CH2M HILL, INC
1000 Wilshire Boulevard
21st Floor
Los Angeles, CA 90017
Tel 213-228-8271
Fax 714-424-2135

August 10, 2011

407609.C1.03

Mr. Paul Cho
California Regional Water Quality Control Board,
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, California 90013

Subject: Results of Step-Out Investigation at the Southeastern Area of the SFPP Norwalk Station, Norwalk, California

Dear Mr. Cho:

This letter report presents the findings of the work performed by CH2M HILL Engineers, Inc. (CH2M HILL) in accordance with the work plan titled, *Work Plan for Step-Out Investigation in the Vicinity of Well GMW-O-18, Southeastern Off-Site Area, Defense Fuel Support Point Norwalk, 15306 Norwalk Boulevard, Norwalk, California (SCP No. 0286B),* prepared by AMEC Geomatrix, Inc. (AMEC, 2010a).

The work plan was prepared in response to a letter from the California Regional Water Quality Control Board, Los Angeles Region (RWQCB), dated February 26, 2010, which required that SFPP, L.P. (SFPP) conduct a step-out investigation in the vicinity of well GMW-O-18 to delineate impacts in groundwater in this area. On behalf of SFPP, an operating partner of Kinder Morgan Energy Partners, L.P. (KMEP), AMEC prepared and submitted the work plan to RWQCB, on April 19, 2010. RWQCB approved the work plan in a letter to KMEP, dated August 12, 2010.

Background

The following sections summarize relevant project background information including site description, site hydrogeologic setting, and previous investigations in the vicinity of the offsite 24-inch block valve area, which encompasses well GMW-O-18. Other areas of the site impacted by petroleum hydrocarbons are not part of this scope.

Site Description

The Defense Fuel Support Point (DFSP) facility is located at 15306 Norwalk Boulevard in Norwalk, California (Figure 1). SFPP has equipment within two acres at the site and has

easements for its pipelines along the southern and eastern boundaries of the facility. Previously, SFPP operated a pump station near the south-central area of the site. The pump station was decommissioned in 2001 but three pipelines heading eastward along the southern boundary of the DFSP facility, one of which bends at the southeastern corner of the facility and continues northward within the eastern easement, remain in service and continue to convey refined petroleum fuels including gasoline, diesel, and jet fuel. The pipelines are fitted with block valves, two of which are located along a 24-inch-diameter pipeline and within areas currently undergoing remediation. One block valve is located in the south-central portion of the site and is referred to as the "intermediate 24-inch block valve." The other block valve is located offsite near the southeastern area of the site and is referred to as the "southeastern 24-inch block valve" or "offsite 24-inch block valve."

Hydrogeologic Setting

The uppermost groundwater zone in the site vicinity is a semiperched unit between depths of approximately 25 and 50 feet below ground surface (bgs). Groundwater flow within this uppermost unconfined zone, as interpreted during previous assessments and monitoring at DFSP, is generally northwestward under a horizontal gradient of approximately 0.001 foot per foot (ft/ft). The uppermost groundwater zone overlies the Bellflower aquitard of the Lakewood Formation. Based on lithologic logs from previous assessments at and near DFSP, the Bellflower aquitard lies between depths of approximately 50 and 80 feet bgs beneath the site and consists of predominantly clay, silty clay, and sandy clay with some interbedded sand with silt.

The Exposition aquifer underlies the Bellflower aquitard between depths of approximately 80 and 220 feet bgs. The potentiometric surface in the Exposition aquifer is approximately 20 feet lower than that in the semiperched uppermost groundwater zone. This relatively consistent difference in hydraulic heads between the semiperched upper groundwater zone and the Exposition aquifer indicates that the Bellflower aquitard inhibits the vertical movement of groundwater in the site area. The horizontal hydraulic gradient in the Exposition aquifer beneath the site area has had a magnitude of approximately 0.001 ft/ft and a generally southeastward direction. The generally southeastward direction of the horizontal hydraulic gradient (and interpreted direction of horizontal groundwater flow) in the Exposition aquifer is roughly opposite the general direction of interpreted groundwater flow in the uppermost groundwater zone. These distinctly different hydraulic conditions consistently interpreted over time above and below the Bellflower aquitard support the interpretation that the Bellflower aquitard in this area comprises a unit that is laterally continuous and has a relatively low bulk vertical hydraulic conductivity.

Previous Investigations

The following sections describe previous soil and groundwater investigations conducted in the vicinity of the offsite 24-inch block valve.

Soil Assessments

In April 1994, SFPP detected a leaking seal at the offsite 24-inch block valve. The valve was repaired and approximately 30 cubic yards of hydrocarbon-impacted soil was excavated from the vicinity of the valve. Geomatrix was retained to assess subsurface conditions associated with the release that occurred as a result of the leaking valve seal, and conducted a subsurface assessment consisting of soil sampling at nine boring locations, five of which were converted to groundwater monitoring wells. The results of the 1994 subsurface assessment were presented in the report titled, *Site Assessment of Fuel Hydrocarbons in Soil and Groundwater Associated with a Leak in a 24-Inch Block Valve Area* (Geomatrix, 1994). The soil sampling analytical results from the 1994 assessment showed that the lateral extent of soil impacts around the offsite 24-inch block valve was adequately delineated by borings GMW-SF-7 to the northwest, GMW-SF-8 to the southwest, GMW-O-17 to the south-southeast, GMW-O-19 to the east-southeast, and GMW-O-18 to the northeast. A figure showing the analytical results for the 1994 soil sampling is provided in Attachment A.

The results from the 1994 assessment showed that the presence of elevated concentrations of fuel constituents in soil was limited to the immediate vicinity of the release area. Elevated concentrations of fuel constituents were detected at greater depths (between approximately 24.5 and 29.5 feet bgs at several boring locations); however, based on the depth to groundwater beneath the site (historically between approximately 24 and 30 feet bgs), the presence of fuel constituents at these depths is interpreted to reflect groundwater or capillary zone conditions rather than vadose zone soil.

Remediation activities were implemented in 1994 in response to the release at the offsite 24-inch block valve and have included product removal from monitoring wells by vacuum truck, total fluids extraction (TFE), and soil vapor extraction.

In 2006 and 2007, Parsons Corporation (Parsons) collected and analyzed soil and soil gas samples offsite as part of an investigation on behalf of Defense Logistics Agency (DLA) Energy (formerly the Defense Energy Support Center [DESC]) and KMEP. The data are presented in the report entitled, *Investigation Report for Holifield Park and Dolland Elementary School* (Parsons, 2007). The southern extent of Parsons' investigation included five borings (B-122, B-24, B-24NORTH, B-24EAST, and B-24SOUTH) in the vicinity of the offsite 24-inch block valve. Parsons collected soil samples at all five locations and soil gas samples at four of these five locations. During its 2006/2007 investigation, Parsons collected soil samples to a depth of approximately 25 feet at all five locations. Volatile organic compounds (VOCs) and total petroleum hydrocarbons (TPH) were not detected or were detected at concentrations below the risk-based and soil-to-groundwater screening levels in soil samples from all locations with one exception. In B-24SOUTH, benzene, toluene, and TPH quantified using a gasoline standard (TPH-g) were detected at concentrations above screening levels in the sample from 25 feet bgs. As indicated above, it is likely that the concentrations of fuel constituents in soil from this depth are a result of historical impacts to groundwater. Parsons indicated in its 2007 report that further investigation to delineate the extent of soil impacts in this area is not necessary because concentrations of these

constituents in soil were not detected in nearby soil sampling locations (e.g., B-24 and B-24EAST) at the corresponding depth (25 feet bgs), indicating that the vertical and horizontal extent of impacts in soil appear to have been characterized in these directions. Parsons' 2007 report also indicates that the southern extent of potential soil impacts at B-24SOUTH appears to have been characterized based on VOC concentrations in soil samples collected approximately 75 feet south of B-24SOUTH as previously reported by KMEP (Geomatrix, 2006).

In summary, subsurface investigations conducted in the area of the offsite 24-inch block valve since 1994 defined the lateral and vertical extent of fuel constituents in the vadose zone. Impacts to the vadose zone were limited to areas in the immediate vicinity of the 24-inch block valve area (Attachment A). Results also indicate that the vadose zone soil beneath the residential area to the south, near upgradient monitoring well GMW-O-17, was not impacted by the release.

Groundwater Assessments

Assessment of impacts to groundwater in the vicinity of the offsite 24-inch block valve release began in 1994 with the installation and sampling of five groundwater monitoring wells. Groundwater sampling was conducted from the five wells during the 1994 site assessment and TPH-g and TPH quantified using a diesel standard (TPH-d) were not detected above laboratory detection limits. Benzene, toluene, ethylbenzene, and xylenes (BTEX) were not detected in samples from four of the five monitoring wells; low concentrations of benzene and toluene were detected in the groundwater sample from GMW-O-19, approximately 115 feet east of the valve. The groundwater samples collected in 1994 were not analyzed for methyl tertiary butyl ether (MTBE). Subsequent to the 1994 investigation, results of groundwater monitoring (reported in semiannual groundwater monitoring reports) indicated the presence of groundwater containing dissolved MTBE in the offsite 24-inch block valve area. In November 2001, increased MTBE concentrations were noted at wells MW-16 and MW-29, both of which are located hydraulically downgradient (northwest) of the 24-inch block valve area.

Based on the increase in MTBE concentrations in these two wells, an additional groundwater assessment was conducted in February and April 2002 in the hydraulically downgradient vicinity of the offsite 24-inch block valve. The 2002 assessment consisted of groundwater sampling of 14 existing monitoring wells and collection and analysis of groundwater screening samples at 20 boring locations (GB1, GB1A, GB2, GB2A, GB3, GB4, GB4A, and GB5 through GB17). Tertiary butyl alcohol (TBA) was not analyzed as part of this investigation. Data from the 2002 assessment can be found in the report titled, *Supplemental Groundwater Assessment Northwest of the 24-inch Block Valve Area* (Geomatrix, 2002). Groundwater screening samples were collected from multiple depths at five of these boring locations. The results of the 2002 groundwater assessment indicated a northwest-trending area of elevated MTBE concentrations in groundwater at depths of approximately 43 to 46 feet bgs. At that time, the lateral extent of MTBE impact to groundwater was generally delineated by wells MW-29, GMW-13, and GMW-O-16, and borings GB10, GB15, and GB5. Figures showing the

boring locations and the 2002 groundwater analytical results for MTBE are provided in Attachment B.

The results of the 2002 additional assessment were used in designing an expansion of the groundwater remediation system in this area. The expansion to the remediation system was implemented in April 2003 to address MTBE detected in groundwater downgradient (northwest) of the 24-inch block valve. The expansion consisted of installing a pump in existing well GMW-36 near the block valve and installing and equipping two additional extraction wells (GMW-SF-9 and GMW-SF-10) in its downgradient vicinity.

In June 2007, Parsons collected discrete-depth groundwater samples at one location (B-122) in the vicinity of the offsite 24-inch block valve as part of an investigation on behalf of the DLA Energy and KMEP (Parsons, 2007). Parsons collected and analyzed groundwater samples from three discrete-depth intervals between 25 and 42 feet. Analytical results for groundwater samples indicated elevated concentrations of BTEX, TPH-g, and MTBE in all of the samples collected from B-122. The cumulative results of historical groundwater assessments and monitoring adequately delineated the lateral extent of fuel constituents in groundwater in the vicinity of the offsite 24-inch block valve except in the area east of boring B-122. Therefore, in the approved 2008 work plan (Geomatrix, 2008), Geomatrix proposed additional assessment near B-122 to delineate the lateral extent of elevated concentrations of fuel constituents in groundwater east of B-122.

Offsite Assessments

During July 2008, SFPP conducted an assessment to evaluate the presence and depth of the Bellflower aquitard in the offsite area near the 24-inch block valve using cone penetrometer test (CPT) profiling at two locations: CPT-1 and CPT-2. In addition, the vertical extent of dissolved fuel constituents was delineated to the top of the interpreted aquitard at these two locations. Discrete-depth groundwater samples were collected from additional borings drilled at the general locations of CPT-1 and CPT-2 during July 2008. Samples were collected from three discrete intervals between 25 and 47 feet bgs at each location. CPT-1, located approximately 150 feet northeast of the block valve (approximately 80 feet southeast of GMW-O-18), was selected to delineate the eastern extent of dissolved fuel constituents (east of boring B-122) in the offsite 24-inch block valve area. Target analytes included TPH-g, TPH quantified using a site fuel product (TPH-fp), BTEX, MTBE, and other fuel oxygenates including TBA, di-isopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE), and tertiary amyl methyl ether (TAME). None of these analytes were detected in any of the three discrete-depth groundwater samples collected at CPT-1. Thus, the eastern extent of dissolved fuel constituents in the offsite 24-inch block valve area was adequately delineated. CPT-2, located approximately 185 feet north-northwest (hydraulically downgradient) of the block valve (approximately 80 feet northwest of GMW-O-18) and within an area of known impact to groundwater, was selected to delineate the vertical extent of dissolved fuel constituents by the confirmed presence of low or nondetected concentrations of target analytes or the top of the Bellflower aquitard in the immediate vicinity of the offsite 24-inch block valve. Elevated concentrations of TPH-g, MTBE, and/or TBA were reported in one or

more of the three groundwater samples collected at CPT-2 to a depth of approximately 47 feet, near the base of the uppermost groundwater zone. Additional details of this investigation can be found in the report titled, *Additional Off-Site Assessment Report Off-Site 24-inch Block Valve Area* (AMEC, 2008).

In 2009, SFPP conducted a supplemental assessment at a location (GB-18) near previous sampling location CPT-1 to characterize the physical properties of the Bellflower aquitard and to assess the potential that petroleum hydrocarbons detected in the uppermost groundwater zone at previous sampling location CPT-2 could have impacted groundwater in the Exposition aquifer beneath the Bellflower aquitard in the area. Continuous core soil samples collected during drilling confirmed the depth and presence of the interpreted Bellflower aquitard from approximately 47 to 81 feet bgs. A groundwater sample was collected from the upper portion of the Exposition aquifer at depth intervals between 86 and 90 feet bgs. The analytical results of the discrete-depth groundwater sample show no impacts to groundwater in the Exposition aquifer. Physical and hydraulic property testing was conducted using soil samples collected from a range of sediment types within the Bellflower aquitard. The results of these tests indicate the sediment samples were composed primarily of low-permeability silt and clay. Additional details of this investigation can be found in the report titled, *Supplemental Vertical Delineation Off-Site 24-inch Block Valve Area* (AMEC, 2010b).

Groundwater Monitoring

SFPP is currently performing groundwater monitoring and remediation in the southeastern area to address the petroleum hydrocarbons in soil and groundwater associated with the 24-inch block valve. Groundwater, hydrocarbon product, and soil vapor are extracted from three TFE wells (GMW-O-15, GMW-O-18, and GMW-36). The extracted liquids and vapors are treated through the centralized treatment system at the south-central area of the facility. Groundwater monitoring includes monthly monitoring for six wells (GMW-36, GMW-O-15, GMW-O-16, GMW-O-18, GMW-O-19, and PZ-5). Recent monitoring results indicate that TPH, BTEX, MTBE, and TBA are present in southeastern offsite wells GMW-O-18 and PZ-5 (Table 1). Depth to product measurements were not collected during June 2011 (since the extraction wells were operating); however, free product was reported in wells GMW-36 and GMW-O-15 during the April 2011 semiannual sampling event when the extraction system was shut down. The free product thicknesses for these wells were 1.93 feet and 0.02 foot, respectively. Free product was not detected in the other four southeastern area wells in April 2011. TFE in the southeastern area is ongoing and groundwater quality will continue to be monitored on a routine basis.

Objectives

Previous assessments indicate that petroleum hydrocarbons have impacted the soil and groundwater in the vicinity of the offsite 24-inch block valve. The lateral and vertical extent of fuel constituents in vadose zone soil has been defined and the impacted soil was limited

to the immediate vicinity of the release area. Additional groundwater assessments have defined the vertical and eastern extent of contamination in the offsite 24-inch block valve area. The current investigation was performed in response to RWQCB's request to conduct a step-out investigation in the vicinity of well GMW-O-18 due to an apparent increase in petroleum hydrocarbons at wells PZ-5 and GMW-O-18 during past groundwater sampling events.

The objective of the current investigation was to delineate and further assess the potential presence and concentrations of dissolved-phase TPH, BTEX, and fuel oxygenates in groundwater in the vicinity of offsite well GMW-O-18. Concentrations of dissolved phase constituents can vary with extraction pump operation and seasonal changes in groundwater levels; however, the potential migration of contaminants to the offsite area facilitated the need to collect additional groundwater data.

Approach and Methods

The following field activities were implemented to meet the objective of this investigation: drilling, coring, lithologic logging, and discrete-depth soil and groundwater sampling at five locations (GB-19 to GB-23) (Figures 2 and 3) using direct-push methods. Three of the sample locations (GB-19, GB-20, and GB-21) were intended to evaluate the extent of TPH and VOCs in the southeast area; two locations (GB-22 and GB-23), initially contemplated as potential contingency step-out locations, were included to evaluate the extent of TBA detected in well GMW-39.

Pre-Field Activities

Prior to commencing field activities, CH2M HILL performed the following work:

- Obtained well/boring construction permits for drilling and groundwater sampling from the County of Los Angeles Department of Public Health – Environmental Health Division (Attachment C).
- Obtained a temporary access agreement from the City of Norwalk (Attachment D).
- Updated the existing site-specific Health and Safety Plan to incorporate the planned fieldwork.
- Notified Underground Service Alert (USA) of the planned field activities and met with utility companies identified by USA.
- Retained Spectrum Geophysics of Burbank, California, a private utility locator, and performed a geophysical survey to screen the planned drilling locations for potential underground utilities or buried objects.

Drilling and Lithologic Logging

CH2M HILL retained Gregg Drilling and Testing, Inc. (Gregg) of Signal Hill, California, to conduct drilling, coring, and groundwater sampling using direct-push equipment and methods. Prior to drilling, the boring locations were cleared to a depth of approximately 10 feet bgs by Gregg using hand-auger methods to check for the presence of subsurface obstructions.

Each boring was continuously cored to the top of the Bellflower aquitard and described based on visual manual procedures of American Society for Testing and Materials (ASTM) D2488 under the direction of a State of California Licensed Professional Geologist. Color, moisture content, grain size, and other pertinent soil characteristics were recorded on boring logs, and soil was screened in the field using a photoionization detector (PID) for potential presence of VOCs.

Downhole drilling equipment and nondisposable sampling equipment were steam-cleaned or cleaned with an Alconox-water solution and rinsed twice with potable water prior to each use.

Discrete-Depth Soil and Groundwater Sampling and Laboratory Analysis

Discrete-depth soil samples were collected every 10 feet to the top of the Bellflower aquitard. In addition, soil samples were collected from approximately 5 feet above and below the water table. Sampling depth intervals for groundwater samples were selected based on the lithologic conditions in the field.

Three discrete-depth groundwater samples were collected from each location. To minimize the potential for cross-contamination, discrete-depth groundwater samples were collected from separate borings drilled within a few feet of each other at each of the five general locations. For collection of groundwater samples, the direct-push rig utilized a stainless steel Hydropunch sampler with an expendable stainless steel point and a 4-foot-long, 0.010-inch slotted polyvinyl chloride (PVC) screen. A new screen was used for each groundwater sample. Groundwater samples were collected through the Hydropunch rod using a stainless steel bailer. All downhole and sampling equipment was steam-cleaned prior to each use.

For quality assurance/quality control (QA/QC) purposes, field duplicates for field samples were collected at a frequency of 1 for each 10 samples. Matrix spike primary and duplicate samples were collected at a frequency of 1 for each 20 samples. An equipment blank sample was collected for each piece of nondedicated sampling equipment each day, and a laboratory-provided trip blank was maintained with each ice-chilled cooler containing samples.

Samples were submitted under chain-of-custody procedures to Alpha Analytical Laboratory of Sparks, Nevada, certified under the California Environmental Laboratory Accreditation Program. Soil and groundwater samples were analyzed for TPH-g and TPH-fp using United States Environmental Protection Agency (EPA) Method 8015M; and BTEX and fuel

oxygenates using EPA Method 8260B. The trip blanks were analyzed for BTEX and fuel oxygenates only.

Boring Destruction and Survey

After completion of lithologic logging and groundwater sampling, each boring was destroyed by backfilling with bentonite cement placed through a tremie pipe. The ground surface at each boring location was repaired to reasonably match surrounding conditions.

Following completion of the field investigation, the location (northing and easting coordinates) and ground surface elevation of the soil borings were surveyed in accordance with RWQCB GeoTracker requirements by Dulin and Boynton of Signal Hill, California, a California-licensed land surveyor. The surveyor's report is provided in Attachment E**.**

Investigation-Derived Waste Management

Investigation-derived waste (IDW) generated during field activities included soil cuttings, decontamination water, and disposable sampling supplies and personal protective equipment (e.g., nitrile gloves). Soil cuttings and decontamination rinse water were containerized in Department of Transportation (DOT)-approved 55-gallon drums. Rinse water was disposed of at SFPP's onsite groundwater treatment system for treatment and discharge. The drum containing soil was labeled and temporarily stored at the treatment pad, pending analytical results for waste classification and eventual disposal by KMEP's waste hauling contractor (Belshire Environmental Services). The soil IDW was profiled as nonhazardous waste and transported offsite to U.S. Ecology at Highway 95 South, Beatty, Nevada 89003. A copy of the nonhazardous waste manifest is included in Attachment F. General refuse such as disposable sampling supplies and used gloves were disposed of onsite as municipal trash.

Findings

The following sections describe the findings of this investigation at the five locations (GB-19 to GB-23), including the lithology encountered during drilling, and analytical results for soil and groundwater samples.

Lithology

The lithology encountered during this investigation within the uppermost zone overlying the Bellflower aquitard consisted of poorly graded sand, silty sand, clayey sand, and sandy silt. Groundwater within the uppermost zone was encountered at approximately 27 to 28 feet bgs; this depth to groundwater was consistent with measurements collected from nearby monitoring wells during the January 2011 monthly monitoring event. The top of the Bellflower aquitard was encountered at approximately 47 feet bgs, which is consistent with previous investigations conducted by AMEC. The interpreted Bellflower aquitard consists of moist fine-grained units of clays and silts interbedded with relatively coarser-grained materials (silty sand and clayey sand). Sediments corresponding to the Bellflower aquitard

were encountered from 47 to 61 feet bgs, the maximum depth of the boreholes. Lithologic descriptions are presented in the boring logs provided in Attachment G.

Soil Analytical Results

Table 2 and Figure 2 show the analytical results for the discrete-depth soil samples collected for this step-out investigation. Laboratory analytical reports are included in Attachment H. MTBE was detected in one discrete-depth sample at each of three soil borings: GB-19 (20 micrograms per kilogram [µg/kg] at 10.5 to 11 feet bgs), GB-21 (40 µg/kg at 60 to 60.5 feet bgs), and GB-22 (23 µg/kg at 53 to 53.5 feet bgs). TPH-fp was detected in two soil borings (GB-22 and GB-23) at depths less than approximately 22 feet bgs. The maximum TPH-fp concentration was reported in boring GB-22 (32 µg/kg). TBA was detected at GB-23 (2,200 µg/kg) at a sample depth of 50 to 50.5 feet bgs. All other target analytes for the remaining discrete-depth soil samples were not detected.

Groundwater Analytical Results

Table 3 and Figure 3 show analytical results for the discrete-depth groundwater samples collected for this step-out investigation and also the analytical results for groundwater monitoring samples collected during the two recent sentry events (July 2010 and January 2011) and two recent semiannual events (October 2010 and April 2011). The results of these recent groundwater monitoring events are provided in reports by Parsons (2011) and CH2M HILL (2011). The TBA concentration contour lines shown in Figure 3 interpret both the depth-discrete groundwater data collected for this step-out investigation and the data from the April 2011 semiannual sampling event. Figure 3 also presents the water table elevation contour lines previously interpreted for the April 2011 semiannual sampling event.

Laboratory analytical reports for the discrete-depth groundwater samples are included in Attachment H. TPH-g was detected in boring GB-23 (100 micrograms per liter [µg/L]) at a sample depth of 41 to 45 feet bgs. TPH-fp was detected in boring GB-20 (220 µg/L) at a sample depth of 31 to 34 feet bgs. TBA was detected in one discrete-depth sample at each of three soil borings: GB-21 (140 µg/L at 42.5 to 46.5 feet bgs), GB-22 (110 µg/L at 41 to 45 feet bgs), and GB-23 (2,400 µg/L at 41 to 45 feet bgs). All other target analytes for the remaining discrete-depth groundwater samples were not detected.

Quality Assurance/Quality Control

During this investigation, six equipment blanks and five trip blank samples were collected to assess data reliability. No VOCs, TPH-g, or TPH-fp were detected at or above laboratory reporting limits in the equipment or trip blank samples.

Analytical data accuracy was evaluated by examining the method blanks, project-specific matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and relative percent differences (RPDs), laboratory control sample (LCS) percent recoveries, and surrogate percent recoveries. The overall accuracy of the project-specific MS/MSD percent recoveries,

RPD values, LCS percent recoveries, and surrogate recoveries was acceptable with respect to samples reporting laboratory detections.

Summary and Conclusions

The findings of this step-out investigation in the vicinity of well GMW-O-18 are summarized as follows.

- The lithology encountered in borings GB-19 to GB-23 was generally consistent with previous investigations conducted in 2008 and 2009 and confirmed the presence, depth, and composition of the Bellflower aquitard in the offsite 24-inch block valve area. The top of the Bellflower aquitard was encountered at approximately 47 feet bgs in each of the completed borings (very similar to lithologic profiles from CPT borings CPT-1 and CPT-2, and boring GB-18). The Bellflower aquitard consists of predominantly fine-grained materials interbedded with some relatively coarser-grained materials. As described above, the Bellflower aquitard continues to approximately 81 feet bgs based on continuous-core soil samples collected at GB-18 (near previous CPT-1) during the 2009 supplemental investigation in the southeast area (AMEC, 2010b).

- TPH, BTEX, and fuel oxygenates were not detected in soil or groundwater samples from the uppermost groundwater zone in the two easternmost offsite borings (GB-19 and GB-20), except for MTBE detected in one shallow soil sample above the water table (GB-19: 20 µg/kg at 10.5 to 11 feet bgs) and TPH-fp in one discrete-depth groundwater sample (GB-20: 220 µg/L at 31 to 34 feet bgs). The only detected constituents at the other offsite location (GB-21) consist of MTBE in soil below the water table (40 µg/kg at 60 to 60.5 feet bgs) and TBA in one discrete-depth groundwater sample (140 µg/L at 42.5 to 46.5 feet bgs). As shown in Figure 3, the horizontal groundwater gradient from these three offsite sample locations (GB-19, GB-20, and GB-21) is toward the northwest in an onsite direction, which would carry any offsite contamination onsite that is not within the capture zone established by TFE at wells GMW-36, GMW-O-15, and GMW-O-18. The low levels of detected constituents and onsite groundwater flow direction indicate that the lateral extent of dissolved-phase constituents to the east is defined.

- TPH, MTBE, and TBA were detected in either soil or groundwater at the two onsite borings (GB-22 and GB-23). The detection of these constituents at the two onsite locations is consistent with the interpretation of the TPH, MTBE, and TBA concentrations in groundwater from the recent sentry and semiannual monitoring events. The TBA concentration contour lines shown in Figure 3 are similar to the contour lines previously interpreted for the April 2011 semiannual monitoring event, except that the contours are now interpreted to extend onsite further toward the northwest. This interpretation of the TBA concentration contour lines is consistent with the horizontal groundwater gradient direction shown in Figure 3, which is toward the northwest in an onsite direction.

- As described above in the Background section, analytical results from a discrete-depth groundwater sample collected while drilling at GB-18 from the upper portion of the Exposition aquifer showed no impacts to groundwater in the Exposition aquifer (AMEC, 2010b).

No additional step-out samples are proposed since the extent of dissolved-phase contaminants in the eastern offsite portion of the southeastern area plume (Holifield Park area) has been defined. Groundwater monitoring in the southeastern area will continue and groundwater conditions will continue to be evaluated as additional groundwater monitoring and remediation system operation data are obtained.

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Parsons Corporation (Parsons). 2011. *Second Semiannual 2010 Groundwater Monitoring Report, Defense Fuel Support Point Norwalk, 15306 Norwalk Boulevard, Norwalk, California.* January 31.

If you have any additional questions regarding this investigation, please contact me at (213) 228-8271, or Mr. Stephen Defibaugh, KMEP's Remediation Project Manager, at (714) 560-4802.

Sincerely,

CH2M HILL, Inc.

Dan Jablonski, R.E.A.
Project Manager

Mark Wuttig, P.G.
Senior Hydrogeologist

Tables:

Table 1: Summary of Groundwater Analytical Data – SE Area Wells
Table 2: Summary of Soil Analytical Data
Table 3: Summary of Hydropunch Groundwater Analytical Data

Figures:

Figure 1: Site Location Map
Figure 2: Soil Analytical Results from SE Investigation
Figure 3: Hydropunch Groundwater Analytical Results from SE Investigation

Attachments:

Attachment A: 1994 Soil Sample Analytical Results
Attachment B: 2002 Groundwater Analytical Results
Attachment C: LACDPH Well/Boring Construction Permits
Attachment D: City of Norwalk Access Agreement
Attachment E: Survey Results
Attachment F: Nonhazardous Waste Manifest
Attachment G: Boring Logs
Attachment H: Laboratory Analytical Reports

Distribution List:

Mr. Steve Defibaugh, KMEP
LTC Tam Gaffney, DLA Energy
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Mr. Tim Whyte, URS
Mr. Mark Wuttig, CH2M HILL
Grace F. Napolitano, U.S. House of Representatives
Evelyn Herrera, Office of Congresswoman Grace F. Napolitano

Tables

TABLE 1
Summary of Groundwater Analytical Data - Southeastern Area Wells
Southeastern Area Step-Out Investigation
SFPP, L.P.
Defense Fuel Support Point Norwalk
Norwalk, California

Sample ID	Date	TPH-g	TPH-fp	Benzene	Toluene	Ethyl-benzene	Total Xylenes [1]	1,2-DCA	MTBE	TBA	DIPE	ETBE	TAME
GMW-36	07/10/97	430	---	---	---	---	---	---	---	---	---	---	---
	01/09/98	4,000	---	22	21	6.1	100	<5	7,700	---	---	---	---
	05/20/98	1,400	---	<0.3	<0.3	<10	<20	<0.5	19,600	---	---	---	---
	11/17/98	7,900	6,650	2,100	1,370	70	650	<50	34,800	---	---	---	---
	05/07/99	2,800	---	<10	<10	<10	<10	<25	14,000	---	---	---	---
	11/18/99	51,000	22,000	8,100	5,600	<250	1,770	<250	47,000	---	---	---	---
	05/17/00	59,000	53,000	14,000	6,700	480	4,100	<130	45,000	---	---	---	---
	11/30/00	110,000	66,000	20,000	19,000	1,600	8,100	<0.5	13,000	---	---	---	---
	02/06/01	75,000	55,000	18,000	13,000	1,400	6,100	<50	9,100	---	---	---	---
	05/10/01	12,000	5,100	3,700	2,500	420	1,730	<0.5	1,600	---	---	---	---
	09/19/01	21,000	37,000	5,800	3,600	580	2,080	<13	1,000	---	---	---	---
	11/06/01	63,000	40,000	16,000	13,000	1,600	7,700	<25	3,200	---	---	---	---
	01/30/02	130,000	68,000	21,000	20,000	1,700	9,000	<125	42,000	---	---	---	---
	04/10/02	150,000	49,000	25,000	22,000	1,800	10,000	<50	67,000	---	---	---	---
	07/30/02	81,000	110,000	28,000	29,000	2,200	11,800	<50	37,000	---	---	---	---
	12/06/06	32,000	10,000	5,300	4,300	480	4,300	<50	1,600	---	---	---	---
	03/13/07	54,000	7,200	9,400	12,000	1,100	8,200	<200	3,800	---	---	---	---
	05/05/07	69,000	11,000	9,800	11,000	1,200	8,000	<200	3,900	---	---	---	---
	08/29/07	30,000	9,800	4,100	4,200	420	4,500	120	890	---	---	---	---
	02/20/08	34,000	9,100	3,900	6,000	750	4,600	<50	43	---	---	---	---
	04/16/08	42,000	11,000	5,200	8,300	940	6,200	<200	<100	---	---	---	---
	10/16/08	17,000	32,000	2,100	2,000	160	2,300	<20	26	---	---	---	---
	07/22/09	24,000	15,000	3,800	5,400	720	3,380	<50	28	<500	<50	<50	<50
	03/16/10	8,000	22,000	830	1,100	140	700	<10	16	690	<10	<10	<10
	04/16/10	4,200	25,000	850	150	89	200	<5.0	11	3,700	<5.0	<5.0	<5.0
	05/24/10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	06/25/10 [2, 3]	14,000	43,000	1,100	1,500	160	1,260	<20	11	2,700	<20	<20	<20
	07/13/10 [2]	500	4,500	49	51	4.9	68	<0.5	0.91	340	<1.0	<1.0	<1.0
	08/12/10 [2]	9,200	2,200	1,400	1,100	52	1,580	<10	18	1,600	<10	<10	<10
	09/20/10 [2]	3,300	5,200	130	18	36	260	<1.0	130	13,000	<1.0	<1.0	1.6
	10/5/2010 [2]	15,000	3,100	2,500	1,300	390	1,790	<20	30	1,300	<20	<20	<20
	11/23/10	31,000	21,000	5,100	3,400	890	3,900	<40	51	470	<40	<40	<40
	12/22/10	63,000	73,000	6,700	9,600	1,700	8,300	<50	28	<500	<50	<50	<50
	01/12/11	320,000	130,000	4,600	2,900	1,400	13,300	<200	<100	<2000	<200	<200	<200
	02/24/11 [2]	1,600	3,900	110	77	19	188	<1.0	3	2,200	<1.0	<1.0	<1.0
	03/23/11 [2]	3,200	2,900	360	340	28	360	<3.0	7.6	2,400	<3.0	<3.0	<3.0
	04/29/11 [2]	1,500	10,000	75	67	6.8	113	<0.5	3.3	1,700	<1.0	<1.0	<1.0
	05/13/11 [2]	13,000	11,000	2,300	2,100	93	1,640	<20	43	<200	<20	<20	<20
	06/22/11 [2]	420	1,500	24	12	2.8	29.3	<0.5	110	5,900	<1.0	<1.0	<1.0

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Southeastern Area Step-Out Investigation
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Defense Fuel Support Point Norwalk
Norwalk, California

Sample ID	Date	TPH-g	TPH-fp	Benzene	Toluene	Ethyl-benzene	Total Xylenes [1]	1,2-DCA	MTBE	TBA	DIPE	ETBE	TAME
GMW-O-15	10/16/08	1,700	2,800	550	3	37	34.1	<5	110	---	---	---	---
	03/16/10 [2]	530	8,900	10	1.1	0.64	2.7	<0.50	400	<10	<1.0	<1.0	1.9
	04/16/10	6,700	62,000	1,700	54	120	176	<10	1,300	1,800	<10	<10	11
	05/25/10	650	5,600	82	16	8.4	44	<2.0	180	1,500	<2.0	<2.0	<2.0
	06/25/10 [2]	490	900	96	9.7	9.6	33.4	<1.0	240	2,900	<1.0	<1.0	1.1
	07/13/10 [2]	580	250	110	7.5	11	33.7	<1.0	300	5,100	<1.0	<1.0	1.5
	08/12/10 [2]	710	370	120	4.1	10	43	<1.0	260	5,300	<1.0	<1.0	1.5
	09/20/10 [2]	620	500	120	3.3	13	29.4	<1.0	230	6,000	<1.0	<1.0	1.4
	10/5/2010 [2]	14,000	6,000	1,800	280	92	1,120	<20	3,200	3,000	<20	<20	35
	11/23/10	---	---	---	---	---	---	---	---	---	---	---	---
	12/22/10	28,000	19,000	3,900	610	850	4,200	<40	1,900	1,300	<40	<40	<40
	01/12/11	12,000	15,000	1,300	49	280	1,030	<20	430	12,000	<20	<20	<20
	02/24/11 [2]	12,000	10,000	700	450	310	1,770	<1.0	970	4,100	<1.0	<1.0	20
	03/23/11 [2]	2,400	4,300	210	47	39	250	<2.0	310	3,600	<2.0	<2.0	5.2
	04/29/11 [2]	1,200	1,500	250	27	27	154	<2.0	350	3,900	<2.0	<2.0	2.4
	05/13/11 [2]	1,300	1,600	200	18	22	127	<2.0	350	6,600	<2.0	<2.0	3.6
	06/22/11 [2]	1,800	1,200	190	95	34	219	<1.0	310	6,800	<1.0	<1.0	1.8
GMW-O-16	11/27/96	---	---	570	67	14	360	<5	120	---	---	---	---
	07/17/97	<100	---	<0.5	<0.5	<0.5	<1	<0.5	310	---	---	---	---
	01/06/98	<100	---	<0.5	<0.5	<0.5	<1.5	<0.5	<5	---	---	---	---
	01/09/98	4,600	---	---	---	---	---	---	---	---	---	---	---
	05/20/98	<300	---	<0.5	<0.5	<0.5	<1	<0.5	76	---	---	---	---
	11/13/98	<300	<100	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	---	---	---	---
	05/07/99	<500	---	0.66	<0.5	<0.5	0.72	<1	7.6	---	---	---	---
	11/18/99	<416	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	05/17/00	<300	<100	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	---	---	---	---
	11/30/00	<300	<100	0.8	<0.5	<0.5	<0.5	<0.5	0.6	---	---	---	---
	05/10/01	<300	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	04/10/02	<300	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	10/22/02	<300	<100	1.6	0.98	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	04/09/03	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	10/07/03	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	04/22/04	<50	3,600	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	07/20/04	---	<100	---	---	---	---	---	---	---	---	---	---
	11/02/04	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	05/05/05	92	<100	1.6	<0.5	<0.5	<0.5	<0.5	110	---	---	---	---
	08/02/05	57	<100	1.3	<0.5	<0.5	<0.5	<0.5	93	---	---	---	---
	11/02/05	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	57	---	---	---	---
	02/28/06	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	5.3	---	---	---	---
	05/04/06	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	6.3	---	---	---	---
	09/19/06	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	0.57	---	---	---	---
	12/05/06	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	05/05/07	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---

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Sample ID	Date	TPH-g	TPH-fp	Benzene	Toluene	Ethyl-benzene	Total Xylenes [1]	1,2-DCA	MTBE	TBA	DIPE	ETBE	TAME
GMW-O-16	11/14/07	<50	1,400	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---
(Cont'd)	02/07/08	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	0.68	---	---	---	---
	04/16/08	<50	<100	<0.5	1.2	0.59	5.5	<0.5	0.63	---	---	---	---
	10/14/08	<50	<100	<0.5	<0.5	<0.5	0.6	<0.5	0.65	---	---	---	---
	04/23/09	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	0.55	<10	<1	<1	<1
	10/21/09	<50	250	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<1	<1	<1
	03/16/10	<50	140	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0
	04/16/10	<50	<100	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0
	05/26/10	<50	120	<0.50	<0.50	<0.50	<0.50	<0.50	0.88	<10	<1.0	<1.0	<1.0
	06/22/10	<50	<100	<0.50	<0.50	<0.50	<0.50	<0.50	1.2	<10	<1.0	<1.0	<1.0
	07/13/10	<50	<100	0.73	<0.5	<0.5	<0.5	<0.5	1.9	<10	<1.0	<1.0	<1.0
	08/12/10	<50	<100	0.50	<0.5	<0.5	<0.5	<0.5	2.3	<10	<1.0	<1.0	<1.0
	09/20/10	<50	170	0.69	<0.5	<0.5	<0.5	<0.5	3.1	<10	<1.0	<1.0	<1.0
	10/06/10	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	1.3	<10	<1.0	<1.0	<1.0
	11/16/10	<50	160	<0.5	<0.5	<0.5	<0.5	<0.5	4	<10	<1.0	<1.0	<1.0
	12/22/10	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	2	<10	<1.0	<1.0	<1.0
	01/11/11	<50	<100	0.52	<0.5	<0.5	<0.5	<0.5	0.94	<10	<1.0	<1.0	<1.0
	02/24/11	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	0.67	<10	<1.0	<1.0	<1.0
	03/23/11	<50	100	<0.5	<0.5	<0.5	<0.5	<0.5	1.6	<10	<1.0	<1.0	<1.0
	04/12/11	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	1.3	<10	<1.0	<1.0	<1.0
	05/13/11	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	1.8	<10	<1.0	<1.0	<1.0
	06/22/11	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	1.9	<10	<1.0	<1.0	<1.0
GMW-O-18	11/26/96	---	---	<10	<10	<10	<30	<10	10,000	---	---	---	---
	11/27/96	---	---	<10	66	<10	<30	<5	120	---	---	---	---
	07/11/97	<100	---	<3	<3	<3	<3	<3	3,000	---	---	---	---
	01/07/98	<100	---	<5	<5	<5	<15	<5	3,200	---	---	---	---
	05/21/98	2,000	---	<100	<100	<100	<200	<100	5,600	---	---	---	---
	11/17/98	543	<100	<0.5	1	<0.5	2.6	<0.5	1,420	---	---	---	---
	05/06/99	2,700	---	<5	<5	<5	<5	<13	15,000	---	---	---	---
	11/18/99	2,900	<100	<13	<12.5	<12.5	<12.5	<13	6,700	---	---	---	---
	05/19/00	3,500	<100	<25	<25	<25	<25	<25	10,000	---	---	---	---
	11/02/05	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	1.4	---	---	---	---
	05/09/06	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	2.1	---	---	---	---
	12/07/06	<100	<100	<0.5	<0.5	<0.5	<0.5	<1	0.65	---	---	---	---
	05/04/07	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	0.62	---	---	---	---
	11/15/07	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	1.6	---	---	---	---
	04/15/08	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	10/15/08	<200	<100	<1	<1	<1	<1	<2	<1	---	---	---	---
	04/23/09	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	1	140	<1.0	<1.0	<1.0
	10/21/09	2,400	680	170	440	17	410	<5	490	480	<5	<5	<5
	03/16/10	<50	<100	0.60	1.3	<0.50	1.77	<0.50	4.5	550	<1.0	<1.0	<1.0
	04/16/10	1,300	6,600	0.67	<0.50	3.1	12.9	<0.50	1.2	2,400	<1.0	<1.0	<1.0
	05/25/10	110	540	<0.50	<0.50	<0.50	<0.50	<1.0	2.9	6,500	<1.0	<1.0	<1.0

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Sample ID	Date	TPH-g	TPH-fp	Benzene	Toluene	Ethyl-benzene	Total Xylenes [1]	1,2-DCA	MTBE	TBA	DIPE	ETBE	TAME
GMW-O-18 (Cont'd)	06/25/10 [2]	74	140	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	8,300	<1.0	<1.0	<1.0
	07/14/10 [2]	110	<100	<0.5	<0.5	<0.5	<0.5	<0.5	0.85	11,000	<1.0	<1.0	<1.0
	08/12/10 [2]	220	<100	0.64	<0.5	<0.5	<0.5	<1.0	0.93	15,000	<1.0	<1.0	<1.0
	09/20/10 [2]	290	<100	1.1	<0.5	<0.5	0.55	<1.0	1.2	23,000	<1.0	<1.0	<1.0
	10/5/10 [2]	4,000	1,100	1,200	420	23	231	<10	670	2,600	<10	<10	<10
	11/16/10 [2]	2,000	120	<0.5	<0.5	<0.5	<0.5	<1.0	0.53	21,000	<1.0	<1.0	<1.0
	12/22/10	---	---	---	---	---	---	---	---	---	---	---	---
	01/12/11 [2]	3,000	130	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	29,000	<2.0	<2.0	<2.0
	02/24/11 [2]	1,400	2,100	60	31	19	123	<0.5	380	1,600	<1.0	<1.0	3.9
	03/23/11 [2]	110	230	6	1.4	1.1	8.1	<0.5	2.9	3,300	<1.0	<1.0	<1.0
	04/29/11 [2]	<50	120	3.7	<0.5	<0.5	1.7	<0.5	7.5	780	<1.0	<1.0	<1.0
	05/13/11 [2]	<100	230	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<10	<1.0	<1.0	<1.0
	06/22/11 [2]	7,500	37,000	<0.5	<0.5	<0.5	436	<1.0	5.5	3,200	<1.0	<1.0	<1.0
GMW-O-19	11/25/96	---	---	<0.5	<0.87	2.8	5.1	<0.5	<5	---	---	---	---
	07/16/97	<100	---	<0.5	<0.5	<0.5	<1	<0.5	<5	---	---	---	---
	01/06/98	<100	---	<0.5	<0.5	<0.5	<1.5	<0.5	<5	---	---	---	---
	05/20/98	<300	---	<0.5	<0.5	<0.5	<1	<0.5	2	---	---	---	---
	11/12/98	<300	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	05/06/99	<500	---	<0.5	<0.5	<0.5	<0.5	<1	0.51	---	---	---	---
	11/18/99	<416	<100	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	---	---	---	---
	05/17/00	<300	180	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	09/19/01	<300	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	11/07/01	<300	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	01/30/02	<300	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	04/09/03	<50	500	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	08/01/03	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	10/07/03	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	04/22/04	<50	1,400	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	07/20/04	---	<100	---	---	---	---	---	---	---	---	---	---
	11/02/04	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	05/05/05	510	110	110	<0.5	17	24.5	<1	150	---	---	---	---
	08/02/05	160	<100	2.1	<0.5	1.2	<0.5	<0.5	19	---	---	---	---
	11/02/05	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	02/28/06	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	05/04/06	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	12/05/06	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	05/05/07	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	11/15/07	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	04/16/08	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	10/14/08	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	04/23/09	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<1	<1	<1
	10/20/09	<50	<200	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<1	<1	<1
	03/15/10	<50	<100	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0

TABLE 1
Summary of Groundwater Analytical Data - Southeastern Area Wells
Southeastern Area Step-Out Investigation
SFPP, L.P.
Defense Fuel Support Point Norwalk
Norwalk, California

Sample ID	Date	TPH-g	TPH-fp	Benzene	Toluene	Ethyl-benzene	Total Xylenes [1]	1,2-DCA	MTBE	TBA	DIPE	ETBE	TAME
GMW-O-19	04/16/10	<50	<100	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0
(Cont'd)	05/26/10	<50	<100	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0
	06/22/10	<50	<100	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<1.0	<1.0	<1.0
	07/13/10	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<1.0	<1.0	<1.0
	08/12/10	<50	<100	0.52	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<1.0	<1.0	<1.0
	09/20/10	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<1.0	<1.0	<1.0
	10/06/10	<50	340	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<1.0	<1.0	<1.0
	11/16/10	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<1.0	<1.0	<1.0
	12/22/10	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<1.0	<1.0	<1.0
	01/11/11	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<1.0	<1.0	<1.0
	02/24/11	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<1.0	<1.0	<1.0
	03/23/11	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<1.0	<1.0	<1.0
	04/12/11	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<1.0	<1.0	<1.0
	05/13/11	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<1.0	<1.0	<1.0
	06/22/11	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<1.0	<1.0	<1.0
PZ-5	10/07/03	6,900	<100	11	<10	<10	<10	<20	9,100	---	---	---	---
	05/05/05	<50	<100	0.87	<0.5	<0.5	<0.5	<0.5	43	---	---	---	---
	11/02/05	1,200	<100	<2.5	<2.5	<2.5	<2.5	<5.0	2,100	---	---	---	---
	02/28/06	160	<100	<0.5	<0.5	<0.5	<0.5	<1	380	---	---	---	---
	05/04/06	1,200	<100	<2	<2	<2	<2	<4	1,900	---	---	---	---
	09/19/06	480	<100	<1	<1	<1	<1	<2	1,200	---	---	---	---
	12/07/06	480	<100	<1.5	<1.5	<1.5	<1.5	<3	960	---	---	---	---
	03/13/07	320	<100	<1	<1	<1	<1	<2	690	---	---	---	---
	05/04/07	400	<100	<0.5	<0.5	<0.5	<0.5	<1	610	---	---	---	---
	08/29/07	380	<100	<1	<1	<1	<1	<2	480	---	---	---	---
	11/15/07	370	<100	<0.5	<0.5	<0.5	<0.5	<1	470	---	---	---	---
	02/20/08	940	560	<1	<1	<1	<1	<2	750	---	---	---	---
	04/15/08	750	330	<1	<1	<1	<1	<2	740	---	---	---	---
	08/12/08	1,500	370	<2	<2	<2	<2	<4	2,000	---	---	---	---
	10/16/08	<3,000	210	22	<15	<15	<15	<30	1,900	---	---	---	---
	02/24/09	1,000	440	61	<1	<1	<1	<2	1,200	37,000	---	---	---
	02/24/09 [4]	2,400	1,000	71	<100	<100	<100	<50	1,400	47,000	<200	<200	<200
	04/23/09	1,200	760	250	<2	5.7	<2	<4	1,200	35,000	<4	<4	<4
	07/22/09	3,800	1,800	2,000	20	98	77	<5	800	54,000	<5	<5	<5
	10/23/09	2,900	1,300	1,100	18	53	69	<10	500	50,000	<10	<10	<10
	03/16/10	1,700	890	370	2.1	33	9.4	<4.0	350	58,000	<4.0	<4.0	<4.0
	04/16/10	1,600	1,100	110	<2.5	9.7	4.6	<5.0	340	91,000	<5.0	<5.0	<5.0
	05/27/10	3,200 J	1,300	1,100	<25	66	<25	<50	360	69,000	<50	<50	<50
	06/22/10	3,600	900	1,500	<10	96	<10	<20	450	73,000	<20	<20	<20
	07/14/10	4,600	1,300	1,900	<10	180	<10	<20	530	82,000	<20	<20	<20
	08/12/10	9,100	1,600	4,400	<5.0	340	50.6	<10	490	64,000	<10	<10	<10
	09/20/10	8,500	1,800	4,200	2.8	110	16.8	<4.0	370	43,000	<4.0	<4.0	<4.0

TABLE 1
Summary of Groundwater Analytical Data - Southeastern Area Wells
Southeastern Area Step-Out Investigation
SFPP, L.P.
Defense Fuel Support Point Norwalk
Norwalk, California

Sample ID	Date	TPH-g	TPH-fp	Benzene	Toluene	Ethyl-benzene	Total Xylenes [1]	1,2-DCA	MTBE	TBA	DIPE	ETBE	TAME
PZ-5	10/07/10	6,300	1,000	3,100	<20	56	<20	<40	150	40,000	<40	<40	<40
(Cont'd)	11/16/10	3,400	1,600	1,600	<10	10	15	<20	130	20,000	<20	<20	<20
	12/22/10	3,400	1,700	1,600	<10	<10	<10	<20	100	22,000	<20	<20	<20
	01/12/11	4,000	1,200	1,500	<5.0	<5.0	<5.0	<10	130	38,000	<10	<10	<10
	02/24/11	1,400	400	390	<2.0	<2.0	3.8	<4.0	84	27,000	<4.0	<4.0	<4.0
	03/23/11	1,100	820	210	<1.0	<1.0	2.4	<2.0	140	29,000	<2.0	<2.0	<2.0
	04/13/11	830	520	59	<1.0	<1.0	<1.0	<2.0	120	28,000	<2.0	<2.0	<2.0
	05/13/11	2,000	830	710	4.7	25	25.8	<5.0	140	34,000	<5.0	<5.0	<5.0
	06/22/11	4,500	1,100	960	9	30	80	<10	100	33,000	<10	<10	<10

Notes

Results are reported in micrograms per liter (µg/L).

1. The total xylenes result is the sum of m,p-xylenes and o-xylenes when detected.
2. Groundwater sample collected through a sampling port.
3. Free product was present.
4. Split groundwater sample analyzed by Calscience Environmental Laboratories, Inc. Results were evaluated to laboratory method detection limits.

