2/12 filter pack sand (9 to 22 ft bgs)

2-inch dia, Sch 40 PVC well screen 0.01-inch factory slotted standard 10 to 23 feet bgs

4/8/11

Schedule 40 PVC end cap
Total Well Depth = 23 feet

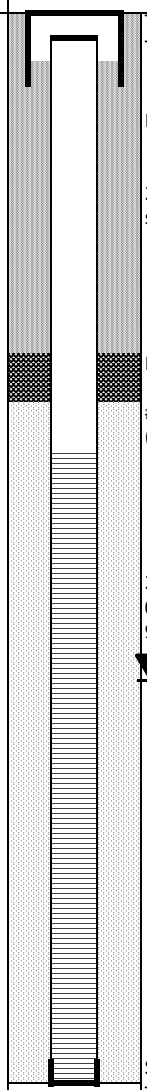
logged by: X Tong

Date: 4/11/2011

OTG EnviroEngineering Solutions, Inc.	Monitoring Well Log	Well ID	NMW-7
Site Location:	5901 MacArthur Blvd, Oakland, CA	Borehole ID	NW-7
Owner:	Huynh Cheng Family Living Trust		

Borehole Information		Well Construction Information		
				Top of Casing Elevation: 97.78 ft
Drilling Contractor:	PeneCore Drilling Co.	Drilling Contractor:	PeneCore Drilling Co.	Well Casing Diameter: 2 inches
Drilling Method:	Direct Push, GeoProbe7822DT	Drilling Equipment:	GeoProbe 6600 Comb rig	Casing Material: Sch 40 PVC
Borehole Diameter:	DualCore, 2.25"OD/1"ID	Drilling Method:	Hollow-stem auger, 8" O.D.	Total Depth of Well: 22 feet
Date Drilled:	8/31/2010	Date Drilled:	4/1/2011	Boring Diameter: 8 inches
Advanced borehole with 5-ft sections of DualCore lines			Well was installed appr 18" from original borehole location	
Neat cement sealed borehole at end of the same day			Sch 40 PVC casing 0 to 9 ft; 0.01" standard screen 9 to 22 ft.	

Depth (feet, bgs)	Sampling location & ID	Blow counts	Recovery, %	PID reading (ppm)	Odor	Graphic log	Lithology/Remarks
0				0.1	no		Gravel-sand-silt fill (GM) very dense, non-plastic brown color
1							
2			80				
3							
4							
5	NW-7-5			0.5	no		
6							
7			50				Gravelly sands fill (SP), brown
8							
9							
10	NW-7-10			0.5	no		Clayey silt (ML) dark green to dark gray
11							
12			50				
13							about 2" concrete at 14 ft, wet
14	NW-7-W						8/31/10
15	NW-7-15			365	strong petro		NW-7-W is a gw sample Silty clay (CL), medium plasticity firm to stiff, light brown to yellowish brown
16							
17			100				
18							
19							
20	NW-7-20			0.5	no		
21							
22							
23							
24							
25							
26							
27							



Well Construction

Traffic rated well box, bolted cover
Twist & lock well cap

Neat cement grout (0 to 7 ft bgs)

2-inch dia, Sch 40 PVC casing surface to 9 feet bgs

Bentonite chip seal (7 to 8 ft bgs)

#2/12 filter pack sand (8 to 22 ft bgs)

2-inch dia, Sch 40 PVC well screen 0.01-inch factory slotted standard 9 to 22 feet bgs

4/8/11

Schedule 40 PVC end cap
Total Well Depth = 22 feet

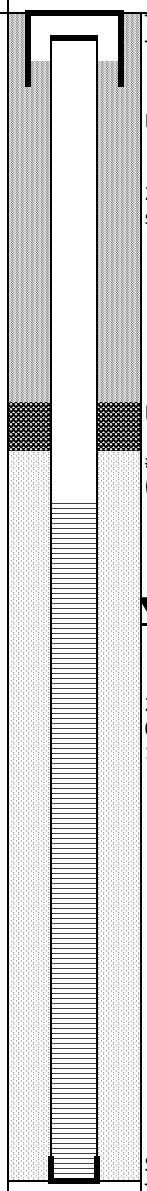
logged by: X Tong

Date: 4/11/2011

OTG EnviroEngineering Solutions, Inc.	Monitoring Well Log	Well ID	NMW-9
Site Location:	5901 MacArthur Blvd, Oakland, CA	Borehole ID	NW-9
Owner:	Huynh Cheng Family Living Trust		

Borehole Information		Well Construction Information		
				Top of Casing Elevation: 97.91 ft
Drilling Contractor:	PeneCore Drilling Co.	Drilling Contractor:	PeneCore Drilling Co.	Well Casing Diameter: 2 inches
Drilling Method:	Direct Push, GeoProbe7822DT	Drilling Equipment:	GeoProbe 6600 Comb rig	Casing Material: Sch 40 PVC
Borehole Diameter:	DualCore, 2.25"OD/1"ID	Drilling Method:	Hollow-stem auger, 8" O.D.	Total Depth of Well: 24 feet
Date Drilled:	8/31/2010	Date Drilled:	3/31/2011	Boring Diameter: 8 inches
Advanced borehole with 5-ft sections of DualCore lines			Well was installed appr 12" from original borehole location	
Neat cement sealed borehole at end of the same day			Sch 40 PVC casing 0 to 10 ft; 0.01" standard screen 9 to 24 ft.	

Depth (feet, bgs)	Sampling location & ID	Blow counts	Recovery, %	PID reading (ppm)	Odor	Graphic log	Lithology/Remarks
0				0.1	no		Aggregates-sand-silt fill (GM) very dense, non-plastic brown color
1							
2			70				
3							
4							Gravelly sands fill (SP)
5	NW-9-5			0.2	no		dense, non-plastic, brown
6							
7			50				
8							
9							Clayey silt (ML), dark brown
10	NW-9-10			0.5	no		
11							
12			100				
13							
14							Gravelly sands fill (SP), wet at 15 ft
15	NW-9-15			0.5	no		▽ 8/31/10
	NW-9-W						Clayey silt (ML), dark green NW-9-W is a gw sample
16							
17							Silty clay (CL), medium plasticity
18			100				firm to stiff, light brown to yellowish brown
19							
20	NW-9-20			0.2	no		Borehole ended at 20 ft on 8/31/10 Soil logging from 20 to 24 ft bgs was on 3/31/11 during well installation
21							
22							
23							
24							
25							
26							
27							



Well Construction
Traffic rated well box, bolted cover
Twist & lock well cap
Neat cement grout (0 to 8 ft bgs)
2-inch dia, Sch 40 PVC casing surface to 10 feet bgs
Bentonite chip seal (8 to 9 ft bgs)
#2/12 filter pack sand (9 to 24 ft bgs)
▼ 4/8/11
2-inch dia, Sch 40 PVC well screen 0.01-inch factory slotted standard 10 to 24 feet bgs
Schedule 40 PVC end cap
Total Well Depth = 24 feet

logged by: X Tong

Date: 4/11/2011

OTG EnviroEngineering Solutions, Inc.	**BORING LOG** sheet 1 of 1	**Boring ID**	**NB-1**
		Well ID	

Site: **5901 MacArthur Blvd, Oakland, CA**
Client **Huynh Cheng Family Living Trust**
Project Number: **11HCT03.1000**
Date(s) Drilled: **03/28/11**
Date(s) Installed: **NA**
Drilling Co./Driller: **OTG**

Ground Elevation: **NA**
T.O.C. Elevation: **NA**
Coordinates: **NA**
Drilling Method: **Hand auger**
Final Borehole Diameter: **2-inch**
Borehole Total Depth, ft **4**

Apparent Groundwater Depth
ft at drilling: no free water encountered
ft after hrs

Drilling Summary: first hand dig with a shavel & pick to 1-ft diameter 6-inch deep, collect first soil sample with ss spoon and then hand auger down to 3.5-ft, collect 2nd sample with a new 2"x 6" ss sleeve. Neat cement grout sealed borehle at the end of the same day.

Well Construction Details	Sample No.	Sample Interval (ft)	PID Reading (ppm)	Recovery, %	Blow Counts	Odor	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
	NB-1-1	0.5-1.0		100		no	1	GM	0 - 4 ft, AGGREGATES-SAND-SILT FILL (GM) very stiff & well compacted brown to dark brown dotted with yellowish sand/silt, moist
	NB-1-4	3.5-4.0				no	4		Total borehole depth = 4 feet, no groundwater encountered

Logged by: Xtong Date of log: 3/28/2011

OTG EnviroEngineering Solutions, Inc.	**BORING LOG** sheet 1 of 1	**Boring ID**	**NB-2**
		Well ID	

Site: **5901 MacArthur Blvd, Oakland, CA**
Client **Huynh Cheng Family Living Trust**
Project Number: **11HCT03.1000**
Date(s) Drilled: **03/28/11**
Date(s) Installed: **NA**
Drilling Co./Driller: **OTG**

Ground Elevation: **NA**
T.O.C. Elevation: **NA**
Coordinates: **NA**
Drilling Method: **Hand auger**
Final Borehole Diameter: **2-inch**
Borehole Total Depth, ft **4**

Apparent Groundwater Depth
ft at drilling: no free water encountered
ft after hrs

Drilling Summary: first hand dig with a shavel & pick to 1-ft diameter 6-inch deep, collect first soil sample with ss spoon and then hand auger down to 3.5-ft, collect 2nd sample with a new 2"x 6" ss sleeve. Neat cement grout sealed borehle at the end of the same day.

Well Construction Details	Sample No.	Sample Interval (ft)	PID Reading (ppm)	Recovery, %	Blow Counts	Odor	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
	NB-2-1	0.5-1.0		100		no	1	GM	0 - 4 ft, AGGREGATES-SAND-SILT FILL (GM) very stiff & well compacted brown to dark brown dotted with yellowish sand/silt, moist
	NB-2-4	3.5-4.0				no	4		Total borehole depth = 4 feet, no groundwater encountered

Logged by: Xtong Date of log: 3/28/2011

OTG EnviroEngineering Solutions, Inc.	**BORING LOG** sheet 1 of 1	**Boring ID**	**NB-3**
		Well ID	

Site: **5901 MacArthur Blvd, Oakland, CA**
Client **Huynh Cheng Family Living Trust**
Project Number: **11HCT03.1000**
Date(s) Drilled: **03/29/11**
Date(s) Installed: **NA**
Drilling Co./Driller: **OTG**

Ground Elevation: **NA**
T.O.C. Elevation: **NA**
Coordinates: **NA**
Drilling Method: **Hand auger**
Final Borehole Diameter: **2-inch**
Borehole Total Depth, ft **4**

Apparent Groundwater Depth
ft at drilling: no free water encountered
ft after hrs

Drilling Summary: first hand dig with a shavel & pick to 1-ft diameter 6-inch deep, collect first soil sample with ss spoon and then hand auger down to 3.5-ft, collect 2nd sample with a new 2"x 6" ss sleeve. Neat cement grout sealed borehle at the end of the same day.

Well Construction Details	Sample No.	Sample Interval (ft)	PID Reading (ppm)	Recovery, %	Blow Counts	Odor	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
	NB-3-1	0.5-1.0		100		no	1	GM	0 - 3 ft, AGGREGATES-SAND-SILT FILL (GM) very stiff & well compacted, brown
							2		
							3		
	NB-3-4	3.5-4.0				no	4	GC	3 - 4 ft, stiff clayey silt with gravels (GC) yellow to light brown Total borehole depth = 4 feet, no groundwater encountered
							5		
							6		
							7		
							8		
							9		
							10		
							11		
							12		
							13		
							14		
							15		
							16		
							17		
							18		
							19		
							20		
							21		
							22		
							23		
							24		
							25		

Logged by: Xtong Date of log: 3/29/2011

OTG EnviroEngineering Solutions, Inc.	**BORING LOG** sheet 1 of 1	**Boring ID**	**NB-4**
		Well ID	

Site: **5901 MacArthur Blvd, Oakland, CA**
Client **Huynh Cheng Family Living Trust**
Project Number: **11HCT03.1000**
Date(s) Drilled: **03/29/11**
Date(s) Installed: **NA**
Drilling Co./Driller: **OTG**

Ground Elevation: **NA**
T.O.C. Elevation: **NA**
Coordinates: **NA**
Drilling Method: **Hand auger**
Final Borehole Diameter: **2-inch**
Borehole Total Depth, ft **4**

Apparent Groundwater Depth
ft at drilling: no free water encountered
ft after hrs

Drilling Summary: first hand dig with a shavel & pick to 1-ft diameter 6-inch deep, collect first soil sample with ss spoon and then hand auger down to 3.5-ft, collect 2nd sample with a new 2"x 6" ss sleeve. Neat cement grout sealed borehle at the end of the same day.

Well Construction Details	Sample No.	Sample Interval (ft)	PID Reading (ppm)	Recovery, %	Blow Counts	Odor	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
	NB-4-1	0.5-1.0		100		no	1	GM	0 - 3 ft, Sandy silt fill with about 20% gravels (GM) moderate stiff, brown
							2		
							3		
	NB-4-4	3.5-4.0				no	4	GC	3 - 4 ft, clayey silt with yellow sand and brown gravels (GC)
							5		Total borehole depth = 4 feet, no groundwater encountered
							6		
							7		
							8		
							9		
							10		
							11		
							12		
							13		
							14		
							15		
							16		
							17		
							18		
							19		
							20		
							21		
							22		
							23		
							24		
							25		

Logged by: Xtong Date of log: 3/29/2011

OTG EnviroEngineering Solutions, Inc.	**BORING LOG** sheet 1 of 1	**Boring ID**	**NB-5**
		Well ID	

Site: **5901 MacArthur Blvd, Oakland, CA**
Client **Huynh Cheng Family Living Trust**
Project Number: **11HCT03.1000**
Date(s) Drilled: **03/29/11**
Date(s) Installed: **NA**
Drilling Co./Driller: **OTG**

Ground Elevation: **NA**
T.O.C. Elevation: **NA**
Coordinates: **NA**
Drilling Method: **Hand auger**
Final Borehole Diameter: **2-inch**
Borehole Total Depth, ft **4**

Apparent Groundwater Depth
ft at drilling: no free water encountered
ft after hrs

Drilling Summary: first hand dig with a shavel & pick to 1-ft diameter 6-inch deep, collect first soil sample with ss spoon and then hand auger down to 3.5-ft, collect 2nd sample with a new 2"x 6" ss sleeve. Neat cement grout sealed borehle at the end of the same day.

Well Construction Details	Sample No.	Sample Interval (ft)	PID Reading (ppm)	Recovery, %	Blow Counts	Odor	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
	NB-5-1	0.5-1.0		100		no	1	GM	0 - 2.5 ft, AGGREGATES-SAND-SILT FILL (GM) very stiff & well compacted, brown
							2		
							3	ML	2.5 - 4 ft, clayey silt (ML), moderately stiff, brown
	NB-5-4	3.5-4.0				no	4		Total borehole depth = 4 feet, no groundwater encountered
							5		
							6		
							7		
							8		
							9		
							10		
							11		
							12		
							13		
							14		
							15		
							16		
							17		
							18		
							19		
							20		
							21		
							22		
							23		
							24		
							25		

Logged by: Xtong Date of log: 3/29/2011

OTG EnviroEngineering Solutions, Inc.	**BORING LOG** sheet 1 of 1	**Boring ID**	**NB-6**
		Well ID	

Site: **5901 MacArthur Blvd, Oakland, CA**
Client **Huynh Cheng Family Living Trust**
Project Number: **11HCT03.1000**
Date(s) Drilled: **03/28/11**
Date(s) Installed: **NA**
Drilling Co./Driller: **OTG**

Ground Elevation: **NA**
T.O.C. Elevation: **NA**
Coordinates: **NA**
Drilling Method: **Hand auger**
Final Borehole Diameter: **2-inch**
Borehole Total Depth, ft **4**

Apparent Groundwater Depth
ft at drilling: no free water encountered
ft after hrs

Drilling Summary: first hand dig with a shavel & pick to 1-ft diameter 6-inch deep, collect first soil sample with ss spoon and then hand auger down to 3.5-ft, collect 2nd sample with a new 2"x 6" ss sleeve. Neat cement grout sealed borehle at the end of the same day.

Well Construction Details	Sample No.	Sample Interval (ft)	PID Reading (ppm)	Recovery, %	Blow Counts	Odor	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
	NB-6-1	0.5-1.0		100		no	1	GW	0 - 1 ft, gravel (>70%) & sand mix (GW), brown
							2	GM	1 - 4 ft, AGGREGATES-SAND-SILT FILL (GM) very stiff & well compacted, brown
							3		
	NB-6-4	3.5-4.0				no	4		Total borehole depth = 4 feet, no groundwater encountered
							5		
							6		
							7		
							8		
							9		
							10		
							11		
							12		
							13		
							14		
							15		
							16		
							17		
							18		
							19		
							20		
							21		
							22		
							23		
							24		
							25		

Logged by: Xtong Date of log: 3/28/2011

OTG EnviroEngineering Solutions, Inc.	**BORING LOG** sheet 1 of 1	**Boring ID**	**NB-7**
		Well ID	

Site: **5901 MacArthur Blvd, Oakland, CA**
Client **Huynh Cheng Family Living Trust**
Project Number: **11HCT03.1000**
Date(s) Drilled: **03/29/11**
Date(s) Installed: **NA**
Drilling Co./Driller: **OTG**

Ground Elevation: **NA**
T.O.C. Elevation: **NA**
Coordinates: **NA**
Drilling Method: **Hand auger**
Final Borehole Diameter: **2-inch**
Borehole Total Depth, ft **4**

Apparent Groundwater Depth
ft at drilling: no free water encountered
ft after hrs

Drilling Summary: first hand dig with a shavel & pick to 1-ft diameter 6-inch deep, collect first soil sample with ss spoon and then hand auger down to 3.5-ft, collect 2nd sample with a new 2"x 6" ss sleeve. Neat cement grout sealed borehle at the end of the same day.

Well Construction Details	Sample No.	Sample Interval (ft)	PID Reading (ppm)	Recovery, %	Blow Counts	Odor	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
	NB-7-1	0.5-1.0		100		no	1	GC	0 - 3 ft, sandy Silty clay with about 20% gravels (GC) moderate stiff, dark brown
							2		
							3		
							4	ML	3 - 4 ft, clayey silt (ML), moderately stiff, dark brown motted with yellow
	NB-7-4	3.5-4.0				no			Total borehole depth = 4 feet, no groundwater encountered
							5		
							6		
							7		
							8		
							9		
							10		
							11		
							12		
							13		
							14		
							15		
							16		
							17		
							18		
							19		
							20		
							21		
							22		
							23		
							24		
							25		

Logged by: Xtong Date of log: 3/29/2011

OTG EnviroEngineering Solutions, Inc.	**BORING LOG** sheet 1 of 1	**Boring ID**	**NB-8**
		Well ID	

Site: **5901 MacArthur Blvd, Oakland, CA**
Client **Huynh Cheng Family Living Trust**
Project Number: **11HCT03.1000**
Date(s) Drilled: **03/28/11**
Date(s) Installed: **NA**
Drilling Co./Driller: **OTG**

Ground Elevation: **NA**
T.O.C. Elevation: **NA**
Coordinates: **NA**
Drilling Method: **Hand auger**
Final Borehole Diameter: **2-inch**
Borehole Total Depth, ft **4**

Apparent Groundwater Depth
ft at drilling: no free water encountered
ft after hrs

Drilling Summary: first hand dig with a shavel & pick to 1-ft diameter 6-inch deep, collect first soil sample with ss spoon and then hand auger down to 3.5-ft, collect 2nd sample with a new 2"x 6" ss sleeve. Neat cement grout sealed borehle at the end of the same day.

