SUPPLEMENTAL INVESTIGATION REPORT FOR HOLIFIELD PARK AND DOLLAND ELEMENTARY SCHOOL

DEFENSE FUEL SUPPORT POINT NORWALK
15306 NORWALK BOULEVARD
NORWALK, CALIFORNIA

Prepared for

Defense Energy Support Center
8725 John J. Kingman Road
Fort Belvoir, Virginia 22060-6222

March 26, 2009

Prepared by

PARSONS

100 WEST WALNUT STREET • PASADENA • CALIFORNIA 91124

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ABBREVIATIONS AND ACRONYMS

µg/L	micrograms per liter
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, xylenes
Calscience	Calscience Environmental Laboratories, Inc.
CHHSL	California Human Health Screening Level
COPC	chemicals of potential concern
CPT	Cone Penetration Test
DESC	Defense Energy Support Center
DFSP	Defense Fuel Support Point
DigAlert	Underground Service Alert
DTSC	Department of Toxic Substance Control
gpm	gallons per minute
HHSE	human health screening evaluation
IDW	investigation-derived waste
JP	jet propellant
KMEP	Kinder Morgan Energy Partners, L.P.
LCS/LCSD	laboratory control sample/laboratory control sample duplicate
MCL	Maximum Contaminant Level
mg/L	milligrams per liter
MS/MSD	matrix spike/matrix spike duplicate
MTBE	methyl tert-butyl ether
OEHHA	Office of Environmental Health and Hazard Assessment
Park	Holifield Park
PID	photoionization detector
PPE	personal protective equipment
PVC	polyvinyl chloride
QA/QC	quality assurance/quality control
RAB	Restoration Advisory Board
RAP	Remedial Action Plan
RWQCB	Regional Water Quality Control Board, Los Angeles Region
school	Dolland Elementary School
SFPP	Santa Fe Pacific Pipeline, L.P.
Site	DFSP Norwalk Facility
SubSurface	SubSurface Surveys & Associates, Inc.
TPH	total petroleum hydrocarbons
TPHfp	total petroleum hydrocarbons as fuel product
TPHg	total petroleum hydrocarbons as gasoline
USEPA	United States Environmental Protection Agency
VMP	vapor monitoring point
VOAs	volatile organic analysis vials
VOCs	volatile organic compounds

1 INTRODUCTION

This report presents the results of the supplemental investigation conducted in off-site areas east of the Defense Fuel Support Point (DFSP) Norwalk facility (site) located at 15306 Norwalk Boulevard, Norwalk, CA. These off-site areas comprise portions of Holifield Park (park) and adjacent to Dolland Elementary School (school). This report has been prepared on behalf of the Defense Energy Support Center (DESC). The supplemental investigation is being conducted in response to the Regional Water Quality Control Board, Los Angeles Region (RWQCB) letter dated December 3, 2007[1]. The site location map is shown in Figure 1-1.

The DFSP Norwalk facility is a 50-acre facility consisting of 12 aboveground storage tanks that previously stored and distributed jet propellant (JP)-5 and JP-8. Aviation gasoline and JP-4 also were reportedly stored at the facility. Santa Fe Pacific Pipeline, L.P. (SFPP), an operating partner of Kinder Morgan Energy Partners, L.P. (KMEP), leases a 2-acre easement along the southern and eastern boundaries of DFSP for operation of its pipelines, which convey gasoline, diesel, and jet fuel. Within the southern easement lie three active pipelines, one of which is a 16-inch diameter pipeline, designated LS-1, that bends at the southeastern corner of the facility and continues northward within the eastern easement. An abandoned pipeline, likely owned or formerly operated by Golden West Pipeline, also runs along the eastern boundary of the site. The DESC has decommissioned the site, but SFPP pipelines continue to operate. Refer to the Revised Remedial Action Plan (RAP)[2] for additional detailed background site information, which is not repeated here. The RAP includes a description of on-site environmental features; environmental setting including regional and site hydrogeology; historical site characterization data; and descriptions of past site use and operations. The area of interest for this investigation includes the park and school located to the east of the site (Figure 1-2).

This report is organized into five sections (including this introductory) plus six appendices. In addition to this introduction, Section 1 includes background and historical data. Section 2 summarizes the Phase 1 and Phase 2 investigation results. The scope, objectives, and sampling activities are presented in Section 3 and the investigation results are included in Section 4. Summary and conclusions of the investigation are discussed in Section 5.

1.1 Background

During a meeting in October 2003 between the RWQCB and DESC, the RWQCB requested that additional groundwater monitoring wells be installed along the eastern site boundary to delineate the eastern extent of the shallow aquifer dissolved plume. In April

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1 Regional Water Quality Control Board, Los Angeles Region (RWQCB), 2007, *Comments on October 11, 2007 Investigation Report for Holifield Park and Dolland Elementary School, 15021 Bloomfield Avenue, Norwalk, California (SCP NO. 0286A, B, Site No. 16638 & 204DM00)*, letter dated December 3.

2 Parsons, 2006a, *Revised Remedial Action Plan Defense Fuel Support Point Norwalk, California,* September 21.

2004, pursuant to the RWQCB's request, two groundwater monitoring wells, designated GMW-60 and GMW-61 (Figure 1-3), were installed along the eastern site boundary. Volatile organic compounds (VOCs) and total petroleum hydrocarbons (TPH) as JP-5 were detected in some soil and groundwater samples from these two wells. Detected VOCs included lighter-end petroleum compounds, including benzene, toluene, ethylbenzene, and xylenes (BTEX), 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene. No methyl tert-butyl ether (MTBE) was detected in the groundwater samples from GMW-60 or GMW-61. TPH as JP-5 was detected in soil samples collected at 10 and 30 feet below ground surface (bgs) during the installation of GMW-60.

Additional drilling and soil sampling activities were performed west of GMW-60 in the northeastern part of the site in July 2004. No soil impacts were detected during the step-out soil investigation west of GMW-60 but TPH as gasoline (TPHg), TPH as fuel product (TPHfp), and BTEX were detected in the groundwater samples. The carbon ranges for TPHfp, TPHg, and TPH as JP-5 are approximately C6-C18, C4-C14, and C8-C17, respectively.

In a letter dated February 16, 2005, the RWQCB requested DESC and KMEP to investigate the eastern boundary area of the subject site to fully delineate the extent of impacted groundwater in the eastern area and identify the source of the impact. KMEP and DESC jointly conducted soil and groundwater investigations in the eastern boundary area of the facility in July 2005, and in the eastern boundary area and the adjacent off-site area in the west side of Holifield Park in August 2006. Results from these investigations were presented in the Parsons *Eastern Boundary and Eastern Boundary Off-Site Area Soil and Groundwater Preliminary Investigation Report*[3] and are discussed in the following section.

1.2 July 2005 and August 2006 Historical Data

During the July 2005 eastern boundary on-site investigation, KMEP collected soil and Hydropunch™ groundwater samples from 10 boring locations (B-1 to B-10) as shown on Figure 1-3. TPH and VOCs were not detected in the soil samples collected at 5-foot depth intervals between approximately 5 and 25 feet, except for n-propylbenzene in a sample collected from B-9 at 20 feet bgs. VOCs or TPH were detected in only two shallow groundwater samples: B-3 (located south of GMW-60) and B-9 (located west of GMW-61). TPH and/or VOCs were detected in each of the deeper groundwater samples, including those collected from B-2 and B-7 where TPH and VOCs were not detected in the corresponding shallow groundwater samples. The highest concentrations of dissolved benzene (1,300 micrograms per liter [µg/L]) and TPHg (2 milligrams per liter [mg/L]) were detected in B-2, located adjacent to GMW-60, at depths of 30 to 35 feet bgs. JP-5 was detected in groundwater samples collected from B-2 and B-3. TPH as diesel was not detected in any samples. The soil and groundwater analytical data for this investigation are shown in Appendix A, Figures A1 through A3.

3 Parsons, 2006b, *Eastern Boundary and Eastern Boundary Off-Site Area Soil & Groundwater Preliminary Investigation Report, Defense Fuel Support Point Norwalk.* October 9.

During the August 2006 eastern boundary on- and off-site investigation, soil and Hydropunch™ groundwater samples were collected from 12 locations (B-11 through B-22). Soil samples from B-11 through B-22 were collected at approximately 5, 10, and 25 feet bgs. Groundwater samples were collected from approximately 25 to 29 feet bgs and from approximately 31 to 35 feet bgs in each boring; and were also collected from 36 to 40 feet in six of the borings (B-11, B-13, B-15, B-17, B-18, and B-19).

The July 2005 and August 2006 eastern boundary and adjacent off-site investigation results indicated generally higher hydrocarbon impacts in deeper groundwater samples collected from 31 to 35 feet bgs than those observed either in the vadose zone soil or the shallower groundwater samples. These deeper groundwater impacts primarily consisted of TPHfp (reported as JP-5 during the July 2005 investigation), TPHg, and/or BTEX compounds. These groundwater impacts could not be attributed to any specific source. The presence of fuel constituents in the easternmost Hydropunch™ sample (approximately 100 feet from the boundary; B-22) suggested the need for additional groundwater delineation in the area beneath Holifield Park. Data from borings B-12 and B-19 suggested that the extent of impacted groundwater was limited to the north and south. No historical data was available to indicate soil and groundwater impacts by these VOCs east of B-22. Based on these results, additional investigation in Holifield Park was recommended and conducted in December 2006 and June/July 2007 as discussed in the next section.

2 DECEMBER 2006 (PHASE 1) AND JUNE/JULY 2007 (PHASE 2) INVESTIGATION RESULTS

The results from the Phase 1 (soil gas) and Phase 2 (soil and groundwater) field activities at the Holifield Park extending eastward to the Dolland Elementary School area from December 2006 through July 2007 are discussed in this section and were presented in detail in the Final Investigation Report for Holifield Park and Dolland Elementary School[4]. The overall objective of soil gas sampling at the adjacent site area was to determine the nature and extent of potential soil gas impacts and whether VOCs are present at concentrations that represent a potential threat to human health for unrestricted land use.

The general purpose of the soil and groundwater investigation was to further assess subsurface conditions in the off-site area. In addition, a human health screening evaluation (HHSE) was conducted to: 1) assess whether there is a potential for adverse human health impacts from site-related chemicals of potential concern (COPCs) in subsurface soil gas, soil, and groundwater beneath the park and school, and 2) to determine whether further evaluation or action is needed to protect against current or future unacceptable exposures at Holifield Park and Dolland Elementary School.

2.1 Sampling Program

The scope for the Phase I and Phase 2 investigations included 171 soil gas samples from 55 locations; 71 soil samples from 70 boring locations; 40 Hydropunch™ groundwater samples from 15 locations; 15 CPT soundings; installing, developing, and collecting groundwater samples from 1 groundwater monitoring well; and 66 soil borings. The analytical data for soil gas, soil, and groundwater are illustrated in Appendix A, Figures A4, A5, and A6, respectively.

2.2 Investigation Results

The results of the Phase 1 and Phase 2 investigations indicated that soil gas and soil have not been impacted with site-related VOCs above screening levels in the park. Therefore, additional soil gas and soil sampling/remediation is not needed in this area.

However, the results of the Phase 1 and Phase 2 investigations indicated that select fuel-related VOCs and TPHg and TPHfp in groundwater have migrated off DESC property and into the subsurface beneath the park. The lateral extent of groundwater impacts above screening/action levels is limited to approximately 90 feet east of DESC property beneath the park (i.e., east of B-120) based on Phase 1 and Phase 2 groundwater results at B-108 through B-111 and B-112. Groundwater impacted above screening/action levels does not extend beneath Dolland Elementary School property.

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[4] Parsons, 2008a, *Final Investigation Report for Holifield Park and Dolland Elementary School, Defense Fuel Support Point Norwalk, 15306 Norwalk Boulevard, Norwalk, California,* January 10.

Groundwater impacts beneath the park have been adequately characterized to the south and east; however, the northern area under the parking lot and northeastern park area require additional investigation to fully define the extent of impacts under the park. In addition, the area near GMW-62 where groundwater impacts are above screening/action levels will be remediated. An aquifer pump test was proposed to assist in remedial design. Results from the aquifer pump test will be used to support the design of the expanded remedial system to include impacted groundwater under the park. Hence, the Phase 3 investigation was conducted and is discussed in the following section.

3 SCOPE OF THE INVESTIGATION (PHASE 3)

This section discusses the scope of the investigations and sampling activities from the investigations. The investigations were conducted in accordance with a work plan[5] and an addendum[6] for the park comprised of supplemental groundwater and soil gas investigations and on-site aquifer testing. Approval of the work plan and conditional approval of addendum were received from the RWQCB[7,8]. This effort has been identified as Phase 3 and is comprised of additional Hydropunch™ locations, the installation of two groundwater monitoring wells and three permanent soil gas monitoring points located adjacent to Dolland Elementary School, and aquifer testing conducted on-site in the eastern DFSP Norwalk property area. The field work was conducted in two mobilizations: 11 Hydropunch™ groundwater sampling locations (B-123 through B-133), 3 permanent vapor monitoring point (VMP) installations (VMP-29 through VMP-31) with 2 probes each and subsequent soil gas sampling, and two monitoring well installations (GMW-63 and GMW-64) were the first mobilization and 6 Hydropunch™ groundwater step-out sampling locations (B-134 through B-139) were the second mobilization, conducted in September/October 2008 and January 2009, respectively.

At the October 23, 2008 Restoration Advisory Board (RAB) meeting, the preliminary results were presented from the first mobilization of this investigation. Based on these results, it was determined that additional groundwater investigation was required in the northern area in the park to define the north/north-eastern plume extent. Therefore, the 6 Hyrdopunch™ step-out locations were conducted.

3.1 Objectives and Scope of Work

This section presents the objectives and scope of work for this effort.

3.1.1 Supplemental Groundwater Investigation

The purpose of the supplemental groundwater investigation is to assess the vertical extent of impacted groundwater within the western portion of Holifield Park, in the immediate vicinity of former sampling location B-120 (Figure 1-3). Although the lateral extent of impacted groundwater has been adequately assessed in this area, the vertical extent of

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5 Parsons, 2008b, *Revised Holifield Park Supplemental Investigation and Groundwater Remediation Work Plan, Defense Fuel Support Point Norwalk, 15306 Norwalk Boulevard, Norwalk, California*, dated April 22.

6 Parsons, 2008c, *Addendum to Revised Holifield Park Supplemental Investigation and Groundwater Remediation Work Plan, Defense Fuel Support Point Norwalk, 15306 Norwalk Boulevard, Norwalk, California*, dated June 26.

7 RWQCB, 2008a, *Approval of Workplan for Revised Holifield Park Supplemental Investigation and Groundwater Remediation, Defense Fuel Support Point Norwalk, 15306 Norwalk Boulevard, Norwalk, California (SCP NO. 0286A, Site No. 16638)*, letter dated June 11.

8 RWQCB, 2008b, *Conditional Approval of Workplan Addendum to Revised Holifield Park Supplemental Investigation and Groundwater Remediation, Defense Fuel Support Point Norwalk, 15306 Norwalk Boulevard, Norwalk, California (SCP NO. 0286A, Site No. 16638)*, letter dated July 30.

impacted groundwater remains unknown. Groundwater was previously sampled within this area at three depth intervals between 23 and 46 feet, beginning just below the top of the groundwater surface. Due to the presence of COPCs detected in groundwater collected from these depths, the proposed groundwater sampling depths for this investigation are between 46 and 60 feet. This investigation included the collection of water samples from these depths at 11 locations within the vicinity of former sampling location B-120.

In addition, the lateral extent of impacted groundwater in the north/north-eastern area needs to be defined which requires further investigation. This portion included the collection of water samples from 6 step-out locations to the north and east of the Phase 1 and Phase 2 sampling grid.

3.1.2 Supplemental Soil Gas Investigation

The soil gas investigation will be conducted within Holifield Park, immediately adjacent to Dolland Elementary School's western side. During the Phase 1 and Phase 2 investigations, no significant VOC concentrations were detected in the soil gas samples collected along this school boundary. However, relatively low levels of 1,2,4-trimethylbenzene were detected in B-87 and low levels of 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, ethylbenzene, and xylenes were detected in former soil gas sampling location B-100 (Figure 1-3). Based on the presence of these low level soil gas detections, the RWQCB recommended the installation of permanent soil gas probes at three locations along the same boundary. The soil gas probes would be installed at depths of 5 and 15 feet. Soil gas samples would be collected from these probes quarterly and submitted for VOC analyses (for the first year). Sampling and analyses would be scaled back if VOCs were not detected.

3.1.3 Additional Groundwater Monitoring Well

Permanent groundwater monitoring wells were also recommended immediately adjacent to Dolland Elementary School. These wells (designated as GMW-63 and GMW-64) are being installed in response to elevated VOC concentrations detected in shallow groundwater on the western side of Holifield Park and will be used at down gradient monitoring wells.

3.1.4 Aquifer Pumping Test

In order to establish the capture zone of the groundwater extraction wells and to design the remediation of the expanded system for the groundwater under Holifield Park, an aquifer pump test was conducted at GW-15 located in site boundaries along the eastern edge of the DFSP Norwalk property.

3.2 Field Sampling Activities

The first part of investigation activities was conducted between September 24 and October 15, 2008. This investigation included the installation and sampling of soil gas probes at three locations (VMP-29 through VMP-31), Hydropunch™ groundwater

sampling at eleven locations (B-123 through B-133), and installation of two groundwater monitoring wells (GMW-63 and GMW-64). Photographs showing various aspects of the field effort are included in Appendix B. Soil was logged prior to the collection of groundwater at three of the Hydropunch™ groundwater sampling locations. The borings for each of the groundwater monitoring wells and development logs are included in Appendix C.

The second mobilization of the investigation was conducted between January 7 and 12, 2009 and included the collection of water samples from six Hydropunch™ step-out groundwater sampling locations (B-134 through B-139). Soil was logged prior to the collection of groundwater at three (per work plan specifications) of the Hydropunch™ groundwater sampling locations and individual boring logs are included in Appendix C.

A summary of the borings and media sampled during these investigations is provided on Table 3-1. The sampling procedures are discussed in the following sections. Prior to the start of this investigation, boring and well permit applications were obtained from the Los Angeles County Environmental Health Division and the City of Norwalk.

3.2.1 Geophysical Clearance

Underground Service Alert (DigAlert) was notified of our subsurface activities at least 48 hours before beginning field work. The planned sampling locations were clearly marked with white paint. DigAlert contacted all utility owners within the site vicinity and notified them of the subsurface investigation plans.

In addition to notifying DigAlert, each boring location and surrounding areas were surveyed using a combination of electromagnetic induction and ground-penetrating radar instruments to investigate and clear all boring locations for any subsurface obstructions (e.g., piping, utilities, metallic debris, etc.). SubSurface Surveys & Associates, Inc. (SubSurface) conducted the geophysical survey immediately prior to the start of the field investigation. They clearly delineated all underground utility lines detected near the planned sampling locations. The sampling locations were not moved due to conflict with underground utilities.

3.2.2 Soil Gas Sampling

Soil gas samples were collected from soil vapor probes installed at three locations (VMP-29, VMP-30, and VMP-31) during the investigation (see Table 3-1; Figure 1-3). Soil sampling was not conducted prior to the installation of the soil vapor probes. Soil vapor probes were installed at each of the three locations at depths of approximately 5 and 15 feet.