Abbreviations

1,2-DCA = 1,2-dichloroethane
MTBE = methyl tertiary butyl ether
TBA = tertiary butyl alcohol
DIPE = di-isopropyl ether
ETBE = ethyl tertiary butyl ether
TAME = tertiary amyl methyl ether
--- = not analyzed or not applicable
<5.0 = not detected at or above the laboratory reporting limit shown
NS = well not sampled due to presence of free product
J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
TPH-fp = total extractable petroleum hydrocarbons quantified using a site fuel product standard
TPH-g = total purgeable petroleum hydrocarbons quantified using a gasoline standard (C4-C13)

TABLE 2
Summary of Soil Analytical Data
Southeastern Area Step-Out Investigation
SFPP, L.P.
Defense Fuel Support Point Norwalk
Norwalk, California

Sample Location	Sample Date	Sample ID	Sample Depth Interval (feet bgs)	TPH-g	TPH-fp	Benzene	Toluene	Ethyl-benzene	Total Xylenes [1]	DIPE	ETBE	MTBE	TAME	TBA
GB-19	1/25/2011	GB-19-10.5-01-012511	10.5 - 11	<2.1	<11	<11	<11	<11	<11	<21	<21	**20**	<21	<430
	1/25/2011	GB-19-20-01-012511	19.5 - 20	<2.2	<10	<11	<11	<11	<11	<22	<22	<11	<22	<440
	1/25/2011	GB-19-23-01-012511	23 - 23.5	<3.2	<13	<16	<16	<16	<16	<32	<32	<16	<32	<640
	1/25/2011	GB-19-30-01-012511	30 - 31	<2	<12	<9.8	<9.8	<9.8	<9.8	<20	<20	<9.8	<20	<390
	1/25/2011	GB-19-30-02-012511 (dup)	30 - 31	<2.1	<13	<11	<11	<11	<11	<21	<21	<11	<21	<420
	1/25/2011	GB-19-33-01-012511	33 - 33.5	<2.1	<13	<11	<11	<11	<11	<21	<21	<11	<21	<420
	1/25/2011	GB-19-40-01-012511	40 - 40.5	<2.2	<13	<11	<11	<11	<11	<22	<22	<11	<22	<440
	1/25/2011	GB-19-50-01-012511	50 - 50.5	<2.3	<13	<11	<11	<11	<11	<23	<23	<11	<23	<460
GB-20	1/25/2011	GB-20-10.5-01-012511	10.5 - 11	<1.8	<11	<9.2	<9.2	<9.2	<9.2	<20	<20	<9.2	<20	<370
	1/25/2011	GB-20-19.5-01-012511	19.5 - 20	<2.2	<12	<11	<11	<11	<11	<22	<22	<11	<22	<430
	1/25/2011	GB-20-22-01-012511	22 - 22.5	<1.9	<11	<9.3	<9.3	<9.3	<9.3	<20	<20	<9.3	<20	<370
	1/25/2011	GB-20-30-01-012511	30 - 30.5	<1.9	<12	<9.6	<9.6	<9.6	<9.6	<20	<20	<9.6	<20	<380
	1/25/2011	GB-20-32-01-012511	32 - 32.5	<2.1	<14	<11	<11	<11	<11	<21	<21	<11	<21	<420
	1/25/2011	GB-20-40-01-012511	40 - 41	<2.1	<12	<10	<10	<10	<10	<21	<21	<10	<21	<410
	1/25/2011	GB-20-40-02-012511 (dup)	40 - 41	<2	<12	<10	<10	<10	<10	<20	<20	<10	<20	<400
	1/25/2011	GB-20-50-01-012511	50 - 50.5	<2	<12	<10	<10	<10	<10	<20	<20	<10	<20	<410
GB-21	1/24/2011	GB-21-10.5-01-012411	10.5 - 11.5	<2.3	<11	<11	<11	<11	<11	<23	<23	<11	<23	<460
	1/24/2011	GB-21-10.5-02-012411 (dup)	10.5 - 11.5	<2	<11	<10	<10	<10	<10	<20	<20	<10	<20	<400
	1/24/2011	GB-21-20-01-012411	19 - 20	<2.2	<11	<11	<11	<11	<11	<22	<22	<11	<22	<430
	1/24/2011	GB-21-20-02-012411 (dup)	19 - 20	<2.1	<10	<10	<10	<10	<10	<21	<21	<10	<21	<410
	1/24/2011	GB-21-22-01-012411	22 - 22.5	<3.8	<11	<19	<19	<19	<19	<38	<38	<19	<38	<760
	1/24/2011	GB-21-30-01-012411	30 - 30.5	<2	<12	<10	<10	<10	<10	<20	<20	<10	<20	<400
	1/24/2011	GB-21-32-01-012411	32 - 33	<1.9	<12	<9.3	<9.3	<9.3	<9.3	<20	<20	<9.3	<20	<370
	1/24/2011	GB-21-32-03-012411	32 - 33	<1.9	<12	<9.7	<9.7	<9.7	<9.7	<20	<20	<9.7	<20	<390
	1/24/2011	GB-21-40-01-012411	39.5 - 40	<1.9	<12	<9.4	<9.4	<9.4	<9.4	<20	<20	<9.4	<20	<380
	1/24/2011	GB-21-50-01-012411	50 - 50.5	<2.1	<12	<11	<11	<11	<11	<21	<21	<11	<21	<430
	1/24/2011	GB-21-60-01-012411	60 - 60.5	<2.2	<13	<11	<11	<11	<11	<22	<22	**40**	<22	<430
GB-22	1/20/2011	GB-22-10.5-01-012011	10.5 - 11	<2.6	<13	<13	<13	<13	<13	<26	<26	<13	<26	<520
	1/20/2011	GB-22-20-01-012011	20 - 20.5	<2.5	<13	<12	<12	<12	<12	<25	<25	<12	<25	<490
	1/20/2011	GB-22-22-01-012011	22 - 22.5	<2.4	**32**	<12	<12	<12	<12	<24	<24	<12	<24	<480
	1/20/2011	GB-22-30-01-012011	30 - 30.5	<2.3	<13	<11	<11	<11	<11	<23	<23	<11	<23	<450
	1/20/2011	GB-22-32-01-012011	32 - 32.5	<2	<12	<10	<10	<10	<10	<20	<20	<10	<20	<410
	1/20/2011	GB-22-40-01-012011	39.5 - 40	<2.3	<13	<12	<12	<12	<12	<23	<23	<12	<23	<460
	1/20/2011	GB-22-53-01-012011	53 - 53.5	<2.3	<14	<12	<12	<12	<12	<23	<23	**23**	<23	<460
GB-23	1/20/2011	GB-23-10.5-01-012011	10.5 - 11	<2.3	**21**	<12	<12	<12	<12	<23	<23	<12	<23	<470
	1/20/2011	GB-23-20-01-012011	20 - 20.5	<2.3	<13	<12	<12	<12	<12	<23	<23	<12	<23	<460
	1/20/2011	GB-23-30-01-012011	30 - 30.5	<2.3	<13	<11	<11	<11	<11	<23	<23	<11	<23	<450
	1/20/2011	GB-23-32.5-01-012011	32 - 32.5	<1.9	<12	<9.7	<9.7	<9.7	<9.7	<20	<20	<9.7	<20	<390
	1/20/2011	GB-23-40-01-012011	40 - 40.5	<2.3	<12	<12	<12	<12	<12	<23	<23	<12	<23	<460
	1/20/2011	GB-23-50-01-012011	50 - 50.5	<2.7	<13	<13	<13	<13	<13	<27	<27	<13	<27	**2,200**

Notes

Results are reported in micrograms per kilogram (µg/kg).

The total xylenes result is the sum of m,p-xylenes and o-xylenes when detected.

2,200 Represents data detected above the laboratory reporting limit.

Abbreviations

<50 = not detected at or above the laboratory reporting limit shown
DIPE = di-isopropyl ether
DUP = duplicate sample
ETBE = ethyl tertiary butyl ether
MTBE = methyl tertiary butyl ether
TAME = tertiary amyl methyl ether
TBA = tertiary butyl alcohol
TPH-fp = total extractable petroleum hydrocarbons quantified using a site fuel product standard
TPH-g = total purgeable petroleum hydrocarbons quantified using a gasoline standard (C4-C13)
bgs = below ground surface

TABLE 3
Summary of Hydropunch Groundwater Analytical Data
Southeastern Area Step-Out Investigation
SFPP, L.P.
Defense Fuel Support Point Norwalk
Norwalk, California

Sample Location	Sample Date	Sample ID	Sample Depth Interval (feet bgs)	TPH-g	TPH-fp	Benzene	Toluene	Ethyl-benzene	Total Xylenes	DIPE	ETBE	MTBE	TAME	TBA
GB-19	1/26/2011	GB-19-34-04-012611	30 - 34	<50	<100	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<10
	1/26/2011	GB-19-41-04-012611	37 - 41	<50	<100	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<10
	1/26/2011	GB-19-46-04-012611	43 - 46	<50	<100	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<10
	1/26/2011	GB-19-46-06-012611 (dup)	43 - 46	<50	<100	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<10
GB-20	1/26/2011	GB-20-34-04-012611	31 - 34	<50	**220**	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<10
	1/26/2011	GB-20-39-04-012611	36 - 39	<50	<100	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<10
	1/26/2011	GB-20-45-04-012611	41 - 45	<50	<100	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<10
	1/26/2011	GB-20-45-05-012611 (dup)	41 - 45	<50	<100	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<10
GB-21	1/24/2011	GB-21-33.5-04-012411	29.5 - 33.5	<50	<100	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<10
	1/24/2011	GB-21-38.5-04-012411	34.5 - 38.5	<50	<100	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<10
	1/24/2011	GB-21-46.5-04-012411	42.5 - 46.5	<50	<100	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	**140**
GB-22	1/21/2011	GB-22-31-04-012111	27 - 31	<50	<100	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<10
	1/21/2011	GB-22-37-04-012111	33 - 37	<50	<100	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<10
	1/21/2011	GB-22-45-04-012111	41 - 45	<50	<100	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	**110**
GB-23	1/21/2011	GB-23-31-04-012111	27 - 31	<50	<100	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<10
	1/21/2011	GB-23-37-04-012111	33 - 37	<50	<100	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	<10
	1/21/2011	GB-23-45-04-012111	41 - 45	**100**	<100	<0.5	<0.5	<0.5	<0.5	<1	<1	<0.5	<1	**2,400**

Notes

Results are reported in micrograms per liter (µg/L).

The total xylenes result is the sum of m,p-xylenes and o-xylenes when detected.

100 Represents data detected above the laboratory reporting limit.

Abbreviations

<50 = not detected at or above the laboratory reporting limit shown

DIPE = di-isopropyl ether

DUP = duplicate sample

ETBE = ethyl tertiary butyl ether

MTBE = methyl tertiary butyl ether

TAME = tertiary amyl methyl ether

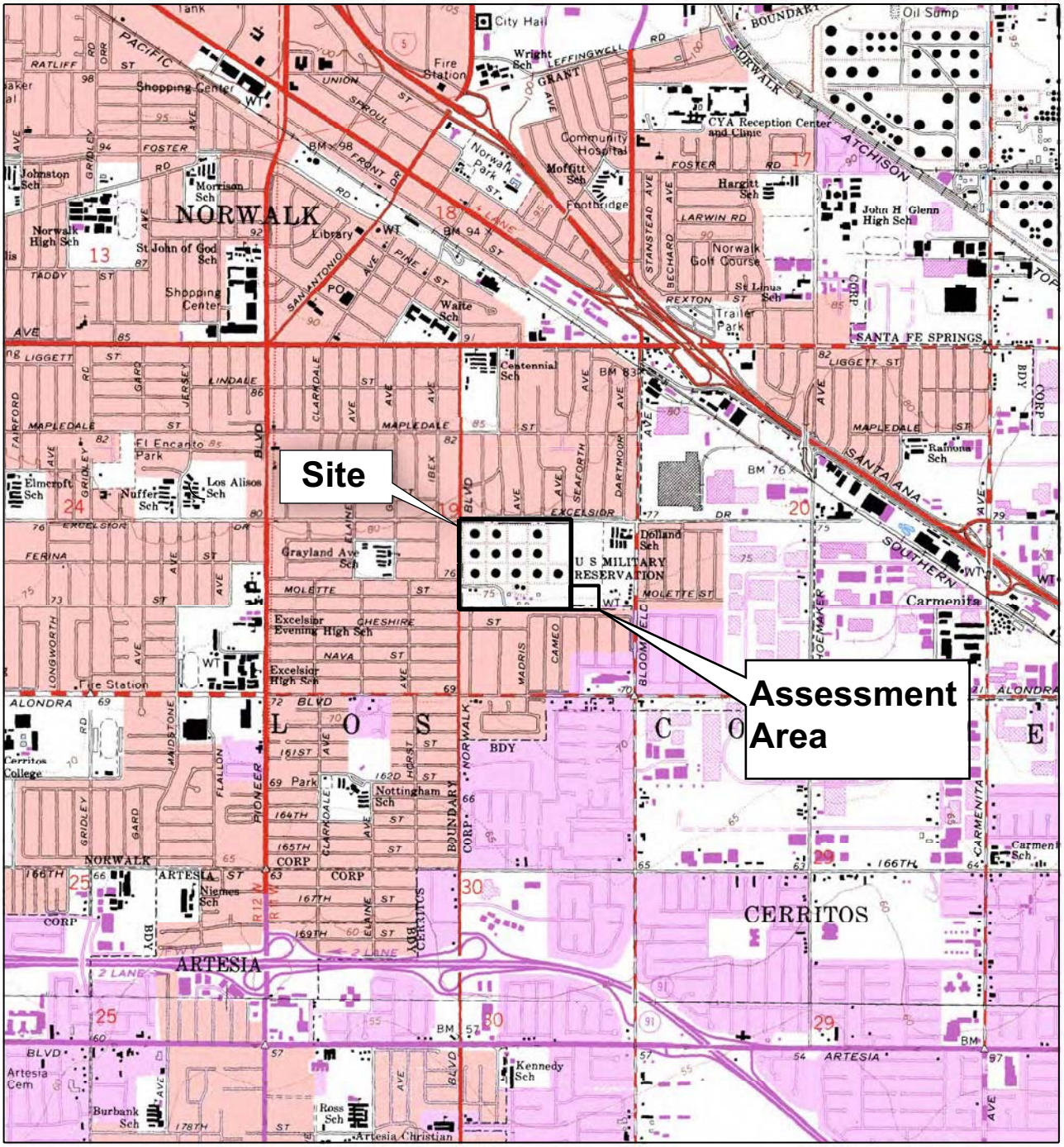
TBA = tertiary butyl alcohol

TPH-fp = total extractable petroleum hydrocarbons quantified using a site fuel product standard

TPH-g = total purgeable petroleum hydrocarbons quantified using a gasoline standard (C4-C13)

bgs = below ground surface

Figures



BASEMAP MODIFIED FROM U.S.G.S. 7.5 MINUTE QUADRANGLE MAP
LOS ALAMITOS 1964, CALIFORNIA. PHOTO-REVISED 1981.
WHITTIER 1965, CALIFORNIA. PHOTO-REVISED 1981.

SITE LOCATION MAP

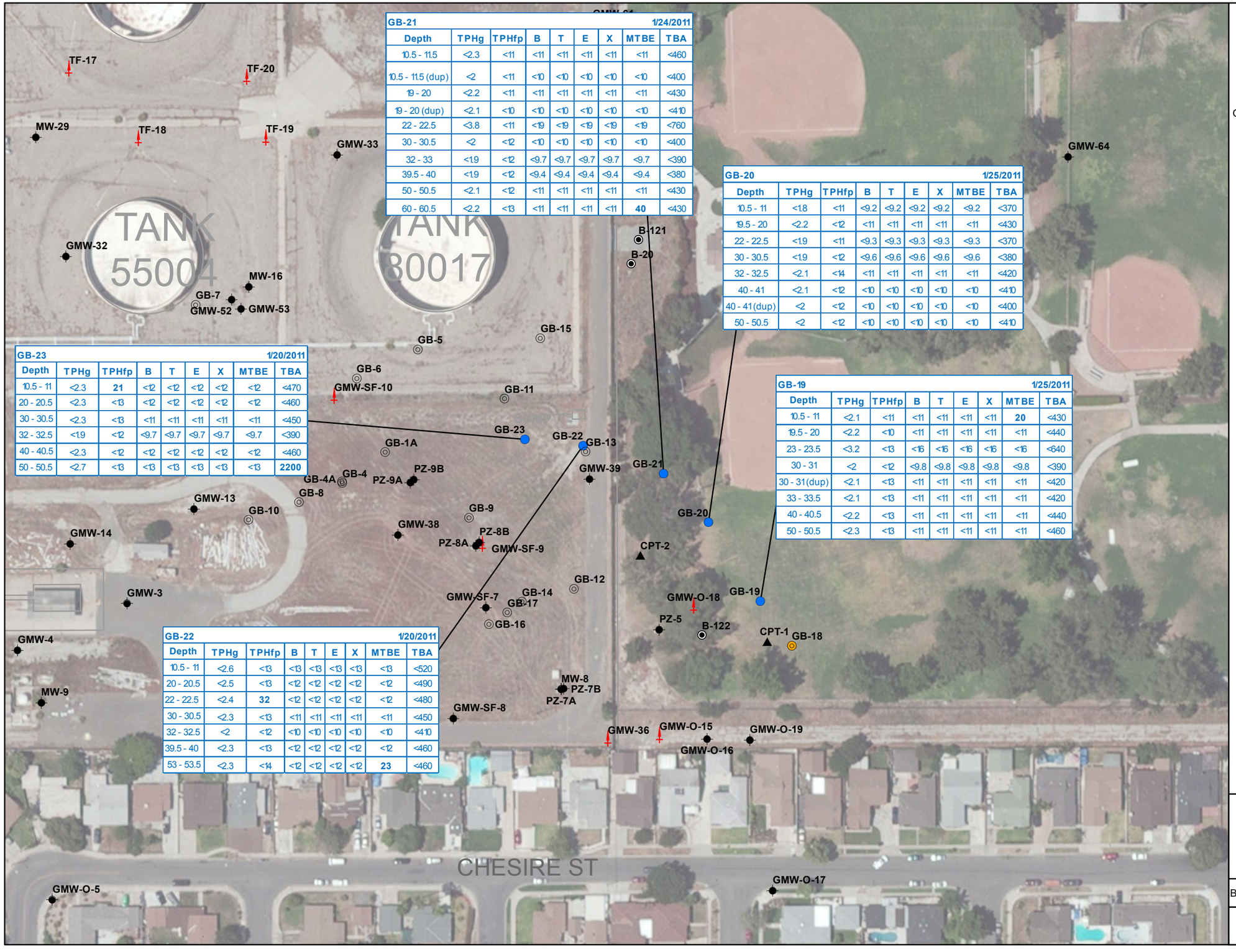
DFSP NORWALK
Norwalk, California

By: Andy Vollmar	Date: August 9, 2010	Project No: 407609

CH2MHILL

Figure 1

ES070610212914SCO407609.A1.03 DFSP_sitelocation.ai 7/10



GB-21 1/24/2011

Depth	TPHg	TPHfp	B	T	E	X	MTBE	TBA
10.5 - 11.5	<2.3	<11	<11	<11	<11	<11	<11	<460
10.5 - 11.5 (dup)	<2	<11	<10	<10	<10	<10	<10	<400
19 - 20	<2.2	<11	<11	<11	<11	<11	<11	<430
19 - 20 (dup)	<2.1	<10	<10	<10	<10	<10	<10	<410
22 - 22.5	<3.8	<11	<19	<19	<19	<19	<19	<760
30 - 30.5	<2	<12	<10	<10	<10	<10	<10	<400
32 - 33	<1.9	<12	<9.7	<9.7	<9.7	<9.7	<9.7	<390
39.5 - 40	<1.9	<12	<9.4	<9.4	<9.4	<9.4	<9.4	<380
50 - 50.5	<2.1	<12	<11	<11	<11	<11	<11	<430
60 - 60.5	<2.2	<13	<11	<11	<11	<11	**40**	<430

GB-20 1/25/2011

Depth	TPHg	TPHfp	B	T	E	X	MTBE	TBA
10.5 - 11	<1.8	<11	<9.2	<9.2	<9.2	<9.2	<9.2	<370
19.5 - 20	<2.2	<12	<11	<11	<11	<11	<11	<430
22 - 22.5	<1.9	<11	<9.3	<9.3	<9.3	<9.3	<9.3	<370
30 - 30.5	<1.9	<12	<9.6	<9.6	<9.6	<9.6	<9.6	<380
32 - 32.5	<2.1	<14	<11	<11	<11	<11	<11	<420
40 - 41	<2.1	<12	<10	<10	<10	<10	<10	<410
40 - 41 (dup)	<2	<12	<10	<10	<10	<10	<10	<400
50 - 50.5	<2	<12	<10	<10	<10	<10	<10	<410

GB-19 1/25/2011

Depth	TPHg	TPHfp	B	T	E	X	MTBE	TBA
10.5 - 11	<2.1	<11	<11	<11	<11	<11	**20**	<430
19.5 - 20	<2.2	<10	<11	<11	<11	<11	<11	<440
23 - 23.5	<3.2	<13	<16	<16	<16	<16	<16	<640
30 - 31	<2	<12	<9.8	<9.8	<9.8	<9.8	<9.8	<390
30 - 31 (dup)	<2.1	<13	<11	<11	<11	<11	<11	<420
33 - 33.5	<2.1	<13	<11	<11	<11	<11	<11	<420
40 - 40.5	<2.2	<13	<11	<11	<11	<11	<11	<440
50 - 50.5	<2.3	<13	<11	<11	<11	<11	<11	<460

GB-23 1/20/2011

Depth	TPHg	TPHfp	B	T	E	X	MTBE	TBA
10.5 - 11	<2.3	**21**	<12	<12	<12	<12	<12	<470
20 - 20.5	<2.3	<13	<12	<12	<12	<12	<12	<460
30 - 30.5	<2.3	<13	<11	<11	<11	<11	<11	<450
32 - 32.5	<1.9	<12	<9.7	<9.7	<9.7	<9.7	<9.7	<390
40 - 40.5	<2.3	<12	<12	<12	<12	<12	<12	<460
50 - 50.5	<2.7	<13	<13	<13	<13	<13	<13	**2200**

GB-22 1/20/2011

Depth	TPHg	TPHfp	B	T	E	X	MTBE	TBA
10.5 - 11	<2.6	<13	<13	<13	<13	<13	<13	<520
20 - 20.5	<2.5	<13	<12	<12	<12	<12	<12	<490
22 - 22.5	<2.4	**32**	<12	<12	<12	<12	<12	<480
30 - 30.5	<2.3	<13	<11	<11	<11	<11	<11	<450
32 - 32.5	<2	<12	<10	<10	<10	<10	<10	<410
39.5 - 40	<2.3	<13	<12	<12	<12	<12	<12	<460
53 - 53.5	<2.3	<14	<12	<12	<12	<12	**23**	<460

Explanation

- GB-19 — Soil and Groundwater Sampling Location (CH2M Hill, 2011)
- GMW-39 — Monitoring well
- GMW-O-18 — Remediation Well
- CPT-1 — CPT and Groundwater Sampling Location (AMEC Geometrix, 2008)
- GB-18 — Exposition aquifer groundwater sampling location (AMEC Geomatrix, 2009)
- GB-17 — Groundwater screening sample location (Gematrix, 2002)
- B-122 — Groundwater sampling location (Parsons, 2007)

Depth Sample depth or well screen interval in feet below ground surface

TPHg Total petroleum hydrocarbons quantified using a gasoline standard

TPHfp Total petroleum hydrocarbons quantified using a fuel product standard

B Benzene

T Toluene

E Ethylbenzene

X Total xylenes

MTBE Methy tert-butyl ether

TBA Tert-butyl alcohol

<11 Not detected at or above laboratory reporting limit (RL) shown

DUP Duplicate Sample

Soil analytical results are reported in units of micrograms per kilogram (µg/kg).

N

0 40 80 160 Feet

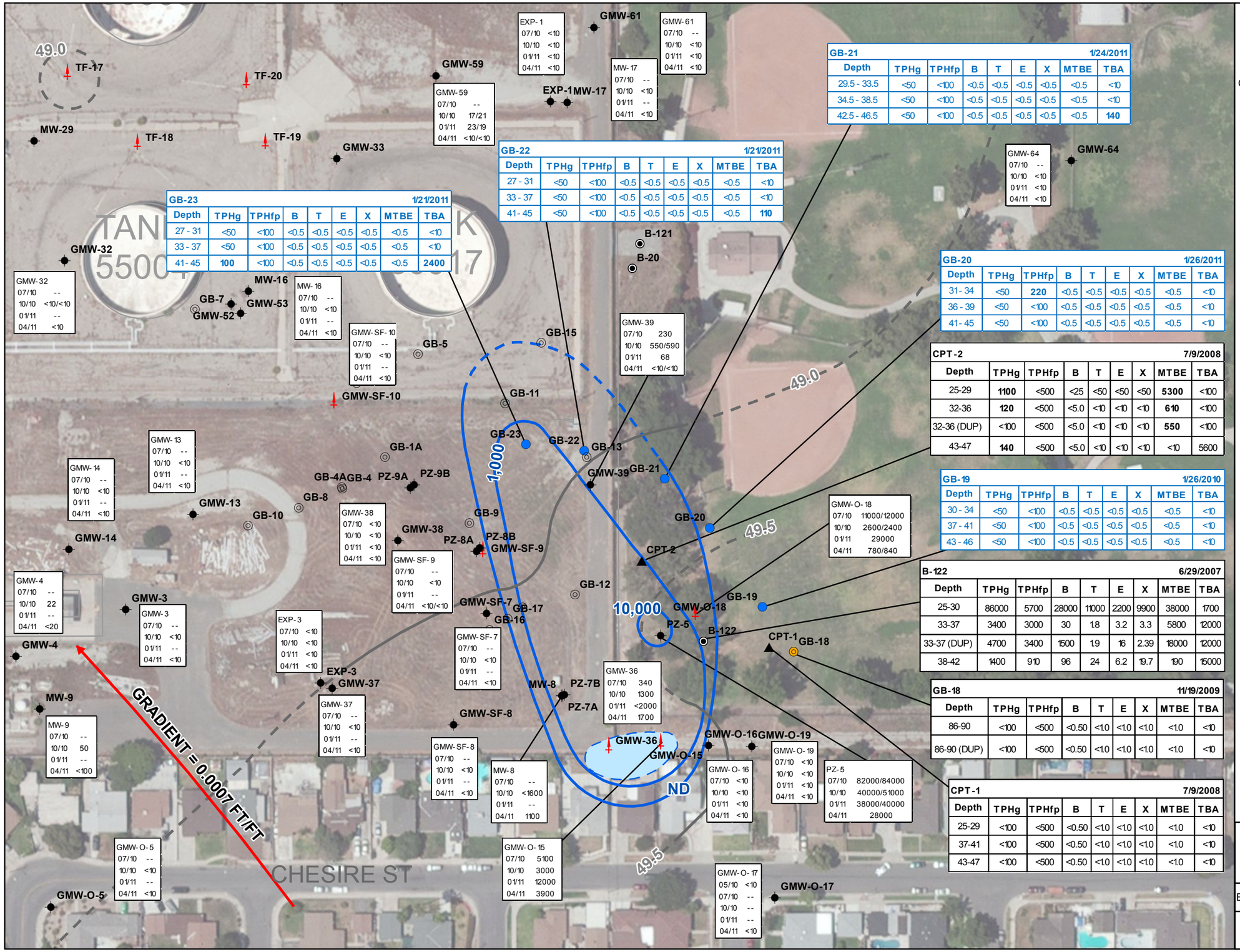
Soil Analytical Results from SE Investigation

DFSP, Norwalk CA

By: Mike Brown | Date: 08/04/11 | PN: 407609

CH2MHILL

Figure 2



GB-21								1/24/2011
Depth	TPHg	TPHfp	B	T	E	X	MTBE	TBA
29.5 - 33.5	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<10
34.5 - 38.5	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<10
42.5 - 46.5	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	140

GB-22								1/21/2011
Depth	TPHg	TPHfp	B	T	E	X	MTBE	TBA
27 - 31	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<10
33 - 37	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<10
41 - 45	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	110

GB-23								1/21/2011
Depth	TPHg	TPHfp	B	T	E	X	MTBE	TBA
27 - 31	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<10
33 - 37	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<10
41 - 45	100	<100	<0.5	<0.5	<0.5	<0.5	<0.5	2400

GB-20								1/26/2011
Depth	TPHg	TPHfp	B	T	E	X	MTBE	TBA
31- 34	<50	220	<0.5	<0.5	<0.5	<0.5	<0.5	<10
36 - 39	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<10
41 - 45	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<10

CPT-2								7/9/2008
Depth	TPHg	TPHfp	B	T	E	X	MTBE	TBA
25-29	1100	<500	<25	<50	<50	<50	5300	<100
32-36	120	<500	<5.0	<10	<10	<10	610	<100
32-36 (DUP)	<100	<500	<5.0	<10	<10	<10	550	<100
43-47	140	<500	<5.0	<10	<10	<10	<10	5600

GB-19								1/26/2010
Depth	TPHg	TPHfp	B	T	E	X	MTBE	TBA
30 - 34	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<10
37 - 41	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<10
43 - 46	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<10

B-122								6/29/2007
Depth	TPHg	TPHfp	B	T	E	X	MTBE	TBA
25-30	86000	5700	28000	11000	2200	9900	38000	1700
33-37	3400	3000	30	1.8	3.2	3.3	5800	12000
33-37 (DUP)	4700	3400	1500	1.9	16	2.39	18000	12000
38-42	1400	910	96	24	6.2	19.7	190	15000

GB-18								11/19/2009
Depth	TPHg	TPHfp	B	T	E	X	MTBE	TBA
86-90	<100	<500	<0.50	<1.0	<1.0	<1.0	<1.0	<10
86-90 (DUP)	<100	<500	<0.50	<1.0	<1.0	<1.0	<1.0	<10

CPT-1								7/9/2008
Depth	TPHg	TPHfp	B	T	E	X	MTBE	TBA
25-29	<100	<500	<0.50	<1.0	<1.0	<1.0	<1.0	<10
37-41	<100	<500	<0.50	<1.0	<1.0	<1.0	<1.0	<10
43-47	<100	<500	<0.50	<1.0	<1.0	<1.0	<1.0	<10

EXP-1: 07/10 <10; 10/10 <10; 01/11 <10; 04/11 <10

GMW-61: 07/10 --; 10/10 <10; 01/11 <10; 04/11 <10

MW-17: 07/10 --; 10/10 <10; 01/11 --; 04/11 <10

GMW-59: 07/10 --; 10/10 17/21; 01/11 23/19; 04/11 <10/<10

GMW-64: 07/10 --; 10/10 <10; 01/11 <10; 04/11 <10

GMW-32: 07/10 --; 10/10 <10/<10; 01/11 --; 04/11 <10

MW-16: 07/10 --; 10/10 <10; 01/11 --; 04/11 <10

GMW-SF-10: 07/10 --; 10/10 <10; 01/11 --; 04/11 <10

GMW-39: 07/10 230; 10/10 550/590; 01/11 68; 04/11 <10/<10

GMW-13: 07/10 --; 10/10 <10; 01/11 --; 04/11 <10

GMW-14: 07/10 --; 10/10 <10; 01/11 --; 04/11 <10

GMW-38: 07/10 <10; 10/10 <10; 01/11 <10; 04/11 <10

GMW-SF-9: 07/10 --; 10/10 <10; 01/11 --; 04/11 <10/<10

GMW-O-18: 07/10 11000/12000; 10/10 2600/2400; 01/11 29000; 04/11 780/840

GMW-4: 07/10 --; 10/10 22; 01/11 --; 04/11 <20

GMW-3: 07/10 --; 10/10 <10; 01/11 --; 04/11 <10

EXP-3: 07/10 <10; 10/10 <10; 01/11 <10; 04/11 <10

GMW-SF-7: 07/10 --; 10/10 <10; 01/11 --; 04/11 <10

GMW-37: 07/10 --; 10/10 <10; 01/11 --; 04/11 <10

GMW-36: 07/10 340; 10/10 1300; 01/11 <2000; 04/11 1700

MW-9: 07/10 --; 10/10 50; 01/11 --; 04/11 <100

GMW-SF-8: 07/10 --; 10/10 <10; 01/11 --; 04/11 <10

MW-8: 07/10 --; 10/10 <1600; 01/11 --; 04/11 1100

GMW-O-16: 07/10 <10; 10/10 <10; 01/11 <10; 04/11 <10

GMW-O-19: 07/10 <10; 10/10 <10; 01/11 <10; 04/11 <10

PZ-5: 07/10 82000/84000; 10/10 40000/51000; 01/11 38000/40000; 04/11 28000

GMW-O-5: 07/10 --; 10/10 <10; 01/11 --; 04/11 <10

GMW-O-15: 07/10 5100; 10/10 3000; 01/11 12000; 04/11 3900

GMW-O-17: 05/10 <10; 07/10 --; 10/10 --; 01/11 --; 04/11 <10

Explanation

- GB-19 — Soil and Groundwater Sampling Location (CH2M Hill, 2011)
- GMW-39 — Monitoring well
- GMW-O-18 — Remediation Well
- CPT-1 — CPT and Groundwater Sampling Location (AMEC Geometrix, 2008)
- GB-18 — Exposition aquifer groundwater sampling location (AMEC Geomatrix, 2009)
- GB-17 — Groundwater screening sample location (Gematrix, 2002)
- B-122 — Groundwater sampling location (Parsons, 2007)
- GMW-13 07/10 -- ; 10/10 <10 ; 01/11 -- ; 04/11 <10 — TBA results in micrograms per Liter (µg/L) for the two most recent semi-annual and sentry events.
- 1,000 — Lines of Equal concentration of TBA (µg/L) in groundwater (dashed where inferred)
- ND — Estimated extent of detected dissolved TBA in groundwater (dashed where inferred) (concentration dependent on laboratory reporting limit)
- 48.0 — Lines of equal groundwater elevation showing groundwater elevation in feet above MSL (dashed where inferred) (April 2011)
- Approximate direction of ground water flow (April 2011)
- Estimated extent of measurable light nonaqueous phase hydrocarbons (LNAPL, free product) on groundwater; dashed where inferred

Depth Sample depth or well screen interval in feet below ground surface

TPHg Total petroleum hydrocarbons quantified using a gasoline standard

TPHfp Total petroleum hydrocarbons quantified using a fuel product standard

B Benzene

T Toluene

E Ethylbenzene

X Total xylenes

MTBE Methy tert-butyl ether

TBA Tert-butyl alcohol

<100 Not detected at or above laboratory reporting limit (RL) shown

DUP Duplicate Sample

Groundwater analytical results are reported in units of micrograms per Liter (µg/L).

N

0 50 100 200 Feet

Hydropunch Groundwater Analytical Results from SE Investigation

DFSP, Norwalk CA

By: Mike Brown | Date: 08/04/11 | PN: 407609

CH2MHILL

Figure 3

Attachment A
1994 Soil Sample Analytical Results

DEFENSE FUEL SUPPLY CENTER

CITY OF NORWALK PARK

EASEMENT (ASPHALT)

℄ CHESHIRE STREET

SAMPLE DEPTH	B	T	E	m.p.-X	o-X	TPHg	TPHd
4.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
9.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
14.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
19.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
24.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
29.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)

GMW-SF-7

SAMPLE DEPTH	B	T	E	m.p.-X	o-X	TPHg	TPHd
4.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
9.5	9.3	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
14.5	6700	48,000	14,000	54,000	21,000	2000	1500
19.5	9,700	42,000	11,000	44,000	18,000	1600	1900
24.5	23,000	320,000	39,000	140,000	58,000	7600	3800

SAMPLE DEPTH	B	T	E	m.p.-X	o-X	TPHg	TPHd
4.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
9.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
14.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
19.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
24.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
29.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)

GMW-SF-8

MW-8

VE-O-1

MW-36

VE-O-2

SBG-O-2

GMW-O-15

GMW-O-16

GMW-O-19

SAMPLE DEPTH	B	T	E	m.p.-X	o-X	TPHg	TPHd
7	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
10	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
13	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
16	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
19.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
22	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	5.3	ND(5.0)	ND(10)
23	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
26.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
29	ND(5.0)	7.7	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
31	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)

GMW-O-18

SAMPLE DEPTH	B	T	E	m.p.-X	o-X	TPHg	TPHd
4.5	ND(5.0)	11	ND(5.0)	16	7	ND(5.0)	ND(10)
9.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
14.5	3800	58,000	10,000	40,000	17,000	1400	1600
19.5	53,000	470,000	62,000	440,000	92,000	15,000	3900
24.5	17,000	110,000	26,000	100,000	41,000	3100	1900
27	39,000	290,000	58,000	220,000	92,000	8000	4200

SBG-O-1

SAMPLE DEPTH	B	T	E	m.p.-X	o-X	TPHg	TPHd
4.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
9.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
14.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
19.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
24.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
29.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)

SAMPLE DEPTH	B	T	E	m.p.-X	o-X	TPHg	TPHd
4.5	770	1500	810	3600	650	940	9300

SAMPLE DEPTH	B	T	E	m.p.-X	o-X	TPHg	TPHd
7	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
10	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
14.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
19	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
23.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
26	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
29.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)

GMW-O-17

SAMPLE DEPTH	B	T	E	m.p.-X	o-X	TPHg	TPHd
6.5	12	10	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
9.5	24	15	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
12.5	66	22	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10)
14	48	37	ND(5.0)	26	16	ND(5.0)	ND(10)
15.5	68	120	27	120	62	ND(5.0)	ND(10)
18.5	190,000	860,000	190,000	760,000	300,000	22,000	17,000
21.5	43,000	320,000	53,000	300,000	120,000	23,000	4600
24.5	14,000	2000	240	880	420	33	93
26.5	770	1500	810	1800	650	940	9300
27.5	NA	NA	NA	NA	NA	NA	NA
29.5	810,000	2,400,000	500,000	2,200,000	820,000	65,000	24,000

KEY

SBG-O-1/ VE-O-2	GEOMATRIX EXPLORATORY SOIL BORING (JULY 1994)
GMW-O-18/ GMW-SF-7	GEOMATRIX GROUNDWATER MONITORING WELL (JULY 1994)
VE-O-1	GEOMATRIX VAPOR EXTRACTION WELL (JULY 1994)
GMW-O-15/ MW-36	EXISTING GROUNDWATER MONITORING WELL INSTALLED BY GTI
⋈	24" BLOCK VALVE
– — –	24" SFPP PIPELINE
—×—	FENCE

B	BENZENE (ug/kg)
T	TOLUENE (ug/kg)
E	ETHYLBENZENE (ug/kg)
m.p.-X	m.p.- XYLENES (ug/kg)
o-X	o-XYLENES (ug/kg)
TPHg	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE (mg/kg)
TPHd	TOTAL PETROLEUM HYDROCARBONS AS DIESEL (mg/kg)
NA	NOT ANALYZED
ND	NOT DETECTED AT NOTED DETECTION LIMIT
ug/kg	MICROGRAMS PER KILOGRAM
mg/kg	MILLIGRAMS PER KILOGRAM

SAMPLE DEPTH IS FEET BELOW GROUND SURFACE (BGS)

TPHg ANALYZED USING MODIFIED EPA METHOD 8015 QUANTIFIED USING A GASOLINE STANDARD

TPHd ANALYZED USING MODIFIED EPA METHOD 8015 QUANTIFIED USING A DIESEL STANDARD

BTEX ANALYZED USING EPA METHOD 8020

N

0 80

APPROXIMATE SCALE (FEET)

SOIL SAMPLE ANALYTICAL RESULTS

BLOCK VALVE LEAK
Norwalk, CA

09/30/94

GEOMATRIX

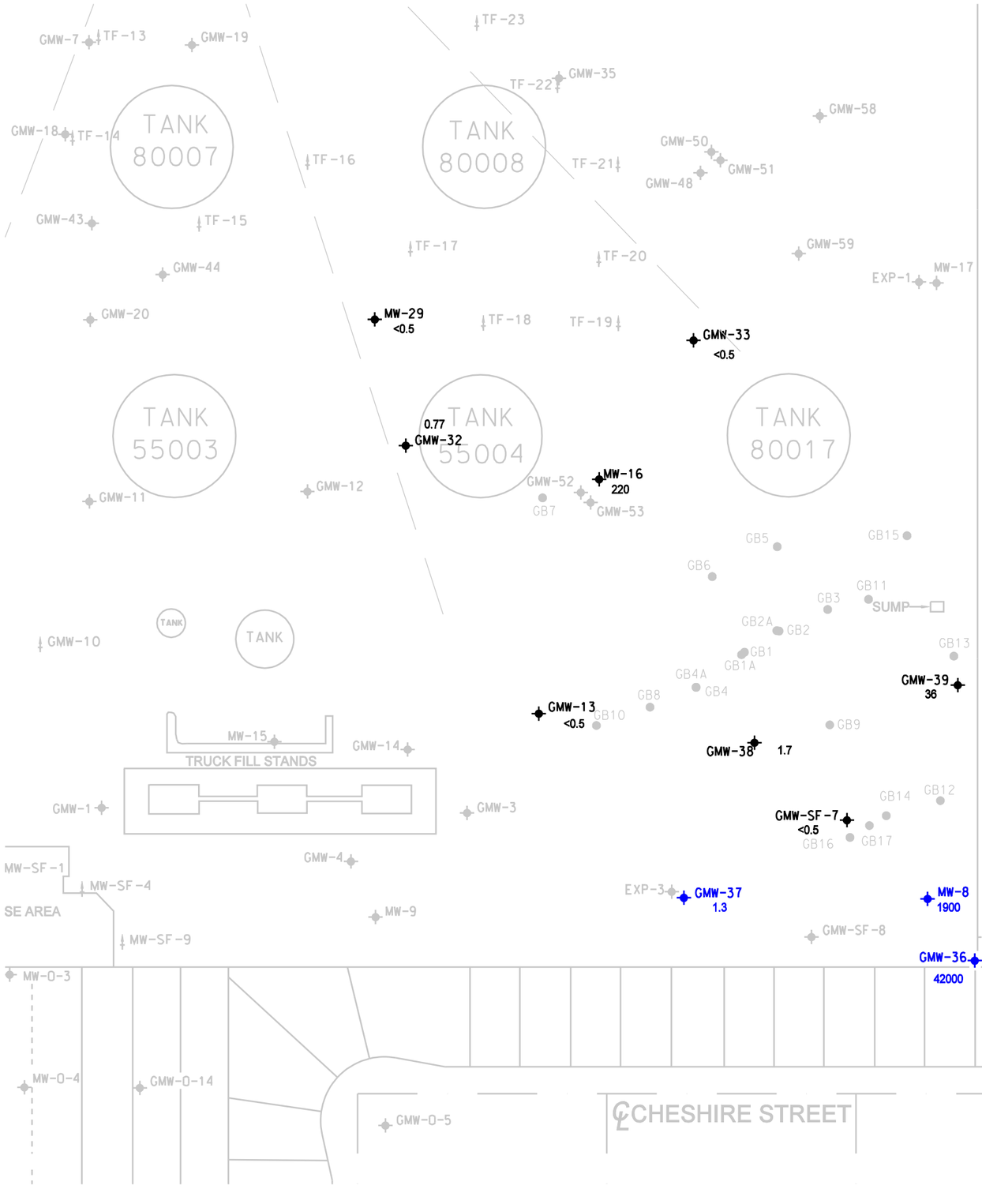
Project No. S1603.11

Figure 5

1603SM06

Filepath: P:\S1603\gis\acad\1603SM06_rev_2.DWG
Plot Time: Jan 25, 2008 - 3:25pm, Plotted By: phenling

Attachment B
2002 Groundwater Analytical Results



EXPLANATION

- GMW-5 — GROUNDWATER MONITORING WELL
- VE-1 — VAPOR EXTRACTION, GROUNDWATER EXTRACTION, TOTAL FLUIDS, OR PRODUCT EXTRACTION WELL USED FOR SITE REMEDIATION
- GB1 — BORING USED FOR GROUNDWATER SCREENING SAMPLE
- MW-16 — GROUNDWATER MONITORING WELL SAMPLED DURING THIS ASSESSMENT WITH METHYL TERT-BUTYL ETHER (MTBE) CONCENTRATION IN MICROGRAMS PER LITER (µg/l), FEBRUARY 2002
- MW-8 — GROUNDWATER MONITORING WELL SAMPLED DURING THE FIRST QUARTER 2002 SENTRY EVENT WITH MTBE CONCENTRATION IN µg/l, JANUARY 2002
- <0.5 — NOT DETECTED AT OR ABOVE REPORTING LIMIT SHOWN

NOTES:

1. BASE MAP PREPARED FROM DATA PROVIDED BY GROUNDWATER TECHNOLOGY, DULIN AND BOYNTON, AND DEVELOPED BY GEOMATRIX.
2. LOCATIONS OF GB1, GB1A, GB2, GB2A, GB3, GB4, GB4A, AND GB5 THROUGH GB17 ARE BASED ON SURVEY BY DULIN AND BOYNTON, MAY 2002.

N

0 60 120

APPROXIMATE SCALE IN FEET

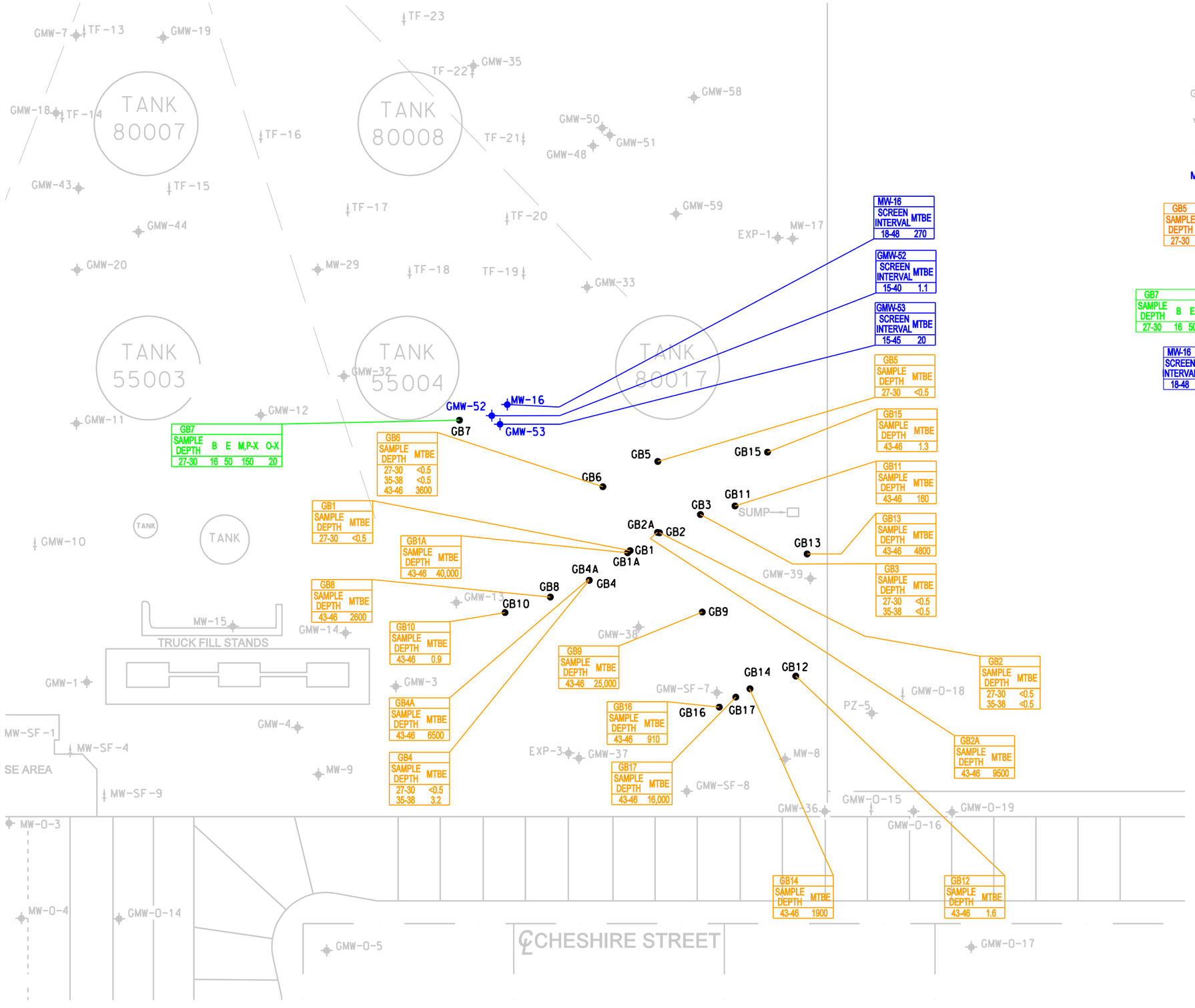
METHYL TERT-BUTYL ETHER RESULTS FOR SELECTED WELLS JANUARY AND FEBRUARY 2002

DFSP NORWALK
Norwalk, California

GEOMATRIX

Figure By	Project No.	Figure
mww	1603	3
Date 09/18/02		

P:\S1603\gis\dgn\81202_gw_mtbe_tb_v4.dgn



EXPLANATION

GMW-5 — GROUNDWATER MONITORING WELL

VE-1 — VAPOR EXTRACTION, GROUNDWATER EXTRACTION, TOTAL FLUIDS, OR PRODUCT EXTRACTION WELL USED FOR SITE REMEDIATION

GB1 — BORING USED FOR GROUNDWATER SCREENING SAMPLE

MW-16 — GROUNDWATER MONITORING WELL SAMPLED DURING THIS ASSESSMENT

GB5 SAMPLE DEPTH	MTBE
27-30	<0.5

GROUNDWATER SCREENING SAMPLE WITH REPORTED METHYL TERT-BUTYL ETHER (MTBE) CONCENTRATION IN WATER IN MICROGRAMS PER LITER (µg/l). SAMPLE DEPTH IN VERTICAL FEET BELOW GROUND SURFACE.

<0.5 NOT DETECTED AT OR ABOVE THE REPORTING LIMIT SHOWN

GB7 SAMPLE DEPTH	B	E	M,P-X	O-X
27-30	16	50	150	20

GROUNDWATER SCREENING SAMPLE WITH REPORTED B (BENZENE), E (ETHYLBENZENE), M,P-X (M,P-XYLENES) AND O-X (O-XYLENE) CONCENTRATION IN WATER IN µg/l. SAMPLE DEPTH IN VERTICAL FEET BELOW GROUND SURFACE.

MW-16 SCREEN INTERVAL	MTBE
18-48	270

GROUNDWATER MONITORING WELL SAMPLE WITH REPORTED MTBE CONCENTRATION IN WATER IN µg/l. SCREEN INTERVAL IN VERTICAL FEET BELOW GROUND SURFACE.

NOTES:

1. BASE MAP PREPARED FROM DATA PROVIDED BY GROUNDWATER TECHNOLOGY, DULIN AND BOYNTON, AND DEVELOPED BY GEOMATRIX.
2. LOCATIONS OF GB1, GB1A, GB2, GB2A, GB3, GB4, GB4A, AND GB5 THROUGH GB17 ARE BASED ON SURVEY BY DULIN AND BOYNTON, MAY 2002.
3. COMPOUNDS NOT LISTED WERE NOT DETECTED AT OR ABOVE REPORTING LIMITS INDICATED IN TABLES 4 AND 5 AND ON LABORATORY REPORTS IN APPENDIX D.

N

0 60 120

APPROXIMATE SCALE IN FEET

RESULTS OF SUPPLEMENTAL GROUNDWATER ASSESSMENT APRIL 2002

DFSP NORWALK
Norwalk, California

GEOMATRIX	Figure By: mww	Project No.: 1603	Figure: 4
	Date: 09/18/02		

P:\1603\gis\dgn\8\04\02_gw_invest_tb_v5.dgn

Attachment C
LACDPH Well/Boring Construction Permits

WELL PERMIT APPLICATION - NON PRODUCTION WELLS

DRINKING WATER PROGRAM - ENVIRONMENTAL HEALTH DIVISION
5050 COMMERCE DRIVE, BALDWIN PARK, CA 91706 TELE (626) 430-5420 FAX (626) 813-3016

DATE 10/05/10

☐ NEW WELL CONSTRUCTION ☐ RECONSTRUCTION OR RENOVATION ☐ DECOMMISSIONING ☐ OTHER:
☐ MONITORING ☐ CATHODIC ☐ INJECTION ☐ EXTRACTION ☐ HEAT EXCHANGE
☒ HYDROPUNCH ☐ C.P.T. (For Ground Water Sampling) ☐ OTHER:

WELL LOCATION

Site Address: 15306 Norwalk Blvd — City: Norwalk — Zip Code: 90650
Nearest Intersection: Norwalk and Excelsior — Thomas Guide Map Book Page/Grid: — Number of Wells in Each Parcel: 3 hydropunches at 5 locations, total:15

WELL STRUCTURE

Total Depth of Well: 50' bgs — Depth of Well Casing: NA — Sanitary / Annular Sealing Material: Cement-Bentonite Grout 95/5
Depth of Sanitary / Annular Seal: 50' bgs — Conductor Casing Seal: NA

OWNER INFORMATION

Owner's Name: KMEP c/o Stephen Defibaugh — Telephone Number: 714-560-4802
Address: 1100 Town and Country Road — City: Orange — Zip Code: 92868

DRILLER INFORMATION

Driller's Name: Gregg Drilling Inc. — Telephone Number: 562-427-6899 — C-57 License Number: 485165
Address: 2726 Walnut Ave — City: Signal Hill — Zip Code: 90755

WELL DECOMMISSIONING INFORMATION

Well Depth ☐ log/records: NA — Method of Well Assessment: NA — Depth and Number of Perforations: NA
Type and Amount of Sealant: NA — Type of Perforator: NA — Size of Perforations: NA — Method of Upper Seal Pressure Application: NA

CONSULTANT INFORMATION

Company: CH2M Hill, Inc.
Address: 1000 Wilshire Blvd — City: Los Angeles — State: CA — Zip Code: 90017
Project Manager: Dan Jablonski — Telephone Number: 213-228-8271 — Fax Number: 714-424-2135

ATTENTION: WORK PLAN MODIFICATIONS MAY BE REQUIRED IF WELL AND GEOLOGIC CONDITIONS ENCOUNTERED AT THE SITE INSPECTION ARE FOUND TO DIFFER FROM THE SCOPE OF WORK PRESENTED TO THIS DEPARTMENT.

I hereby agree to comply in every respect with all the regulations of the County Environmental Health Division and with all ordinances and laws of the County of Los Angeles and the State of California pertaining to well construction, reconstruction, and decommissioning data deemed necessary by the County Environmental Health Division Of Los Angeles County.

Signature of Applicant: [signature] Printed Name: Matthew Mayry

THIS PERMIT IS NOT COMPLETE UNTIL ALL OF THE FOLLOWING REQUIREMENTS ARE SIGNED OFF BY THE DEPUTY HEALTH OFFICER. WELL CONSTRUCTION OR DECOMMISSIONING CANNOT BE INITIATED WITHOUT A WORK PLAN APPROVAL FROM THIS DEPARTMENT.