Well Construction Details	Sample No.	Sample Interval (ft)	PID Reading (ppm)	Recovery, %	Blow Counts	Odor	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
	NB-8-1	0.5-1.0		100		no	1	GW	0 - 2 ft, gravel (>50%) & sand mix (GW), brown
							2		
							3	CL	2 - 4 ft, silty clay (CL), moderately stiff, brown motted with yellow
	NB-8-4	3.5-4.0				no	4		Total borehole depth = 4 feet, no groundwater encountered
							5		
							6		
							7		
							8		
							9		
							10		
							11		
							12		
							13		
							14		
							15		
							16		
							17		
							18		
							19		
							20		
							21		
							22		
							23		
							24		
							25		

Logged by: Xtong Date of log: 3/28/2011

OTG EnviroEngineering Solutions, Inc.	**BORING LOG** sheet 1 of 1	**Boring ID**	**NB-9**
		Well ID	

Site: **5901 MacArthur Blvd, Oakland, CA**
Client **Huynh Cheng Family Living Trust**
Project Number: **11HCT03.1000**
Date(s) Drilled: **03/29/11**
Date(s) Installed: **NA**
Drilling Co./Driller: **OTG**

Ground Elevation: **NA**
T.O.C. Elevation: **NA**
Coordinates: **NA**
Drilling Method: **Hand auger**
Final Borehole Diameter: **2-inch**
Borehole Total Depth, ft **4**

Apparent Groundwater Depth
ft at drilling: no free water encountered
ft after hrs

Drilling Summary: first hand dig with a shavel & pick to 1-ft diameter 6-inch deep, collect first soil sample with ss spoon and then hand auger down to 3.5-ft, collect 2nd sample with a new 2"x 6" ss sleeve. Neat cement grout sealed borehle at the end of the same day.

Well Construction Details	Sample No.	Sample Interval (ft)	PID Reading (ppm)	Recovery, %	Blow Counts	Odor	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
	NB-9-1	0.5-1.0		100		no	1	GW	0 - 2.5 ft, gravel & sand mix (GW), light brown
							2		
							3	ML	2.5 - 4 ft, clayey silt with some gravels (ML), moist brown motted with yellow
	NB-9-4	3.5-4.0				no	4		Total borehole depth = 4 feet, no groundwater encountered
							5		
							6		
							7		
							8		
							9		
							10		
							11		
							12		
							13		
							14		
							15		
							16		
							17		
							18		
							19		
							20		
							21		
							22		
							23		
							24		
							25		

Logged by: Xtong Date of log: 3/29/2011

OTG EnviroEngineering Solutions, Inc.	**BORING LOG** sheet 1 of 1	**Boring ID**	**NB-10**
		Well ID	

Site: **5901 MacArthur Blvd, Oakland, CA**
Client **Huynh Cheng Family Living Trust**
Project Number: **11HCT03.1000**
Date(s) Drilled: **03/29/11**
Date(s) Installed: **NA**
Drilling Co./Driller: **OTG**

Ground Elevation: **NA**
T.O.C. Elevation: **NA**
Coordinates: **NA**
Drilling Method: **Hand auger**
Final Borehole Diameter: **2-inch**
Borehole Total Depth, ft **4**

Apparent Groundwater Depth
ft at drilling: no free water encountered
ft after hrs

Drilling Summary: first hand dig with a shavel & pick to 1-ft diameter 6-inch deep, collect first soil sample with ss spoon and then hand auger down to 3.5-ft, collect 2nd sample with a new 2"x 6" ss sleeve. Neat cement grout sealed borehle at the end of the same day.

Well Construction Details	Sample No.	Sample Interval (ft)	PID Reading (ppm)	Recovery, %	Blow Counts	Odor	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
	NB-10-1	0.5-1.0		100		no	1	ML	0 - 4 ft, clayey silty sand with some gravels (ML), moist moderately stiff, light brown
							2		
							3		
	NB-10-4	3.5-4.0				no	4		Total borehole depth = 4 feet, no groundwater encountered
							5		
							6		
							7		
							8		
							9		
							10		
							11		
							12		
							13		
							14		
							15		
							16		
							17		
							18		
							19		
							20		
							21		
							22		
							23		
							24		
							25		

Logged by: Xtong Date of log: 3/29/2011

APPENDIX C

Well Development and Sampling Logs

OTG EnviroEngineering Solutions, Inc.

Weather Partial cloud

FIELD SAMPLING LOG SHEET Well Development

WELL ID NMW-1		**Date of Sampling** 4/8/2011	
Site Location 5901 MacArthur Blvd, Oakland			
Project # 11HCT03	Task # 1000	Title	
OTG Project Manager X. Tong		Phone # 510-465-8982	
Client: Huynh Cheng Family Trust			
Client Contact: Jeffrey Huynh		Phone #	
Laboratory:			
Well Diameter: 2" 3" (4") 6" other		Well Material: (sch 40 PVC), sch 80 PVC, other	
Is well secured? (Yes) no Bolt size:		Type of lock/Lock # Master	
Comments:			
Purge Method: PE/PVC (disp bailer), Teflon bailer, Centrifugal pump, Peristaltic pump, Grundfos pump, Other			
Pump lines: (NA) New, Dedicated, Cleaned		Bailer line: NA, (New) Dedicated, Cleaned	
Method of cleaning pump: (NA) Alconox, Liqui-nox, Tap water DI rinse, other			
Method of cleaning Bailer: (NA) Alconox, Liqui-nox, Tap water DI rinse, other			
Sampling method: PE/PVC disp bailer, Teflon bailer, Peristaltic pump, other			
pH meter serial # H19811-5	Spec cond meter serial # H198115	Calibrated at: pH 4.0, 7.0, 10.0	
Water level meter: Solinst Serial # 39506	P.I.D. reading:	ppm at well head	
Water level before purging (TOC, ft) 21.84 / TD = 22.72		Water level prior to sampling	
22.72 (TD) - 21.84 (TOC) = 0.88 (ft of water) x k (0.653) = 0.57 gallons/CV x 3 (# of CV) = 1.7 gallons			
k = 0.163 (2" well), k = 0.653 (4" well), k = 1.02 (5" well), k = 1.46 (6" well), k = 2.61 (8" well)			

FIELD WATER QUALITY PARAMETERS

Time	Discharge (gallons)	pH	Temp (°C)	Specific conductivity (mS or uS)	Turbidity (NTU)	D.O. (mg/L)	Color	Comments
14:50	1	7.2	17.9	3170				milky
15:20	2	7.1	17.9	2910				"
15:30	2.5	7.1	17.9	2810				"
	Near dry, only about 2" water in bailer							

Total discharge: 2.5 gallons	Casing volumes removed: 4.4
Handling of purge & rinsate water: stored in labeled 55-gallon DOT drum & left on site	
Date/time sampled:	QA: duplicate, Eq. blank, trip blank, other
Sample containers filled:	
Less than 1' water in the well	
Recorded by: Xinggang Tong Signature:	Date: 4/8/11

OTG EnviroEngineering Solutions, Inc.

Weather Partial Cloud

FIELD SAMPLING LOG SHEET Well Development

WELL ID NMW-2		**Date of Sampling** 4/8/2011	
Site Location 5901 MacArthur Blvd, Oakland			
Project # 111HCT03	Task # 1000	Title	
OTG Project Manager X Tong		Phone # 510-465-8982	
Client: Huynh Cheng Family Trust			
Client Contact: Jeffrey Huynh		Phone #	
Laboratory:			
Well Diameter: 2" 3" (4") 6" other		Well Material: sch 40 PVC, sch 80 PVC, other	
Is well secured? (Yes) no Bolt size:		Type of lock/Lock # Master	
Comments:			
Purge Method: PE/PVC disp bailer, Teflon bailer, Centrifugal pump, Peristaltic pump, Grundfos pump, Other			
Pump lines: (NA), New, Dedicated, Cleaned		Bailer line: NA, (New), Dedicated, Cleaned	
Method of cleaning pump: (NA), Alconox, Liqui-nox, Tap water DI rinse, other			
Method of cleaning Bailer: (NA), Alconox, Liqui-nox, Tap water DI rinse, other			
Sampling method: PE/PVC disp bailer, Teflon bailer, Peristaltic pump, other			
pH meter serial # H19811-5	Spec cond meter serial # H19811 5	Calibrated at: PH 4.0, 7.0, 10.0	
Water level meter: Solinst Serial # 39506	P.I.D. reading:	ppm at well head	
Water level before purging (TOC, ft) 13.91 / TD = 21.7		Water level prior to sampling	
21.7 (TD) - 13.91 (TOC) = 7.79 (ft of water) x k (.653) = 5.1 gallons/CV x 3 (# of CV) = 15.3 gallons			
k = 0.163 (2" well), k = 0.653 (4" well), k = 1.02 (5" well), k = 1.46 (6" well), k = 2.61 (8" well)			

FIELD WATER QUALITY PARAMETERS

Time	Discharge (gallons)	pH	Temp (°C)	Specific conductivity (mS or uS)	Turbidity (NTU)	D.O. (mg/L)	Color	Comments
15:45	12	6.8	17.3	960				gray muddy water
15:55	16	6.8	17.3	850				" " "
16:10	20	6.8	17.2	810				gray cloudy
16:25	26	6.8	17.2	820				" "

Total discharge: 26 gallons	Casing volumes removed: 5.1
Handling of purge & rinsate water: stored in labeled 55-gallon DOT drum & left on site	
Date/time sampled:	QA: duplicate, Eq. blank, trip blank, other
Sample containers filled:	
Recorded by: Xiaogang Tong Signature:	Date: 4/8/2011

OTG EnviroEngineering Solutions, Inc.

Weather partial cloud

FIELD SAMPLING LOG SHEET Well Development			
WELL ID NMW-3		Date of Sampling 4/18/2011	
Site Location 5901 MacArthur Blvd, Oakland			
Project # 11HCT03	Task # 1000	Title	
OTG Project Manager X Tong		Phone # 510-465-8982	
Client: Huynh Cheng Family Trust			
Client Contact: Jeffrey Huynh		Phone #	
Laboratory:			
Well Diameter: 2" 3" 4" 6" other		Well Material: sch 40 PVC, sch 80 PVC, other	
Is well secured? Yes no Bolt size:		Type of lock/Lock # Master	
Comments:			
Purge Method: PE/PVC disp bailer, Teflon bailer, Centrifugal pump, Peristaltic pump, Grundfos pump, Other			
Pump lines: NA, New, Dedicated, Cleaned		Bailer line: NA, New, Dedicated, Cleaned	
Method of cleaning pump: NA, Alconox, Liqui-nox, Tap water DI rinse, other			
Method of cleaning Bailer: NA, Alconox, Liqui-nox, Tap water DI rinse, other			
Sampling method: PE/PVC disp bailer, Teflon bailer, Peristaltic pump, other			
pH meter serial #	Spec cond meter serial #		Calibrated at:
Water level meter:		P.I.D. reading:	ppm at well head
Water level before purging (TOC, ft) 22.64 / TD=22.64			Water level prior to sampling
(TD) - (TOC) = (ft of water) x k ( ) = gallons/CV x 3 (# of CV) = gallons			
k = 0.163 (2" well), k = 0.653 (4" well), k = 1.02 (5" well), k = 1.46 (6" well), k = 2.61 (8" well)			

FIELD WATER QUALITY PARAMETERS

Time	Discharge (gallons)	pH	Temp (°C)	Specific conductivity (mS or uS)	Turbidity (NTU)	D.O. (mg/L)	Color	Comments
	Dry, no water							

Total discharge: gallons	Casing volumes removed:
Handling of purge & rinsate water: stored in labeled 55-gallon DOT drum & left on site	
Date/time sampled:	QA: duplicate, Eq. blank, trip blank, other
Sample containers filled:	
Recorded by: Xinggang Tong Signature:	Date: 4/18/2011

OTG EnviroEngineering Solutions, Inc.

Weather Partial cloud

FIELD SAMPLING LOG SHEET Well Development			
WELL ID NMW-4		Date of Sampling 4/8/2011	
Site Location 5901 MacArthur Blvd, Oakland			
Project # HHCT03	Task # 1000	Title	
OTG Project Manager X Tong		Phone # 510-465-8982	
Client: Huynh Cheng Family Trust			
Client Contact: Jeffrey Huynh		Phone #	
Laboratory:			
Well Diameter: 2" 3" (4") 6" other		Well Material: sch 40 PVC, sch 80 PVC, other	
Is well secured? (Yes) no Bolt size:		Type of lock/Lock # Master	
Comments:			
Purge Method: PE/PVC disp bailer, Teflon bailer, Centrifugal pump, Peristaltic pump, Grundfos pump, Other			
Pump lines: (NA), New, Dedicated, Cleaned		Bailer line: NA, (New), Dedicated, Cleaned	
Method of cleaning pump: (NA), Alconox, Liqui-nox, Tap water DI rinse, other			
Method of cleaning Bailer: (NA), Alconox, Liqui-nox, Tap water DI rinse, other			
Sampling method: PE/PVC disp bailer, Teflon bailer, Peristaltic pump, other			
pH meter serial # H19811-5	Spec cond meter serial # H19811 5	Calibrated at: pH 4.0, 7.0, 10.0	
Water level meter: Solinst Serial # 39506	P.I.D. reading:	ppm at well head	
Water level before purging (TOC, ft) 13.98 / TD=20.10		Water level prior to sampling	
20.1 (TD) - 13.98 (TOC) = 6.12 (ft of water) x k (.653) = 4.0 gallons/CV x 3 (# of CV) = 12 gallons			
k = 0.163 (2" well), k = 0.653 (4" well), k = 1.02 (5" well), k = 1.46 (6" well), k = 2.61 (8" well)			

FIELD WATER QUALITY PARAMETERS

Time	Discharge (gallons)	pH	Temp (°C)	Specific conductivity (mS or (uS))	Turbidity (NTU)	D.O. (mg/L)	Color	Comments
12:45	1.5	6.9	17.3	1400				gray cloudy
13:00	20	6.9	17.6	1310				" "
13:10	25	6.9	17.4	1270				" "
13:25	30	6.9	17.4	1280				" "

Total discharge: 30 gallons	Casing volumes removed: 7.5
Handling of purge & rinsate water: stored in labeled 55-gallon DOT drum & left on site	
Date/time sampled:	QA: duplicate, Eq. blank, trip blank, other
Sample containers filled:	
Recorded by: Xinggang Tong Signature: [signature]	Date: 4/8/2011

OTG EnviroEngineering Solutions, Inc.

Weather Partial cloud

FIELD SAMPLING LOG SHEET Well Development

WELL ID NMW-6		**Date of Sampling**	4/8/2011
Site Location	5901 MacArthur Blvd, Oakland		
Project #	11HCTO3 Task # 1000	Title	
OTG Project Manager	X Toney	Phone #	510-465-8982
Client:	Huynh Cheng Family Trust		
Client Contact:	Jeffrey Huynh	Phone #	
Laboratory:			
Well Diameter:	(2") 3" 4" 6" other	Well Material:	(sch 40 PVC), sch 80 PVC, other
Is well secured?	(Yes) no Bolt size:	Type of lock/Lock #	Master
Comments:			
Purge Method:	PE/PVC disp bailer, Teflon bailer, Centrifugal pump, Peristaltic pump, Grundfos pump, Other		
Pump lines:	(NA), New, Dedicated, Cleaned	Bailer line:	NA, (New), Dedicated, Cleaned
Method of cleaning pump:	(NA), Alconox, Liqui-nox, Tap water DI rinse, other		
Method of cleaning Bailer:	(NA), Alconox, Liqui-nox, Tap water DI rinse, other		
Sampling method:	PE/PVC disp bailer, Teflon bailer, Peristaltic pump, other		
pH meter serial #	H19811-5	Spec cond meter serial #	H198115
Calibrated at:	pH 4.0, 7.0, 10.0		
Water level meter:	Solinst Serial #39506	P.I.D. reading:	ppm at well head
Water level before purging (TOC, ft)	13.45 / TD = 22.63	Water level prior to sampling	

22.63(TD) - 13.45(TOC) = 9.18(ft of water) x k (.163) = 1.5 gallons/CV x 3 (# of CV) = 4.5 gallons

k = 0.163 (2" well), k = 0.653 (4" well), k = 1.02 (5" well), k = 1.46 (6" well), k = 2.61 (8" well)

FIELD WATER QUALITY PARAMETERS

Time	Discharge (gallons)	pH	Temp (°C)	Specific conductivity (mS or (uS))	Turbidity (NTU)	D.O. (mg/L)	Color	Comments
11:45	10	7.1	17.6	1470				light gray cloudy
12:00	13	7.0	17.10	990				" " "
12:10	15	7.0	16.9	1090				" " "
12:20	18	7.0	16.9	1050				" " "

Total discharge: 18 gallons	Casing volumes removed: 12
Handling of purge & rinsate water: stored in labeled 55-gallon DOT drum & left on site	
Date/time sampled:	QA: duplicate, Eq. blank, trip blank, other
Sample containers filled:	
Recorded by: Xinggang Tong	Signature: [signature] Date: 4/8/2011

OTG EnviroEngineering Solutions, Inc.

Weather Partial cloud

FIELD SAMPLING LOG SHEET Well Development

WELL ID NMW-7	**Date of Sampling** 4/8/2011
Site Location 5901 MacArthur Blvd, Oakland	
Project # 111HCT03 Task # 1000	Title
OTG Project Manager Xinggang Tong	Phone # 510-465-8982
Client: Huynh Cheng Family Trust	
Client Contact: Jeffrey Huynh	Phone #
Laboratory:	
Well Diameter: (2") 3" 4" 6" other	Well Material: (sch 40 PVC) sch 80 PVC, other
Is well secured? (Yes) no Bolt size:	Type of lock/Lock # Master
Comments:	
Purge Method: PE/PVC disp bailer, Teflon bailer, Centrifugal pump, Peristaltic pump, Grundfos pump, Other	
Pump lines: NA, New, Dedicated, Cleaned	Bailer line: NA, (New), Dedicated, Cleaned
Method of cleaning pump: (NA) Alconox, Liqui-nox, Tap water DI rinse, other	
Method of cleaning Bailer: (NA) Alconox, Liqui-nox, Tap water DI rinse, other	
Sampling method: PE/PVC disp bailer, Teflon bailer, Peristaltic pump, other	
pH meter serial # H19811-5 Spec cond meter serial # H198115	Calibrated at: pH 4.0, 7.0, 10.0
Water level meter: Solinst Serial # 39506	P.I.D. reading: ppm at well head
Water level before purging (TOC, ft) 13.64 / TD 21.61	Water level prior to sampling
21.61 (TD) - 13.64 (TOC) = 7.97 (ft of water) x k (0.163) = 1.3 gallons/CV x 3 (# of CV) = 3.9 gallons	
k = 0.163 (2" well), k = 0.653 (4" well), k = 1.02 (5" well), k = 1.46 (6" well), k = 2.61 (8" well)	

FIELD WATER QUALITY PARAMETERS

Time	Discharge (gallons)	pH	Temp (°C)	Specific conductivity (mS or uS)	Turbidity (NTU)	D.O. (mg/L)	Color	Comments
13:50	10	6.7	16.8	860				gray cloudy
14:00	13	6.8	16.5	690				" "
14:10	15	6.8	16.6	720				" "
14:25	18	6.8	16.5	710				" "

Total discharge: 18 gallons	Casing volumes removed: 13.8
Handling of purge & rinsate water: stored in labeled 55-gallon DOT drum & left on site	
Date/time sampled:	QA: duplicate, Eq. blank, trip blank, other
Sample containers filled:	
Recorded by: Xinggang Tong Signature:	Date: 4/8/11

OTG EnviroEngineering Solutions, Inc.