Following borehole drilling, new polyethylene tubing (0.25-inch outside diameter [OD], 0.17-inch inside diameter [ID]) attached to a soil gas filter (vapor probe) was placed down through the open boring to the deepest planned soil gas sampling depth (15 feet). After installing the tubing and filter into the boring, a steel measuring tape was used to verify the depth of the boring and soil gas filter. Number 2/12 sand was then placed into the boring to infill the area around the soil gas filter and an interval of at least 6 inches

below and above the filter. The sand thickness was verified with the steel measuring tape. After the filter pack had been created, approximately 6 inches of granular bentonite were placed as a seal above the filter pack. Once this first layer of bentonite had been hydrated, additional bentonite was used to fill the boring to the next sample interval (5 feet), where a second probe was set within a sand filter pack. The upper portion of the boring was sealed with hydrated bentonite. A sampling valve was used to temporarily seal off the top of the polyethylene tubing, which extended 1 to 2 feet above ground surface. This upper tubing was placed into a well box at ground surface, which was set in concrete at each sampling location.

The installed vapor tubing and filter were allowed to set more than 24 hours prior to purging and sampling. Sampling was not conducted within one week of a previous rainfall event. In addition, the sprinklers used throughout the park near soil gas sampling locations had been shut off more than 2 days prior to sampling. Soil gas samples were collected from each vapor probe following purging. The purge volume (seven volumes) was based on the method specified in the Department of Toxic Substance Control (DTSC) and RWQCB soil gas sampling guidelines[9] and was confirmed at the site during the Phase 1 sampling. Soil gas samples were collected from each vapor probe in a Summa canister. Each Summa canister used during soil gas collection contained a dedicated flow regulator. The Summa canisters were filled (following purging) at a rate of less than 200 milliliters per minute. Once sampling was complete and the Summa canister was sealed and labeled (using non-volatile ink) with the sample location, sample depth, date, and time. The filled Summa canisters were transported to the certified laboratory (Calscience Environmental Laboratories, Inc.) following each day's testing. The VOC analyses (TO-15) were started within 24 hours of collection.

Indications of excess soil moisture in the soil zone being sampled (as suggested by saturated soil or perched groundwater) were not encountered during drilling or soil gas sampling. Visible soil moisture or water was not observed in the tubing during purging or during soil gas sampling. Due to its apparent absence, excess soil moisture was not considered a potential threat to the viability of the collected soil gas samples.

3.2.3 Soil Sampling

Soil samples were collected and logged at six Hydropunch™ sampling locations (B-124, B-126, B-131, B-134, B-136, and B-139; Figure 1-3) prior to groundwater collection. The soil samples were collected utilizing a truck-mounted Geoprobe® rig. The borings were initially cleared via hand-augering to a depth of 5 feet in a further attempt to avoid possible underground utilities. Borings B-124, B-126, and B-131 were continuously logged between depths of 40 and 60 feet. The remaining three borings were continuously sampled from the ground surface to a depth of 58 feet.

Soil samples were collected from the Geoprobe® borings using stainless steel drive samplers lined with new acetate sleeves (four-foot lengths). Immediately following the

[9] DTSC/RWQCB, 2003, *Advisory – Active Soil Gas Investigations*, January 28.

collection of soil from the Geoprobe® borings, the acetate tube was cut lengthwise to expose the soil within the tube. This soil was reviewed for classification by a California-licensed professional geologist. The soil descriptions included texture (grain size; using the Unified Soil Classification System), color (Munsell soil color system), general moisture content, and evidence of contamination.

Soil samples were collected at 5-foot intervals and placed in a sealable bag for headspace measurements. The headspace of each bag was measured (for VOCs) using a photoionization detector (PID). The PIDs used during this investigation were calibrated immediately prior to the start of each field day. Soil descriptions and headspace measurements were recorded on Parsons' standard boring log forms and are provided in Appendix C.

Soil sampling was also conducted at each groundwater monitoring well location (GMW-63 and GMW-64) prior to the installation of the wells. Soil was sampled at each of these locations at 5-foot intervals to depths of 40 feet. Soil samples were driven into stainless steel drive samplers lined with three 2-inch diameter by 6-inch long stainless steel tubes. Upon removal from the subsurface, the lower stainless steel tube was capped on each end with Teflon tape and plastic caps. The capped sample was labeled, placed in a sealable plastic bag, and then immediately placed into an ice-cooled chest. The soil within the remaining upper tubes was used for classification. Boring logs are presented in Appendix C of this report.

3.2.4 Hydropunch™ Groundwater Sampling

Groundwater samples were collected using a Hydropunch™ sampler at seventeen locations during the investigations (B-123 through B-139; Figure 1-3). Groundwater samples were collected from B-124 through B-133 between September 24 and 25, 2008, and from B-134 through B-139 between January 7 and 12, 2009.

Five sampling depths were planned for B-123 through B-133. These sampling depths were 24-28 feet, 31-35 feet, 36-40 feet, 44-48 feet, and 55-58 feet. Groundwater samples were collected from B-124 through B-133 at depths of approximately 46-50 feet and 56-60 feet (two total). The sampling depths at each location were frequently shifted vertically as much as three feet in order to avoid sampling within a non-water bearing silt layer, or to center the sampling interval within a saturated sand layer. The final sampling depths are provided on Table 3-1. Note on this table that groundwater was only collected from three to four sampling intervals at B-134 through B-139. Insufficient groundwater quantities were often encountered in the upper portion of the aquifer, often the result of the finer soils (sandy silt and silty sand layers).

At each sampling interval, a cleaned Hydropunch™ water sampler was driven to bottom of the sampling interval and pulled up to expose approximately 4 feet of screen. A cleaned bailer was then placed down through the center of the screened interval, where it was filled, retrieved to the surface, and used to fill six 40-milliter vials (laboratory supplied volatile organic analysis vials [VOAs] containing the preservative hydrochloric acid) and one 1-liter amber glass jar. After filling, the VOAs and amber glass jar were

immediately capped, labeled, placed into a sealable container, and then placed within an ice-cooled chest.

After retrieving a groundwater sample from the each sampling interval, the Hydropunch™ sampler was pulled up, decontaminated, and then driven down to the next sampling interval. Decontamination procedures are provided in Section 3.2.9.

3.2.5 Groundwater Monitoring Well Installation, Development, and Sampling

Two groundwater monitoring wells (GMW-63 and GMW-64) were installed within Holifield park on September 29, 2008. Prior to installation of the wells, a well installation permit was obtained from Los Angeles County Environmental Health Division.

The borings for the wells were drilled using a hollow-stem auger drill equipped with 10-inch outer diameter augers. Drilling was conducted to a depth of approximate 41 feet. As noted in Section 3.2.3, soil samples were collected at 5-foot intervals between 5 and 40 feet prior to well installation.

After drilling was complete, the borings were converted to groundwater monitoring wells constructed of 4-inch diameter schedule 40 polyvinyl chloride (PVC) screen and solid schedule 40 PVC casing. The wells were screened (0.02-inch slots) between approximately 20 and 40 feet bgs.

Blank PVC casing was placed from the top of the screen up to 0.5 foot bgs. Number 3 Monterey sand was placed in the annulus of the screened interval, extending approximately 2 feet above and 0.5 foot below the screen (at depths between approximately 18 and 40.5 feet). A 3-foot-thick seal of medium sized bentonite chips was placed above the filter pack, between approximately 15 and 18 feet. A bentonite grout was placed from approximately 2 to 15 feet bgs. Medium bentonite chips were placed on top of the grout, between approximately 1.0 and 2 feet bgs. A 12-inch-diameter, flush-mount, traffic rated well box set in concrete was placed on top of the bentonite and extended approximately 2 inches aboveground. Copies of the well construction notes are included in Appendix C.

GMW-63 and GMW-64 were developed on October 1, 2008. A stainless steel bailer was initially used to remove sediment that collected during and immediately after the well installation process. Surging was then conducted to clean the PVC slots and adjoining sand pack. After surging, a bailer was again used to remove any newly generated sediment. Following the last bailing, a clean groundwater pump was placed approximately 2 feet above the bottom of the wells and used to remove additional water and sediment. Well development continued until pH, specific conductivity, temperature, turbidity, and dissolved oxygen measurements stabilized. Approximately 71 gallons of groundwater (9.7 well volumes) were purged from GMW-63, and 85 gallons (10.4 well volumes) were purged from GMW-64 during development. The development logs for these wells are included in Appendix C.

Groundwater was sampled from GMW-63 and GMW-64 on October 15, 2008. At least three well volumes were purged from the well prior to obtaining the groundwater sample using low flow sampling procedures.

3.2.6 Abandoment of Borings

Following the completion of Hydropunch™ groundwater sampling, the open Geoprobe® borings were filled from the surface with granular bentonite to within 2 to 4 inches of ground surface. The upper portion of each boring was capped with lawn, soil, or asphalt, depending on the initial surface condition.

3.2.7 Analytical Methods

Calscience Environmental Laboratories, Inc. (Calscience) analyzed all the samples collected during the investigation. Calscience is certified by the California Department of Health Services Environmental Accreditation Laboratory Program.

The soil gas samples were analyzed for VOCs using United Stated Environmental Protection Agency (USEPA) Method TO-15. Selected soil samples from each sampling location and each groundwater sample were analyzed for the following compounds:

- Total petroleum hydrocarbons as gasoline using USEPA Method 8015B (modified);
- Total petroleum hydrocarbons as jet propellant 5 (JP-5) using USEPA Method 8015B (modified); and
- VOCs using USEPA Method 8260B (via 5035).

Analytical data summary tables for soil gas, soil, and groundwater are provided in Appendix D. Copies of the completed soil gas, soil, and groundwater laboratory reports are provided in Appendix E and data validation reports in Appendix F.

3.2.8 Field Variations from Work Plan

All field activities were conducted in general conformance with Parsons sampling work plans[10] and addendums[11] and consultation with RWQCB[12,13]. The sampling locations were consistent with those proposed. Select locations were adjusted a few feet in the field to accommodate physical or subsurface obstructions.

Five groundwater samples were to be collected at pre-determined depths at Hydropunch™ sampling locations B-134 through B-139. These depths were shifted vertically, as anticipated, due to lithologic variations at depth. Only three to four water

10 Parsons, 2008b.
11 Parsons, 2008c.
12 RWQCB, 2008a.
13 RWQCB, 2008b.

samples were obtained from each sampling location. Sampling at one to two of the planned intervals at each location yielded no significant water. This generally occurred within the upper sampling intervals. No other field variations occurred during the investigations.

3.2.9 Equipment Decontamination

All equipment that came into contact with potentially contaminated soil or water was carefully decontaminated to assure the quality of samples collected and prevent transference of impacted materials from the area sampled. Decontamination was conducted prior to and after each use of equipment. All sampling devices used were decontaminated according to USEPA Region IX recommended procedures.

The Geoprobe® drilling and sampling equipment used was decontaminated using the following procedures:

- Non-phosphate detergent and tap water wash,
- Initial tap water rinse, and
- Final distilled water rinse.

Sampling equipment used in conjunction with the Geoprobe® was decontaminated in the near vicinity of the areas being sampled. Due to the distance between Geoprobe® sampling locations, the decontamination area was set up on the side of the Geoprobe® rig.

The Hydropunch™ water samplers were washed before use with non-phosphate detergent and rinsed with distilled water within cleaning basins on the Geoprobe® rig.

Drill rig augers associated with the groundwater well installation arrived at the site cleaned. Following the completion of drilling, the augers were steam cleaned within a decontamination trailer. The soil sampling equipment used prior to well installation was decontaminated in a manner similar to that used for soil sampling with the Geoprobe® rig.

The wash water and rinse water generated during the field investigation were placed into 55-gallon drums. These drums were stored within the southwestern portion of the DFSP facility (near office area), west of the park.

3.3 Aquifer Pump Test

In order to better understand the aquifer conditions in the area of Holifield Park and to assist with remedial design for the expanded system to cover the off-site groundwater plume, an aquifer test was performed. Aquifer testing was conducted at on-site groundwater extraction well GW-15 and surrounding monitoring wells. All supporting figures and tables are present in Appendix G referenced here in.

3.3.1 Pumping Test Field Methods

Three types of aquifer tests were performed as part of the hydrogeologic analysis: a step-drawdown test, a constant rate test, and a recovery test. The main objective of the step test was to determine the optimal pumping rate of the constant rate test, and estimate well loss. The objective of the constant rate test was to determine hydraulic parameters such as transmissivity, hydraulic conductivity, and storage coefficient. The objective of the recovery test was to support the calculations of constant rate test and provide redundancy.

The step test was conducted at pumping rates of approximately 2.0, 3.0, 6.0, and 9.0 gallons per minute (gpm) from 20 to 60 minutes each. By the end of the forth step total drawdown at the pumping well (GW-15) was approximately 7.0 feet. Based on the step drawdown analysis the (see Appendix G) the well is approximately 60% for 40% efficient at rates above 3 gpm. Using data from the step test, an optimal flow for the constant rate test was calculated at approximately 7 gpm. Following an equilibration period of approximately 24 hours after the step test, the constant rate test began.

A 48-hour constant rate test was conducted at GW-15 with an average pumping rate of 6.5 gpm. Hydraulic head was measured at 7 wells including the pumping well (GW-15, GMW-57, GMW-58, GMW-59, GMW-60, GMW-61, and GMW-62). Appendix G, Figure 1 is a map illustrating the spatial relationships of the test wells. After the pump was turned off, recovery was monitored at the same locations.

3.3.2 Pumping Test Analysis Methods and Results

Site characterization information, including drilling records outlined the following conceptual model for the test. It was assumed that pumping and observation wells were screened in a fairly continuous sand unit that exists from approximately 30 to 65 feet bgs. At the time of the tests the water table was approximately 29 feet bgs, thus the saturated thickness was assumed to be 36 feet. The unit is presumably unconfined although interbeded finer grained units exist above the sand.

Prior to analyzing the data, drawdown measurements were corrected for barometric fluctuations. The corrections, ranging from 0 to 0.22 feet, were applied to all constant rate data. After application of correction factors, data were categorized into one of three types of analyses:

- qualitative drawdown observations,
- time-drawdown analysis, and
- distance-drawdown analysis.

3.3.2.1 Qualitative Drawdown and Observations

Appendix G, Table 1 lists the wells, and information related to the pumping tests. Appendix G, Figure 2 is a time drawdown plot of measurements from the monitoring wells, and the pumping rate. Qualitative observations from the table and figure are as follows:

- At an average pumping rate of 6.5 gpm the drawdown in the pumping well GW-15 was approximately 6.9 feet. Based on step test analysis, the approximate formation drawdown around GW-15 was 3.1 feet.
- After pumping for approximately 48 hours a fairly uniform cone of depression developed around GW-15. The associated drawdown at 70 to 100 feet away was approximately 0.70 feet. Minor drawdown of 0.25 feet or less was observed up to 180 feet from GW-15.

Qualitatively, the results support the geological characterization, and indicated the unit tested was fairly transmissive sand. Observations indicate the sand exhibits good hydraulic connection laterally throughout the well network, and a relatively large cone of depression can be created by groundwater extraction.

3.3.2.2 Curve Matching Analysis

Measurements from each of the observation wells were analyzed in time-drawdown plots from the constant rate test. Aquifer analysis methods developed from Theis[14] and Hantush and Jacob[15] were chosen as the most appropriate. Results from drawdown and recovery analysis are listed in Appendix G (Table 2 and Attachment 1) and provide the graphical analysis and computations. Transmissivity estimates ranged from approximately 488 ft^2/day to 893 ft^2/day. Given the estimated saturated thickness of 36 feet, the hydraulic conductivity ranged from approximately 11 to 25 ft/day. Estimates of storage coefficient ranged from 0.0004 to 0.01 (dimensionless).

The estimates of hydraulic conductivity and storage coefficient apparently increased with distance from the pumping well. This may be related to the stratified nature of the units and/or scale effects, often seen in estimating hydraulic conductivity[16]. This phenomenon is also observed in partial penetration aquifer tests. However, partial penetration corrections did not influence the drawdown, therefore they were not applied.

3.3.2.3 Distance Drawdown Analysis

As an alternative to the time-drawdown analysis discussed above, a distance-drawdown analysis was performed using methods developed by Cooper, and Jacob[17]. Results from the distance-drawdown analysis are listed in Appendix G, Table 2 (Attachment 1 provides the details). The estimated transmissivity was approximately 380 ft^2/day, resulting in an estimated hydraulic conductivity of 11 ft/day. The estimate of the storage

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14 Theis, C.V. 1935, "The Relation Between the Lowering of the Piezometric Surface and the Rate and Duration of Discharge of a Well Using Groundwater Storage", *Transactions, American Geophysical Union.* Vol. 16, pp. 519-524.

15 Hantush, M.S. and C.E. Jacob, 1955. "Non-Steady Radial Flow in an Infinite Leaky Aquifer". *Transactions, American Geophysical Union.* Vol. 36, no. 1.

16 Butler, J. J. Jr., 1997, "The Design, Performance and Analysis of Slug Tests". Boca Raton, FL., CRC Press LLC. p. 252.

17 Cooper, H. H. and C.E. Jacob. 1945. "A Generalized Graphical Method for Evaluation Formation Constants and Summarizing Well-Field History". Transactions, American Geophysical Union. Vol. 27, no. 4. pp. 526-534.

coefficient was 0.0037 (dimensionless). Results from the distance-drawdown analysis are near the range of values estimated in the time-drawdown analysis, which supports the validity of the estimates.

3.4 Investigation-Derived Waste Disposal

Different types of investigation-derived waste (IDW) were generated during the field activities that included the following:

- Used personal protective equipment (PPE),
- Disposable sampling equipment,
- Decontamination fluids, and
- Soil cuttings from the soil borings.

IDW was managed and disposed of in accordance with current Federal, State, and local requirements. IDW was labeled and stored in accordance with the requirements of the Los Angeles County Health Department.

Soil cuttings and decontamination water generated during field investigations were collected in properly labeled and sealed U.S. DOT approved 55-gallon drums. At the end of each field day, the drums were moved to the DESC property. Profiling of soil cuttings and waste water was done to ensure appropriate disposal. Proper arrangements were made to haul and dispose of the IDW drums.

Used PPE and disposable equipment was double bagged and placed in a municipal refuse dumpster at the park. These wastes are not considered hazardous and may be sent to a municipal landfill.

4 INVESTIGATION RESULTS

This section discusses the results from the Phase 3 investigation.

4.1 Geology & Hydrogeology

Ground surface in the area of investigation is between approximately 74 and 77 feet above mean sea level[18]. Soil encountered during the investigation was comprised primarily of unconsolidated fine sand, silty fine sand, and silt, with lesser concentrations of clay to a depth of 60 feet (deepest soil samples collected during this investigation). Geologic cross-sections that depict an interpretation of subsurface conditions based on soil logged during this and previous investigations by Parsons in the area are illustrated on Figures 4-1 and 4-2. The cross-section location lines are shown on Figure 1-3. The boring logs are presented in Appendix C for those locations logged during this investigation.