(DEPARTMENT USE ONLY)

WORK PLAN APPROVAL
This Approval is Valid for 180 Days

Conditions: On 10-07-10 $ 3,015 was paid for Permit # 890918 for groundwater sampling at 15 different locations. Maintain all setbacks. Notify this office at 626-430-5398 48 hrs prior to the work being done.

REHS: Juan Rodriguez 10/15/10

FINAL INSPECTION
The placement of the annular seal must be witnessed by a Deputy Health Officer for the permit to be valid. Contact this department to arrange for an appointment.

REHS DATE

NOTICE

This well permit approval is limited to compliance with the California Well Standards and the Los Angeles County Code and does not grant any rights to construct, reconstruct, or decommission any well. The applicant is responsible for securing all other necessary permits.

WELL PERMIT APPLICATION - NON PRODUCTION WELLS

DATE 10/18/10

DRINKING WATER PROGRAM - ENVIRONMENTAL HEALTH DIVISION
5050 COMMERCE DRIVE, BALDWIN PARK, CA 91706 TELE (626) 430-5420 FAX (626) 813-3016

☐ NEW WELL CONSTRUCTION ☐ RECONSTRUCTION OR RENOVATION ☐ DECOMMISSIONING ☐ OTHER:
☐ MONITORING ☐ CATHODIC ☐ INJECTION ☐ EXTRACTION ☐ HEAT EXCHANGE
☒ HYDROPUNCH ☐ C.P.T. (For Ground Water Sampling) ☐ OTHER:

WELL LOCATION

Site Address: 15306 Norwalk Blvd
City: Norwalk
Zip Code: 90650
Nearest Intersection: Norwalk and Excelsior
Thomas Guide Map Book Page/Grid:
Number of Wells in Each Parcel: 1 hydropunches at 5 locations, total:5

WELL STRUCTURE

Total Depth of Well: 50' bgs
Depth of Well Casing: NA
Sanitary / Annular Sealing Material: Cement-Bentonite Grout 95/5
Depth of Sanitary / Annular Seal: 50' bgs
Conductor Casing Seal: NA

OWNER INFORMATION

Owner's Name: KMEP c/o Stephen Defibaugh
Telephone Number: 714-560-4802
Address: 1100 Town and Country Road
City: Orange
Zip Code: 92868

DRILLER INFORMATION

Driller's Name: Gregg Drilling Inc.
Telephone Number: 562-427-6899
C-57 License Number: 485165
Address: 2726 Walnut Ave
City: Signal Hill
Zip Code: 90755

WELL DECOMMISSIONING INFORMATION

Well Depth ☐ log/records: NA
Method of Well Assessment: NA
Depth and Number of Perforations: NA
Type and Amount of Sealant: NA
Type of Perforator: NA
Size of Perforations: NA
Method of Upper Seal Pressure Application: NA

CONSULTANT INFORMATION

Company: CH2M Hill, Inc.
Address: 1000 Wilshire Blvd
City: Los Angeles
State: CA
Zip Code: 90017
Project Manager: Dan Jablonski
Telephone Number: 213-228-8271
Fax Number: 714-424-2135

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Signature of Applicant: [signature]
Printed Name: Matthew Mayry

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(DEPARTMENT USE ONLY)*

WORK PLAN APPROVAL

This Approval is Valid for 180 Days

REHS: [signature] DATE: 11/4/10

Conditions: On 10-29-10 $ 1,005 was paid for Permit # 890918 to conduct 5 hydropunches at 5 different locations. Maintain all setbacks.

Notify this office at iurodriguez@ph.lacounty.gov.

FINAL INSPECTION

The placement of the annular seal must be witnessed by a Deputy Health Officer for the permit to be valid. Contact this Department to arrange for an appointment.

REHS DATE

NOTICE

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DATE 10/18/10

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☐ MONITORING ☐ CATHODIC ☐ INJECTION ☐ EXTRACTION ☐ HEAT EXCHANGE
☒ HYDROPUNCH ☐ C.P.T. (For Ground Water Sampling) ☐ OTHER:

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Thomas Guide Map Book Page/Grid	
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Depth of Well Casing	NA
Sanitary / Annular Sealing Material	Cement-Bentonite Grout 95/5
Depth of Sanitary / Annular Seal	50' bgs
Conductor Casing Seal	NA

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City	Orange
Zip Code	92868

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City	Signal Hill
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Depth and Number of Perforations	NA
Type and Amount of Sealant	NA
Type of Perforator	NA
Size of Perforations	NA
Method of Upper Seal Pressure Application	NA

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Company	CH2M Hill, Inc.
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City	Los Angeles
State	CA
Zip Code	90017
Project Manager	Dan Jablonski
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****************************(DEPARTMENT USE ONLY)****************************

WORK PLAN APPROVAL

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REHS DATE

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DRINKING WATER PROGRAM - ENVIRONMENTAL HEALTH DIVISION
5050 COMMERCE DRIVE, BALDWIN PARK, CA 91706 TELE (626) 430-5420 FAX (626) 813-3016

DATE 10/05/10

☐ NEW WELL CONSTRUCTION ☐ RECONSTRUCTION OR RENOVATION ☐ DECOMMISSIONING ☐ OTHER:
☐ MONITORING ☐ CATHODIC ☐ INJECTION ☐ EXTRACTION ☐ HEAT EXCHANGE
☒ HYDROPUNCH ☐ C.P.T. (For Ground Water Sampling) ☐ OTHER:

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WELL STRUCTURE

Total Depth of Well: 50' bgs Depth of Well Casing: NA Sanitary / Annular Sealing Material: Cement-Bentonite Grout 95/5
Depth of Sanitary / Annular Seal: 50' bgs Conductor Casing Seal: NA

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Owner's Name: KMEP c/o Stephen Defibaugh Telephone Number: 714-560-4802
Address: 1100 Town and Country Road City: Orange Zip Code: 92868

DRILLER INFORMATION

Driller's Name: Gregg Drilling Inc. Telephone Number: 562-427-6899 C-57 License Number: 485165
Address: 2726 Walnut Ave City: Signal Hill Zip Code: 90755

WELL DECOMMISSIONING INFORMATION

Well Depth ☐ log/records: NA Method of Well Assessment: NA Depth and Number of Perforations: NA
Type and Amount of Sealant: NA Type of Perforator: NA Size of Perforations: NA Method of Upper Seal Pressure Application: NA

CONSULTANT INFORMATION

Company: CH2M Hill, Inc.
Address: 1000 Wilshire Blvd City: Los Angeles State: CA Zip Code: 90017
Project Manager: Dan Jablonski Telephone Number: 213-228-8271 Fax Number: 714-424-2135

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I hereby agree to comply in every respect with all the regulations of the County Environmental Health Division and with all ordinances and laws of the County of Los Angeles and the State of California pertaining to well construction, reconstruction, and decommissioning data deemed necessary by the County Environmental Health Division Of Los Angeles County.

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(DEPARTMENT USE ONLY)

WORK PLAN APPROVAL
This Approval is Valid for 180 Days

Conditions: On 10-07-10 $ 3,015 was paid for Permit # 890918 for groundwater sampling at 15 different locations. Maintain all setbacks. Notify this office at 626-430-5398 48 hrs prior to the work being done.

REHS: Juan Rodriguez 10/15/10

FINAL INSPECTION
The placement of the annular seal must be witnessed by a Deputy Health Officer for the permit to be valid. Contact this Department to arrange for an appointment.

REHS DATE

NOTICE

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Attachment D
City of Norwalk Access Agreement

KINDER MORGAN

SFPP, L.P.
Operating Partnership

December 27, 2010

Ms. Teresa Devoy
City Clerk
City of Norwalk
12700 Norwalk Boulevard
Norwalk, California 90650

Subject: Transmittal of Access Fee for Amendment No. 2 to Temporary Access Agreement for Holifield Park for Work Related to the Defense Fuel Support Point Norwalk

Dear Ms. Devoy;

Please find attached a check in the amount of $7,500.00 for the access fee for Amendment No. 2 to Temporary Access Agreement for Holifield Park for additional site assessment activities related to the Defense Fuel Support Point Norwalk, located at 15306 Norwalk Boulevard, Norwalk, California. A copy of the amendment is attached for reference.

If you have are any questions regarding this site, I can be reached at (714) 560-4802.

Sincerely,

KMEP

Stephen T. Defibaugh, PG, CHG
Senior Specialist, EHS

cc: Nancy Van Burgel, Kinder Morgan Energy Partners
Adriana Figueroa, City of Norwalk
Mark Wuttig, CH2MHill
Daniel Jablonski, CH2MHill

Attachments

Kinder Morgan SFPP, L.P.

No. 862450

Check Date: 12/22/2010

(100058047)

CITY OF NORWALK, 12700 NORWALK BLVD., NORWALK CA 90650

Description	Voucher #	Date	PO Number	Gross Amount	Discount Amount	Net Amount Paid
PMTREQ AGREEMENT FORPA ***PLEASE SEND CHECK TO STEVE DEFIBAUGH IN ORANGE***	6094105	12/22/10		$7,500.00	$0.00	$7,500.00
Detach at Perforation Before Depositing Check 100058047			**Totals**	$7,500.00	$0.00	$7,500.00

KINDER MORGAN ENERGY PARTNERS, L.P.

Kinder Morgan SFPP, L.P.
500 Dallas, Suite 1000
Houston, TX 77002

Wells Fargo Bank Ohio, N.A.
115 Hospital Drive
Van Wert, OH 45891
56-382/412

Check No. 862450

Check Date
12/22/2010

Check Amount
$ *****7,500.00

PAY *Seven Thousand Five Hundred AND 00/100*

TO THE ORDER OF

100058047

CITY OF NORWALK
12700 NORWALK BLVD.
NORWALK CA 90650

⑈000086 2450⑈ ⑆041203824⑆96000500 16⑈

SECOND AMENDMENT TO TEMPORARY ACCESS AGREEMENT FOR HOLIFIELD PARK

This Second Amendment is entered into as of December 10, 2010, by and between the CITY OF NORWALK, a municipal corporation, (hereinafter designated as "NORWALK") and KINDER MORGAN ENERGY PARTNERS, L.P., a Delaware limited partnership (hereinafter designated as "KMEP").

RECITALS

A. On June 17, 2008, the Norwalk City Council approved a Temporary Site Access License Agreement ("Agreement") for Holifield Park;

B. This Second Amendment amends the Agreement;

C. Results from groundwater testing prompted the California Regional Water Quality Control Board to require that KMEP conduct additional testing at Holifield Park, including testing to determine further vertical delineation of the plume of contaminants in and around the 24-inch Block Valve area;

D. KMEP is requesting access to Holifield Park to perform soil, soil vapor and groundwater investigations as required by the California Regional Water Quality Control Board. CH2MHill, a contractor employed by KMEP, has provided to NORWALK a work plan prepared by a predecessor contractor, AMEC/Geomatrix, dated April 19, 2010 and an approval letter of that work plan dated August 12, 2010, from the Los Angeles Regional Water Quality Control Board which are attached hereto as Exhibits "A" and "B" respectively. CH2MHill has also provided to NORWALK a separate work plan prepared by AMEC dated May 27, 2010, which has been approved by the Los Angeles Regional Water Quality Control Board and is attached hereto as Exhibit "C," and a further work plan for conducting an investigation of possible LNAPL materials on the site, including at least one cone penitometer/Laser induced fluorescence device to be located in Holifield Park attached hereto as Exhibit "D." The latter work plan has not yet been formally approved by the Los Angeles Regional Water Quality Control Board, but the parties intend that if the Regional Board requires any changes in the plan that affect Holifield Park and the need for access to Holifield Park, then this agreement will control any such modified access requirements. To allow KMEP to perform the additional testing, NORWALK agrees to permit KMEP access to Holifield Park to perform the work as described in Exhibits "A," Exhibits "C" and "D" hereto, and such additional soil and

groundwater sampling as may be required by the Los Angeles Regional Water Quality Control Board in its review and approval of the vertical delineation summary report to be submitted by CH2MHill on behalf of KMEP to the Regional Board (collectively referred to as the "Work").

NOW THEREFORE, it is mutually agreed by and between the undersigned parties as follows:

Section 1. Section 1 of the Agreement is amended to read as follows:

This Amended Agreement shall be effective three (3) business days after the date of the last signature on the Amendment and shall continue in effect for the later of: (a) 24 months thereafter; or (b) the completion of all field sampling work as described in Exhibit "A" to this Second Amendment or the completion of all soil vapor monitoring work as described in Exhibit "C" to this Second Amendment. For purposes of determining continuance of this Agreement under this Section 1, a determination of completion of the work as described in Exhibit "A" or Exhibit "C" of the Second Amendment will be determined by CH2MHill and confirmed by KMEP.

Section 2. KMEP, its employees, agents, representatives, contractors and subcontractors shall have such additional access to Holifield Park as is required to complete the work described in Exhibit "A," Exhibits "C" and "D" hereto, and such additional soil and groundwater sampling as may be required by the Los Angeles Regional Water Quality Control Board in its review and approval of the vertical delineation summary report to be submitted by CH2MHill on behalf of KMEP to the Regional Board.

Section 3. Upon completion of laboratory analysis that KMEP will timely provide in tabular form to the NORWALK all results, with any QA/QC qualifiers and appropriate laboratory documentation. Such results shall be provided to the NORWALK without regard to the schedule for a final report to the Los Angeles Regional Water Quality Control Board.

Section 4. KMEP or CH2MHill will provide to NORWALK, and NORWALK will accept as satisfying this Section 4 requirement, a current certification of liability coverage showing limits of at least one (1) million dollars per occurrence for its automobile liability and commercial general liability. Either KMEP or CH2MHill will further provide to the NORWALK, and NORWALK will accept as satisfying this Section 4 requirement, a current certification of pollution liability policy with limits of at least one (1) million dollars per occurrence prior to the commencement of any further work or investigation in Holifield Park.

Section 5. KMEP, or CH2MHill on behalf of KMEP, will notify NORWALK at least two business days before the commencement of entry upon Holifield Park pursuant to the notice provisions set for in Section 6 of the Agreement.

Section 6. KMEP will pay to NORWALK an access fee of seven thousand five hundred dollars ($7,500) for all work contemplated under this Second Amendment. No additional access fee will be imposed by NORWALK on KMEP, its employees, agents, representatives, contractors and subcontractors, for any work related to or contemplated under this Second Amendment. This fee shall be paid prior to the commencement of work as described in Exhibit "A" hereto.

Section 7. KMEP, or CH2MHill on behalf of KMEP, will transmit to NORWALK a final copy of the report on the results of the investigation required under the Work described in Recital D on the same day that said report is transmitted to the Regional Water Quality Control Board.

Section 8. All other provisions of the Agreement, as previously amended, shall remain in full force and effect.

IN WITNESS WHEREOF, the parties have executed this agreement as of the dates stated below:

CITY OF NORWALK

BY: _____
Gordon Stefenhagen
Mayor

DATED: 12-07-10

KINDER MORGAN ENERGY PARTNERS, L.P.

BY: _____
Name: Michael A. Horak
Title: Director, Environmental

DATED: 12/3/2010

ATTEST:

BY: _____
Theresa Devoy
City Clerk

Approved as to form:

BY: _____
Steven L. Dorsey
City Attorney

Attachment E
Survey Results

DULIN and **B**OYNTON
LICENSED **S**URVEYORS

February 9, 2011

Dan Jablonski
Ch2M Hill
1000 Wilshire Blvd
21st Floor
Los Angeles, Ca 90017

RE: DFSP Norwalk

On January 31, 2011 Dulin and Boynton performed a survey for 15 temporary borings for locations and elevations. Method of surveying is conventional fieldwork consist of horizontal angles and distances. The horizontal angles recorded during data collection are relative to the back sight. Horizontal distance is measured from the instrument set-up. Elevations are taken from instrument set-up with respect to instrument height and rod height. Equipment used Sokkia 530R3 total station and Nomad-spectra precision, survey pro 4.9.2 version.

Horizontal and vertical datum used CP-5 scribed "x", CP-7 scribed "x", CP-9 PK nail, CP-70 PK nail, CP-71 PK nail and CP-87 PK nail, all control points where found and previously set from previous surveys. Horizontal control is tied to NGS PID stations AI4489 and AJ1841 epoch date 2000.35, vertical datum is tied to County of Los Angeles benchmark CY8835.

The survey performed on January 31, 2011 under my supervision conforms with all federal, state and local laws regulating the practice of surveying in the State of California and the work also meets the specifications contained in this Scope of Work per purchase order #942975, project #407609.C1.02 dated January 08, 2011.

Please feel free to contact Edson Chavez if you have any further questions at (562) 426-6464.

Very truly yours,

Douglas Boynton, PLS4787
President

LICENSED LAND SURVEYOR
DOUGLAS A. BOYNTON
EXP. 30 SEP 12
L.S. 4787
STATE OF CALIFORNIA

729 E. Willow Street • Signal Hill, CA 90755-2700
(562) 426-6464 • Fax: (562) 426-7707 • Toll Free: (800) 887-6774
Web Site: www.dulinandboynton.com • e-mail: info@dulinandboynton.com

CH2M HILL
DFSP
NORWALK, CA

BORE	ELEV	NORTH	EAST
GB-19/A	74.6	1783006.4	6541375.4
GB-19/B	74.6	1783003.1	6541376.5
GB-19/C	74.5	1783001.2	6541373.5
GB-19/D	74.5	1783004.6	6541372.3
GB-20/A	75.0	1783090.3	6541320.2
GB-20/B	74.9	1783090.8	6541324.0
GB-20/C	74.8	1783086.8	6541324.8
GB-20/D	74.8	1783086.2	6541320.9
GB-21/A	74.7	1783142.1	6541272.4
GB-21/B	74.6	1783139.0	6541274.6
GB-21/C	74.7	1783137.0	6541271.4
GB-21/D	74.8	1783139.6	6541269.5
GB-22/A	74.0	1783171.7	6541187.2
GB-22/B	73.9	1783175.2	6541186.7
GB-22/C	73.9	1783178.5	6541186.3
GB-22/D	73.8	1783182.3	6541186.1
GB-23/A	73.4	1783178.4	6541125.5
GB-23/B	73.3	1783174.8	6541127.0
GB-23/C	73.3	1783172.9	6541122.7
GB-23/D	73.4	1783176.8	6541121.6

Prepared by:
DULIN and BOYNTON

Date of Survey:
31 JAN 11

BENCHMARK:

VERTICAL DATUM NGVD29

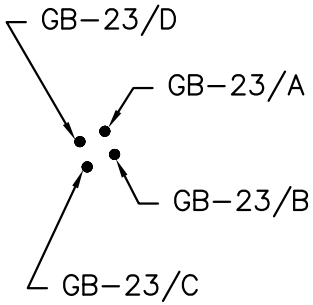
COUNTY OF LA BM #CY8835, CS BM MON IN S END C.B.
3.3' N/O BCR AT NW COR ALONDRA BLVD AND NORWALK
BLVD MKD (BM 41-7A 1970)

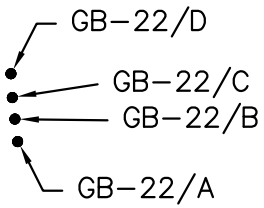
1980 ELEV= 69.014 FEET NGVD29

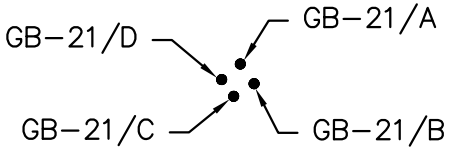
HORIZONTAL DATUM NAD83, ZONE 5

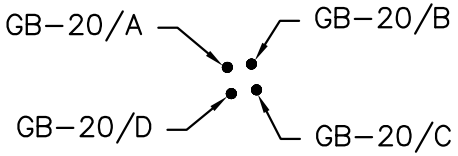
NGS PID STATIONS AI4489 AND AJ1841 EPOCH DATE 2000.35

CH2M HILL
DFSP
NORWALK, CA



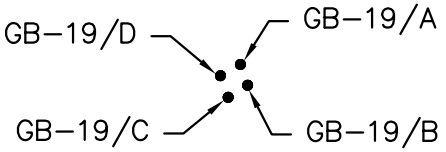






NORTH

SCALE 1"= 30'



DATE OF SURVEY: 31 JAN 11

DULIN & BOYNTON
LICENSED SURVEYORS
729 E. WILLOW STREET ◎ (562)426-6464 FAX(562)426-7707 ◎ SIGNAL HILL, CA. 90755

Attachment F
Nonhazardous Waste Manifest

NO. 692387

NON-HAZARDOUS WASTE DATA FORM

BES! # 189918

GENERATOR

Generator's Name and Mailing Address
SFPP, L.P. (NORWALK STATION)
ATTN: KARINA HANKINS
1100 TOWN & COUNTRY RD.
ORANGE, CA 92868

Generator's Site Address (if different than mailing address)
SFPP NORWALK STATION
16306 NORWALK BLVD.
NORWALK, CA 90650

Generator's Phone: 714-560-4887

Container type removed from site:
☒ Drums ☐ Vacuum Truck ☐ Roll-off Truck ☐ Dump Truck
☐ Other _____
Quantity 1

Container type transported to receiving facility:
☒ Drums ☐ Vacuum Truck ☐ Roll-off Truck ☐ Dump Truck
☐ Other _____
Quantity 1 Volume 200 LBS.

WASTE DESCRIPTION NON-HAZARDOUS SOIL
GENERATING PROCESS SITE INVESTIGATION (DRILL CUTTINGS)

COMPONENTS OF WASTE	PPM	%	COMPONENTS OF WASTE	PPM	%
1. Soil		99-100%	3. TPH		<.1%
2. Debris		<1%	4.		

Waste Profile 07-012-8043-1873 PROPERTIES: pH _____ ☐ SOLID ☐ LIQUID ☐ SLUDGE ☐ SLURRY ☐ OTHER _____

HANDLING INSTRUCTIONS: _____

Generator Printed/Typed Name: Patrick Loya | Signature | Month 4 Day 12 Year 11

The Generator certifies that the waste as described is 100% non-hazardous

TRANSPORTER

Transporter 1 Company Name: BELSHIRE | Phone# 949-460-5200

Transporter 1 Printed/Typed Name: PAUL DELGADO | Signature | Month 4 Day 12 Year 11

Transporter Acknowledgment of Receipt of Materials

Transporter 2 Company Name: Pacific Trans Environmental Services Inc | Phone# 619-441-1818

Transporter 2 Printed/Typed Name: Jesus Estrada | Signature | Month 04 Day 19 Year 11

Transporter Acknowledgment of Receipt of Materials

RECEIVING FACILITY

Designated Facility Name and Site Address
US ECOLOGY, NEVADA OPERATIONS
HIGHWAY 95, 12 MILES S. OF BEATTY
BEATTY, NV 89003
15306 NOR
653224

Phone# 775-553-2203

Printed/Typed Name: Misty Leary | Signature | Month 04 Day 22 Year 11

Designated Facility Owner or Operator: Certification of receipt of materials covered by this data form.

Attachment G
Boring Logs

PROJECT NUMBER:	BORING / WELL NUMBER:	
407609	GB-19	SHEET 1 OF 2

Soil Boring Log

PROJECT : KMEP Norwalk

LOCATION : Southeastern Area, Defense Fuel Support Point, Norwalk, CA

GROUND ELEVATION : 74.6 ft (NGVD 29)

DRILLING CONTRACTOR : Gregg Drilling and Testing, Inc.

COORDINATES: N 1783006.4, E 6541375.4, (NAD 83, Zone 5)

DRILLING METHOD AND EQUIPMENT : CPT Rig, Direct Push with Continuous Macro-core

WATER LEVEL: 28.00 ft bgs

START : 1/25/2011

END : 1/25/2011

LOGGER : M. Mayry

DEPTH BELOW GROUND SURFACE (ft)	CORE INTERVAL LOGGED (ft)	HYDROPUNCH SAMPLES	CORE SCREENING PID READING	GRAPHIC LOG	SOIL DESCRIPTION Soil Name, USCS Group Symbol, Color, Moisture Content, Relative Density or Consistency, Soil Structure, Mineralogy	COMMENTS Observations during drilling
0	Hand Auger				**SILTY SAND (SM)** moist, 70% fine sand, 30% fines.	Hand Auger to 10' bgs to clear for subsurface utilities.
5					**POORLY GRADED SAND (SP)** moist, 95% fine to medium sand, 5% fines.	
					CLAYEY SAND (SC) moist, 70% fine sand, 30% fines.	
10	4.0		1.5 ppm		**SILTY SAND (SM)** moist, 85% fine sand, micaceous, 15% fines.	
15	4.0		4.0 ppm		As above. Moist, 85% fine sand, micaceous, 15% fines, grades into below.	
	2.0		1.0 ppm		**POORLY GRADED SAND (SP)** dry, 100% fine sand.	
20	NR		1.9 ppm			
	2.5				**SILTY SAND (SM)** moist, 85% fine sand, micaceous, 15% fines.	
25	1.5 NR				**SANDY SILT (ML)** moist, 55% fines, 45% fine sand, micaceous, some clay present.	
	4.0		2.2 ppm		**SILTY SAND (SM)** wet, 60% fine sand, micaceous, 40% fines, mica prominent, standing water in sample.	DTW: 28' bgs
30						

KMEP NORWALK, 307609.GPJ, CH2M GEOTECH_06_REVISED_327530.GLB, 3/28/11

PROJECT NUMBER:	BORING / WELL NUMBER:	
407609	GB-19	SHEET 2 OF 2

Soil Boring Log

PROJECT : KMEP Norwalk

LOCATION : Southeastern Area, Defense Fuel Support Point, Norwalk, CA

GROUND ELEVATION : 74.6 ft (NGVD 29)

DRILLING CONTRACTOR : Gregg Drilling and Testing, Inc.

COORDINATES: N 1783006.4, E 6541375.4, (NAD 83, Zone 5)

DRILLING METHOD AND EQUIPMENT : CPT Rig, Direct Push with Continuous Macro-core

WATER LEVEL: 28.00 ft bgs

START : 1/25/2011

END : 1/25/2011

LOGGER : M. Mayry

DEPTH BELOW GROUND SURFACE (ft)	CORE INTERVAL LOGGED (ft)	HYDROPUNCH SAMPLES	CORE SCREENING PID READING	GRAPHIC LOG	SOIL DESCRIPTION Soil Name, USCS Group Symbol, Color, Moisture Content, Relative Density or Consistency, Soil Structure, Mineralogy	COMMENTS Observations during drilling
	4.0	GB-19-34-04-012611	3.0 ppm		**SANDY SILT (ML)** wet, 55% fines, 45% fine sand, micaceous. **SILTY SAND (SM)** wet, 70% fine sand, 30% fines. As above, 60% fine sand, micaceous, 40% fines, mica prominent, standing water in sample.	
35	3.8		5.7 ppm		**SANDY SILT (ML)** wet, 55% fines, 45% fine sand, micaceous. **POORLY GRADED SAND (SP)** wet, 95% fine sand, micaceous, 5% fines. **SILTY SAND (SM)** wet, 70% fine sand, 30% fines. As above except, increase in fines, 65% fine sand, 35% fines, standing water in sample.	
	NR	GB-19-41-04-012611	4.6 ppm		**SANDY SILT (ML)** wet, 55% fines, 45% fine sand, micaceous, grades into below.	
40	4.0		2.8 ppm		**POORLY GRADED SAND (SP)** wet, 95% fine sand, micaceous, 5% fines.	
	3.5	GB-19-46-04-012611				
45	NR		1.4 ppm		**SILTY SAND (SM)** wet, 60% fine sand, micaceous, 40% fines, mica prominent, standing water in sample.	
	4.0				**POORLY GRADED SAND (SP)** wet, 95% fine sand, micaceous, 5% fines.	
50						Moist, no visible water in sample.
	4.0		2.7 ppm		**SANDY SILT (ML)** moist, 55% fines, 45% fine sand, micaceous. **LEAN CLAY (CL)** moist, 100% fines, trace fine sand, silt present, low plasticity, soft, low toughness, trace wood fragments present.	
					Boring terminated at 54 ft bgs.	

PROJECT NUMBER:	BORING / WELL NUMBER:	
407609	GB-20	SHEET 1 OF 2

Soil Boring Log

PROJECT : KMEP Norwalk

LOCATION : Southeastern Area, Defense Fuel Support Point, Norwalk, CA

GROUND ELEVATION : 75 ft (NGVD 29)

DRILLING CONTRACTOR : Gregg Drilling and Testing, Inc.

COORDINATES: N 1783090.8, E 6541320.2, (NAD 83, Zone 5)

DRILLING METHOD AND EQUIPMENT : CPT Rig, Direct Push with Continuous Macro-core

WATER LEVEL: 27.00 ft bgs

START : 1/25/2011

END : 1/25/2011

LOGGER : M. Mayry

DEPTH BELOW GROUND SURFACE (ft)	CORE INTERVAL LOGGED (ft)	HYDROPUNCH SAMPLES	CORE SCREENING PID READING	GRAPHIC LOG	SOIL DESCRIPTION Soil Name, USCS Group Symbol, Color, Moisture Content, Relative Density or Consistency, Soil Structure, Mineralogy	COMMENTS Observations during drilling
0	Hand Auger				**SILTY SAND (SM)** moist, 70% fine sand, 30% fines.	Hand Auger to 10' bgs to clear for subsurface utilities.
5					**POORLY GRADED SAND (SP)** moist, 95% fine to medium sand, 5% fines.	
					CLAYEY SAND (SC) moist, 70% fine sand, 30% fines.	
					SILTY SAND (SM) dry, 60% fine sand, 40% fines, trace medium sand.	
10			1.8 ppm			
	4.0					
			0.2 ppm			
15	2.0				Dry, 80% fine sand, 20% fines, trace medium sand. As above.	
	NR					
	2.0					
20	NR		0.4 ppm		**POORLY GRADED SAND (SP)** dry, 95% fine sand, 5% fines.	
	2.0		0.6 ppm		**SILTY SAND (SM)** moist, 85% fine sand, 15% fines. As above.	
25	NR					
	3.5		1.0 ppm		**CLAYEY SAND (SC)** wet, 80% fine sand, 20% fines. As above, 70% fine sand, 30% fines.	DTW: 27' bgs
30	NR					

KMEP NORWALK, 307609.GPJ, CH2M GEOTECH_06_REVISED_327530.GLB, 3/28/11

PROJECT NUMBER:	BORING / WELL NUMBER:	
407609	GB-20	SHEET 2 OF 2

Soil Boring Log

PROJECT : KMEP Norwalk

LOCATION : Southeastern Area, Defense Fuel Support Point, Norwalk, CA

GROUND ELEVATION : 75 ft (NGVD 29)

DRILLING CONTRACTOR : Gregg Drilling and Testing, Inc.

COORDINATES: N 1783090.8, E 6541320.2, (NAD 83, Zone 5)

DRILLING METHOD AND EQUIPMENT : CPT Rig, Direct Push with Continuous Macro-core

WATER LEVEL: 27.00 ft bgs

START : 1/25/2011

END : 1/25/2011

LOGGER : M. Mayry

DEPTH BELOW GROUND SURFACE (ft)	CORE INTERVAL LOGGED (ft)	HYDROPUNCH SAMPLES	CORE SCREENING PID READING	GRAPHIC LOG	SOIL DESCRIPTION Soil Name, USCS Group Symbol, Color, Moisture Content, Relative Density or Consistency, Soil Structure, Mineralogy	COMMENTS Observations during drilling
			0.8 ppm		**CLAYEY SAND (SC)** wet, 80% fine sand, 20% fines.	
	4.0	GB-20-34-04-012611	0.6 ppm		**SANDY SILT (ML)** wet, 55% fines, 45% fine sand, micaceous, grades into below.	
			0.3 ppm			
35					As above, increase in silt.	
	4.0	GB-20-39-04-012611	2.8 ppm			
			0.2 ppm		As above, increase in silt.	
					SILTY SAND (SM) wet, 85% fine sand, micaceous, 15% fines.	
					POORLY GRADED SAND (SP) wet, 95% fine to medium sand, 5% fines.	
40	3.0					
			0.5 ppm		**SANDY SILT (ML)** wet, 55% fines, 45% fine sand, micaceous.	
	NR				**POORLY GRADED SAND (SP)** wet, 95% fine sand, 5% fines.	
			1.3 ppm		**POORLY GRADED SAND WITH SILT (SP-SM)** wet, 90% fine sand, 10% fines.	
	1.5	GB-20-45-04-012611				
45	NR					
					POORLY GRADED SAND (SP) wet, 95% fine to medium sand, 5% fines.	
	3.5		0.3 ppm		**LEAN CLAY WITH SAND (CL)** moist, 80% fines, 20% fine sand, low plasticity, low toughness, soft, some silt present, slow dilatancy.	
					CLAYEYSAND (SC) moist, 80% fine sand, 20% fines, low plastic fines present.	
50	NR				**SILTY SAND (SM)** moist, 85% fine sand, micaceous, 15% fines.	Moist, no visible water in sample.
	3.0				**LEAN CLAY WITH SAND (CL)** moist, 80% fines, 20% fine sand, low plasticity, low toughness, soft, some silt present, slow dilatancy, trace wood fragments present.	
	NR		1.0 ppm		**CLAYEY SAND (SC)** moist, 80% fine sand, 20% fines.	
55	NR					Abundant water in sampler.
					Boring terminated at 58 ft bgs.	

KMEP NORWALK, 307609.GPJ, CH2M GEOTECH_06_REVISED_327530.GLB, 3/28/11

PROJECT NUMBER:	BORING / WELL NUMBER:	
407609	GB-21	SHEET 1 OF 3

Soil Boring Log

PROJECT : KMEP Norwalk

LOCATION : Southeastern Area, Defense Fuel Support Point, Norwalk, CA

GROUND ELEVATION : 74.7 ft (NGVD 29)

DRILLING CONTRACTOR : Gregg Drilling and Testing, Inc.

COORDINATES: N 1783142.1, E 6541272.4, (NAD 83, Zone 5)

DRILLING METHOD AND EQUIPMENT : CPT Rig, Direct Push with Continuous Macro-core

WATER LEVEL: 27.00 ft bgs

START : 1/24/2011

END : 1/24/2011

LOGGER : M. Mayry

DEPTH BELOW GROUND SURFACE (ft)	CORE INTERVAL LOGGED (ft)	HYDROPUNCH SAMPLES	CORE SCREENING PID READING	GRAPHIC LOG	SOIL DESCRIPTION Soil Name, USCS Group Symbol, Color, Moisture Content, Relative Density or Consistency, Soil Structure, Mineralogy	COMMENTS Observations during drilling
0	Hand Auger				**SILTY SAND (SM)** moist, 70% fine sand, 30% fines.	Hand Auger to 10' bgs to clear for subsurface utilities.
5					**POORLY GRADED SAND (SP)** moist, 95% fine to medium sand, 5% fines.	
					CLAYEY SAND (SC) moist, 70% fine sand, 30% fines.	
					SILTY SAND (SM) dry, 60% fine sand, 40% fines, trace medium sand.	
10	4.0		1.4 ppm			
15	3.5		1.7 ppm			
	NR		1.7 ppm			
	2.0					
20	NR		2.9 ppm		**POORLY GRADED SAND (SP)** dry, 95% fine sand, 5% fines.	
					SILTY SAND (SM) moist, 80% fine sand, micaceous, 20% fines, trace medium sand.	
	4.0		5.6 ppm			
25			1.6 ppm			
					As above, wet.	DTW: 27' bgs
	4.0		5.6 ppm		As above, increase in fines, 60% fine sand, 40% fines.	
					SANDY SILT (ML) wet, 60% fines, 40% fine sand, some low plastic fines.	
30						

KMEP NORWALK, 307609.GPJ, CH2M GEOTECH_06_REVISED_327530.GLB, 3/28/11

PROJECT NUMBER:	BORING / WELL NUMBER:	
407609	GB-21	SHEET 2 OF 3

Soil Boring Log

PROJECT : KMEP Norwalk

LOCATION : Southeastern Area, Defense Fuel Support Point, Norwalk, CA

GROUND ELEVATION : 74.7 ft (NGVD 29)

DRILLING CONTRACTOR : Gregg Drilling and Testing, Inc.

COORDINATES: N 1783142.1, E 6541272.4, (NAD 83, Zone 5)

DRILLING METHOD AND EQUIPMENT : CPT Rig, Direct Push with Continuous Macro-core

WATER LEVEL: 27.00 ft bgs

START : 1/24/2011

END : 1/24/2011

LOGGER : M. Mayry

DEPTH BELOW GROUND SURFACE (ft)	CORE INTERVAL LOGGED (ft)	HYDROPUNCH SAMPLES	CORE SCREENING PID READING	GRAPHIC LOG	SOIL DESCRIPTION Soil Name, USCS Group Symbol, Color, Moisture Content, Relative Density or Consistency, Soil Structure, Mineralogy	COMMENTS Observations during drilling
	3.0	GB-21-33.5-04-012611	4.6 ppm 3.5 ppm		**SILTY SAND (SM)** wet, 75% fine sand, micaceous, 25% fines.	
	NR					
35	3.0	GB-21-38.5-04-012611	4.7 ppm			
	NR				**POORLY GRADED SAND (SP)** wet, 95% fine sand, micaceous, 5% fines, trace medium sand.	
	2.0					
40	NR		2.1 ppm		Decrease in fines.	
	3.0	GB-21-46.5-04-012611	1.9 ppm		**SILTY SAND (SM)** wet, 75% fine sand, micaceous, 25% fines. **POORLY GRADED SAND (SP)** wet, 95% fine sand, micaceous, 5% fines, trace medium sand.	
45	NR					
	3.0		4.1 ppm 3.1 ppm		**CLAYEY SILT (CL/ML)** moist, 90% fines, 10% fine sand, low plasticity, soft, low toughness, rapid dilatancy.	
	NR		2.6 ppm		**LEAN CLAY (CL)** moist, 95% fines, 5% fine sand, low plasticity, soft, low toughness, slow dilatancy.	
50	3.0		3.3 ppm		**SILTY SAND (SM)** wet, 75% fine sand, 25% fines. **POORLY GRADED SAND (SP)** wet, 95% fine sand, 5% fines.	Abundant water in sample.
	NR		1.2 ppm			
55	3.5		1.2 ppm		**LEAN CLAY WITH SAND (CL)** moist, 75% fines, 25% fine sand, micaceous, low plasticity, low toughness, soft, some silt present. **SILTY SAND (SM)** wet, 60% fine sand, micaceous, 40% fines, some low plastic fines.	
	NR				**LEAN CLAY WITH SAND (CL)** moist, 75% fines, 25% fine sand, micaceous, low plasticity, low toughness, soft, some silt present.	
60	2.5				**SILTY SAND (SM)** wet, 60% fine sand, micaceous, 40% fines, some low plastic fines.	

KMEP NORWALK, 307609.GPJ, CH2M GEOTECH_06_REVISED_327530.GLB, 3/28/11

PROJECT NUMBER:	BORING / WELL NUMBER:
407609	GB-21 SHEET 3 OF 3

Soil Boring Log

PROJECT : KMEP Norwalk

LOCATION : Southeastern Area, Defense Fuel Support Point, Norwalk, CA

GROUND ELEVATION : 74.7 ft (NGVD 29)

DRILLING CONTRACTOR : Gregg Drilling and Testing, Inc.

COORDINATES: N 1783142.1, E 6541272.4, (NAD 83, Zone 5)

DRILLING METHOD AND EQUIPMENT : CPT Rig, Direct Push with Continuous Macro-core

WATER LEVEL: 27.00 ft bgs

START : 1/24/2011

END : 1/24/2011

LOGGER : M. Mayry

DEPTH BELOW GROUND SURFACE (ft)	CORE INTERVAL LOGGED (ft)	HYDROPUNCH SAMPLES	CORE SCREENING PID READING	GRAPHIC LOG	SOIL DESCRIPTION Soil Name, USCS Group Symbol, Color, Moisture Content, Relative Density or Consistency, Soil Structure, Mineralogy	COMMENTS Observations during drilling
			1.1 ppm		**SILTY SAND (SM)** wet, 85% fine sand, micaceous, 15% fines.	
					POORLY GRADED SAND (SP) wet, 95% fine sand, 5% fines.	
					Boring terminated at 60.5 ft bgs.	

KMEP NORWALK, 307609.GPJ, CH2M GEOTECH_06_REVISED_327530.GLB, 3/28/11

PROJECT NUMBER:	BORING / WELL NUMBER:	
407609	GB-22	SHEET 1 OF 3

Soil Boring Log

PROJECT : KMEP Norwalk
LOCATION : Southeastern Area, Defense Fuel Support Point, Norwalk, CA
GROUND ELEVATION : 74 ft (NGVD 29)
DRILLING CONTRACTOR : Gregg Drilling and Testing, Inc.
COORDINATES: N 1783171.7, E 6541187.2, (NAD 83, Zone 5)
DRILLING METHOD AND EQUIPMENT : CPT Rig, Direct Push with Continuous Macro-core
WATER LEVEL: 27.00 ft bgs
START : 1/20/2011
END : 1/20/2011
LOGGER : M. Mayry

DEPTH BELOW GROUND SURFACE (ft)	CORE INTERVAL LOGGED (ft)	HYDROPUNCH SAMPLES	CORE SCREENING PID READING	GRAPHIC LOG	SOIL DESCRIPTION Soil Name, USCS Group Symbol, Color, Moisture Content, Relative Density or Consistency, Soil Structure, Mineralogy	COMMENTS Observations during drilling
0	Hand Auger				**SILTY SAND (SM)** moist, 70% fine sand, 30% fines.	Hand auger to 10' bgs to clear subsurface utilities.
5					**POORLY GRADED SAND (SP)** moist, 95% fine to medium sand, 5% fines.	
					CLAYEY SAND (SC) moist, 70% fine sand, 30% fines.	
10			3.6 ppm		**SILTY SAND (SM)** moist, 80% fine sand, micaceous, 20% fines.	
	3.0					
	NR					
15	3.0		0.7 ppm		As above, 70% fine sand, micaceous, 30% fines.	
	NR				**POORLY GRADED SAND (SP)** moist, 95% fine sand, micaceous, 5% fines.	
20	4.0		0.5 ppm			
			0.4 ppm		**SILTY SAND (SM)** moist, 70% fine sand, micaceous, 30% fines, grading to below.	
			0.5 ppm		**CLAYEY SAND (SC)** moist, 70% fine sand, micaceous, 30% fines, mostly low plastic fines.	
	3.5					
25					**POORLY GRADED SAND (SP)** moist, 95% fine sand, micaceous, 5% fines, trace medium sand.	
	NR				As above, slight increase in medium sand.	
	4.0	GB-22-31	0.3 ppm			Depth to water at ~27' bgs.
			0.7 ppm		**SILTY SAND (SM)** wet, 70% fine sand, micaceous, 30% fines.	
30						

KMEP NORWALK, 307609.GPJ, CH2M GEOTECH_06_REVISED_327530.GLB, 3/28/11

PROJECT NUMBER:	BORING / WELL NUMBER:
407609	GB-22 SHEET 2 OF 3

Soil Boring Log

PROJECT : KMEP Norwalk
LOCATION : Southeastern Area, Defense Fuel Support Point, Norwalk, CA

GROUND ELEVATION : 74 ft (NGVD 29)
DRILLING CONTRACTOR : Gregg Drilling and Testing, Inc.

COORDINATES: N 1783171.7, E 6541187.2, (NAD 83, Zone 5)
DRILLING METHOD AND EQUIPMENT : CPT Rig, Direct Push with Continuous Macro-core

WATER LEVEL: 27.00 ft bgs
START : 1/20/2011
END : 1/20/2011
LOGGER : M. Mayry

DEPTH BELOW GROUND SURFACE (ft)	CORE INTERVAL LOGGED (ft)	HYDROPUNCH SAMPLES	CORE SCREENING PID READING	GRAPHIC LOG	SOIL DESCRIPTION Soil Name, USCS Group Symbol, Color, Moisture Content, Relative Density or Consistency, Soil Structure, Mineralogy	COMMENTS Observations during drilling
	4.0		0.8 ppm		**SILTY SAND (SM)** wet, 70% fine sand, micaceous, 30% fines. Increase in mica. As above, some clay present.	
35	2.0	GB-22-37	0.6 ppm		As above, 85% fine sand, micaceous, 15% fines, some clay, trace medium sand.	Water in sample. Poor recovery.
	NR					
	2.0				**POORLY GRADED SAND (SP)** wet, >90% fine sand, micaceous, <10% fines.	
40	NR		1.2 ppm		**SILTY SAND (SM)** wet, 60% fine sand, micaceous, 40% fines as silt.	
	2.0	GB-22-45	1.2 ppm		**POORLY GRADED SAND (SP)** wet, 95% fine to medium sand, 5% fines, grades into below.	
45	NR		0.6 ppm			
	2.5		0.3 ppm		**LEAN CLAY (CL)** wet, 90% fines, 10% fine sand, micaceous, low plasticity, low toughness, soft, slow to medium dilatancy, abundant silt present, interlaminated Silty Clay (ML/CL).	
	NR					
50	NR				Trace micaceous fine sand and silt observed with water in sampler from 50'-53' bgs, no true recovery.	
	3.0		0.5 ppm		**SANDY SILT (ML) INTERBEDDED WITH SILTY SAND (SM)** wet, >50% fine sand, micaceous, <50% fines, interlaminated Sandy Silt (ML).	
55	NR				**SILTY SAND (SM)** wet, 80% fine sand, micaceous, 20% fines, trace medium sand.	
	4.0					
60						

KMEP NORWALK, 307609.GPJ, CH2M GEOTECH_06_REVISED_327530.GLB, 3/28/11

PROJECT NUMBER:	BORING / WELL NUMBER:
407609	GB-22 SHEET 3 OF 3

Soil Boring Log

PROJECT : KMEP Norwalk

LOCATION : Southeastern Area, Defense Fuel Support Point, Norwalk, CA

GROUND ELEVATION : 74 ft (NGVD 29)

DRILLING CONTRACTOR : Gregg Drilling and Testing, Inc.

COORDINATES: N 1783171.7, E 6541187.2, (NAD 83, Zone 5)

DRILLING METHOD AND EQUIPMENT : CPT Rig, Direct Push with Continuous Macro-core

WATER LEVEL: 27.00 ft bgs

START : 1/20/2011

END : 1/20/2011

LOGGER : M. Mayry

DEPTH BELOW GROUND SURFACE (ft)	CORE INTERVAL LOGGED (ft)	HYDROPUNCH SAMPLES	CORE SCREENING PID READING	GRAPHIC LOG	SOIL DESCRIPTION Soil Name, USCS Group Symbol, Color, Moisture Content, Relative Density or Consistency, Soil Structure, Mineralogy	COMMENTS Observations during drilling
					As above, decrease in grain size, absence of medium sand. Boring terminated at 61 ft bgs.	Total depth: 61' bgs.

PROJECT NUMBER:	BORING / WELL NUMBER:	
407609	GB-23	SHEET 1 OF 2

Soil Boring Log

PROJECT : KMEP Norwalk

LOCATION : Southeastern Area, Defense Fuel Support Point, Norwalk, CA

GROUND ELEVATION : 73.4 ft (NGVD 29)

DRILLING CONTRACTOR : Gregg Drilling and Testing, Inc.

COORDINATES: N 1783178.4, E 6541125.5, (NAD 83, Zone 5)

DRILLING METHOD AND EQUIPMENT : CPT Rig, Direct Push with Continuous Macro-core

WATER LEVEL: 28.00 ft bgs

START : 1/20/2011

END : 1/20/2011

LOGGER : M. Mayry

DEPTH BELOW GROUND SURFACE (ft)	CORE INTERVAL LOGGED (ft)	HYDROPUNCH SAMPLES	CORE SCREENING PID READING	GRAPHIC LOG	SOIL DESCRIPTION Soil Name, USCS Group Symbol, Color, Moisture Content, Relative Density or Consistency, Soil Structure, Mineralogy	COMMENTS Observations during drilling
0	Hand Auger				**SILTY SAND (SM)** moist, 70% fine sand, 30% fines.	Hand auger to 10' bgs to clear subsurface utilities.
5					**POORLY GRADED SAND (SP)** moist, 95% fine to medium sand, 5% fines.	
					CLAYEY SAND (SC) moist, 70% fine sand, 30% fines.	
10			2.3 ppm		**SILTY SAND (SM)** moist, 85% fine sand, 15% fines.	
	3.0					
	NR		3.3 ppm		As above.	
15	1.5		2.8 ppm			
	NR					
	2.5					
20			3.0 ppm		**POORLY GRADED SAND (SP)** dry, 95% fine sand, 5% fines, trace medium sand.	
	NR		4.5 ppm		**SILTY SAND (SM)** moist, 80% fine sand, micaceous, 20% fines.	
	4.0		6.0 ppm		As above, increase in clay.	
25			2.8 ppm			
			3.8 ppm		**SANDY SILTY CLAY (ML/CL)** wet, 60% fines, 40% fine sand, micaceous, low plasticity, low toughness, soft.	
	3.0	GB-23-31	4.2 ppm			Depth to water at 28' bgs.
30	NR		3.5 ppm			

KMEP NORWALK, 307609.GPJ, CH2M GEOTECH_06_REVISED_327530.GLB, 3/28/11

PROJECT NUMBER:	BORING / WELL NUMBER:	
407609	GB-23	SHEET 2 OF 2

Soil Boring Log

PROJECT : KMEP Norwalk

LOCATION : Southeastern Area, Defense Fuel Support Point, Norwalk, CA

GROUND ELEVATION : 73.4 ft (NGVD 29)

DRILLING CONTRACTOR : Gregg Drilling and Testing, Inc.

COORDINATES: N 1783178.4, E 6541125.5, (NAD 83, Zone 5)

DRILLING METHOD AND EQUIPMENT : CPT Rig, Direct Push with Continuous Macro-core

WATER LEVEL: 28.00 ft bgs

START : 1/20/2011

END : 1/20/2011

LOGGER : M. Mayry

DEPTH BELOW GROUND SURFACE (ft)	CORE INTERVAL LOGGED (ft)	HYDROPUNCH SAMPLES	CORE SCREENING PID READING	GRAPHIC LOG	SOIL DESCRIPTION Soil Name, USCS Group Symbol, Color, Moisture Content, Relative Density or Consistency, Soil Structure, Mineralogy	COMMENTS Observations during drilling
	2.5		2.4 ppm		**SILTY SAND (SM)** wet, 55% fine sand, micaceous, 45% fines.	
	NR		6.2 ppm			
	3.0	GB-23-37	6.3 ppm		Decrease in fines.	
35	NR					
	3.0		4.1 ppm		Increase in fines.	
40	NR		0.3 ppm		**POORLY GRADED SAND (SP)** wet, 95% fine to medium sand, 5% fines.	
	3.0	GB-23-45	3.9 ppm			
45	NR					
	3.0				**LEAN CLAY (CL)** moist, 90% fines, 10% fine sand, low plasticity, low toughness, soft.	
			5.9 ppm		**POORLY GRADED SAND (SP)** moist, 95% fine sand, 5% fines.	
50	NR		3.9 ppm			
	2.5		5.4 ppm		**CLAYEY SAND (SC)** moist, 65% fine sand, 35% fines, low plastic fines, trace nodule, trace decomposed wood, grade into below.	
					POORLY GRADED SAND (SP) wet, 95% fine sand, 5% fines. Boring terminated at 52.5 ft bgs.	