Weather Partial cloud

FIELD SAMPLING LOG SHEET Well Development

WELL ID NMW-9	**Date of Sampling** 4/8/2011
Site Location 5901 MacArthur Blvd, Oakland	
Project # 11HCT03 Task # 1000	Title
OTG Project Manager X. Tong	Phone # 510-465-8982
Client: Huynh Chens Family Trust	
Client Contact: Jeffrey Huynh	Phone #
Laboratory:	
Well Diameter: 2" 3" 4" 6" other	Well Material: sch 40 PVC, sch 80 PVC, other
Is well secured? Yes no Bolt size:	Type of lock/Lock # Master
Comments:	
Purge Method: PE/PVC disp bailer, Teflon bailer, Centrifugal pump, Peristaltic pump, Grundfos pump, Other	
Pump lines: NA, New, Dedicated, Cleaned	Bailer line: NA, New, Dedicated, Cleaned
Method of cleaning pump: NA, Alconox, Liqui-nox, Tap water DI rinse, other	
Method of cleaning Bailer: NA, Alconox, Liqui-nox, Tap water DI rinse, other	
Sampling method: PE/PVC disp bailer, Teflon bailer, Peristaltic pump, other	
pH meter serial # H19811-5 Spec cond meter serial # H19811 5	Calibrated at: pH 4.0, 7.0, 10.0
Water level meter: Solinst Serial # 39506	P.I.D. reading: ppm at well head
Water level before purging (TOC, ft) 12.28 / TD = 23.67	Water level prior to sampling
23.67 (TD) - 12.28 (TOC) = 11.39 (ft of water) x k (.163) = 1.9 gallons/CV x 3 (# of CV) = 5.6 gallons	
k = 0.163 (2" well), k = 0.653 (4" well), k = 1.02 (5" well), k = 1.46 (6" well), k = 2.61 (8" well)	

FIELD WATER QUALITY PARAMETERS

Time	Discharge (gallons)	pH	Temp (°C)	Specific conductivity (mS or uS)	Turbidity (NTU)	D.O. (mg/L)	Color	Comments
10:45	12							muddy water
10:50	13	6.9	17.1	720				plenty silt / clay
11:00	15	6.8	17.1	650				light brown cloudy
11:10	18	6.8	17.2	650				" "
11:25	21	6.8	17.2	650				slightly cloudy

Total discharge: 21 gallons	Casing volumes removed: 11
Handling of purge & rinsate water: stored in labeled 55-gallon DOT drum & left on site	
Date/time sampled:	QA: duplicate, Eq. blank, trip blank, other
Sample containers filled:	
Recorded by: Xinggang Tong Signature:	Date: 4/8/2011

OTG EnviroEngineering Solutions, Inc.

Weather Overcast / light shower

FIELD SAMPLING LOG SHEET

WELL ID NMW-1	**Date of Sampling** 4/20/2011
Site Location 5901 MacArthur Blvd, Oakland	
Project # 11HCT03 Task # 1000	Title phase II
OTG Project Manager X Tong	Phone # 510-465-8982
Client: Jeffrey Huynh	
Client Contact:	Phone #
Laboratory: Test America	
Well Diameter: 2" 3" (4") 6" other	Well Material: (sch 40 PVC), sch 80 PVC, other
Is well secured? (Yes) no Bolt size:	Type of lock/Lock # Master
Comments:	
Purge Method: PE/PVC disp bailer, Teflon bailer, Centrifugal pump, Peristaltic pump, Grundfos pump, Other	
Pump lines: (NA), New, Dedicated, Cleaned	Bailer line: NA, (New), Dedicated, Cleaned
Method of cleaning pump: (NA), Alconox, Liqui-nox, Tap water DI rinse, other	
Method of cleaning Bailer: (NA), Alconox, Liqui-nox, Tap water DI rinse, other	
Sampling method: PE/PVC disp bailer, Teflon bailer, Peristaltic pump, other	
pH meter serial # H19811-5 Spec cond meter serial # H19815	Calibrated at: pH 4.0/7.0 & 10.0
Water level meter: Solinst Serial # 39506	P.I.D. reading: ppm at well head
Water level before purging (TOC, ft) 20.10 at 9:55	Water level prior to sampling 22.06
22.76(TD) - 20.10(TOC) = 2.6 (ft of water) x k (.653) = 1.7 gallons/CV x 3 (# of CV) = 5.1 gallons	
k = 0.163 (2" well), k = 0.653 (4" well), k = 1.02 (5" well), k = 1.46 (6" well), k = 2.61 (8" well)	

FIELD WATER QUALITY PARAMETERS

Time	Discharge (gallons)	pH	Temp (°C)	Specific conductivity (mS or (uS))	Turbidity (NTU)	D.O. (mg/L)	Color	Comments
14:40	1.0	6.8	18.2	2370		2.8	clear	
14:44	2.0	6.9	18.3	2200		3.2	"	
14:55	3.0	7.0	18.4	2130		3.5	"	only ~1' water in well
15:10	4.0	6.9	18.4	2150		3.7	"	only ~6" water in well, stopped bailing

Total discharge: 4.0 gallons	Casing volumes removed: 2.4
Handling of purge & rinsate water: stored in labeled 55-gallon DOT drum & left on site	
Date/time sampled: 4/20/11 at 17:05	QA: duplicate, Eq. blank, (trip blank), other
Sample containers filled: 3 40-ml VOAs, 1 1-L glass bottle. almost dry after first bottle. did not collect 2nd 1-L bottle.	
Recorded by: Xinggang Tong Signature:	Date: 4/20/11

OTG EnviroEngineering Solutions, Inc.

Weather cloudy / light shower

FIELD SAMPLING LOG SHEET

WELL ID NMW-2	**Date of Sampling** 4/20/2011
Site Location 5901 MacArthur Blvd, Oakland	
Project # 11HCT03 Task # 1000	Title Phase II
OTG Project Manager X Tong	Phone # 510-465-8982
Client: Jeffrey Huynh	
Client Contact:	Phone #
Laboratory: Test America	
Well Diameter: 2" 3" (4") 6" other	Well Material: sch 40 PVC, sch 80 PVC, other
Is well secured? (yes) no Bolt size:	Type of lock/Lock # Master
Comments:	
Purge Method: PE/PVC disp bailer, Teflon bailer, Centrifugal pump, Peristaltic pump, Grundfos pump, Other	
Pump lines: (NA), New, Dedicated, Cleaned	Bailer line: NA, (New), Dedicated, Cleaned
Method of cleaning pump: (NA) Alconox, Liqui-nox, Tap water DI rinse, other	
Method of cleaning Bailer: (NA), Alconox, Liqui-nox, Tap water DI rinse, other	
Sampling method: PE/PVC disp bailer, Teflon bailer, Peristaltic pump, other	
pH meter serial # H19811-5 Spec cond meter serial # H19811-5	Calibrated at: pH 4.0, 7.0 & 10.0
Water level meter: Solinst Serial# 39506 P.I.D. reading:	ppm at well head
Water level before purging (TOC, ft) 14.01 at 10:05	Water level prior to sampling 14.07
21.84 (TD) - 14.01 (TOC) = 7.83 (ft of water) x k (.653) = 5.1 gallons/CV x 3 (# of CV) = 15.3 gallons	
k = 0.163 (2" well), k = 0.653 (4" well), k = 1.02 (5" well), k = 1.46 (6" well), k = 2.61 (8" well)	

FIELD WATER QUALITY PARAMETERS

Time	Discharge (gallons)	pH	Temp (°C)	Specific conductivity (mS or (uS))	Turbidity (NTU)	D.O. (mg/L)	Color	Comments
15:25	4.0	6.7	17.4	650		1.12	light gray	
15:35	8.0	6.7	17.2	650		1.3	" "	
15:43	12.0	6.8	17.0	640		1.3	" "	
15:48	14.0	6.8	17.1	640		1.3	" "	
15:54	16.0	6.7	17.0	640		1.4	" "	
16:02	19.0	6.8	16.9	640		1.35	" "	

Total discharge: 19 gallons	Casing volumes removed: 3.7
Handling of purge & rinsate water: stored in labeled 55-gallon DOT drum & left on site	
Date/time sampled: 4/20/11 at 16:25	QA: (duplicate), Eq. blank, (trip blank), other NMW-2d
Sample containers filled: 6 40ml VOAs, w/ HCl, 4 1-L glass bottles	
Recorded by: Xingyang Tong Signature:	Date: 4/20/11

OTG EnviroEngineering Solutions, Inc.

Weather

FIELD SAMPLING LOG SHEET

WELL ID NMW-3		**Date of Sampling**	4/20/2011
Site Location	5901 MacArthur Blvd, Oakland, CA		
Project # 11HCT03	Task # 1000	Title	phase II
OTG Project Manager	X Tong	Phone #	
Client:	Jeffrey Huynh		
Client Contact:		Phone #	
Laboratory:			
Well Diameter: (2") 3" 4" 6" other		Well Material: sch 40 PVC, sch 80 PVC, other	
Is well secured? Yes no	Bolt size:	Type of lock/Lock #	
Comments:			
Purge Method: PE/PVC disp bailer, Teflon bailer, Centrifugal pump, Peristaltic pump, Grundfos pump, Other			
Pump lines: NA, New, Dedicated, Cleaned		Bailer line: NA, New, Dedicated, Cleaned	
Method of cleaning pump: NA, Alconox, Liqui-nox, Tap water DI rinse, other			
Method of cleaning Bailer: NA, Alconox, Liqui-nox, Tap water DI rinse, other			
Sampling method: PE/PVC disp bailer, Teflon bailer, Peristaltic pump, other			
pH meter serial #	Spec cond meter serial #		Calibrated at:
Water level meter:		P.I.D. reading:	ppm at well head
Water level before purging (TOC, ft)		Water level prior to sampling	
(TD) - (TOC) = (ft of water) x k ( ) = gallons/CV x 3 (# of CV) = gallons			
k = 0.163 (2" well), k = 0.653 (4" well), k = 1.02 (5" well), k = 1.46 (6" well), k = 2.61 (8" well)			

FIELD WATER QUALITY PARAMETERS

Time	Discharge (gallons)	pH	Temp (°C)	Specific conductivity (mS or uS)	Turbidity (NTU)	D.O. (mg/L)	Color	Comments
10:08	Dry, No Water							

Total discharge: gallons	Casing volumes removed:
Handling of purge & rinsate water: stored in labeled 55-gallon DOT drum & left on site	
Date/time sampled:	QA: duplicate, Eq. blank, trip blank, other
Sample containers filled:	
Recorded by: Xinggang Tong Signature:	Date: 4/20/11

OTG EnviroEngineering Solutions, Inc.

Weather Overcast/light shower

FIELD SAMPLING LOG SHEET

WELL ID NMW-4	**Date of Sampling** 4/20/2011
Site Location 5901 MacArthur Blvd, Oakland	
Project # 11HCT03 Task # 1000	Title Phase II
OTG Project Manager X Tong	Phone # 510-465-8982
Client: Jeffrey Huynh	
Client Contact:	Phone #
Laboratory: TestAmerica	
Well Diameter: 2" 3" (4") 6" other	Well Material: sch 40 PVC, sch 80 PVC, other
Is well secured? (Yes) no Bolt size:	Type of lock/Lock # Master
Comments:	
Purge Method: PE/PVC disp bailer, Teflon bailer, Centrifugal pump, Peristaltic pump, Grundfos pump, Other	
Pump lines: (NA), New, Dedicated, Cleaned	Bailer line: NA, (New), Dedicated, Cleaned
Method of cleaning pump: (NA), Alconox, Liqui-nox, Tap water DI rinse, other	
Method of cleaning Bailer: (NA), Alconox, Liqui-nox, Tap water DI rinse, other	
Sampling method: PE/PVC disp bailer, Teflon bailer, Peristaltic pump, other	
pH meter serial # H19811-5 Spec cond meter serial # H19845	Calibrated at: pH 4.0, 7.0, & 10.0
Water level meter: Solinst Serial# 39506	P.I.D. reading: ppm at well head
Water level before purging (TOC, ft) 14.19 at 9:52	Water level prior to sampling 14.30
21.47 (TD) - 14.19 (TOC) = 7.28 (ft of water) x k (.653) = 4.8 gallons/CV x 3 (# of CV) = 14.3 gallons	
k = 0.163 (2" well), k = 0.653 (4" well), k = 1.02 (5" well), k = 1.46 (6" well), k = 2.61 (8" well)	

FIELD WATER QUALITY PARAMETERS

Time	Discharge (gallons)	pH	Temp (°C)	Specific conductivity (mS or (uS))	Turbidity (NTU)	D.O. (mg/L)	Color	Comments
13:25	4.0	6.8	17.6	1530		1.4	lightly gray	
13:32	6.0	6.8	17.6	1500		1.5	" "	
13:38	8.0	6.8	17.6	1460		1.4	" "	
13:43	10.0	6.8	17.6	1400		1.3	" "	
13:48	12.0	6.8	17.3	1370		1.25	" "	
13:53	14.0	6.9	17.5	1340		1.35	lightly gray	
13:58	16.0	6.8	17.6	1310		1.40	" "	
14:05	18.0	6.9	17.4	1300		1.4	" "	

Total discharge: 18 gallons	Casing volumes removed: 3.8
Handling of purge & rinsate water: stored in labeled 55-gallon DOT drum & left on site	
Date/time sampled: 4/20/11 at 14:25	QA: duplicate, Eq. blank, (trip blank), other
Sample containers filled: 3 40-ml VOAs w/ HCl 2 1-L glass bottles	
Recorded by: Xiongsang Tong Signature:	Date: 4/20/11

OTG EnviroEngineering Solutions, Inc.

Weather Overcast / light shower

FIELD SAMPLING LOG SHEET

WELL ID NMW-6		**Date of Sampling** 4/20/2011	
Site Location 5901 MacArthur Blvd			
Project # 11HCT03	Task # 1000	Title Phase II	
OTG Project Manager X Tong		Phone # 510-465-8982	
Client: Jeffrey Huynh			
Client Contact:		Phone #	
Laboratory: Test America			
Well Diameter: (2") 3" 4" 6" other		Well Material: sch 40 PVC, sch 80 PVC, other	
Is well secured? (Yes) no Bolt size:		Type of lock/Lock # Master	
Comments:			
Purge Method: PE/PVC disp bailer, Teflon bailer, Centrifugal pump, Peristaltic pump, Grundfos pump, Other			
Pump lines: (NA), New, Dedicated, Cleaned		Bailer line: NA, (New), Dedicated, Cleaned	
Method of cleaning pump: (NA), Alconox, Liqui-nox, Tap water DI rinse, other			
Method of cleaning Bailer: (NA), Alconox, Liqui-nox, Tap water DI rinse, other			
Sampling method: PE/PVC disp bailer, Teflon bailer, Peristaltic pump, other			
pH meter serial # H19811-5	Spec cond meter serial # H19815	Calibrated at: pH 4.0, 7.0 & 10.0	
Water level meter: Solinst Serial # 39506	P.I.D. reading:	ppm at well head	
Water level before purging (TOC, ft) 13.58 at 9:48		Water level prior to sampling 13.64	
22.61 (TD) - 13.58 (TOC) = 9.03 (ft of water) x k (.163) = 1.5 gallons/CV x 3 (# of CV) = 4.5 gallons			
k = 0.163 (2" well), k = 0.653 (4" well), k = 1.02 (5" well), k = 1.46 (6" well), k = 2.61 (8" well)			

FIELD WATER QUALITY PARAMETERS

Time	Discharge (gallons)	pH	Temp (°C)	Specific conductivity (mS or (uS))	Turbidity (NTU)	D.O. (mg/L)	Color	Comments
11:30	2.0	6.8	17.0	710		1.8	light gray	
11:35	3.0	6.9	17.0	760		2.1	"	
11:40	4.0	6.9	16.9	620		1.9	"	
11:45	5.0	6.8	16.7	620		2.1	"	
11:50	6.0	6.8	16.7	630		2.3	lightly cloudy	
11:55	7.5	6.8	16.6	620		2.2	" "	

Total discharge: 7.5 gallons	Casing volumes removed: 5
Handling of purge & rinsate water: stored in labeled 55-gallon DOT drum & left on site	
Date/time sampled: 4/20/11 at 12:40	QA: duplicate, Eq. blank, (trip blank), other
Sample containers filled: 3 40-ml VOAs w/ HCl 2 1-L glass bottles	
Recorded by: Xingang Tong Signature:	Date: 4/20/11

OTG EnviroEngineering Solutions, Inc.

Weather Cloudy / Shower

FIELD SAMPLING LOG SHEET

WELL ID NMW-7		**Date of Sampling**	4/20/2011
Site Location	5901 MacArthur Blvd, Oakland		
Project # 11HCT03	Task # 1000	Title	phase II
OTG Project Manager	X. Tong	Phone #	510-465-8982
Client:	Jeffrey Huynh		
Client Contact:		Phone #	
Laboratory:	Test America		
Well Diameter (2") 3" 4" 6" other		Well Material: (sch 40 PVC) sch 80 PVC, other	
Is well secured? (Yes) no	Bolt size:	Type of lock/Lock #	Master
Comments:			
Purge Method: PE/(PVC disp bailer), Teflon bailer, Centrifugal pump, Peristaltic pump, Grundfos pump, Other			
Pump lines: (NA), New, Dedicated, Cleaned		Bailer line: NA, (New), Dedicated, Cleaned	
Method of cleaning pump: (NA) Alconox, Liqui-nox, Tap water DI rinse, other			
Method of cleaning Bailer: (NA) Alconox, Liqui-nox, Tap water DI rinse, other			
Sampling method: PE/(PVC disp bailer), Teflon bailer, Peristaltic pump, other			
pH meter serial # H19811-5	Spec cond meter serial # H198115	Calibrated at:	pH 4.0, 7.0 & 10.0
Water level meter: Solinst Serial # 39506		P.I.D. reading:	ppm at well head
Water level before purging (TOC, ft) 13.75 at 10:02		Water level prior to sampling	13.86
21.61 (TD) - 13.75 (TOC) = 7.86 (ft of water) x k (.163) = 1.3 gallons/CV x 3 (# of CV) = 3.9 gallons			
k = 0.163 (2" well), k = 0.653 (4" well), k = 1.02 (5" well), k = 1.46 (6" well), k = 2.61 (8" well)			

FIELD WATER QUALITY PARAMETERS

Time	Discharge (gallons)	pH	Temp (°C)	Specific conductivity (mS or (uS))	Turbidity (NTU)	D.O. (mg/L)	Color	Comments
17:20	2.0	6.7	16.5	690		1.6	Milky	
17:24	3.0	6.7	16.5	660		1.7	"	
17:27	4.0	6.7	16.6	640		1.7	"	
17:30	5.0	6.7	16.5	640		1.9	"	
17:35	6.0	6.7	16.4	640		1.9	"	

Total discharge: 6 gallons	Casing volumes removed: 4.6
Handling of purge & rinsate water: stored in labeled 55-gallon DOT drum & left on site	
Date/time sampled: 4/20/11 at 17:55	QA: duplicate, Eq. blank, (trip blank), other
Sample containers filled: 3 40ml VOA w/HCl, 2 1-L glass bottle	
Recorded by: ~~Xinggang~~ Tong Signature:	Date: 4/20/11

OTG EnviroEngineering Solutions, Inc.