Fine sand and silty fine sand were relatively more abundant than silt and clay beneath the investigation area. Greater concentrations and thicker layers of fine sand and silty fine sand were encountered between the surface and approximately 7 feet bgs, and between approximately 25 feet and at least 54 feet bgs. Continuous or nearly continuous silt layers are interpreted to occur between approximately 7 and 25 feet bgs. Discontinuous and continuous sand layers are interpreted to occur between the silt layers within this depth interval. A few discontinuous clay layers were also interpreted to occur between these depths. A relatively thick clay layer is encountered at a depth of approximately 54 feet. This clay layer was noted to be organic rich, often containing wood fragments. The sand, silt, and clay layers encountered between the surface and 24 feet bgs were damp to moist. Saturated soils were encountered between approximately 24 and 60 feet bgs.

The Exposition aquifer is the shallowest reported aquifer beneath the site[19]. This aquifer is reported between approximately 87 and 155 feet bgs. As noted above, however, saturated sediments were encountered between 24 and 60 feet bgs in the investigation area. The saturated zone is comprised primarily of fine sand and silty fine sand. Additional information on subsurface conditions encountered below the maximum depth of this investigation (60 feet) for the DFSP property is available in previous reports on the DFSP site.

The depth to groundwater in monitoring wells GMW-63 and GMW-64 installed within Holifield Park during this investigation was 29.17 feet bgs and 27.60 feet bgs, respectively in October 2008. This is consistent with the water depth in near-vicinity well GMW-62 (located near the western side of Holifield Park), measured at 28.24 feet bgs. Historical interpretations of groundwater flow that included wells GMW-60 and GMW-61 (adjacent to Holifield Park in DFSP property) have been generally to the

18 United States Geological Survey (USGS), 1981 (photo revised from 1965), Whittier, California 7.5-Minute Quadrangle (1" = 2,000').

19 California Department of Water Resources (CDWR), 1961. Bulletin No. 104 – Planned Utilization of the Ground Water Basins of the Coastal Plain of Los Angeles County (Ground Water Geology), dated June 1961 (reprinted May 1991).

northwest, with a hydraulic gradient of approximately 0.001 foot per foot. Groundwater flow direction under Holifield Park was consistent with this and relatively flat to the northwest. Figure 4-3 presents the groundwater equipotential map from October 2008.

4.2 Data Quality Assurance/Quality Control

Soil, groundwater, and soil gas samples were collected as part of this investigation. This section provides a summary of the quality assurance/quality control (QA/QC) review and a detailed review is provided in Appendix F.

The sampling program consisted of collection and analysis of 5 soil, 52 groundwater, and 7 soil gas samples. These samples were collected between September 24 2008 and January 12, 2009. The soil and groundwater samples were collectively analyzed for:

- VOCs by EPA Method 5030B/8260B (groundwater) and by EPA Method 5035/8260B (soil),
- TPHg by EPA Method 5030B/8015 Modified (groundwater) and by EPA Method 5035/8015B Modified (soil),
- TPH as JP-5 by EPA Method 3510C/8015 Modified (groundwater) and by EPA Method 3550B/8015 Modified (soil).

Soil gas samples (analyzed by the fixed laboratory) were analyzed for VOCs (TO-15). The data were reviewed in accordance with the work plans.

Laboratory data were reviewed to evaluate compliance with the method and the quality of the data reported. This data review did not include recalculation or transcription error checking from the raw data. The following areas were covered in this review:

- Data Completeness
- Holding Times and Preservation
- Blanks
- Surrogates
- Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)
- Matrix Spike/Matrix Spike Duplicate (MS/MSD)
- Field Duplicates.

Data qualifiers were applied to analytical results during the data validation process, based on adherence to method protocols and QA/QC limits. All data were reviewed and found acceptable and usable based on compliance of quality control procedures as reported. Accordingly, data were used for project purposes with the addition of data qualifiers as discussed above and met data quality objectives.

4.3 Analytical Data

The purpose of this section is to present the results of the field investigations and to determine if sufficient data have been collected to adequately characterize the nature and extent of impacts at the park. In addition to determine if there is sufficient information to design the remedial system for groundwater under the park. Appendix D contains

analytical data summary tables for soil gas, soil, and groundwater and Appendix E contains the laboratory reports.

4.3.1 Soil Gas

Laboratory soil gas samples were analyzed for target VOCs. Figure 4-4 presents the fixed laboratory soil gas results for BTEX and MTBE. Concentrations of VOCs in soil gas were all below their respective screening concentrations. Vapor intrusion screening risk-based screening concentrations are residential California Human Health Screening levels (CHHSLs) assuming the presence of engineered fill[20].

4.3.2 Soil

Laboratory soil samples were analyzed from B-126 at one depth and from the installation of the two new groundwater wells. The samples were analyzed for 71 target VOCs, TPHg, and TPH as JP-5. There were no soil detections for all compounds analyzed. Soil results are presented on Figure 4-5 for BTEX, MTBE, TPH as JP-5, and TPHg.

4.3.3 Groundwater

Groundwater samples were analyzed for 71 target VOCs, TPHg, and TPH as JP-5. In general, detections of VOCs included 11 of the 71 target VOCs (including benzene), TPHg, and TPH as JP-5. Groundwater VOC data were compared with maximum contaminant levels (MCLs). TPH screening/action levels for groundwater from the RWQCB or USEPA Region 9 are not available. Therefore, TPHg and TPH as JP-5 data were compared with a value of 500 µg/L as approved in the DFSP Norwalk site revised RAP[21] to help delineate the extent of groundwater impacts.

TPHg and benzene were the only compounds that were detected above their corresponding screening/action level. TPHg was detected at B-125 (700 µg/L), B-128 (520 µg/L), and B-133 (740 µg/L) above its action level of 500 µg/L. Benzene was detected at B-125 (31 µg/L), B-128 (2.1 µg/L), and B-129 (3.5 µg/L) above its MCL of 1 µg/L. There were groundwater samples collected to the north, south, and east of these exceedences that have detections below their corresponding action level. Concentrations of TPH as JP-5 were detected but were below its action level. Therefore, the extent of the dissolved TPHg, TPH as JP-5, and benzene plumes under Holifield Park have been adequately defined and additional characterization of groundwater at the park and school is not necessary.

Groundwater results are presented on Figure 4-6 for BTEX, MTBE, TPHfp, and TPHg. Additionally, Figures 4-7 through 4-12 present isoconcentration plume contours for individual BTEX compounds, TPHg, and TPH as JP-5. Data on the isoconcentration maps include the Phase 1 and Phase 2 results and spans from August 2006 to January 2009. Therefore, some data points are not included during contouring (i.e., more recent result is included versus an older data set).

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20 California Environmental Protection Agency (CalEPA), 2005. Use of California Human Health Screening Levels (CHHCLs) in Evaluation of Contaminated Properties. CalEPA OEHHA. January.

21 Parsons, 2006a.

4.4 Groundwater Capture Analysis

A groundwater capture analysis was conducted using site information, results from the aquifer hydrogeologic tests, and an analytical modeling application[22]. The capture zone analysis included the following tasks:

- defining the target capture area,
- indentifying hydraulic heads and gradients,
- developing an analytical groundwater model, and
- modifying the analytical model to develop a groundwater extraction system that would capture the target capture area.

Results from the Final Investigation Report for the Holifield Park and Dolland Elementary School[23] and from the current Phase 3 investigation defined the target capture zone. For the analysis included herein, the spatial extent of impacted groundwater above the screening/action level is limited to an area inside locations B-116, B-108, B-109, B-110, B-111, B-115, and B-119 (see Appendix G, Figure 4 for the capture target outline).

Hydraulic heads and groundwater flow direction were based on several phases of groundwater measurements. On a site wide scale, hydraulic gradient is relatively low (0.0009) trending north, or north-northeast. In the area west of Holifield Park, there is an apparent localized groundwater mound around GMW-59 which initiates an eastward gradient towards the property boundary. However, water levels suggest this mound does not propagate significantly farther than the property line. If groundwater were flowing from the groundwater mound eastward toward the property line, it would likely begin to follow the regional trend to the north (see Appendix G, Figure 3), and may provide a mechanism to the limit extent of impacted groundwater east of the site. Water levels from the recently installed GMW-63 and GMW-64 support this observation. Due to this hydrogeological setting, groundwater extraction may influence the hydraulic head a significant distance east of the site.

The capture analysis included development of a groundwater model to estimate the capture zone from pumping GW-15 and (if necessary) additional wells. Initial model parameters were estimated using results from the pumping tests (transmissivity equaled 609 ft^2/d), and the site-wide hydraulic gradient from groundwater contour map (gradient = 0.0009, north-northeast). The groundwater mound (near GMW-59) was modeled using a flux source in the area of the mound. The model was "roughly" calibrated to sixteen water level elevations (October 2008 event) in, and around the GW-15 area. Since the model is developed to measure relative change in hydraulic heads, a more comprehensive calibration is not necessary. Prior to using the model for predictive purposes it was compared with pumping test results, as an additional support of validity. In both the calibration, and validity tests the model was deemed accurate for purpose. For the predictive model the transmissivity was assigned a value of 648 ft2/day, hydraulic

22 WINFLOW, 1995. Winflow Version 1.07, developed by Jim Rumbaugh and Doug Runbaugh, Environmental Simulations, Inc.

23 Parsons, 2008a.

gradient was 0.0009 (unitless), and the flux source (used to produce the groundwater mound) was 0.07 gpm.

Results of the predictive model are demonstrated in Appendix G, Figure 5. In order to capture the targeted area two pumping wells were simulated: GW-15 and a second extraction well (designated GW-16) located approximately 100 feet north of GMW-60 within site boundaries. The simulated flow rates were: 5 gpm at GW-15 and 3 gpm at GW-16. Appendix G, Figure 5 demonstrates a cone of depression that encompasses the target capture area.

5 SUMMARY AND RECOMMENDATIONS

The objectives of the soil gas, soil, and groundwater sampling at Holifield Park and along the property boundary of the adjacent Dolland Elementary School and conducting the on-site aquifer tests were to:

- Further assess the vertical extent of dissolved phase hydrocarbons and VOCs in groundwater in the northwestern portion of Holifield Park;
- Further assess the northern/northeastern extent of dissolved phase hydrocarbons and VOCs in groundwater under Holifield Park;
- Further assess VOCs in soil gas and groundwater immediately adjacent to Dolland Elementary School;
- Characterize hydrogeologic parameters to support remedial decisions regarding migration of COPCs towards the property east of the site; and
- Conduct a capture analysis from extraction well for use in the design of the remedial system for groundwater under Holifield Park.

The objectives of the investigations at Holifield Park and the on-site pumping test as outlined above were met by:

- Installing three permanent VMPs with two probe depths at each location;
- Collecting 7 soil gas samples (including one duplicate) from the 3 new VMPs;
- Collecting 5 soil samples for laboratory analysis;
- Collecting 50 Hydropunch™ groundwater samples for analysis by a fixed laboratory (including four duplicates and four equipment blanks);
- Installing, developing, and collecting groundwater samples from 2 groundwater monitoring wells;
- Continuously coring, logging, and collecting soil samples from selected borings (as discussed in Section 3.2) to characterize site lithology;
- Performing an aquifer pump test resulting in the collection of hydraulic parameters; and
- Developing a capture model predicting the likely zone of capture surrounding the pumping well.

During the fourth quarter groundwater monitoring gauging event conducted in October 2008, groundwater levels in the new groundwater monitoring wells, GMW-63 and GMW-64, were measured at 29.17 feet bgs and 27.60 feet bgs, respectively. This is consistent with the water levels in the eastern site wells GMW-60 and GMW-61, measured at 28.46 feet bgs and 27.73 feet bgs, respectively. Historical interpretations of groundwater flow have been generally to the northwest in the eastern site area with a

hydraulic gradient of approximately 0.001 foot per foot. Groundwater flow direction under Holifield Park was consistent with this and relatively flat to the northwest.

Soil gas and soil have not been impacted with site-related VOCs above screening/action levels in the investigated area of Holifield Park and the most eastern park boundary line, adjacent to the Dolland Elementary property. Therefore, as indicated previously, additional soil gas and soil sampling/remediation is not needed in the park.

As concluded from the previous investigations conducted in Holifield Park and herein, the results of these investigations indicate that select fuel-related VOCs and TPH as gasoline and fuel products in groundwater have migrated off DESC property and into the subsurface beneath the park. The lateral extent of groundwater impacts above screening/action levels is limited to approximately 300 feet east of DESC property beneath the park based on groundwater results at B-108 through B-111 and B-133. Groundwater impacted above screening/action levels does not extend beneath Dolland Elementary School property. In addition, the northern and southern extents of groundwater impacts are limited to 200 feet wide (B-124 and B-116 to the north and B-126 and B-118 to the south). Groundwater impacts beneath the park have been adequately characterized; however, the area near GMW-62 and as indicated on Figures 4-7, 4-11, and 4-12, where groundwater impacts are above screening/action levels will be remediated via an expansion of the existing DFSP Norwalk site remediation system.

Results of the on-site aquifer pumping tests suggest groundwater extraction at the site can induce a large enough cone of depression to prevent further migration of COPCs towards the property east of the site. Furthermore, if designed properly an extraction system may capture a significant portion of the impacted groundwater under Holifield Park east of the site.

The capture zone analysis included: 1) defining the target capture area; 2) indentifying hydraulic heads and gradients, developing an analytical groundwater model; and 3) modifying the groundwater model to predict effects from groundwater extraction west of Holifield Park. Results of the capture analysis suggest the following recommendations to prevent impacted groundwater from flowing off-site to the east of the site (GW-15), and capture a significant portion of impacted groundwater east of the site.

- Extract groundwater from GW-15 at approximately 4-6 gpm.
- Install a second groundwater extraction well (designated GW-16) approximately 95 feet north of GW-15 and of similar construction to GW-15. Extract groundwater at approximately 3-5 gpm at GW-16.
- Install a piezometer, less than 10 feet from GW-16 in order to define hydraulic head near the extraction well and for use during groundwater contouring.

This phase of work will be carried out under a new DESC work plan and will be forthcoming.

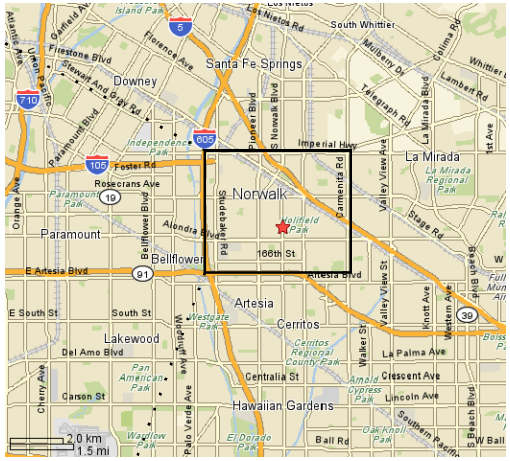
TABLES

TABLE 3-1
PHASE 3 SAMPLING PROGRAM

Holifield Park
Norwalk, California

Boring ID	Continuous Soil Logging Depths (feet)	Soil Sampling Depths (feet)	Soil Gas Sampling Depths (feet)	Groundwater Sampling Depths (feet)
B-123	-	-	-	46 - 50
				56 - 60
B-124	40 - 60	-	-	44 - 48
				54 - 58
B-125	-	-	-	44 - 48
				54 - 58
B-126	40 - 60	45	-	44 - 48
				54 - 58
B-127	-	-	-	44 - 48
				54 - 58
B-128	-	-	-	44 - 48
				54 - 58
B-129	-	-	-	44 - 48
				54 - 58
B-130	-	-	-	44 - 48
				54 - 58
B-131	40 - 60	-	-	44 - 48
				55 - 59
B-132	-	-	-	44 - 48
				55 - 59
B-133	-	-	-	44 - 48
				55 - 59
B-134	5 – 58	-	-	32 - 35
				36 - 40
				44 - 48
				52 – 55
B-135	-	-	-	35 - 39
				40 - 43
				46 - 49
				51 – 54
B-136	5 – 58	-	-	40 - 43
				44 - 49
				51 – 54
B-137	-	-	-	40 - 43
				46 - 49
				51 – 54
B-138	-	-	-	35 - 39
				46 - 49
				51 - 54
B-139	0 – 58	-	-	35 - 39
				46 - 49
				51 - 54
GMW-63	5 – 40.5	25 & 30	-	-
GMW-64	5 – 40.5	25 & 30	-	-
VMP-29	-	-	5 & 15	-
VMP-30	-	-	5 & 15	-
VMP-31	-	-	5 & 15	-

FIGURES



AREA OF INVESTIGATION

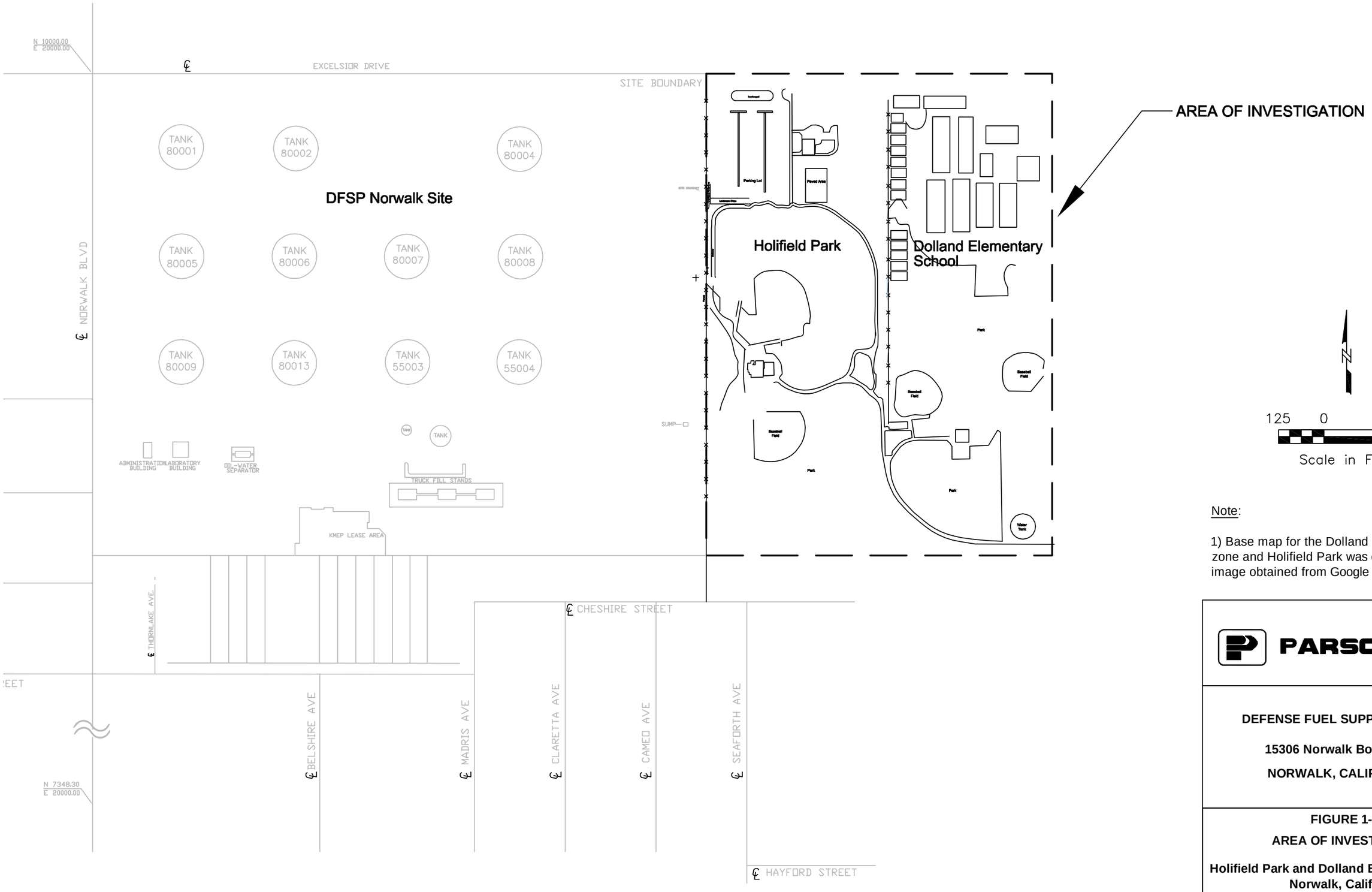
FIGURE 1-1

SITE LOCATION MAP

DFSP NORWALK FACILITY
Holifield Park
and Dolland Elementary School
Norwalk, California

PARSONS

k:\depts\dept48\desc\norwalk\ACO-0031\Report\Figures\Figure 1-1 Site Location Map.cdr



Note:

1) Base map for the Dolland Elementary School zone and Holifield Park was created from an image obtained from Google Earth.