KMEP NORWALK, 307609.GPJ, CH2M GEOTECH_06_REVISED_327530.GLB, 3/28/11

Attachment H
Laboratory Analytical Reports

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

CH2M Hill
1000 Wilshire Boulevard
Los Angeles, CA 90017

Attn: Daniel Jablonski
Phone: (213) 228-8271
Fax: (714) 424-2135
Date Received : 01/22/11

Job: Norwalk

Percent Moisture
ASTM D2216

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **GB-23-10.5-01-012011** Lab ID : CHH11012401-01A Percent Moisture Date Sampled 01/20/11 09:23	19	0.10 %	01/27/11	01/27/11
Client ID: **GB-23-20-01-012011** Lab ID : CHH11012401-02A Percent Moisture Date Sampled 01/20/11 09:38	21	0.10 %	01/27/11	01/27/11
Client ID: **GB-23-30-01-012011** Lab ID : CHH11012401-03A Percent Moisture Date Sampled 01/20/11 10:10	23	0.10 %	01/27/11	01/27/11
Client ID: **GB-23-32.5-01-012011** Lab ID : CHH11012401-04A Percent Moisture Date Sampled 01/20/11 10:30	17	0.10 %	01/27/11	01/27/11
Client ID: **GB-23-40-01-012011** Lab ID : CHH11012401-05A Percent Moisture Date Sampled 01/20/11 10:55	16	0.10 %	01/27/11	01/27/11
Client ID: **GB-23-50-01-012011** Lab ID : CHH11012401-06A Percent Moisture Date Sampled 01/20/11 11:30	22	0.10 %	01/27/11	01/27/11
Client ID: **GB-22-10.5-01-012011** Lab ID : CHH11012401-07A Percent Moisture Date Sampled 01/20/11 13:30	23	0.10 %	01/27/11	01/27/11
Client ID: **GB-22-20-01-012011** Lab ID : CHH11012401-08A Percent Moisture Date Sampled 01/20/11 13:51	22	0.10 %	01/27/11	01/27/11
Client ID: **GB-22-22-01-012011** Lab ID : CHH11012401-09A Percent Moisture Date Sampled 01/20/11 13:55	24	0.10 %	01/27/11	01/27/11
Client ID: **GB-22-30-01-012011** Lab ID : CHH11012401-10A Percent Moisture Date Sampled 01/20/11 14:00	23	0.10 %	01/27/11	01/27/11
Client ID: **GB-22-32-01-012011** Lab ID : CHH11012401-11A Percent Moisture Date Sampled 01/20/11 14:40	19	0.10 %	01/27/11	01/27/11

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Client ID: **GB-22-40-01-012011**					
Lab ID : CHH11012401-12A	Percent Moisture	25	0.10 %	01/27/11	01/27/11
Date Sampled 01/20/11 15:20					
Client ID: **GB-22-53-01-012011**					
Lab ID : CHH11012401-13A	Percent Moisture	28	0.10 %	01/27/11	01/27/11
Date Sampled 01/20/11 17:05					

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

1/31/11

Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

CH2M Hill
1000 Wilshire Boulevard
Los Angeles, CA 90017

Attn: Daniel Jablonski
Phone: (213) 228-8271
Fax: (714) 424-2135
Date Received : 01/22/11

Job: Norwalk

Total Petroleum Hydrocarbons - Extractable (TPH-E) EPA Method SW8015B
Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B
Volatile Organic Compounds (VOCs) EPA Method SW8260B

		Parameter	Concentration		Reporting Limit	Date Extracted	Date Analyzed
Client ID :	**GB-23-10.5-01-012011**						
Lab ID :	CHH11012401-01A	TPH-E (Fuel Product)	21	*	12 mg/Kg-dry	01/25/11	01/27/11
Date Sampled	01/20/11 09:23	Surr: Nonane	152		(62-161) %REC	01/25/11	01/27/11
		TPH-P (GRO)	ND		2.3 mg/Kg-dry	01/25/11	01/25/11
		Tertiary Butyl Alcohol (TBA)	ND		470 µg/Kg-dry	01/25/11	01/25/11
		Methyl tert-butyl ether (MTBE)	ND		12 µg/Kg-dry	01/25/11	01/25/11
		Di-isopropyl Ether (DIPE)	ND		23 µg/Kg-dry	01/25/11	01/25/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND		23 µg/Kg-dry	01/25/11	01/25/11
		Benzene	ND		12 µg/Kg-dry	01/25/11	01/25/11
		Tertiary Amyl Methyl Ether (TAME)	ND		23 µg/Kg-dry	01/25/11	01/25/11
		Toluene	ND		12 µg/Kg-dry	01/25/11	01/25/11
		Ethylbenzene	ND		12 µg/Kg-dry	01/25/11	01/25/11
		m,p-Xylene	ND		12 µg/Kg-dry	01/25/11	01/25/11
		o-Xylene	ND		12 µg/Kg-dry	01/25/11	01/25/11
		Surr: 1,2-Dichloroethane-d4	98		(70-130) %REC	01/25/11	01/25/11
		Surr: Toluene-d8	100		(70-130) %REC	01/25/11	01/25/11
		Surr: 4-Bromofluorobenzene	100		(70-130) %REC	01/25/11	01/25/11
Client ID :	**GB-23-20-01-012011**						
Lab ID :	CHH11012401-02A	TPH-E (Fuel Product)	ND		13 mg/Kg-dry	01/25/11	01/27/11
Date Sampled	01/20/11 09:38	Surr: Nonane	115		(62-161) %REC	01/25/11	01/27/11
		TPH-P (GRO)	ND		2.3 mg/Kg-dry	01/25/11	01/25/11
		Tertiary Butyl Alcohol (TBA)	ND		460 µg/Kg-dry	01/25/11	01/25/11
		Methyl tert-butyl ether (MTBE)	ND		12 µg/Kg-dry	01/25/11	01/25/11
		Di-isopropyl Ether (DIPE)	ND		23 µg/Kg-dry	01/25/11	01/25/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND		23 µg/Kg-dry	01/25/11	01/25/11
		Benzene	ND		12 µg/Kg-dry	01/25/11	01/25/11
		Tertiary Amyl Methyl Ether (TAME)	ND		23 µg/Kg-dry	01/25/11	01/25/11
		Toluene	ND		12 µg/Kg-dry	01/25/11	01/25/11
		Ethylbenzene	ND		12 µg/Kg-dry	01/25/11	01/25/11
		m,p-Xylene	ND		12 µg/Kg-dry	01/25/11	01/25/11
		o-Xylene	ND		12 µg/Kg-dry	01/25/11	01/25/11
		Surr: 1,2-Dichloroethane-d4	95		(70-130) %REC	01/25/11	01/25/11
		Surr: Toluene-d8	104		(70-130) %REC	01/25/11	01/25/11
		Surr: 4-Bromofluorobenzene	99		(70-130) %REC	01/25/11	01/25/11

Alpha Analytical, Inc.

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Client ID :	**GB-23-30-01-012011**					
Lab ID :	CHH11012401-03A	TPH-E (Fuel Product)	ND	13 mg/Kg-dry	01/25/11	01/27/11
Date Sampled	01/20/11 10:10	Surr: Nonane	113	(62-161) %REC	01/25/11	01/27/11
		TPH-P (GRO)	ND	2.3 mg/Kg-dry	01/25/11	01/25/11
		Tertiary Butyl Alcohol (TBA)	ND	450 µg/Kg-dry	01/25/11	01/25/11
		Methyl tert-butyl ether (MTBE)	ND	11 µg/Kg-dry	01/25/11	01/25/11
		Di-isopropyl Ether (DIPE)	ND	23 µg/Kg-dry	01/25/11	01/25/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	23 µg/Kg-dry	01/25/11	01/25/11
		Benzene	ND	11 µg/Kg-dry	01/25/11	01/25/11
		Tertiary Amyl Methyl Ether (TAME)	ND	23 µg/Kg-dry	01/25/11	01/25/11
		Toluene	ND	11 µg/Kg-dry	01/25/11	01/25/11
		Ethylbenzene	ND	11 µg/Kg-dry	01/25/11	01/25/11
		m,p-Xylene	ND	11 µg/Kg-dry	01/25/11	01/25/11
		o-Xylene	ND	11 µg/Kg-dry	01/25/11	01/25/11
		Surr: 1,2-Dichloroethane-d4	92	(70-130) %REC	01/25/11	01/25/11
		Surr: Toluene-d8	105	(70-130) %REC	01/25/11	01/25/11
		Surr: 4-Bromofluorobenzene	98	(70-130) %REC	01/25/11	01/25/11
Client ID :	**GB-23-32.5-01-012011**					
Lab ID :	CHH11012401-04A	TPH-E (Fuel Product)	ND	12 mg/Kg-dry	01/25/11	01/27/11
Date Sampled	01/20/11 10:30	Surr: Nonane	130	(62-161) %REC	01/25/11	01/27/11
		TPH-P (GRO)	ND	1.9 mg/Kg-dry	01/25/11	01/25/11
		Tertiary Butyl Alcohol (TBA)	ND	390 µg/Kg-dry	01/25/11	01/25/11
		Methyl tert-butyl ether (MTBE)	ND	9.7 µg/Kg-dry	01/25/11	01/25/11
		Di-isopropyl Ether (DIPE)	ND	20 µg/Kg-dry	01/25/11	01/25/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	20 µg/Kg-dry	01/25/11	01/25/11
		Benzene	ND	9.7 µg/Kg-dry	01/25/11	01/25/11
		Tertiary Amyl Methyl Ether (TAME)	ND	20 µg/Kg-dry	01/25/11	01/25/11
		Toluene	ND	9.7 µg/Kg-dry	01/25/11	01/25/11
		Ethylbenzene	ND	9.7 µg/Kg-dry	01/25/11	01/25/11
		m,p-Xylene	ND	9.7 µg/Kg-dry	01/25/11	01/25/11
		o-Xylene	ND	9.7 µg/Kg-dry	01/25/11	01/25/11
		Surr: 1,2-Dichloroethane-d4	99	(70-130) %REC	01/25/11	01/25/11
		Surr: Toluene-d8	103	(70-130) %REC	01/25/11	01/25/11
		Surr: 4-Bromofluorobenzene	98	(70-130) %REC	01/25/11	01/25/11
Client ID :	**GB-23-40-01-012011**					
Lab ID :	CHH11012401-05A	TPH-E (Fuel Product)	ND	12 mg/Kg-dry	01/25/11	01/27/11
Date Sampled	01/20/11 10:55	Surr: Nonane	145	(62-161) %REC	01/25/11	01/27/11
		TPH-P (GRO)	ND	2.3 mg/Kg-dry	01/25/11	01/25/11
		Tertiary Butyl Alcohol (TBA)	ND	460 µg/Kg-dry	01/25/11	01/25/11
		Methyl tert-butyl ether (MTBE)	ND	12 µg/Kg-dry	01/25/11	01/25/11
		Di-isopropyl Ether (DIPE)	ND	23 µg/Kg-dry	01/25/11	01/25/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	23 µg/Kg-dry	01/25/11	01/25/11
		Benzene	ND	12 µg/Kg-dry	01/25/11	01/25/11
		Tertiary Amyl Methyl Ether (TAME)	ND	23 µg/Kg-dry	01/25/11	01/25/11
		Toluene	ND	12 µg/Kg-dry	01/25/11	01/25/11
		Ethylbenzene	ND	12 µg/Kg-dry	01/25/11	01/25/11
		m,p-Xylene	ND	12 µg/Kg-dry	01/25/11	01/25/11
		o-Xylene	ND	12 µg/Kg-dry	01/25/11	01/25/11
		Surr: 1,2-Dichloroethane-d4	99	(70-130) %REC	01/25/11	01/25/11
		Surr: Toluene-d8	102	(70-130) %REC	01/25/11	01/25/11
		Surr: 4-Bromofluorobenzene	98	(70-130) %REC	01/25/11	01/25/11

Alpha Analytical, Inc.

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Client ID :	**GB-23-50-01-012011**					
Lab ID :	CHH11012401-06A	TPH-E (Fuel Product)	ND	13 mg/Kg-dry	01/25/11	01/27/11
Date Sampled	01/20/11 11:30	Surr: Nonane	126	(62-161) %REC	01/25/11	01/27/11
		TPH-P (GRO)	ND	2.7 mg/Kg-dry	01/25/11	01/25/11
		Tertiary Butyl Alcohol (TBA)	2,200	530 µg/Kg-dry	01/25/11	01/25/11
		Methyl tert-butyl ether (MTBE)	ND	13 µg/Kg-dry	01/25/11	01/25/11
		Di-isopropyl Ether (DIPE)	ND	27 µg/Kg-dry	01/25/11	01/25/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	27 µg/Kg-dry	01/25/11	01/25/11
		Benzene	ND	13 µg/Kg-dry	01/25/11	01/25/11
		Tertiary Amyl Methyl Ether (TAME)	ND	27 µg/Kg-dry	01/25/11	01/25/11
		Toluene	ND	13 µg/Kg-dry	01/25/11	01/25/11
		Ethylbenzene	ND	13 µg/Kg-dry	01/25/11	01/25/11
		m,p-Xylene	ND	13 µg/Kg-dry	01/25/11	01/25/11
		o-Xylene	ND	13 µg/Kg-dry	01/25/11	01/25/11
		Surr: 1,2-Dichloroethane-d4	87	(70-130) %REC	01/25/11	01/25/11
		Surr: Toluene-d8	105	(70-130) %REC	01/25/11	01/25/11
		Surr: 4-Bromofluorobenzene	98	(70-130) %REC	01/25/11	01/25/11
Client ID :	**GB-22-10.5-01-012011**					
Lab ID :	CHH11012401-07A	TPH-E (Fuel Product)	ND	13 mg/Kg-dry	01/25/11	01/27/11
Date Sampled	01/20/11 13:30	Surr: Nonane	101	(62-161) %REC	01/25/11	01/27/11
		TPH-P (GRO)	ND	2.6 mg/Kg-dry	01/25/11	01/25/11
		Tertiary Butyl Alcohol (TBA)	ND	520 µg/Kg-dry	01/25/11	01/25/11
		Methyl tert-butyl ether (MTBE)	ND	13 µg/Kg-dry	01/25/11	01/25/11
		Di-isopropyl Ether (DIPE)	ND	26 µg/Kg-dry	01/25/11	01/25/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	26 µg/Kg-dry	01/25/11	01/25/11
		Benzene	ND	13 µg/Kg-dry	01/25/11	01/25/11
		Tertiary Amyl Methyl Ether (TAME)	ND	26 µg/Kg-dry	01/25/11	01/25/11
		Toluene	ND	13 µg/Kg-dry	01/25/11	01/25/11
		Ethylbenzene	ND	13 µg/Kg-dry	01/25/11	01/25/11
		m,p-Xylene	ND	13 µg/Kg-dry	01/25/11	01/25/11
		o-Xylene	ND	13 µg/Kg-dry	01/25/11	01/25/11
		Surr: 1,2-Dichloroethane-d4	99	(70-130) %REC	01/25/11	01/25/11
		Surr: Toluene-d8	104	(70-130) %REC	01/25/11	01/25/11
		Surr: 4-Bromofluorobenzene	97	(70-130) %REC	01/25/11	01/25/11
Client ID :	**GB-22-20-01-012011**					
Lab ID :	CHH11012401-08A	TPH-E (Fuel Product)	ND	13 mg/Kg-dry	01/25/11	01/28/11
Date Sampled	01/20/11 13:51	Surr: Nonane	131	(62-161) %REC	01/25/11	01/28/11
		TPH-P (GRO)	ND	2.5 mg/Kg-dry	01/25/11	01/25/11
		Tertiary Butyl Alcohol (TBA)	ND	490 µg/Kg-dry	01/25/11	01/25/11
		Methyl tert-butyl ether (MTBE)	ND	12 µg/Kg-dry	01/25/11	01/25/11
		Di-isopropyl Ether (DIPE)	ND	25 µg/Kg-dry	01/25/11	01/25/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	25 µg/Kg-dry	01/25/11	01/25/11
		Benzene	ND	12 µg/Kg-dry	01/25/11	01/25/11
		Tertiary Amyl Methyl Ether (TAME)	ND	25 µg/Kg-dry	01/25/11	01/25/11
		Toluene	ND	12 µg/Kg-dry	01/25/11	01/25/11
		Ethylbenzene	ND	12 µg/Kg-dry	01/25/11	01/25/11
		m,p-Xylene	ND	12 µg/Kg-dry	01/25/11	01/25/11
		o-Xylene	ND	12 µg/Kg-dry	01/25/11	01/25/11
		Surr: 1,2-Dichloroethane-d4	100	(70-130) %REC	01/25/11	01/25/11
		Surr: Toluene-d8	101	(70-130) %REC	01/25/11	01/25/11
		Surr: 4-Bromofluorobenzene	98	(70-130) %REC	01/25/11	01/25/11

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Client ID :	**GB-22-22-01-012011**						
Lab ID :	CHH11012401-09A	TPH-E (Fuel Product)	32	*	13 mg/Kg-dry	01/25/11	01/28/11
Date Sampled	01/20/11 13:55	Surr: Nonane	90		(62-161) %REC	01/25/11	01/28/11
		TPH-P (GRO)	ND		2.4 mg/Kg-dry	01/25/11	01/25/11
		Tertiary Butyl Alcohol (TBA)	ND		480 µg/Kg-dry	01/25/11	01/25/11
		Methyl tert-butyl ether (MTBE)	ND		12 µg/Kg-dry	01/25/11	01/25/11
		Di-isopropyl Ether (DIPE)	ND		24 µg/Kg-dry	01/25/11	01/25/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND		24 µg/Kg-dry	01/25/11	01/25/11
		Benzene	ND		12 µg/Kg-dry	01/25/11	01/25/11
		Tertiary Amyl Methyl Ether (TAME)	ND		24 µg/Kg-dry	01/25/11	01/25/11
		Toluene	ND		12 µg/Kg-dry	01/25/11	01/25/11
		Ethylbenzene	ND		12 µg/Kg-dry	01/25/11	01/25/11
		m,p-Xylene	ND		12 µg/Kg-dry	01/25/11	01/25/11
		o-Xylene	ND		12 µg/Kg-dry	01/25/11	01/25/11
		Surr: 1,2-Dichloroethane-d4	89		(70-130) %REC	01/25/11	01/25/11
		Surr: Toluene-d8	105		(70-130) %REC	01/25/11	01/25/11
		Surr: 4-Bromofluorobenzene	98		(70-130) %REC	01/25/11	01/25/11
Client ID :	**GB-22-30-01-012011**						
Lab ID :	CHH11012401-10A	TPH-E (Fuel Product)	ND		13 mg/Kg-dry	01/25/11	01/28/11
Date Sampled	01/20/11 14:00	Surr: Nonane	117		(62-161) %REC	01/25/11	01/28/11
		TPH-P (GRO)	ND		2.3 mg/Kg-dry	01/25/11	01/25/11
		Tertiary Butyl Alcohol (TBA)	ND		450 µg/Kg-dry	01/25/11	01/25/11
		Methyl tert-butyl ether (MTBE)	ND		11 µg/Kg-dry	01/25/11	01/25/11
		Di-isopropyl Ether (DIPE)	ND		23 µg/Kg-dry	01/25/11	01/25/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND		23 µg/Kg-dry	01/25/11	01/25/11
		Benzene	ND		11 µg/Kg-dry	01/25/11	01/25/11
		Tertiary Amyl Methyl Ether (TAME)	ND		23 µg/Kg-dry	01/25/11	01/25/11
		Toluene	ND		11 µg/Kg-dry	01/25/11	01/25/11
		Ethylbenzene	ND		11 µg/Kg-dry	01/25/11	01/25/11
		m,p-Xylene	ND		11 µg/Kg-dry	01/25/11	01/25/11
		o-Xylene	ND		11 µg/Kg-dry	01/25/11	01/25/11
		Surr: 1,2-Dichloroethane-d4	101		(70-130) %REC	01/25/11	01/25/11
		Surr: Toluene-d8	103		(70-130) %REC	01/25/11	01/25/11
		Surr: 4-Bromofluorobenzene	98		(70-130) %REC	01/25/11	01/25/11
Client ID :	**GB-22-32-01-012011**						
Lab ID :	CHH11012401-11A	TPH-E (Fuel Product)	ND		12 mg/Kg-dry	01/25/11	01/28/11
Date Sampled	01/20/11 14:40	Surr: Nonane	117		(62-161) %REC	01/25/11	01/28/11
		TPH-P (GRO)	ND		2.0 mg/Kg-dry	01/25/11	01/25/11
		Tertiary Butyl Alcohol (TBA)	ND		410 µg/Kg-dry	01/25/11	01/25/11
		Methyl tert-butyl ether (MTBE)	ND		10 µg/Kg-dry	01/25/11	01/25/11
		Di-isopropyl Ether (DIPE)	ND		20 µg/Kg-dry	01/25/11	01/25/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND		20 µg/Kg-dry	01/25/11	01/25/11
		Benzene	ND		10 µg/Kg-dry	01/25/11	01/25/11
		Tertiary Amyl Methyl Ether (TAME)	ND		20 µg/Kg-dry	01/25/11	01/25/11
		Toluene	ND		10 µg/Kg-dry	01/25/11	01/25/11
		Ethylbenzene	ND		10 µg/Kg-dry	01/25/11	01/25/11
		m,p-Xylene	ND		10 µg/Kg-dry	01/25/11	01/25/11
		o-Xylene	ND		10 µg/Kg-dry	01/25/11	01/25/11
		Surr: 1,2-Dichloroethane-d4	100		(70-130) %REC	01/25/11	01/25/11
		Surr: Toluene-d8	105		(70-130) %REC	01/25/11	01/25/11
		Surr: 4-Bromofluorobenzene	98		(70-130) %REC	01/25/11	01/25/11

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Client ID :	**GB-22-40-01-012011**					
Lab ID :	CHH11012401-12A	TPH-E (Fuel Product)	ND	13 mg/Kg-dry	01/25/11	01/28/11
Date Sampled	01/20/11 15:20	Surr: Nonane	132	(62-161) %REC	01/25/11	01/28/11
		TPH-P (GRO)	ND	2.3 mg/Kg-dry	01/26/11	01/26/11
		Tertiary Butyl Alcohol (TBA)	ND	460 µg/Kg-dry	01/26/11	01/26/11
		Methyl tert-butyl ether (MTBE)	ND	12 µg/Kg-dry	01/26/11	01/26/11
		Di-isopropyl Ether (DIPE)	ND	23 µg/Kg-dry	01/26/11	01/26/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	23 µg/Kg-dry	01/26/11	01/26/11
		Benzene	ND	12 µg/Kg-dry	01/26/11	01/26/11
		Tertiary Amyl Methyl Ether (TAME)	ND	23 µg/Kg-dry	01/26/11	01/26/11
		Toluene	ND	12 µg/Kg-dry	01/26/11	01/26/11
		Ethylbenzene	ND	12 µg/Kg-dry	01/26/11	01/26/11
		m,p-Xylene	ND	12 µg/Kg-dry	01/26/11	01/26/11
		o-Xylene	ND	12 µg/Kg-dry	01/26/11	01/26/11
		Surr: 1,2-Dichloroethane-d4	98	(70-130) %REC	01/26/11	01/26/11
		Surr: Toluene-d8	103	(70-130) %REC	01/26/11	01/26/11
		Surr: 4-Bromofluorobenzene	99	(70-130) %REC	01/26/11	01/26/11
Client ID :	**GB-22-53-01-012011**					
Lab ID :	CHH11012401-13A	TPH-E (Fuel Product)	ND	14 mg/Kg-dry	01/25/11	01/28/11
Date Sampled	01/20/11 17:05	Surr: Nonane	108	(62-161) %REC	01/25/11	01/28/11
		TPH-P (GRO)	ND	2.3 mg/Kg-dry	01/26/11	01/26/11
		Tertiary Butyl Alcohol (TBA)	ND	460 µg/Kg-dry	01/26/11	01/26/11
		Methyl tert-butyl ether (MTBE)	23	12 µg/Kg-dry	01/26/11	01/26/11
		Di-isopropyl Ether (DIPE)	ND	23 µg/Kg-dry	01/26/11	01/26/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	23 µg/Kg-dry	01/26/11	01/26/11
		Benzene	ND	12 µg/Kg-dry	01/26/11	01/26/11
		Tertiary Amyl Methyl Ether (TAME)	ND	23 µg/Kg-dry	01/26/11	01/26/11
		Toluene	ND	12 µg/Kg-dry	01/26/11	01/26/11
		Ethylbenzene	ND	12 µg/Kg-dry	01/26/11	01/26/11
		m,p-Xylene	ND	12 µg/Kg-dry	01/26/11	01/26/11
		o-Xylene	ND	12 µg/Kg-dry	01/26/11	01/26/11
		Surr: 1,2-Dichloroethane-d4	100	(70-130) %REC	01/26/11	01/26/11
		Surr: Toluene-d8	103	(70-130) %REC	01/26/11	01/26/11
		Surr: 4-Bromofluorobenzene	97	(70-130) %REC	01/26/11	01/26/11

*TPH-E (Fuel Product) concentration may include contributions from heavier-end hydrocarbons (e.g. motor oil) that elute in the TPH-E (Fuel Product) range.

Gasoline Range Organics (GRO) C4-C13

Note: Samples were received pre-preserved in Methanol.

This replaces the report signed 1/31/11 due to a change in the reporting limit for TBA, per client request.

Concentrations and reporting limits are based on dry weights.
ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/7/11

Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

CH2M Hill
1000 Wilshire Boulevard
Los Angeles, CA 90017

Attn: Daniel Jablonski
Phone: (213) 228-8271
Fax: (714) 424-2135
Date Received : 01/22/11

Job: Norwalk

Total Petroleum Hydrocarbons - Extractable (TPH-E) EPA Method SW8015B
Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B
Volatile Organic Compounds (VOCs) EPA Method SW8260B

		Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID :	**QCEB-012011**					
Lab ID :	CHH11012401-14A	TPH-E (Fuel Product)	ND	0.10 mg/L	01/27/11	01/27/11
Date Sampled	01/20/11 17:30	Surr: Nonane	107	(49-145) %REC	01/27/11	01/27/11
		TPH-P (GRO)	ND	0.050 mg/L	01/25/11	01/25/11
		Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	01/25/11	01/25/11
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	01/25/11	01/25/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	01/25/11	01/25/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	01/25/11	01/25/11
		Benzene	ND	0.50 µg/L	01/25/11	01/25/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	01/25/11	01/25/11
		Toluene	ND	0.50 µg/L	01/25/11	01/25/11
		Ethylbenzene	ND	0.50 µg/L	01/25/11	01/25/11
		m,p-Xylene	ND	0.50 µg/L	01/25/11	01/25/11
		o-Xylene	ND	0.50 µg/L	01/25/11	01/25/11
		Surr: 1,2-Dichloroethane-d4	94	(70-130) %REC	01/25/11	01/25/11
		Surr: Toluene-d8	102	(70-130) %REC	01/25/11	01/25/11
		Surr: 4-Bromofluorobenzene	90	(70-130) %REC	01/25/11	01/25/11
Client ID :	**GB-23-31-04-012111**					
Lab ID :	CHH11012401-15A	TPH-E (Fuel Product)	ND	0.10 mg/L	01/27/11	01/27/11
Date Sampled	01/21/11 09:40	Surr: Nonane	103	(49-145) %REC	01/27/11	01/27/11
		TPH-P (GRO)	ND	0.050 mg/L	01/25/11	01/25/11
		Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	01/25/11	01/25/11
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	01/25/11	01/25/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	01/25/11	01/25/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	01/25/11	01/25/11
		Benzene	ND	0.50 µg/L	01/25/11	01/25/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	01/25/11	01/25/11
		Toluene	ND	0.50 µg/L	01/25/11	01/25/11
		Ethylbenzene	ND	0.50 µg/L	01/25/11	01/25/11
		m,p-Xylene	ND	0.50 µg/L	01/25/11	01/25/11
		o-Xylene	ND	0.50 µg/L	01/25/11	01/25/11
		Surr: 1,2-Dichloroethane-d4	96	(70-130) %REC	01/25/11	01/25/11
		Surr: Toluene-d8	101	(70-130) %REC	01/25/11	01/25/11
		Surr: 4-Bromofluorobenzene	89	(70-130) %REC	01/25/11	01/25/11

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Client ID :	**GB-23-37-04-012111**						
Lab ID :	CHH11012401-16A	TPH-E (Fuel Product)	ND		0.10 mg/L	01/27/11	01/27/11
Date Sampled	01/21/11 10:05	Surr: Nonane	95		(49-145) %REC	01/27/11	01/27/11
		TPH-P (GRO)	ND		0.050 mg/L	01/25/11	01/25/11
		Tertiary Butyl Alcohol (TBA)	ND		10 µg/L	01/25/11	01/25/11
		Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	01/25/11	01/25/11
		Di-isopropyl Ether (DIPE)	ND		1.0 µg/L	01/25/11	01/25/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND		1.0 µg/L	01/25/11	01/25/11
		Benzene	ND		0.50 µg/L	01/25/11	01/25/11
		Tertiary Amyl Methyl Ether (TAME)	ND		1.0 µg/L	01/25/11	01/25/11
		Toluene	ND		0.50 µg/L	01/25/11	01/25/11
		Ethylbenzene	ND		0.50 µg/L	01/25/11	01/25/11
		m,p-Xylene	ND		0.50 µg/L	01/25/11	01/25/11
		o-Xylene	ND		0.50 µg/L	01/25/11	01/25/11
		Surr: 1,2-Dichloroethane-d4	100		(70-130) %REC	01/25/11	01/25/11
		Surr: Toluene-d8	104		(70-130) %REC	01/25/11	01/25/11
		Surr: 4-Bromofluorobenzene	88		(70-130) %REC	01/25/11	01/25/11
Client ID :	**GB-23-45-04-012111**						
Lab ID :	CHH11012401-17A	TPH-E (Fuel Product)	ND		0.10 mg/L	01/27/11	01/27/11
Date Sampled	01/21/11 10:35	Surr: Nonane	102		(49-145) %REC	01/27/11	01/27/11
		TPH-P (GRO)	ND	V	0.10 mg/L	01/26/11	01/26/11
		Tertiary Butyl Alcohol (TBA)	2,400	*	500 µg/L	01/26/11	01/26/11
		Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	01/26/11	01/26/11
		Di-isopropyl Ether (DIPE)	ND		1.0 µg/L	01/26/11	01/26/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND		1.0 µg/L	01/26/11	01/26/11
		Benzene	ND		0.50 µg/L	01/26/11	01/26/11
		Tertiary Amyl Methyl Ether (TAME)	ND		1.0 µg/L	01/26/11	01/26/11
		Toluene	ND		0.50 µg/L	01/26/11	01/26/11
		Ethylbenzene	ND		0.50 µg/L	01/26/11	01/26/11
		m,p-Xylene	ND		0.50 µg/L	01/26/11	01/26/11
		o-Xylene	ND		0.50 µg/L	01/26/11	01/26/11
		Surr: 1,2-Dichloroethane-d4	95		(70-130) %REC	01/26/11	01/26/11
		Surr: Toluene-d8	101		(70-130) %REC	01/26/11	01/26/11
		Surr: 4-Bromofluorobenzene	95		(70-130) %REC	01/26/11	01/26/11
Client ID :	**QCEB-012111**						
Lab ID :	CHH11012401-18A	TPH-E (Fuel Product)	ND		0.10 mg/L	01/27/11	01/27/11
Date Sampled	01/21/11 10:25	Surr: Nonane	105		(49-145) %REC	01/27/11	01/27/11
		TPH-P (GRO)	ND		0.050 mg/L	01/25/11	01/25/11
		Tertiary Butyl Alcohol (TBA)	ND		10 µg/L	01/25/11	01/25/11
		Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	01/25/11	01/25/11
		Di-isopropyl Ether (DIPE)	ND		1.0 µg/L	01/25/11	01/25/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND		1.0 µg/L	01/25/11	01/25/11
		Benzene	ND		0.50 µg/L	01/25/11	01/25/11
		Tertiary Amyl Methyl Ether (TAME)	ND		1.0 µg/L	01/25/11	01/25/11
		Toluene	ND		0.50 µg/L	01/25/11	01/25/11
		Ethylbenzene	ND		0.50 µg/L	01/25/11	01/25/11
		m,p-Xylene	ND		0.50 µg/L	01/25/11	01/25/11
		o-Xylene	ND		0.50 µg/L	01/25/11	01/25/11
		Surr: 1,2-Dichloroethane-d4	90		(70-130) %REC	01/25/11	01/25/11
		Surr: Toluene-d8	102		(70-130) %REC	01/25/11	01/25/11
		Surr: 4-Bromofluorobenzene	90		(70-130) %REC	01/25/11	01/25/11

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Client ID :	**GB-22-31-04-012111**					
Lab ID :	CHH11012401-19A	TPH-E (Fuel Product)	ND	0.10 mg/L	01/27/11	01/27/11
Date Sampled	01/21/11 12:15	Surr: Nonane	107	(49-145) %REC	01/27/11	01/27/11
		TPH-P (GRO)	ND	0.050 mg/L	01/25/11	01/25/11
		Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	01/25/11	01/25/11
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	01/25/11	01/25/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	01/25/11	01/25/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	01/25/11	01/25/11
		Benzene	ND	0.50 µg/L	01/25/11	01/25/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	01/25/11	01/25/11
		Toluene	ND	0.50 µg/L	01/25/11	01/25/11
		Ethylbenzene	ND	0.50 µg/L	01/25/11	01/25/11
		m,p-Xylene	ND	0.50 µg/L	01/25/11	01/25/11
		o-Xylene	ND	0.50 µg/L	01/25/11	01/25/11
		Surr: 1,2-Dichloroethane-d4	98	(70-130) %REC	01/25/11	01/25/11
		Surr: Toluene-d8	102	(70-130) %REC	01/25/11	01/25/11
		Surr: 4-Bromofluorobenzene	87	(70-130) %REC	01/25/11	01/25/11
Client ID :	**GB-22-37-04-012111**					
Lab ID :	CHH11012401-20A	TPH-E (Fuel Product)	ND	0.10 mg/L	01/27/11	01/27/11
Date Sampled	01/21/11 12:50	Surr: Nonane	106	(49-145) %REC	01/27/11	01/27/11
		TPH-P (GRO)	ND	0.050 mg/L	01/25/11	01/25/11
		Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	01/25/11	01/25/11
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	01/25/11	01/25/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	01/25/11	01/25/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	01/25/11	01/25/11
		Benzene	ND	0.50 µg/L	01/25/11	01/25/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	01/25/11	01/25/11
		Toluene	ND	0.50 µg/L	01/25/11	01/25/11
		Ethylbenzene	ND	0.50 µg/L	01/25/11	01/25/11
		m,p-Xylene	ND	0.50 µg/L	01/25/11	01/25/11
		o-Xylene	ND	0.50 µg/L	01/25/11	01/25/11
		Surr: 1,2-Dichloroethane-d4	94	(70-130) %REC	01/25/11	01/25/11
		Surr: Toluene-d8	102	(70-130) %REC	01/25/11	01/25/11
		Surr: 4-Bromofluorobenzene	88	(70-130) %REC	01/25/11	01/25/11
Client ID :	**GB-22-45-04-012111**					
Lab ID :	CHH11012401-21A	TPH-E (Fuel Product)	ND	0.10 mg/L	01/27/11	01/27/11
Date Sampled	01/21/11 13:10	Surr: Nonane	107	(49-145) %REC	01/27/11	01/27/11
		TPH-P (GRO)	ND	0.050 mg/L	01/25/11	01/25/11
		Tertiary Butyl Alcohol (TBA)	110	10 µg/L	01/25/11	01/25/11
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	01/25/11	01/25/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	01/25/11	01/25/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	01/25/11	01/25/11
		Benzene	ND	0.50 µg/L	01/25/11	01/25/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	01/25/11	01/25/11
		Toluene	ND	0.50 µg/L	01/25/11	01/25/11
		Ethylbenzene	ND	0.50 µg/L	01/25/11	01/25/11
		m,p-Xylene	ND	0.50 µg/L	01/25/11	01/25/11
		o-Xylene	ND	0.50 µg/L	01/25/11	01/25/11
		Surr: 1,2-Dichloroethane-d4	96	(70-130) %REC	01/25/11	01/25/11
		Surr: Toluene-d8	104	(70-130) %REC	01/25/11	01/25/11
		Surr: 4-Bromofluorobenzene	90	(70-130) %REC	01/25/11	01/25/11

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Client ID : **QCTB-012011**

Lab ID : CHH11012401-22A

Date Sampled 01/20/11 00:00

Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	01/25/11	01/25/11
Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	01/25/11	01/25/11
Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	01/25/11	01/25/11
Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	01/25/11	01/25/11
Benzene	ND	0.50 µg/L	01/25/11	01/25/11
Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	01/25/11	01/25/11
Toluene	ND	0.50 µg/L	01/25/11	01/25/11
Ethylbenzene	ND	0.50 µg/L	01/25/11	01/25/11
m,p-Xylene	ND	0.50 µg/L	01/25/11	01/25/11
o-Xylene	ND	0.50 µg/L	01/25/11	01/25/11
Surr: 1,2-Dichloroethane-d4	94	(70-130) %REC	01/25/11	01/25/11
Surr: Toluene-d8	101	(70-130) %REC	01/25/11	01/25/11
Surr: 4-Bromofluorobenzene	92	(70-130) %REC	01/25/11	01/25/11

*This analyte was analyzed separately in order to achieve lower reporting limits for the other analytes.

Gasoline Range Organics (GRO) C4-C13

V = Reporting Limits were increased due to high concentrations of target analytes.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

1/31/11

Report Date

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VOC Sample Preservation Report

Work Order: CHH11012401 **Job:** Norwalk

Alpha's Sample ID	Client's Sample ID	Matrix	pH
11012401-14A	QCEB-012011	Aqueous	2
11012401-15A	GB-23-31-04-012111	Aqueous	6
11012401-16A	GB-23-37-04-012111	Aqueous	6
11012401-17A	GB-23-45-04-012111	Aqueous	2
11012401-18A	QCEB-012111	Aqueous	2
11012401-19A	GB-22-31-04-012111	Aqueous	6
11012401-20A	GB-22-37-04-012111	Aqueous	6
11012401-21A	GB-22-45-04-012111	Aqueous	2
11012401-22A	QCTB-012011	Aqueous	2

1/31/11

Report Date

Alpha Analytical, Inc.

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Date: *31-Jan-11*

QC Summary Report

Work Order: 11012401

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/C Ext**

File ID: **2A01241143.D** Batch ID: **25866** Analysis Date: **01/27/2011 15:27**

Sample ID: **MBLK-25866** Units : **mg/Kg** Run ID: **FID_2_110125A** Prep Date: **01/25/2011 10:47**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (Fuel Product)	ND	5								
Surr: Nonane	7.33		6		122	62	161			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/C Ext**

File ID: **2A01241144.D** Batch ID: **25866** Analysis Date: **01/27/2011 15:53**

Sample ID: **LCS-25866** Units : **mg/Kg** Run ID: **FID_2_110125A** Prep Date: **01/25/2011 10:47**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	102	5	100		102	70	130			
Surr: Nonane	7.54		6		126	62	161			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/C Ext**

File ID: **2A01241160.D** Batch ID: **25866** Analysis Date: **01/27/2011 22:37**

Sample ID: **11012401-05AMS** Units : **mg/Kg** Run ID: **FID_2_110125A** Prep Date: **01/25/2011 10:47**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	52.9	5	50	0	106	50	149			
Surr: Nonane	3.79		3		126	62	161			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/C Ext**

File ID: **2A01241161.D** Batch ID: **25866** Analysis Date: **01/27/2011 23:02**

Sample ID: **11012401-05AMSD** Units : **mg/Kg** Run ID: **FID_2_110125A** Prep Date: **01/25/2011 10:47**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	54.6	5	50	0	109	50	149	52.88	3.3(46)	
Surr: Nonane	3.81		3		127	62	161			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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Date: *31-Jan-11*

QC Summary Report

Work Order: 11012401

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/C Ext**

File ID: **7A01211169.D** Batch ID: **25882** Analysis Date: **01/27/2011 10:54**

Sample ID: **MBLK-25882** Units : **mg/L** Run ID: **FID_7_110127A** Prep Date: **01/27/2011 09:04**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (Fuel Product)	ND	0.1								
Surr: Nonane	0.153		0.15		102	49	145			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/C Ext**

File ID: **7A01211170.D** Batch ID: **25882** Analysis Date: **01/27/2011 11:20**

Sample ID: **LCS-25882** Units : **mg/L** Run ID: **FID_7_110127A** Prep Date: **01/27/2011 09:04**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	2.5	0.05	2.5		99.8	70	130			
Surr: Nonane	0.162		0.15		108	49	145			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/C Ext**

File ID: **7A01211173.D** Batch ID: **25882** Analysis Date: **01/27/2011 12:39**

Sample ID: **11012602-01AMS** Units : **mg/L** Run ID: **FID_7_110127A** Prep Date: **01/27/2011 09:04**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	2.43	0.05	2.5	0	97	53	150			
Surr: Nonane	0.146		0.15		97	49	145			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/C Ext**

File ID: **7A01211174.D** Batch ID: **25882** Analysis Date: **01/27/2011 13:05**

Sample ID: **11012602-01AMSD** Units : **mg/L** Run ID: **FID_7_110127A** Prep Date: **01/27/2011 09:04**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	2.36	0.05	2.5	0	94	53	150	2.432	3.0(47)	
Surr: Nonane	0.155		0.15		103	49	145			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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Date: *31-Jan-11*

QC Summary Report

Work Order: 11012401

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/C**

File ID: **11012509.D** Batch ID: **MS08S5860B** Analysis Date: **01/25/2011 11:17**

Sample ID: **MBLK MS08S5860B** Units : **mg/Kg** Run ID: **MSD_08_110125A** Prep Date: **01/25/2011 11:17**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	1								
Surr: 1,2-Dichloroethane-d4	0.192		0.2		96	70	130			
Surr: Toluene-d8	0.21		0.2		105	70	130			
Surr: 4-Bromofluorobenzene	0.197		0.2		98	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/C**

File ID: **11012513.D** Batch ID: **MS08S5860B** Analysis Date: **01/25/2011 12:55**

Sample ID: **GLCS MS08S5860B** Units : **mg/Kg** Run ID: **MSD_08_110125A** Prep Date: **01/25/2011 12:55**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	16.6	2	16		104	63	148			
Surr: 1,2-Dichloroethane-d4	0.394		0.4		99	70	130			
Surr: Toluene-d8	0.39		0.4		98	70	130			
Surr: 4-Bromofluorobenzene	0.425		0.4		106	70	130			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/C**

File ID: **11012514.D** Batch ID: **MS08S5860B** Analysis Date: **01/25/2011 13:19**

Sample ID: **11012401-02AGS** Units : **mg/Kg** Run ID: **MSD_08_110125A** Prep Date: **01/25/2011 13:19**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	15.5	2	16	0	97	35	166			
Surr: 1,2-Dichloroethane-d4	0.397		0.4		99	70	130			
Surr: Toluene-d8	0.391		0.4		98	70	130			
Surr: 4-Bromofluorobenzene	0.424		0.4		106	70	130			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/C**

File ID: **11012515.D** Batch ID: **MS08S5860B** Analysis Date: **01/25/2011 13:44**

Sample ID: **11012401-02AGSD** Units : **mg/Kg** Run ID: **MSD_08_110125A** Prep Date: **01/25/2011 13:44**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	14	2	16	0	87	35	166	15.54	10.7(33)	
Surr: 1,2-Dichloroethane-d4	0.353		0.4		88	70	130			
Surr: Toluene-d8	0.393		0.4		98	70	130			
Surr: 4-Bromofluorobenzene	0.426		0.4		106	70	130			

Comments:

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Date: *31-Jan-11*

QC Summary Report

Work Order: 11012401

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/C**

File ID: **11012504.D** Batch ID: **MS12W0125B** Analysis Date: **01/25/2011 09:42**

Sample ID: **MBLK MS12W0125B** Units : **mg/L** Run ID: **MSD_12_110125A** Prep Date: **01/25/2011 09:42**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	0.05								
Surr: 1,2-Dichloroethane-d4	0.00894		0.01		89	70	130			
Surr: Toluene-d8	0.0105		0.01		105	70	130			
Surr: 4-Bromofluorobenzene	0.00895		0.01		90	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/C**

File ID: **11012502.D** Batch ID: **MS12W0125B** Analysis Date: **01/25/2011 08:57**

Sample ID: **GLCS MS12W0125B** Units : **mg/L** Run ID: **MSD_12_110125A** Prep Date: **01/25/2011 08:57**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	0.396	0.05	0.4		99	70	130			
Surr: 1,2-Dichloroethane-d4	0.00828		0.01		83	70	130			
Surr: Toluene-d8	0.0105		0.01		105	70	130			
Surr: 4-Bromofluorobenzene	0.00983		0.01		98	70	130			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/C**

File ID: **11012517.D** Batch ID: **MS12W0125B** Analysis Date: **01/25/2011 14:51**

Sample ID: **11012401-19AGS** Units : **mg/L** Run ID: **MSD_12_110125A** Prep Date: **01/25/2011 14:51**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2.07	0.25	2	0	104	51	144			
Surr: 1,2-Dichloroethane-d4	0.0446		0.05		89	70	130			
Surr: Toluene-d8	0.051		0.05		102	70	130			
Surr: 4-Bromofluorobenzene	0.0486		0.05		97	70	130			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/C**

File ID: **11012518.D** Batch ID: **MS12W0125B** Analysis Date: **01/25/2011 15:13**

Sample ID: **11012401-19AGSD** Units : **mg/L** Run ID: **MSD_12_110125A** Prep Date: **01/25/2011 15:13**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1.97	0.25	2	0	98	51	144	2.075	5.3(29)	
Surr: 1,2-Dichloroethane-d4	0.0421		0.05		84	70	130			
Surr: Toluene-d8	0.0511		0.05		102	70	130			
Surr: 4-Bromofluorobenzene	0.0482		0.05		96	70	130			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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Date: *07-Feb-11*

QC Summary Report

Work Order: 11012401

Method Blank

Type: **MBLK** Test Code: **EPA Method SW8260B**

File ID: **11012509.D** Batch ID: **MS08S5860A** Analysis Date: **01/25/2011 11:17**

Sample ID: **MBLK MS08S5860A** Units : **µg/Kg** Run ID: **MSD_08_110125A** Prep Date: **01/25/2011 11:17**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	ND	500								
Methyl tert-butyl ether (MTBE)	ND	5								
Di-isopropyl Ether (DIPE)	ND	20								
Ethyl Tertiary Butyl Ether (ETBE)	ND	20								
Benzene	ND	5								
Tertiary Amyl Methyl Ether (TAME)	ND	20								
Toluene	ND	5								
Ethylbenzene	ND	5								
m,p-Xylene	ND	5								
o-Xylene	ND	5								
Surr: 1,2-Dichloroethane-d4	192		200		96	70	130			
Surr: Toluene-d8	210		200		105	70	130			
Surr: 4-Bromofluorobenzene	197		200		98	70	130			

Laboratory Control Spike

Type: **LCS** Test Code: **EPA Method SW8260B**

File ID: **11012510.D** Batch ID: **MS08S5860A** Analysis Date: **01/25/2011 11:42**

Sample ID: **LCS MS08S5860A** Units : **µg/Kg** Run ID: **MSD_08_110125A** Prep Date: **01/25/2011 11:42**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	2400	1000	4000		60	14	156			
Methyl tert-butyl ether (MTBE)	445	10	400		111	61	147			
Di-isopropyl Ether (DIPE)	503	20	400		126	68	150			
Ethyl Tertiary Butyl Ether (ETBE)	463	20	400		116	66	150			
Benzene	489	10	400		122	70	138			
Tertiary Amyl Methyl Ether (TAME)	438	20	400		109	61	148			
Toluene	439	10	400		110	70	137			
Ethylbenzene	456	10	400		114	70	138			
m,p-Xylene	419	10	400		105	70	145			
o-Xylene	412	10	400		103	70	145			
Surr: 1,2-Dichloroethane-d4	414		400		104	70	130			
Surr: Toluene-d8	367		400		92	70	130			
Surr: 4-Bromofluorobenzene	453		400		113	70	130			

Sample Matrix Spike

Type: **MS** Test Code: **EPA Method SW8260B**

File ID: **11012511.D** Batch ID: **MS08S5860A** Analysis Date: **01/25/2011 12:06**

Sample ID: **11012401-02AMS** Units : **µg/Kg** Run ID: **MSD_08_110125A** Prep Date: **01/25/2011 12:06**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	2400	1000	4000	0	60	10	171			
Methyl tert-butyl ether (MTBE)	379	10	400	0	95	42	157			
Di-isopropyl Ether (DIPE)	428	20	400	0	107	49	157			
Ethyl Tertiary Butyl Ether (ETBE)	401	20	400	0	100	48	158			
Benzene	418	10	400	0	105	53	150			
Tertiary Amyl Methyl Ether (TAME)	369	20	400	0	92	45	152			
Toluene	370	10	400	0	92	51	149			
Ethylbenzene	386	10	400	0	97	54	150			
m,p-Xylene	351	10	400	0	88	50	161			
o-Xylene	346	10	400	0	87	35	177			
Surr: 1,2-Dichloroethane-d4	423		400		106	70	130			
Surr: Toluene-d8	365		400		91	70	130			
Surr: 4-Bromofluorobenzene	453		400		113	70	130			

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *07-Feb-11*

QC Summary Report

Work Order: 11012401

Sample Matrix Spike Duplicate Type: **MSD** Test Code: **EPA Method SW8260B**

File ID: **11012512.D** Batch ID: **MS08S5860A** Analysis Date: **01/25/2011 12:30**

Sample ID: **11012401-02AMSD** Units : **µg/Kg** Run ID: **MSD_08_110125A** Prep Date: **01/25/2011 12:30**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	2340	1000	4000	0	58	10	171	2398	2.6(40)	
Methyl tert-butyl ether (MTBE)	396	10	400	0	99	42	157	379.2	4.4(32)	
Di-isopropyl Ether (DIPE)	449	20	400	0	112	49	157	428.3	4.8(31)	
Ethyl Tertiary Butyl Ether (ETBE)	417	20	400	0	104	48	158	401	3.9(31)	
Benzene	437	10	400	0	109	53	150	418.4	4.5(26)	
Tertiary Amyl Methyl Ether (TAME)	388	20	400	0	97	45	152	369.4	4.9(30)	
Toluene	388	10	400	0	97	51	149	369.9	4.7(26)	
Ethylbenzene	402	10	400	0	100	54	150	386.3	3.9(29)	
m,p-Xylene	366	10	400	0	91	50	161	351.2	4.1(38)	
o-Xylene	360	10	400	0	90	35	177	346.4	4.0(40)	
Surr: 1,2-Dichloroethane-d4	416		400		104	70	130			
Surr: Toluene-d8	367		400		92	70	130			
Surr: 4-Bromofluorobenzene	449		400		112	70	130			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *07-Feb-11*

QC Summary Report

Work Order: 11012401

Method Blank

Type: **MBLK** Test Code: **EPA Method SW8260B**
File ID: **11012504.D** Batch ID: **MS12W0125A** Analysis Date: **01/25/2011 09:42**
Sample ID: **MBLK MS12W0125A** Units : **µg/L** Run ID: **MSD_12_110125A** Prep Date: **01/25/2011 09:42**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	ND	10								
Methyl tert-butyl ether (MTBE)	ND	0.5								
Di-isopropyl Ether (DIPE)	ND	1								
Ethyl Tertiary Butyl Ether (ETBE)	ND	1								
Benzene	ND	0.5								
Tertiary Amyl Methyl Ether (TAME)	ND	1								
Toluene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
o-Xylene	ND	0.5								
Surr: 1,2-Dichloroethane-d4	8.94		10		89	70	130			
Surr: Toluene-d8	10.5		10		105	70	130			
Surr: 4-Bromofluorobenzene	8.95		10		90	70	130			

Laboratory Control Spike

Type: **LCS** Test Code: **EPA Method SW8260B**
File ID: **11012503.D** Batch ID: **MS12W0125A** Analysis Date: **01/25/2011 09:19**
Sample ID: **LCS MS12W0125A** Units : **µg/L** Run ID: **MSD_12_110125A** Prep Date: **01/25/2011 09:19**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	74.2	10	100		74	44	156			
Methyl tert-butyl ether (MTBE)	8.46	0.5	10		85	65	140			
Di-isopropyl Ether (DIPE)	7.55	1	10		76	70	130			
Ethyl Tertiary Butyl Ether (ETBE)	7.98	1	10		80	65	139			
Benzene	9.49	0.5	10		95	70	130			
Tertiary Amyl Methyl Ether (TAME)	8.82	1	10		88	68	134			
Toluene	9.84	0.5	10		98	80	120			
Ethylbenzene	10.5	0.5	10		105	80	120			
m,p-Xylene	10.4	0.5	10		104	70	130			
o-Xylene	10.7	0.5	10		107	70	130			
Surr: 1,2-Dichloroethane-d4	8.13		10		81	70	130			
Surr: Toluene-d8	10.5		10		105	70	130			
Surr: 4-Bromofluorobenzene	9.74		10		97	70	130			

Sample Matrix Spike

Type: **MS** Test Code: **EPA Method SW8260B**
File ID: **11012515.D** Batch ID: **MS12W0125A** Analysis Date: **01/25/2011 14:05**
Sample ID: **11012401-19AMS** Units : **µg/L** Run ID: **MSD_12_110125A** Prep Date: **01/25/2011 14:05**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	391	25	500	0	78	41	157			
Methyl tert-butyl ether (MTBE)	40.5	1.3	50	0	81	47	150			
Di-isopropyl Ether (DIPE)	33.8	2.5	50	0	68	59	139			
Ethyl Tertiary Butyl Ether (ETBE)	36.1	2.5	50	0	72	59	182			
Benzene	40	1.3	50	0	80	59	138			
Tertiary Amyl Methyl Ether (TAME)	39.8	2.5	50	0	80	63	135			
Toluene	39	1.3	50	0	78	68	130			
Ethylbenzene	41.7	1.3	50	0	83	68	130			
m,p-Xylene	41	1.3	50	0	82	68	131			
o-Xylene	43.5	1.3	50	0	87	70	130			
Surr: 1,2-Dichloroethane-d4	44.1		50		88	70	130			
Surr: Toluene-d8	50		50		100	70	130			
Surr: 4-Bromofluorobenzene	49.3		50		99	70	130			

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *07-Feb-11*

QC Summary Report

Work Order: 11012401

Sample Matrix Spike Duplicate Type: **MSD** Test Code: **EPA Method SW8260B**

File ID: **11012516.D** Batch ID: **MS12W0125A** Analysis Date: **01/25/2011 14:28**

Sample ID: **11012401-19AMSD** Units : **µg/L** Run ID: **MSD_12_110125A** Prep Date: **01/25/2011 14:28**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	380	25	500	0	76	41	157	390.8	2.7(30)	
Methyl tert-butyl ether (MTBE)	40.9	1.3	50	0	82	47	150	40.47	1.0(40)	
Di-isopropyl Ether (DIPE)	34.8	2.5	50	0	70	59	139	33.77	3.1(20)	
Ethyl Tertiary Butyl Ether (ETBE)	36.9	2.5	50	0	74	59	182	36.12	2.1(40)	
Benzene	42.3	1.3	50	0	85	59	138	40.02	5.4(21)	
Tertiary Amyl Methyl Ether (TAME)	40.5	2.5	50	0	81	63	135	39.79	1.8(40)	
Toluene	41.3	1.3	50	0	83	68	130	39.03	5.6(20)	
Ethylbenzene	44.2	1.3	50	0	88	68	130	41.68	5.9(20)	
m,p-Xylene	43.3	1.3	50	0	87	68	131	41.04	5.3(20)	
o-Xylene	46	1.3	50	0	92	70	130	43.5	5.5(20)	
Surr: 1,2-Dichloroethane-d4	44.8		50		90	70	130			
Surr: Toluene-d8	50.1		50		100	70	130			
Surr: 4-Bromofluorobenzene	48.8		50		98	70	130			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : CHHL11012401

Report Due By : 5:00 PM On : 01-Feb-2011

Client:
CH2M Hill
1000 Wilshire Boulevard
21st Floor
Los Angeles, CA 90017

Report Attention	Phone Number	EMail Address
Daniel Jablonski	(213) 228-8271 x	daniel.jablonski@ch2m.com
Vladimir Carino	(213) 228-8271 x	vladimir.carino@ch2m.com

EDD Required : **Yes**

Sampled by : Matt Mayry

PO :

Client's COC # : 31993, 31994 Job : Norwalk

Cooler Temp	Samples Received	Date Printed
0 °C	22-Jan-2011	24-Jan-2011

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests P_MOIST	TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W	Sample Remarks
CHH11012401-01A	GB-23-10.5-01-012011	SO	01/20/11 09:23	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C		(2) MeOH voas (1) Geoprobe Report on a dry weight basis.
CHH11012401-02A	GB-23-20-01-012011	SO	01/20/11 09:38	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C		(2) MeOH voas (1) Geoprobe Report on a dry weight basis.
CHH11012401-03A	GB-23-30-01-012011	SO	01/20/11 10:10	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C		(2) MeOH voas (1) Geoprobe Report on a dry weight basis.
CHH11012401-04A	GB-23-32.5-01-012011	SO	01/20/11 10:30	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C		(2) MeOH voas (1) Geoprobe Report on a dry weight basis. 1 MeOH voa received w/ sample ID GB-23-30.5-01-012011 matched up by sample time and logged in per COC.
CHH11012401-05A	GB-23-40-01-012011	SO	01/20/11 10:55	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C		(2) MeOH voas (1) Geoprobe Report on a dry weight basis.