Page 1 of 1

Weather cloudy / light shower

FIELD SAMPLING LOG SHEET

WELL ID NMW-9		**Date of Sampling** 4/20/2011	
Site Location 5901 MacArthur Blvd, Oakland			
Project # 11HCT03	Task # 1000	Title phase II	
OTG Project Manager X Tong		Phone # 510-465-8982	
Client: Jeffrey Huynh			
Client Contact:		Phone #	
Laboratory: Test America			
Well Diameter: (2") 3" 4" 6" other		Well Material: sch 40 PVC, sch 80 PVC, other	
Is well secured? (Yes) no Bolt size:		Type of lock/Lock # Master	
Comments:			
Purge Method: PE/PVC disp bailer, Teflon bailer, Centrifugal pump, Peristaltic pump, Grundfos pump, Other			
Pump lines: NA, New, Dedicated, Cleaned		Bailer line: NA, New, Dedicated, Cleaned	
Method of cleaning pump: NA, Alconox, Liqui-nox, Tap water DI rinse, other			
Method of cleaning Bailer: NA, Alconox, Liqui-nox, Tap water DI rinse, other			
Sampling method: PE/PVC disp bailer, Teflon bailer, Peristaltic pump, other			
pH meter serial # H19811-5	Spec cond meter serial # H19811 5	Calibrated at: pH 4.0, 7.0 & 10.0	
Water level meter: Solinst serial # 39506	P.I.D. reading:	ppm at well head	
Water level before purging (TOC, ft) 12.70 at 9:45		Water level prior to sampling 12.80	
23.48 (TD) - 12.76 (TOC) = 10.78 (ft of water) x k (.163) = 1.8 gallons/CV x 3 (# of CV) = 5.3 gallons			
k = 0.163 (2" well), k = 0.653 (4" well), k = 1.02 (5" well), k = 1.46 (6" well), k = 2.61 (8" well)			

FIELD WATER QUALITY PARAMETERS

Time	Discharge (gallons)	pH	Temp (°C)	Specific conductivity (mS or (uS))	Turbidity (NTU)	D.O. (mg/L)	Color	Comments
10:50	2.0	6.6	17.7	570		1.4	brown	
10:54	3.0	6.6	17.5	570		1.5	"	
11:00	4.0	6.6	17.4	570		1.6	"	
11:04	5.0	6.6	17.5	570		1.4	"	
11:08	6.0	6.6	17.5	570		1.4	"	
11:15	7.5	6.6	17.5	570		1.4	"	

Total discharge: 7.5 gallons	Casing volumes removed: 4.2
Handling of purge & rinsate water: stored in labeled 55-gallon DOT drum & left on site	
Date/time sampled: 4/20/11 at 12:10	QA: duplicate, Eq. blank, trip blank, other
Sample containers filled: 3 40-ml VOAs w/ HCl	
2 1-L glass bottles	
Recorded by: X Tong Signature:	Date: 4/20/11

APPENDIX D

Laboratory Analytical Reports

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica San Francisco
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-34711-1
Client Project/Site: B112-Oakland

For:
OTG EnviroEngineering Solutions, Inc.
7700 Edgwater Drive
Suite 260
Oakland, California 94621

Attn: Xinggang Tong

Authorized for release by:
04/29/2011 11:21:17 AM

Afsaneh Salimpour
Project Manager I
afsaneh.salimpour@testamericainc.com

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Client: OTG EnviroEngineering Solutions, Inc.
Project/Site: B112-Oakland

TestAmerica Job ID: 720-34711-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis.
EPA	United States Environmental Protection Agency
ND	Not Detected above the reporting level.
MDL	Method Detection Limit
RL	Reporting Limit
RE, RE1 (etc.)	Indicates a Re-extraction or Reanalysis of the sample.
%R	Percent Recovery
RPD	Relative Percent Difference, a measure of the relative difference between two points.

Client: OTG EnviroEngineering Solutions, Inc.
Project/Site: B112-Oakland

TestAmerica Job ID: 720-34711-1

Job ID: 720-34711-1

Laboratory: TestAmerica San Francisco

Narrative

Job Narrative
720-34711-1

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

GC/MS VOA
No analytical or quality issues were noted.

GC Semi VOA
No analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Detection Summary

Client: OTG EnviroEngineering Solutions, Inc.
Project/Site: B112-Oakland

TestAmerica Job ID: 720-34711-1

Client Sample ID: NMW-9 — Lab Sample ID: 720-34711-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) -C5-C12	2600		500		ug/L	10		8260B/CA_LUFTM	Total/NA
Diesel Range Organics [C10-C28]	250		52		ug/L	1		8015B	Silica Gel Clean

Client Sample ID: NMW-6 — Lab Sample ID: 720-34711-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) -C5-C12	880		50		ug/L	1		8260B/CA_LUFTM	Total/NA
Diesel Range Organics [C10-C28]	230		50		ug/L	1		8015B	Silica Gel Clean

Client Sample ID: NMW-4 — Lab Sample ID: 720-34711-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylenes, Total	2.3		2.0		ug/L	2		8260B/CA_LUFTM	Total/NA
Gasoline Range Organics (GRO) -C5-C12	1800		100		ug/L	2		8260B/CA_LUFTM	Total/NA
Diesel Range Organics [C10-C28]	1200		50		ug/L	1		8015B	Silica Gel Clean

Client Sample ID: NMW-1 — Lab Sample ID: 720-34711-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	13		0.50		ug/L	1		8260B/CA_LUFTM	Total/NA

Client Sample ID: NMW-2 — Lab Sample ID: 720-34711-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.84		0.50		ug/L	1		8260B/CA_LUFTM	Total/NA
Ethylbenzene	7.7		0.50		ug/L	1		8260B/CA_LUFTM	Total/NA
Toluene	0.72		0.50		ug/L	1		8260B/CA_LUFTM	Total/NA
Xylenes, Total	1.9		1.0		ug/L	1		8260B/CA_LUFTM	Total/NA
Gasoline Range Organics (GRO) -C5-C12	3100		50		ug/L	1		8260B/CA_LUFTM	Total/NA
TBA	7.6		4.0		ug/L	1		8260B/CA_LUFTM	Total/NA
Diesel Range Organics [C10-C28]	1000		50		ug/L	1		8015B	Silica Gel Clean

Client Sample ID: NMW-2D — Lab Sample ID: 720-34711-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) -C5-C12	2100		250		ug/L	5		8260B/CA_LUFTM	Total/NA
Diesel Range Organics [C10-C28]	750		50		ug/L	1		8015B	Silica Gel Clean

Client Sample ID: NMW-7 — Lab Sample ID: 720-34711-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) -C5-C12	5700		500		ug/L	10		8260B/CA_LUFTM	Total/NA
Diesel Range Organics [C10-C28]	2500		50		ug/L	1		8015B	Silica Gel Clean

Client Sample ID: TB-1 — Lab Sample ID: 720-34711-8

No Detections.

Client Sample ID: NMW-9

Lab Sample ID: 720-34711-1

Date Collected: 04/20/11 12:10

Matrix: Water

Date Received: 04/21/11 10:25

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0		ug/L			04/27/11 02:37	10
Benzene	ND		5.0		ug/L			04/27/11 02:37	10
Ethylene Dibromide	ND		5.0		ug/L			04/27/11 02:37	10
1,2-Dichloroethane	ND		5.0		ug/L			04/27/11 02:37	10
Ethylbenzene	ND		5.0		ug/L			04/27/11 02:37	10
Toluene	ND		5.0		ug/L			04/27/11 02:37	10
Xylenes, Total	ND		10		ug/L			04/27/11 02:37	10
Gasoline Range Organics (GRO) -C5-C12	**2600**		500		ug/L			04/27/11 02:37	10
TBA	ND		40		ug/L			04/27/11 02:37	10
DIPE	ND		5.0		ug/L			04/27/11 02:37	10
TAME	ND		5.0		ug/L			04/27/11 02:37	10
Ethyl t-butyl ether	ND		5.0		ug/L			04/27/11 02:37	10
Ethanol	ND		2500		ug/L			04/27/11 02:37	10

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*67 - 130*		*04/27/11 02:37*	*10*
1,2-Dichloroethane-d4 (Surr)	*118*		*67 - 130*		*04/27/11 02:37*	*10*
Toluene-d8 (Surr)	*98*		*70 - 130*		*04/27/11 02:37*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**250**		52		ug/L		04/22/11 13:30	04/23/11 12:12	1
Motor Oil Range Organics [C24-C36]	ND		100		ug/L		04/22/11 13:30	04/23/11 12:12	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.9*		*0 - 5*	*04/22/11 13:30*	*04/23/11 12:12*	*1*
p-Terphenyl	*79*		*31 - 150*	*04/22/11 13:30*	*04/23/11 12:12*	*1*

Client Sample ID: NMW-6

Lab Sample ID: 720-34711-2

Date Collected: 04/20/11 12:40

Matrix: Water

Date Received: 04/21/11 10:25

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			04/27/11 03:09	1
Benzene	ND		0.50		ug/L			04/27/11 03:09	1
Ethylene Dibromide	ND		0.50		ug/L			04/27/11 03:09	1
1,2-Dichloroethane	ND		0.50		ug/L			04/27/11 03:09	1
Ethylbenzene	ND		0.50		ug/L			04/27/11 03:09	1
Toluene	ND		0.50		ug/L			04/27/11 03:09	1
Xylenes, Total	ND		1.0		ug/L			04/27/11 03:09	1
Gasoline Range Organics (GRO) -C5-C12	**880**		50		ug/L			04/27/11 03:09	1
TBA	ND		4.0		ug/L			04/27/11 03:09	1
DIPE	ND		0.50		ug/L			04/27/11 03:09	1
TAME	ND		0.50		ug/L			04/27/11 03:09	1
Ethyl t-butyl ether	ND		0.50		ug/L			04/27/11 03:09	1
Ethanol	ND		250		ug/L			04/27/11 03:09	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*67 - 130*		*04/27/11 03:09*	*1*

Client Sample ID: NMW-6

Lab Sample ID: 720-34711-2

Date Collected: 04/20/11 12:40

Matrix: Water

Date Received: 04/21/11 10:25

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*118*		*67 - 130*		*04/27/11 03:09*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*04/27/11 03:09*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**230**		50		ug/L		04/22/11 13:30	04/23/11 12:35	1
Motor Oil Range Organics [C24-C36]	ND		100		ug/L		04/22/11 13:30	04/23/11 12:35	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	*0.3*		*0 - 5*	*04/22/11 13:30*	*04/23/11 12:35*	*1*
p-Terphenyl	*89*		*31 - 150*	*04/22/11 13:30*	*04/23/11 12:35*	*1*

Client Sample ID: NMW-4

Lab Sample ID: 720-34711-3

Date Collected: 04/20/11 14:25

Matrix: Water

Date Received: 04/21/11 10:25

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0		ug/L			04/27/11 03:41	2
Benzene	ND		1.0		ug/L			04/27/11 03:41	2
Ethylene Dibromide	ND		1.0		ug/L			04/27/11 03:41	2
1,2-Dichloroethane	ND		1.0		ug/L			04/27/11 03:41	2
Ethylbenzene	ND		1.0		ug/L			04/27/11 03:41	2
Toluene	ND		1.0		ug/L			04/27/11 03:41	2
Xylenes, Total	**2.3**		2.0		ug/L			04/27/11 03:41	2
Gasoline Range Organics (GRO) -C5-C12	**1800**		100		ug/L			04/27/11 03:41	2
TBA	ND		8.0		ug/L			04/27/11 03:41	2
DIPE	ND		1.0		ug/L			04/27/11 03:41	2
TAME	ND		1.0		ug/L			04/27/11 03:41	2
Ethyl t-butyl ether	ND		1.0		ug/L			04/27/11 03:41	2
Ethanol	ND		500		ug/L			04/27/11 03:41	2

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	*114*		*67 - 130*		*04/27/11 03:41*	*2*
1,2-Dichloroethane-d4 (Surr)	*115*		*67 - 130*		*04/27/11 03:41*	*2*
Toluene-d8 (Surr)	*98*		*70 - 130*		*04/27/11 03:41*	*2*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**1200**		50		ug/L		04/22/11 13:30	04/23/11 12:59	1
Motor Oil Range Organics [C24-C36]	ND		100		ug/L		04/22/11 13:30	04/23/11 12:59	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	*2*		*0 - 5*	*04/22/11 13:30*	*04/23/11 12:59*	*1*
p-Terphenyl	*91*		*31 - 150*	*04/22/11 13:30*	*04/23/11 12:59*	*1*

Client Sample ID: NMW-1

Lab Sample ID: 720-34711-4

Date Collected: 04/20/11 17:05

Matrix: Water

Date Received: 04/21/11 10:25

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	**13**		0.50		ug/L			04/27/11 01:02	1
Benzene	ND		0.50		ug/L			04/27/11 01:02	1
Ethylene Dibromide	ND		0.50		ug/L			04/27/11 01:02	1
1,2-Dichloroethane	ND		0.50		ug/L			04/27/11 01:02	1
Ethylbenzene	ND		0.50		ug/L			04/27/11 01:02	1
Toluene	ND		0.50		ug/L			04/27/11 01:02	1
Xylenes, Total	ND		1.0		ug/L			04/27/11 01:02	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			04/27/11 01:02	1
TBA	ND		4.0		ug/L			04/27/11 01:02	1
DIPE	ND		0.50		ug/L			04/27/11 01:02	1
TAME	ND		0.50		ug/L			04/27/11 01:02	1
Ethyl t-butyl ether	ND		0.50		ug/L			04/27/11 01:02	1
Ethanol	ND		250		ug/L			04/27/11 01:02	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*67 - 130*		*04/27/11 01:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*67 - 130*		*04/27/11 01:02*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*04/27/11 01:02*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50		ug/L		04/22/11 13:30	04/23/11 13:22	1
Motor Oil Range Organics [C24-C36]	ND		100		ug/L		04/22/11 13:30	04/23/11 13:22	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*2*		*0 - 5*	*04/22/11 13:30*	*04/23/11 13:22*	*1*
p-Terphenyl	*90*		*31 - 150*	*04/22/11 13:30*	*04/23/11 13:22*	*1*

Client Sample ID: NMW-2

Lab Sample ID: 720-34711-5

Date Collected: 04/20/11 16:25

Matrix: Water

Date Received: 04/21/11 10:25

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			04/27/11 04:13	1
Benzene	**0.84**		0.50		ug/L			04/27/11 04:13	1
Ethylene Dibromide	ND		0.50		ug/L			04/27/11 04:13	1
1,2-Dichloroethane	ND		0.50		ug/L			04/27/11 04:13	1
Ethylbenzene	**7.7**		0.50		ug/L			04/27/11 04:13	1
Toluene	**0.72**		0.50		ug/L			04/27/11 04:13	1
Xylenes, Total	**1.9**		1.0		ug/L			04/27/11 04:13	1
Gasoline Range Organics (GRO) -C5-C12	**3100**		50		ug/L			04/27/11 04:13	1
TBA	**7.6**		4.0		ug/L			04/27/11 04:13	1
DIPE	ND		0.50		ug/L			04/27/11 04:13	1
TAME	ND		0.50		ug/L			04/27/11 04:13	1
Ethyl t-butyl ether	ND		0.50		ug/L			04/27/11 04:13	1
Ethanol	ND		250		ug/L			04/27/11 04:13	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*67 - 130*		*04/27/11 04:13*	*1*

Client Sample ID: NMW-2

Lab Sample ID: 720-34711-5

Date Collected: 04/20/11 16:25

Matrix: Water

Date Received: 04/21/11 10:25

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*113*		*67 - 130*		*04/27/11 04:13*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*04/27/11 04:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**1000**		50		ug/L		04/22/11 13:30	04/23/11 13:46	1
Motor Oil Range Organics [C24-C36]	ND		100		ug/L		04/22/11 13:30	04/23/11 13:46	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	*0.4*		*0 - 5*	*04/22/11 13:30*	*04/23/11 13:46*	*1*
p-Terphenyl	*86*		*31 - 150*	*04/22/11 13:30*	*04/23/11 13:46*	*1*

Client Sample ID: NMW-2D

Lab Sample ID: 720-34711-6

Date Collected: 04/20/11 16:25

Matrix: Water

Date Received: 04/21/11 10:25

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		2.5		ug/L			04/27/11 04:44	5
Benzene	ND		2.5		ug/L			04/27/11 04:44	5
Ethylene Dibromide	ND		2.5		ug/L			04/27/11 04:44	5
1,2-Dichloroethane	ND		2.5		ug/L			04/27/11 04:44	5
Ethylbenzene	ND		2.5		ug/L			04/27/11 04:44	5
Toluene	ND		2.5		ug/L			04/27/11 04:44	5
Xylenes, Total	ND		5.0		ug/L			04/27/11 04:44	5
Gasoline Range Organics (GRO) -C5-C12	**2100**		250		ug/L			04/27/11 04:44	5
TBA	ND		20		ug/L			04/27/11 04:44	5
DIPE	ND		2.5		ug/L			04/27/11 04:44	5
TAME	ND		2.5		ug/L			04/27/11 04:44	5
Ethyl t-butyl ether	ND		2.5		ug/L			04/27/11 04:44	5
Ethanol	ND		1200		ug/L			04/27/11 04:44	5

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	*106*		*67 - 130*		*04/27/11 04:44*	*5*
1,2-Dichloroethane-d4 (Surr)	*109*		*67 - 130*		*04/27/11 04:44*	*5*
Toluene-d8 (Surr)	*98*		*70 - 130*		*04/27/11 04:44*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**750**		50		ug/L		04/22/11 13:30	04/23/11 14:09	1
Motor Oil Range Organics [C24-C36]	ND		100		ug/L		04/22/11 13:30	04/23/11 14:09	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	*1*		*0 - 5*	*04/22/11 13:30*	*04/23/11 14:09*	*1*
p-Terphenyl	*83*		*31 - 150*	*04/22/11 13:30*	*04/23/11 14:09*	*1*

Client Sample ID: NMW-7

Lab Sample ID: 720-34711-7

Date Collected: 04/20/11 17:55

Matrix: Water

Date Received: 04/21/11 10:25

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0		ug/L			04/27/11 05:16	10
Benzene	ND		5.0		ug/L			04/27/11 05:16	10
Ethylene Dibromide	ND		5.0		ug/L			04/27/11 05:16	10
1,2-Dichloroethane	ND		5.0		ug/L			04/27/11 05:16	10
Ethylbenzene	ND		5.0		ug/L			04/27/11 05:16	10
Toluene	ND		5.0		ug/L			04/27/11 05:16	10
Xylenes, Total	ND		10		ug/L			04/27/11 05:16	10
Gasoline Range Organics (GRO) -C5-C12	**5700**		500		ug/L			04/27/11 05:16	10
TBA	ND		40		ug/L			04/27/11 05:16	10
DIPE	ND		5.0		ug/L			04/27/11 05:16	10
TAME	ND		5.0		ug/L			04/27/11 05:16	10
Ethyl t-butyl ether	ND		5.0		ug/L			04/27/11 05:16	10
Ethanol	ND		2500		ug/L			04/27/11 05:16	10

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*67 - 130*		*04/27/11 05:16*	*10*
1,2-Dichloroethane-d4 (Surr)	*108*		*67 - 130*		*04/27/11 05:16*	*10*
Toluene-d8 (Surr)	*98*		*70 - 130*		*04/27/11 05:16*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**2500**		50		ug/L		04/22/11 13:30	04/23/11 14:33	1
Motor Oil Range Organics [C24-C36]	ND		100		ug/L		04/22/11 13:30	04/23/11 14:33	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*3*		*0 - 5*	*04/22/11 13:30*	*04/23/11 14:33*	*1*
p-Terphenyl	*97*		*31 - 150*	*04/22/11 13:30*	*04/23/11 14:33*	*1*