PARSONS

DEFENSE FUEL SUPPORT POINT

15306 Norwalk Boulevard,

NORWALK, CALIFORNIA

FIGURE 1-2

AREA OF INVESTIGATION

Holifield Park and Dolland Elementary School
Norwalk, California

k:\depts\dept48\desc\norwalk\cgc-0031\Report\Figures\Figure 1-2.dwg

LEGEND

B-116	●	Phase 1 and Phase 2 Sample Location (Aug. 2006 & June 2007) Boring Locations
GW-15	⊕	Groundwater Extraction Well Location (May 2007)
GMW-63	⊕	Groundwater Monitoring Well (Sept. 2008)
GMW-60	⊕	Groundwater Monitoring Well
VMP-29	⊗	Vapor Monitoring Point
B-10	○	Surveyed Sampling Locations
B-124	●	Groundwater Sampling Location - Hydropunch (Sept. 2008)
B-136	■	Groundwater Sampling Location - Hydropunch (Jan. 2009)

DFSP Norwalk Site

Dolland Elementary School

Holifield Park

Parking Lot

Paved Area

Landscaped

Landscaped Slope

Baseball Field

Baseball Field

Park

SITE BOUNDARY

Overhead Power Line

Fence

TANK 80017

SUMP

G

G'

H

H'

N

50 0 100

Scale in Feet

FIGURE 1-3

SAMPLING LOCATIONS and MONITORING POINTS

Holifield Park and Dolland Elementary School Norwalk, California

PARSONS

Pasadena, California

File: K:\Depts\Dept48\DESC 07-2008 Contract\Norwalk\ACO-0007 Holifield Park & Aquifer Test\Report\Figures\Figure 1-3 - Sampling Locations.dwg

G
North

G'
South

ELEVATION IN FEET ABOVE MSL

100
75
50
25
0

DP-9
DP-8
B-50 North (Projected in 45 ft)
DP-7
B-50 (Projected in 43 ft)
B-33 (Projected in 43 ft)
B-34 (Projected in 43 ft)
HP-5
B-53 (Projected in 43 ft)
B-35 (Projected in 43 ft)
B-36 (Projected in 43 ft)
B-120 (Projected in 55 ft)
B-56 (Projected in 43 ft)
HP-4
B-38 (Projected in 43 ft)
B-59 (Projected in 43 ft)
B-39 (Projected in 43 ft)
HP-3
B-40 (Projected in 45 ft)
B-47 (Projected in 43 ft)
B-121 (Projected in 43 ft)
HP-2
HP-1

LEGEND

- Predominantly Sand/Silty Sand
- Silt
- Clay
- Inferred Geologic Contact
- Groundwater Depth

100 0 100
HORIZONTAL SCALE (feet)

25 0 25
VERTICAL SCALE (feet)

LOOKING EAST

Figure 4-1

Geologic Cross Section G-G'

DFSP Norwalk
Norwalk, CA

PARSONS
Pasadena, CA

K:\Depts\Dept48\DESC 07-2008 Contract\Norwalk\ACO-0007 Holifield Park & Aquifer Test\Report\Figures\Figure 4-1 Cross Section G-G'.cdr

H
West

H'
East

B-35

B-120 (Projected in 30 ft.)

B-27

B-43

B-28

B-54

B-113 (Projected in 7 ft.)

B-44

B-109 (Projected in 5 ft.)

B-55

B-90 (Projected in 10 ft.)

ELEVATION IN FEET ABOVE MSL

100

75

50

25

LEGEND

- Predominantly Sand/Silty Sand
- Silt
- Clay
- Inferred Geologic Contact
- Groundwater Depth

100 0 100

HORIZONTAL SCALE (feet)

25 0 25

VERTICAL SCALE (feet)

LOOKING NORTH

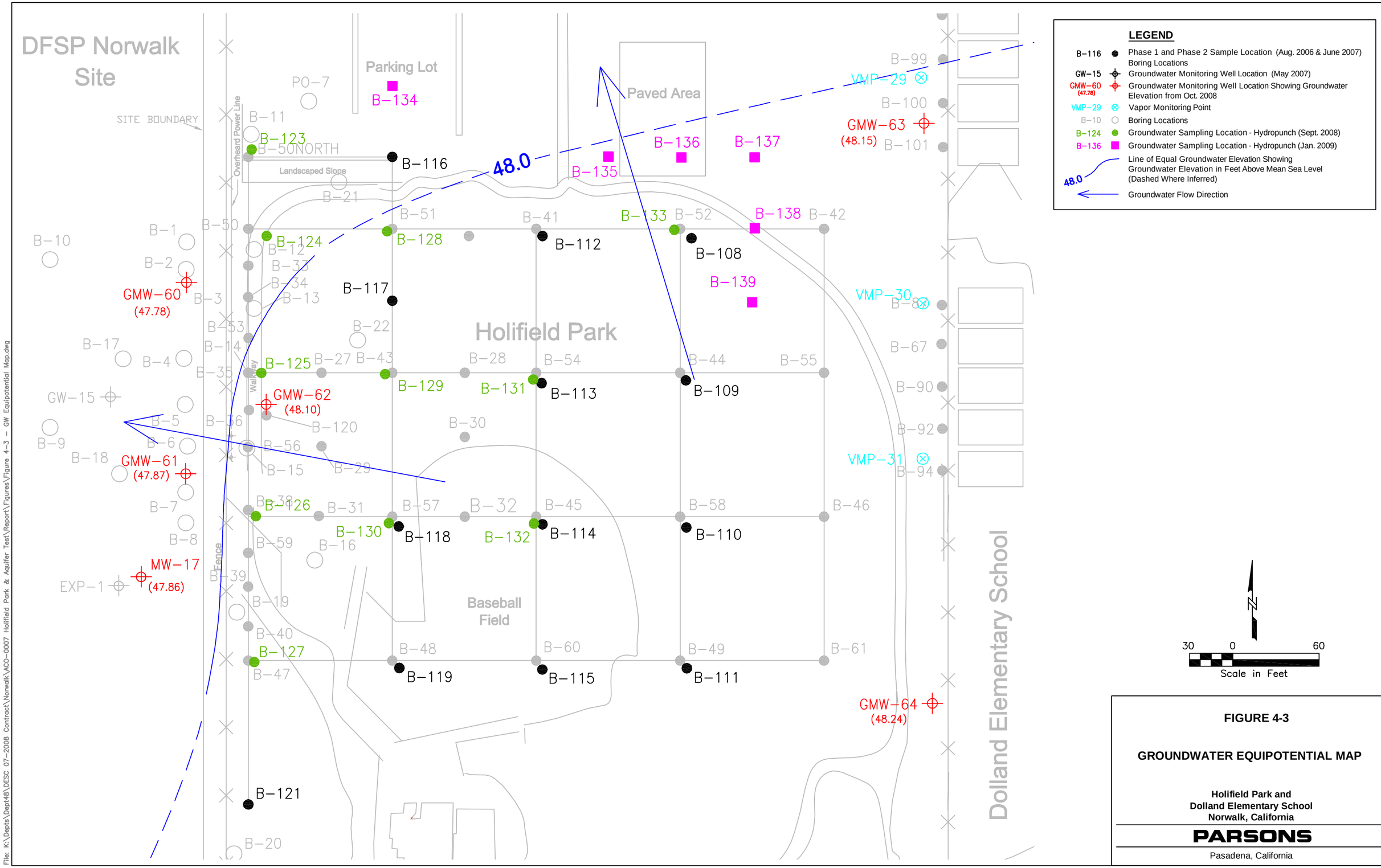
FIGURE 4-2

GEOLOGIC CROSS SECTION H-H'

Holifield Park and Dolland Elementary School
Norwalk, California

PARSONS

K:\Depts\Dept48\DESC 07-2008\Norwalk\ACO-0007Holifield Park & Aquifer Test\Report\Figures\Figure 4-2 Cross Section H-H'.cdr



LEGEND

- B-116 — Phase 1 and Phase 2 Sample Location (Aug. 2006 & June 2007) Boring Locations
- GW-15 — Groundwater Monitoring Well Location (May 2007)
- GMW-60 (47.78) — Groundwater Monitoring Well Location Showing Groundwater Elevation from Oct. 2008
- VMP-29 — Vapor Monitoring Point
- B-10 — Boring Locations
- B-124 — Groundwater Sampling Location - Hydropunch (Sept. 2008)
- B-136 — Groundwater Sampling Location - Hydropunch (Jan. 2009)
- 48.0 — Line of Equal Groundwater Elevation Showing Groundwater Elevation in Feet Above Mean Sea Level (Dashed Where Inferred)
- Groundwater Flow Direction

FIGURE 4-3

GROUNDWATER EQUIPOTENTIAL MAP

Holifield Park and Dolland Elementary School Norwalk, California

PARSONS

Pasadena, California

File: K:\Depts\Dept48\DESC 07-2008 Contract\Norwalk\ACO-0007 Holifield Park & Aquifer Test\Report\Figures\Figure 4-3 — GW Equipotential Map.dwg

DFSP Norwalk Site

VMP-29					
Depth	**B**	**T**	**E**	**X**	**MTBE**
5	**0.019**	**0.037**	**0.0032**	**0.0055**	ND
15	**0.039**	**0.084**	**0.0064**	**0.012**	ND

VMP-30					
Depth	**B**	**T**	**E**	**X**	**MTBE**
5	**0.02**	**0.04**	**0.0031**	**0.006**	ND
15	**0.058**	**0.099**	**0.0063**	**0.013**	ND
15 (Dup)	**0.062**	**0.11**	**0.0085**	**0.017**	ND

Holifield Park

Dolland Elementary School

VMP-31					
Depth	**B**	**T**	**E**	**X**	**MTBE**
5	**0.022**	**0.044**	**0.0035**	**0.008**	ND
15	**0.014**	**0.028**	ND	**0.0044**	ND

0 65 130 260 Feet

1 inch equals 130 feet

LEGEND

- Phase 1 and Phase 2 Sample Locations (Aug. 2006 & June 2007)
- Groundwater Sampling Location - Hydropunch (Sept. 2008)
- Groundwater Sampling Location - Hydropunch (Jan. 2009)
- Groundwater Monitoring Well Location (Oct. 2008)
- Vapor Monitoring Probe

Note:

Base map for the school zone and Holifield Park was created from a image obtained from Google Earth.

Depth in feet below ground surface

All concentrations are reported in micrograms per liter (ug/L)

B - Benzene
T - Toluene
E - Ethylbenzene
X - Xylenes, Total
MTBE - Methyl-t-Butyl Ether
ND - Not Detected

DEFENSE FUEL SUPPORT POINT

15306 Norwalk Boulevard,

NORWALK, CALIFORNIA

FIGURE 4-4

SOIL GAS BTEX AND MTBE RESULTS OCTOBER 2008

Holifield Park and Dolland Elementary School

PARSONS

S:\ES\Remed\DFSP\HolifieldPark\GIS\1Q09\HFP_SGFixed_Invt_Sep08_r.mxd lxh 3/23/09

DFSP Norwalk Site

B-126							
Depth	TPH-JP5	TPH-G	B	T	E	X	MTBE
45	ND	ND	ND	ND	ND	ND	ND

GMW-63							
Depth	TPH-JP5	TPH-G	B	T	E	X	MTBE
25	ND	ND	ND	ND	ND	ND	ND
30	ND	ND	ND	ND	ND	ND	ND

GMW-64							
Depth	TPH-JP5	TPH-G	B	T	E	X	MTBE
25	ND	ND	ND	ND	ND	ND	ND
30	ND	ND	ND	ND	ND	ND	ND

Holifield Park

Dolland Elementary School

Parking Lot

Paved Area

Baseball Field

Baseball Field

N

0 65 130 260 Feet

1 inch equals 130 feet

LEGEND

- Phase 1 and Phase 2 Sample Locations (Aug. 2006 & June 2007)
- Groundwater Sampling Location - Hydropunch (Sept. 2008)
- Groundwater Sampling Location - Hydropunch (Jan. 2009)
- Groundwater Monitoring Well Location (Oct. 2008)
- Vapor Monitoring Probe

Note:

Base map for Dolland Elementary School and Holifield Park was created from an image obtained from Google Earth.

Depth in feet below ground surface

All concentrations are reported in milligrams per kilogram (mg/kg)

TPH-JP5 - Total Petroleum Hydrocarbons as JP5
TPH-G - Total Petroleum Hydrocarbons as Gasoline
B - Benzene
T - Toluene
E - Ethylbenzene
X - Xylenes, Total
MTBE - Methyl tert-Butyl Ether
ND - Not Detected

DEFENSE FUEL SUPPORT POINT

15306 Norwalk Boulevard,

NORWALK, CALIFORNIA

FIGURE 4-5

SOIL
BTEX, MTBE, AND TPH RESULTS
SEPTEMBER 2008

Holifield Park and Dolland Elementary School
Norwalk, California

PARSONS

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DFSP Norwalk Site

B-123							
Depth	TPH-JP5	TPH-G	B	T	E	X	MTBE
46-50	ND	ND	ND	ND	ND	ND	ND
56-60	ND	ND	ND	**0.52**	ND	ND	ND

B-124							
Depth	TPH-JP5	TPH-G	B	T	E	X	MTBE
44-48	ND	ND	ND	ND	ND	ND	ND
54-58	ND	ND	ND	ND	ND	ND	ND

B-125							
Depth	TPH-JP5	TPH-G	B	T	E	X	MTBE
44-48	**440**	**440**	**5.8**	**32**	**7.6**	**42**	ND
54-58	**390**	**700**	**31**	**85**	**9.7**	**50**	ND

B-126							
Depth	TPH-JP5	TPH-G	B	T	E	X	MTBE
44-48	ND	ND	ND	ND	ND	**0.59**	ND
54-58	ND	ND	ND	ND	**0.63**	**2.25**	ND

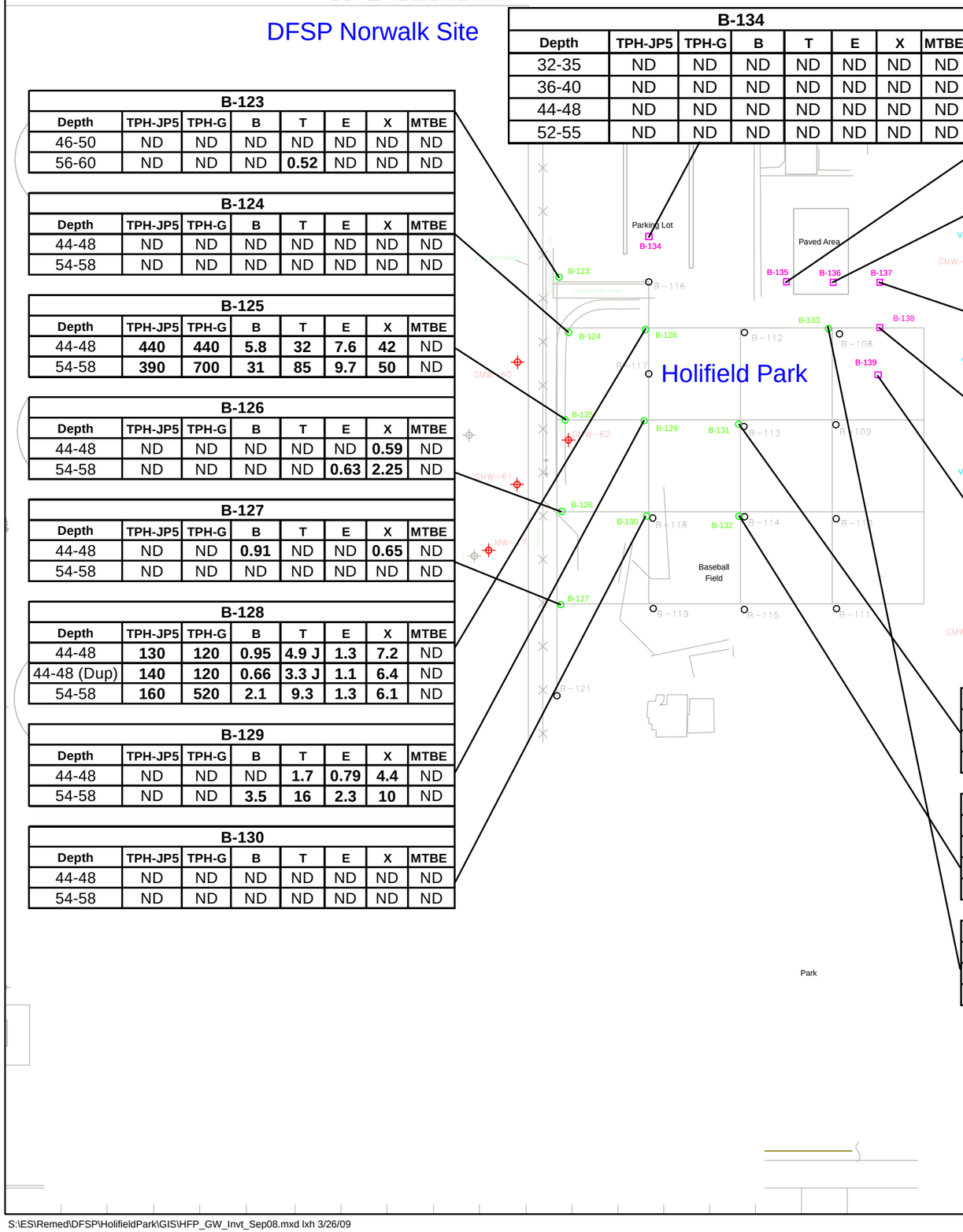
B-127							
Depth	TPH-JP5	TPH-G	B	T	E	X	MTBE
44-48	ND	ND	**0.91**	ND	ND	**0.65**	ND
54-58	ND	ND	ND	ND	ND	ND	ND