Comments: Security seals intact. Frozen ice. Saturday delivery. Samples received 1/22/11 kept cold and secure until login on 1/24/11. Analysts: Run two analyses in order to achieve lower reporting limits for all other analytes due to high TBA values. :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	Alpha Analytical, Inc.	1-24-11 9:38

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : CHHL11012401

Report Due By : 5:00 PM On : 01-Feb-2011

Report Attention	Phone Number	EMail Address
Daniel Jablonski	(213) 228-8271 x	daniel.jablonski@ch2m.com
Vladimir Carino	(213) 228-8271 x	vladimir.carino@ch2m.com

Client:
CH2M Hill
1000 Wilshire Boulevard
21st Floor
Los Angeles, CA 90017

EDD Required : **Yes**

Sampled by : Matt Mayry

PO :

Client's COC # : 31993, 31994 Job : Norwalk

Cooler Temp	Samples Received	Date Printed
0 °C	22-Jan-2011	24-Jan-2011

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests P_MOIST	TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W	Sample Remarks
CHH11012401-06A	GB-23-50-01-012011	SO	01/20/11 11:30	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C		(2) MeOH voas (1) Geoprobe Report on a dry weight basis.
CHH11012401-07A	GB-22-10.5-01-012011	SO	01/20/11 13:30	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C		(2) MeOH voas (1) Geoprobe Report on a dry weight basis.
CHH11012401-08A	GB-22-20-01-012011	SO	01/20/11 13:51	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C		(2) MeOH voas (1) Geoprobe Report on a dry weight basis.
CHH11012401-09A	GB-22-22-01-012011	SO	01/20/11 13:55	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C		(2) MeOH voas (1) Geoprobe Report on a dry weight basis.
CHH11012401-10A	GB-22-30-01-012011	SO	01/20/11 14:00	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C		(2) MeOH voas (1) Geoprobe Report on a dry weight basis.
CHH11012401-11A	GB-22-32-01-012011	SO	01/20/11 14:40	4	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C		(2) MeOH voas (2) 4oz jars Report on a dry weight basis.
CHH11012401-12A	GB-22-40-01-012011	SO	01/20/11 15:20	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C		(2) MeOH voas (1) Geoprobe Report on a dry weight basis.

Comments: Security seals intact. Frozen ice. Saturday delivery. Samples received 1/22/11 kept cold and secure until login on 1/24/11. Analysts: Run two analyses in order to achieve lower reporting limits for all other analytes due to high TBA values. ;

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	Alpha Analytical, Inc.	1-24-11 9:38

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : CHHL11012401

Report Due By : 5:00 PM On : 01-Feb-2011

Client:
CH2M Hill
1000 Wilshire Boulevard
21st Floor
Los Angeles, CA 90017

Report Attention	Phone Number	EMail Address
Daniel Jablonski	(213) 228-8271 x	daniel.jablonski@ch2m.com
Vladimir Carino	(213) 228-8271 x	vladimir.carino@ch2m.com

EDD Required : **Yes**

Sampled by : Matt Mayry

PO :

Client's COC # : 31993, 31994 Job : Norwalk

Cooler Temp	Samples Received	Date Printed
0 °C	22-Jan-2011	24-Jan-2011

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests P_MOIST	TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W	Sample Remarks
CHH11012401-13A	GB-22-53-01-012011	SO	01/20/11 17:05	4	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C		(2) MeOH voas (2) 4oz jars Report on a dry weight basis.
CHH11012401-14A	QCEB-012011	AQ	01/20/11 17:30	6	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	
CHH11012401-15A	GB-23-31-04-012111	AQ	01/21/11 09:40	9	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	
CHH11012401-16A	GB-23-37-04-012111	AQ	01/21/11 10:05	8	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	
CHH11012401-17A	GB-23-45-04-012111	AQ	01/21/11 10:35	6	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	
CHH11012401-18A	QCEB-012111	AQ	01/21/11 10:25	6	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	
CHH11012401-19A	GB-22-31-04-012111	AQ	01/21/11 12:15	11	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	
CHH11012401-20A	GB-22-37-04-012111	AQ	01/21/11 12:50	9	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	
CHH11012401-21A	GB-22-45-04-012111	AQ	01/21/11 13:10	6	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	
CHH11012401-22A	QCTB-012011	AQ	01/20/11 00:00	2	0	6							TPHE(0.10)	Reno Trip Blank 11/18/10

Comments: Security seals intact. Frozen ice. Saturday delivery. Samples received 1/22/11 kept cold and secure until login on 1/24/11. Analysts: Run two analyses in order to achieve lower reporting limits for all other analytes due to high TBA values. :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	1-24-11 9:38

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

31993

Billing Information:
Company Name CH2MHill
Attn: Dan Jablonski
Address 1000 Wilshire Blvd Floor 21
City, State, Zip Los Angeles, CA 90017
Phone Number 818-257-3630 Fax 714-424-2135

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State?
AZ ___ CA X NV ___ WA ___ DOD Site ___
ID ___ OR ___ OTHER ___ Page # 1 of 2

Consultant / Client Name
Address
City, State, Zip
Job # direct bill to Kinder Morgan
Job Name
Report Attention / Project Manager
Name:
Email:
Phone: Mobile:
P.O. #

Analyses Required
Data Validation Level: III or IV
EDD / EDF? YES ___ NO ___
Global ID # ___

Time Sampled	Date Sampled	Matrix* See Key Below	Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	# Containers**	BTEX + Fuel oxys (methanol preserved)	TPHg (methanol) preserved	TPH fp (soil sleeve)				REMARKS
0923	1-20-11	Soil	CHH01240I-01	GB-23-10.5-01-012011			2 vials 1 sleeve	X	X	X				2 methanol preserved vials provided. Analyze only ONE unless the second is needed. Soil sleeve is for TPH fp
0938	↓	↓	-02	GB-23-20-01-012011			↓	↓	↓	↓				
1010			-03	GB-23-30-01-012011										
1030			-04	GB-23-32.5-01-012011										
1055			-05	GB-23-40-01-012011										
1130			-06	GB-23-50-01-012011										
1330			-07	GB-22-10.5-01-012011										
1351			-08	GB-22-20-01-012011										
1355			-09	GB-22-22-01-012011										
1400			-10	GB-22-30-01-012011										
1440			-11	GB-22-32-01-012011			2 vials 2-4oz jars							
1520			-12	GB-22-40-01-012011			2 vials 1 sleeve							
1705	↓	↓	-13	GB-22-53-01-012011			2 vials 2-4oz jars	↓	↓	↓				

FOR LAB USE ONLY

ADDITIONAL INSTRUCTIONS:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action (NAC 445.0636 (c) (2)). Sampled By: [signature]

Relinquished by: (Signature/Affiliation) [signature] CH2MHill 1-21-11 1400	Received by: (Signature/Affiliation) [signature] Alpha Analytical	Date: 1.21.11	Time: 1407
Relinquished by: (Signature/Affiliation) [signature] Alpha Analytical	Received by: (Signature/Affiliation) Elizabeth Adcox / Alpha	Date: 1-24-11	Time: 9:38
Relinquished by: (Signature/Affiliation)	Received by: (Signature/Affiliation)	Date:	Time:

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

31994

Billing Information:
Company Name: CH2MHill
Attn: Dan Jablonski
Address:
City, State, Zip:
Phone Number: 818-257-3630 Fax: 714-424-2135

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State?
AZ ___ CA X NV ___ WA ___ DOD Site ___
ID ___ OR ___ OTHER ___ Page # 2 of 2

Consultant / Client Name:
Address:
City, State, Zip:

Job # direct bill Kinder Morgan | Job Name:

Report Attention / Project Manager
Name:
Email:
Phone: ___ Mobile: ___

Analyses Required

Data Validation Level: III or IV

EDD / EDF? YES ___ NO ___
Global ID #:

Time Sampled	Date Sampled	Matrix* See Key Below	P.O. # / Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	# Containers**	BTEX+fuel oxys	TPHg	TPHd	REMARKS
1730	1-20-11	AQ	-14	QCEB-012011			6	X	X	X	
0940	1-21-11	AQ	-15	GB-23-31-04-012111			9				
1005	1-21-11		-16	GB-23-37-04-012111			8				
1035			-17	GB-23-45-04-012111			6				
1025			-18	QCEB-012111			6				
1215			-19	GB-22-31-04-012111			11				
1250			-20	GB-22-37-04-012111			9				
1310			-21	GB-22-45-04-012111			6				
-	1-20-11		-22	QCTB-012011			2	X			

FOR LAB USE ONLY

ADDITIONAL INSTRUCTIONS:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action (NAC 445.0636 (c) (2)). Sampled By: Matt Magny

Relinquished by: (Signature/Affiliation) CH2MHill 1-21-11 1400	Received by: (Signature/Affiliation) Alpha Analytical	Date: 1-21-11	Time: 1700
Relinquished by: (Signature/Affiliation) Alpha Analytical	Received by: (Signature/Affiliation) Elizabeth Adcox / Alpha	Date: 1-24-11	Time: 9:38
Relinquished by: (Signature/Affiliation)	Received by: (Signature/Affiliation)	Date:	Time:

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

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ANALYTICAL REPORT

CH2M Hill
1000 Wilshire Boulevard
Los Angeles, CA 90017

Attn: Daniel Jablonski
Phone: (213) 228-8271
Fax: (714) 424-2135
Date Received : 01/26/11

Job: KMEP Norwalk

Percent Moisture
ASTM D2216

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **GB-21-10.5-01-012411** Lab ID : CHH11012601-01A Percent Moisture Date Sampled 01/24/11 08:22	7.4	0.10 %	01/28/11	01/28/11
Client ID: **GB-21-10.5-02-012411** Lab ID : CHH11012601-02A Percent Moisture Date Sampled 01/24/11 08:25	6.8	0.10 %	01/28/11	01/28/11
Client ID: **GB-21-20-01-012411** Lab ID : CHH11012601-03A Percent Moisture Date Sampled 01/24/11 09:40	6.2	0.10 %	01/28/11	01/28/11
Client ID: **GB-21-20-02-012411** Lab ID : CHH11012601-04A Percent Moisture Date Sampled 01/24/11 09:45	3.4	0.10 %	01/28/11	01/28/11
Client ID: **GB-21-22-01-012411** Lab ID : CHH11012601-05A Percent Moisture Date Sampled 01/24/11 10:05	10	0.10 %	01/28/11	01/28/11
Client ID: **GB-21-30-01-012411** Lab ID : CHH11012601-06A Percent Moisture Date Sampled 01/24/11 10:15	19	0.10 %	01/28/11	01/28/11
Client ID: **GB-21-32-01-012411** Lab ID : CHH11012601-07A Percent Moisture Date Sampled 01/24/11 10:30	17	0.10 %	01/28/11	01/28/11
Client ID: **GB-21-32-03-012411** Lab ID : CHH11012601-08A Percent Moisture Date Sampled 01/24/11 10:33	18	0.10 %	01/28/11	01/28/11
Client ID: **GB-21-40-01-012411** Lab ID : CHH11012601-09A Percent Moisture Date Sampled 01/24/11 11:10	16	0.10 %	01/28/11	01/28/11
Client ID: **GB-21-50-01-012411** Lab ID : CHH11012601-10A Percent Moisture Date Sampled 01/24/11 12:00	19	0.10 %	01/28/11	01/28/11
Client ID: **GB-21-60-01-012411** Lab ID : CHH11012601-11A Percent Moisture Date Sampled 01/24/11 12:52	23	0.10 %	01/28/11	01/28/11

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Client ID: **GB-20-10.5-01-012511**					
Lab ID : CHH11012601-18A	Percent Moisture	8.6	0.10 %	01/28/11	01/28/11
Date Sampled 01/25/11 08:00					
Client ID: **GB-20-19.5-01-012511**					
Lab ID : CHH11012601-19A	Percent Moisture	20	0.10 %	01/28/11	01/28/11
Date Sampled 01/25/11 08:15					
Client ID: **GB-20-22-01-012511**					
Lab ID : CHH11012601-20A	Percent Moisture	7.4	0.10 %	01/28/11	01/28/11
Date Sampled 01/25/11 08:25					
Client ID: **GB-20-30-01-012511**					
Lab ID : CHH11012601-21A	Percent Moisture	20	0.10 %	01/28/11	01/28/11
Date Sampled 01/25/11 08:50					
Client ID: **GB-20-32-01-012511**					
Lab ID : CHH11012601-22A	Percent Moisture	27	0.10 %	01/28/11	01/28/11
Date Sampled 01/25/11 09:10					
Client ID: **GB-20-40-01-012511**					
Lab ID : CHH11012601-23A	Percent Moisture	16	0.10 %	01/28/11	01/28/11
Date Sampled 01/25/11 09:35					
Client ID: **GB-20-40-02-012511**					
Lab ID : CHH11012601-24A	Percent Moisture	18	0.10 %	01/28/11	01/28/11
Date Sampled 01/25/11 09:40					
Client ID: **GB-20-50-01-012511**					
Lab ID : CHH11012601-25A	Percent Moisture	19	0.10 %	01/28/11	01/28/11
Date Sampled 01/25/11 10:30					
Client ID: **GB-19-10.5-01-012511**					
Lab ID : CHH11012601-27A	Percent Moisture	12	0.10 %	01/28/11	01/28/11
Date Sampled 01/25/11 12:10					
Client ID: **GB-19-20-01-012511**					
Lab ID : CHH11012601-28A	Percent Moisture	2.8	0.10 %	01/28/11	01/28/11
Date Sampled 01/25/11 12:25					
Client ID: **GB-19-23-01-012511**					
Lab ID : CHH11012601-29A	Percent Moisture	21	0.10 %	01/28/11	01/28/11
Date Sampled 01/25/11 12:50					
Client ID: **GB-19-30-01-012511**					
Lab ID : CHH11012601-30A	Percent Moisture	19	0.10 %	01/28/11	01/28/11
Date Sampled 01/25/11 13:30					
Client ID: **GB-19-30-02-012511**					
Lab ID : CHH11012601-31A	Percent Moisture	21	0.10 %	01/28/11	01/28/11
Date Sampled 01/25/11 13:35					
Client ID: **GB-19-33-01-012511**					
Lab ID : CHH11012601-32A	Percent Moisture	21	0.10 %	01/28/11	01/28/11
Date Sampled 01/25/11 13:50					
Client ID: **GB-19-40-01-012511**					
Lab ID : CHH11012601-33A	Percent Moisture	21	0.10 %	01/28/11	01/28/11
Date Sampled 01/25/11 14:10					

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Client ID: **GB-19-50-01-012511**					
Lab ID : CHH11012601-34A Percent Moisture	24	0.10 %	01/28/11	01/28/11
Date Sampled 01/25/11 14:40				

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/2/11

Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

CH2M Hill
1000 Wilshire Boulevard
Los Angeles, CA 90017

Attn: Daniel Jablonski
Phone: (213) 228-8271
Fax: (714) 424-2135
Date Received : 01/26/11

Job: KMEP Norwalk

Total Petroleum Hydrocarbons - Extractable (TPH-E) EPA Method SW8015B
Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B
Volatile Organic Compounds (VOCs) EPA Method SW8260B

		Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID :	**GB-21-10.5-01-012411**					
Lab ID :	CHH11012601-01A	TPH-E (Fuel Product)	ND	11 mg/Kg-dry	01/26/11	01/28/11
Date Sampled	01/24/11 08:22	Surr: Nonane	117	(62-161) %REC	01/26/11	01/28/11
		TPH-P (GRO)	ND	2.3 mg/Kg-dry	01/27/11	01/27/11
		Tertiary Butyl Alcohol (TBA)	ND	460 µg/Kg-dry	01/27/11	01/27/11
		Methyl tert-butyl ether (MTBE)	ND	11 µg/Kg-dry	01/27/11	01/27/11
		Di-isopropyl Ether (DIPE)	ND	23 µg/Kg-dry	01/27/11	01/27/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	23 µg/Kg-dry	01/27/11	01/27/11
		Benzene	ND	11 µg/Kg-dry	01/27/11	01/27/11
		Tertiary Amyl Methyl Ether (TAME)	ND	23 µg/Kg-dry	01/27/11	01/27/11
		Toluene	ND	11 µg/Kg-dry	01/27/11	01/27/11
		Ethylbenzene	ND	11 µg/Kg-dry	01/27/11	01/27/11
		m,p-Xylene	ND	11 µg/Kg-dry	01/27/11	01/27/11
		o-Xylene	ND	11 µg/Kg-dry	01/27/11	01/27/11
		Surr: 1,2-Dichloroethane-d4	89	(70-130) %REC	01/27/11	01/27/11
		Surr: Toluene-d8	106	(70-130) %REC	01/27/11	01/27/11
		Surr: 4-Bromofluorobenzene	100	(70-130) %REC	01/27/11	01/27/11
Client ID :	**GB-21-10.5-02-012411**					
Lab ID :	CHH11012601-02A	TPH-E (Fuel Product)	ND	11 mg/Kg-dry	01/26/11	01/28/11
Date Sampled	01/24/11 08:25	Surr: Nonane	93	(62-161) %REC	01/26/11	01/28/11
		TPH-P (GRO)	ND	2.0 mg/Kg-dry	01/27/11	01/27/11
		Tertiary Butyl Alcohol (TBA)	ND	400 µg/Kg-dry	01/27/11	01/27/11
		Methyl tert-butyl ether (MTBE)	ND	10 µg/Kg-dry	01/27/11	01/27/11
		Di-isopropyl Ether (DIPE)	ND	20 µg/Kg-dry	01/27/11	01/27/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	20 µg/Kg-dry	01/27/11	01/27/11
		Benzene	ND	10 µg/Kg-dry	01/27/11	01/27/11
		Tertiary Amyl Methyl Ether (TAME)	ND	20 µg/Kg-dry	01/27/11	01/27/11
		Toluene	ND	10 µg/Kg-dry	01/27/11	01/27/11
		Ethylbenzene	ND	10 µg/Kg-dry	01/27/11	01/27/11
		m,p-Xylene	ND	10 µg/Kg-dry	01/27/11	01/27/11
		o-Xylene	ND	10 µg/Kg-dry	01/27/11	01/27/11
		Surr: 1,2-Dichloroethane-d4	98	(70-130) %REC	01/27/11	01/27/11
		Surr: Toluene-d8	103	(70-130) %REC	01/27/11	01/27/11
		Surr: 4-Bromofluorobenzene	99	(70-130) %REC	01/27/11	01/27/11

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Client ID :	**GB-21-20-01-012411**						
Lab ID :	CHH11012601-03A	TPH-E (Fuel Product)	ND		11 mg/Kg-dry	01/26/11	01/28/11
Date Sampled	01/24/11 09:40	Surr: Nonane	122		(62-161) %REC	01/26/11	01/28/11
		TPH-P (GRO)	ND		2.2 mg/Kg-dry	01/27/11	01/27/11
		Tertiary Butyl Alcohol (TBA)	ND		430 µg/Kg-dry	01/27/11	01/27/11
		Methyl tert-butyl ether (MTBE)	ND		11 µg/Kg-dry	01/27/11	01/27/11
		Di-isopropyl Ether (DIPE)	ND		22 µg/Kg-dry	01/27/11	01/27/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND		22 µg/Kg-dry	01/27/11	01/27/11
		Benzene	ND		11 µg/Kg-dry	01/27/11	01/27/11
		Tertiary Amyl Methyl Ether (TAME)	ND		22 µg/Kg-dry	01/27/11	01/27/11
		Toluene	ND		11 µg/Kg-dry	01/27/11	01/27/11
		Ethylbenzene	ND		11 µg/Kg-dry	01/27/11	01/27/11
		m,p-Xylene	ND		11 µg/Kg-dry	01/27/11	01/27/11
		o-Xylene	ND		11 µg/Kg-dry	01/27/11	01/27/11
		Surr: 1,2-Dichloroethane-d4	99		(70-130) %REC	01/27/11	01/27/11
		Surr: Toluene-d8	103		(70-130) %REC	01/27/11	01/27/11
		Surr: 4-Bromofluorobenzene	99		(70-130) %REC	01/27/11	01/27/11
Client ID :	**GB-21-20-02-012411**						
Lab ID :	CHH11012601-04A	TPH-E (Fuel Product)	ND		10 mg/Kg-dry	01/26/11	01/28/11
Date Sampled	01/24/11 09:45	Surr: Nonane	120		(62-161) %REC	01/26/11	01/28/11
		TPH-P (GRO)	ND		2.1 mg/Kg-dry	01/27/11	01/27/11
		Tertiary Butyl Alcohol (TBA)	ND		410 µg/Kg-dry	01/27/11	01/27/11
		Methyl tert-butyl ether (MTBE)	ND		10 µg/Kg-dry	01/27/11	01/27/11
		Di-isopropyl Ether (DIPE)	ND		21 µg/Kg-dry	01/27/11	01/27/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND		21 µg/Kg-dry	01/27/11	01/27/11
		Benzene	ND		10 µg/Kg-dry	01/27/11	01/27/11
		Tertiary Amyl Methyl Ether (TAME)	ND		21 µg/Kg-dry	01/27/11	01/27/11
		Toluene	ND		10 µg/Kg-dry	01/27/11	01/27/11
		Ethylbenzene	ND		10 µg/Kg-dry	01/27/11	01/27/11
		m,p-Xylene	ND		10 µg/Kg-dry	01/27/11	01/27/11
		o-Xylene	ND		10 µg/Kg-dry	01/27/11	01/27/11
		Surr: 1,2-Dichloroethane-d4	100		(70-130) %REC	01/27/11	01/27/11
		Surr: Toluene-d8	103		(70-130) %REC	01/27/11	01/27/11
		Surr: 4-Bromofluorobenzene	97		(70-130) %REC	01/27/11	01/27/11
Client ID :	**GB-21-22-01-012411**						
Lab ID :	CHH11012601-05A	TPH-E (Fuel Product)	ND		11 mg/Kg-dry	01/26/11	01/28/11
Date Sampled	01/24/11 10:05	Surr: Nonane	129		(62-161) %REC	01/26/11	01/28/11
		TPH-P (GRO)	ND	O	3.8 mg/Kg-dry	01/27/11	01/27/11
		Tertiary Butyl Alcohol (TBA)	ND	O	760 µg/Kg-dry	01/27/11	01/27/11
		Methyl tert-butyl ether (MTBE)	ND	O	19 µg/Kg-dry	01/27/11	01/27/11
		Di-isopropyl Ether (DIPE)	ND	O	38 µg/Kg-dry	01/27/11	01/27/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	O	38 µg/Kg-dry	01/27/11	01/27/11
		Benzene	ND	O	19 µg/Kg-dry	01/27/11	01/27/11
		Tertiary Amyl Methyl Ether (TAME)	ND	O	38 µg/Kg-dry	01/27/11	01/27/11
		Toluene	ND	O	19 µg/Kg-dry	01/27/11	01/27/11
		Ethylbenzene	ND	O	19 µg/Kg-dry	01/27/11	01/27/11
		m,p-Xylene	ND	O	19 µg/Kg-dry	01/27/11	01/27/11
		o-Xylene	ND	O	19 µg/Kg-dry	01/27/11	01/27/11
		Surr: 1,2-Dichloroethane-d4	101		(70-130) %REC	01/27/11	01/27/11
		Surr: Toluene-d8	104		(70-130) %REC	01/27/11	01/27/11
		Surr: 4-Bromofluorobenzene	98		(70-130) %REC	01/27/11	01/27/11

Alpha Analytical, Inc.

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Client ID :	**GB-21-30-01-012411**					
Lab ID :	CHH11012601-06A	TPH-E (Fuel Product)	ND	12 mg/Kg-dry	01/26/11	01/28/11
Date Sampled	01/24/11 10:15	Surr: Nonane	136	(62-161) %REC	01/26/11	01/28/11
		TPH-P (GRO)	ND	2.0 mg/Kg-dry	01/27/11	01/27/11
		Tertiary Butyl Alcohol (TBA)	ND	400 µg/Kg-dry	01/27/11	01/27/11
		Methyl tert-butyl ether (MTBE)	ND	10 µg/Kg-dry	01/27/11	01/27/11
		Di-isopropyl Ether (DIPE)	ND	20 µg/Kg-dry	01/27/11	01/27/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	20 µg/Kg-dry	01/27/11	01/27/11
		Benzene	ND	10 µg/Kg-dry	01/27/11	01/27/11
		Tertiary Amyl Methyl Ether (TAME)	ND	20 µg/Kg-dry	01/27/11	01/27/11
		Toluene	ND	10 µg/Kg-dry	01/27/11	01/27/11
		Ethylbenzene	ND	10 µg/Kg-dry	01/27/11	01/27/11
		m,p-Xylene	ND	10 µg/Kg-dry	01/27/11	01/27/11
		o-Xylene	ND	10 µg/Kg-dry	01/27/11	01/27/11
		Surr: 1,2-Dichloroethane-d4	89	(70-130) %REC	01/27/11	01/27/11
		Surr: Toluene-d8	105	(70-130) %REC	01/27/11	01/27/11
		Surr: 4-Bromofluorobenzene	98	(70-130) %REC	01/27/11	01/27/11
Client ID :	**GB-21-32-01-012411**					
Lab ID :	CHH11012601-07A	TPH-E (Fuel Product)	ND	12 mg/Kg-dry	01/26/11	01/28/11
Date Sampled	01/24/11 10:30	Surr: Nonane	136	(62-161) %REC	01/26/11	01/28/11
		TPH-P (GRO)	ND	1.9 mg/Kg-dry	01/27/11	01/27/11
		Tertiary Butyl Alcohol (TBA)	ND	370 µg/Kg-dry	01/27/11	01/27/11
		Methyl tert-butyl ether (MTBE)	ND	9.3 µg/Kg-dry	01/27/11	01/27/11
		Di-isopropyl Ether (DIPE)	ND	20 µg/Kg-dry	01/27/11	01/27/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	20 µg/Kg-dry	01/27/11	01/27/11
		Benzene	ND	9.3 µg/Kg-dry	01/27/11	01/27/11
		Tertiary Amyl Methyl Ether (TAME)	ND	20 µg/Kg-dry	01/27/11	01/27/11
		Toluene	ND	9.3 µg/Kg-dry	01/27/11	01/27/11
		Ethylbenzene	ND	9.3 µg/Kg-dry	01/27/11	01/27/11
		m,p-Xylene	ND	9.3 µg/Kg-dry	01/27/11	01/27/11
		o-Xylene	ND	9.3 µg/Kg-dry	01/27/11	01/27/11
		Surr: 1,2-Dichloroethane-d4	97	(70-130) %REC	01/27/11	01/27/11
		Surr: Toluene-d8	103	(70-130) %REC	01/27/11	01/27/11
		Surr: 4-Bromofluorobenzene	99	(70-130) %REC	01/27/11	01/27/11
Client ID :	**GB-21-32-03-012411**					
Lab ID :	CHH11012601-08A	TPH-E (Fuel Product)	ND	12 mg/Kg-dry	01/26/11	01/28/11
Date Sampled	01/24/11 10:33	Surr: Nonane	114	(62-161) %REC	01/26/11	01/28/11
		TPH-P (GRO)	ND	1.9 mg/Kg-dry	01/27/11	01/27/11
		Tertiary Butyl Alcohol (TBA)	ND	390 µg/Kg-dry	01/27/11	01/27/11
		Methyl tert-butyl ether (MTBE)	ND	9.7 µg/Kg-dry	01/27/11	01/27/11
		Di-isopropyl Ether (DIPE)	ND	20 µg/Kg-dry	01/27/11	01/27/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	20 µg/Kg-dry	01/27/11	01/27/11
		Benzene	ND	9.7 µg/Kg-dry	01/27/11	01/27/11
		Tertiary Amyl Methyl Ether (TAME)	ND	20 µg/Kg-dry	01/27/11	01/27/11
		Toluene	ND	9.7 µg/Kg-dry	01/27/11	01/27/11
		Ethylbenzene	ND	9.7 µg/Kg-dry	01/27/11	01/27/11
		m,p-Xylene	ND	9.7 µg/Kg-dry	01/27/11	01/27/11
		o-Xylene	ND	9.7 µg/Kg-dry	01/27/11	01/27/11
		Surr: 1,2-Dichloroethane-d4	101	(70-130) %REC	01/27/11	01/27/11
		Surr: Toluene-d8	102	(70-130) %REC	01/27/11	01/27/11
		Surr: 4-Bromofluorobenzene	97	(70-130) %REC	01/27/11	01/27/11

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Client ID :	**GB-21-40-01-012411**					
Lab ID :	CHH11012601-09A	TPH-E (Fuel Product)	ND	12 mg/Kg-dry	01/26/11	01/28/11
Date Sampled	01/24/11 11:10	Surr: Nonane	129	(62-161) %REC	01/26/11	01/28/11
		TPH-P (GRO)	ND	1.9 mg/Kg-dry	01/27/11	01/27/11
		Tertiary Butyl Alcohol (TBA)	ND	380 µg/Kg-dry	01/27/11	01/27/11
		Methyl tert-butyl ether (MTBE)	ND	9.4 µg/Kg-dry	01/27/11	01/27/11
		Di-isopropyl Ether (DIPE)	ND	20 µg/Kg-dry	01/27/11	01/27/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	20 µg/Kg-dry	01/27/11	01/27/11
		Benzene	ND	9.4 µg/Kg-dry	01/27/11	01/27/11
		Tertiary Amyl Methyl Ether (TAME)	ND	20 µg/Kg-dry	01/27/11	01/27/11
		Toluene	ND	9.4 µg/Kg-dry	01/27/11	01/27/11
		Ethylbenzene	ND	9.4 µg/Kg-dry	01/27/11	01/27/11
		m,p-Xylene	ND	9.4 µg/Kg-dry	01/27/11	01/27/11
		o-Xylene	ND	9.4 µg/Kg-dry	01/27/11	01/27/11
		Surr: 1,2-Dichloroethane-d4	90	(70-130) %REC	01/27/11	01/27/11
		Surr: Toluene-d8	103	(70-130) %REC	01/27/11	01/27/11
		Surr: 4-Bromofluorobenzene	96	(70-130) %REC	01/27/11	01/27/11
Client ID :	**GB-21-50-01-012411**					
Lab ID :	CHH11012601-10A	TPH-E (Fuel Product)	ND	12 mg/Kg-dry	01/26/11	01/28/11
Date Sampled	01/24/11 12:00	Surr: Nonane	140	(62-161) %REC	01/26/11	01/28/11
		TPH-P (GRO)	ND	2.1 mg/Kg-dry	01/27/11	01/27/11
		Tertiary Butyl Alcohol (TBA)	ND	430 µg/Kg-dry	01/27/11	01/27/11
		Methyl tert-butyl ether (MTBE)	ND	11 µg/Kg-dry	01/27/11	01/27/11
		Di-isopropyl Ether (DIPE)	ND	21 µg/Kg-dry	01/27/11	01/27/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	21 µg/Kg-dry	01/27/11	01/27/11
		Benzene	ND	11 µg/Kg-dry	01/27/11	01/27/11
		Tertiary Amyl Methyl Ether (TAME)	ND	21 µg/Kg-dry	01/27/11	01/27/11
		Toluene	ND	11 µg/Kg-dry	01/27/11	01/27/11
		Ethylbenzene	ND	11 µg/Kg-dry	01/27/11	01/27/11
		m,p-Xylene	ND	11 µg/Kg-dry	01/27/11	01/27/11
		o-Xylene	ND	11 µg/Kg-dry	01/27/11	01/27/11
		Surr: 1,2-Dichloroethane-d4	101	(70-130) %REC	01/27/11	01/27/11
		Surr: Toluene-d8	104	(70-130) %REC	01/27/11	01/27/11
		Surr: 4-Bromofluorobenzene	97	(70-130) %REC	01/27/11	01/27/11
Client ID :	**GB-21-60-01-012411**					
Lab ID :	CHH11012601-11A	TPH-E (Fuel Product)	ND	13 mg/Kg-dry	01/26/11	01/28/11
Date Sampled	01/24/11 12:52	Surr: Nonane	137	(62-161) %REC	01/26/11	01/28/11
		TPH-P (GRO)	ND	2.2 mg/Kg-dry	01/27/11	01/27/11
		Tertiary Butyl Alcohol (TBA)	ND	430 µg/Kg-dry	01/27/11	01/27/11
		Methyl tert-butyl ether (MTBE)	40	11 µg/Kg-dry	01/27/11	01/27/11
		Di-isopropyl Ether (DIPE)	ND	22 µg/Kg-dry	01/27/11	01/27/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	22 µg/Kg-dry	01/27/11	01/27/11
		Benzene	ND	11 µg/Kg-dry	01/27/11	01/27/11
		Tertiary Amyl Methyl Ether (TAME)	ND	22 µg/Kg-dry	01/27/11	01/27/11
		Toluene	ND	11 µg/Kg-dry	01/27/11	01/27/11
		Ethylbenzene	ND	11 µg/Kg-dry	01/27/11	01/27/11
		m,p-Xylene	ND	11 µg/Kg-dry	01/27/11	01/27/11
		o-Xylene	ND	11 µg/Kg-dry	01/27/11	01/27/11
		Surr: 1,2-Dichloroethane-d4	102	(70-130) %REC	01/27/11	01/27/11
		Surr: Toluene-d8	103	(70-130) %REC	01/27/11	01/27/11
		Surr: 4-Bromofluorobenzene	97	(70-130) %REC	01/27/11	01/27/11

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Client ID :	**GB-20-10.5-01-012511**					
Lab ID :	CHH11012601-18A	TPH-E (Fuel Product)	ND	11 mg/Kg-dry	01/26/11	01/28/11
Date Sampled	01/25/11 08:00	Surr: Nonane	104	(62-161) %REC	01/26/11	01/28/11
		TPH-P (GRO)	ND	1.8 mg/Kg-dry	01/27/11	01/27/11
		Tertiary Butyl Alcohol (TBA)	ND	370 µg/Kg-dry	01/27/11	01/27/11
		Methyl tert-butyl ether (MTBE)	ND	9.2 µg/Kg-dry	01/27/11	01/27/11
		Di-isopropyl Ether (DIPE)	ND	20 µg/Kg-dry	01/27/11	01/27/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	20 µg/Kg-dry	01/27/11	01/27/11
		Benzene	ND	9.2 µg/Kg-dry	01/27/11	01/27/11
		Tertiary Amyl Methyl Ether (TAME)	ND	20 µg/Kg-dry	01/27/11	01/27/11
		Toluene	ND	9.2 µg/Kg-dry	01/27/11	01/27/11
		Ethylbenzene	ND	9.2 µg/Kg-dry	01/27/11	01/27/11
		m,p-Xylene	ND	9.2 µg/Kg-dry	01/27/11	01/27/11
		o-Xylene	ND	9.2 µg/Kg-dry	01/27/11	01/27/11
		Surr: 1,2-Dichloroethane-d4	102	(70-130) %REC	01/27/11	01/27/11
		Surr: Toluene-d8	104	(70-130) %REC	01/27/11	01/27/11
		Surr: 4-Bromofluorobenzene	97	(70-130) %REC	01/27/11	01/27/11
Client ID :	**GB-20-19.5-01-012511**					
Lab ID :	CHH11012601-19A	TPH-E (Fuel Product)	ND	12 mg/Kg-dry	01/26/11	01/28/11
Date Sampled	01/25/11 08:15	Surr: Nonane	145	(62-161) %REC	01/26/11	01/28/11
		TPH-P (GRO)	ND	2.2 mg/Kg-dry	01/27/11	01/27/11
		Tertiary Butyl Alcohol (TBA)	ND	430 µg/Kg-dry	01/27/11	01/27/11
		Methyl tert-butyl ether (MTBE)	ND	11 µg/Kg-dry	01/27/11	01/27/11
		Di-isopropyl Ether (DIPE)	ND	22 µg/Kg-dry	01/27/11	01/27/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	22 µg/Kg-dry	01/27/11	01/27/11
		Benzene	ND	11 µg/Kg-dry	01/27/11	01/27/11
		Tertiary Amyl Methyl Ether (TAME)	ND	22 µg/Kg-dry	01/27/11	01/27/11
		Toluene	ND	11 µg/Kg-dry	01/27/11	01/27/11
		Ethylbenzene	ND	11 µg/Kg-dry	01/27/11	01/27/11
		m,p-Xylene	ND	11 µg/Kg-dry	01/27/11	01/27/11
		o-Xylene	ND	11 µg/Kg-dry	01/27/11	01/27/11
		Surr: 1,2-Dichloroethane-d4	102	(70-130) %REC	01/27/11	01/27/11
		Surr: Toluene-d8	102	(70-130) %REC	01/27/11	01/27/11
		Surr: 4-Bromofluorobenzene	98	(70-130) %REC	01/27/11	01/27/11
Client ID :	**GB-20-22-01-012511**					
Lab ID :	CHH11012601-20A	TPH-E (Fuel Product)	ND	11 mg/Kg-dry	01/26/11	01/28/11
Date Sampled	01/25/11 08:25	Surr: Nonane	138	(62-161) %REC	01/26/11	01/28/11
		TPH-P (GRO)	ND	1.9 mg/Kg-dry	01/27/11	01/27/11
		Tertiary Butyl Alcohol (TBA)	ND	370 µg/Kg-dry	01/27/11	01/27/11
		Methyl tert-butyl ether (MTBE)	ND	9.3 µg/Kg-dry	01/27/11	01/27/11
		Di-isopropyl Ether (DIPE)	ND	20 µg/Kg-dry	01/27/11	01/27/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	20 µg/Kg-dry	01/27/11	01/27/11
		Benzene	ND	9.3 µg/Kg-dry	01/27/11	01/27/11
		Tertiary Amyl Methyl Ether (TAME)	ND	20 µg/Kg-dry	01/27/11	01/27/11
		Toluene	ND	9.3 µg/Kg-dry	01/27/11	01/27/11
		Ethylbenzene	ND	9.3 µg/Kg-dry	01/27/11	01/27/11
		m,p-Xylene	ND	9.3 µg/Kg-dry	01/27/11	01/27/11
		o-Xylene	ND	9.3 µg/Kg-dry	01/27/11	01/27/11
		Surr: 1,2-Dichloroethane-d4	102	(70-130) %REC	01/27/11	01/27/11
		Surr: Toluene-d8	104	(70-130) %REC	01/27/11	01/27/11
		Surr: 4-Bromofluorobenzene	98	(70-130) %REC	01/27/11	01/27/11

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Client ID :	**GB-20-30-01-012511**					
Lab ID :	CHH11012601-21A	TPH-E (Fuel Product)	ND	12 mg/Kg-dry	01/26/11	01/28/11
Date Sampled	01/25/11 08:50	Surr: Nonane	147	(62-161) %REC	01/26/11	01/28/11
		TPH-P (GRO)	ND	1.9 mg/Kg-dry	01/27/11	01/27/11
		Tertiary Butyl Alcohol (TBA)	ND	380 µg/Kg-dry	01/27/11	01/27/11
		Methyl tert-butyl ether (MTBE)	ND	9.6 µg/Kg-dry	01/27/11	01/27/11
		Di-isopropyl Ether (DIPE)	ND	20 µg/Kg-dry	01/27/11	01/27/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	20 µg/Kg-dry	01/27/11	01/27/11
		Benzene	ND	9.6 µg/Kg-dry	01/27/11	01/27/11
		Tertiary Amyl Methyl Ether (TAME)	ND	20 µg/Kg-dry	01/27/11	01/27/11
		Toluene	ND	9.6 µg/Kg-dry	01/27/11	01/27/11
		Ethylbenzene	ND	9.6 µg/Kg-dry	01/27/11	01/27/11
		m,p-Xylene	ND	9.6 µg/Kg-dry	01/27/11	01/27/11
		o-Xylene	ND	9.6 µg/Kg-dry	01/27/11	01/27/11
		Surr: 1,2-Dichloroethane-d4	102	(70-130) %REC	01/27/11	01/27/11
		Surr: Toluene-d8	103	(70-130) %REC	01/27/11	01/27/11
		Surr: 4-Bromofluorobenzene	96	(70-130) %REC	01/27/11	01/27/11
Client ID :	**GB-20-32-01-012511**					
Lab ID :	CHH11012601-22A	TPH-E (Fuel Product)	ND	14 mg/Kg-dry	01/26/11	01/27/11
Date Sampled	01/25/11 09:10	Surr: Nonane	127	(62-161) %REC	01/26/11	01/27/11
		TPH-P (GRO)	ND	2.1 mg/Kg-dry	01/28/11	01/28/11
		Tertiary Butyl Alcohol (TBA)	ND	420 µg/Kg-dry	01/28/11	01/28/11
		Methyl tert-butyl ether (MTBE)	ND	11 µg/Kg-dry	01/28/11	01/28/11
		Di-isopropyl Ether (DIPE)	ND	21 µg/Kg-dry	01/28/11	01/28/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	21 µg/Kg-dry	01/28/11	01/28/11
		Benzene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		Tertiary Amyl Methyl Ether (TAME)	ND	21 µg/Kg-dry	01/28/11	01/28/11
		Toluene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		Ethylbenzene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		m,p-Xylene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		o-Xylene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		Surr: 1,2-Dichloroethane-d4	102	(70-130) %REC	01/28/11	01/28/11
		Surr: Toluene-d8	102	(70-130) %REC	01/28/11	01/28/11
		Surr: 4-Bromofluorobenzene	100	(70-130) %REC	01/28/11	01/28/11
Client ID :	**GB-20-40-01-012511**					
Lab ID :	CHH11012601-23A	TPH-E (Fuel Product)	ND	12 mg/Kg-dry	01/26/11	01/27/11
Date Sampled	01/25/11 09:35	Surr: Nonane	130	(62-161) %REC	01/26/11	01/27/11
		TPH-P (GRO)	ND	2.1 mg/Kg-dry	01/28/11	01/28/11
		Tertiary Butyl Alcohol (TBA)	ND	410 µg/Kg-dry	01/28/11	01/28/11
		Methyl tert-butyl ether (MTBE)	ND	10 µg/Kg-dry	01/28/11	01/28/11
		Di-isopropyl Ether (DIPE)	ND	21 µg/Kg-dry	01/28/11	01/28/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	21 µg/Kg-dry	01/28/11	01/28/11
		Benzene	ND	10 µg/Kg-dry	01/28/11	01/28/11
		Tertiary Amyl Methyl Ether (TAME)	ND	21 µg/Kg-dry	01/28/11	01/28/11
		Toluene	ND	10 µg/Kg-dry	01/28/11	01/28/11
		Ethylbenzene	ND	10 µg/Kg-dry	01/28/11	01/28/11
		m,p-Xylene	ND	10 µg/Kg-dry	01/28/11	01/28/11
		o-Xylene	ND	10 µg/Kg-dry	01/28/11	01/28/11
		Surr: 1,2-Dichloroethane-d4	94	(70-130) %REC	01/28/11	01/28/11
		Surr: Toluene-d8	104	(70-130) %REC	01/28/11	01/28/11
		Surr: 4-Bromofluorobenzene	98	(70-130) %REC	01/28/11	01/28/11

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Client ID :	**GB-20-40-02-012511**					
Lab ID :	CHH11012601-24A	TPH-E (Fuel Product)	ND	12 mg/Kg-dry	01/26/11	01/27/11
Date Sampled	01/25/11 09:40	Surr: Nonane	153	(62-161) %REC	01/26/11	01/27/11
		TPH-P (GRO)	ND	2.0 mg/Kg-dry	01/28/11	01/28/11
		Tertiary Butyl Alcohol (TBA)	ND	400 µg/Kg-dry	01/28/11	01/28/11
		Methyl tert-butyl ether (MTBE)	ND	10 µg/Kg-dry	01/28/11	01/28/11
		Di-isopropyl Ether (DIPE)	ND	20 µg/Kg-dry	01/28/11	01/28/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	20 µg/Kg-dry	01/28/11	01/28/11
		Benzene	ND	10 µg/Kg-dry	01/28/11	01/28/11
		Tertiary Amyl Methyl Ether (TAME)	ND	20 µg/Kg-dry	01/28/11	01/28/11
		Toluene	ND	10 µg/Kg-dry	01/28/11	01/28/11
		Ethylbenzene	ND	10 µg/Kg-dry	01/28/11	01/28/11
		m,p-Xylene	ND	10 µg/Kg-dry	01/28/11	01/28/11
		o-Xylene	ND	10 µg/Kg-dry	01/28/11	01/28/11
		Surr: 1,2-Dichloroethane-d4	103	(70-130) %REC	01/28/11	01/28/11
		Surr: Toluene-d8	102	(70-130) %REC	01/28/11	01/28/11
		Surr: 4-Bromofluorobenzene	97	(70-130) %REC	01/28/11	01/28/11
Client ID :	**GB-20-50-01-012511**					
Lab ID :	CHH11012601-25A	TPH-E (Fuel Product)	ND	12 mg/Kg-dry	01/26/11	01/27/11
Date Sampled	01/25/11 10:30	Surr: Nonane	138	(62-161) %REC	01/26/11	01/27/11
		TPH-P (GRO)	ND	2.0 mg/Kg-dry	01/28/11	01/28/11
		Tertiary Butyl Alcohol (TBA)	ND	410 µg/Kg-dry	01/28/11	01/28/11
		Methyl tert-butyl ether (MTBE)	ND	10 µg/Kg-dry	01/28/11	01/28/11
		Di-isopropyl Ether (DIPE)	ND	20 µg/Kg-dry	01/28/11	01/28/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	20 µg/Kg-dry	01/28/11	01/28/11
		Benzene	ND	10 µg/Kg-dry	01/28/11	01/28/11
		Tertiary Amyl Methyl Ether (TAME)	ND	20 µg/Kg-dry	01/28/11	01/28/11
		Toluene	ND	10 µg/Kg-dry	01/28/11	01/28/11
		Ethylbenzene	ND	10 µg/Kg-dry	01/28/11	01/28/11
		m,p-Xylene	ND	10 µg/Kg-dry	01/28/11	01/28/11
		o-Xylene	ND	10 µg/Kg-dry	01/28/11	01/28/11
		Surr: 1,2-Dichloroethane-d4	101	(70-130) %REC	01/28/11	01/28/11
		Surr: Toluene-d8	102	(70-130) %REC	01/28/11	01/28/11
		Surr: 4-Bromofluorobenzene	97	(70-130) %REC	01/28/11	01/28/11
Client ID :	**GB-19-10.5-01-012511**					
Lab ID :	CHH11012601-27A	TPH-E (Fuel Product)	ND	11 mg/Kg-dry	01/26/11	01/27/11
Date Sampled	01/25/11 12:10	Surr: Nonane	135	(62-161) %REC	01/26/11	01/27/11
		TPH-P (GRO)	ND	2.1 mg/Kg-dry	01/28/11	01/28/11
		Tertiary Butyl Alcohol (TBA)	ND	430 µg/Kg-dry	01/28/11	01/28/11
		Methyl tert-butyl ether (MTBE)	20	11 µg/Kg-dry	01/28/11	01/28/11
		Di-isopropyl Ether (DIPE)	ND	21 µg/Kg-dry	01/28/11	01/28/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	21 µg/Kg-dry	01/28/11	01/28/11
		Benzene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		Tertiary Amyl Methyl Ether (TAME)	ND	21 µg/Kg-dry	01/28/11	01/28/11
		Toluene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		Ethylbenzene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		m,p-Xylene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		o-Xylene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		Surr: 1,2-Dichloroethane-d4	90	(70-130) %REC	01/28/11	01/28/11
		Surr: Toluene-d8	102	(70-130) %REC	01/28/11	01/28/11
		Surr: 4-Bromofluorobenzene	99	(70-130) %REC	01/28/11	01/28/11

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Client ID :	**GB-19-20-01-012511**					
Lab ID :	CHH11012601-28A	TPH-E (Fuel Product)	ND	10 mg/Kg-dry	01/26/11	01/27/11
Date Sampled	01/25/11 12:25	Surr: Nonane	124	(62-161) %REC	01/26/11	01/27/11
		TPH-P (GRO)	ND	2.2 mg/Kg-dry	01/28/11	01/28/11
		Tertiary Butyl Alcohol (TBA)	ND	440 µg/Kg-dry	01/28/11	01/28/11
		Methyl tert-butyl ether (MTBE)	ND	11 µg/Kg-dry	01/28/11	01/28/11
		Di-isopropyl Ether (DIPE)	ND	22 µg/Kg-dry	01/28/11	01/28/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	22 µg/Kg-dry	01/28/11	01/28/11
		Benzene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		Tertiary Amyl Methyl Ether (TAME)	ND	22 µg/Kg-dry	01/28/11	01/28/11
		Toluene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		Ethylbenzene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		m,p-Xylene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		o-Xylene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		Surr: 1,2-Dichloroethane-d4	91	(70-130) %REC	01/28/11	01/28/11
		Surr: Toluene-d8	106	(70-130) %REC	01/28/11	01/28/11
		Surr: 4-Bromofluorobenzene	99	(70-130) %REC	01/28/11	01/28/11
Client ID :	**GB-19-23-01-012511**					
Lab ID :	CHH11012601-29A	TPH-E (Fuel Product)	ND	13 mg/Kg-dry	01/26/11	01/27/11
Date Sampled	01/25/11 12:50	Surr: Nonane	131	(62-161) %REC	01/26/11	01/27/11
		TPH-P (GRO)	ND	3.2 mg/Kg-dry	01/28/11	01/28/11
		Tertiary Butyl Alcohol (TBA)	ND	640 µg/Kg-dry	01/28/11	01/28/11
		Methyl tert-butyl ether (MTBE)	ND	16 µg/Kg-dry	01/28/11	01/28/11
		Di-isopropyl Ether (DIPE)	ND	32 µg/Kg-dry	01/28/11	01/28/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	32 µg/Kg-dry	01/28/11	01/28/11
		Benzene	ND	16 µg/Kg-dry	01/28/11	01/28/11
		Tertiary Amyl Methyl Ether (TAME)	ND	32 µg/Kg-dry	01/28/11	01/28/11
		Toluene	ND	16 µg/Kg-dry	01/28/11	01/28/11
		Ethylbenzene	ND	16 µg/Kg-dry	01/28/11	01/28/11
		m,p-Xylene	ND	16 µg/Kg-dry	01/28/11	01/28/11
		o-Xylene	ND	16 µg/Kg-dry	01/28/11	01/28/11
		Surr: 1,2-Dichloroethane-d4	90	(70-130) %REC	01/28/11	01/28/11
		Surr: Toluene-d8	103	(70-130) %REC	01/28/11	01/28/11
		Surr: 4-Bromofluorobenzene	101	(70-130) %REC	01/28/11	01/28/11
Client ID :	**GB-19-30-01-012511**					
Lab ID :	CHH11012601-30A	TPH-E (Fuel Product)	ND	12 mg/Kg-dry	01/26/11	01/27/11
Date Sampled	01/25/11 13:30	Surr: Nonane	131	(62-161) %REC	01/26/11	01/27/11
		TPH-P (GRO)	ND	2.0 mg/Kg-dry	01/28/11	01/28/11
		Tertiary Butyl Alcohol (TBA)	ND	390 µg/Kg-dry	01/28/11	01/28/11
		Methyl tert-butyl ether (MTBE)	ND	9.8 µg/Kg-dry	01/28/11	01/28/11
		Di-isopropyl Ether (DIPE)	ND	20 µg/Kg-dry	01/28/11	01/28/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	20 µg/Kg-dry	01/28/11	01/28/11
		Benzene	ND	9.8 µg/Kg-dry	01/28/11	01/28/11
		Tertiary Amyl Methyl Ether (TAME)	ND	20 µg/Kg-dry	01/28/11	01/28/11
		Toluene	ND	9.8 µg/Kg-dry	01/28/11	01/28/11
		Ethylbenzene	ND	9.8 µg/Kg-dry	01/28/11	01/28/11
		m,p-Xylene	ND	9.8 µg/Kg-dry	01/28/11	01/28/11
		o-Xylene	ND	9.8 µg/Kg-dry	01/28/11	01/28/11
		Surr: 1,2-Dichloroethane-d4	94	(70-130) %REC	01/28/11	01/28/11
		Surr: Toluene-d8	103	(70-130) %REC	01/28/11	01/28/11
		Surr: 4-Bromofluorobenzene	101	(70-130) %REC	01/28/11	01/28/11

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Client ID :	**GB-19-30-02-012511**					
Lab ID :	CHH11012601-31A	TPH-E (Fuel Product)	ND	13 mg/Kg-dry	01/26/11	01/27/11
Date Sampled	01/25/11 13:35	Surr: Nonane	124	(62-161) %REC	01/26/11	01/27/11
		TPH-P (GRO)	ND	2.1 mg/Kg-dry	01/28/11	01/28/11
		Tertiary Butyl Alcohol (TBA)	ND	420 µg/Kg-dry	01/28/11	01/28/11
		Methyl tert-butyl ether (MTBE)	ND	11 µg/Kg-dry	01/28/11	01/28/11
		Di-isopropyl Ether (DIPE)	ND	21 µg/Kg-dry	01/28/11	01/28/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	21 µg/Kg-dry	01/28/11	01/28/11
		Benzene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		Tertiary Amyl Methyl Ether (TAME)	ND	21 µg/Kg-dry	01/28/11	01/28/11
		Toluene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		Ethylbenzene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		m,p-Xylene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		o-Xylene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		Surr: 1,2-Dichloroethane-d4	92	(70-130) %REC	01/28/11	01/28/11
		Surr: Toluene-d8	105	(70-130) %REC	01/28/11	01/28/11
		Surr: 4-Bromofluorobenzene	97	(70-130) %REC	01/28/11	01/28/11
Client ID :	**GB-19-33-01-012511**					
Lab ID :	CHH11012601-32A	TPH-E (Fuel Product)	ND	13 mg/Kg-dry	01/26/11	01/27/11
Date Sampled	01/25/11 13:50	Surr: Nonane	134	(62-161) %REC	01/26/11	01/27/11
		TPH-P (GRO)	ND	2.1 mg/Kg-dry	01/28/11	01/28/11
		Tertiary Butyl Alcohol (TBA)	ND	420 µg/Kg-dry	01/28/11	01/28/11
		Methyl tert-butyl ether (MTBE)	ND	11 µg/Kg-dry	01/28/11	01/28/11
		Di-isopropyl Ether (DIPE)	ND	21 µg/Kg-dry	01/28/11	01/28/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	21 µg/Kg-dry	01/28/11	01/28/11
		Benzene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		Tertiary Amyl Methyl Ether (TAME)	ND	21 µg/Kg-dry	01/28/11	01/28/11
		Toluene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		Ethylbenzene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		m,p-Xylene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		o-Xylene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		Surr: 1,2-Dichloroethane-d4	102	(70-130) %REC	01/28/11	01/28/11
		Surr: Toluene-d8	103	(70-130) %REC	01/28/11	01/28/11
		Surr: 4-Bromofluorobenzene	98	(70-130) %REC	01/28/11	01/28/11
Client ID :	**GB-19-40-01-012511**					
Lab ID :	CHH11012601-33A	TPH-E (Fuel Product)	ND	13 mg/Kg-dry	01/26/11	01/27/11
Date Sampled	01/25/11 14:10	Surr: Nonane	140	(62-161) %REC	01/26/11	01/27/11
		TPH-P (GRO)	ND	2.2 mg/Kg-dry	01/28/11	01/28/11
		Tertiary Butyl Alcohol (TBA)	ND	440 µg/Kg-dry	01/28/11	01/28/11
		Methyl tert-butyl ether (MTBE)	ND	11 µg/Kg-dry	01/28/11	01/28/11
		Di-isopropyl Ether (DIPE)	ND	22 µg/Kg-dry	01/28/11	01/28/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	22 µg/Kg-dry	01/28/11	01/28/11
		Benzene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		Tertiary Amyl Methyl Ether (TAME)	ND	22 µg/Kg-dry	01/28/11	01/28/11
		Toluene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		Ethylbenzene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		m,p-Xylene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		o-Xylene	ND	11 µg/Kg-dry	01/28/11	01/28/11
		Surr: 1,2-Dichloroethane-d4	88	(70-130) %REC	01/28/11	01/28/11
		Surr: Toluene-d8	105	(70-130) %REC	01/28/11	01/28/11
		Surr: 4-Bromofluorobenzene	97	(70-130) %REC	01/28/11	01/28/11

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Client ID : **GB-19-50-01-012511**

Lab ID : CHH11012601-34A

Date Sampled 01/25/11 14:40

TPH-E (Fuel Product)	ND	13 mg/Kg-dry	01/26/11	01/28/11
Surr: Nonane	114	(62-161) %REC	01/26/11	01/28/11
TPH-P (GRO)	ND	2.3 mg/Kg-dry	01/28/11	01/28/11
Tertiary Butyl Alcohol (TBA)	ND	460 µg/Kg-dry	01/28/11	01/28/11
Methyl tert-butyl ether (MTBE)	ND	11 µg/Kg-dry	01/28/11	01/28/11
Di-isopropyl Ether (DIPE)	ND	23 µg/Kg-dry	01/28/11	01/28/11
Ethyl Tertiary Butyl Ether (ETBE)	ND	23 µg/Kg-dry	01/28/11	01/28/11
Benzene	ND	11 µg/Kg-dry	01/28/11	01/28/11
Tertiary Amyl Methyl Ether (TAME)	ND	23 µg/Kg-dry	01/28/11	01/28/11
Toluene	ND	11 µg/Kg-dry	01/28/11	01/28/11
Ethylbenzene	ND	11 µg/Kg-dry	01/28/11	01/28/11
m,p-Xylene	ND	11 µg/Kg-dry	01/28/11	01/28/11
o-Xylene	ND	11 µg/Kg-dry	01/28/11	01/28/11
Surr: 1,2-Dichloroethane-d4	102	(70-130) %REC	01/28/11	01/28/11
Surr: Toluene-d8	103	(70-130) %REC	01/28/11	01/28/11
Surr: 4-Bromofluorobenzene	97	(70-130) %REC	01/28/11	01/28/11

Gasoline Range Organics (GRO) C4-C13

Note: Samples were received pre-preserved in Methanol.