Client Sample ID: TB-1

Lab Sample ID: 720-34711-8

Date Collected: 04/20/11 09:00

Matrix: Water

Date Received: 04/21/11 10:25

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			04/22/11 15:06	1
Benzene	ND		0.50		ug/L			04/22/11 15:06	1
Ethylene Dibromide	ND		0.50		ug/L			04/22/11 15:06	1
1,2-Dichloroethane	ND		0.50		ug/L			04/22/11 15:06	1
Ethylbenzene	ND		0.50		ug/L			04/22/11 15:06	1
Toluene	ND		0.50		ug/L			04/22/11 15:06	1
Xylenes, Total	ND		1.0		ug/L			04/22/11 15:06	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			04/22/11 15:06	1
TBA	ND		4.0		ug/L			04/22/11 15:06	1
DIPE	ND		0.50		ug/L			04/22/11 15:06	1
TAME	ND		0.50		ug/L			04/22/11 15:06	1
Ethyl t-butyl ether	ND		0.50		ug/L			04/22/11 15:06	1
Ethanol	ND		250		ug/L			04/26/11 23:26	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*67 - 130*		*04/22/11 15:06*	*1*

Client Sample ID: TB-1
Date Collected: 04/20/11 09:00
Date Received: 04/21/11 10:25

Lab Sample ID: 720-34711-8
Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	102		67 - 130		04/26/11 23:26	1
1,2-Dichloroethane-d4 (Surr)	98		67 - 130		04/22/11 15:06	1
1,2-Dichloroethane-d4 (Surr)	115		67 - 130		04/26/11 23:26	1
Toluene-d8 (Surr)	95		70 - 130		04/22/11 15:06	1
Toluene-d8 (Surr)	99		70 - 130		04/26/11 23:26	1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Lab Sample ID: MB 720-90179/9
Matrix: Water
Analysis Batch: 90179

Client Sample ID: MB 720-90179/9
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			04/22/11 11:53	1
Benzene	ND		0.50		ug/L			04/22/11 11:53	1
Ethylene Dibromide	ND		0.50		ug/L			04/22/11 11:53	1
1,2-Dichloroethane	ND		0.50		ug/L			04/22/11 11:53	1
Ethylbenzene	ND		0.50		ug/L			04/22/11 11:53	1
Toluene	ND		0.50		ug/L			04/22/11 11:53	1
m-Xylene & p-Xylene	ND		1.0		ug/L			04/22/11 11:53	1
o-Xylene	ND		0.50		ug/L			04/22/11 11:53	1
Xylenes, Total	ND		1.0		ug/L			04/22/11 11:53	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			04/22/11 11:53	1
TBA	ND		4.0		ug/L			04/22/11 11:53	1
DIPE	ND		0.50		ug/L			04/22/11 11:53	1
TAME	ND		0.50		ug/L			04/22/11 11:53	1
Ethyl t-butyl ether	ND		0.50		ug/L			04/22/11 11:53	1

Surrogate	*MB % Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*67 - 130*		*04/22/11 11:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*67 - 130*		*04/22/11 11:53*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*04/22/11 11:53*	*1*

Lab Sample ID: LCS 720-90179/10
Matrix: Water
Analysis Batch: 90179

Client Sample ID: LCS 720-90179/10
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Methyl tert-butyl ether	20.0	19.9		ug/L		100	62 - 130
Benzene	20.0	20.1		ug/L		101	82 - 127
Ethylene Dibromide	20.0	19.4		ug/L		97	70 - 130
1,2-Dichloroethane	20.0	19.4		ug/L		97	70 - 126
Ethylbenzene	20.0	19.2		ug/L		96	86 - 135
Toluene	20.0	18.6		ug/L		93	83 - 129
m-Xylene & p-Xylene	40.0	41.8		ug/L		105	70 - 142
o-Xylene	20.0	20.8		ug/L		104	89 - 136
TBA	100	97.6		ug/L		98	82 - 116
DIPE	20.0	19.9		ug/L		99	74 - 155
TAME	20.0	20.1		ug/L		100	79 - 129
Ethyl t-butyl ether	20.0	19.8		ug/L		99	70 - 130

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*108*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*67 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-90179/12
Matrix: Water
Analysis Batch: 90179

Client Sample ID: LCS 720-90179/12
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Gasoline Range Organics (GRO) -C5-C12			500	461		ug/L		92	62 - 117		

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*107*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*105*		*67 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 720-90179/11
Matrix: Water
Analysis Batch: 90179

Client Sample ID: LCSD 720-90179/11
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether			20.0	19.3		ug/L		96	62 - 130	3	20
Benzene			20.0	20.3		ug/L		101	82 - 127	1	20
Ethylene Dibromide			20.0	19.1		ug/L		95	70 - 130	2	20
1,2-Dichloroethane			20.0	18.5		ug/L		92	70 - 126	5	20
Ethylbenzene			20.0	19.1		ug/L		96	86 - 135	0	20
Toluene			20.0	19.3		ug/L		97	83 - 129	4	20
m-Xylene & p-Xylene			40.0	40.3		ug/L		101	70 - 142	4	20
o-Xylene			20.0	19.7		ug/L		98	89 - 136	5	20
TBA			100	94.2		ug/L		94	82 - 116	4	20
DIPE			20.0	20.5		ug/L		103	74 - 155	3	20
TAME			20.0	19.7		ug/L		99	79 - 129	2	20
Ethyl t-butyl ether			20.0	19.6		ug/L		98	70 - 130	1	20

Surrogate	*LCSD % Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*99*		*67 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: LCSD 720-90179/13
Matrix: Water
Analysis Batch: 90179

Client Sample ID: LCSD 720-90179/13
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C5-C12			500	441		ug/L		88	62 - 117	4	20

Surrogate	*LCSD % Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*101*		*67 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

Lab Sample ID: MB 720-90411/5
Matrix: Water
Analysis Batch: 90411

Client Sample ID: MB 720-90411/5
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			04/26/11 20:46	1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: MB 720-90411/5
Matrix: Water
Analysis Batch: 90411

Client Sample ID: MB 720-90411/5
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			04/26/11 20:46	1
Ethylene Dibromide	ND		0.50		ug/L			04/26/11 20:46	1
1,2-Dichloroethane	ND		0.50		ug/L			04/26/11 20:46	1
Ethylbenzene	ND		0.50		ug/L			04/26/11 20:46	1
Toluene	ND		0.50		ug/L			04/26/11 20:46	1
m-Xylene & p-Xylene	ND		1.0		ug/L			04/26/11 20:46	1
o-Xylene	ND		0.50		ug/L			04/26/11 20:46	1
Xylenes, Total	ND		1.0		ug/L			04/26/11 20:46	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			04/26/11 20:46	1
TBA	ND		4.0		ug/L			04/26/11 20:46	1
DIPE	ND		0.50		ug/L			04/26/11 20:46	1
TAME	ND		0.50		ug/L			04/26/11 20:46	1
Ethyl t-butyl ether	ND		0.50		ug/L			04/26/11 20:46	1
Ethanol	ND		250		ug/L			04/26/11 20:46	1

Surrogate	*MB % Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*67 - 130*		*04/26/11 20:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*67 - 130*		*04/26/11 20:46*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*04/26/11 20:46*	*1*

Lab Sample ID: LCS 720-90411/6
Matrix: Water
Analysis Batch: 90411

Client Sample ID: LCS 720-90411/6
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Methyl tert-butyl ether	25.0	27.1		ug/L		109	62 - 130
Benzene	25.0	24.0		ug/L		96	82 - 127
Ethylene Dibromide	25.0	26.1		ug/L		104	70 - 130
1,2-Dichloroethane	25.0	28.4		ug/L		114	70 - 126
Ethylbenzene	25.0	24.0		ug/L		96	86 - 135
Toluene	25.0	23.1		ug/L		93	83 - 129
m-Xylene & p-Xylene	50.0	48.9		ug/L		98	70 - 142
o-Xylene	25.0	25.8		ug/L		103	89 - 136
TBA	500	490		ug/L		98	82 - 116
DIPE	25.0	25.3		ug/L		101	74 - 155
TAME	25.0	28.4		ug/L		114	79 - 129
Ethyl t-butyl ether	25.0	26.6		ug/L		107	70 - 130
Ethanol	500	469		ug/L		94	31 - 216

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*104*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*114*		*67 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-90411/8
Matrix: Water
Analysis Batch: 90411

Client Sample ID: LCS 720-90411/8
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Gasoline Range Organics (GRO) -C5-C12			500	468		ug/L		94	62 - 117		

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*108*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*119*		*67 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 720-90411/7
Matrix: Water
Analysis Batch: 90411

Client Sample ID: LCSD 720-90411/7
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether			25.0	27.4		ug/L		109	62 - 130	1	20
Benzene			25.0	23.9		ug/L		96	82 - 127	0	20
Ethylene Dibromide			25.0	26.4		ug/L		106	70 - 130	1	20
1,2-Dichloroethane			25.0	28.3		ug/L		113	70 - 126	0	20
Ethylbenzene			25.0	23.5		ug/L		94	86 - 135	2	20
Toluene			25.0	22.8		ug/L		91	83 - 129	1	20
m-Xylene & p-Xylene			50.0	48.5		ug/L		97	70 - 142	1	20
o-Xylene			25.0	25.2		ug/L		101	89 - 136	2	20
TBA			500	465		ug/L		93	82 - 116	5	20
DIPE			25.0	25.4		ug/L		102	74 - 155	1	20
TAME			25.0	28.5		ug/L		114	79 - 129	0	20
Ethyl t-butyl ether			25.0	26.7		ug/L		107	70 - 130	0	20
Ethanol			500	466		ug/L		93	31 - 216	1	30

Surrogate	*LCSD % Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*117*		*67 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 720-90411/9
Matrix: Water
Analysis Batch: 90411

Client Sample ID: LCSD 720-90411/9
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C5-C12			500	462		ug/L		92	62 - 117	1	20

Surrogate	*LCSD % Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*104*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*114*		*67 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: 720-34711-4 MS
Matrix: Water
Analysis Batch: 90411

Client Sample ID: NMW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	% Rec	% Rec. Limits
Methyl tert-butyl ether	13		25.0	42.5		ug/L		119	60 - 138
Benzene	ND		25.0	23.3		ug/L		93	60 - 140
Ethylene Dibromide	ND		25.0	28.0		ug/L		112	60 - 140
1,2-Dichloroethane	ND		25.0	29.7		ug/L		119	60 - 140
Ethylbenzene	ND		25.0	22.9		ug/L		92	60 - 140
Toluene	ND		25.0	22.3		ug/L		89	60 - 140
m-Xylene & p-Xylene	ND		50.0	46.9		ug/L		94	60 - 140
o-Xylene	ND		25.0	25.0		ug/L		100	60 - 140
TBA	ND		500	470		ug/L		93	60 - 140
DIPE	ND		25.0	26.3		ug/L		105	60 - 140
TAME	ND		25.0	30.0		ug/L		120	60 - 140
Ethyl t-butyl ether	ND		25.0	28.1		ug/L		113	60 - 140
Ethanol	ND		500	426		ug/L		85	60 - 140

Surrogate	*MS % Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*124*		*67 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: 720-34711-4 MSD
Matrix: Water
Analysis Batch: 90411

Client Sample ID: NMW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	13		25.0	43.2		ug/L		122	60 - 138	2	20
Benzene	ND		25.0	24.0		ug/L		96	60 - 140	3	20
Ethylene Dibromide	ND		25.0	27.4		ug/L		109	60 - 140	2	20
1,2-Dichloroethane	ND		25.0	29.9		ug/L		119	60 - 140	1	20
Ethylbenzene	ND		25.0	22.9		ug/L		92	60 - 140	0	20
Toluene	ND		25.0	22.6		ug/L		91	60 - 140	1	20
m-Xylene & p-Xylene	ND		50.0	47.2		ug/L		94	60 - 140	1	20
o-Xylene	ND		25.0	25.1		ug/L		100	60 - 140	0	20
TBA	ND		500	473		ug/L		94	60 - 140	1	20
DIPE	ND		25.0	27.1		ug/L		108	60 - 140	3	20
TAME	ND		25.0	30.8		ug/L		123	60 - 140	3	20
Ethyl t-butyl ether	ND		25.0	28.9		ug/L		115	60 - 140	3	20
Ethanol	ND		500	459		ug/L		92	60 - 140	7	20

Surrogate	*MSD % Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*120*		*67 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

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

Lab Sample ID: MB 720-90175/1-A
Matrix: Water
Analysis Batch: 90167

Client Sample ID: MB 720-90175/1-A
Prep Type: Silica Gel Cleanup
Prep Batch: 90175

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50		ug/L		04/22/11 10:25	04/22/11 18:54	1
Motor Oil Range Organics [C24-C36]	ND		99		ug/L		04/22/11 10:25	04/22/11 18:54	1

Surrogate	*MB % Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.2*		*0 - 5*	*04/22/11 10:25*	*04/22/11 18:54*	*1*
p-Terphenyl	*98*		*31 - 150*	*04/22/11 10:25*	*04/22/11 18:54*	*1*

Lab Sample ID: LCS 720-90175/2-A
Matrix: Water
Analysis Batch: 90167

Client Sample ID: LCS 720-90175/2-A
Prep Type: Silica Gel Cleanup
Prep Batch: 90175

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Diesel Range Organics [C10-C28]			2500	1840		ug/L		74	32 - 119		

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*107*		*31 - 150*

Lab Sample ID: LCSD 720-90175/3-A
Matrix: Water
Analysis Batch: 90167

Client Sample ID: LCSD 720-90175/3-A
Prep Type: Silica Gel Cleanup
Prep Batch: 90175

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			2500	1710		ug/L		69	32 - 119	7	35

Surrogate	*LCSD % Recovery*	*LCSD Qualifier*	*Limits*
p-Terphenyl	*107*		*31 - 150*

GC/MS VOA

Analysis Batch: 90179

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-90179/10	LCS 720-90179/10	Total/NA	Water	8260B/CA_LUF TMS	
LCSD 720-90179/11	LCSD 720-90179/11	Total/NA	Water	8260B/CA_LUF TMS	
LCS 720-90179/12	LCS 720-90179/12	Total/NA	Water	8260B/CA_LUF TMS	
LCSD 720-90179/13	LCSD 720-90179/13	Total/NA	Water	8260B/CA_LUF TMS	
720-34711-8	TB-1	Total/NA	Water	8260B/CA_LUF TMS	
MB 720-90179/9	MB 720-90179/9	Total/NA	Water	8260B/CA_LUF TMS	

Analysis Batch: 90411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-34711-8	TB-1	Total/NA	Water	8260B/CA_LUF TMS	
720-34711-4	NMW-1	Total/NA	Water	8260B/CA_LUF TMS	
720-34711-4 MS	NMW-1	Total/NA	Water	8260B/CA_LUF TMS	
720-34711-4 MSD	NMW-1	Total/NA	Water	8260B/CA_LUF TMS	
720-34711-1	NMW-9	Total/NA	Water	8260B/CA_LUF TMS	
720-34711-2	NMW-6	Total/NA	Water	8260B/CA_LUF TMS	
720-34711-3	NMW-4	Total/NA	Water	8260B/CA_LUF TMS	
720-34711-5	NMW-2	Total/NA	Water	8260B/CA_LUF TMS	
720-34711-6	NMW-2D	Total/NA	Water	8260B/CA_LUF TMS	
720-34711-7	NMW-7	Total/NA	Water	8260B/CA_LUF TMS	
MB 720-90411/5	MB 720-90411/5	Total/NA	Water	8260B/CA_LUF TMS	
LCS 720-90411/6	LCS 720-90411/6	Total/NA	Water	8260B/CA_LUF TMS	
LCSD 720-90411/7	LCSD 720-90411/7	Total/NA	Water	8260B/CA_LUF TMS	
LCS 720-90411/8	LCS 720-90411/8	Total/NA	Water	8260B/CA_LUF TMS	
LCSD 720-90411/9	LCSD 720-90411/9	Total/NA	Water	8260B/CA_LUF TMS	

GC Semi VOA

Analysis Batch: 90167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-90175/2-A	LCS 720-90175/2-A	Silica Gel Cleanup	Water	8015B	90175
LCSD 720-90175/3-A	LCSD 720-90175/3-A	Silica Gel Cleanup	Water	8015B	90175
MB 720-90175/1-A	MB 720-90175/1-A	Silica Gel Cleanup	Water	8015B	90175

Prep Batch: 90175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-90175/1-A	MB 720-90175/1-A	Silica Gel Cleanup	Water	3510C SGC	
720-34711-3	NMW-4	Silica Gel Cleanup	Water	3510C SGC	
720-34711-4	NMW-1	Silica Gel Cleanup	Water	3510C SGC	
720-34711-5	NMW-2	Silica Gel Cleanup	Water	3510C SGC	
720-34711-6	NMW-2D	Silica Gel Cleanup	Water	3510C SGC	
720-34711-7	NMW-7	Silica Gel Cleanup	Water	3510C SGC	

GC Semi VOA (Continued)

Prep Batch: 90175 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-90175/2-A	LCS 720-90175/2-A	Silica Gel Cleanup	Water	3510C SGC	
LCSD 720-90175/3-A	LCSD 720-90175/3-A	Silica Gel Cleanup	Water	3510C SGC	
720-34711-1	NMW-9	Silica Gel Cleanup	Water	3510C SGC	
720-34711-2	NMW-6	Silica Gel Cleanup	Water	3510C SGC	

Analysis Batch: 90248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-34711-4	NMW-1	Silica Gel Cleanup	Water	8015B	90175
720-34711-5	NMW-2	Silica Gel Cleanup	Water	8015B	90175
720-34711-6	NMW-2D	Silica Gel Cleanup	Water	8015B	90175
720-34711-7	NMW-7	Silica Gel Cleanup	Water	8015B	90175
720-34711-1	NMW-9	Silica Gel Cleanup	Water	8015B	90175
720-34711-2	NMW-6	Silica Gel Cleanup	Water	8015B	90175
720-34711-3	NMW-4	Silica Gel Cleanup	Water	8015B	90175

Lab Chronicle

Client: OTG EnviroEngineering Solutions, Inc.
Project/Site: B112-Oakland

TestAmerica Job ID: 720-34711-1

Client Sample ID: NMW-9
Date Collected: 04/20/11 12:10
Date Received: 04/21/11 10:25

Lab Sample ID: 720-34711-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		10	90411	04/27/11 02:37	AC	TestAmerica San Francisco
Silica Gel Cleanup	Prep	3510C SGC			90175	04/22/11 13:30	AM	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		1	90248	04/23/11 12:12	DH	TestAmerica San Francisco

Client Sample ID: NMW-6
Date Collected: 04/20/11 12:40
Date Received: 04/21/11 10:25

Lab Sample ID: 720-34711-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	90411	04/27/11 03:09	AC	TestAmerica San Francisco
Silica Gel Cleanup	Prep	3510C SGC			90175	04/22/11 13:30	AM	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		1	90248	04/23/11 12:35	DH	TestAmerica San Francisco

Client Sample ID: NMW-4
Date Collected: 04/20/11 14:25
Date Received: 04/21/11 10:25

Lab Sample ID: 720-34711-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		2	90411	04/27/11 03:41	AC	TestAmerica San Francisco
Silica Gel Cleanup	Prep	3510C SGC			90175	04/22/11 13:30	AM	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		1	90248	04/23/11 12:59	DH	TestAmerica San Francisco

Client Sample ID: NMW-1
Date Collected: 04/20/11 17:05
Date Received: 04/21/11 10:25

Lab Sample ID: 720-34711-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	90411	04/27/11 01:02	AC	TestAmerica San Francisco
Silica Gel Cleanup	Prep	3510C SGC			90175	04/22/11 13:30	AM	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		1	90248	04/23/11 13:22	DH	TestAmerica San Francisco