B-128							
Depth	TPH-JP5	TPH-G	B	T	E	X	MTBE
44-48	**130**	**120**	**0.95**	**4.9 J**	**1.3**	**7.2**	ND
44-48 (Dup)	**140**	**120**	**0.66**	**3.3 J**	**1.1**	**6.4**	ND
54-58	**160**	**520**	**2.1**	**9.3**	**1.3**	**6.1**	ND

B-129							
Depth	TPH-JP5	TPH-G	B	T	E	X	MTBE
44-48	ND	ND	ND	**1.7**	**0.79**	**4.4**	ND
54-58	ND	ND	**3.5**	**16**	**2.3**	**10**	ND

B-130							
Depth	TPH-JP5	TPH-G	B	T	E	X	MTBE
44-48	ND	ND	ND	ND	ND	ND	ND
54-58	ND	ND	ND	ND	ND	ND	ND

B-134							
Depth	TPH-JP5	TPH-G	B	T	E	X	MTBE
32-35	ND	ND	ND	ND	ND	ND	ND
36-40	ND	ND	ND	ND	ND	ND	ND
44-48	ND	ND	ND	ND	ND	ND	ND
52-55	ND	ND	ND	ND	ND	ND	ND



B-135							
Depth	TPH-JP5	TPH-G	B	T	E	X	MTBE
35-39	ND	ND	ND	ND	ND	ND	ND
40-43	ND	ND	ND	ND	ND	ND	ND
46-49	**410**	ND	ND	ND	ND	ND	ND
51-54	ND	ND	ND	ND	ND	ND	ND

B-136							
Depth	TPH-JP5	TPH-G	B	T	E	X	MTBE
40-43	**170**	ND	ND	ND	ND	ND	**0.63**
44-49	ND	ND	ND	ND	ND	ND	ND
51-54	ND	ND	ND	ND	ND	ND	ND

B-137							
Depth	TPH-JP5	TPH-G	B	T	E	X	MTBE
40-43	ND	ND	ND	ND	ND	ND	ND
46-49	ND	ND	ND	ND	ND	ND	ND
51-54	ND	ND	ND	ND	ND	ND	ND

B-138							
Depth	TPH-JP5	TPH-G	B	T	E	X	MTBE
35-39	ND	ND	ND	ND	ND	ND	ND
35-39 (Dup)	ND	ND	ND	ND	ND	ND	ND
46-49	ND	ND	ND	ND	ND	ND	ND
51-54	ND	ND	ND	ND	ND	ND	ND

B-139							
Depth	TPH-JP5	TPH-G	B	T	E	X	MTBE
35-39	**410 J**	ND	ND	ND	ND	ND	ND
35-39 (Dup)	**280 J**	ND	ND	ND	ND	ND	ND
46-49	**380**	ND	ND	ND	ND	ND	ND
51-54	**490**	ND	ND	ND	ND	ND	ND

B-131							
Depth	TPH-JP5	TPH-G	B	T	E	X	MTBE
44-48	ND	ND	ND	ND	ND	ND	ND
55-59	**140**	ND	ND	ND	ND	ND	ND

B-132							
Depth	TPH-JP5	TPH-G	B	T	E	X	MTBE
44-48	ND	ND	ND	**0.74**	ND	**2.26**	ND
44-48 (Dup)	ND	ND	ND	**0.66**	ND	**2.16**	ND
55-59	ND	ND	ND	ND	ND	ND	ND

B-133							
Depth	TPH-JP5	TPH-G	B	T	E	X	MTBE
44-48	**160**	**740**	**0.55**	**5**	**1.6**	**10.9**	ND
55-59	ND	ND	ND	**1.9**	ND	**0.98**	ND

LEGEND

- Phase 1 and Phase 2 Sample Locations (Aug. 2006 & June 2007)
- Groundwater Sampling Location - Hydropunch (Sept. 2008)
- Groundwater Sampling Location - Hydropunch (Jan. 2009)
- Groundwater Monitoring Well Location (Oct. 2008)
- Vapor Monitoring Probe
- Groundwater Sampling Results

Note:

Base map for Dolland Elementary School and Holifield Park was created from an image obtained from Google Earth.

Depth in feet below ground surface

All concentrations are reported in micrograms per liter (ug/L)

TPH-JP5 - Total Petroleum Hydrocarbons as JP5
TPH-G - Total Petroleum Hydrocarbons as Gasoline

B - Benzene
T - Toluene
E - Ethylbenzene
X - Xylenes, Total
MTBE - Methyl tert-Butyl Ether
ND - Not Detected
J - Estimated value due to lack of precision in field duplicate pairs

N

0 65 130 260 Feet

1 inch equals 130 feet

DEFENSE FUEL SUPPORT POINT

15306 Norwalk Boulevard,

NORWALK, CALIFORNIA

FIGURE 4-6

GROUNDWATER
BTEX, MTBE, AND TPH RESULTS
SEPTEMBER 2008 AND JANUARY 2009

Holifield Park and Dolland Elementary School
Norwalk, California

PARSONS

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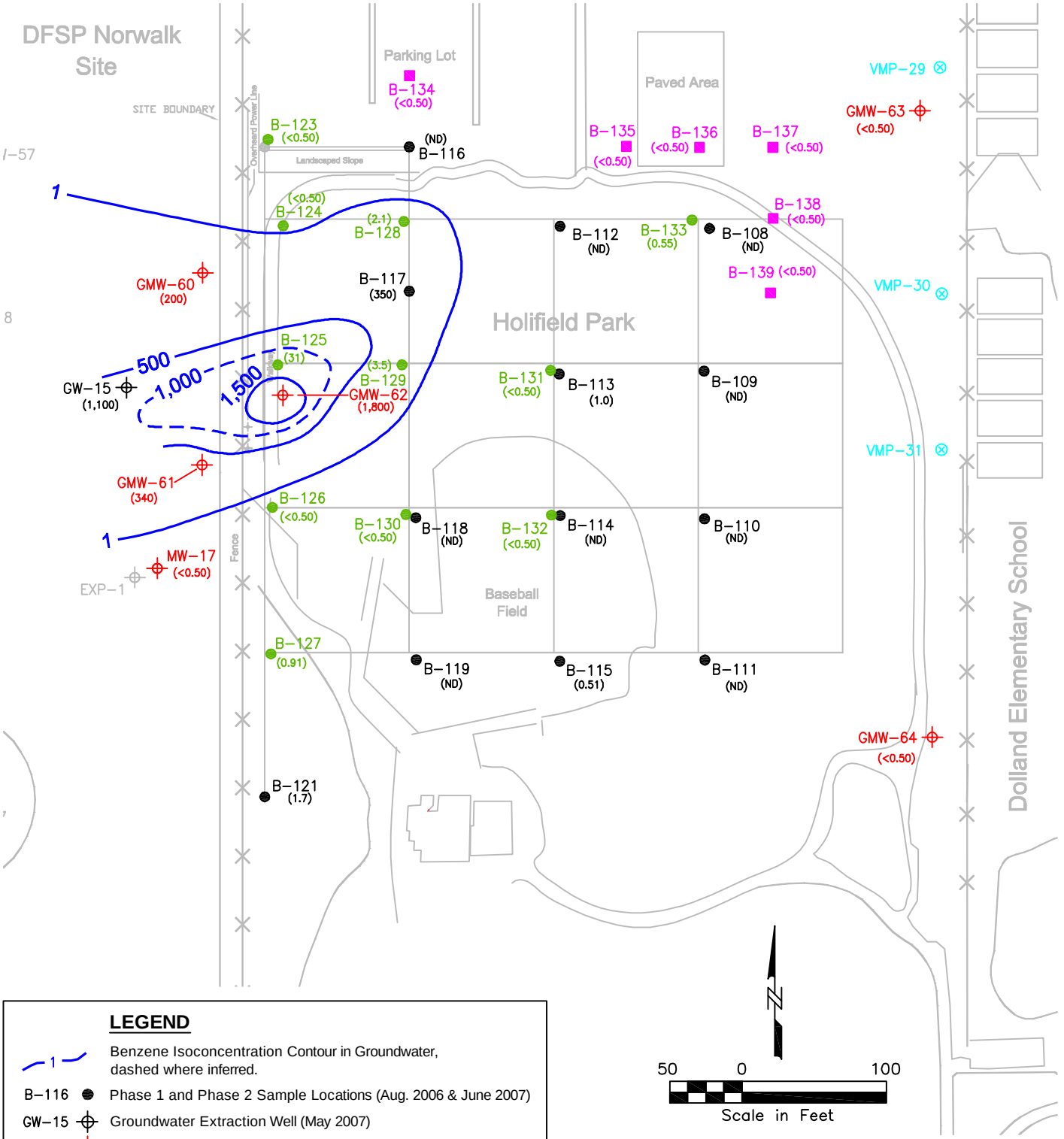


LEGEND

- 1 — Benzene Isoconcentration Contour in Groundwater, dashed where inferred.
- B-116 — Phase 1 and Phase 2 Sample Locations (Aug. 2006 & June 2007)
- GW-15 — Groundwater Extraction Well (May 2007)
- GMW-60 — Groundwater Monitoring Well
- VMP-29 — Vapor Monitoring Point
- B-124 — Groundwater Sampling Location - Hydropunch (Sept. 2008)
- B-136 — Groundwater Sampling Location - Hydropunch (Jan. 2009)
- ( ) Maximum Concentration of Benzene in Groundwater

Notes:

1. Data obtained from Hydropunch™ groundwater results (dates indicated in legend) and are reported as µg/L. For GMWs, data is from the First Sentry Event (February 2009).
2. Contours generated based on the maximum detected concentration at each location independent of sample depth.
3. 1 µg/L contour line based on California MCL.
4. Contour Interval 500 µg/L.

FIGURE 4-7

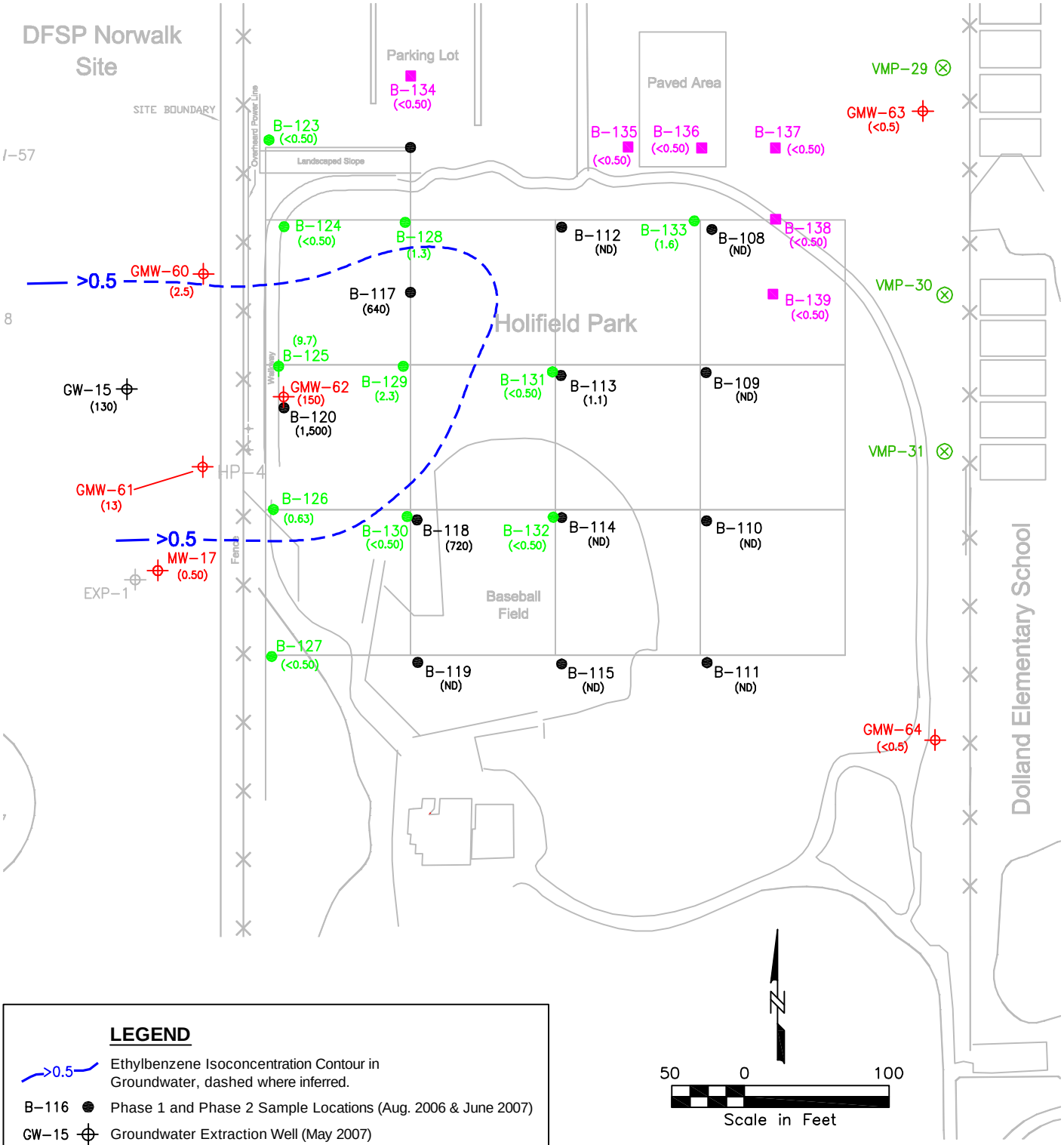
BENZENE CONCENTRATIONS IN GROUNDWATER

Holifield Park and Dolland Elementary School Norwalk, California

PARSONS

Pasadena, California

File: K:\Depts\Dept48\DESC 07-2008 Contract\Norwalk\ACO-0007 Holifield Park & Aquifer Test\Report\Figures\Figure 4-7 - Benzene GW.dwg



LEGEND

- >0.5 — Ethylbenzene Isoconcentration Contour in Groundwater, dashed where inferred.
- B-116 — Phase 1 and Phase 2 Sample Locations (Aug. 2006 & June 2007)
- GW-15 — Groundwater Extraction Well (May 2007)
- GMW-60 — Groundwater Monitoring Well
- VMP-29 — Vapor Monitoring Point
- B-124 — Groundwater Sampling Location - Hydropunch (Sept. 2008)
- B-136 — Groundwater Sampling Location - Hydropunch (Jan. 2009)
- ( ) Maximum Concentration of Benzene in Groundwater

Notes:

1. Data obtained from Hydropunch™ groundwater results (dates indicated in legend) and are reported as µg/L. For GMWs, data is from the First Sentry Event (February 2009).
2. Contours generated based on the maximum detected concentration at each location independent of sample depth.
3. 1 µg/L contour line based on California MCL.

FIGURE 4-8

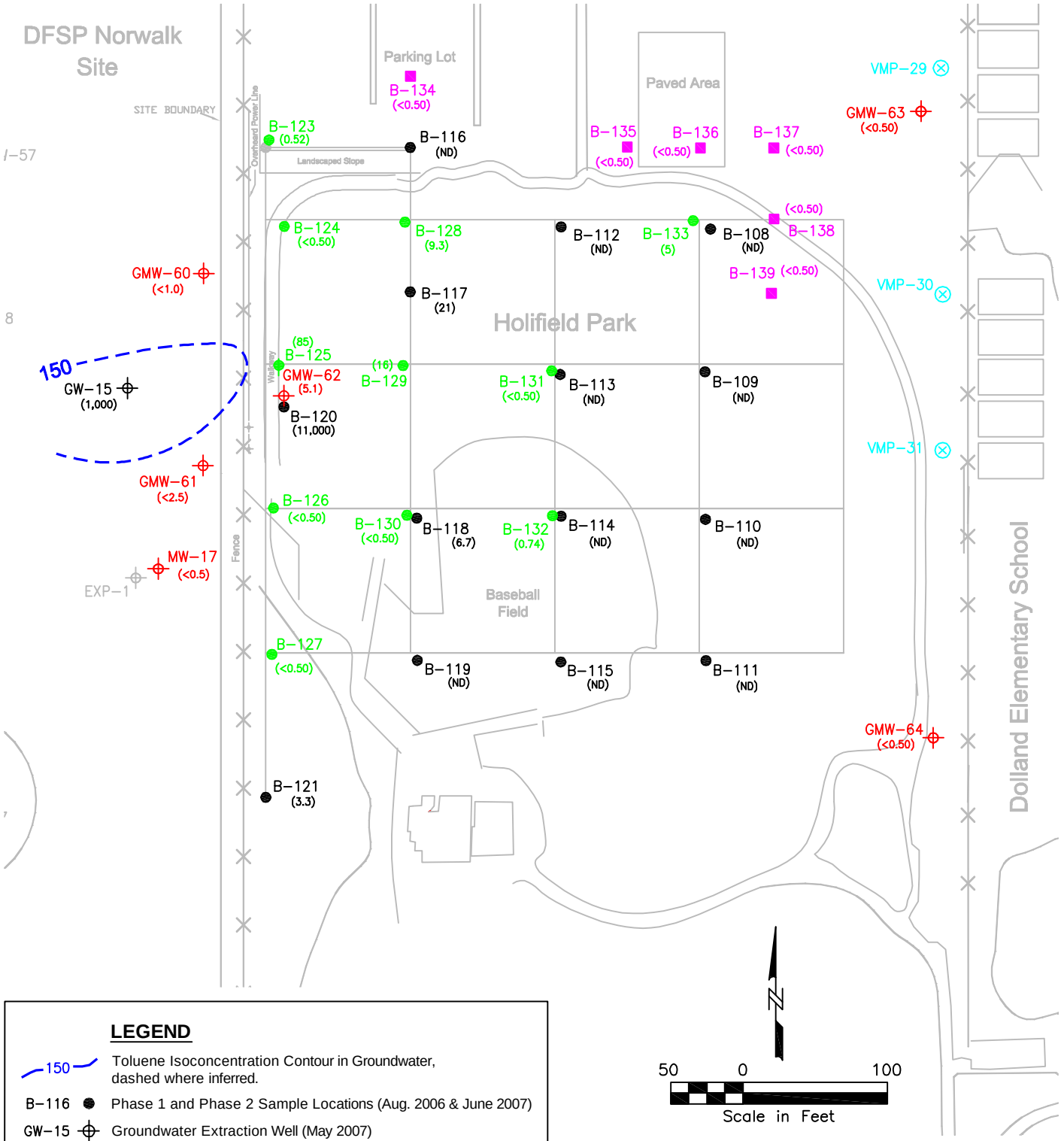
ETHYLBENZENE CONCENTRATIONS IN GROUNDWATER

Holifield Park and Dolland Elementary School Norwalk, California

PARSONS

Pasadena, California

File: K:\Depts\Dept48\DESC 07-2008 Contract\Norwalk\ACO-0007 Holifield Park & Aquifer Test\Report\Figures\Figure 4-8- Ethylbenzene GW.dwg



LEGEND

- 150 — Toluene Isoconcentration Contour in Groundwater, dashed where inferred.
- B-116 — Phase 1 and Phase 2 Sample Locations (Aug. 2006 & June 2007)
- GW-15 — Groundwater Extraction Well (May 2007)
- GMW-60 — Groundwater Monitoring Well
- VMP-29 — Vapor Monitoring Point
- B-124 — Groundwater Sampling Location - Hydropunch (Sept. 2008)
- B-136 — Groundwater Sampling Location - Hydropunch (Jan. 2009)
- ( ) Maximum Concentration of Benzene in Groundwater

Notes:

1. Data obtained from Hydropunch™ groundwater results (dates indicated in legend) and are reported as µg/L. For GMWs, data is from the First Sentry Event (February 2009).
2. Contours generated based on the maximum detected concentration at each location independent of sample depth.
3. 1 µg/L contour line based on California MCL.