O = Reporting Limits were increased due to sample foaming.

Concentrations and reporting limits are based on dry weights.
ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/2/11

Report Date

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ANALYTICAL REPORT

CH2M Hill
1000 Wilshire Boulevard
Los Angeles, CA 90017

Attn: Daniel Jablonski
Phone: (213) 228-8271
Fax: (714) 424-2135
Date Received : 01/26/11

Job: KMEP Norwalk

Total Petroleum Hydrocarbons - Extractable (TPH-E) EPA Method SW8015B
Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B
Volatile Organic Compounds (VOCs) EPA Method SW8260B

		Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID :	**QCEB-012411 (Sample Shoe)**					
Lab ID :	CHH11012601-12A	TPH-E (Fuel Product)	ND	0.10 mg/L	01/27/11	01/27/11
Date Sampled	01/24/11 13:10	Surr: Nonane	100	(49-145) %REC	01/27/11	01/27/11
		TPH-P (GRO)	ND	0.050 mg/L	01/27/11	01/27/11
		Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	01/27/11	01/27/11
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	01/27/11	01/27/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	01/27/11	01/27/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	01/27/11	01/27/11
		Benzene	ND	0.50 µg/L	01/27/11	01/27/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	01/27/11	01/27/11
		Toluene	ND	0.50 µg/L	01/27/11	01/27/11
		Ethylbenzene	ND	0.50 µg/L	01/27/11	01/27/11
		m,p-Xylene	ND	0.50 µg/L	01/27/11	01/27/11
		o-Xylene	ND	0.50 µg/L	01/27/11	01/27/11
		Surr: 1,2-Dichloroethane-d4	91	(70-130) %REC	01/27/11	01/27/11
		Surr: Toluene-d8	104	(70-130) %REC	01/27/11	01/27/11
		Surr: 4-Bromofluorobenzene	95	(70-130) %REC	01/27/11	01/27/11
Client ID :	**GB-21-33.5-04-012411**					
Lab ID :	CHH11012601-13A	TPH-E (Fuel Product)	ND	0.10 mg/L	01/27/11	01/27/11
Date Sampled	01/24/11 13:30	Surr: Nonane	110	(49-145) %REC	01/27/11	01/27/11
		TPH-P (GRO)	ND	0.050 mg/L	01/27/11	01/27/11
		Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	01/27/11	01/27/11
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	01/27/11	01/27/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	01/27/11	01/27/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	01/27/11	01/27/11
		Benzene	ND	0.50 µg/L	01/27/11	01/27/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	01/27/11	01/27/11
		Toluene	ND	0.50 µg/L	01/27/11	01/27/11
		Ethylbenzene	ND	0.50 µg/L	01/27/11	01/27/11
		m,p-Xylene	ND	0.50 µg/L	01/27/11	01/27/11
		o-Xylene	ND	0.50 µg/L	01/27/11	01/27/11
		Surr: 1,2-Dichloroethane-d4	97	(70-130) %REC	01/27/11	01/27/11
		Surr: Toluene-d8	101	(70-130) %REC	01/27/11	01/27/11
		Surr: 4-Bromofluorobenzene	92	(70-130) %REC	01/27/11	01/27/11

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Client ID :	**GB-21-38.5-04-012411**						
Lab ID :	CHH11012601-14A	TPH-E (Fuel Product)	ND		0.10 mg/L	01/27/11	01/27/11
Date Sampled	01/24/11 14:30	Surr: Nonane	102		(49-145) %REC	01/27/11	01/27/11
		TPH-P (GRO)	ND		0.050 mg/L	01/27/11	01/27/11
		Tertiary Butyl Alcohol (TBA)	ND		10 µg/L	01/27/11	01/27/11
		Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	01/27/11	01/27/11
		Di-isopropyl Ether (DIPE)	ND		1.0 µg/L	01/27/11	01/27/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND		1.0 µg/L	01/27/11	01/27/11
		Benzene	ND		0.50 µg/L	01/27/11	01/27/11
		Tertiary Amyl Methyl Ether (TAME)	ND		1.0 µg/L	01/27/11	01/27/11
		Toluene	ND		0.50 µg/L	01/27/11	01/27/11
		Ethylbenzene	ND		0.50 µg/L	01/27/11	01/27/11
		m,p-Xylene	ND		0.50 µg/L	01/27/11	01/27/11
		o-Xylene	ND		0.50 µg/L	01/27/11	01/27/11
		Surr: 1,2-Dichloroethane-d4	96		(70-130) %REC	01/27/11	01/27/11
		Surr: Toluene-d8	103		(70-130) %REC	01/27/11	01/27/11
		Surr: 4-Bromofluorobenzene	94		(70-130) %REC	01/27/11	01/27/11
Client ID :	**QCEB-012411**						
Lab ID :	CHH11012601-15A	TPH-E (Fuel Product)	ND	X	0.20 mg/L	01/27/11	01/27/11
Date Sampled	01/24/11 14:50	Surr: Nonane	101		(49-145) %REC	01/27/11	01/27/11
		TPH-P (GRO)	ND		0.050 mg/L	01/27/11	01/27/11
		Tertiary Butyl Alcohol (TBA)	ND		10 µg/L	01/27/11	01/27/11
		Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	01/27/11	01/27/11
		Di-isopropyl Ether (DIPE)	ND		1.0 µg/L	01/27/11	01/27/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND		1.0 µg/L	01/27/11	01/27/11
		Benzene	ND		0.50 µg/L	01/27/11	01/27/11
		Tertiary Amyl Methyl Ether (TAME)	ND		1.0 µg/L	01/27/11	01/27/11
		Toluene	ND		0.50 µg/L	01/27/11	01/27/11
		Ethylbenzene	ND		0.50 µg/L	01/27/11	01/27/11
		m,p-Xylene	ND		0.50 µg/L	01/27/11	01/27/11
		o-Xylene	ND		0.50 µg/L	01/27/11	01/27/11
		Surr: 1,2-Dichloroethane-d4	95		(70-130) %REC	01/27/11	01/27/11
		Surr: Toluene-d8	103		(70-130) %REC	01/27/11	01/27/11
		Surr: 4-Bromofluorobenzene	94		(70-130) %REC	01/27/11	01/27/11
Client ID :	**GB-21-46.5-04-012411**						
Lab ID :	CHH11012601-16A	TPH-E (Fuel Product)	ND		0.10 mg/L	01/27/11	01/27/11
Date Sampled	01/24/11 14:55	Surr: Nonane	101		(49-145) %REC	01/27/11	01/27/11
		TPH-P (GRO)	ND		0.050 mg/L	01/27/11	01/27/11
		Tertiary Butyl Alcohol (TBA)	140		10 µg/L	01/27/11	01/27/11
		Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	01/27/11	01/27/11
		Di-isopropyl Ether (DIPE)	ND		1.0 µg/L	01/27/11	01/27/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND		1.0 µg/L	01/27/11	01/27/11
		Benzene	ND		0.50 µg/L	01/27/11	01/27/11
		Tertiary Amyl Methyl Ether (TAME)	ND		1.0 µg/L	01/27/11	01/27/11
		Toluene	ND		0.50 µg/L	01/27/11	01/27/11
		Ethylbenzene	ND		0.50 µg/L	01/27/11	01/27/11
		m,p-Xylene	ND		0.50 µg/L	01/27/11	01/27/11
		o-Xylene	ND		0.50 µg/L	01/27/11	01/27/11
		Surr: 1,2-Dichloroethane-d4	95		(70-130) %REC	01/27/11	01/27/11
		Surr: Toluene-d8	104		(70-130) %REC	01/27/11	01/27/11
		Surr: 4-Bromofluorobenzene	88		(70-130) %REC	01/27/11	01/27/11

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Client ID :	**QCTB-012411**					
Lab ID :	CHH11012601-17A	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	01/27/11	01/27/11
Date Sampled	01/24/11 00:00	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	01/27/11	01/27/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	01/27/11	01/27/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	01/27/11	01/27/11
		Benzene	ND	0.50 µg/L	01/27/11	01/27/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	01/27/11	01/27/11
		Toluene	ND	0.50 µg/L	01/27/11	01/27/11
		Ethylbenzene	ND	0.50 µg/L	01/27/11	01/27/11
		m,p-Xylene	ND	0.50 µg/L	01/27/11	01/27/11
		o-Xylene	ND	0.50 µg/L	01/27/11	01/27/11
		Surr: 1,2-Dichloroethane-d4	82	(70-130) %REC	01/27/11	01/27/11
		Surr: Toluene-d8	103	(70-130) %REC	01/27/11	01/27/11
		Surr: 4-Bromofluorobenzene	96	(70-130) %REC	01/27/11	01/27/11
Client ID :	**QCEB-012511**					
Lab ID :	CHH11012601-26A	TPH-E (Fuel Product)	ND	0.10 mg/L	01/27/11	01/27/11
Date Sampled	01/25/11 12:00	Surr: Nonane	102	(49-145) %REC	01/27/11	01/27/11
		TPH-P (GRO)	ND	0.050 mg/L	01/27/11	01/27/11
		Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	01/27/11	01/27/11
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	01/27/11	01/27/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	01/27/11	01/27/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	01/27/11	01/27/11
		Benzene	ND	0.50 µg/L	01/27/11	01/27/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	01/27/11	01/27/11
		Toluene	ND	0.50 µg/L	01/27/11	01/27/11
		Ethylbenzene	ND	0.50 µg/L	01/27/11	01/27/11
		m,p-Xylene	ND	0.50 µg/L	01/27/11	01/27/11
		o-Xylene	ND	0.50 µg/L	01/27/11	01/27/11
		Surr: 1,2-Dichloroethane-d4	94	(70-130) %REC	01/27/11	01/27/11
		Surr: Toluene-d8	103	(70-130) %REC	01/27/11	01/27/11
		Surr: 4-Bromofluorobenzene	89	(70-130) %REC	01/27/11	01/27/11
Client ID :	**QCTBA-012511**					
Lab ID :	CHH11012601-35A	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	01/27/11	01/27/11
Date Sampled	01/25/11 00:00	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	01/27/11	01/27/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	01/27/11	01/27/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	01/27/11	01/27/11
		Benzene	ND	0.50 µg/L	01/27/11	01/27/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	01/27/11	01/27/11
		Toluene	ND	0.50 µg/L	01/27/11	01/27/11
		Ethylbenzene	ND	0.50 µg/L	01/27/11	01/27/11
		m,p-Xylene	ND	0.50 µg/L	01/27/11	01/27/11
		o-Xylene	ND	0.50 µg/L	01/27/11	01/27/11
		Surr: 1,2-Dichloroethane-d4	92	(70-130) %REC	01/27/11	01/27/11
		Surr: Toluene-d8	103	(70-130) %REC	01/27/11	01/27/11
		Surr: 4-Bromofluorobenzene	91	(70-130) %REC	01/27/11	01/27/11
Client ID :	**QCTBB-012511**					
Lab ID :	CHH11012601-36A	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	01/27/11	01/27/11
Date Sampled	01/25/11 00:00	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	01/27/11	01/27/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	01/27/11	01/27/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	01/27/11	01/27/11
		Benzene	ND	0.50 µg/L	01/27/11	01/27/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	01/27/11	01/27/11
		Toluene	ND	0.50 µg/L	01/27/11	01/27/11
		Ethylbenzene	ND	0.50 µg/L	01/27/11	01/27/11
		m,p-Xylene	ND	0.50 µg/L	01/27/11	01/27/11
		o-Xylene	ND	0.50 µg/L	01/27/11	01/27/11
		Surr: 1,2-Dichloroethane-d4	96	(70-130) %REC	01/27/11	01/27/11
		Surr: Toluene-d8	100	(70-130) %REC	01/27/11	01/27/11
		Surr: 4-Bromofluorobenzene	95	(70-130) %REC	01/27/11	01/27/11

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Gasoline Range Organics (GRO) C4-C13

X = Reporting Limits were increased due to sample matrix interferences.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/2/11

Report Date

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VOC Sample Preservation Report

Work Order: CHH11012601 **Job:** KMEP Norwalk

Alpha's Sample ID	Client's Sample ID	Matrix	pH
11012601-12A	QCEB-012411 (Sample Shoe)	Aqueous	2
11012601-13A	GB-21-33.5-04-012411	Aqueous	6
11012601-14A	GB-21-38.5-04-012411	Aqueous	4
11012601-15A	QCEB-012411	Aqueous	2
11012601-16A	GB-21-46.5-04-012411	Aqueous	2
11012601-17A	QCTB-012411	Aqueous	2
11012601-26A	QCEB-012511	Aqueous	2
11012601-35A	QCTBA-012511	Aqueous	2
11012601-36A	QCTBB-012511	Aqueous	2

2/2/11

Report Date

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Date: *01-Feb-11*

QC Summary Report

Work Order: 11012601

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/C Ext**

File ID: **1A01271136.D** Batch ID: **25879** Analysis Date: **01/28/2011 04:42**

Sample ID: **MBLK-25879** Units : **mg/Kg** Run ID: **FID_1_110126A** Prep Date: **01/26/2011 12:13**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (Fuel Product)	ND	5								
Surr: Nonane	7.76		6		129	62	161			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/C Ext**

File ID: **1A01271137.D** Batch ID: **25879** Analysis Date: **01/28/2011 05:06**

Sample ID: **LCS-25879** Units : **mg/Kg** Run ID: **FID_1_110126A** Prep Date: **01/26/2011 12:13**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	107	5	100		107	70	130			
Surr: Nonane	7.58		6		126	62	161			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/C Ext**

File ID: **1A01271144.D** Batch ID: **25879** Analysis Date: **01/28/2011 08:03**

Sample ID: **11012601-01AMS** Units : **mg/Kg** Run ID: **FID_1_110126A** Prep Date: **01/26/2011 12:13**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	50	5	50	0	100	50	149			
Surr: Nonane	3.72		3		124	62	161			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/C Ext**

File ID: **1A01271145.D** Batch ID: **25879** Analysis Date: **01/28/2011 08:28**

Sample ID: **11012601-01AMSD** Units : **mg/Kg** Run ID: **FID_1_110126A** Prep Date: **01/26/2011 12:13**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	72	5	50	0	144	50	149	50	36.0(46)	
Surr: Nonane	3.41		3		114	62	161			

Comments:

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Date: *01-Feb-11*

QC Summary Report

Work Order: 11012601

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/C Ext**

File ID: **1A01271106.D** Batch ID: **25880** Analysis Date: **01/27/2011 16:07**

Sample ID: **MBLK-25880** Units : **mg/Kg** Run ID: **FID_1_110126B** Prep Date: **01/26/2011 13:13**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (Fuel Product)	ND	5								
Surr: Nonane	7.74		6		129	62	161			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/C Ext**

File ID: **1A01271107.D** Batch ID: **25880** Analysis Date: **01/27/2011 16:32**

Sample ID: **LCS-25880** Units : **mg/Kg** Run ID: **FID_1_110126B** Prep Date: **01/26/2011 13:13**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	105	5	100		105	70	130			
Surr: Nonane	8.05		6		134	62	161			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/C Ext**

File ID: **1A01271109.D** Batch ID: **25880** Analysis Date: **01/27/2011 17:23**

Sample ID: **11012601-22AMS** Units : **mg/Kg** Run ID: **FID_1_110126B** Prep Date: **01/26/2011 13:13**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	60.3	5	50	0	121	50	149			
Surr: Nonane	4.02		3		134	62	161			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/C Ext**

File ID: **1A01271110.D** Batch ID: **25880** Analysis Date: **01/27/2011 17:49**

Sample ID: **11012601-22AMSD** Units : **mg/Kg** Run ID: **FID_1_110126B** Prep Date: **01/26/2011 13:13**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	54.4	5	50	0	109	50	149	60.27	10.2(46)	
Surr: Nonane	4.53		3		151	62	161			

Comments:

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Date: *01-Feb-11*

QC Summary Report

Work Order: 11012601

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/C Ext**

File ID: **7A01211169.D** Batch ID: **25882** Analysis Date: **01/27/2011 10:54**

Sample ID: **MBLK-25882** Units : **mg/L** Run ID: **FID_7_110127A** Prep Date: **01/27/2011 09:04**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (Fuel Product)	ND	0.1								
Surr: Nonane	0.153		0.15		102	49	145			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/C Ext**

File ID: **7A01211170.D** Batch ID: **25882** Analysis Date: **01/27/2011 11:20**

Sample ID: **LCS-25882** Units : **mg/L** Run ID: **FID_7_110127A** Prep Date: **01/27/2011 09:04**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	2.5	0.05	2.5		99.8	70	130			
Surr: Nonane	0.162		0.15		108	49	145			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/C Ext**

File ID: **7A01211173.D** Batch ID: **25882** Analysis Date: **01/27/2011 12:39**

Sample ID: **11012602-01AMS** Units : **mg/L** Run ID: **FID_7_110127A** Prep Date: **01/27/2011 09:04**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	2.43	0.05	2.5	0	97	53	150			
Surr: Nonane	0.146		0.15		97	49	145			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/C Ext**

File ID: **7A01211174.D** Batch ID: **25882** Analysis Date: **01/27/2011 13:05**

Sample ID: **11012602-01AMSD** Units : **mg/L** Run ID: **FID_7_110127A** Prep Date: **01/27/2011 09:04**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	2.36	0.05	2.5	0	94	53	150	2.432	3.0(47)	
Surr: Nonane	0.155		0.15		103	49	145			

Comments:

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Date: *01-Feb-11*

QC Summary Report

Work Order: 11012601

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/C**

File ID: **11012710.D** Batch ID: **MS08S5872B** Analysis Date: **01/27/2011 13:27**

Sample ID: **MBLK MS08S5872B** Units : **mg/Kg** Run ID: **MSD_08_110127A** Prep Date: **01/27/2011 13:27**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	1								
Surr: 1,2-Dichloroethane-d4	0.196		0.2		98	70	130			
Surr: Toluene-d8	0.206		0.2		103	70	130			
Surr: 4-Bromofluorobenzene	0.196		0.2		98	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/C**

File ID: **11012714.D** Batch ID: **MS08S5872B** Analysis Date: **01/27/2011 15:06**

Sample ID: **GLCS MS08S5872B** Units : **mg/Kg** Run ID: **MSD_08_110127A** Prep Date: **01/27/2011 15:06**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	16.7	2	16		105	63	148			
Surr: 1,2-Dichloroethane-d4	0.398		0.4		99	70	130			
Surr: Toluene-d8	0.389		0.4		97	70	130			
Surr: 4-Bromofluorobenzene	0.428		0.4		107	70	130			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/C**

File ID: **11012715.D** Batch ID: **MS08S5872B** Analysis Date: **01/27/2011 15:30**

Sample ID: **11012601-08AGS** Units : **mg/Kg** Run ID: **MSD_08_110127A** Prep Date: **01/27/2011 15:30**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	15.9	2	16	0	99	35	166			
Surr: 1,2-Dichloroethane-d4	0.373		0.4		93	70	130			
Surr: Toluene-d8	0.389		0.4		97	70	130			
Surr: 4-Bromofluorobenzene	0.422		0.4		106	70	130			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/C**

File ID: **11012716.D** Batch ID: **MS08S5872B** Analysis Date: **01/27/2011 15:55**

Sample ID: **11012601-08AGSD** Units : **mg/Kg** Run ID: **MSD_08_110127A** Prep Date: **01/27/2011 15:55**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	16.2	2	16	0	101	35	166	15.86	1.9(33)	
Surr: 1,2-Dichloroethane-d4	0.397		0.4		99	70	130			
Surr: Toluene-d8	0.395		0.4		99	70	130			
Surr: 4-Bromofluorobenzene	0.43		0.4		107	70	130			

Comments:

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QC Summary Report

Work Order: 11012601

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/C**

File ID: **11012808.D** Batch ID: **MS08S5874B** Analysis Date: **01/28/2011 11:50**

Sample ID: **MBLK MS08S5874B** Units : **mg/Kg** Run ID: **MSD_08_110128A** Prep Date: **01/28/2011 11:50**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	1								
Surr: 1,2-Dichloroethane-d4	0.199		0.2		99	70	130			
Surr: Toluene-d8	0.211		0.2		105	70	130			
Surr: 4-Bromofluorobenzene	0.196		0.2		98	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/C**

File ID: **11012812.D** Batch ID: **MS08S5874B** Analysis Date: **01/28/2011 13:28**

Sample ID: **GLCS MS08S5874B** Units : **mg/Kg** Run ID: **MSD_08_110128A** Prep Date: **01/28/2011 13:28**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	17.3	2	16		108	63	148			
Surr: 1,2-Dichloroethane-d4	0.404		0.4		101	70	130			
Surr: Toluene-d8	0.385		0.4		96	70	130			
Surr: 4-Bromofluorobenzene	0.429		0.4		107	70	130			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/C**

File ID: **11012813.D** Batch ID: **MS08S5874B** Analysis Date: **01/28/2011 13:53**

Sample ID: **11012601-24AGS** Units : **mg/Kg** Run ID: **MSD_08_110128A** Prep Date: **01/28/2011 13:53**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	16.4	2	16	0	102	35	166			
Surr: 1,2-Dichloroethane-d4	0.4		0.4		100	70	130			
Surr: Toluene-d8	0.38		0.4		95	70	130			
Surr: 4-Bromofluorobenzene	0.422		0.4		105	70	130			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/C**

File ID: **11012814.D** Batch ID: **MS08S5874B** Analysis Date: **01/28/2011 14:18**

Sample ID: **11012601-24AGSD** Units : **mg/Kg** Run ID: **MSD_08_110128A** Prep Date: **01/28/2011 14:18**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	14.1	2	16	0	88	35	166	16.39	14.9(33)	
Surr: 1,2-Dichloroethane-d4	0.404		0.4		101	70	130			
Surr: Toluene-d8	0.379		0.4		95	70	130			
Surr: 4-Bromofluorobenzene	0.436		0.4		109	70	130			

Comments:

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Date: *01-Feb-11*

QC Summary Report

Work Order: 11012601

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/C**

File ID: **11012704.D** Batch ID: **MS12W0127B** Analysis Date: **01/27/2011 09:52**

Sample ID: **MBLK MS12W0127B** Units : **mg/L** Run ID: **MSD_12_110127A** Prep Date: **01/27/2011 09:52**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	0.05								
Surr: 1,2-Dichloroethane-d4	0.0089		0.01		89	70	130			
Surr: Toluene-d8	0.0103		0.01		103	70	130			
Surr: 4-Bromofluorobenzene	0.00891		0.01		89	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/C**

File ID: **11012702.D** Batch ID: **MS12W0127B** Analysis Date: **01/27/2011 09:07**

Sample ID: **GLCS MS12W0127B** Units : **mg/L** Run ID: **MSD_12_110127A** Prep Date: **01/27/2011 09:07**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	0.411	0.05	0.4		103	70	130			
Surr: 1,2-Dichloroethane-d4	0.00839		0.01		84	70	130			
Surr: Toluene-d8	0.0105		0.01		105	70	130			
Surr: 4-Bromofluorobenzene	0.00999		0.01		99.9	70	130			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/C**

File ID: **11012714.D** Batch ID: **MS12W0127B** Analysis Date: **01/27/2011 13:49**

Sample ID: **11012601-13AGS** Units : **mg/L** Run ID: **MSD_12_110127A** Prep Date: **01/27/2011 13:49**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2.02	0.25	2	0	101	51	144			
Surr: 1,2-Dichloroethane-d4	0.0436		0.05		87	70	130			
Surr: Toluene-d8	0.051		0.05		102	70	130			
Surr: 4-Bromofluorobenzene	0.0482		0.05		96	70	130			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/C**

File ID: **11012715.D** Batch ID: **MS12W0127B** Analysis Date: **01/27/2011 14:12**

Sample ID: **11012601-13AGSD** Units : **mg/L** Run ID: **MSD_12_110127A** Prep Date: **01/27/2011 14:12**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2.14	0.25	2	0	107	51	144	2.019	5.7(29)	
Surr: 1,2-Dichloroethane-d4	0.0436		0.05		87	70	130			
Surr: Toluene-d8	0.0509		0.05		102	70	130			
Surr: 4-Bromofluorobenzene	0.0488		0.05		98	70	130			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

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Date: *07-Feb-11*

QC Summary Report

Work Order: 11012601

Method Blank

Type: **MBLK** Test Code: **EPA Method SW8260B**

File ID: **11012710.D** Batch ID: **MS08S5872A** Analysis Date: **01/27/2011 13:27**

Sample ID: **MBLK MS08S5872A** Units : **µg/Kg** Run ID: **MSD_08_110127A** Prep Date: **01/27/2011 13:27**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	ND	500								
Methyl tert-butyl ether (MTBE)	ND	5								
Di-isopropyl Ether (DIPE)	ND	20								
Ethyl Tertiary Butyl Ether (ETBE)	ND	20								
Benzene	ND	5								
Tertiary Amyl Methyl Ether (TAME)	ND	20								
Toluene	ND	5								
Ethylbenzene	ND	5								
m,p-Xylene	ND	5								
o-Xylene	ND	5								
Surr: 1,2-Dichloroethane-d4	196		200		98	70	130			
Surr: Toluene-d8	206		200		103	70	130			
Surr: 4-Bromofluorobenzene	196		200		98	70	130			

Laboratory Control Spike

Type: **LCS** Test Code: **EPA Method SW8260B**

File ID: **11012711.D** Batch ID: **MS08S5872A** Analysis Date: **01/27/2011 13:52**

Sample ID: **LCS MS08S5872A** Units : **µg/Kg** Run ID: **MSD_08_110127A** Prep Date: **01/27/2011 13:52**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	2290	1000	4000		57	14	156			
Methyl tert-butyl ether (MTBE)	423	10	400		106	61	147			
Di-isopropyl Ether (DIPE)	485	20	400		121	68	150			
Ethyl Tertiary Butyl Ether (ETBE)	445	20	400		111	66	150			
Benzene	474	10	400		118	70	138			
Tertiary Amyl Methyl Ether (TAME)	408	20	400		102	61	148			
Toluene	424	10	400		106	70	137			
Ethylbenzene	437	10	400		109	70	138			
m,p-Xylene	396	10	400		99	70	145			
o-Xylene	392	10	400		98	70	145			
Surr: 1,2-Dichloroethane-d4	421		400		105	70	130			
Surr: Toluene-d8	373		400		93	70	130			
Surr: 4-Bromofluorobenzene	450		400		113	70	130			

Sample Matrix Spike

Type: **MS** Test Code: **EPA Method SW8260B**

File ID: **11012712.D** Batch ID: **MS08S5872A** Analysis Date: **01/27/2011 14:16**

Sample ID: **11012601-08AMS** Units : **µg/Kg** Run ID: **MSD_08_110127A** Prep Date: **01/27/2011 14:16**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	2330	1000	4000	0	58	10	171			
Methyl tert-butyl ether (MTBE)	399	10	400	0	99.9	42	157			
Di-isopropyl Ether (DIPE)	458	20	400	0	114	49	157			
Ethyl Tertiary Butyl Ether (ETBE)	420	20	400	0	105	48	158			
Benzene	449	10	400	0	112	53	150			
Tertiary Amyl Methyl Ether (TAME)	385	20	400	0	96	45	152			
Toluene	400	10	400	0	99.9	51	149			
Ethylbenzene	414	10	400	0	103	54	150			
m,p-Xylene	377	10	400	0	94	50	161			
o-Xylene	370	10	400	0	92	35	177			
Surr: 1,2-Dichloroethane-d4	422		400		105	70	130			
Surr: Toluene-d8	371		400		93	70	130			
Surr: 4-Bromofluorobenzene	459		400		115	70	130			

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Date: *07-Feb-11*

QC Summary Report

Work Order: 11012601

Sample Matrix Spike Duplicate Type: **MSD** Test Code: **EPA Method SW8260B**

File ID: **11012713.D** Batch ID: **MS08S5872A** Analysis Date: **01/27/2011 14:41**

Sample ID: **11012601-08AMSD** Units : **µg/Kg** Run ID: **MSD_08_110127A** Prep Date: **01/27/2011 14:41**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	2150	1000	4000	0	54	10	171	2325	7.9(40)	
Methyl tert-butyl ether (MTBE)	386	10	400	0	96	42	157	399.5	3.5(32)	
Di-isopropyl Ether (DIPE)	434	20	400	0	108	49	157	457.9	5.5(31)	
Ethyl Tertiary Butyl Ether (ETBE)	404	20	400	0	101	48	158	420	3.8(31)	
Benzene	428	10	400	0	107	53	150	448.9	4.9(26)	
Tertiary Amyl Methyl Ether (TAME)	364	20	400	0	91	45	152	384.9	5.6(30)	
Toluene	377	10	400	0	94	51	149	399.7	5.8(26)	
Ethylbenzene	392	10	400	0	98	54	150	413.5	5.4(29)	
m,p-Xylene	360	10	400	0	90	50	161	376.7	4.6(38)	
o-Xylene	349	10	400	0	87	35	177	369.5	5.8(40)	
Surr: 1,2-Dichloroethane-d4	418		400		105	70	130			
Surr: Toluene-d8	368		400		92	70	130			
Surr: 4-Bromofluorobenzene	450		400		113	70	130			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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Date: 07-Feb-11

QC Summary Report

Work Order: 11012601

Method Blank

Type: **MBLK** Test Code: **EPA Method SW8260B**

File ID: **11012808.D** Batch ID: **MS08S5874A** Analysis Date: **01/28/2011 11:50**

Sample ID: **MBLK MS08S5874A** Units : **µg/Kg** Run ID: **MSD_08_110128A** Prep Date: **01/28/2011 11:50**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	ND	500								
Methyl tert-butyl ether (MTBE)	ND	5								
Di-isopropyl Ether (DIPE)	ND	20								
Ethyl Tertiary Butyl Ether (ETBE)	ND	20								
Benzene	ND	5								
Tertiary Amyl Methyl Ether (TAME)	ND	20								
Toluene	ND	5								
Ethylbenzene	ND	5								
m,p-Xylene	ND	5								
o-Xylene	ND	5								
Surr: 1,2-Dichloroethane-d4	199		200		99	70	130			
Surr: Toluene-d8	211		200		105	70	130			
Surr: 4-Bromofluorobenzene	196		200		98	70	130			

Laboratory Control Spike

Type: **LCS** Test Code: **EPA Method SW8260B**

File ID: **11012809.D** Batch ID: **MS08S5874A** Analysis Date: **01/28/2011 12:14**

Sample ID: **LCS MS08S5874A** Units : **µg/Kg** Run ID: **MSD_08_110128A** Prep Date: **01/28/2011 12:14**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	2880	1000	4000		72	14	156			
Methyl tert-butyl ether (MTBE)	432	10	400		108	61	147			
Di-isopropyl Ether (DIPE)	491	20	400		123	68	150			
Ethyl Tertiary Butyl Ether (ETBE)	447	20	400		112	66	150			
Benzene	486	10	400		122	70	138			
Tertiary Amyl Methyl Ether (TAME)	413	20	400		103	61	148			
Toluene	422	10	400		105	70	137			
Ethylbenzene	440	10	400		110	70	138			
m,p-Xylene	401	10	400		100	70	145			
o-Xylene	392	10	400		98	70	145			
Surr: 1,2-Dichloroethane-d4	438		400		110	70	130			
Surr: Toluene-d8	368		400		92	70	130			
Surr: 4-Bromofluorobenzene	455		400		114	70	130			

Sample Matrix Spike

Type: **MS** Test Code: **EPA Method SW8260B**

File ID: **11012810.D** Batch ID: **MS08S5874A** Analysis Date: **01/28/2011 12:39**

Sample ID: **11012601-24AMS** Units : **µg/Kg** Run ID: **MSD_08_110128A** Prep Date: **01/28/2011 12:39**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	2520	1000	4000	0	63	10	171			
Methyl tert-butyl ether (MTBE)	385	10	400	0	96	42	157			
Di-isopropyl Ether (DIPE)	432	20	400	0	108	49	157			
Ethyl Tertiary Butyl Ether (ETBE)	399	20	400	0	99.7	48	158			
Benzene	426	10	400	0	107	53	150			
Tertiary Amyl Methyl Ether (TAME)	357	20	400	0	89	45	152			
Toluene	370	10	400	0	92	51	149			
Ethylbenzene	381	10	400	0	95	54	150			
m,p-Xylene	347	10	400	0	87	50	161			
o-Xylene	340	10	400	0	85	35	177			
Surr: 1,2-Dichloroethane-d4	444		400		111	70	130			
Surr: Toluene-d8	368		400		92	70	130			
Surr: 4-Bromofluorobenzene	458		400		115	70	130			

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Date: *07-Feb-11*

QC Summary Report

Work Order: 11012601

Sample Matrix Spike Duplicate Type: **MSD** Test Code: **EPA Method SW8260B**

File ID: **11012811.D** Batch ID: **MS08S5874A** Analysis Date: **01/28/2011 13:04**

Sample ID: **11012601-24AMSD** Units : **µg/Kg** Run ID: **MSD_08_110128A** Prep Date: **01/28/2011 13:04**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	2030	1000	4000	0	51	10	171	2516	21.4(40)	
Methyl tert-butyl ether (MTBE)	348	10	400	0	87	42	157	384.8	9.9(32)	
Di-isopropyl Ether (DIPE)	398	20	400	0	99	49	157	431.7	8.2(31)	
Ethyl Tertiary Butyl Ether (ETBE)	361	20	400	0	90	48	158	398.6	9.8(31)	
Benzene	394	10	400	0	98	53	150	426.5	8.0(26)	
Tertiary Amyl Methyl Ether (TAME)	335	20	400	0	84	45	152	357	6.4(30)	
Toluene	335	10	400	0	84	51	149	369.6	9.7(26)	
Ethylbenzene	345	10	400	0	86	54	150	381.4	10.1(29)	
m,p-Xylene	313	10	400	0	78	50	161	346.5	10.0(38)	
o-Xylene	308	10	400	0	77	35	177	340.4	10.1(40)	
Surr: 1,2-Dichloroethane-d4	439		400		110	70	130			
Surr: Toluene-d8	364		400		91	70	130			
Surr: 4-Bromofluorobenzene	451		400		113	70	130			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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Date: *07-Feb-11*

QC Summary Report

Work Order: 11012601

Method Blank

Type: **MBLK** Test Code: **EPA Method SW8260B**

File ID: **11012704.D** Batch ID: **MS12W0127A** Analysis Date: **01/27/2011 09:52**

Sample ID: **MBLK MS12W0127A** Units : **µg/L** Run ID: **MSD_12_110127A** Prep Date: **01/27/2011 09:52**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	ND	10								
Methyl tert-butyl ether (MTBE)	ND	0.5								
Di-isopropyl Ether (DIPE)	ND	1								
Ethyl Tertiary Butyl Ether (ETBE)	ND	1								
Benzene	ND	0.5								
Tertiary Amyl Methyl Ether (TAME)	ND	1								
Toluene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
o-Xylene	ND	0.5								
Surr: 1,2-Dichloroethane-d4	8.9		10		89	70	130			
Surr: Toluene-d8	10.3		10		103	70	130			
Surr: 4-Bromofluorobenzene	8.91		10		89	70	130			

Laboratory Control Spike

Type: **LCS** Test Code: **EPA Method SW8260B**

File ID: **11012703.D** Batch ID: **MS12W0127A** Analysis Date: **01/27/2011 09:29**

Sample ID: **LCS MS12W0127A** Units : **µg/L** Run ID: **MSD_12_110127A** Prep Date: **01/27/2011 09:29**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	71.1	10	100		71	44	156			
Methyl tert-butyl ether (MTBE)	7.88	0.5	10		79	65	140			
Di-isopropyl Ether (DIPE)	6.91	1	10		69	70	130			L50
Ethyl Tertiary Butyl Ether (ETBE)	7.27	1	10		73	65	139			
Benzene	8.61	0.5	10		86	70	130			
Tertiary Amyl Methyl Ether (TAME)	8.03	1	10		80	68	134			
Toluene	8.82	0.5	10		88	80	120			
Ethylbenzene	9.24	0.5	10		92	80	120			
m,p-Xylene	9.2	0.5	10		92	70	130			
o-Xylene	9.43	0.5	10		94	70	130			
Surr: 1,2-Dichloroethane-d4	8.28		10		83	70	130			
Surr: Toluene-d8	10.5		10		105	70	130			
Surr: 4-Bromofluorobenzene	9.95		10		100	70	130			

Sample Matrix Spike

Type: **MS** Test Code: **EPA Method SW8260B**

File ID: **11012712.D** Batch ID: **MS12W0127A** Analysis Date: **01/27/2011 13:04**

Sample ID: **11012601-13AMS** Units : **µg/L** Run ID: **MSD_12_110127A** Prep Date: **01/27/2011 13:04**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	399	25	500	0	80	41	157			
Methyl tert-butyl ether (MTBE)	43.5	1.3	50	0	87	47	150			
Di-isopropyl Ether (DIPE)	36.4	2.5	50	0	73	59	139			
Ethyl Tertiary Butyl Ether (ETBE)	38.7	2.5	50	0	77	59	182			
Benzene	44.3	1.3	50	0	89	59	138			
Tertiary Amyl Methyl Ether (TAME)	43.4	2.5	50	0	87	63	135			
Toluene	42.5	1.3	50	0	85	68	130			
Ethylbenzene	45.2	1.3	50	0	90	68	130			
m,p-Xylene	44	1.3	50	0	88	68	131			
o-Xylene	46.5	1.3	50	0	93	70	130			
Surr: 1,2-Dichloroethane-d4	45.6		50		91	70	130			
Surr: Toluene-d8	49.8		50		99.5	70	130			
Surr: 4-Bromofluorobenzene	48.8		50		98	70	130			

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Date: *07-Feb-11*

QC Summary Report

Work Order: 11012601

Sample Matrix Spike Duplicate Type: **MSD** Test Code: **EPA Method SW8260B**

File ID: **11012713.D** Batch ID: **MS12W0127A** Analysis Date: **01/27/2011 13:27**

Sample ID: **11012601-13AMSD** Units : **µg/L** Run ID: **MSD_12_110127A** Prep Date: **01/27/2011 13:27**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	393	25	500	0	79	41	157	399.3	1.5(30)	
Methyl tert-butyl ether (MTBE)	42.1	1.3	50	0	84	47	150	43.48	3.1(40)	
Di-isopropyl Ether (DIPE)	35.8	2.5	50	0	72	59	139	36.41	1.8(20)	
Ethyl Tertiary Butyl Ether (ETBE)	38.1	2.5	50	0	76	59	182	38.7	1.5(40)	
Benzene	43.7	1.3	50	0	87	59	138	44.25	1.2(21)	
Tertiary Amyl Methyl Ether (TAME)	42.7	2.5	50	0	85	63	135	43.42	1.7(40)	
Toluene	42.7	1.3	50	0	85	68	130	42.47	0.4(20)	
Ethylbenzene	45.3	1.3	50	0	91	68	130	45.23	0.1(20)	
m,p-Xylene	44.3	1.3	50	0	89	68	131	44	0.6(20)	
o-Xylene	46.7	1.3	50	0	93	70	130	46.45	0.6(20)	
Surr: 1,2-Dichloroethane-d4	43.9		50		88	70	130			
Surr: Toluene-d8	50.5		50		101	70	130			
Surr: 4-Bromofluorobenzene	49.1		50		98	70	130			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

L50 = Analyte recovery was below acceptance limits for the LCS, but was acceptable in the MS/MSD.

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : CHHL11012601

Report Due By : 5:00 PM On : 03-Feb-2011

Client:
CH2M Hill
1000 Wilshire Boulevard
21st Floor
Los Angeles, CA 90017

Report Attention	Phone Number	EMail Address
Daniel Jablonski	(213) 228-8271 x	daniel.jablonski@ch2m.com
Vladimir Carino	(213) 228-8271 x	vladimir.carino@ch2m.com

EDD Required : **Yes**

Sampled by : Matt Mayry

PO :

Client's COC # : 32008, 32007, 32006, 3199 Job : KMEP Norwalk

Cooler Temp	Samples Received	Date Printed
0 °C	26-Jan-2011	**26-Jan-2011**

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests P_MOIST	TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W		Sample Remarks
CHH11012601-01A	GB-21-10.5-01-012411	SO	01/24/11 08:22	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C			(2) MeOH voas (1) Geoprobe Report on a dry weight basis.
CHH11012601-02A	GB-21-10.5-02-012411	SO	01/24/11 08:25	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C			(2) MeOH voas (1) Geoprobe Report on a dry weight basis.
CHH11012601-03A	GB-21-20-01-012411	SO	01/24/11 09:40	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C			(2) MeOH voas (1) 4oz. jar Report on a dry weight basis.
CHH11012601-04A	GB-21-20-02-012411	SO	01/24/11 09:45	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C			(2) MeOH voas (1) 4oz. jar Report on a dry weight basis.
CHH11012601-05A	GB-21-22-01-012411	SO	01/24/11 10:05	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C			(2) MeOH voas (1) 4oz. jar Report on a dry weight basis.
CHH11012601-06A	GB-21-30-01-012411	SO	01/24/11 10:15	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C			(2) MeOH voas (1) 4oz. jar Report on a dry weight basis.
CHH11012601-07A	GB-21-32-01-012411	SO	01/24/11 10:30	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C			(2) MeOH voas (1) 4oz. jar Report on a dry weight basis.
CHH11012601-08A	GB-21-32-03-012411	SO	01/24/11 10:33	5	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C			(3) MeOH voas (2) 4oz. jars Report on a dry weight basis. MS/MSD

Comments: Security seals intact. Frozen ice. Analysts: Run two analyses in order to achieve lower reporting limits for all other analytes due to high TBA values. Per phone conversation w/ Matt Mayry 1/26/11 @ 9:48 changed sample ID on sample -12A from QCEB-012411 : (soil) to QCEB-012411 (sample shoe).

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth AdCox	Elizabeth AdCox	**Alpha Analytical, Inc.**	1-26-11 1138

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : CHHL11012601

Report Due By : 5:00 PM On : 03-Feb-2011

Client:
CH2M Hill
1000 Wilshire Boulevard
21st Floor
Los Angeles, CA 90017

Report Attention	Phone Number	EMail Address
Daniel Jablonski	(213) 228-8271 x	daniel.jablonski@ch2m.com
Vladimir Carino	(213) 228-8271 x	vladimir.carino@ch2m.com

EDD Required : **Yes**

Sampled by : Matt Mayry

PO :

Client's COC # : 32008, 32007, 32006, 3199 Job : KMEP Norwalk

Cooler Temp	Samples Received	Date Printed
0 °C	26-Jan-2011	**26-Jan-2011**

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests P_MOIST	TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W	Sample Remarks
CHH11012601-09A	GB-21-40-01-012411	SO	01/24/11 11:10	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C		(2) MeOH voas (1) Geoprobe Report on a dry weight basis.
CHH11012601-10A	GB-21-50-01-012411	SO	01/24/11 12:00	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C		(2) MeOH voas (1) Geoprobe Report on a dry weight basis.
CHH11012601-11A	GB-21-60-01-012411	SO	01/24/11 12:52	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C		(2) MeOH voas (1) Geoprobe Report on a dry weight basis.
CHH11012601-12A	QCEB-012411 (Sample Shoe)	AQ	01/24/11 13:10	6	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	
CHH11012601-13A	GB-21-33.5-04-012411	AQ	01/24/11 13:30	12	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	
CHH11012601-14A	GB-21-38.5-04-012411	AQ	01/24/11 14:30	9	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	
CHH11012601-15A	QCEB-012411	AQ	01/24/11 14:50	6	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	
CHH11012601-16A	GB-21-46.5-04-012411	AQ	01/24/11 14:55	7	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	

Comments: Security seals intact. Frozen ice. Analysts: Run two analyses in order to achieve lower reporting limits for all other analytes due to high TBA values. Per phone conversation w/ Matt Mayry 1/26/11 @ 9:48 changed sample ID on sample -12A from QCEB-012411 : (soil) to QCEB-012411 (sample shoe).

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	1-26-11 1138

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : CHHL11012601

Report Due By : 5:00 PM On : 03-Feb-2011

Client:
CH2M Hill
1000 Wilshire Boulevard
21st Floor
Los Angeles, CA 90017

Report Attention	Phone Number	EMail Address
Daniel Jablonski	(213) 228-8271 x	daniel.jablonski@ch2m.com
Vladimir Carino	(213) 228-8271 x	vladimir.carino@ch2m.com

EDD Required : **Yes**

Sampled by : Matt Mayry

PO :

Client's COC # : 32008, 32007, 32006, 3199 Job : KMEP Norwalk

Cooler Temp	Samples Received	Date Printed
0 °C	26-Jan-2011	**26-Jan-2011**

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests P_MOIST	TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W	Sample Remarks
CHH11012601-17A	QCTB-012411	AQ	01/24/11 00:00	2	0	6							TPHE(0.10)	2 Reno Trip Blanks: (1)12/14/10 (1) 11/18/10
CHH11012601-18A	GB-20-10.5-01-012511	SO	01/25/11 08:00	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C		(2) MeOH voas (1) Geoprobe Report on a dry weight basis.
CHH11012601-19A	GB-20-19.5-01-012511	SO	01/25/11 08:15	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C		(2) MeOH voas (1) Geoprobe Report on a dry weight basis.
CHH11012601-20A	GB-20-22-01-012511	SO	01/25/11 08:25	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C		(2) MeOH voas (1) Geoprobe Report on a dry weight basis.
CHH11012601-21A	GB-20-30-01-012511	SO	01/25/11 08:50	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C		(2) MeOH voas (1) Geoprobe Report on a dry weight basis.
CHH11012601-22A	GB-20-32-01-012511	SO	01/25/11 09:10	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C		(2) MeOH voas (1) Geoprobe Report on a dry weight basis.
CHH11012601-23A	GB-20-40-01-012511	SO	01/25/11 09:35	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C		(2) MeOH voas (1) Geoprobe Report on a dry weight basis.

Comments: Security seals intact. Frozen ice. Analysts: Run two analyses in order to achieve lower reporting limits for all other analytes due to high TBA values. Per phone conversation w/ Matt Mayry 1/26/11 @ 9:48 changed sample ID on sample -12A from QCEB-012411 : (soil) to QCEB-012411 (sample shoe).

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	Alpha Analytical, Inc.	1-26-11 1138

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : CHHL11012601

Report Due By : 5:00 PM On : 03-Feb-2011

Client:
CH2M Hill
1000 Wilshire Boulevard
21st Floor
Los Angeles, CA 90017

Report Attention	Phone Number	EMail Address
Daniel Jablonski	(213) 228-8271 x	daniel.jablonski@ch2m.com
Vladimir Carino	(213) 228-8271 x	vladimir.carino@ch2m.com

EDD Required : **Yes**

Sampled by : Matt Mayry

PO :

Client's COC # : 32008, 32007, 32006, 3199 Job : KMEP Norwalk

Cooler Temp	Samples Received	Date Printed
0 °C	26-Jan-2011	**26-Jan-2011**

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests P_MOIST	TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W		Sample Remarks
CHH11012601-24A	GB-20-40-02-012511	SO	01/25/11 09:40	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C			(2) MeOH voas (1) Geoprobe Report on a dry weight basis.
CHH11012601-25A	GB-20-50-01-012511	SO	01/25/11 10:30	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C			(2) MeOH voas (1) 4oz. jar Report on a dry weight basis.
CHH11012601-26A	QCEB-012511	AQ	01/25/11 12:00	6	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)		
CHH11012601-27A	GB-19-10.5-01-012511	SO	01/25/11 12:10	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C			(2) MeOH voas (1) Geoprobe Report on a dry weight basis.
CHH11012601-28A	GB-19-20-01-012511	SO	01/25/11 12:25	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C			(2) MeOH voas (1) Geoprobe Report on a dry weight basis.
CHH11012601-29A	GB-19-23-01-012511	SO	01/25/11 12:50	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C			(2) MeOH voas (1) Geoprobe Report on a dry weight basis.
CHH11012601-30A	GB-19-30-01-012511	SO	01/25/11 13:30	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C			(2) MeOH voas (1) 4oz. jar Report on a dry weight basis.