Client Sample ID: NMW-2
Date Collected: 04/20/11 16:25
Date Received: 04/21/11 10:25

Lab Sample ID: 720-34711-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	90411	04/27/11 04:13	AC	TestAmerica San Francisco
Silica Gel Cleanup	Prep	3510C SGC			90175	04/22/11 13:30	AM	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		1	90248	04/23/11 13:46	DH	TestAmerica San Francisco

Lab Chronicle

Client: OTG EnviroEngineering Solutions, Inc.
Project/Site: B112-Oakland

TestAmerica Job ID: 720-34711-1

Client Sample ID: NMW-2D

Lab Sample ID: 720-34711-6

Date Collected: 04/20/11 16:25

Matrix: Water

Date Received: 04/21/11 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		5	90411	04/27/11 04:44	AC	TestAmerica San Francisco
Silica Gel Cleanup	Prep	3510C SGC			90175	04/22/11 13:30	AM	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		1	90248	04/23/11 14:09	DH	TestAmerica San Francisco

Client Sample ID: NMW-7

Lab Sample ID: 720-34711-7

Date Collected: 04/20/11 17:55

Matrix: Water

Date Received: 04/21/11 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		10	90411	04/27/11 05:16	AC	TestAmerica San Francisco
Silica Gel Cleanup	Prep	3510C SGC			90175	04/22/11 13:30	AM	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		1	90248	04/23/11 14:33	DH	TestAmerica San Francisco

Client Sample ID: TB-1

Lab Sample ID: 720-34711-8

Date Collected: 04/20/11 09:00

Matrix: Water

Date Received: 04/21/11 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	90179	04/22/11 15:06	LL	TestAmerica San Francisco
Total/NA	Analysis	8260B/CA_LUFTMS		1	90411	04/26/11 23:26	AC	TestAmerica San Francisco

Certification Summary

Client: OTG EnviroEngineering Solutions, Inc.
Project/Site: B112-Oakland

TestAmerica Job ID: 720-34711-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica San Francisco	California	State Program	9	2496

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: OTG EnviroEngineering Solutions, Inc.
Project/Site: B112-Oakland

TestAmerica Job ID: 720-34711-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFT MS	8260B / CA LUFT MS	SW846	TAL SF
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL SF

Protocol References:

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

Laboratory References:

TAL SF = TestAmerica San Francisco, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: OTG EnviroEngineering Solutions, Inc.
Project/Site: B112-Oakland

TestAmerica Job ID: 720-34711-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-34711-1	NMW-9	Water	04/20/11 12:10	04/21/11 10:25
720-34711-2	NMW-6	Water	04/20/11 12:40	04/21/11 10:25
720-34711-3	NMW-4	Water	04/20/11 14:25	04/21/11 10:25
720-34711-4	NMW-1	Water	04/20/11 17:05	04/21/11 10:25
720-34711-5	NMW-2	Water	04/20/11 16:25	04/21/11 10:25
720-34711-6	NMW-2D	Water	04/20/11 16:25	04/21/11 10:25
720-34711-7	NMW-7	Water	04/20/11 17:55	04/21/11 10:25
720-34711-8	TB-1	Water	04/20/11 09:00	04/21/11 10:25

720-34711

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA San Francisco Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 130987

Date 4/21/11 Page 1 of 1

04/29/2011

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Report To

Attn: Xinggang Tong
Company: OTG EnviroEngineering Solutions
Address: 7700 Edgewater Dr, Suite 260, Oakland
Phone: 510-465-8982 Email: xtong@otgenv.com
Bill To: OTG
Sampled By: X. Tong
Attn: X. Tong
Phone (510) 465-8982

Analysis Request

Sample ID	Date	Time	Matrix	Preserv.	TPH EPA - ☐ 8260B ☐ Gas w/ ☐ BTEX ☐ MTBE	TEPH EPA 8015M* ☒ Silica Gel ☒ Diesel ☒ Motor Oil ☐ Other	EPA 8260B: ☒ Gas ☒ BTEX ☒ 5 Oxygenates ☒ DCA, EDB ☒ Ethanol	(HVOCs) EPA 8021 by 8260B	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B ☐ 624	Semivolatiles GC/MS ☐ EPA 8270 ☐ 625	Oil and Grease (EPA 1664) ☐ Petroleum ☐ Total	Pesticides ☐ EPA 8081 ☐ 608 PCBs ☐ EPA 8082 ☐ 608	PNAs by ☐ 8270 ☐ 8310	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Low Level Metals by EPA 200.8/6020 (ICP-MS):	☐ W.E.T (STLC) ☐ TCLP	☐ Hexavalent Chromium ☐ pH (24h hold time for H_2O)	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	Number of Containers
NMW-9	4/20/11	12:10	W	HCl		X	X														
NMW-6	4/20/11	12:40	W	HCl		X	X														
NMW-4	4/20/11	14:25	W	HCl		X	X														
NMW-1	4/20/11	17:05	W	HCl		X	X														
NMW-2	4/20/11	16:25	W	HCl		X	X														
NMW-2d	4/20/11	16:25	W	HCl		X	X														
NMW-7	4/20/11	17:55	W	HCl		X	X														
TB-1	4/20/11	9:00	W	HCl			X														

Project Info

Project Name: B12 - Oakland
Project#: 11HCT03.1000
PO#:
Credit Card#:

Sample Receipt

of Containers: 38
Head Space:
Temp: 2.2°C, 3.1°C
Conforms to record:

TAT: (5 Day) 3 Day 2 Day 1 Day
Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☒ State Tank
Fund EDF
Special Instructions / Comments: ☒ Global ID SLT1976120
Log Code: OTGO

Harry's quote on 6/4/10 for OTG Oakland site

See Terms and Conditions on reverse
*TestAmerica SF reports 8015M from C_9-C_{24} (industry norm). Default for 8015B is C_{10}-C_{28}

1) Relinquished by:
Signature 9:45 Time
Xinggang Tong 4/21/11
Printed Name Date
OTG
Company

2) Relinquished by:
Signature 1025 Time
Bryan Thomas 4/21/11
Printed Name Date
TestAmerica
Company

3) Relinquished by:
Signature Time
Printed Name Date
Company

1) Received by:
Signature 0945 Time
Bryan Thomas 4/21/11
Printed Name Date
TestAmerica
Company

2) Received by:
Signature 1025 Time
Mullen 4-21-11
Printed Name Date
Company

3) Received by:
Signature Time
Printed Name Date
Company

Rev09/09

Login Sample Receipt Checklist

Client: OTG EnviroEngineering Solutions, Inc.

Job Number: 720-34711-1

Login Number: 34711

List Number: 1

Creator: Mullen, Joan

List Source: TestAmerica San Francisco

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica San Francisco
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-34269-1
Client Project/Site: B112-Oakland

For:
OTG EnviroEngineering Solutions, Inc.
7700 Edgwater Drive
Suite 260
Oakland, California 94621

Attn: Xinggang Tong

Authorized for release by:
04/07/2011 04:46:57 PM

Afsaneh Salimpour
Project Manager I
afsaneh.salimpour@testamericainc.com

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Qualifier Definition/Glossary

Client: OTG EnviroEngineering Solutions, Inc.
Project/Site: B112-Oakland

TestAmerica Job ID: 720-34269-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis.
EPA	United States Environmental Protection Agency
ND	Not Detected above the reporting level.
MDL	Method Detection Limit
RL	Reporting Limit
RE, RE1 (etc.)	Indicates a Re-extraction or Reanalysis of the sample.
%R	Percent Recovery
RPD	Relative Percent Difference, a measure of the relative difference between two points.

Job ID: 720-34269-1

Laboratory: TestAmerica San Francisco

Narrative

Job Narrative
720-34269-1

Comments
No additional comments.

Receipt
Received 2 containers for nb-9-4. no extra analysis requested.

All other samples were received in good condition within temperature requirements.

GC Semi VOA
Method(s) 8015B: Due to the level of dilution required for the following sample(s), surrogate recoveries are not reported: (720-34269-1 MS), (720-34269-1 MSD), NB-1-1 (720-34269-1).

Method(s) 8015B: Due to the level of dilution required for the following sample(s), surrogate recoveries are not reported: NB-4-4D (720-34269-22),NB-6-1 (720-34269-5), NB-8-1 (720-34269-7).

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Detection Summary

Client: OTG EnviroEngineering Solutions, Inc.
Project/Site: B112-Oakland

TestAmerica Job ID: 720-34269-1

Client Sample ID: NB-1-1 — Lab Sample ID: 720-34269-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	65		10		mg/Kg	10		8015B	Silica Gel Clean
Motor Oil Range Organics [C24-C36]	590		500		mg/Kg	10		8015B	Silica Gel Clean

Client Sample ID: NB-1-4 — Lab Sample ID: 720-34269-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	46		3.0		mg/Kg	3		8015B	Silica Gel Clean
Motor Oil Range Organics [C24-C36]	210		150		mg/Kg	3		8015B	Silica Gel Clean

Client Sample ID: NB-2-1 — Lab Sample ID: 720-34269-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	2.6		0.98		mg/Kg	1		8015B	Silica Gel Clean

Client Sample ID: NB-2-4 — Lab Sample ID: 720-34269-4

No Detections.

Client Sample ID: NB-6-1 — Lab Sample ID: 720-34269-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	56		4.9		mg/Kg	5		8015B	Silica Gel Clean
Motor Oil Range Organics [C24-C36]	300		250		mg/Kg	5		8015B	Silica Gel Clean

Client Sample ID: NB-6-4 — Lab Sample ID: 720-34269-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	32		3.0		mg/Kg	3		8015B	Silica Gel Clean
Motor Oil Range Organics [C24-C36]	220		150		mg/Kg	3		8015B	Silica Gel Clean

Client Sample ID: NB-8-1 — Lab Sample ID: 720-34269-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	400		20		mg/Kg	20		8015B	Silica Gel Clean
Motor Oil Range Organics [C24-C36]	1800		990		mg/Kg	20		8015B	Silica Gel Clean

Client Sample ID: NB-8-4 — Lab Sample ID: 720-34269-8

No Detections.

Client Sample ID: NB-7-1 — Lab Sample ID: 720-34269-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	30		3.0		mg/Kg	3		8015B	Silica Gel Clean
Motor Oil Range Organics [C24-C36]	160		150		mg/Kg	3		8015B	Silica Gel Clean

Client Sample ID: NB-7-4 — Lab Sample ID: 720-34269-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	15		1.0		mg/Kg	1		8015B	Silica Gel Clean
Motor Oil Range Organics [C24-C36]	62		50		mg/Kg	1		8015B	Silica Gel Clean

Client Sample ID: NB-4-1 — Lab Sample ID: 720-34269-11

Client Sample ID: NB-4-1 (Continued) — Lab Sample ID: 720-34269-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	3.2		0.99		mg/Kg	1		8015B	Silica Gel Clean

Client Sample ID: NB-4-4 — Lab Sample ID: 720-34269-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	11		2.0		mg/Kg	2		8015B	Silica Gel Clean
Motor Oil Range Organics [C24-C36]	280		100		mg/Kg	2		8015B	Silica Gel Clean

Client Sample ID: NB-3-1 — Lab Sample ID: 720-34269-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	11		0.99		mg/Kg	1		8015B	Silica Gel Clean
Motor Oil Range Organics [C24-C36]	61		49		mg/Kg	1		8015B	Silica Gel Clean

Client Sample ID: NB-3-4 — Lab Sample ID: 720-34269-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	7.5		1.0		mg/Kg	1		8015B	Silica Gel Clean
Motor Oil Range Organics [C24-C36]	170		50		mg/Kg	1		8015B	Silica Gel Clean

Client Sample ID: NB-5-1 — Lab Sample ID: 720-34269-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	3.0		0.99		mg/Kg	1		8015B	Silica Gel Clean

Client Sample ID: NB-5-4 — Lab Sample ID: 720-34269-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	1.9		0.99		mg/Kg	1		8015B	Silica Gel Clean

Client Sample ID: NB-9-1 — Lab Sample ID: 720-34269-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	14		0.99		mg/Kg	1		8015B	Silica Gel Clean
Motor Oil Range Organics [C24-C36]	57		50		mg/Kg	1		8015B	Silica Gel Clean

Client Sample ID: NB-9-4 — Lab Sample ID: 720-34269-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	2.7		0.99		mg/Kg	1		8015B	Silica Gel Clean

Client Sample ID: NB-10-1 — Lab Sample ID: 720-34269-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	1.6		0.99		mg/Kg	1		8015B	Silica Gel Clean

Client Sample ID: NB-10-4 — Lab Sample ID: 720-34269-20

No Detections.

Client Sample ID: NB-2-4-D — Lab Sample ID: 720-34269-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	2.6		0.99		mg/Kg	1		8015B	Total/NA

Client: OTG EnviroEngineering Solutions, Inc.
Project/Site: B112-Oakland

TestAmerica Job ID: 720-34269-1

Client Sample ID: NB-4-4D — Lab Sample ID: 720-34269-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	53		4.9		mg/Kg	5		8015B	Total/NA
Motor Oil Range Organics [C24-C36]	320		250		mg/Kg	5		8015B	Total/NA

Client Sample ID: NB-7-4-D — Lab Sample ID: 720-34269-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	37		0.99		mg/Kg	1		8015B	Total/NA
Motor Oil Range Organics [C24-C36]	110		50		mg/Kg	1		8015B	Total/NA

Client Sample ID: NB-1-1

Lab Sample ID: 720-34269-1

Date Collected: 03/28/11 11:15

Matrix: Solid

Date Received: 03/31/11 17:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	65		10		mg/Kg		04/01/11 16:11	04/04/11 11:09	10
Motor Oil Range Organics [C24-C36]	590		500		mg/Kg		04/01/11 16:11	04/04/11 11:09	10

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0*		*0 - 5*	*04/01/11 16:11*	*04/04/11 11:09*	*10*
p-Terphenyl	*0*	*D*	*50 - 150*	*04/01/11 16:11*	*04/04/11 11:09*	*10*

Client Sample ID: NB-1-4

Lab Sample ID: 720-34269-2

Date Collected: 03/28/11 12:10

Matrix: Solid

Date Received: 03/31/11 17:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	46		3.0		mg/Kg		04/01/11 16:11	04/05/11 18:50	3
Motor Oil Range Organics [C24-C36]	210		150		mg/Kg		04/01/11 16:11	04/05/11 18:50	3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*2*		*0 - 5*	*04/01/11 16:11*	*04/05/11 18:50*	*3*
p-Terphenyl	*69*		*50 - 150*	*04/01/11 16:11*	*04/05/11 18:50*	*3*

Client Sample ID: NB-2-1

Lab Sample ID: 720-34269-3

Date Collected: 03/28/11 12:38

Matrix: Solid

Date Received: 03/31/11 17:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.6		0.98		mg/Kg		04/01/11 16:11	04/04/11 14:21	1
Motor Oil Range Organics [C24-C36]	ND		49		mg/Kg		04/01/11 16:11	04/04/11 14:21	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.1*		*0 - 5*	*04/01/11 16:11*	*04/04/11 14:21*	*1*
p-Terphenyl	*86*		*50 - 150*	*04/01/11 16:11*	*04/04/11 14:21*	*1*

Client Sample ID: NB-2-4

Lab Sample ID: 720-34269-4

Date Collected: 03/28/11 13:20

Matrix: Solid

Date Received: 03/31/11 17:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		0.99		mg/Kg		04/01/11 16:11	04/04/11 11:56	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		04/01/11 16:11	04/04/11 11:56	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.07*		*0 - 5*	*04/01/11 16:11*	*04/04/11 11:56*	*1*
p-Terphenyl	*86*		*50 - 150*	*04/01/11 16:11*	*04/04/11 11:56*	*1*

Client Sample ID: NB-6-1

Lab Sample ID: 720-34269-5

Date Collected: 03/28/11 13:50

Matrix: Solid

Date Received: 03/31/11 17:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	56		4.9		mg/Kg		04/01/11 16:11	04/04/11 15:32	5
Motor Oil Range Organics [C24-C36]	300		250		mg/Kg		04/01/11 16:11	04/04/11 15:32	5

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0*		*0 - 5*	*04/01/11 16:11*	*04/04/11 15:32*	*5*
p-Terphenyl	*0*	*D*	*50 - 150*	*04/01/11 16:11*	*04/04/11 15:32*	*5*

Client Sample ID: NB-6-4

Lab Sample ID: 720-34269-6

Date Collected: 03/28/11 16:10

Matrix: Solid

Date Received: 03/31/11 17:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	32		3.0		mg/Kg		04/01/11 16:11	04/05/11 19:14	3
Motor Oil Range Organics [C24-C36]	220		150		mg/Kg		04/01/11 16:11	04/05/11 19:14	3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*1*		*0 - 5*	*04/01/11 16:11*	*04/05/11 19:14*	*3*
p-Terphenyl	*61*		*50 - 150*	*04/01/11 16:11*	*04/05/11 19:14*	*3*

Client Sample ID: NB-8-1

Lab Sample ID: 720-34269-7

Date Collected: 03/28/11 16:40

Matrix: Solid

Date Received: 03/31/11 17:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	400		20		mg/Kg		04/01/11 16:11	04/06/11 20:33	20
Motor Oil Range Organics [C24-C36]	1800		990		mg/Kg		04/01/11 16:11	04/06/11 20:33	20

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*3*		*0 - 5*	*04/01/11 16:11*	*04/06/11 20:33*	*20*
p-Terphenyl	*0*	*D X*	*50 - 150*	*04/01/11 16:11*	*04/06/11 20:33*	*20*

Client Sample ID: NB-8-4

Lab Sample ID: 720-34269-8

Date Collected: 03/28/11 17:15

Matrix: Solid

Date Received: 03/31/11 17:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		0.98		mg/Kg		04/01/11 16:11	04/04/11 14:45	1
Motor Oil Range Organics [C24-C36]	ND		49		mg/Kg		04/01/11 16:11	04/04/11 14:45	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.1*		*0 - 5*	*04/01/11 16:11*	*04/04/11 14:45*	*1*
p-Terphenyl	*89*		*50 - 150*	*04/01/11 16:11*	*04/04/11 14:45*	*1*

Client Sample ID: NB-7-1

Lab Sample ID: 720-34269-9

Date Collected: 03/29/11 09:20

Matrix: Solid

Date Received: 03/31/11 17:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	30		3.0		mg/Kg		04/01/11 16:11	04/06/11 20:57	3
Motor Oil Range Organics [C24-C36]	160		150		mg/Kg		04/01/11 16:11	04/06/11 20:57	3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.4*		*0 - 5*	*04/01/11 16:11*	*04/06/11 20:57*	*3*
p-Terphenyl	*80*		*50 - 150*	*04/01/11 16:11*	*04/06/11 20:57*	*3*

Client Sample ID: NB-7-4

Lab Sample ID: 720-34269-10

Date Collected: 03/29/11 10:50

Matrix: Solid

Date Received: 03/31/11 17:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	15		1.0		mg/Kg		04/05/11 14:30	04/06/11 15:09	1
Motor Oil Range Organics [C24-C36]	62		50		mg/Kg		04/05/11 14:30	04/06/11 15:09	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.1*		*0 - 5*	*04/05/11 14:30*	*04/06/11 15:09*	*1*
p-Terphenyl	*55*		*50 - 150*	*04/05/11 14:30*	*04/06/11 15:09*	*1*