FIGURE 4-9

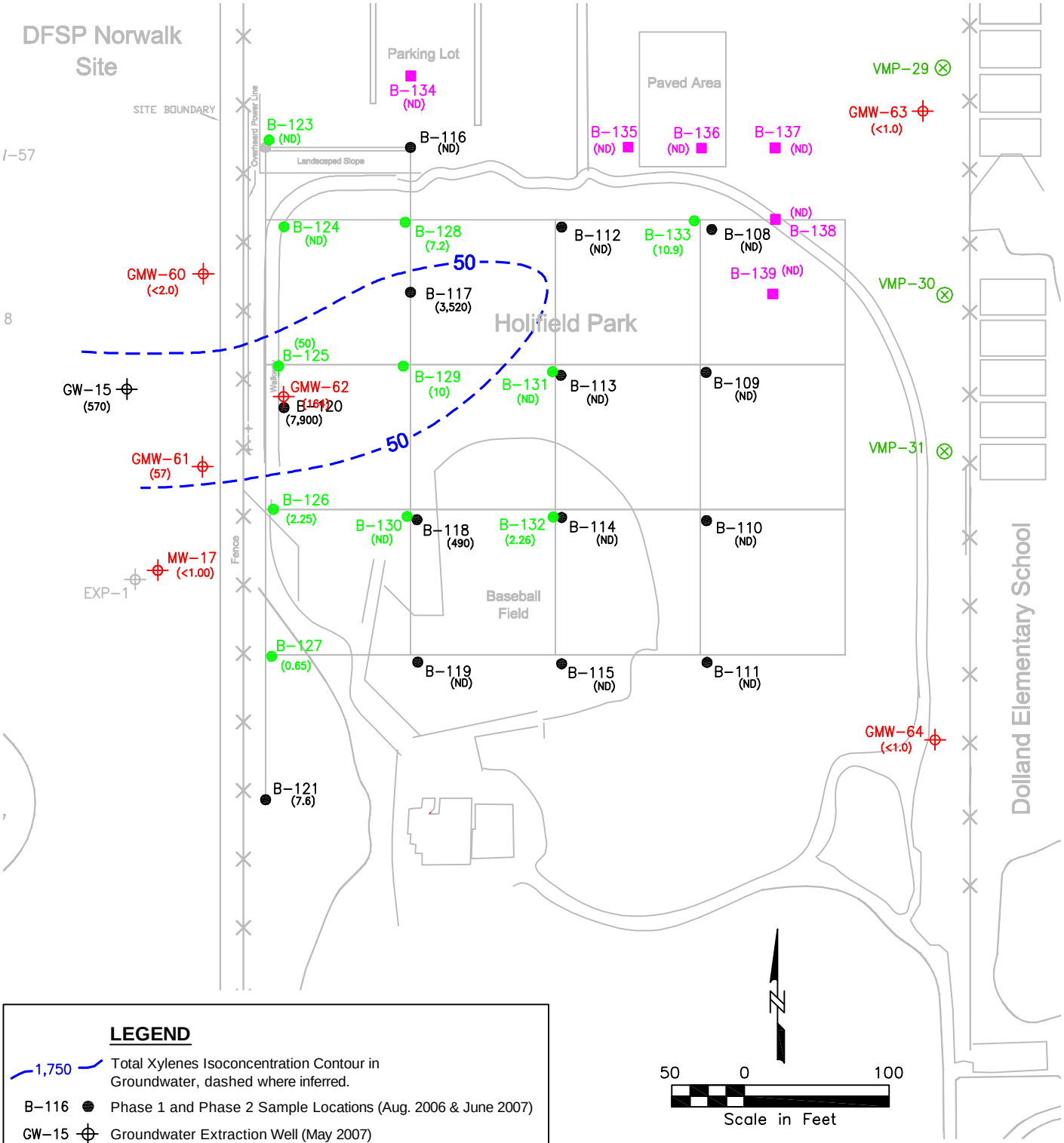
TOLUENE CONCENTRATIONS IN GROUNDWATER

Holifield Park and Dolland Elementary School Norwalk, California

PARSONS

Pasadena, California

File: K:\Depts\Dept48\DESC 07-2008 Contract\Norwalk\ACO-0007 Holifield Park & Aquifer Test\Report\Figures\Figure 4-9 - Toluene GW.dwg



LEGEND

- 1,750 — Total Xylenes Isoconcentration Contour in Groundwater, dashed where inferred.
- B-116 — Phase 1 and Phase 2 Sample Locations (Aug. 2006 & June 2007)
- GW-15 — Groundwater Extraction Well (May 2007)
- GMW-60 — Groundwater Monitoring Well
- VMP-29 — Vapor Monitoring Point
- B-124 — Groundwater Sampling Location - Hydropunch (Sept. 2008)
- B-136 — Groundwater Sampling Location - Hydropunch (Jan. 2009)
- ( ) Maximum Concentration of Benzene in Groundwater

Notes:

1. Data obtained from Hydropunch™ groundwater results (dates indicated in legend) and are reported as µg/L. For GMWs, data is from the First Sentry Event (February 2009).
2. Contours generated based on the maximum detected concentration at each location independent of sample depth.
3. 1 µg/L contour line based on California MCL.

FIGURE 4-10

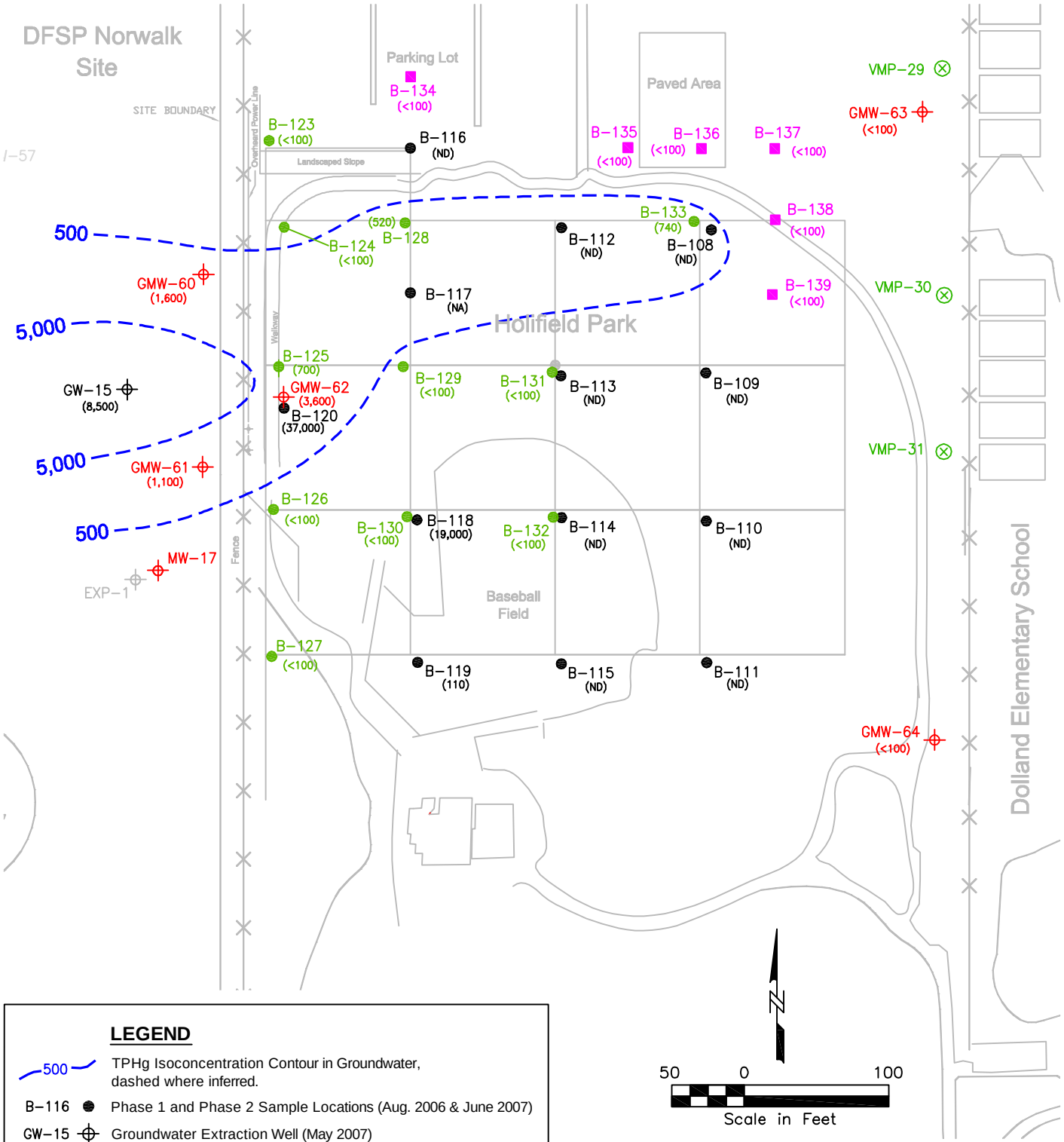
XYLENES (TOTAL) CONCENTRATIONS IN GROUNDWATER

Holifield Park and Dolland Elementary School Norwalk, California

PARSONS

Pasadena, California

File: K:\Depts\Dept48\DESC 07-2008 Contract\Norwalk\ACO-0007 Holifield Park & Aquifer Test\Report\Figures\Figure 4-10 - Xylenes GW.dwg



LEGEND

500	TPHg Isoconcentration Contour in Groundwater, dashed where inferred.
B-116	Phase 1 and Phase 2 Sample Locations (Aug. 2006 & June 2007)
GW-15	Groundwater Extraction Well (May 2007)
GMW-60	Groundwater Monitoring Well
VMP-29	Vapor Monitoring Point
B-124	Groundwater Sampling Location - Hydropunch (Sept. 2008)
B-136	Groundwater Sampling Location - Hydropunch (Jan. 2009)
( )	Maximum Concentration of Benzene in Groundwater

Notes:

1. Data obtained from Hydropunch™ groundwater results (dates indicated in legend) and are reported as µg/L. For GMWs, data is from the First Sentry Event (February 2009).
2. Contours generated based on the maximum detected concentration at each location independent of sample depth.
3. 1 µg/L contour line based on California MCL.

FIGURE 4-11

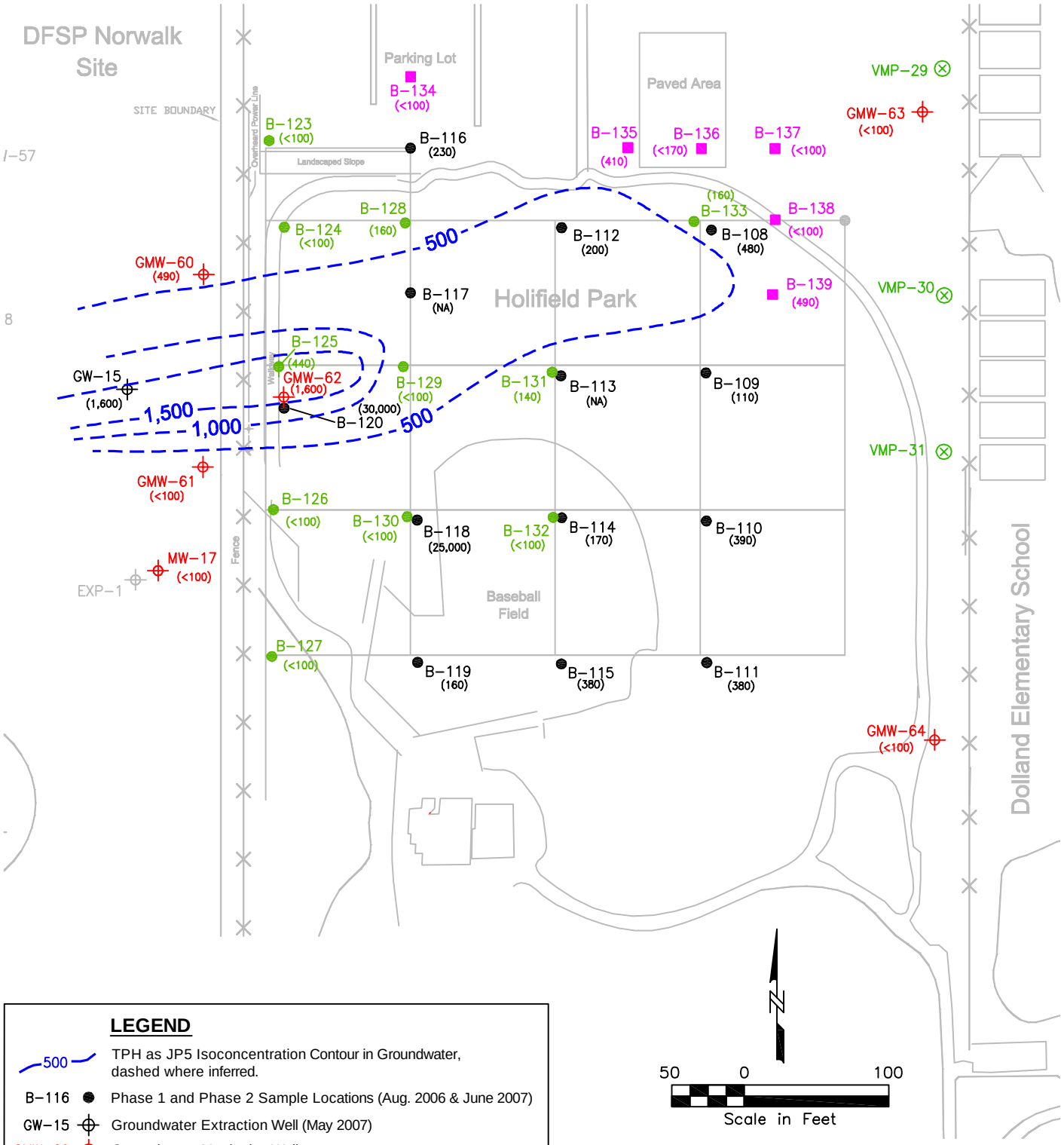
TPH AS GASOLINE CONCENTRATIONS IN GROUNDWATER

Holifield Park and Dolland Elementary School Norwalk, California

PARSONS

Pasadena, California

File: K:\Depts\Dept48\DESC 07-2008 Contract\Norwalk\ACO-0007 Holifield Park & Aquifer Test\Report\Figures\Figure 4-11 - TPH as Gasoline GW.dwg



LEGEND

- 500 — TPH as JP5 Isoconcentration Contour in Groundwater, dashed where inferred.
- B-116 — Phase 1 and Phase 2 Sample Locations (Aug. 2006 & June 2007)
- GW-15 — Groundwater Extraction Well (May 2007)
- GMW-60 — Groundwater Monitoring Well
- VMP-29 — Vapor Monitoring Point
- B-124 — Groundwater Sampling Location - Hydropunch (Sept. 2008)
- B-136 — Groundwater Sampling Location - Hydropunch (Jan. 2009)
- ( ) Maximum Concentration of Benzene in Groundwater

Notes:

1. Data obtained from Hydropunch™ groundwater results (dates indicated in legend) and are reported as µg/L. For GMWs, data is from the First Sentry Event (February 2009).
2. Contours generated based on the maximum detected concentration at each location independent of sample depth.
3. 1 µg/L contour line based on California MCL.
4. Contour Interval 500 µg/L.

FIGURE 4-12

TPH AS JP5 CONCENTRATIONS IN GROUNDWATER

Holifield Park and Dolland Elementary School Norwalk, California

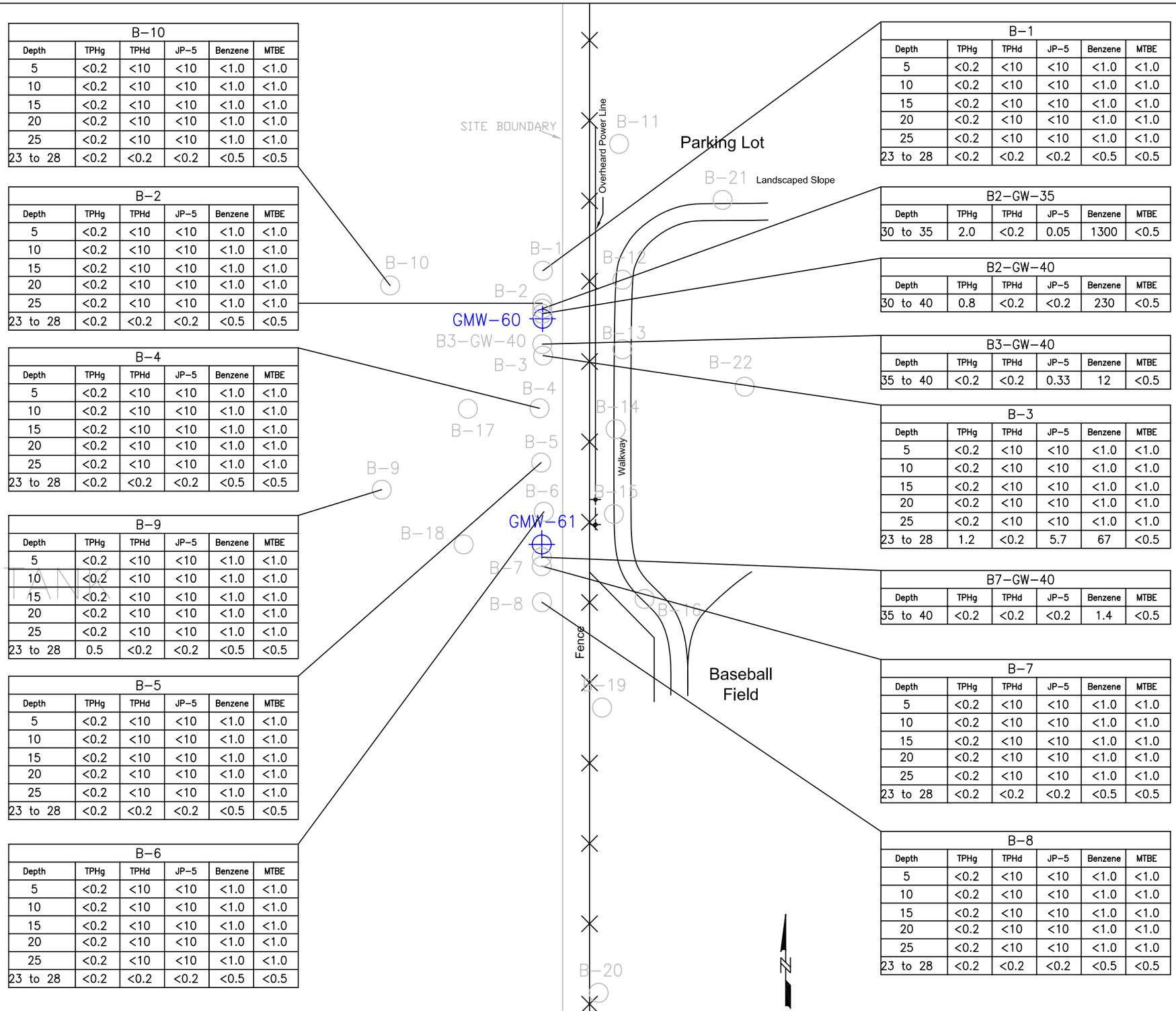
PARSONS

Pasadena, California

File: K:\Depts\Dept48\DESC 07-2008 Contract\Norwalk\ACO-0007 Holifield Park & Aquifer Test\Report\Figures\Figure 4-12 - TPH as JP5 GW.dwg