Comments: Security seals intact. Frozen ice. Analysts: Run two analyses in order to achieve lower reporting limits for all other analytes due to high TBA values. Per phone conversation w/ Matt Mayry 1/26/11 @ 9:48 changed sample ID on sample -12A from QCEB-012411 : (soil) to QCEB-012411 (sample shoe).

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	1-26-11 1138

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : CHHL11012601

Report Due By : 5:00 PM On : 03-Feb-2011

Client:
CH2M Hill
1000 Wilshire Boulevard
21st Floor
Los Angeles, CA 90017

Report Attention	Phone Number	EMail Address
Daniel Jablonski	(213) 228-8271 x	daniel.jablonski@ch2m.com
Vladimir Carino	(213) 228-8271 x	vladimir.carino@ch2m.com

EDD Required : **Yes**

Sampled by : Matt Mayry

PO :

Client's COC # : 32008, 32007, 32006, 3199 Job : KMEP Norwalk

Cooler Temp	Samples Received	Date Printed
0 °C	26-Jan-2011	**26-Jan-2011**

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests P_MOIST	TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W		Sample Remarks
CHH11012601-31A	GB-19-30-02-012511	SO	01/25/11 13:35	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C			(2) MeOH voas (1) Geoprobe Report on a dry weight basis.
CHH11012601-32A	GB-19-33-01-012511	SO	01/25/11 13:50	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C			(2) MeOH voas (1) Geoprobe Report on a dry weight basis.
CHH11012601-33A	GB-19-40-01-012511	SO	01/25/11 14:10	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C			(2) MeOH voas (1) Geoprobe Report on a dry weight basis.
CHH11012601-34A	GB-19-50-01-012511	SO	01/25/11 14:40	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C			(2) MeOH voas (1) Geoprobe Report on a dry weight basis.
CHH11012601-35A	QCTBA-012511	AQ	01/25/11 00:00	2	0	6							TPHE(0.10)		2 Reno Trip Blanks: (1)12/14/10 (1) 11/18/10
CHH11012601-36A	QCTBB-012511	AQ	01/25/11 00:00	2	0	6							TPHE(0.10)		2 Reno Trip Blanks: 11/18/10

Comments: Security seals intact. Frozen ice. Analysts: Run two analyses in order to achieve lower reporting limits for all other analytes due to high TBA values. Per phone conversation w/ Matt Mayry 1/26/11 @ 9:48 changed sample ID on sample -12A from QCEB-012411 : (soil) to QCEB-012411 (sample shoe).

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	1-26-11 1138

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

32008

Billing Information:
Company Name CH2MHill
Attn: Dan Jablonski
Address 1000 Wilshire Blvd Floor 21
City, State, Zip Los Angeles, CA 90017
Phone Number 818-257-3630 Fax 714-424-2135

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State?
AZ ___ CA X NV ___ WA ___ DOD Site ___
ID ___ OR ___ OTHER ___ Page # 1 of 4

Consultant / Client Name: CH2MHill / Dan Jablonski
Address: 1000 Wilshire Blvd Floor 21
City, State, Zip: Los Angeles, CA
P.O. #
Job #: direct bill to Kinder Morgan
Job Name: KMEP Norwalk
Report Attention / Project Manager
Name:
Email:
Phone: Mobile:

Analyses Required: BTEX + oxygenates (methanol preserved); TPHg (methanol preserved); TPHfp (sleeve)

Data Validation Level: III or IV
EDD / EDF? YES ___ NO ___
Global ID #

Time Sampled	Date Sampled	Matrix* See Key Below	Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	# Containers**	BTEX + oxygenates (methanol preserved)	TPHg (methanol preserved)	TPHfp (sleeve)						REMARKS
0822	1-24	Soil	CHH11012601 01	GB-21-10.5-01-012411			3 2 vials 1 sleeve	X	X	X						Provided 2 methanol preserved vials. Use only 1. If necessary, ASM use the 2nd one.
0825	↓	↓	-02	GB-21-10.5-02-012411			3 vials 1 sleeve	↓	↓	↓						
0940			-03	GB-21-20-01-012411			2 vials 1 jar									
0945			-04	GB-21-20-02-012411			2 vials 1 jar									
1005			-05	GB-21-22-01-012411			2 vials 1 jar									
1015			-06	GB-21-30-01-012411			1 jar									
1030			-07	GB-21-32-01-012411			2 vials 1 jar									
1033			-08	GB-21-32-03-012411			3 vials 2 jars									MS/MSD
1110			-09	GB-21-40-01-012411			2 vials 1 sleeve									
1200			-10	GB-21-50-01-012411			2 vials 1 sleeve									
1252		↓	-11	GB-21-60-01-012411			2 vials 1 sleeve									
1310	↓	AQ	-12	QCEB-012411 (soil) (Sample shoe per Matt M.)			6 VOAs	↓	↓	↓						HCl pres

FOR LAB USE ONLY

ADDITIONAL INSTRUCTIONS:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action (NAC 445.0636 (c) (2)). Sampled By: [signature]

Relinquished by: (Signature/Affiliation)	Received by: (Signature/Affiliation)	Date:	Time:
[signature] CH2MHill 1530 1-25-11	[signature] Alpha Analytical	1-25-11	1530
[signature] 1530 1-25-11 Alpha Analytical	Elizabeth Adcox / Alpha	1-26-11	1138

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

32007

Billing Information:

Company Name _____
Attn: _____
Address _____
City, State, Zip _____
Phone Number _____ Fax _____

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State?
AZ ____ CA X NV ____ WA ____ DOD Site ____
ID ____ OR ____ OTHER ____ Page # 2 of 4

Consultant / Client Name: CH2M Hill / Dan Jablonski
Address:
City, State, Zip:
Job # direct bill Kinder Morgan Job Name:
Report Attention / Project Manager
Name:
Email:
Phone: _____ Mobile: _____

Analyses Required

Data Validation Level: III or IV

EDD / EDF? YES ____ NO ____
Global ID # _____

Time Sampled	Date Sampled	Matrix* See Key Below	P.O. # / Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	# Containers**	BTEX + (HCl preserved or Kryolabs)	TPH g (HCl preserved)	TPH fp (HCl preserved)	REMARKS
1330	1-24-11	AQ	-13	GB-21-33.5-04-012411			12 VOAs	X	X	X	sediment in GW sample
1430			-14	GB-21-38.5-04-012411			9 VOAs				
1450			-15	QCEB-012411			6 VOAs				
1455			-16	GB-21-46.5-04-012411			7 VOAs				
—			-17	QCTB-012411			2 VOAs	X			

FOR LAB USE ONLY

ADDITIONAL INSTRUCTIONS:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action (NAC 445.0636 (c) (2)). Sampled By: _____

Relinquished by: (Signature/Affiliation)		Received by: (Signature/Affiliation)	Date:	Time:
	CH2M Hill 1530 1-25-11	Alpha Analytical	1-25-11	1530
Relinquished by: (Signature/Affiliation)	Alpha Analytical 1-25-11 1530	Received by: (Signature/Affiliation) Elizabeth Adcox / Alpha	1-26-11	1138
Relinquished by: (Signature/Affiliation)		Received by: (Signature/Affiliation)	Date:	Time:

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

32006

Billing Information:

Company Name

Attn:

Address

City, State, Zip

Phone Number ______ Fax ______

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State? AZ ___ CA X NV ___ WA ___ DOD Site ___ ID ___ OR ___ OTHER ___

Page # 3 of 4

Consultant/Client Name: CH2MHill Dan Jablonski

Job #: Direct bill Kinder Morgan

Job Name:

Address:

City, State, Zip:

Report Attention / Project Manager
Name:
Email:
Phone: Mobile:

P.O. #

Data Validation Level: III or IV

EDD / EDF? YES ___ NO ___

Global ID #

Analyses Required: BTEX + oxys (methanol preserved); TPHg (methanol preserved); TPH fp

Time Sampled	Date Sampled	Matrix* See Key Below	Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	# Containers**	BTEX + oxys (methanol preserved)	TPHg (methanol preserved)	TPH fp					REMARKS
0800	1-25-11	Soil	-18	GB-20-10.5-01-012511			2 vials 1 sleeve	X	X	X					Provided 2 methanol preserved vials. Analyze only one. If necessary, use 2nd vial.
0815	↓	↓	-19	GB-20-19.5-01-012511			2 vials sleeve	↓	↓	↓					
0825			-20	GB-20-22-01-012511			2 vials sleeve								
0850			-21	GB-20-30-01-012511			2 vials sleeve								
0910			-22	GB-20-32-01-012511			2 vials sleeve								
0935			-23	GB-20-40-01-012511			2 vials sleeve								
0940			-24	GB-20-40-02-012511			2 vials sleeve								
1030		↓	-25	GB-20-50-01-012511			2 vials 1 jar								
1200		AQ	-26	QCEB-012511			6 VOAs								HCl pres
1210		Soil	-27	GB-19-10.5-01-012511			2 vials 1 sleeve								
1225		↓	-28	GB-19-20-01-012511			↓								
1250			-29	GB-19-23-01-012511			↓								
1330	↓	↓	-30	GB-19-30-01-012511			2 vials 1 jar	↓	↓	↓					

FOR LAB USE ONLY

ADDITIONAL INSTRUCTIONS:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action (NAC 445.0636 (c) (2)). Sampled By: [signature]

Relinquished by: (Signature/Affiliation)	Received by: (Signature/Affiliation)	Date:	Time:
[signature] CH2MHill 1550 1-25-11	[signature] Alpha Analytical	1-25-11	1550
[signature] Alpha Analytical 1550 1-25-11	Elizabeth Adcox / Alpha	1-26-11	1138

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

31999

Billing Information:

Company Name _____
Attn: _____
Address _____
City, State, Zip _____
Phone Number _____ Fax _____

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State?
AZ ____ CA X NV ____ WA ____ DOD Site ____
ID ____ OR ____ OTHER ____ Page # 4 of 4

Consultant / Client Name: CHAMMAN / D. Jablonski
Address:
City, State, Zip:

Job #: direct bill Kinder Morgan
Job Name:

Report Attention / Project Manager
Name:
Email:
Phone: _____ Mobile: _____

Analyses Required

Data Validation Level: III or IV

EDD / EDF? YES ____ NO ____
Global ID # _____

Time Sampled	Date Sampled	Matrix* See Key Below	P.O. # / Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	# Containers**	BTEX + Oxys (methanol preserved)	TPH g (methanol preserved)	TPH c					REMARKS
1335	1-25-11	SO	31	GB-19-30-02-012511			2 vials 1 sleeve	X	X	X					– methanol leaked in 1 vial
1350	↓	↓	32	GB-19-33-01-012511			2 vials 1 sleeve	↓	↓	↓					
1410			33	GB-19-40-01-012511			2 vials 1 sleeve								
1440		↓	34	GB-19-50-01-012511			2 vials 1 sleeve								
–		AQ	35	QCTBA-012511			2 VOAs	X							
–	↓	AQ	36	QCTBB-012511			2 VOAs	X							Provided 2 methanol preserved vials. Analyze only one vial if necessary, use 2nd

FOR LAB USE ONLY

ADDITIONAL INSTRUCTIONS:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action (NAC 445.0636 (c) (2)). Sampled By: _____

Relinquished by: (Signature/Affiliation)	Received by: (Signature/Affiliation)	Date:	Time:
CHAMMAN 1550 1-25-11	Alpha Analytical	1-25-11	1550
Alpha Analytical 1550 1-25-11	Elizabeth Adcox / alpha	1-26-11	1138
Relinquished by: (Signature/Affiliation)	Received by: (Signature/Affiliation)	Date:	Time:

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

Alpha Analytical, Inc.

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ANALYTICAL REPORT

CH2M Hill
1000 Wilshire Boulevard
Los Angeles, CA 90017

Attn: Daniel Jablonski
Phone: (213) 228-8271
Fax: (714) 424-2135
Date Received : 01/28/11

Job: KMEP Norwalk

Percent Moisture
ASTM D2216

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **IDW-SOIL-012611**				
Lab ID : CHH11012804-10A Percent Moisture	31	0.10 %	02/03/11	02/03/11
Date Sampled 01/26/11 13:30				

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/4/11
Report Date

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ANALYTICAL REPORT

CH2M Hill
1000 Wilshire Boulevard
Los Angeles, CA 90017

Attn: Daniel Jablonski
Phone: (213) 228-8271
Fax: (714) 424-2135
Date Received : 01/28/11

Job: KMEP Norwalk

Total Petroleum Hydrocarbons - Extractable (TPH-E) EPA Method SW8015B
Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B
Volatile Organic Compounds (VOCs) EPA Method SW8260B

		Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID :	**IDW-SOIL-012611**					
Lab ID :	CHH11012804-10A	TPH-E (Fuel Product)	ND	15 mg/Kg-dry	02/01/11	02/03/11
Date Sampled	01/26/11 13:30	Surr: Nonane	123	(62-161) %REC	02/01/11	02/03/11
		TPH-P (GRO)	ND	1.5 mg/Kg-dry	01/31/11	01/31/11
		Tertiary Butyl Alcohol (TBA)	ND	290 µg/Kg-dry	01/31/11	01/31/11
		Methyl tert-butyl ether (MTBE)	ND	7.3 µg/Kg-dry	01/31/11	01/31/11
		Di-isopropyl Ether (DIPE)	ND	20 µg/Kg-dry	01/31/11	01/31/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	20 µg/Kg-dry	01/31/11	01/31/11
		Benzene	ND	7.3 µg/Kg-dry	01/31/11	01/31/11
		Tertiary Amyl Methyl Ether (TAME)	ND	20 µg/Kg-dry	01/31/11	01/31/11
		Toluene	ND	7.3 µg/Kg-dry	01/31/11	01/31/11
		Ethylbenzene	ND	7.3 µg/Kg-dry	01/31/11	01/31/11
		m,p-Xylene	ND	7.3 µg/Kg-dry	01/31/11	01/31/11
		o-Xylene	ND	7.3 µg/Kg-dry	01/31/11	01/31/11
		Surr: 1,2-Dichloroethane-d4	99	(70-130) %REC	01/31/11	01/31/11
		Surr: Toluene-d8	104	(70-130) %REC	01/31/11	01/31/11
		Surr: 4-Bromofluorobenzene	99	(70-130) %REC	01/31/11	01/31/11

Gasoline Range Organics (GRO) C4-C13

Concentrations and reporting limits are based on dry weights.
ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

RS
2/4/11
Report Date

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ANALYTICAL REPORT

CH2M Hill
1000 Wilshire Boulevard
Los Angeles, CA 90017

Attn: Daniel Jablonski
Phone: (213) 228-8271
Fax: (714) 424-2135
Date Received : 01/28/11

Job: KMEP Norwalk

Total Petroleum Hydrocarbons - Extractable (TPH-E) EPA Method SW8015B
Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B
Volatile Organic Compounds (VOCs) EPA Method SW8260B

		Parameter	Concentration		Reporting Limit	Date Extracted	Date Analyzed
Client ID :	**GB-20-34-04-012611**						
Lab ID :	CHH11012804-01A	TPH-E (Fuel Product)	0.22	**	0.10 mg/L	01/31/11	01/31/11
Date Sampled	01/26/11 08:30	Surr: Nonane	101		(49-145) %REC	01/31/11	01/31/11
		TPH-P (GRO)	ND		0.050 mg/L	02/02/11	02/02/11
		Tertiary Butyl Alcohol (TBA)	ND		10 µg/L	02/02/11	02/02/11
		Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	02/02/11	02/02/11
		Di-isopropyl Ether (DIPE)	ND		1.0 µg/L	02/02/11	02/02/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND		1.0 µg/L	02/02/11	02/02/11
		Benzene	ND		0.50 µg/L	02/02/11	02/02/11
		Tertiary Amyl Methyl Ether (TAME)	ND		1.0 µg/L	02/02/11	02/02/11
		Toluene	ND		0.50 µg/L	02/02/11	02/02/11
		Ethylbenzene	ND		0.50 µg/L	02/02/11	02/02/11
		m,p-Xylene	ND		0.50 µg/L	02/02/11	02/02/11
		o-Xylene	ND		0.50 µg/L	02/02/11	02/02/11
		Surr: 1,2-Dichloroethane-d4	99		(70-130) %REC	02/02/11	02/02/11
		Surr: Toluene-d8	101		(70-130) %REC	02/02/11	02/02/11
		Surr: 4-Bromofluorobenzene	95		(70-130) %REC	02/02/11	02/02/11
Client ID :	**GB-20-39-04-012611**						
Lab ID :	CHH11012804-02A	TPH-E (Fuel Product)	ND		0.10 mg/L	01/31/11	01/31/11
Date Sampled	01/26/11 09:00	Surr: Nonane	100		(49-145) %REC	01/31/11	01/31/11
		TPH-P (GRO)	ND		0.050 mg/L	02/02/11	02/02/11
		Tertiary Butyl Alcohol (TBA)	ND		10 µg/L	02/02/11	02/02/11
		Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	02/02/11	02/02/11
		Di-isopropyl Ether (DIPE)	ND		1.0 µg/L	02/02/11	02/02/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND		1.0 µg/L	02/02/11	02/02/11
		Benzene	ND		0.50 µg/L	02/02/11	02/02/11
		Tertiary Amyl Methyl Ether (TAME)	ND		1.0 µg/L	02/02/11	02/02/11
		Toluene	ND		0.50 µg/L	02/02/11	02/02/11
		Ethylbenzene	ND		0.50 µg/L	02/02/11	02/02/11
		m,p-Xylene	ND		0.50 µg/L	02/02/11	02/02/11
		o-Xylene	ND		0.50 µg/L	02/02/11	02/02/11
		Surr: 1,2-Dichloroethane-d4	101		(70-130) %REC	02/02/11	02/02/11
		Surr: Toluene-d8	98		(70-130) %REC	02/02/11	02/02/11
		Surr: 4-Bromofluorobenzene	95		(70-130) %REC	02/02/11	02/02/11

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Client ID :	**QCEB-012611**					
Lab ID :	CHH11012804-03A	TPH-E (Fuel Product)	ND	0.10 mg/L	01/31/11	01/31/11
Date Sampled	01/26/11 09:15	Surr: Nonane	100	(49-145) %REC	01/31/11	01/31/11
		TPH-P (GRO)	ND	0.050 mg/L	02/02/11	02/02/11
		Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	02/02/11	02/02/11
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	02/02/11	02/02/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	02/02/11	02/02/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	02/02/11	02/02/11
		Benzene	ND	0.50 µg/L	02/02/11	02/02/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	02/02/11	02/02/11
		Toluene	ND	0.50 µg/L	02/02/11	02/02/11
		Ethylbenzene	ND	0.50 µg/L	02/02/11	02/02/11
		m,p-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		o-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		Surr: 1,2-Dichloroethane-d4	102	(70-130) %REC	02/02/11	02/02/11
		Surr: Toluene-d8	100	(70-130) %REC	02/02/11	02/02/11
		Surr: 4-Bromofluorobenzene	99	(70-130) %REC	02/02/11	02/02/11
Client ID :	**GB-20-45-04-012611**					
Lab ID :	CHH11012804-04A	TPH-E (Fuel Product)	ND	0.10 mg/L	01/31/11	01/31/11
Date Sampled	01/26/11 09:50	Surr: Nonane	105	(49-145) %REC	01/31/11	01/31/11
		TPH-P (GRO)	ND	0.050 mg/L	02/02/11	02/02/11
		Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	02/02/11	02/02/11
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	02/02/11	02/02/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	02/02/11	02/02/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	02/02/11	02/02/11
		Benzene	ND	0.50 µg/L	02/02/11	02/02/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	02/02/11	02/02/11
		Toluene	ND	0.50 µg/L	02/02/11	02/02/11
		Ethylbenzene	ND	0.50 µg/L	02/02/11	02/02/11
		m,p-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		o-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		Surr: 1,2-Dichloroethane-d4	106	(70-130) %REC	02/02/11	02/02/11
		Surr: Toluene-d8	100	(70-130) %REC	02/02/11	02/02/11
		Surr: 4-Bromofluorobenzene	91	(70-130) %REC	02/02/11	02/02/11
Client ID :	**GB-20-45-05-012611**					
Lab ID :	CHH11012804-05A	TPH-E (Fuel Product)	ND	0.10 mg/L	01/31/11	01/31/11
Date Sampled	01/26/11 09:55	Surr: Nonane	102	(49-145) %REC	01/31/11	01/31/11
		TPH-P (GRO)	ND	0.050 mg/L	02/02/11	02/02/11
		Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	02/02/11	02/02/11
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	02/02/11	02/02/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	02/02/11	02/02/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	02/02/11	02/02/11
		Benzene	ND	0.50 µg/L	02/02/11	02/02/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	02/02/11	02/02/11
		Toluene	ND	0.50 µg/L	02/02/11	02/02/11
		Ethylbenzene	ND	0.50 µg/L	02/02/11	02/02/11
		m,p-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		o-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		Surr: 1,2-Dichloroethane-d4	106	(70-130) %REC	02/02/11	02/02/11
		Surr: Toluene-d8	102	(70-130) %REC	02/02/11	02/02/11
		Surr: 4-Bromofluorobenzene	90	(70-130) %REC	02/02/11	02/02/11

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Client ID :	**GB-19-34-04-012611**					
Lab ID :	CHH11012804-06A	TPH-E (Fuel Product)	ND	0.10 mg/L	01/31/11	01/31/11
Date Sampled	01/26/11 11:30	Surr: Nonane	99	(49-145) %REC	01/31/11	01/31/11
		TPH-P (GRO)	ND	0.050 mg/L	02/02/11	02/02/11
		Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	02/02/11	02/02/11
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	02/02/11	02/02/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	02/02/11	02/02/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	02/02/11	02/02/11
		Benzene	ND	0.50 µg/L	02/02/11	02/02/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	02/02/11	02/02/11
		Toluene	ND	0.50 µg/L	02/02/11	02/02/11
		Ethylbenzene	ND	0.50 µg/L	02/02/11	02/02/11
		m,p-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		o-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		Surr: 1,2-Dichloroethane-d4	104	(70-130) %REC	02/02/11	02/02/11
		Surr: Toluene-d8	99	(70-130) %REC	02/02/11	02/02/11
		Surr: 4-Bromofluorobenzene	95	(70-130) %REC	02/02/11	02/02/11
Client ID :	**GB-19-41-04-012611**					
Lab ID :	CHH11012804-07A	TPH-E (Fuel Product)	ND	0.10 mg/L	01/31/11	01/31/11
Date Sampled	01/26/11 11:55	Surr: Nonane	96	(49-145) %REC	01/31/11	01/31/11
		TPH-P (GRO)	ND	0.050 mg/L	02/02/11	02/02/11
		Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	02/02/11	02/02/11
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	02/02/11	02/02/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	02/02/11	02/02/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	02/02/11	02/02/11
		Benzene	ND	0.50 µg/L	02/02/11	02/02/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	02/02/11	02/02/11
		Toluene	ND	0.50 µg/L	02/02/11	02/02/11
		Ethylbenzene	ND	0.50 µg/L	02/02/11	02/02/11
		m,p-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		o-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		Surr: 1,2-Dichloroethane-d4	107	(70-130) %REC	02/02/11	02/02/11
		Surr: Toluene-d8	98	(70-130) %REC	02/02/11	02/02/11
		Surr: 4-Bromofluorobenzene	93	(70-130) %REC	02/02/11	02/02/11
Client ID :	**GB-19-46-04-012611**					
Lab ID :	CHH11012804-08A	TPH-E (Fuel Product)	ND	0.10 mg/L	01/31/11	02/01/11
Date Sampled	01/26/11 12:20	Surr: Nonane	99	(49-145) %REC	01/31/11	02/01/11
		TPH-P (GRO)	ND	0.050 mg/L	02/02/11	02/02/11
		Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	02/02/11	02/02/11
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	02/02/11	02/02/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	02/02/11	02/02/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	02/02/11	02/02/11
		Benzene	ND	0.50 µg/L	02/02/11	02/02/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	02/02/11	02/02/11
		Toluene	ND	0.50 µg/L	02/02/11	02/02/11
		Ethylbenzene	ND	0.50 µg/L	02/02/11	02/02/11
		m,p-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		o-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		Surr: 1,2-Dichloroethane-d4	110	(70-130) %REC	02/02/11	02/02/11
		Surr: Toluene-d8	99	(70-130) %REC	02/02/11	02/02/11
		Surr: 4-Bromofluorobenzene	94	(70-130) %REC	02/02/11	02/02/11

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Client ID :	**GB-19-46-06-012611**					
Lab ID :	CHH11012804-09A	TPH-E (Fuel Product)	ND	0.10 mg/L	01/31/11	02/01/11
Date Sampled	01/26/11 12:25	Surr: Nonane	100	(49-145) %REC	01/31/11	02/01/11
		TPH-P (GRO)	ND	0.050 mg/L	02/02/11	02/02/11
		Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	02/02/11	02/02/11
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	02/02/11	02/02/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	02/02/11	02/02/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	02/02/11	02/02/11
		Benzene	ND	0.50 µg/L	02/02/11	02/02/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	02/02/11	02/02/11
		Toluene	ND	0.50 µg/L	02/02/11	02/02/11
		Ethylbenzene	ND	0.50 µg/L	02/02/11	02/02/11
		m,p-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		o-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		Surr: 1,2-Dichloroethane-d4	104	(70-130) %REC	02/02/11	02/02/11
		Surr: Toluene-d8	102	(70-130) %REC	02/02/11	02/02/11
		Surr: 4-Bromofluorobenzene	94	(70-130) %REC	02/02/11	02/02/11
Client ID :	**QCTB-012611**					
Lab ID :	CHH11012804-11A	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	02/02/11	02/02/11
Date Sampled	01/26/11 00:00	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	02/02/11	02/02/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	02/02/11	02/02/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	02/02/11	02/02/11
		Benzene	ND	0.50 µg/L	02/02/11	02/02/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	02/02/11	02/02/11
		Toluene	ND	0.50 µg/L	02/02/11	02/02/11
		Ethylbenzene	ND	0.50 µg/L	02/02/11	02/02/11
		m,p-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		o-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		Surr: 1,2-Dichloroethane-d4	84	(70-130) %REC	02/02/11	02/02/11
		Surr: Toluene-d8	105	(70-130) %REC	02/02/11	02/02/11
		Surr: 4-Bromofluorobenzene	96	(70-130) %REC	02/02/11	02/02/11

**Note: Reported TPH-E (Fuel Product) may contain undifferentiated diesel range hydrocarbons.

All VOAs that were provided for sample 01A had an air bubble.

Gasoline Range Organics (GRO) C4-C13

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/4/11

Report Date

Alpha Analytical, Inc.

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VOC Sample Preservation Report

Work Order: CHH11012804 **Job:** KMEP Norwalk

Alpha's Sample ID	Client's Sample ID	Matrix	pH
11012804-01A	GB-20-34-04-012611	Aqueous	5
11012804-02A	GB-20-39-04-012611	Aqueous	5
11012804-03A	QCEB-012611	Aqueous	2
11012804-04A	GB-20-45-04-012611	Aqueous	4
11012804-05A	GB-20-45-05-012611	Aqueous	2
11012804-06A	GB-19-34-04-012611	Aqueous	2
11012804-07A	GB-19-41-04-012611	Aqueous	5
11012804-08A	GB-19-46-04-012611	Aqueous	3
11012804-09A	GB-19-46-06-012611	Aqueous	5
11012804-11A	QCTB-012611	Aqueous	2

2/4/11

Report Date

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Date: 04-Feb-11

QC Summary Report

Work Order: 11012804

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/C Ext**

File ID: **2A02031109.D** Batch ID: **25907** Analysis Date: **02/03/2011 13:03**

Sample ID: **MBLK-25907** Units : **mg/Kg** Run ID: **FID_2_110201A** Prep Date: **02/01/2011 12:50**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (Fuel Product)	ND	5								
Surr: Nonane	6.47		6		108	62	161			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/C Ext**

File ID: **2A02031108.D** Batch ID: **25907** Analysis Date: **02/03/2011 12:38**

Sample ID: **LCS-25907** Units : **mg/Kg** Run ID: **FID_2_110201A** Prep Date: **02/01/2011 12:50**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	112	5	100		112	70	130			
Surr: Nonane	6.92		6		115	62	161			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/C Ext**

File ID: **2A02031110.D** Batch ID: **25907** Analysis Date: **02/03/2011 13:28**

Sample ID: **11012825-01AMS** Units : **mg/Kg** Run ID: **FID_2_110201A** Prep Date: **02/01/2011 12:50**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	195	5	100	69.21	126	50	149			
Surr: Nonane	8.69		6		145	62	161			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/C Ext**

File ID: **2A02031111.D** Batch ID: **25907** Analysis Date: **02/03/2011 13:53**

Sample ID: **11012825-01AMSD** Units : **mg/Kg** Run ID: **FID_2_110201A** Prep Date: **02/01/2011 12:50**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	162	5	100	69.21	92	50	149	194.8	18.6(46)	
Surr: Nonane	7.24		6		121	62	161			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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Date: *04-Feb-11*

QC Summary Report

Work Order: 11012804

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/C Ext**

File ID: **7A01311106.D** Batch ID: **25899** Analysis Date: **01/31/2011 12:41**

Sample ID: **MBLK-25899** Units : **mg/L** Run ID: **FID_7_110131A** Prep Date: **01/31/2011 10:08**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (Fuel Product)	ND	0.1								
Surr: Nonane	0.153		0.15		102	49	145			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/C Ext**

File ID: **7A01311107.D** Batch ID: **25899** Analysis Date: **01/31/2011 13:08**

Sample ID: **LCS-25899** Units : **mg/L** Run ID: **FID_7_110131A** Prep Date: **01/31/2011 10:08**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	2.3	0.05	2.5		92	70	130			
Surr: Nonane	0.156		0.15		104	49	145			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/C Ext**

File ID: **7A01311109.D** Batch ID: **25899** Analysis Date: **01/31/2011 14:01**

Sample ID: **11013101-01AMS** Units : **mg/L** Run ID: **FID_7_110131A** Prep Date: **01/31/2011 10:08**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	2.23	0.05	2.5	0	89	53	150			
Surr: Nonane	0.161		0.15		107	49	145			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/C Ext**

File ID: **7A01311110.D** Batch ID: **25899** Analysis Date: **01/31/2011 14:27**

Sample ID: **11013101-01AMSD** Units : **mg/L** Run ID: **FID_7_110131A** Prep Date: **01/31/2011 10:08**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	2.48	0.05	2.5	0	99	53	150	2.226	10.9(47)	
Surr: Nonane	0.146		0.15		97	49	145			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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Date: *04-Feb-11*

QC Summary Report

Work Order: 11012804

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/C**

File ID: **11013106.D** Batch ID: **MS08S5892B** Analysis Date: **01/31/2011 10:59**

Sample ID: **MBLK MS08S5892B** Units : **mg/Kg** Run ID: **MSD_08_110131A** Prep Date: **01/31/2011 10:59**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	1								
Surr: 1,2-Dichloroethane-d4	0.203		0.2		101	70	130			
Surr: Toluene-d8	0.209		0.2		105	70	130			
Surr: 4-Bromofluorobenzene	0.199		0.2		99.5	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/C**

File ID: **11013110.D** Batch ID: **MS08S5892B** Analysis Date: **01/31/2011 12:37**

Sample ID: **GLCS MS08S5892B** Units : **mg/Kg** Run ID: **MSD_08_110131A** Prep Date: **01/31/2011 12:37**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	17.4	2	16		109	63	148			
Surr: 1,2-Dichloroethane-d4	0.399		0.4		99.8	70	130			
Surr: Toluene-d8	0.381		0.4		95	70	130			
Surr: 4-Bromofluorobenzene	0.425		0.4		106	70	130			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/C**

File ID: **11013111.D** Batch ID: **MS08S5892B** Analysis Date: **01/31/2011 13:01**

Sample ID: **11012801-04AGS** Units : **mg/Kg** Run ID: **MSD_08_110131A** Prep Date: **01/31/2011 13:01**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	17.7	2	16	0	111	35	166			
Surr: 1,2-Dichloroethane-d4	0.397		0.4		99	70	130			
Surr: Toluene-d8	0.392		0.4		98	70	130			
Surr: 4-Bromofluorobenzene	0.442		0.4		110	70	130			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/C**

File ID: **11013112.D** Batch ID: **MS08S5892B** Analysis Date: **01/31/2011 13:26**

Sample ID: **11012801-04AGSD** Units : **mg/Kg** Run ID: **MSD_08_110131A** Prep Date: **01/31/2011 13:26**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	17	2	16	0	106	35	166	17.72	4.3(33)	
Surr: 1,2-Dichloroethane-d4	0.351		0.4		88	70	130			
Surr: Toluene-d8	0.398		0.4		99.6	70	130			
Surr: 4-Bromofluorobenzene	0.43		0.4		107	70	130			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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Date: 04-Feb-11

QC Summary Report

Work Order: 11012804

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/C**

File ID: **11020204.D** Batch ID: **MS12W0202B** Analysis Date: **02/02/2011 09:53**

Sample ID: **MBLK MS12W0202B** Units : **mg/L** Run ID: **MSD_12_110202A** Prep Date: **02/02/2011 09:53**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	0.05								
Surr: 1,2-Dichloroethane-d4	0.00968		0.01		97	70	130			
Surr: Toluene-d8	0.0105		0.01		105	70	130			
Surr: 4-Bromofluorobenzene	0.00916		0.01		92	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/C**

File ID: **11020202.D** Batch ID: **MS12W0202B** Analysis Date: **02/02/2011 09:07**

Sample ID: **GLCS MS12W0202B** Units : **mg/L** Run ID: **MSD_12_110202A** Prep Date: **02/02/2011 09:07**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	0.429	0.05	0.4		107	70	130			
Surr: 1,2-Dichloroethane-d4	0.00959		0.01		96	70	130			
Surr: Toluene-d8	0.00997		0.01		99.7	70	130			
Surr: 4-Bromofluorobenzene	0.00958		0.01		96	70	130			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/C**

File ID: **11020220.D** Batch ID: **MS12W0202B** Analysis Date: **02/02/2011 16:06**

Sample ID: **11012804-01AGS** Units : **mg/L** Run ID: **MSD_12_110202A** Prep Date: **02/02/2011 16:06**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2.08	0.25	2	0	104	51	144			
Surr: 1,2-Dichloroethane-d4	0.0457		0.05		91	70	130			
Surr: Toluene-d8	0.0507		0.05		101	70	130			
Surr: 4-Bromofluorobenzene	0.0505		0.05		101	70	130			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/C**

File ID: **11020221.D** Batch ID: **MS12W0202B** Analysis Date: **02/02/2011 16:29**

Sample ID: **11012804-01AGSD** Units : **mg/L** Run ID: **MSD_12_110202A** Prep Date: **02/02/2011 16:29**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2.02	0.25	2	0	101	51	144	2.079	2.7(29)	
Surr: 1,2-Dichloroethane-d4	0.0444		0.05		89	70	130			
Surr: Toluene-d8	0.0509		0.05		102	70	130			
Surr: 4-Bromofluorobenzene	0.0483		0.05		97	70	130			

Comments:

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Date: 04-Feb-11

QC Summary Report

Work Order: 11012804

Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **11013106.D** Batch ID: **MS08S5892A** Analysis Date: **01/31/2011 10:59**

Sample ID: **MBLK MS08S5892A** Units : **µg/Kg** Run ID: **MSD_08_110131A** Prep Date: **01/31/2011 10:59**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	ND	500								
Methyl tert-butyl ether (MTBE)	ND	5								
Di-isopropyl Ether (DIPE)	ND	20								
Ethyl Tertiary Butyl Ether (ETBE)	ND	20								
Benzene	ND	5								
Tertiary Amyl Methyl Ether (TAME)	ND	20								
Toluene	ND	5								
Ethylbenzene	ND	5								
m,p-Xylene	ND	5								
o-Xylene	ND	5								
Surr: 1,2-Dichloroethane-d4	203		200		101	70	130			
Surr: Toluene-d8	209		200		105	70	130			
Surr: 4-Bromofluorobenzene	199		200		99.5	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **11013107.D** Batch ID: **MS08S5892A** Analysis Date: **01/31/2011 11:24**

Sample ID: **LCS MS08S5892A** Units : **µg/Kg** Run ID: **MSD_08_110131A** Prep Date: **01/31/2011 11:24**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	2670	1000	4000		67	14	156			
Methyl tert-butyl ether (MTBE)	425	10	400		106	61	147			
Di-isopropyl Ether (DIPE)	494	20	400		124	68	150			
Ethyl Tertiary Butyl Ether (ETBE)	434	20	400		109	66	150			
Benzene	473	10	400		118	70	138			
Tertiary Amyl Methyl Ether (TAME)	410	20	400		102	61	148			
Toluene	418	10	400		104	70	137			
Ethylbenzene	439	10	400		110	70	138			
m,p-Xylene	396	10	400		99	70	145			
o-Xylene	390	10	400		98	70	145			
Surr: 1,2-Dichloroethane-d4	433		400		108	70	130			
Surr: Toluene-d8	367		400		92	70	130			
Surr: 4-Bromofluorobenzene	462		400		115	70	130			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8260B**

File ID: **11013108.D** Batch ID: **MS08S5892A** Analysis Date: **01/31/2011 11:48**

Sample ID: **11012801-04AMS** Units : **µg/Kg** Run ID: **MSD_08_110131A** Prep Date: **01/31/2011 11:48**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	1120	1000	4000	0	28	10	171			
Methyl tert-butyl ether (MTBE)	331	10	400	0	83	42	157			
Di-isopropyl Ether (DIPE)	428	20	400	0	107	49	157			
Ethyl Tertiary Butyl Ether (ETBE)	371	20	400	0	93	48	158			
Benzene	430	10	400	0	107	53	150			
Tertiary Amyl Methyl Ether (TAME)	363	20	400	0	91	45	152			
Toluene	407	10	400	0	102	51	149			
Ethylbenzene	425	10	400	0	106	54	150			
m,p-Xylene	397	10	400	16.37	95	50	161			
o-Xylene	379	10	400	0	95	35	177			
Surr: 1,2-Dichloroethane-d4	350		400		88	70	130			
Surr: Toluene-d8	370		400		93	70	130			
Surr: 4-Bromofluorobenzene	464		400		116	70	130			

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Date: *04-Feb-11*

QC Summary Report

Work Order: 11012804

Sample Matrix Spike Duplicate Type **MSD** Test Code: **EPA Method SW8260B**

File ID: **11013109.D** Batch ID: **MS08S5892A** Analysis Date: **01/31/2011 12:13**

Sample ID: **11012801-04AMSD** Units : **µg/Kg** Run ID: **MSD_08_110131A** Prep Date: **01/31/2011 12:13**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	2820	1000	4000	0	71	10	171	1120	86.4(40)	R5
Methyl tert-butyl ether (MTBE)	404	10	400	0	101	42	157	330.5	20.1(32)	
Di-isopropyl Ether (DIPE)	469	20	400	0	117	49	157	428	9.1(31)	
Ethyl Tertiary Butyl Ether (ETBE)	420	20	400	0	105	48	158	370.5	12.6(31)	
Benzene	446	10	400	0	111	53	150	429.6	3.7(26)	
Tertiary Amyl Methyl Ether (TAME)	381	20	400	0	95	45	152	362.7	5.0(30)	
Toluene	396	10	400	0	99	51	149	407.2	2.7(26)	
Ethylbenzene	410	10	400	0	102	54	150	425	3.7(29)	
m,p-Xylene	383	10	400	16.37	92	50	161	397.1	3.6(38)	
o-Xylene	370	10	400	0	93	35	177	378.9	2.3(40)	
Surr: 1,2-Dichloroethane-d4	428		400		107	70	130			
Surr: Toluene-d8	369		400		92	70	130			
Surr: 4-Bromofluorobenzene	457		400		114	70	130			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

R5 = MS/MSD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.

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Date: 04-Feb-11

QC Summary Report

Work Order: 11012804

Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **11020204.D** Batch ID: **MS12W0202A** Analysis Date: **02/02/2011 09:53**

Sample ID: **MBLK MS12W0202A** Units : **µg/L** Run ID: **MSD_12_110202A** Prep Date: **02/02/2011 09:53**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	ND	10								
Methyl tert-butyl ether (MTBE)	ND	0.5								
Di-isopropyl Ether (DIPE)	ND	1								
Ethyl Tertiary Butyl Ether (ETBE)	ND	1								
Benzene	ND	0.5								
Tertiary Amyl Methyl Ether (TAME)	ND	1								
Toluene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
o-Xylene	ND	0.5								
Surr: 1,2-Dichloroethane-d4	9.68		10		97	70	130			
Surr: Toluene-d8	10.5		10		105	70	130			
Surr: 4-Bromofluorobenzene	9.16		10		92	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **11020203.D** Batch ID: **MS12W0202A** Analysis Date: **02/02/2011 09:30**

Sample ID: **LCS MS12W0202A** Units : **µg/L** Run ID: **MSD_12_110202A** Prep Date: **02/02/2011 09:30**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	79.7	10	100		80	44	156			
Methyl tert-butyl ether (MTBE)	8.9	0.5	10		89	65	140			
Di-isopropyl Ether (DIPE)	7.75	1	10		78	70	130			
Ethyl Tertiary Butyl Ether (ETBE)	8.13	1	10		81	65	139			
Benzene	9.63	0.5	10		96	70	130			
Tertiary Amyl Methyl Ether (TAME)	8.86	1	10		89	68	134			
Toluene	9.37	0.5	10		94	80	120			
Ethylbenzene	10	0.5	10		100	80	120			
m,p-Xylene	10.1	0.5	10		101	70	130			
o-Xylene	10.5	0.5	10		105	70	130			
Surr: 1,2-Dichloroethane-d4	9.18		10		92	70	130			
Surr: Toluene-d8	9.94		10		99	70	130			
Surr: 4-Bromofluorobenzene	9.59		10		96	70	130			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8260B**

File ID: **11020218.D** Batch ID: **MS12W0202A** Analysis Date: **02/02/2011 15:20**

Sample ID: **11012804-01AMS** Units : **µg/L** Run ID: **MSD_12_110202A** Prep Date: **02/02/2011 15:20**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	371	25	500	0	74	41	157			
Methyl tert-butyl ether (MTBE)	41	1.3	50	0	82	47	150			
Di-isopropyl Ether (DIPE)	34.4	2.5	50	0	69	59	139			
Ethyl Tertiary Butyl Ether (ETBE)	36.9	2.5	50	0	74	59	182			
Benzene	41.1	1.3	50	0	82	59	138			
Tertiary Amyl Methyl Ether (TAME)	40	2.5	50	0	80	63	135			
Toluene	39.5	1.3	50	0	79	68	130			
Ethylbenzene	42.1	1.3	50	0	84	68	130			
m,p-Xylene	43.2	1.3	50	0	86	68	131			
o-Xylene	44.2	1.3	50	0	88	70	130			
Surr: 1,2-Dichloroethane-d4	48		50		96	70	130			
Surr: Toluene-d8	49.5		50		99	70	130			
Surr: 4-Bromofluorobenzene	48.7		50		97	70	130			

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *04-Feb-11*

QC Summary Report

Work Order: 11012804

Sample Matrix Spike Duplicate Type **MSD** Test Code: **EPA Method SW8260B**

File ID: **11020219.D** Batch ID: **MS12W0202A** Analysis Date: **02/02/2011 15:43**

Sample ID: **11012804-01AMSD** Units : **µg/L** Run ID: **MSD_12_110202A** Prep Date: **02/02/2011 15:43**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	360	25	500	0	72	41	157	370.7	2.9(30)	
Methyl tert-butyl ether (MTBE)	41.3	1.3	50	0	83	47	150	41.04	0.5(40)	
Di-isopropyl Ether (DIPE)	35.6	2.5	50	0	71	59	139	34.38	3.5(20)	
Ethyl Tertiary Butyl Ether (ETBE)	37.7	2.5	50	0	75	59	182	36.91	2.1(40)	
Benzene	43.7	1.3	50	0	87	59	138	41.05	6.2(21)	
Tertiary Amyl Methyl Ether (TAME)	41.6	2.5	50	0	83	63	135	39.97	4.0(40)	
Toluene	43	1.3	50	0	86	68	130	39.5	8.4(20)	
Ethylbenzene	46.2	1.3	50	0	92	68	130	42.05	9.4(20)	
m,p-Xylene	46.9	1.3	50	0	94	68	131	43.16	8.4(20)	
o-Xylene	48.1	1.3	50	0	96	70	130	44.21	8.5(20)	
Surr: 1,2-Dichloroethane-d4	45.6		50		91	70	130			
Surr: Toluene-d8	50.1		50		100	70	130			
Surr: 4-Bromofluorobenzene	48.6		50		97	70	130			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

AMENDED

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : CHHL11012804

Report Due By : 5:00 PM On : 07-Feb-2011

Client:
CH2M Hill
1000 Wilshire Boulevard
21st Floor
Los Angeles, CA 90017

Report Attention	Phone Number	EMail Address
Daniel Jablonski	(213) 228-8271 x	daniel.jablonski@ch2m.com
Vladimir Carino	(213) 228-8271 x	vladimir.carino@ch2m.com

EDD Required : **Yes**

Sampled by : Matt Mayry

PO :

Client's COC # : 32000 Job : KMEP Norwalk

Cooler Temp	Samples Received	Date Printed
2 °C	28-Jan-2011	04-Feb-2011

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests P_MOIST	TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W		Sample Remarks
CHH11012804-01A	GB-20-34-04-012611	AQ	01/26/11 08:30	16	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)		All voas received contain air bubbles > 6mm.
CHH11012804-02A	GB-20-39-04-012611	AQ	01/26/11 09:00	8	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)		
CHH11012804-03A	QCEB-012611	AQ	01/26/11 09:15	6	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)		
CHH11012804-04A	GB-20-45-04-012611	AQ	01/26/11 09:50	7	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)		
CHH11012804-05A	GB-20-45-05-012611	AQ	01/26/11 09:55	7	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)		
CHH11012804-06A	GB-19-34-04-012611	AQ	01/26/11 11:30	8	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)		
CHH11012804-07A	GB-19-41-04-012611	AQ	01/26/11 11:55	8	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)		
CHH11012804-08A	GB-19-46-04-012611	AQ	01/26/11 12:20	6	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)		
CHH11012804-09A	GB-19-46-06-012611	AQ	01/26/11 12:25	8	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)		MS/MSD
CHH11012804-10A	IDW-SOIL-012611	SO	01/26/11 13:30	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C			Report on a dry weight basis. (3) 4 oz. jars

Comments: Security seals intact. Frozen ice. Analysts: Run two analyses in order to achieve lower reporting limits for all other analytes due to high TBA values. Amended 2/4/11 @ 14:21: Corrected sample ID for sample -01A due to login error. EA :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	2-4-11 1423

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA AMENDED

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : CHHL11012804

Report Due By : 5:00 PM On : 07-Feb-2011

Client:
CH2M Hill
1000 Wilshire Boulevard
21st Floor
Los Angeles, CA 90017

Report Attention	Phone Number	EMail Address
Daniel Jablonski	(213) 228-8271 x	daniel.jablonski@ch2m.com
Vladimir Carino	(213) 228-8271 x	vladimir.carino@ch2m.com

EDD Required : **Yes**

Sampled by : Matt Mayry

PO :

Client's COC # : 32000 Job : KMEP Norwalk

Cooler Temp	Samples Received	Date Printed
2 °C	28-Jan-2011	04-Feb-2011

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests P_MOIST	TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W		Sample Remarks
CHH11012804-11A	QCTB-012611	AQ	01/26/11 00:00	2	0	6							TPHE(0.10)		2 Reno Trip Blanks (1) 11/22/10 (1) 12/21/10

Comments: Security seals intact. Frozen ice. Analysts: Run two analyses in order to achieve lower reporting limits for all other analytes due to high TBA values. Amended 2/4/11 @ 14:21: Corrected sample ID for sample -01A due to login error. EA :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	Alpha Analytical, Inc.	2-4-11 1423

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Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information :

CHAIN-OF-CUSTODY RECORD

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Los Angeles, CA 90017

Report Attention	Phone Number	EMail Address
Daniel Jablonski	(213) 228-8271 x	daniel.jablonski@ch2m.com
Vladimir Carino	(213) 228-8271 x	vladimir.carino@ch2m.com

EDD Required : **Yes**

Sampled by : Matt Mayry

PO :

Client's COC # : 32000 Job : KMEP Norwalk

Cooler Temp	Samples Received	Date Printed
2 °C	28-Jan-2011	28-Jan-2011

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests P_MOIST	TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W		Sample Remarks
CHH11012804-01A	GB-20-34-04-012511	AQ	01/26/11 08:30	16	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)		All voas received contain air bubbles > 6mm.
CHH11012804-02A	GB-20-39-04-012611	AQ	01/26/11 09:00	8	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)		
CHH11012804-03A	QCEB-012611	AQ	01/26/11 09:15	6	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)		
CHH11012804-04A	GB-20-45-04-012611	AQ	01/26/11 09:50	7	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)		
CHH11012804-05A	GB-20-45-05-012611	AQ	01/26/11 09:55	7	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)		
CHH11012804-06A	GB-19-34-04-012611	AQ	01/26/11 11:30	8	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)		
CHH11012804-07A	GB-19-41-04-012611	AQ	01/26/11 11:55	8	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)		
CHH11012804-08A	GB-19-46-04-012611	AQ	01/26/11 12:20	6	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)		
CHH11012804-09A	GB-19-46-06-012611	AQ	01/26/11 12:25	8	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)		MS/MSD
CHH11012804-10A	IDW-SOIL-012611	SO	01/26/11 13:30	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C			Report on a dry weight basis. (3) 4 oz. jars

Comments: Security seals intact. Frozen ice. Analysts: Run two analyses in order to achieve lower reporting limits for all other analytes due to high TBA values. :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	1·28·11 1212

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
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Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : CHHL11012804

Report Due By : 5:00 PM On : 07-Feb-2011

Client:
CH2M Hill
1000 Wilshire Boulevard
21st Floor
Los Angeles, CA 90017

Report Attention	Phone Number	EMail Address
Daniel Jablonski	(213) 228-8271 x	daniel.jablonski@ch2m.com
Vladimir Carino	(213) 228-8271 x	vladimir.carino@ch2m.com

EDD Required : **Yes**

Sampled by : Matt Mayry

PO :

Client's COC # : 32000 Job : KMEP Norwalk

Cooler Temp	Samples Received	Date Printed
2 °C	28-Jan-2011	**28-Jan-2011**

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests P_MOIST	TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W		Sample Remarks
CHH11012804-11A	QCTB-012611	AQ	01/26/11 00:00	2	0	6							TPHE(0.10)		2 Reno Trip Blanks (1) 11/22/10 (1) 12/21/10

Comments: Security seals intact. Frozen ice. Analysts: Run two analyses in order to achieve lower reporting limits for all other analytes due to high TBA values. :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	1-28-11 1212

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
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Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

32000

Billing Information:
Company Name Direct bill Kinder Morgan
Attn: attn Dan Jablonski / CH2MHill
Address
City, State, Zip
Phone Number 818-257-3630 Fax 714-424-2135

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State?
AZ ___ CA X NV ___ WA ___ DOD Site ___
ID ___ OR ___ OTHER ___ Page # 1 of ___

Consultant / Client Name: CH2MHill Dan Jablonski
Address: 1000 Wilshire Blvd Floor 21
City, State, Zip: Los Angeles, CA 90017
P.O. #
Job #: direct bill to Kinder Morgan
Job Name: KMEP Norwalk
Report Attention / Project Manager
Name:
Email:
Phone: Mobile:

Data Validation Level: III or IV
EDD / EDF? YES ___ NO ___
Global ID #

Analyses Required: BTEX + fuel oxygenates (HCl preserved); TPHg (HCl preserved); TPH fp (HCl preserved)

Time Sampled	Date Sampled	Matrix* See Key Below	Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	# Containers**	BTEX + fuel oxygenates	TPHg	TPH fp					REMARKS
0830	1-26-11	AQ	CHH11012804-01	GB-20-34-04-012611			16 VOAs	X	X	X					sediment in sample
0900	↓	↓	-02	GB-20-39-04-012611			8 VOAs	↓	↓	↓					
0915			-03	QCEB-012611			6 VOAs								
0950			-04	GB-20-45-04-012611			7 VOAs								
0955			-05	GB-20-45-05-012611			7 VOAs								
1130			-06	GB-19-34-04-012611			8 VOAs								
1155			-07	GB-19-41-04-012611			8 VOAs								
1220			-08	GB-19-46-04-012611			6 VOAs								
1225		↓	-09	GB-19-46-06-012611			8 VOAs	↓	↓	↓					MS/MSD
1330	↓	Soil	-10	IDW-soil-012611			3 jars	X	X	X					
—	1-26	AQ	-11	QCTB-012611 (trip blank)			2 VOAs	X							