Client Sample ID: NB-4-1

Lab Sample ID: 720-34269-11

Date Collected: 03/29/11 11:25

Matrix: Solid

Date Received: 03/31/11 17:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3.2		0.99		mg/Kg		04/05/11 14:30	04/06/11 16:16	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		04/05/11 14:30	04/06/11 16:16	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.6*		*0 - 5*	*04/05/11 14:30*	*04/06/11 16:16*	*1*
p-Terphenyl	*100*		*50 - 150*	*04/05/11 14:30*	*04/06/11 16:16*	*1*

Client Sample ID: NB-4-4

Lab Sample ID: 720-34269-12

Date Collected: 03/29/11 12:10

Matrix: Solid

Date Received: 03/31/11 17:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	11		2.0		mg/Kg		04/05/11 14:30	04/06/11 17:26	2
Motor Oil Range Organics [C24-C36]	280		100		mg/Kg		04/05/11 14:30	04/06/11 17:26	2

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.2*		*0 - 5*	*04/05/11 14:30*	*04/06/11 17:26*	*2*
p-Terphenyl	*55*		*50 - 150*	*04/05/11 14:30*	*04/06/11 17:26*	*2*

Client Sample ID: NB-3-1

Lab Sample ID: 720-34269-13

Date Collected: 03/29/11 12:35

Matrix: Solid

Date Received: 03/31/11 17:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	11		0.99		mg/Kg		04/05/11 14:30	04/06/11 17:49	1
Motor Oil Range Organics [C24-C36]	61		49		mg/Kg		04/05/11 14:30	04/06/11 17:49	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.4*		*0 - 5*	*04/05/11 14:30*	*04/06/11 17:49*	*1*
p-Terphenyl	*88*		*50 - 150*	*04/05/11 14:30*	*04/06/11 17:49*	*1*

Client Sample ID: NB-3-4

Lab Sample ID: 720-34269-14

Date Collected: 03/29/11 14:00

Matrix: Solid

Date Received: 03/31/11 17:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	7.5		1.0		mg/Kg		04/05/11 14:30	04/06/11 18:13	1
Motor Oil Range Organics [C24-C36]	170		50		mg/Kg		04/05/11 14:30	04/06/11 18:13	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.2*		*0 - 5*	*04/05/11 14:30*	*04/06/11 18:13*	*1*
p-Terphenyl	*59*		*50 - 150*	*04/05/11 14:30*	*04/06/11 18:13*	*1*

Client Sample ID: NB-5-1

Lab Sample ID: 720-34269-15

Date Collected: 03/29/11 14:25

Matrix: Solid

Date Received: 03/31/11 17:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3.0		0.99		mg/Kg		04/05/11 14:30	04/06/11 18:36	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		04/05/11 14:30	04/06/11 18:36	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.2*		*0 - 5*	*04/05/11 14:30*	*04/06/11 18:36*	*1*
p-Terphenyl	*100*		*50 - 150*	*04/05/11 14:30*	*04/06/11 18:36*	*1*

Client Sample ID: NB-5-4

Lab Sample ID: 720-34269-16

Date Collected: 03/29/11 14:50

Matrix: Solid

Date Received: 03/31/11 17:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1.9		0.99		mg/Kg		04/05/11 14:30	04/06/11 18:59	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		04/05/11 14:30	04/06/11 18:59	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.09*		*0 - 5*	*04/05/11 14:30*	*04/06/11 18:59*	*1*
p-Terphenyl	*104*		*50 - 150*	*04/05/11 14:30*	*04/06/11 18:59*	*1*

Client Sample ID: NB-9-1

Lab Sample ID: 720-34269-17

Date Collected: 03/29/11 15:15

Matrix: Solid

Date Received: 03/31/11 17:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	14		0.99		mg/Kg		04/05/11 14:30	04/07/11 14:03	1
Motor Oil Range Organics [C24-C36]	57		50		mg/Kg		04/05/11 14:30	04/07/11 14:03	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.4*		*0 - 5*	*04/05/11 14:30*	*04/07/11 14:03*	*1*
p-Terphenyl	*89*		*50 - 150*	*04/05/11 14:30*	*04/07/11 14:03*	*1*

Client Sample ID: NB-9-4

Lab Sample ID: 720-34269-18

Date Collected: 03/29/11 15:45

Matrix: Solid

Date Received: 03/31/11 17:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.7		0.99		mg/Kg		04/05/11 14:30	04/06/11 19:46	1
Motor Oil Range Organics [C24-C36]	ND		49		mg/Kg		04/05/11 14:30	04/06/11 19:46	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.2*		*0 - 5*	*04/05/11 14:30*	*04/06/11 19:46*	*1*
p-Terphenyl	*79*		*50 - 150*	*04/05/11 14:30*	*04/06/11 19:46*	*1*

Client Sample ID: NB-10-1

Lab Sample ID: 720-34269-19

Date Collected: 03/29/11 16:10

Matrix: Solid

Date Received: 03/31/11 17:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1.6		0.99		mg/Kg		04/05/11 14:30	04/06/11 16:16	1
Motor Oil Range Organics [C24-C36]	ND		49		mg/Kg		04/05/11 14:30	04/06/11 16:16	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.3*		*0 - 5*	*04/05/11 14:30*	*04/06/11 16:16*	*1*
p-Terphenyl	*84*		*50 - 150*	*04/05/11 14:30*	*04/06/11 16:16*	*1*

Client Sample ID: NB-10-4

Lab Sample ID: 720-34269-20

Date Collected: 03/29/11 16:42

Matrix: Solid

Date Received: 03/31/11 17:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		0.98		mg/Kg		04/05/11 14:30	04/06/11 16:39	1
Motor Oil Range Organics [C24-C36]	ND		49		mg/Kg		04/05/11 14:30	04/06/11 16:39	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.03*		*0 - 5*	*04/05/11 14:30*	*04/06/11 16:39*	*1*
p-Terphenyl	*79*		*50 - 150*	*04/05/11 14:30*	*04/06/11 16:39*	*1*

Client Sample ID: NB-2-4-D

Lab Sample ID: 720-34269-21

Date Collected: 03/28/11 13:20

Matrix: Solid

Date Received: 03/31/11 17:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.6		0.99		mg/Kg		04/01/11 16:08	04/04/11 15:55	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		04/01/11 16:08	04/04/11 15:55	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*93*		*50 - 150*	*04/01/11 16:08*	*04/04/11 15:55*	*1*

Client Sample ID: NB-4-4D

Lab Sample ID: 720-34269-22

Date Collected: 03/29/11 12:10

Matrix: Solid

Date Received: 03/31/11 17:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	53		4.9		mg/Kg		04/01/11 16:08	04/04/11 16:42	5
Motor Oil Range Organics [C24-C36]	320		250		mg/Kg		04/01/11 16:08	04/04/11 16:42	5

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*0*	*D*	*50 - 150*	*04/01/11 16:08*	*04/04/11 16:42*	*5*

Client Sample ID: NB-7-4-D

Lab Sample ID: 720-34269-23

Date Collected: 03/29/11 10:50

Matrix: Solid

Date Received: 03/31/11 17:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	37		0.99		mg/Kg		04/01/11 16:08	04/04/11 16:18	1
Motor Oil Range Organics [C24-C36]	110		50		mg/Kg		04/01/11 16:08	04/04/11 16:18	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*66*		*50 - 150*	*04/01/11 16:08*	*04/04/11 16:18*	*1*

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

Lab Sample ID: MB 720-88813/1-A
Matrix: Solid
Analysis Batch: 88838

Client Sample ID: MB 720-88813/1-A
Prep Type: Total/NA
Prep Batch: 88813

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		0.99		mg/Kg		04/01/11 16:08	04/02/11 16:09	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		04/01/11 16:08	04/02/11 16:09	1

Surrogate	*MB % Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*110*		*50 - 150*	*04/01/11 16:08*	*04/02/11 16:09*	*1*

Lab Sample ID: LCS 720-88813/2-A
Matrix: Solid
Analysis Batch: 88838

Client Sample ID: LCS 720-88813/2-A
Prep Type: Total/NA
Prep Batch: 88813

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Diesel Range Organics [C10-C28]	83.2	74.6		mg/Kg		90	50 - 150

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*96*		*50 - 150*

Lab Sample ID: LCSD 720-88813/3-A
Matrix: Solid
Analysis Batch: 88838

Client Sample ID: LCSD 720-88813/3-A
Prep Type: Total/NA
Prep Batch: 88813

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	82.9	80.3		mg/Kg		97	50 - 150	7	20

Surrogate	*LCSD % Recovery*	*LCSD Qualifier*	*Limits*
p-Terphenyl	*104*		*50 - 150*

Lab Sample ID: MB 720-88814/1-A
Matrix: Solid
Analysis Batch: 88838

Client Sample ID: MB 720-88814/1-A
Prep Type: Silica Gel Cleanup
Prep Batch: 88814

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		0.99		mg/Kg		04/01/11 16:11	04/02/11 17:19	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		04/01/11 16:11	04/02/11 17:19	1

Surrogate	*MB % Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.4*		*0 - 5*	*04/01/11 16:11*	*04/02/11 17:19*	*1*
p-Terphenyl	*104*		*50 - 150*	*04/01/11 16:11*	*04/02/11 17:19*	*1*

Lab Sample ID: LCS 720-88814/2-A
Matrix: Solid
Analysis Batch: 88838

Client Sample ID: LCS 720-88814/2-A
Prep Type: Silica Gel Cleanup
Prep Batch: 88814

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Diesel Range Organics [C10-C28]	83.2	63.8		mg/Kg		77	50 - 150

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

Lab Sample ID: LCS 720-88814/2-A
Matrix: Solid
Analysis Batch: 88838

Client Sample ID: LCS 720-88814/2-A
Prep Type: Silica Gel Cleanup
Prep Batch: 88814

Surrogate	LCS % Recovery	LCS Qualifier	Limits
p-Terphenyl	88		50 - 150

Lab Sample ID: LCSD 720-88814/3-A
Matrix: Solid
Analysis Batch: 88838

Client Sample ID: LCSD 720-88814/3-A
Prep Type: Silica Gel Cleanup
Prep Batch: 88814

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			82.9	70.1		mg/Kg		85	50 - 150	9	20

Surrogate	LCSD % Recovery	LCSD Qualifier	Limits
p-Terphenyl	101		50 - 150

Lab Sample ID: 720-34269-1 MS
Matrix: Solid
Analysis Batch: 88864

Client Sample ID: NB-1-1
Prep Type: Silica Gel Cleanup
Prep Batch: 88814

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	% Rec	% Rec. Limits
Diesel Range Organics [C10-C28]	65		82.4	138		mg/Kg		89	50 - 150

Surrogate	MS % Recovery	MS Qualifier	Limits
p-Terphenyl	0	D	50 - 150

Lab Sample ID: 720-34269-1 MSD
Matrix: Solid
Analysis Batch: 88864

Client Sample ID: NB-1-1
Prep Type: Silica Gel Cleanup
Prep Batch: 88814

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	65		82.9	133		mg/Kg		82	50 - 150	4	20

Surrogate	MSD % Recovery	MSD Qualifier	Limits
p-Terphenyl	0	D	50 - 150

Lab Sample ID: MB 720-88994/1-A
Matrix: Solid
Analysis Batch: 89029

Client Sample ID: MB 720-88994/1-A
Prep Type: Silica Gel Cleanup
Prep Batch: 88994

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		1.0		mg/Kg		04/05/11 14:30	04/06/11 09:53	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		04/05/11 14:30	04/06/11 09:53	1

Surrogate	MB % Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.03		0 - 5	04/05/11 14:30	04/06/11 09:53	1
p-Terphenyl	124		50 - 150	04/05/11 14:30	04/06/11 09:53	1

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

Lab Sample ID: LCS 720-88994/2-A
Matrix: Solid
Analysis Batch: 89029

Client Sample ID: LCS 720-88994/2-A
Prep Type: Silica Gel Cleanup
Prep Batch: 88994

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Diesel Range Organics [C10-C28]			82.8	80.8		mg/Kg		98	50 - 150		

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*106*		*50 - 150*

Lab Sample ID: LCSD 720-88994/3-A
Matrix: Solid
Analysis Batch: 89029

Client Sample ID: LCSD 720-88994/3-A
Prep Type: Silica Gel Cleanup
Prep Batch: 88994

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			82.8	78.6		mg/Kg		95	50 - 150	3	20

Surrogate	*LCSD % Recovery*	*LCSD Qualifier*	*Limits*
p-Terphenyl	*107*		*50 - 150*

Lab Sample ID: 720-34269-11 MS
Matrix: Solid
Analysis Batch: 89040

Client Sample ID: NB-4-1
Prep Type: Silica Gel Cleanup
Prep Batch: 88994

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	% Rec	% Rec. Limits		
Diesel Range Organics [C10-C28]	3.2		82.7	73.8		mg/Kg		85	50 - 150		

Surrogate	*MS % Recovery*	*MS Qualifier*	*Limits*
p-Terphenyl	*101*		*50 - 150*

Lab Sample ID: 720-34269-11 MSD
Matrix: Solid
Analysis Batch: 89040

Client Sample ID: NB-4-1
Prep Type: Silica Gel Cleanup
Prep Batch: 88994

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	3.2		82.7	79.4		mg/Kg		92	50 - 150	7	20

Surrogate	*MSD % Recovery*	*MSD Qualifier*	*Limits*
p-Terphenyl	*103*		*50 - 150*

GC Semi VOA

Prep Batch: 88813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-88813/1-A	MB 720-88813/1-A	Total/NA	Solid	3546	
720-34269-21	NB-2-4-D	Total/NA	Solid	3546	
720-34269-22	NB-4-4D	Total/NA	Solid	3546	
720-34269-23	NB-7-4-D	Total/NA	Solid	3546	
LCS 720-88813/2-A	LCS 720-88813/2-A	Total/NA	Solid	3546	
LCSD 720-88813/3-A	LCSD 720-88813/3-A	Total/NA	Solid	3546	

Prep Batch: 88814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-88814/1-A	MB 720-88814/1-A	Silica Gel Cleanup	Solid	3546	
720-34269-5	NB-6-1	Silica Gel Cleanup	Solid	3546	
720-34269-6	NB-6-4	Silica Gel Cleanup	Solid	3546	
720-34269-7	NB-8-1	Silica Gel Cleanup	Solid	3546	
720-34269-8	NB-8-4	Silica Gel Cleanup	Solid	3546	
720-34269-9	NB-7-1	Silica Gel Cleanup	Solid	3546	
LCS 720-88814/2-A	LCS 720-88814/2-A	Silica Gel Cleanup	Solid	3546	
LCSD 720-88814/3-A	LCSD 720-88814/3-A	Silica Gel Cleanup	Solid	3546	
720-34269-1	NB-1-1	Silica Gel Cleanup	Solid	3546	
720-34269-1 MS	NB-1-1	Silica Gel Cleanup	Solid	3546	
720-34269-1 MSD	NB-1-1	Silica Gel Cleanup	Solid	3546	
720-34269-2	NB-1-4	Silica Gel Cleanup	Solid	3546	
720-34269-3	NB-2-1	Silica Gel Cleanup	Solid	3546	
720-34269-4	NB-2-4	Silica Gel Cleanup	Solid	3546	

Analysis Batch: 88838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-88813/2-A	LCS 720-88813/2-A	Total/NA	Solid	8015B	88813
LCSD 720-88813/3-A	LCSD 720-88813/3-A	Total/NA	Solid	8015B	88813
MB 720-88813/1-A	MB 720-88813/1-A	Total/NA	Solid	8015B	88813
LCS 720-88814/2-A	LCS 720-88814/2-A	Silica Gel Cleanup	Solid	8015B	88814
LCSD 720-88814/3-A	LCSD 720-88814/3-A	Silica Gel Cleanup	Solid	8015B	88814
MB 720-88814/1-A	MB 720-88814/1-A	Silica Gel Cleanup	Solid	8015B	88814

Analysis Batch: 88863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-34269-21	NB-2-4-D	Total/NA	Solid	8015B	88813
720-34269-23	NB-7-4-D	Total/NA	Solid	8015B	88813
720-34269-22	NB-4-4D	Total/NA	Solid	8015B	88813

Analysis Batch: 88864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-34269-1	NB-1-1	Silica Gel Cleanup	Solid	8015B	88814
720-34269-4	NB-2-4	Silica Gel Cleanup	Solid	8015B	88814
720-34269-3	NB-2-1	Silica Gel Cleanup	Solid	8015B	88814
720-34269-8	NB-8-4	Silica Gel Cleanup	Solid	8015B	88814
720-34269-5	NB-6-1	Silica Gel Cleanup	Solid	8015B	88814
720-34269-1 MS	NB-1-1	Silica Gel Cleanup	Solid	8015B	88814
720-34269-1 MSD	NB-1-1	Silica Gel Cleanup	Solid	8015B	88814

Analysis Batch: 88948

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-34269-2	NB-1-4	Silica Gel Cleanup	Solid	8015B	88814

GC Semi VOA (Continued)

Analysis Batch: 88948 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-34269-6	NB-6-4	Silica Gel Cleanup	Solid	8015B	88814

Prep Batch: 88994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-88994/1-A	MB 720-88994/1-A	Silica Gel Cleanup	Solid	3546	
720-34269-14	NB-3-4	Silica Gel Cleanup	Solid	3546	
720-34269-15	NB-5-1	Silica Gel Cleanup	Solid	3546	
720-34269-16	NB-5-4	Silica Gel Cleanup	Solid	3546	
720-34269-17	NB-9-1	Silica Gel Cleanup	Solid	3546	
720-34269-18	NB-9-4	Silica Gel Cleanup	Solid	3546	
720-34269-19	NB-10-1	Silica Gel Cleanup	Solid	3546	
720-34269-20	NB-10-4	Silica Gel Cleanup	Solid	3546	
LCS 720-88994/2-A	LCS 720-88994/2-A	Silica Gel Cleanup	Solid	3546	
LCSD 720-88994/3-A	LCSD 720-88994/3-A	Silica Gel Cleanup	Solid	3546	
720-34269-10	NB-7-4	Silica Gel Cleanup	Solid	3546	
720-34269-11	NB-4-1	Silica Gel Cleanup	Solid	3546	
720-34269-11 MS	NB-4-1	Silica Gel Cleanup	Solid	3546	
720-34269-11 MSD	NB-4-1	Silica Gel Cleanup	Solid	3546	
720-34269-12	NB-4-4	Silica Gel Cleanup	Solid	3546	
720-34269-13	NB-3-1	Silica Gel Cleanup	Solid	3546	

Analysis Batch: 89029

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-34269-10	NB-7-4	Silica Gel Cleanup	Solid	8015B	88994
MB 720-88994/1-A	MB 720-88994/1-A	Silica Gel Cleanup	Solid	8015B	88994
LCS 720-88994/2-A	LCS 720-88994/2-A	Silica Gel Cleanup	Solid	8015B	88994
LCSD 720-88994/3-A	LCSD 720-88994/3-A	Silica Gel Cleanup	Solid	8015B	88994

Analysis Batch: 89040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-34269-11	NB-4-1	Silica Gel Cleanup	Solid	8015B	88994
720-34269-11 MS	NB-4-1	Silica Gel Cleanup	Solid	8015B	88994
720-34269-11 MSD	NB-4-1	Silica Gel Cleanup	Solid	8015B	88994
720-34269-12	NB-4-4	Silica Gel Cleanup	Solid	8015B	88994
720-34269-13	NB-3-1	Silica Gel Cleanup	Solid	8015B	88994
720-34269-14	NB-3-4	Silica Gel Cleanup	Solid	8015B	88994
720-34269-15	NB-5-1	Silica Gel Cleanup	Solid	8015B	88994
720-34269-16	NB-5-4	Silica Gel Cleanup	Solid	8015B	88994
720-34269-18	NB-9-4	Silica Gel Cleanup	Solid	8015B	88994