APPENDIX A

HISTORICAL DATA FROM JULY 2005 AND AUGUST 2006



B-10					
Depth	TPHg	TPHd	JP-5	Benzene	MTBE
5	<0.2	<10	<10	<1.0	<1.0
10	<0.2	<10	<10	<1.0	<1.0
15	<0.2	<10	<10	<1.0	<1.0
20	<0.2	<10	<10	<1.0	<1.0
25	<0.2	<10	<10	<1.0	<1.0
23 to 28	<0.2	<0.2	<0.2	<0.5	<0.5

B-2					
Depth	TPHg	TPHd	JP-5	Benzene	MTBE
5	<0.2	<10	<10	<1.0	<1.0
10	<0.2	<10	<10	<1.0	<1.0
15	<0.2	<10	<10	<1.0	<1.0
20	<0.2	<10	<10	<1.0	<1.0
25	<0.2	<10	<10	<1.0	<1.0
23 to 28	<0.2	<0.2	<0.2	<0.5	<0.5

B-4					
Depth	TPHg	TPHd	JP-5	Benzene	MTBE
5	<0.2	<10	<10	<1.0	<1.0
10	<0.2	<10	<10	<1.0	<1.0
15	<0.2	<10	<10	<1.0	<1.0
20	<0.2	<10	<10	<1.0	<1.0
25	<0.2	<10	<10	<1.0	<1.0
23 to 28	<0.2	<0.2	<0.2	<0.5	<0.5

B-9					
Depth	TPHg	TPHd	JP-5	Benzene	MTBE
5	<0.2	<10	<10	<1.0	<1.0
10	<0.2	<10	<10	<1.0	<1.0
15	<0.2	<10	<10	<1.0	<1.0
20	<0.2	<10	<10	<1.0	<1.0
25	<0.2	<10	<10	<1.0	<1.0
23 to 28	0.5	<0.2	<0.2	<0.5	<0.5

B-5					
Depth	TPHg	TPHd	JP-5	Benzene	MTBE
5	<0.2	<10	<10	<1.0	<1.0
10	<0.2	<10	<10	<1.0	<1.0
15	<0.2	<10	<10	<1.0	<1.0
20	<0.2	<10	<10	<1.0	<1.0
25	<0.2	<10	<10	<1.0	<1.0
23 to 28	<0.2	<0.2	<0.2	<0.5	<0.5

B-6					
Depth	TPHg	TPHd	JP-5	Benzene	MTBE
5	<0.2	<10	<10	<1.0	<1.0
10	<0.2	<10	<10	<1.0	<1.0
15	<0.2	<10	<10	<1.0	<1.0
20	<0.2	<10	<10	<1.0	<1.0
25	<0.2	<10	<10	<1.0	<1.0
23 to 28	<0.2	<0.2	<0.2	<0.5	<0.5

B-1					
Depth	TPHg	TPHd	JP-5	Benzene	MTBE
5	<0.2	<10	<10	<1.0	<1.0
10	<0.2	<10	<10	<1.0	<1.0
15	<0.2	<10	<10	<1.0	<1.0
20	<0.2	<10	<10	<1.0	<1.0
25	<0.2	<10	<10	<1.0	<1.0
23 to 28	<0.2	<0.2	<0.2	<0.5	<0.5

B2-GW-35					
Depth	TPHg	TPHd	JP-5	Benzene	MTBE
30 to 35	2.0	<0.2	0.05	1300	<0.5

B2-GW-40					
Depth	TPHg	TPHd	JP-5	Benzene	MTBE
30 to 40	0.8	<0.2	<0.2	230	<0.5

B3-GW-40					
Depth	TPHg	TPHd	JP-5	Benzene	MTBE
35 to 40	<0.2	<0.2	0.33	12	<0.5

B-3					
Depth	TPHg	TPHd	JP-5	Benzene	MTBE
5	<0.2	<10	<10	<1.0	<1.0
10	<0.2	<10	<10	<1.0	<1.0
15	<0.2	<10	<10	<1.0	<1.0
20	<0.2	<10	<10	<1.0	<1.0
25	<0.2	<10	<10	<1.0	<1.0
23 to 28	1.2	<0.2	5.7	67	<0.5

B7-GW-40					
Depth	TPHg	TPHd	JP-5	Benzene	MTBE
35 to 40	<0.2	<0.2	<0.2	1.4	<0.5

B-7					
Depth	TPHg	TPHd	JP-5	Benzene	MTBE
5	<0.2	<10	<10	<1.0	<1.0
10	<0.2	<10	<10	<1.0	<1.0
15	<0.2	<10	<10	<1.0	<1.0
20	<0.2	<10	<10	<1.0	<1.0
25	<0.2	<10	<10	<1.0	<1.0
23 to 28	<0.2	<0.2	<0.2	<0.5	<0.5

B-8					
Depth	TPHg	TPHd	JP-5	Benzene	MTBE
5	<0.2	<10	<10	<1.0	<1.0
10	<0.2	<10	<10	<1.0	<1.0
15	<0.2	<10	<10	<1.0	<1.0
20	<0.2	<10	<10	<1.0	<1.0
25	<0.2	<10	<10	<1.0	<1.0
23 to 28	<0.2	<0.2	<0.2	<0.5	<0.5

LEGEND

B-1 ○ Boring Location

GMW-60 ⊕ Groundwater Monitoring Well

NOTE:

1) TPH and JP-5 are reported in milligrams per kilogram for soil samples and in milligrams per liter for groundwater samples.

2) Bezene and MTBE are reported in micrograms per kilogram for soil samples, and in micrograms per liter for groundwater samples.

3) This soil investigation work was conducted by Geomatrix in July 2005

Notations:

TPHg - Total Petroleum Hydrocarbons as Gasoline

TPHd - Total Petroleum Hydrocarbons as Diesel

JP-5 Jet Propellant 5

MTBE - Methyl Tertiary Butyl Ether

30 0 60

Scale in Feet

PARSONS

DEFENSE FUEL SUPPORT POINT

NORWALK, CALIFORNIA

FIGURE A1

Soil & Groundwater Analytical Results
July 2005

Holifield Park & Dolland Elementary School
Norwalk, California

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B11						
Depth	TPH as Fuel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes
5’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0
10’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0
25’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0

B12						
Depth	TPH as Fuel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes
5’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0
10’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0
25’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0

B13						
Depth	TPH as Fuel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes
5’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0
10’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0
25’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0

B17						
Depth	TPH as Fuel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes
5’	<5.0	<0.5	<5.0	<5.0	<5.0	<10.0
10’	<5.0	<0.5	<5.0	<5.0	<5.0	<10.0
25’	<5.0	<0.5	<5.0	<5.0	5.6	<10.0

B18						
Depth	TPH as Fuel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes
5’	<5.0	<0.5	<5.0	<5.0	<5.0	<10.0
10’	<5.0	<0.5	<5.0	<5.0	<5.0	<10.0
25’	<5.0	<0.5	<5.0	<5.0	<5.0	<10.0

B19						
Depth	TPH as Fuel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes
5’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0
10’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0
25’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0

SITE BOUNDARY

Overheard Power Line

Parking Lot

B-11

Landscaped Slope

B-21

B-12

GMW-60

B-13

B-17

B-22

B-14

Walkway

GMW-61

B-18

B-15

B-16

Fence

Baseball Field

B-19

B-20

B11						
Depth	TPH as Fuel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes
5’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0
10’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0
25’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0

B22						
Depth	TPH as Fuel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes
5’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0
10’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0
25’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0

B14						
Depth	TPH as Fuel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes
5’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0
10’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0
25’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0

B15						
Depth	TPH as Fuel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes
5’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0
10’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0
25’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0

B16						
Depth	TPH as Fuel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes
5’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0
10’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0
25’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0

B20						
Depth	TPH as Fuel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes
5’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0
10’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0
25’	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0

LEGEND

Borings

Groundwater Monitoring Well

Notations:

TPH - Total Petroleum Hydrocarbons

Note:

TPH concentrations are reported in milligram per kilogram, whereas Benzene, Toluene, Ethylbenzene and Total Xylenes are reported in micrograms per liter.

N

30 0 60

Scale in Feet

PARSONS

DEFENSE FUEL SUPPORT POINT

NORWALK, CALIFORNIA

FIGURE A2

Soil Analytical Results
August 2006
Holifield Park & Dolland Elementary School
Norwalk, California

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B11						
Depth	TPH as Fuel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes
25'–29'	NA	NA	NA	NA	NA	NA
31'–35'	<100	<100	<0.5	3.2	0.66	3.5
36'–40'	<100	<100	<0.5	1.4	<0.5	1.94

B12						
Depth	TPH as Fuel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes
25'–29'	<100	<100	<0.5	0.75	<0.5	0.58
30'–35'	100	<100	11	<0.5	<0.5	0.98

B13						
Depth	TPH as Fuel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes
25'–29'	NA	NA	NA	NA	NA	NA
31'–35'	8,000	9,800	100	270	140	710
36'–40'	300	240	11	29	5.6	30.8

B17						
Depth	TPH as Fuel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes
25'–29'	160	150	7.9	12	1.0	4.9
31'–35'	410	2,000	890	160	36	120
36'–40'	2,600	4,800	75	490	110	680

B18						
Depth	TPH as Fuel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes
25'–29'	5,500	19,000	130	6.7	110	580
31'–35'	7,500	9.500	5,200	290	220	1,490
36'–40'	1,100	3,500	4,100	28	180	700

B19						
Depth	TPH as Fuel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes
25'–29'	<100	<100	<0.5	0.51	<0.5	<0.5
31'–35'	<100	<100	0.96	2.7	0.54	2.22
36'–40'	<100	<100	<0.5	2.1	<0.5	1.0

B21						
Depth	TPH as Fuel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes
25'–29'	<100	<100	0.74	1.1	<0.5	0.58
30'–35'	<100	<100	0.6	1.2	<0.5	0.89

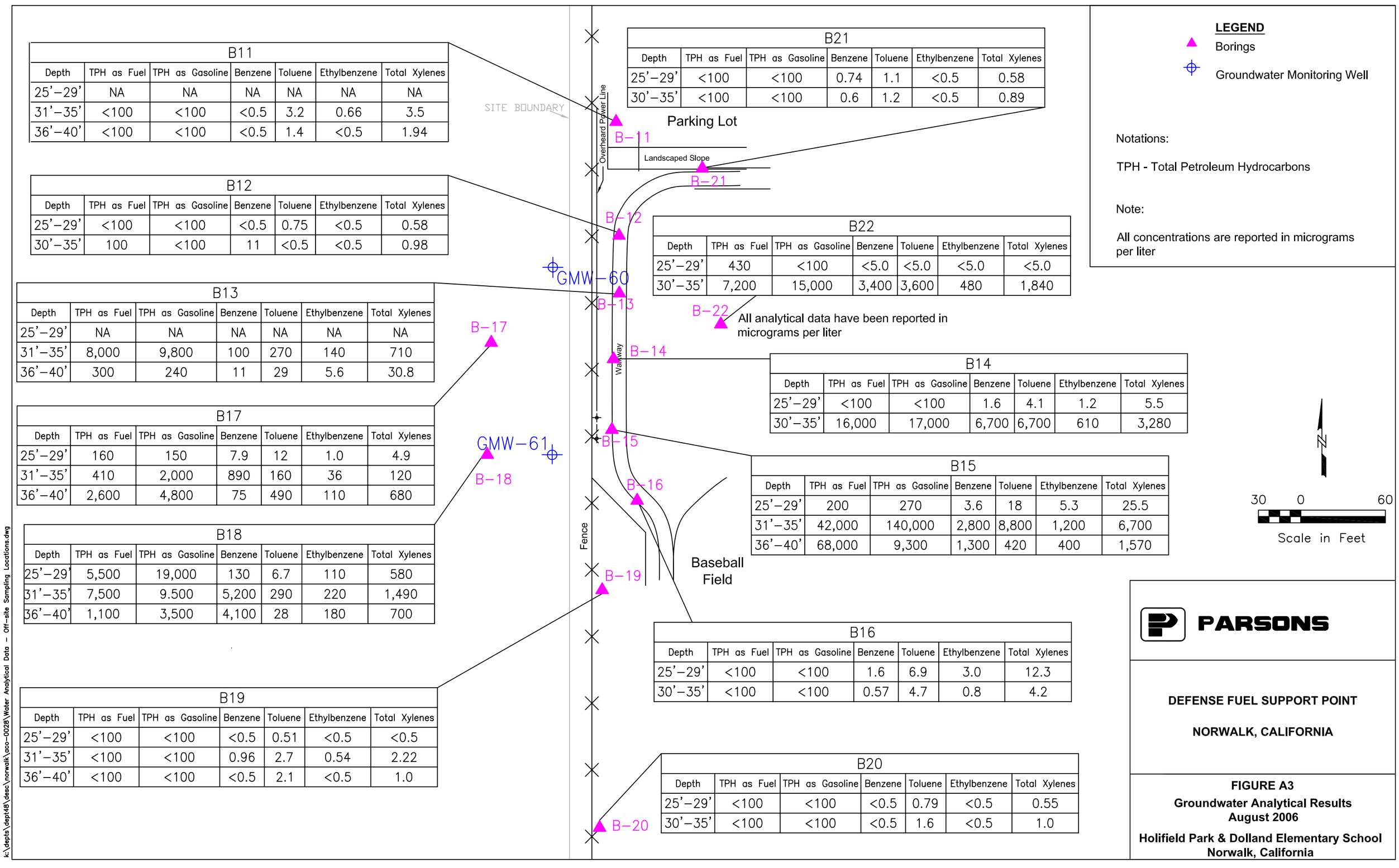
B22						
Depth	TPH as Fuel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes
25'–29'	430	<100	<5.0	<5.0	<5.0	<5.0
30'–35'	7,200	15,000	3,400	3,600	480	1,840

B14						
Depth	TPH as Fuel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes
25'–29'	<100	<100	1.6	4.1	1.2	5.5
30'–35'	16,000	17,000	6,700	6,700	610	3,280

B15						
Depth	TPH as Fuel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes
25'–29'	200	270	3.6	18	5.3	25.5
31'–35'	42,000	140,000	2,800	8,800	1,200	6,700
36'–40'	68,000	9,300	1,300	420	400	1,570

B16						
Depth	TPH as Fuel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes
25'–29'	<100	<100	1.6	6.9	3.0	12.3
30'–35'	<100	<100	0.57	4.7	0.8	4.2

B20						
Depth	TPH as Fuel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes
25'–29'	<100	<100	<0.5	0.79	<0.5	0.55
30'–35'	<100	<100	<0.5	1.6	<0.5	1.0



LEGEND

Borings

Groundwater Monitoring Well

Notations:

TPH - Total Petroleum Hydrocarbons

Note:

All concentrations are reported in micrograms per liter

PARSONS

DEFENSE FUEL SUPPORT POINT

NORWALK, CALIFORNIA

FIGURE A3

Groundwater Analytical Results August 2006

Holifield Park & Dolland Elementary School Norwalk, California

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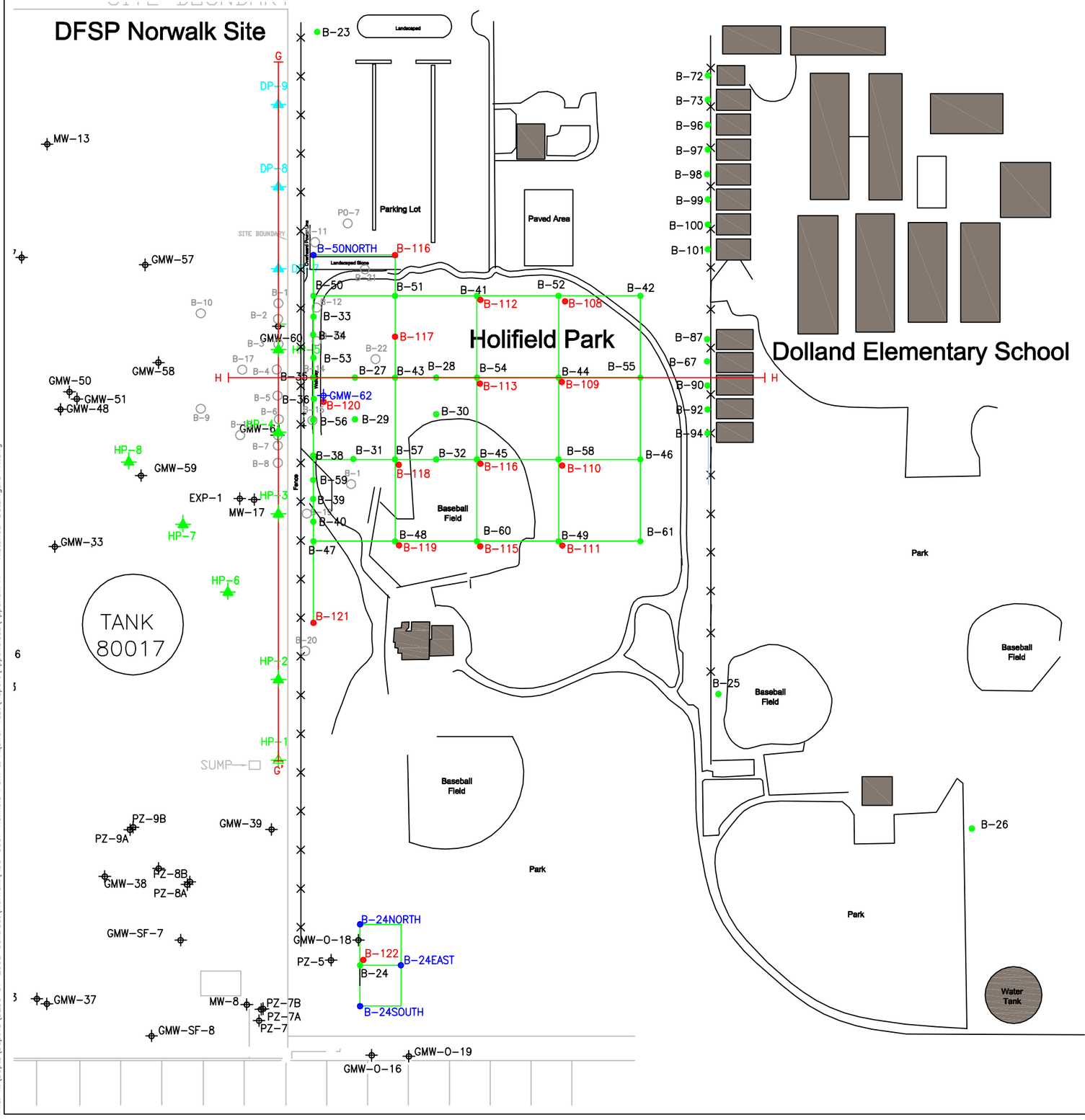

LEGEND

- Phase 1 Soil & Soil Gas Sample Locations
- Phase 2 Soil Gas Step-Out Sample Locations
- Phase 2 DPT Soil/CPT Groundwater Sample Locations
- New Groundwater Monitoring Well Location
- DP-9 Geoprobe Hydraulic Push Point
- HP-5 Hydropunch Location
- G — G' Cross Section Line

Notations:

ft - feet
bgs - below ground surface

Note:

Base map for the school zone and Holifield Park was created from a image obtained from Google Earth.