FOR LAB USE ONLY

ADDITIONAL INSTRUCTIONS:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action (NAC 445.0636 (c) (2)). Sampled By: [signature]

Relinquished by: (Signature/Affiliation)	Received by: (Signature/Affiliation)	Date:	Time:
[signature] CH2MHill 1-27-11 11:55	[signature] Alpha Analytical	1/27/11	1155
[signature] Alpha Analytical 1-27-11 1155	Elizabeth Adcox / Alpha	1-28-11	1212

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

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Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

CH2M Hill
1000 Wilshire Boulevard
Los Angeles, CA 90017

Attn: Daniel Jablonski
Phone: (213) 228-8271
Fax: (714) 424-2135
Date Received : 01/28/11

Job: KMEP Norwalk

Metals by ICPMS
EPA Method SW6020 / SW6020A

	Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **IDW-SOIL-012611**					
Lab ID : CHH11012804-10A	Beryllium (Be)	ND	1.0 mg/Kg	02/09/11	02/10/11
Date Sampled 01/26/11 13:30	Vanadium (V)	34	1.0 mg/Kg	02/09/11	02/10/11
	Chromium (Cr)	19	1.0 mg/Kg	02/09/11	02/10/11
	Cobalt (Co)	7.0	1.0 mg/Kg	02/09/11	02/10/11
	Nickel (Ni)	14	2.0 mg/Kg	02/09/11	02/10/11
	Copper (Cu)	17	2.0 mg/Kg	02/09/11	02/10/11
	Zinc (Zn)	41	20 mg/Kg	02/09/11	02/10/11
	Arsenic (As)	5.2	1.0 mg/Kg	02/09/11	02/10/11
	Selenium (Se)	ND	1.0 mg/Kg	02/09/11	02/10/11
	Molybdenum (Mo)	ND	1.0 mg/Kg	02/09/11	02/10/11
	Silver (Ag)	ND	1.0 mg/Kg	02/09/11	02/10/11
	Cadmium (Cd)	ND	1.0 mg/Kg	02/09/11	02/10/11
	Antimony (Sb)	ND	1.0 mg/Kg	02/09/11	02/10/11
	Barium (Ba)	110	1.0 mg/Kg	02/09/11	02/10/11
	Mercury (Hg)	ND	0.20 mg/Kg	02/09/11	02/10/11
	Thallium (Tl)	ND	1.0 mg/Kg	02/09/11	02/10/11
	Lead (Pb)	3.8	1.0 mg/Kg	02/09/11	02/10/11

Sample results were calculated on a wet weight basis.
ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/15/11
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

CH2M Hill
1000 Wilshire Boulevard
Los Angeles, CA 90017

Attn: Daniel Jablonski
Phone: (213) 228-8271
Fax: (714) 424-2135
Date Received : 01/28/11

Job: KMEP Norwalk

Percent Moisture
ASTM D2216

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **IDW-SOIL-012611**				
Lab ID : CHH11012804-10A Percent Moisture	31	0.10 %	02/03/11	02/03/11
Date Sampled 01/26/11 13:30				

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

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2/4/11
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

CH2M Hill
1000 Wilshire Boulevard
Los Angeles, CA 90017

Attn: Daniel Jablonski
Phone: (213) 228-8271
Fax: (714) 424-2135
Date Received : 01/28/11

Job: KMEP Norwalk

Total Petroleum Hydrocarbons - Extractable (TPH-E) EPA Method SW8015B
Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B
Volatile Organic Compounds (VOCs) EPA Method SW8260B

		Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID :	**IDW-SOIL-012611**					
Lab ID :	CHH11012804-10A	TPH-E (Fuel Product)	ND	15 mg/Kg-dry	02/01/11	02/03/11
Date Sampled	01/26/11 13:30	Surr: Nonane	123	(62-161) %REC	02/01/11	02/03/11
		TPH-P (GRO)	ND	1.5 mg/Kg-dry	01/31/11	01/31/11
		Tertiary Butyl Alcohol (TBA)	ND	290 µg/Kg-dry	01/31/11	01/31/11
		Methyl tert-butyl ether (MTBE)	ND	7.3 µg/Kg-dry	01/31/11	01/31/11
		Di-isopropyl Ether (DIPE)	ND	20 µg/Kg-dry	01/31/11	01/31/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	20 µg/Kg-dry	01/31/11	01/31/11
		Benzene	ND	7.3 µg/Kg-dry	01/31/11	01/31/11
		Tertiary Amyl Methyl Ether (TAME)	ND	20 µg/Kg-dry	01/31/11	01/31/11
		Toluene	ND	7.3 µg/Kg-dry	01/31/11	01/31/11
		Ethylbenzene	ND	7.3 µg/Kg-dry	01/31/11	01/31/11
		m,p-Xylene	ND	7.3 µg/Kg-dry	01/31/11	01/31/11
		o-Xylene	ND	7.3 µg/Kg-dry	01/31/11	01/31/11
		Surr: 1,2-Dichloroethane-d4	99	(70-130) %REC	01/31/11	01/31/11
		Surr: Toluene-d8	104	(70-130) %REC	01/31/11	01/31/11
		Surr: 4-Bromofluorobenzene	99	(70-130) %REC	01/31/11	01/31/11

Gasoline Range Organics (GRO) C4-C13

Concentrations and reporting limits are based on dry weights.
ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

RS
2/4/11
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

CH2M Hill
1000 Wilshire Boulevard
Los Angeles, CA 90017

Attn: Daniel Jablonski
Phone: (213) 228-8271
Fax: (714) 424-2135
Date Received : 01/28/11

Job: KMEP Norwalk

Total Petroleum Hydrocarbons - Extractable (TPH-E) EPA Method SW8015B
Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B
Volatile Organic Compounds (VOCs) EPA Method SW8260B

		Parameter	Concentration		Reporting Limit	Date Extracted	Date Analyzed
Client ID :	**GB-20-34-04-012611**						
Lab ID :	CHH11012804-01A	TPH-E (Fuel Product)	0.22	**	0.10 mg/L	01/31/11	01/31/11
Date Sampled	01/26/11 08:30	Surr: Nonane	101		(49-145) %REC	01/31/11	01/31/11
		TPH-P (GRO)	ND		0.050 mg/L	02/02/11	02/02/11
		Tertiary Butyl Alcohol (TBA)	ND		10 µg/L	02/02/11	02/02/11
		Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	02/02/11	02/02/11
		Di-isopropyl Ether (DIPE)	ND		1.0 µg/L	02/02/11	02/02/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND		1.0 µg/L	02/02/11	02/02/11
		Benzene	ND		0.50 µg/L	02/02/11	02/02/11
		Tertiary Amyl Methyl Ether (TAME)	ND		1.0 µg/L	02/02/11	02/02/11
		Toluene	ND		0.50 µg/L	02/02/11	02/02/11
		Ethylbenzene	ND		0.50 µg/L	02/02/11	02/02/11
		m,p-Xylene	ND		0.50 µg/L	02/02/11	02/02/11
		o-Xylene	ND		0.50 µg/L	02/02/11	02/02/11
		Surr: 1,2-Dichloroethane-d4	99		(70-130) %REC	02/02/11	02/02/11
		Surr: Toluene-d8	101		(70-130) %REC	02/02/11	02/02/11
		Surr: 4-Bromofluorobenzene	95		(70-130) %REC	02/02/11	02/02/11
Client ID :	**GB-20-39-04-012611**						
Lab ID :	CHH11012804-02A	TPH-E (Fuel Product)	ND		0.10 mg/L	01/31/11	01/31/11
Date Sampled	01/26/11 09:00	Surr: Nonane	100		(49-145) %REC	01/31/11	01/31/11
		TPH-P (GRO)	ND		0.050 mg/L	02/02/11	02/02/11
		Tertiary Butyl Alcohol (TBA)	ND		10 µg/L	02/02/11	02/02/11
		Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	02/02/11	02/02/11
		Di-isopropyl Ether (DIPE)	ND		1.0 µg/L	02/02/11	02/02/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND		1.0 µg/L	02/02/11	02/02/11
		Benzene	ND		0.50 µg/L	02/02/11	02/02/11
		Tertiary Amyl Methyl Ether (TAME)	ND		1.0 µg/L	02/02/11	02/02/11
		Toluene	ND		0.50 µg/L	02/02/11	02/02/11
		Ethylbenzene	ND		0.50 µg/L	02/02/11	02/02/11
		m,p-Xylene	ND		0.50 µg/L	02/02/11	02/02/11
		o-Xylene	ND		0.50 µg/L	02/02/11	02/02/11
		Surr: 1,2-Dichloroethane-d4	101		(70-130) %REC	02/02/11	02/02/11
		Surr: Toluene-d8	98		(70-130) %REC	02/02/11	02/02/11
		Surr: 4-Bromofluorobenzene	95		(70-130) %REC	02/02/11	02/02/11

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Client ID :	**QCEB-012611**					
Lab ID :	CHH11012804-03A	TPH-E (Fuel Product)	ND	0.10 mg/L	01/31/11	01/31/11
Date Sampled	01/26/11 09:15	Surr: Nonane	100	(49-145) %REC	01/31/11	01/31/11
		TPH-P (GRO)	ND	0.050 mg/L	02/02/11	02/02/11
		Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	02/02/11	02/02/11
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	02/02/11	02/02/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	02/02/11	02/02/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	02/02/11	02/02/11
		Benzene	ND	0.50 µg/L	02/02/11	02/02/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	02/02/11	02/02/11
		Toluene	ND	0.50 µg/L	02/02/11	02/02/11
		Ethylbenzene	ND	0.50 µg/L	02/02/11	02/02/11
		m,p-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		o-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		Surr: 1,2-Dichloroethane-d4	102	(70-130) %REC	02/02/11	02/02/11
		Surr: Toluene-d8	100	(70-130) %REC	02/02/11	02/02/11
		Surr: 4-Bromofluorobenzene	99	(70-130) %REC	02/02/11	02/02/11
Client ID :	**GB-20-45-04-012611**					
Lab ID :	CHH11012804-04A	TPH-E (Fuel Product)	ND	0.10 mg/L	01/31/11	01/31/11
Date Sampled	01/26/11 09:50	Surr: Nonane	105	(49-145) %REC	01/31/11	01/31/11
		TPH-P (GRO)	ND	0.050 mg/L	02/02/11	02/02/11
		Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	02/02/11	02/02/11
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	02/02/11	02/02/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	02/02/11	02/02/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	02/02/11	02/02/11
		Benzene	ND	0.50 µg/L	02/02/11	02/02/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	02/02/11	02/02/11
		Toluene	ND	0.50 µg/L	02/02/11	02/02/11
		Ethylbenzene	ND	0.50 µg/L	02/02/11	02/02/11
		m,p-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		o-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		Surr: 1,2-Dichloroethane-d4	106	(70-130) %REC	02/02/11	02/02/11
		Surr: Toluene-d8	100	(70-130) %REC	02/02/11	02/02/11
		Surr: 4-Bromofluorobenzene	91	(70-130) %REC	02/02/11	02/02/11
Client ID :	**GB-20-45-05-012611**					
Lab ID :	CHH11012804-05A	TPH-E (Fuel Product)	ND	0.10 mg/L	01/31/11	01/31/11
Date Sampled	01/26/11 09:55	Surr: Nonane	102	(49-145) %REC	01/31/11	01/31/11
		TPH-P (GRO)	ND	0.050 mg/L	02/02/11	02/02/11
		Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	02/02/11	02/02/11
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	02/02/11	02/02/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	02/02/11	02/02/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	02/02/11	02/02/11
		Benzene	ND	0.50 µg/L	02/02/11	02/02/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	02/02/11	02/02/11
		Toluene	ND	0.50 µg/L	02/02/11	02/02/11
		Ethylbenzene	ND	0.50 µg/L	02/02/11	02/02/11
		m,p-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		o-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		Surr: 1,2-Dichloroethane-d4	106	(70-130) %REC	02/02/11	02/02/11
		Surr: Toluene-d8	102	(70-130) %REC	02/02/11	02/02/11
		Surr: 4-Bromofluorobenzene	90	(70-130) %REC	02/02/11	02/02/11

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Client ID :	**GB-19-34-04-012611**					
Lab ID :	CHH11012804-06A	TPH-E (Fuel Product)	ND	0.10 mg/L	01/31/11	01/31/11
Date Sampled	01/26/11 11:30	Surr: Nonane	99	(49-145) %REC	01/31/11	01/31/11
		TPH-P (GRO)	ND	0.050 mg/L	02/02/11	02/02/11
		Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	02/02/11	02/02/11
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	02/02/11	02/02/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	02/02/11	02/02/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	02/02/11	02/02/11
		Benzene	ND	0.50 µg/L	02/02/11	02/02/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	02/02/11	02/02/11
		Toluene	ND	0.50 µg/L	02/02/11	02/02/11
		Ethylbenzene	ND	0.50 µg/L	02/02/11	02/02/11
		m,p-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		o-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		Surr: 1,2-Dichloroethane-d4	104	(70-130) %REC	02/02/11	02/02/11
		Surr: Toluene-d8	99	(70-130) %REC	02/02/11	02/02/11
		Surr: 4-Bromofluorobenzene	95	(70-130) %REC	02/02/11	02/02/11
Client ID :	**GB-19-41-04-012611**					
Lab ID :	CHH11012804-07A	TPH-E (Fuel Product)	ND	0.10 mg/L	01/31/11	01/31/11
Date Sampled	01/26/11 11:55	Surr: Nonane	96	(49-145) %REC	01/31/11	01/31/11
		TPH-P (GRO)	ND	0.050 mg/L	02/02/11	02/02/11
		Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	02/02/11	02/02/11
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	02/02/11	02/02/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	02/02/11	02/02/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	02/02/11	02/02/11
		Benzene	ND	0.50 µg/L	02/02/11	02/02/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	02/02/11	02/02/11
		Toluene	ND	0.50 µg/L	02/02/11	02/02/11
		Ethylbenzene	ND	0.50 µg/L	02/02/11	02/02/11
		m,p-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		o-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		Surr: 1,2-Dichloroethane-d4	107	(70-130) %REC	02/02/11	02/02/11
		Surr: Toluene-d8	98	(70-130) %REC	02/02/11	02/02/11
		Surr: 4-Bromofluorobenzene	93	(70-130) %REC	02/02/11	02/02/11
Client ID :	**GB-19-46-04-012611**					
Lab ID :	CHH11012804-08A	TPH-E (Fuel Product)	ND	0.10 mg/L	01/31/11	02/01/11
Date Sampled	01/26/11 12:20	Surr: Nonane	99	(49-145) %REC	01/31/11	02/01/11
		TPH-P (GRO)	ND	0.050 mg/L	02/02/11	02/02/11
		Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	02/02/11	02/02/11
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	02/02/11	02/02/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	02/02/11	02/02/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	02/02/11	02/02/11
		Benzene	ND	0.50 µg/L	02/02/11	02/02/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	02/02/11	02/02/11
		Toluene	ND	0.50 µg/L	02/02/11	02/02/11
		Ethylbenzene	ND	0.50 µg/L	02/02/11	02/02/11
		m,p-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		o-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		Surr: 1,2-Dichloroethane-d4	110	(70-130) %REC	02/02/11	02/02/11
		Surr: Toluene-d8	99	(70-130) %REC	02/02/11	02/02/11
		Surr: 4-Bromofluorobenzene	94	(70-130) %REC	02/02/11	02/02/11

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Client ID :	**GB-19-46-06-012611**					
Lab ID :	CHH11012804-09A	TPH-E (Fuel Product)	ND	0.10 mg/L	01/31/11	02/01/11
Date Sampled	01/26/11 12:25	Surr: Nonane	100	(49-145) %REC	01/31/11	02/01/11
		TPH-P (GRO)	ND	0.050 mg/L	02/02/11	02/02/11
		Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	02/02/11	02/02/11
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	02/02/11	02/02/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	02/02/11	02/02/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	02/02/11	02/02/11
		Benzene	ND	0.50 µg/L	02/02/11	02/02/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	02/02/11	02/02/11
		Toluene	ND	0.50 µg/L	02/02/11	02/02/11
		Ethylbenzene	ND	0.50 µg/L	02/02/11	02/02/11
		m,p-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		o-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		Surr: 1,2-Dichloroethane-d4	104	(70-130) %REC	02/02/11	02/02/11
		Surr: Toluene-d8	102	(70-130) %REC	02/02/11	02/02/11
		Surr: 4-Bromofluorobenzene	94	(70-130) %REC	02/02/11	02/02/11
Client ID :	**QCTB-012611**					
Lab ID :	CHH11012804-11A	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	02/02/11	02/02/11
Date Sampled	01/26/11 00:00	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	02/02/11	02/02/11
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	02/02/11	02/02/11
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	02/02/11	02/02/11
		Benzene	ND	0.50 µg/L	02/02/11	02/02/11
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	02/02/11	02/02/11
		Toluene	ND	0.50 µg/L	02/02/11	02/02/11
		Ethylbenzene	ND	0.50 µg/L	02/02/11	02/02/11
		m,p-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		o-Xylene	ND	0.50 µg/L	02/02/11	02/02/11
		Surr: 1,2-Dichloroethane-d4	84	(70-130) %REC	02/02/11	02/02/11
		Surr: Toluene-d8	105	(70-130) %REC	02/02/11	02/02/11
		Surr: 4-Bromofluorobenzene	96	(70-130) %REC	02/02/11	02/02/11

**Note: Reported TPH-E (Fuel Product) may contain undifferentiated diesel range hydrocarbons.

All VOAs that were provided for sample 01A had an air bubble.

Gasoline Range Organics (GRO) C4-C13

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/4/11

Report Date

Alpha Analytical, Inc.

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VOC Sample Preservation Report

Work Order: CHH11012804 **Job:** KMEP Norwalk

Alpha's Sample ID	Client's Sample ID	Matrix	pH
11012804-01A	GB-20-34-04-012611	Aqueous	5
11012804-02A	GB-20-39-04-012611	Aqueous	5
11012804-03A	QCEB-012611	Aqueous	2
11012804-04A	GB-20-45-04-012611	Aqueous	4
11012804-05A	GB-20-45-05-012611	Aqueous	2
11012804-06A	GB-19-34-04-012611	Aqueous	2
11012804-07A	GB-19-41-04-012611	Aqueous	5
11012804-08A	GB-19-46-04-012611	Aqueous	3
11012804-09A	GB-19-46-06-012611	Aqueous	5
11012804-11A	QCTB-012611	Aqueous	2

2/4/11

Report Date

Alpha Analytical, Inc.

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Date: *15-Feb-11*

QC Summary Report

Work Order: 11012804

Method Blank

Type: **MBLK** Test Code: **EPA Method SW6020 / SW6020A**

File ID: **021011.B\019_M2.D** Batch ID: **25959** Analysis Date: **02/10/2011 15:45**

Sample ID: **MB-25959** Units : **mg/Kg** Run ID: **ICP/MS_110210A** Prep Date: **02/09/2011 12:34**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Beryllium (Be)	ND	1								
Vanadium (V)	ND	1								
Chromium (Cr)	ND	1								
Cobalt (Co)	ND	1								
Nickel (Ni)	ND	2								
Copper (Cu)	ND	2								
Zinc (Zn)	ND	20								
Arsenic (As)	ND	1								
Selenium (Se)	ND	1								
Molybdenum (Mo)	ND	1								
Silver (Ag)	ND	1								
Cadmium (Cd)	ND	1								
Antimony (Sb)	ND	1								
Barium (Ba)	ND	1								
Mercury (Hg)	ND	0.2								
Thallium (Tl)	ND	1								
Lead (Pb)	ND	1								

Laboratory Control Spike

Type: **LCS** Test Code: **EPA Method SW6020 / SW6020A**

File ID: **021011.B\020_M.D** Batch ID: **25959** Analysis Date: **02/10/2011 15:51**

Sample ID: **LCS-25959** Units : **mg/Kg** Run ID: **ICP/MS_110210A** Prep Date: **02/09/2011 12:34**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Beryllium (Be)	27.2	1	25		109	80	120			
Vanadium (V)	25.3	1	25		101	80	120			
Chromium (Cr)	28.1	1	25		112	80	120			
Cobalt (Co)	26.5	1	25		106	80	120			
Nickel (Ni)	27.2	2	25		109	80	120			
Copper (Cu)	27.2	2	25		109	80	120			
Zinc (Zn)	27.2	20	25		109	80	120			
Arsenic (As)	26.8	1	25		107	80	120			
Selenium (Se)	27.2	1	25		109	80	120			
Molybdenum (Mo)	27.2	1	25		109	80	120			
Silver (Ag)	26.3	1	25		105	80	120			
Cadmium (Cd)	27.8	1	25		111	80	120			
Antimony (Sb)	25.4	1	25		102	80	120			
Barium (Ba)	291	1	250		116	80	120			
Mercury (Hg)	0.49	0.2	0.5		98	80	120			
Thallium (Tl)	26.3	1	25		105	80	120			
Lead (Pb)	27.7	1	25		111	80	120			

Sample Matrix Spike

Type: **MS** Test Code: **EPA Method SW6020 / SW6020A**

File ID: **021011.B\025_M.D** Batch ID: **25959** Analysis Date: **02/10/2011 16:19**

Sample ID: **11020842-01AMS** Units : **mg/Kg** Run ID: **ICP/MS_110210A** Prep Date: **02/09/2011 12:34**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Beryllium (Be)	27.3	1	25	0	109	75	125			
Vanadium (V)	76.4	1	25	54.04	89	75	125			
Chromium (Cr)	78	1	25	60.18	71	75	125			M2
Cobalt (Co)	35.4	1	25	10.66	99	75	125			
Nickel (Ni)	104	2	25	83.98	81	75	125			
Copper (Cu)	45.2	2	25	21.77	94	75	125			
Zinc (Zn)	67	20	25	45.3	87	75	125			
Arsenic (As)	29.8	1	25	4.292	102	75	125			
Selenium (Se)	25.8	1	25	0	103	75	125			
Molybdenum (Mo)	26.1	1	25	0	105	75	125			
Silver (Ag)	26	1	25	0	104	75	125			
Cadmium (Cd)	27.7	1	25	0	111	75	125			
Antimony (Sb)	25.6	1	25	0	102	75	125			
Barium (Ba)	494	1	250	238.5	102	75	125			
Mercury (Hg)	0.654	0.2	0.5	0	131	75	125			M1
Thallium (Tl)	26.2	1	25	0	105	75	125			
Lead (Pb)	33.3	1	25	7.366	104	75	125			

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QC Summary Report

Work Order: 11012804

Sample Matrix Spike Duplicate Type: **MSD** Test Code: **EPA Method SW6020 / SW6020A**

File ID: **021011.B\026_M.D** Batch ID: **25959** Analysis Date: **02/10/2011 16:25**

Sample ID: **11020842-01AMSD** Units : **mg/Kg** Run ID: **ICP/MS_110210A** Prep Date: **02/09/2011 12:34**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Beryllium (Be)	26.6	1	25	0	106	75	125	27.31	2.6(20)	
Vanadium (V)	78.7	1	25	54.04	99	75	125	76.4	3.0(20)	
Chromium (Cr)	78	1	25	60.18	71	75	125	78	0.0(20)	M2
Cobalt (Co)	35.3	1	25	10.66	99	75	125	35.38	0.1(20)	
Nickel (Ni)	107	2	25	83.98	92	75	125	104.3	2.5(20)	
Copper (Cu)	45.5	2	25	21.77	95	75	125	45.16	0.6(20)	
Zinc (Zn)	67.3	20	25	45.3	88	75	125	67.01	0.5(20)	
Arsenic (As)	28.9	1	25	4.292	99	75	125	29.81	3.0(20)	
Selenium (Se)	24.2	1	25	0	97	75	125	25.84	6.6(20)	
Molybdenum (Mo)	25.5	1	25	0	102	75	125	26.14	2.5(20)	
Silver (Ag)	25.6	1	25	0	102	75	125	26.04	1.7(20)	
Cadmium (Cd)	27.1	1	25	0	108	75	125	27.68	2.2(20)	
Antimony (Sb)	24.9	1	25	0	99	75	125	25.6	2.9(20)	
Barium (Ba)	492	1	250	238.5	101	75	125	493.6	0.3(20)	
Mercury (Hg)	0.673	0.2	0.5	0	135	75	125	0.6543	2.8(20)	M1
Thallium (Tl)	26	1	25	0	104	75	125	26.17	0.7(20)	
Lead (Pb)	32.6	1	25	7.366	101	75	125	33.29	2.0(20)	

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

M1 = Matrix spike recovery was high, the method control sample recovery was acceptable.

M2 = Matrix spike recovery was low, the method control sample recovery was acceptable.

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QC Summary Report

Work Order: 11012804

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/C Ext**

File ID: **2A02031109.D** Batch ID: **25907** Analysis Date: **02/03/2011 13:03**

Sample ID: **MBLK-25907** Units : **mg/Kg** Run ID: **FID_2_110201A** Prep Date: **02/01/2011 12:50**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (Fuel Product)	ND	5								
Surr: Nonane	6.47		6		108	62	161			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/C Ext**

File ID: **2A02031108.D** Batch ID: **25907** Analysis Date: **02/03/2011 12:38**

Sample ID: **LCS-25907** Units : **mg/Kg** Run ID: **FID_2_110201A** Prep Date: **02/01/2011 12:50**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	112	5	100		112	70	130			
Surr: Nonane	6.92		6		115	62	161			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/C Ext**

File ID: **2A02031110.D** Batch ID: **25907** Analysis Date: **02/03/2011 13:28**

Sample ID: **11012825-01AMS** Units : **mg/Kg** Run ID: **FID_2_110201A** Prep Date: **02/01/2011 12:50**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	195	5	100	69.21	126	50	149			
Surr: Nonane	8.69		6		145	62	161			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/C Ext**

File ID: **2A02031111.D** Batch ID: **25907** Analysis Date: **02/03/2011 13:53**

Sample ID: **11012825-01AMSD** Units : **mg/Kg** Run ID: **FID_2_110201A** Prep Date: **02/01/2011 12:50**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	162	5	100	69.21	92	50	149	194.8	18.6(46)	
Surr: Nonane	7.24		6		121	62	161			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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QC Summary Report

Work Order: 11012804

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/C Ext**

File ID: **7A01311106.D** Batch ID: **25899** Analysis Date: **01/31/2011 12:41**

Sample ID: **MBLK-25899** Units : **mg/L** Run ID: **FID_7_110131A** Prep Date: **01/31/2011 10:08**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (Fuel Product)	ND	0.1								
Surr: Nonane	0.153		0.15		102	49	145			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/C Ext**

File ID: **7A01311107.D** Batch ID: **25899** Analysis Date: **01/31/2011 13:08**

Sample ID: **LCS-25899** Units : **mg/L** Run ID: **FID_7_110131A** Prep Date: **01/31/2011 10:08**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	2.3	0.05	2.5		92	70	130			
Surr: Nonane	0.156		0.15		104	49	145			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/C Ext**

File ID: **7A01311109.D** Batch ID: **25899** Analysis Date: **01/31/2011 14:01**

Sample ID: **11013101-01AMS** Units : **mg/L** Run ID: **FID_7_110131A** Prep Date: **01/31/2011 10:08**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	2.23	0.05	2.5	0	89	53	150			
Surr: Nonane	0.161		0.15		107	49	145			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/C Ext**

File ID: **7A01311110.D** Batch ID: **25899** Analysis Date: **01/31/2011 14:27**

Sample ID: **11013101-01AMSD** Units : **mg/L** Run ID: **FID_7_110131A** Prep Date: **01/31/2011 10:08**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	2.48	0.05	2.5	0	99	53	150	2.226	10.9(47)	
Surr: Nonane	0.146		0.15		97	49	145			

Comments:

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QC Summary Report

Work Order: 11012804

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/C**

File ID: **11013106.D** Batch ID: **MS08S5892B** Analysis Date: **01/31/2011 10:59**

Sample ID: **MBLK MS08S5892B** Units : **mg/Kg** Run ID: **MSD_08_110131A** Prep Date: **01/31/2011 10:59**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	1								
Surr: 1,2-Dichloroethane-d4	0.203		0.2		101	70	130			
Surr: Toluene-d8	0.209		0.2		105	70	130			
Surr: 4-Bromofluorobenzene	0.199		0.2		99.5	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/C**

File ID: **11013110.D** Batch ID: **MS08S5892B** Analysis Date: **01/31/2011 12:37**

Sample ID: **GLCS MS08S5892B** Units : **mg/Kg** Run ID: **MSD_08_110131A** Prep Date: **01/31/2011 12:37**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	17.4	2	16		109	63	148			
Surr: 1,2-Dichloroethane-d4	0.399		0.4		99.8	70	130			
Surr: Toluene-d8	0.381		0.4		95	70	130			
Surr: 4-Bromofluorobenzene	0.425		0.4		106	70	130			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/C**

File ID: **11013111.D** Batch ID: **MS08S5892B** Analysis Date: **01/31/2011 13:01**

Sample ID: **11012801-04AGS** Units : **mg/Kg** Run ID: **MSD_08_110131A** Prep Date: **01/31/2011 13:01**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	17.7	2	16	0	111	35	166			
Surr: 1,2-Dichloroethane-d4	0.397		0.4		99	70	130			
Surr: Toluene-d8	0.392		0.4		98	70	130			
Surr: 4-Bromofluorobenzene	0.442		0.4		110	70	130			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/C**

File ID: **11013112.D** Batch ID: **MS08S5892B** Analysis Date: **01/31/2011 13:26**

Sample ID: **11012801-04AGSD** Units : **mg/Kg** Run ID: **MSD_08_110131A** Prep Date: **01/31/2011 13:26**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	17	2	16	0	106	35	166	17.72	4.3(33)	
Surr: 1,2-Dichloroethane-d4	0.351		0.4		88	70	130			
Surr: Toluene-d8	0.398		0.4		99.6	70	130			
Surr: 4-Bromofluorobenzene	0.43		0.4		107	70	130			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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Work Order: 11012804

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/C**

File ID: **11020204.D** Batch ID: **MS12W0202B** Analysis Date: **02/02/2011 09:53**

Sample ID: **MBLK MS12W0202B** Units : **mg/L** Run ID: **MSD_12_110202A** Prep Date: **02/02/2011 09:53**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	0.05								
Surr: 1,2-Dichloroethane-d4	0.00968		0.01		97	70	130			
Surr: Toluene-d8	0.0105		0.01		105	70	130			
Surr: 4-Bromofluorobenzene	0.00916		0.01		92	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/C**

File ID: **11020202.D** Batch ID: **MS12W0202B** Analysis Date: **02/02/2011 09:07**

Sample ID: **GLCS MS12W0202B** Units : **mg/L** Run ID: **MSD_12_110202A** Prep Date: **02/02/2011 09:07**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	0.429	0.05	0.4		107	70	130			
Surr: 1,2-Dichloroethane-d4	0.00959		0.01		96	70	130			
Surr: Toluene-d8	0.00997		0.01		99.7	70	130			
Surr: 4-Bromofluorobenzene	0.00958		0.01		96	70	130			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/C**

File ID: **11020220.D** Batch ID: **MS12W0202B** Analysis Date: **02/02/2011 16:06**

Sample ID: **11012804-01AGS** Units : **mg/L** Run ID: **MSD_12_110202A** Prep Date: **02/02/2011 16:06**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2.08	0.25	2	0	104	51	144			
Surr: 1,2-Dichloroethane-d4	0.0457		0.05		91	70	130			
Surr: Toluene-d8	0.0507		0.05		101	70	130			
Surr: 4-Bromofluorobenzene	0.0505		0.05		101	70	130			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/C**

File ID: **11020221.D** Batch ID: **MS12W0202B** Analysis Date: **02/02/2011 16:29**

Sample ID: **11012804-01AGSD** Units : **mg/L** Run ID: **MSD_12_110202A** Prep Date: **02/02/2011 16:29**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2.02	0.25	2	0	101	51	144	2.079	2.7(29)	
Surr: 1,2-Dichloroethane-d4	0.0444		0.05		89	70	130			
Surr: Toluene-d8	0.0509		0.05		102	70	130			
Surr: 4-Bromofluorobenzene	0.0483		0.05		97	70	130			

Comments:

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QC Summary Report

Work Order: 11012804

Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **11013106.D** Batch ID: **MS08S5892A** Analysis Date: **01/31/2011 10:59**

Sample ID: **MBLK MS08S5892A** Units : **µg/Kg** Run ID: **MSD_08_110131A** Prep Date: **01/31/2011 10:59**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	ND	500								
Methyl tert-butyl ether (MTBE)	ND	5								
Di-isopropyl Ether (DIPE)	ND	20								
Ethyl Tertiary Butyl Ether (ETBE)	ND	20								
Benzene	ND	5								
Tertiary Amyl Methyl Ether (TAME)	ND	20								
Toluene	ND	5								
Ethylbenzene	ND	5								
m,p-Xylene	ND	5								
o-Xylene	ND	5								
Surr: 1,2-Dichloroethane-d4	203		200		101	70	130			
Surr: Toluene-d8	209		200		105	70	130			
Surr: 4-Bromofluorobenzene	199		200		99.5	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **11013107.D** Batch ID: **MS08S5892A** Analysis Date: **01/31/2011 11:24**

Sample ID: **LCS MS08S5892A** Units : **µg/Kg** Run ID: **MSD_08_110131A** Prep Date: **01/31/2011 11:24**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	2670	1000	4000		67	14	156			
Methyl tert-butyl ether (MTBE)	425	10	400		106	61	147			
Di-isopropyl Ether (DIPE)	494	20	400		124	68	150			
Ethyl Tertiary Butyl Ether (ETBE)	434	20	400		109	66	150			
Benzene	473	10	400		118	70	138			
Tertiary Amyl Methyl Ether (TAME)	410	20	400		102	61	148			
Toluene	418	10	400		104	70	137			
Ethylbenzene	439	10	400		110	70	138			
m,p-Xylene	396	10	400		99	70	145			
o-Xylene	390	10	400		98	70	145			
Surr: 1,2-Dichloroethane-d4	433		400		108	70	130			
Surr: Toluene-d8	367		400		92	70	130			
Surr: 4-Bromofluorobenzene	462		400		115	70	130			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8260B**

File ID: **11013108.D** Batch ID: **MS08S5892A** Analysis Date: **01/31/2011 11:48**

Sample ID: **11012801-04AMS** Units : **µg/Kg** Run ID: **MSD_08_110131A** Prep Date: **01/31/2011 11:48**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	1120	1000	4000	0	28	10	171			
Methyl tert-butyl ether (MTBE)	331	10	400	0	83	42	157			
Di-isopropyl Ether (DIPE)	428	20	400	0	107	49	157			
Ethyl Tertiary Butyl Ether (ETBE)	371	20	400	0	93	48	158			
Benzene	430	10	400	0	107	53	150			
Tertiary Amyl Methyl Ether (TAME)	363	20	400	0	91	45	152			
Toluene	407	10	400	0	102	51	149			
Ethylbenzene	425	10	400	0	106	54	150			
m,p-Xylene	397	10	400	16.37	95	50	161			
o-Xylene	379	10	400	0	95	35	177			
Surr: 1,2-Dichloroethane-d4	350		400		88	70	130			
Surr: Toluene-d8	370		400		93	70	130			
Surr: 4-Bromofluorobenzene	464		400		116	70	130			

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QC Summary Report

Work Order: 11012804

Sample Matrix Spike Duplicate Type **MSD** Test Code: **EPA Method SW8260B**

File ID: **11013109.D** Batch ID: **MS08S5892A** Analysis Date: **01/31/2011 12:13**

Sample ID: **11012801-04AMSD** Units : **µg/Kg** Run ID: **MSD_08_110131A** Prep Date: **01/31/2011 12:13**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	2820	1000	4000	0	71	10	171	1120	86.4(40)	R5
Methyl tert-butyl ether (MTBE)	404	10	400	0	101	42	157	330.5	20.1(32)	
Di-isopropyl Ether (DIPE)	469	20	400	0	117	49	157	428	9.1(31)	
Ethyl Tertiary Butyl Ether (ETBE)	420	20	400	0	105	48	158	370.5	12.6(31)	
Benzene	446	10	400	0	111	53	150	429.6	3.7(26)	
Tertiary Amyl Methyl Ether (TAME)	381	20	400	0	95	45	152	362.7	5.0(30)	
Toluene	396	10	400	0	99	51	149	407.2	2.7(26)	
Ethylbenzene	410	10	400	0	102	54	150	425	3.7(29)	
m,p-Xylene	383	10	400	16.37	92	50	161	397.1	3.6(38)	
o-Xylene	370	10	400	0	93	35	177	378.9	2.3(40)	
Surr: 1,2-Dichloroethane-d4	428		400		107	70	130			
Surr: Toluene-d8	369		400		92	70	130			
Surr: 4-Bromofluorobenzene	457		400		114	70	130			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

R5 = MS/MSD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *04-Feb-11*

QC Summary Report

Work Order: 11012804

Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **11020204.D** Batch ID: **MS12W0202A** Analysis Date: **02/02/2011 09:53**

Sample ID: **MBLK MS12W0202A** Units : **µg/L** Run ID: **MSD_12_110202A** Prep Date: **02/02/2011 09:53**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	ND	10								
Methyl tert-butyl ether (MTBE)	ND	0.5								
Di-isopropyl Ether (DIPE)	ND	1								
Ethyl Tertiary Butyl Ether (ETBE)	ND	1								
Benzene	ND	0.5								
Tertiary Amyl Methyl Ether (TAME)	ND	1								
Toluene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
o-Xylene	ND	0.5								
Surr: 1,2-Dichloroethane-d4	9.68		10		97	70	130			
Surr: Toluene-d8	10.5		10		105	70	130			
Surr: 4-Bromofluorobenzene	9.16		10		92	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **11020203.D** Batch ID: **MS12W0202A** Analysis Date: **02/02/2011 09:30**

Sample ID: **LCS MS12W0202A** Units : **µg/L** Run ID: **MSD_12_110202A** Prep Date: **02/02/2011 09:30**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	79.7	10	100		80	44	156			
Methyl tert-butyl ether (MTBE)	8.9	0.5	10		89	65	140			
Di-isopropyl Ether (DIPE)	7.75	1	10		78	70	130			
Ethyl Tertiary Butyl Ether (ETBE)	8.13	1	10		81	65	139			
Benzene	9.63	0.5	10		96	70	130			
Tertiary Amyl Methyl Ether (TAME)	8.86	1	10		89	68	134			
Toluene	9.37	0.5	10		94	80	120			
Ethylbenzene	10	0.5	10		100	80	120			
m,p-Xylene	10.1	0.5	10		101	70	130			
o-Xylene	10.5	0.5	10		105	70	130			
Surr: 1,2-Dichloroethane-d4	9.18		10		92	70	130			
Surr: Toluene-d8	9.94		10		99	70	130			
Surr: 4-Bromofluorobenzene	9.59		10		96	70	130			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8260B**

File ID: **11020218.D** Batch ID: **MS12W0202A** Analysis Date: **02/02/2011 15:20**

Sample ID: **11012804-01AMS** Units : **µg/L** Run ID: **MSD_12_110202A** Prep Date: **02/02/2011 15:20**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	371	25	500	0	74	41	157			
Methyl tert-butyl ether (MTBE)	41	1.3	50	0	82	47	150			
Di-isopropyl Ether (DIPE)	34.4	2.5	50	0	69	59	139			
Ethyl Tertiary Butyl Ether (ETBE)	36.9	2.5	50	0	74	59	182			
Benzene	41.1	1.3	50	0	82	59	138			
Tertiary Amyl Methyl Ether (TAME)	40	2.5	50	0	80	63	135			
Toluene	39.5	1.3	50	0	79	68	130			
Ethylbenzene	42.1	1.3	50	0	84	68	130			
m,p-Xylene	43.2	1.3	50	0	86	68	131			
o-Xylene	44.2	1.3	50	0	88	70	130			
Surr: 1,2-Dichloroethane-d4	48		50		96	70	130			
Surr: Toluene-d8	49.5		50		99	70	130			
Surr: 4-Bromofluorobenzene	48.7		50		97	70	130			

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *04-Feb-11*

QC Summary Report

Work Order: 11012804

Sample Matrix Spike Duplicate Type **MSD** Test Code: **EPA Method SW8260B**

File ID: **11020219.D** Batch ID: **MS12W0202A** Analysis Date: **02/02/2011 15:43**

Sample ID: **11012804-01AMSD** Units : **µg/L** Run ID: **MSD_12_110202A** Prep Date: **02/02/2011 15:43**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	360	25	500	0	72	41	157	370.7	2.9(30)	
Methyl tert-butyl ether (MTBE)	41.3	1.3	50	0	83	47	150	41.04	0.5(40)	
Di-isopropyl Ether (DIPE)	35.6	2.5	50	0	71	59	139	34.38	3.5(20)	
Ethyl Tertiary Butyl Ether (ETBE)	37.7	2.5	50	0	75	59	182	36.91	2.1(40)	
Benzene	43.7	1.3	50	0	87	59	138	41.05	6.2(21)	
Tertiary Amyl Methyl Ether (TAME)	41.6	2.5	50	0	83	63	135	39.97	4.0(40)	
Toluene	43	1.3	50	0	86	68	130	39.5	8.4(20)	
Ethylbenzene	46.2	1.3	50	0	92	68	130	42.05	9.4(20)	
m,p-Xylene	46.9	1.3	50	0	94	68	131	43.16	8.4(20)	
o-Xylene	48.1	1.3	50	0	96	70	130	44.21	8.5(20)	
Surr: 1,2-Dichloroethane-d4	45.6		50		91	70	130			
Surr: Toluene-d8	50.1		50		100	70	130			
Surr: 4-Bromofluorobenzene	48.6		50		97	70	130			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

AMENDED #2

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : CHHL11012804

Report Due By : 5:00 PM On : 07-Feb-2011

Amendment #2 Due: 2/16/11

Client:
CH2M Hill
1000 Wilshire Boulevard
21st Floor
Los Angeles, CA 90017

Report Attention	Phone Number	EMail Address
Daniel Jablonski	(213) 228-8271 x	daniel.jablonski@ch2m.com
Vladimir Carino	(213) 228-8271 x	vladimir.carino@ch2m.com

EDD Required : **Yes**

Sampled by : Matt Mayry

PO :

Client's COC # : 32000 Job : KMEP Norwalk

Cooler Temp	Samples Received	Date Printed
2 °C	28-Jan-2011	**08-Feb-2011**

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests: METALS_SO	P_MOIST	TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W	Sample Remarks
CHH11012804-01A	GB-20-34-04-012611	AQ	01/26/11 08:30	16	0	6				TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	All voas received contain air bubbles > 6mm.
CHH11012804-02A	GB-20-39-04-012611	AQ	01/26/11 09:00	8	0	6				TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	
CHH11012804-03A	QCEB-012611	AQ	01/26/11 09:15	6	0	6				TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	
CHH11012804-04A	GB-20-45-04-012611	AQ	01/26/11 09:50	7	0	6				TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	
CHH11012804-05A	GB-20-45-05-012611	AQ	01/26/11 09:55	7	0	6				TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	
CHH11012804-06A	GB-19-34-04-012611	AQ	01/26/11 11:30	8	0	6				TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	
CHH11012804-07A	GB-19-41-04-012611	AQ	01/26/11 11:55	8	0	6				TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	
CHH11012804-08A	GB-19-46-04-012611	AQ	01/26/11 12:20	6	0	6				TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	
CHH11012804-09A	GB-19-46-06-012611	AQ	01/26/11 12:25	8	0	6				TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	MS/MSD
CHH11012804-10A	IDW-SOIL-012611	SO	01/26/11 13:30	3	0	6	CAM_17_TTLC	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C		Report on a dry weight basis. (3) 4 oz. jars

Comments: Security seals intact. Frozen ice. Analysts: Run two analyses in order to achieve lower reporting limits for all other analytes due to high TBA values. Amended 2/4/11 @ 14:21: Corrected sample ID for sample -01A due to login error. EA : Amended 2/8/11: Per email from Matt Mayry added CAM 17 to sample -10A on a 6 day TAT, Due 2/16/11. EA

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	2-8-11 1201

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

AMENDED #2

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : CHHL11012804

Report Due By : 5:00 PM On : 07-Feb-2011

Client:
CH2M Hill
1000 Wilshire Boulevard
21st Floor
Los Angeles, CA 90017

Report Attention	Phone Number	EMail Address
Daniel Jablonski	(213) 228-8271 x	daniel.jablonski@ch2m.com
Vladimir Carino	(213) 228-8271 x	vladimir.carino@ch2m.com

EDD Required : **Yes**

Sampled by : Matt Mayry

PO :

Client's COC # : 32000 Job : KMEP Norwalk

Cooler Temp	Samples Received	Date Printed
2 °C	28-Jan-2011	**08-Feb-2011**

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests METALS_SO	P_MOIST	TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W	Sample Remarks
CHH11012804-11A	QCTB-012611	AQ	01/26/11 00:00	2	0	6								TPHE(0.10)	2 Reno Trip Blanks (1) 11/22/10 (1) 12/21/10

Comments: Security seals intact. Frozen ice. Analysts: Run two analyses in order to achieve lower reporting limits for all other analytes due to high TBA values. Amended 2/4/11 @ 14:21: Corrected sample ID for sample -01A due to login error. EA : Amended 2/8/11: Per email from Matt Mayry added CAM 17 to sample -10A on a 6 day TAT, Due 2/16/11. EA

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	2.8.11 1201

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

AMENDED

Billing Information :

CHAIN-OF-CUSTODY RECORD

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WorkOrder : CHHL11012804

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Vladimir Carino	(213) 228-8271 x	vladimir.carino@ch2m.com

EDD Required : **Yes**

Sampled by : Matt Mayry

PO :

Client's COC # : 32000 Job : KMEP Norwalk

Cooler Temp	Samples Received	Date Printed
2 °C	28-Jan-2011	04-Feb-2011

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests P_MOIST	TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W	Sample Remarks
CHH11012804-01A	GB-20-34-04-012611	AQ	01/26/11 08:30	16	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	All voas received contain air bubbles > 6mm.
CHH11012804-02A	GB-20-39-04-012611	AQ	01/26/11 09:00	8	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	
CHH11012804-03A	QCEB-012611	AQ	01/26/11 09:15	6	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	
CHH11012804-04A	GB-20-45-04-012611	AQ	01/26/11 09:50	7	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	
CHH11012804-05A	GB-20-45-05-012611	AQ	01/26/11 09:55	7	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	
CHH11012804-06A	GB-19-34-04-012611	AQ	01/26/11 11:30	8	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	
CHH11012804-07A	GB-19-41-04-012611	AQ	01/26/11 11:55	8	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	
CHH11012804-08A	GB-19-46-04-012611	AQ	01/26/11 12:20	6	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	
CHH11012804-09A	GB-19-46-06-012611	AQ	01/26/11 12:25	8	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)	MS/MSD
CHH11012804-10A	IDW-SOIL-012611	SO	01/26/11 13:30	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C		Report on a dry weight basis. (3) 4 oz. jars

Comments: Security seals intact. Frozen ice. Analysts: Run two analyses in order to achieve lower reporting limits for all other analytes due to high TBA values. Amended 2/4/11 @ 14:21: Corrected sample ID for sample -01A due to login error. EA :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	2-4-11 1423

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
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Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA AMENDED

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : CHHL11012804

Report Due By : 5:00 PM On : 07-Feb-2011

Client:
CH2M Hill
1000 Wilshire Boulevard
21st Floor
Los Angeles, CA 90017

Report Attention	Phone Number	EMail Address
Daniel Jablonski	(213) 228-8271 x	daniel.jablonski@ch2m.com
Vladimir Carino	(213) 228-8271 x	vladimir.carino@ch2m.com

EDD Required : **Yes**

Sampled by : Matt Mayry

PO :

Client's COC # : 32000 Job : KMEP Norwalk

Cooler Temp	Samples Received	Date Printed
2 °C	28-Jan-2011	**04-Feb-2011**

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests P_MOIST	TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W		Sample Remarks
CHH11012804-11A	QCTB-012611	AQ	01/26/11 00:00	2	0	6							TPHE(0.10)		2 Reno Trip Blanks (1) 11/22/10 (1) 12/21/10

Comments: Security seals intact. Frozen ice. Analysts: Run two analyses in order to achieve lower reporting limits for all other analytes due to high TBA values. Amended 2/4/11 @ 14:21: Corrected sample ID for sample -01A due to login error. EA :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	2-4-11 1423

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
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Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

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TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : CHHL11012804

Report Due By : 5:00 PM On : 07-Feb-2011

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Los Angeles, CA 90017

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Vladimir Carino	(213) 228-8271 x	vladimir.carino@ch2m.com

EDD Required : **Yes**

Sampled by : Matt Mayry

PO :

Client's COC # : 32000 Job : KMEP Norwalk

Cooler Temp	Samples Received	Date Printed
2 °C	28-Jan-2011	**28-Jan-2011**

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests P_MOIST	TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W		Sample Remarks
CHH11012804-01A	GB-20-34-04-012511	AQ	01/26/11 08:30	16	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)		All voas received contain air bubbles > 6mm.
CHH11012804-02A	GB-20-39-04-012611	AQ	01/26/11 09:00	8	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)		
CHH11012804-03A	QCEB-012611	AQ	01/26/11 09:15	6	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)		
CHH11012804-04A	GB-20-45-04-012611	AQ	01/26/11 09:50	7	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)		
CHH11012804-05A	GB-20-45-05-012611	AQ	01/26/11 09:55	7	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)		
CHH11012804-06A	GB-19-34-04-012611	AQ	01/26/11 11:30	8	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)		
CHH11012804-07A	GB-19-41-04-012611	AQ	01/26/11 11:55	8	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)		
CHH11012804-08A	GB-19-46-04-012611	AQ	01/26/11 12:20	6	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)		
CHH11012804-09A	GB-19-46-06-012611	AQ	01/26/11 12:25	8	0	6			TPHE(0.10)		TPHE(0.10)		TPHE(0.10)		MS/MSD
CHH11012804-10A	IDW-SOIL-012611	SO	01/26/11 13:30	3	0	6	Percent Moisture	Fuel Product		GAS-C		BTEX/OXY_C			Report on a dry weight basis. (3) 4 oz. jars

Comments: Security seals intact. Frozen ice. Analysts: Run two analyses in order to achieve lower reporting limits for all other analytes due to high TBA values. :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	1·28·11 1212

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : CHHL11012804

Report Due By : 5:00 PM On : 07-Feb-2011

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Daniel Jablonski	(213) 228-8271 x	daniel.jablonski@ch2m.com
Vladimir Carino	(213) 228-8271 x	vladimir.carino@ch2m.com

EDD Required : **Yes**

Sampled by : Matt Mayry

PO :

Client's COC # : 32000 Job : KMEP Norwalk

Cooler Temp	Samples Received	Date Printed
2 °C	28-Jan-2011	**28-Jan-2011**

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests P_MOIST	TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W		Sample Remarks
CHH11012804-11A	QCTB-012611	AQ	01/26/11 00:00	2	0	6							TPHE(0.10)		2 Reno Trip Blanks (1) 11/22/10 (1) 12/21/10

Comments: Security seals intact. Frozen ice. Analysts: Run two analyses in order to achieve lower reporting limits for all other analytes due to high TBA values. :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	1-28-11 1212

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

32000

Billing Information:
Company Name: Direct bill Kinder Morgan
Attn: att. Dan Jablonski / Chamhill
Address:
City, State, Zip:
Phone Number: 818-257-3630 Fax: 714-424-2135

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State?
AZ ____ CA X NV ____ WA ____ DOD Site ____
ID ____ OR ____ OTHER ____ Page # 1 of ____

Consultant / Client Name: CH2MHill Dan Jablonski
Address: 1100 Wilshire Blvd Floor 21
City, State, Zip: Los Angeles, CA 90017

Job #: direct bill to Kinder Morgan
Job Name: KMEP Norwalk
Report Attention / Project Manager
Name:
Email:
Phone: Mobile:

Analyses Required

Data Validation Level: III or IV

EDD / EDF? YES ____ NO ____
Global ID #:

Time Sampled	Date Sampled	Matrix* See Key Below	P.O. #	Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	# Containers**	BTEX + Fuel OXY (HCl preserved)	TPH g (non-HCl preserved)	TPH fr (HCl preserved)	REMARKS
0830	1-26-11	AQ		CHH1101280401	GB-20-34-04-012611			16 VOAs	X	X	X	sediment in sample
0900				-02	GB-20-39-04-012611			8 VOAs				
0915				-03	QCEB-012611			6 VOAs				
0950				-04	GB-20-45-04-012611			7 VOAs				
0955				-05	GB-20-45-05-012611			7 VOAs				
1130				-06	GB-19-34-04-012611			8 VOAs				
1155				-07	GB-19-41-04-012611			8 VOAs				
1220				-08	GB-19-46-04-012611			6 VOAs				
1225				-09	GB-19-46-06-012611			8 VOAs	↓	↓	↓	MS/MSD
1330	↓	Soil		-10	IDW-Soil-012611			3 jars	X	X	X	
—	1-26	AQ		-11	QCTB-012611 (Trip blank)			2 VOAs	X			

FOR LAB USE ONLY

ADDITIONAL INSTRUCTIONS:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action (NAC 445.0636 (c) (2)). Sampled By: _____

Relinquished by: (Signature/Affiliation)	Received by: (Signature/Affiliation)	Date:	Time:
CH2MHill 1-27-11 11:55	Alpha Analytical	1/27/11	1155
Alpha Analytical 1-27-11 1155	Elizabeth Adcox / Alpha	1-28-11	1212

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.