Analysis Batch: 89041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-34269-19	NB-10-1	Silica Gel Cleanup	Solid	8015B	88994
720-34269-20	NB-10-4	Silica Gel Cleanup	Solid	8015B	88994
720-34269-7	NB-8-1	Silica Gel Cleanup	Solid	8015B	88814
720-34269-9	NB-7-1	Silica Gel Cleanup	Solid	8015B	88814

Analysis Batch: 89119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-34269-17	NB-9-1	Silica Gel Cleanup	Solid	8015B	88994

Lab Chronicle

Client: OTG EnviroEngineering Solutions, Inc.
Project/Site: B112-Oakland

TestAmerica Job ID: 720-34269-1

Client Sample ID: NB-1-1
Date Collected: 03/28/11 11:15
Date Received: 03/31/11 17:15

Lab Sample ID: 720-34269-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3546			88814	04/01/11 16:11	RU	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		10	88864	04/04/11 11:09	DH	TestAmerica San Francisco

Client Sample ID: NB-1-4
Date Collected: 03/28/11 12:10
Date Received: 03/31/11 17:15

Lab Sample ID: 720-34269-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3546			88814	04/01/11 16:11	RU	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		3	88948	04/05/11 18:50	DH	TestAmerica San Francisco

Client Sample ID: NB-2-1
Date Collected: 03/28/11 12:38
Date Received: 03/31/11 17:15

Lab Sample ID: 720-34269-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3546			88814	04/01/11 16:11	RU	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		1	88864	04/04/11 14:21	DH	TestAmerica San Francisco

Client Sample ID: NB-2-4
Date Collected: 03/28/11 13:20
Date Received: 03/31/11 17:15

Lab Sample ID: 720-34269-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3546			88814	04/01/11 16:11	RU	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		1	88864	04/04/11 11:56	DH	TestAmerica San Francisco

Client Sample ID: NB-6-1
Date Collected: 03/28/11 13:50
Date Received: 03/31/11 17:15

Lab Sample ID: 720-34269-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3546			88814	04/01/11 16:11	RU	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		5	88864	04/04/11 15:32	DH	TestAmerica San Francisco

Client Sample ID: NB-6-4
Date Collected: 03/28/11 16:10
Date Received: 03/31/11 17:15

Lab Sample ID: 720-34269-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3546			88814	04/01/11 16:11	RU	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		3	88948	04/05/11 19:14	DH	TestAmerica San Francisco

Lab Chronicle

Client: OTG EnviroEngineering Solutions, Inc.
Project/Site: B112-Oakland

TestAmerica Job ID: 720-34269-1

Client Sample ID: NB-8-1
Date Collected: 03/28/11 16:40
Date Received: 03/31/11 17:15

Lab Sample ID: 720-34269-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3546			88814	04/01/11 16:11	RU	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		20	89041	04/06/11 20:33	DH	TestAmerica San Francisco

Client Sample ID: NB-8-4
Date Collected: 03/28/11 17:15
Date Received: 03/31/11 17:15

Lab Sample ID: 720-34269-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3546			88814	04/01/11 16:11	RU	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		1	88864	04/04/11 14:45	DH	TestAmerica San Francisco

Client Sample ID: NB-7-1
Date Collected: 03/29/11 09:20
Date Received: 03/31/11 17:15

Lab Sample ID: 720-34269-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3546			88814	04/01/11 16:11	RU	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		3	89041	04/06/11 20:57	DH	TestAmerica San Francisco

Client Sample ID: NB-7-4
Date Collected: 03/29/11 10:50
Date Received: 03/31/11 17:15

Lab Sample ID: 720-34269-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3546			88994	04/05/11 14:30	RU	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		1	89029	04/06/11 15:09	DH	TestAmerica San Francisco

Client Sample ID: NB-4-1
Date Collected: 03/29/11 11:25
Date Received: 03/31/11 17:15

Lab Sample ID: 720-34269-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3546			88994	04/05/11 14:30	RU	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		1	89040	04/06/11 16:16	DH	TestAmerica San Francisco

Client Sample ID: NB-4-4
Date Collected: 03/29/11 12:10
Date Received: 03/31/11 17:15

Lab Sample ID: 720-34269-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3546			88994	04/05/11 14:30	RU	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		2	89040	04/06/11 17:26	DH	TestAmerica San Francisco

Lab Chronicle

Client: OTG EnviroEngineering Solutions, Inc.
Project/Site: B112-Oakland

TestAmerica Job ID: 720-34269-1

Client Sample ID: NB-3-1
Date Collected: 03/29/11 12:35
Date Received: 03/31/11 17:15

Lab Sample ID: 720-34269-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3546			88994	04/05/11 14:30	RU	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		1	89040	04/06/11 17:49	DH	TestAmerica San Francisco

Client Sample ID: NB-3-4
Date Collected: 03/29/11 14:00
Date Received: 03/31/11 17:15

Lab Sample ID: 720-34269-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3546			88994	04/05/11 14:30	RU	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		1	89040	04/06/11 18:13	DH	TestAmerica San Francisco

Client Sample ID: NB-5-1
Date Collected: 03/29/11 14:25
Date Received: 03/31/11 17:15

Lab Sample ID: 720-34269-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3546			88994	04/05/11 14:30	RU	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		1	89040	04/06/11 18:36	DH	TestAmerica San Francisco

Client Sample ID: NB-5-4
Date Collected: 03/29/11 14:50
Date Received: 03/31/11 17:15

Lab Sample ID: 720-34269-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3546			88994	04/05/11 14:30	RU	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		1	89040	04/06/11 18:59	DH	TestAmerica San Francisco

Client Sample ID: NB-9-1
Date Collected: 03/29/11 15:15
Date Received: 03/31/11 17:15

Lab Sample ID: 720-34269-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3546			88994	04/05/11 14:30	RU	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		1	89119	04/07/11 14:03	WR	TestAmerica San Francisco

Client Sample ID: NB-9-4
Date Collected: 03/29/11 15:45
Date Received: 03/31/11 17:15

Lab Sample ID: 720-34269-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3546			88994	04/05/11 14:30	RU	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		1	89040	04/06/11 19:46	DH	TestAmerica San Francisco

Client Sample ID: NB-10-1 — **Lab Sample ID: 720-34269-19**
Date Collected: 03/29/11 16:10 — **Matrix: Solid**
Date Received: 03/31/11 17:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3546			88994	04/05/11 14:30	RU	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		1	89041	04/06/11 16:16	DH	TestAmerica San Francisco

Client Sample ID: NB-10-4 — **Lab Sample ID: 720-34269-20**
Date Collected: 03/29/11 16:42 — **Matrix: Solid**
Date Received: 03/31/11 17:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3546			88994	04/05/11 14:30	RU	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		1	89041	04/06/11 16:39	DH	TestAmerica San Francisco

Client Sample ID: NB-2-4-D — **Lab Sample ID: 720-34269-21**
Date Collected: 03/28/11 13:20 — **Matrix: Solid**
Date Received: 03/31/11 17:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			88813	04/01/11 16:08	RU	TestAmerica San Francisco
Total/NA	Analysis	8015B		1	88863	04/04/11 15:55	DH	TestAmerica San Francisco

Client Sample ID: NB-4-4D — **Lab Sample ID: 720-34269-22**
Date Collected: 03/29/11 12:10 — **Matrix: Solid**
Date Received: 03/31/11 17:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			88813	04/01/11 16:08	RU	TestAmerica San Francisco
Total/NA	Analysis	8015B		5	88863	04/04/11 16:42	DH	TestAmerica San Francisco

Client Sample ID: NB-7-4-D — **Lab Sample ID: 720-34269-23**
Date Collected: 03/29/11 10:50 — **Matrix: Solid**
Date Received: 03/31/11 17:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			88813	04/01/11 16:08	RU	TestAmerica San Francisco
Total/NA	Analysis	8015B		1	88863	04/04/11 16:18	DH	TestAmerica San Francisco

Certification Summary

Client: OTG EnviroEngineering Solutions, Inc.
Project/Site: B112-Oakland

TestAmerica Job ID: 720-34269-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica San Francisco	California	State Program	9	2496

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: OTG EnviroEngineering Solutions, Inc.
Project/Site: B112-Oakland

TestAmerica Job ID: 720-34269-1

Method	Method Description	Protocol	Laboratory
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL SF

Protocol References:

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

Laboratory References:

TAL SF = TestAmerica San Francisco, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: OTG EnviroEngineering Solutions, Inc.
Project/Site: B112-Oakland

TestAmerica Job ID: 720-34269-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-34269-1	NB-1-1	Solid	03/28/11 11:15	03/31/11 17:15
720-34269-2	NB-1-4	Solid	03/28/11 12:10	03/31/11 17:15
720-34269-3	NB-2-1	Solid	03/28/11 12:38	03/31/11 17:15
720-34269-4	NB-2-4	Solid	03/28/11 13:20	03/31/11 17:15
720-34269-5	NB-6-1	Solid	03/28/11 13:50	03/31/11 17:15
720-34269-6	NB-6-4	Solid	03/28/11 16:10	03/31/11 17:15
720-34269-7	NB-8-1	Solid	03/28/11 16:40	03/31/11 17:15
720-34269-8	NB-8-4	Solid	03/28/11 17:15	03/31/11 17:15
720-34269-9	NB-7-1	Solid	03/29/11 09:20	03/31/11 17:15
720-34269-10	NB-7-4	Solid	03/29/11 10:50	03/31/11 17:15
720-34269-11	NB-4-1	Solid	03/29/11 11:25	03/31/11 17:15
720-34269-12	NB-4-4	Solid	03/29/11 12:10	03/31/11 17:15
720-34269-13	NB-3-1	Solid	03/29/11 12:35	03/31/11 17:15
720-34269-14	NB-3-4	Solid	03/29/11 14:00	03/31/11 17:15
720-34269-15	NB-5-1	Solid	03/29/11 14:25	03/31/11 17:15
720-34269-16	NB-5-4	Solid	03/29/11 14:50	03/31/11 17:15
720-34269-17	NB-9-1	Solid	03/29/11 15:15	03/31/11 17:15
720-34269-18	NB-9-4	Solid	03/29/11 15:45	03/31/11 17:15
720-34269-19	NB-10-1	Solid	03/29/11 16:10	03/31/11 17:15
720-34269-20	NB-10-4	Solid	03/29/11 16:42	03/31/11 17:15
720-34269-21	NB-2-4-D	Solid	03/28/11 13:20	03/31/11 17:15
720-34269-22	NB-4-4D	Solid	03/29/11 12:10	03/31/11 17:15
720-34269-23	NB-7-4-D	Solid	03/29/11 10:50	03/31/11 17:15

720-34269

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA San Francisco Chain of Custody

1220 Quarry Lane • Pleasanton CA 94566-4756

Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 130552 · 5.4

Date_____ Page_____of_____

04/07/2011

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Report To

Attn: Xinggang Tong

Company: OTG EnviroEngineering Solutions

Address: 7100 Edgewater Dr., Suite 260, Oakland

Phone: 510-465-8982 Email: xtong@otgenv.com

Bill To: OTG

Sampled By: X Tong

Attn: X Tong

Phone: 510-465-8982

Analysis Request

Sample ID	Date	Time	Mat rix	Preserv	TPH EPA - ☐ 8260B ☐ Gas w/ ☐ BTEX ☐ MTBE	TEPH EPA 8015M* ☒ Silica Gel ☒ Diesel ☒ Motor Oil ☐ Other ___	EPA 8260B: ☒ Gas ☒ BTEX ☐ 5 Oxygenates ☒ DCA, EDB ☒ Ethanol	(HVOCs) EPA 8021 by 8260B	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B ☐ 624	Semivolatiles GC/MS ☐ EPA 8270 ☐ 625	Oil and Grease ☐ Petroleum (EPA 1664) ☐ Total	Pesticides ☐ EPA 8081 ☐ 608 PCBs ☐ EPA 8082 ☐ 608	PNAs by ☐ 8270 ☐ 8310	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___	Low Level Metals by EPA 200.8/6020 (ICP-MS): ___	☐ W.E.T (STLC) ☐ TCLP	☐ Hexavalent Chromium ☐ pH (24h hold time for H_2O)	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	EPA 8015M-TPH d&mo Without Silica gel cleanu				Number of Containers
21 NB-2-4d	3/28/11	13:20	S	NO																		X				
22 NB-4-4d	3/29/11	12:10	S	NO																		X				
23 NB-7-4d	3/29/11	10:50	S	NO																		X				

Project Info

Project Name: B112-Oakland

Project#: 11HCT03.1000

PO#:

Credit Card#:

Sample Receipt

of Containers:

Head Space:

Temp:

Conforms to record:

TAT: 5 Day | 3 Day | 2 Day | 1 Day

Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☒ State Tank

Fund EDF

Special Instructions / Comments: ☒ Global ID SLT19761201

LogCode: OTGO

Harry's quote on 6/4/10 for OTG Oakland site

See Terms and Conditions on reverse

*TestAmerica SF reports 8015M from C_9-C_{24} (industry norm). Default for 8015B is C_{10}-C_{28}

	1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature	X		
Time	3/31/11 14:20	1715	
Printed Name	Xinggang Tong	Ed Martinez	
Date		3.31.11	
Company	OTG	TASF	

	1) Received by:	2) Received by:	3) Received by:
Signature			
Time	1420	1715	
Printed Name	Ed Martinez	Clinton Groth	
Date	3-31-11	3/31/11	
Company	TASF	TASF	

Rev09/09

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

720-34269

TESTAMERICA San Francisco Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 130550 5.6

Date_____ Page 1 of 3

04/07/2011

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Report To

Attn: Xinggang Tong
Company: OTG EnviroEngineering Solutions
Address: 7700 Edgewater Dr., Suite 260
Phone: 510-465-8982 Email: xtong@otgenv.com
Bill To: OTG
Sampled By: X. Tong
Attn: X Tong
Phone: 510-465-8982

Analysis Request

#	Sample ID	Date	Time	Mat rix	Preserv.	TPH EPA - ☐ 8260B ☐ Gas w/ ☐ BTEX ☐ MTBE	TEPH EPA 8015M* ☒ Silica Gel ☒ Diesel ☒ Motor Oil ☐ Other ___	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	(HVOCs) EPA 8021 by 8260B	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B ☐ 624	Semivolatiles GC/MS ☐ EPA 8270 ☐ 625	Oil and Grease ☐ Petroleum (EPA 1664) ☐ Total	Pesticides ☐ EPA 8081 ☐ 608 PCBs ☐ EPA 8082 ☐ 608	PNAs by ☐ 8270 ☐ 8310	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___	Low Level Metals by EPA 200.8/6020 (ICP-MS): ___ ☐ W.E.T (STLC) ☐ TCLP	☐ Hexavalent Chromium ☐ pH (24h hold time for H_2O)	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ TDS	Anions : ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4					Number of Containers
1	NB-1-1	3/28/11	11:15	S	No		X																				
2	NB-1-4	"	12:10	S	No		X																				
3	NB-2-1	"	12:38	S	No		X																				
4	NB-2-4	"	13:20	S	No		X																				
5	NB-6-1	"	13:50	S	No		X																				
6	NB-6-4	"	16:10	S	No		X																				
7	NB-8-1	"	16:40	S	No		X																				
8	NB-8-4	"	17:15	S	No		X																				
9	NB-7-1	3/29/11	9:20	S	No		X																				
10	NB-7-4	"	10:50	S	No		X																				

Project Info

Project Name: B112 - Oakland
Project#: 111HCT03.1000
PO#:
Credit Card#:

Sample Receipt

# of Containers:
Head Space:
Temp:
Conforms to record:

TAT: (5 Day) 3 Day 2 Day 1 Day
Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☒ State Tank
Fund EDF
Special Instructions / Comments: ☒ Global ID SLT1976120
Log Code: OTGO

Harry's quote on 6/4/10 for OTG Oakland site

See Terms and Conditions on reverse
*TestAmerica SF reports 8015M from C_8-C_{24} (industry norm). Default for 8015B is C_{10}-C_{28}

	1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature			
Time	1420		
Printed Name	Xinggang Tong	Ed Mantzier	
Date	3/31/11	3-31-11	
Company	OTG	TASF	

	1) Received by:	2) Received by:	3) Received by:
Signature			
Time	1422	1715	
Printed Name	Ed Mantzier	Matt Cyrok	
Date	3-31-11	3/31/11	
Company		TASF	

Rev09/09

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

720-34269

TESTAMERICA San Francisco Chain of Custody

1220 Quarry Lane ● Pleasanton CA 94566-4756
Phone: (925) 484-1919 ● Fax: (925) 600-3002

Reference #: 130552

5.6

Date _____ Page 2 of 3

04/07/2011

Report To

Attn: Xinggang Tong
Company: OTG EnviroEngineering Solutions
Address: 7700 Edgewater Dr., Suite 260
Phone: 510-465-8982 Email: xtong@otgenv.com
Bill To: OTG
Sampled By: X. Tong
Attn: X. Tong
Phone: 510-465-8982

Analysis Request

	Sample ID	Date	Time	Matrix	Preserv	TPH EPA - ☐ 8260B ☐ Gas w/ ☐ BTEX ☐ MTBE	TEPH EPA 8015M* ☒ Silica Gel ☒ Diesel ☒ Motor Oil ☐ Other ___	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	(HVOCs) EPA 8021 by 8260B	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B ☐ 624	Semivolatiles GC/MS ☐ EPA 8270 ☐ 625	Oil and Grease ☐ Petroleum (EPA 1664) ☐ Total	Pesticides ☐ EPA 8081 ☐ 608 PCBs ☐ EPA 8082 ☐ 608	PNAs by ☐ 8270 ☐ 8310	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___	Low Level Metals by EPA 200.8/6020 (ICP-MS): ___	☐ W.E.T (STLC) ☐ TCLP	☐ Hexavalent Chromium ☐ pH (24h hold time for H_2O)	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4					Number of Containers
11	NB-4-1	3/29/11	11:25	S	No		X																				1
12	NB-4-4	"	12:10	S	No		X																				1
13	NB-3-1	"	12:35	S	No		X																				1
14	NB-3-4	"	14:00	S	No		X																				1
15	NB-5-1	"	14:25	S	No		X																				1
16	NB-5-4	"	14:50	S	No		X																				1
17	NB-9-1	"	15:15	S	No		X																				1
18	NB-9-4	"	15:45	S	No		X																				1
19	NB-10-1	"	16:10	S	No		X																				1
20	NB-10-4	"	16:42	S	No		X																				1

Project Info

Project Name: B112 - Oakland
Project#: 11HCT03.1000
PO#:
Credit Card#:

Sample Receipt

of Containers:
Head Space:
Temp:
Conforms to record:

TAT: (5 Day) 3 Day 2 Day 1 Day Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☒ State Tank

Fund EDF

Special Instructions / Comments: ☒ Global ID SLT1976120l
Log Code: OTGD

Harry's quote on 6/4/10 for OTG Oakland site

See Terms and Conditions on reverse

*TestAmerica SF reports 8015M from C_9-C_{24} (industry norm). Default for 8015B is C_{10}-C_{28}

	1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature / Time	14:20	1715	
Printed Name / Date	Xinggang Tong 3/31/11	Ed Martinez 3-31-11	
Company		TBSP	

	1) Received by:	2) Received by:	3) Received by:
Signature / Time	1922	1715	
Printed Name / Date	Ed Martinez 3-31-11	Chris Good 3/31/11	
Company	TBSP	TBSP	

Rev09/09

Login Sample Receipt Checklist

Client: OTG EnviroEngineering Solutions, Inc.

Job Number: 720-34269-1

Login Number: 34269
List Number: 1
Creator: Apostol, Anita

List Source: TestAmerica San Francisco

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	