N

65 0 130

Scale in Feet

PARSONS

DEFENSE FUEL SUPPORT POINT

15306 Norwalk Boulevard,

NORWALK, CALIFORNIA

FIGURE A4

Phase 1 and 2 Sampling Locations

Holifield Park and Dolland Elementary School

File: K:\Depts\Dept48\DESC 07-2008 Contract\Norwalk\ACO-0007 Holifield Park & Aquifer Test\Report\Appendices\Appendix A - Historical Data\Figure A4.dwg

SITE BOUNDARY

B116							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
5	ND	ND	**0.002**	**0.00099**	ND	ND	ND
10	ND	ND	ND	ND	ND	ND	ND
15	ND	ND	ND	ND	ND	ND	ND

B-50							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
5	ND	ND	ND	**0.0013**	ND	ND	ND
10	ND	ND	ND	ND	ND	ND	ND
25	**7.9**	ND	**0.001**	**0.00089**	ND	ND	ND

B-117							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
5	ND	ND	ND	ND	ND	ND	ND
10	ND	ND	**0.0023**	**0.002**	ND	ND	ND

B-27							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
25	ND	ND	**0.0013**	**0.0013**	ND	ND	ND

B-29							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
25	ND	ND	**0.002**	**0.002**	ND	ND	ND

B-120							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
5	ND	ND	ND	ND	ND	ND	ND
10	ND	ND	**0.00089**	ND	ND	ND	ND
15	ND	ND	ND	ND	ND	ND	ND
15 (Dup)	ND	ND	ND	ND	ND	ND	ND
20	ND	ND	ND	ND	ND	ND	ND
25	ND	ND	ND	**0.00087**	ND	ND	ND
25 (Dup)	ND	ND	ND	ND	ND	ND	ND

B-31							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
25	ND	ND	**0.0011**	ND	ND	ND	ND

B-118							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
10	ND	ND	**0.0019**	**0.0022**	ND	ND	ND
10 (Dup)	ND	ND	**0.0028**	**0.0027**	ND	ND	ND

B-59							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
10	ND	ND	**0.003**	**0.003**	ND	ND	ND
15	ND	ND	**0.00098**	**0.0011**	ND	ND	ND
20	ND	ND	ND	ND	ND	ND	ND
25	ND	ND	ND	ND	ND	ND	ND

B119							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
5	ND	ND	ND	ND	ND	ND	ND
10	ND	ND	**0.0016**	**0.0014**	ND	ND	ND

B121							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
5	ND	ND	ND	ND	ND	ND	ND
10	ND	ND	**0.0014**	**0.0013**	ND	ND	ND
10 (Dup)	ND	ND	**0.001**	**0.001**	ND	ND	ND

B108							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
5	ND	ND	**0.0017**	**0.0016**	ND	ND	ND
10	ND	ND	**0.0022**	**0.0016**	ND	ND	ND

B109							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
5	ND	**0.64**	**0.0035**	**0.0016**	ND	ND	ND
10	ND	**0.28**	ND	ND	ND	ND	ND
20	ND	ND	**0.0021**	**0.0018**	ND	ND	ND
25	ND	ND	ND	ND	ND	ND	ND

B112							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
5	ND	ND	**0.0013**	**0.00098**	ND	ND	ND
10	ND	ND	ND	ND	ND	ND	ND

B-54							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
20	ND	ND	**0.00087**	ND	ND	ND	ND
25	ND	ND	**0.0011**	**0.0012**	ND	ND	ND

B113							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
5	ND	ND	ND	ND	ND	ND	ND
10	ND	ND	**0.0024**	**0.0019**	ND	ND	ND
15	ND	ND	ND	ND	ND	ND	ND

B115							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
5	ND	ND	ND	ND	ND	ND	ND
10	ND	ND	**0.0011**	ND	ND	ND	ND

B24 SOUTH							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
5	ND	ND	ND	ND	ND	ND	ND
15	ND	ND	**0.0031**	ND	ND	**0.0027**	**0.017**
25	**150**	**230**	**7.2**	**18**	**3.1**	**20.9**	**29**

LEGEND

- B-72 — Phase 1 Soil & Soil Gas Sample Locations
- B-50NORTH — Phase 2 Soil Gas Step-Out Sample Locations
- B-108 — Phase 2 DPT Soil/CPT Groundwater Sample Locations
- GMW-60 — Groundwater Monitoring Well Location
- GMW-62 — New Groundwater Monitoring Well Location
- B-72 — Soil Non-Detected Results At All Depths Sampled
- Soil Sampling Detected Results

Note:

Base map for Dolland Elementary School and Holifield Park was created from an image obtained from Google Earth.

Depth in feet below ground surface

All concentrations are reported in milligrams per kilogram (mg/kg)

TPH-G - Total Petroleum Hydrocarbons as Gasoline
TPH-FP - Total Petroleum Hydrocarbons as Fuel Product
B - Benzene
T - Toluene
E - Ethylbenzene
X - Xylenes, Total
MTBE - Methyl tert-Butyl Ether
NA - Not Analyzed
ND - Not Detected

N

0 65 130 260 Feet

1 inch equals 130 feet

DEFENSE FUEL SUPPORT POINT

15306 Norwalk Boulevard,

NORWALK, CALIFORNIA

FIGURE A5

SOIL
BTEX, MTBE, AND TPH RESULTS
DECEMBER 2006 AND JUNE 2007

Holifield Park and Dolland Elementary School
Norwalk, California

PARSONS

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SITE BOUNDARY

B-116							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
30-35	**120**	ND	ND	ND	ND	ND	ND
36-40	**170**	ND	ND	ND	ND	ND	ND
41-45	**230**	ND	ND	ND	ND	ND	ND

B-117							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
30-35	NA	NA	**350**	**21**	**640**	**3520**	ND
36-40	ND	ND	**2.5**	**0.64**	**5.2**	**25.5**	ND
41-45	ND	ND	ND	ND	**0.95**	**4.57**	ND

B-118							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
30-35	**25000**	**19000**	ND	**6.7**	**720**	**490**	ND
36-40	**420**	**330**	ND	ND	**1.7**	**1.2**	ND

B-119							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
24-28	ND	ND	ND	ND	ND	ND	ND
30-35	ND	ND	ND	ND	ND	ND	ND
36-40	**160**	ND	ND	ND	ND	ND	ND
36-40 (Dup)	**110**	**110**	ND	ND	ND	ND	ND

B-120							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
31-36	**30000**	**37000**	**5700**	**11000**	**1500**	**7900**	ND
38-42	**310**	**860**	**130**	**32**	**47**	**81**	ND
38-42 (Dup)	**330**	**850**	**130**	**32**	**54**	**86**	ND
44-48	**1200**	**7600**	**2900**	**28**	**560**	**2080**	ND

B-121							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
29-35	ND	ND	**1.7**	**3.3**	**1.5**	**7.6**	**1.3**
36-40	ND	ND	ND	**0.56**	ND	**0.57**	**0.71**
40-44	ND	ND	ND	ND	ND	ND	ND

B-122							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
25-30	**5700**	**86000**	**28000**	**11000**	**2200**	**9900**	**38000**
33-37	**3000**	**3400**	**30**	**1.8**	**3.2**	**3.3**	**5800**
33-37 (Dup)	**3400**	**4700**	**1500**	**1.9**	**16**	**2.39**	**18000**
38-42	**910**	**1400**	**96**	**24**	**6.2**	**19.7**	**190**

B-108							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
26-30	ND	ND	ND	ND	ND	ND	ND
31-35	**480***	ND	ND	ND	ND	ND	ND
36-40	**400***	ND	ND	ND	ND	ND	ND

B-109							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
26-30	ND	ND	ND	ND	ND	ND	ND
31-35	ND	ND	ND	ND	ND	ND	ND
36-40	**110***	ND	ND	ND	ND	ND	ND

B-110							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
36-40	**200***	ND	ND	ND	ND	ND	ND
31-35	**390**	ND	ND	ND	ND	ND	ND

B-111							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
26-30	**380**	ND	ND	ND	ND	ND	ND
31-35	**110***	ND	ND	ND	ND	ND	ND
36-40	**170**	ND	ND	ND	ND	ND	ND

B-112							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
31-35	**200**	ND	ND	ND	ND	ND	ND
36-40	ND	ND	ND	ND	ND	ND	ND
36-40 (Dup)	**110**	ND	ND	ND	ND	ND	ND

B-113							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
32-35	ND	ND	ND	ND	ND	ND	ND
36-40	ND	ND	**1.0**	ND	**1.1**	ND	ND

B-114							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
31-35	**140**	ND	ND	ND	ND	ND	ND
36-40	**170**	ND	ND	ND	ND	ND	ND

B-115							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
24-28	**380**	ND	**0.51**	**1.3**	ND	ND	ND
31-35	**100**	ND	ND	ND	ND	ND	ND
36-40	**150**	ND	ND	ND	ND	ND	ND

GMW-62							
Depth	TPH-FP	TPH-G	B	T	E	X	MTBE
	2500	**11000**	**1400**	**1200**	**360**	**1720**	ND

LEGEND

- B-72 — Phase 1 Soil & Soil Gas Sample Locations
- B-50NORTH — Phase 2 Soil Gas Step-Out Sample Locations
- B-108 — Phase 2 DPT Soil/CPT Groundwater Sample Locations
- GMW-60 — Groundwater Monitoring Well Location
- GMW-62 — New Groundwater Monitoring Well Location
- Groundwater Sampling Results

Note:

Base map for Dolland Elementary School and Holifield Park was created from an image obtained from Google Earth.

Depth in feet below ground surface

All concentrations are reported in micrograms per liter (ug/L)

TPH-G - Total Petroleum Hydrocarbons as Gasoline
TPH-FP - Total Petroleum Hydrocarbons as Fuel Product
* TPH-FP result from the silica gel cleanup. Appendix D contains the non-silica gel treated value.
B - Benzene
T - Toluene
E - Ethylbenzene
X - Xylenes, Total
MTBE - Methyl tert-Butyl Ether
NA - Not Analyzed
ND - Not Detected

N

0 65 130 260 Feet

1 inch equals 130 feet

DEFENSE FUEL SUPPORT POINT

15306 Norwalk Boulevard,

NORWALK, CALIFORNIA

FIGURE A6

GROUNDWATER BTEX, MTBE, AND TPH RESULTS JUNE 2007

Holifield Park and Dolland Elementary School
Norwalk, California

PARSONS

S:\ES\Remed\DFSP\HolifieldPark\GIS\HFP_GW_Invt_Sep07_r.mxd lxh 9/21/07

APPENDIX B

PHOTO LOG

B-124 Hydropunch™ groundwater sampling.

B-131 Hydropunch™ groundwater sampling.

GMW-64 borehole drilling.

GMW-64 well installation.

GMW-64 well development set up.

GMW-63 well development.

VMP-29 probe installation.

VMP-30 probe installation.

VMP-31 probe well box.

APPENDIX C

BORING LOGS AND DEVELOPMENT LOGS

GEOLOGIC LOG

DATE STARTED: 29-Sep-08
DATE COMPLETED: 29-Sep-08

LOGGER: Quin Kinnebrew
WEATHER: Cool, overcast

WELL NO. GMW-63

COMPANY NAME: PARSONS Pasadena, CA

DRILLING SUBCONTRACTOR: Gregg Drilling
DRILL RIG TYPE: Hollow Stem Auger
AUGER TYPE & SIZE: Hollow Stem Auger
BOREHOLE DIAMETER: 10 inches

SURFACE ELEV. 77.8 ft amsl
TOP CASING ELEV. 77.32 ft amsl
NORTHING: 1783886.626 ft
EASTING: 6541687.545 ft

PROJECT: DFSP, Hollifield Park Job Number: 746440
LOCATION: Holifield Park, Norwalk, CA

DEPTH (ft bgs)	DESCRIPTION OF MATERIALS	GRAPHIC LOG	USCS CODE	PID HEADSPACE (ppmv)	BLOW COUNTS
0	BLANK: [Soil not logged between surface and 5 feet.]		NSNR		N/A
5	SILTY SAND: Brown, fine grained sand with trace medium to coarse sand, damp, friable, loose, no odor or visible staining.		SM		4, 5, 5
10	SAND: Brown, fine grained sand, moist, friable, loose, no odor or visible staining.		SP		5, 6, 8
15					

WELL CONSTR.

WELL CONSTRUCTION INFORMATION

SURFACE COMPLETION: Above Ground Completion

WELL CASING:
- Material: SCH 40 PVC
- Diameter: 4 inches

WELL SCREEN:
- Material: SCH 40 PVC
- Screen Opening: 0.02 inches

DEPTH INTERVALS: (feet bgs)
- Casing: 0 - 20
- Screen: 20 - 40
- Grout Seal: 2 - 14.7
- Bentonite Seal: 14.7 - 17.7
- Sand Pack: 17.7 - 41
- End Cap: 40 - 40.33

Total Depth = 41 ft bgs

bgs - Below Ground Surface
ft - feet
HSA - Hollow Stem Auger
N/A - Not Applicable
NS - Not Sampled
PID - Photoionization Detector
ppmv - Parts per Million, Volume per Volume
SAA - Same as Above
Horizontal Survey System: NAD 1983 State Plane California V-FIPS-0405 Feet
Elevations: ASP-NAD83-Zone 4-US Feet

USCS CODE DESCRIPTIONS:

CL - Gravelly, sandy, or silty clays
GC - Gravel/sand/clay mixtures, poorly graded
GM - Gravel/sand/silt mixtures, poorly graded
GP - Gravel/sand mixtures, poorly graded
GW - Gravel/sand mixtures, well graded
ML - Silty or clayey fine sands
NACM - Not applicable/consolidated material
NSNR - No sample/no recovery
SC - Clayey sands, poorly graded
SM - Silty sands, poorly graded
SP - Gravelly sands, poorly graded
SW - Gravelly sands, well graded

GEOLOGIC LOG

DATE STARTED: 29-Sep-08
DATE COMPLETED: 29-Sep-08

LOGGER: Quin Kinnebrew
WEATHER: Cool, overcast

WELL NO. GMW-63

COMPANY NAME: PARSONS Pasadena, CA

DRILLING SUBCONTRACTOR: Gregg Drilling
DRILL RIG TYPE: Hollow Stem Auger
AUGER TYPE & SIZE: Hollow Stem Auger
BOREHOLE DIAMETER: 10 inches

SURFACE ELEV. 77.8 ft amsl
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NORTHING: 1783886.626 ft
EASTING: 6541687.545 ft

PROJECT: DFSP, Hollifield Park Job Number: 746440
LOCATION: Holifield Park, Norwalk, CA

DEPTH (ft bgs)	DESCRIPTION OF MATERIALS	GRAPHIC LOG	USCS CODE	PID HEADSPACE (ppmv)	BLOW COUNTS	WELL CONSTR.
15	SAND: Gray, fine grained sand, moist, friable, medium dense, no odor or visible staining.		SP		8, 13, 15	
20	SAND: Grayish brown, fine grained sand, moist, friable, medium dense, no odor or visible staining.		SP		10, 17, 19	
25	SILT: Olive brown, wet to saturated, trace mica, stiff, no chemical or petroleum odor or staining, trace FeO staining.		ML		8, 8, 14	
30						

WELL CONSTRUCTION INFORMATION

bgs - Below Ground Surface
ft - feet
HSA - Hollow Stem Auger
N/A - Not Applicable
NS - Not Sampled
PID - Photoionization Detector
ppmv - Parts per Million, Volume per Volume
SAA - Same as Above
Horizontal Survey System: NAD 1983 State Plane California V-FIPS-0405 Feet
Elevations: ASP-NAD83-Zone 4-US Feet

USCS CODE DESCRIPTIONS:

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GW - Gravel/sand mixtures, well graded
ML - Silty or clayey fine sands
NACM - Not applicable/consolidated material
NSNR - No sample/no recovery
SC - Clayey sands, poorly graded
SM - Silty sands, poorly graded
SP - Gravelly sands, poorly graded
SW - Gravelly sands, well graded

GEOLOGIC LOG

DATE STARTED: 29-Sep-08
DATE COMPLETED: 29-Sep-08

LOGGER: Quin Kinnebrew
WEATHER: Cool, overcast

WELL NO. GMW-63

COMPANY NAME: PARSONS Pasadena, CA

DRILLING SUBCONTRACTOR: Gregg Drilling
DRILL RIG TYPE: Hollow Stem Auger
AUGER TYPE & SIZE: Hollow Stem Auger
BOREHOLE DIAMETER: 10 inches

SURFACE ELEV. 77.8 ft amsl
TOP CASING ELEV. 77.32 ft amsl
NORTHING: 1783886.626 ft
EASTING: 6541687.545 ft

PROJECT: DFSP, Hollifield Park Job Number: 746440
LOCATION: Holifield Park, Norwalk, CA

DEPTH (ft bgs)	DESCRIPTION OF MATERIALS	GRAPHIC LOG	USCS CODE	PID HEADSPACE (ppmv)	BLOW COUNTS	WELL CONSTR.
30	SILT: Olive gray, fine sandy silt, saturated, trace mica, stiff, no odor or visible staining.		ML		4, 5, 12	
35	SAND: Gray to dark gray, fine grained sand with trace medium to coarse sand, saturated, medium dense, no odor or visible staining.		SP		10, 10, 13	
40	SANDY SILT: Very dark gray silt to fine sandy silt, saturated, micaceous, no odor or visible staining.		ML		5, 5, 7	
45						

WELL CONSTRUCTION INFORMATION

bgs - Below Ground Surface
ft - feet
HSA - Hollow Stem Auger
N/A - Not Applicable
NS - Not Sampled
PID - Photoionization Detector
ppmv - Parts per Million, Volume per Volume
SAA - Same as Above
Horizontal Survey System: NAD 1983 State Plane California V-FIPS-0405 Feet
Elevations: ASP-NAD83-Zone 4-US Feet

USCS CODE DESCRIPTIONS:

CL - Gravelly, sandy, or silty clays
GC - Gravel/sand/clay mixtures, poorly graded
GM - Gravel/sand/silt mixtures, poorly graded
GP - Gravel/sand mixtures, poorly graded
GW - Gravel/sand mixtures, well graded
ML - Silty or clayey fine sands
NACM - Not applicable/consolidated material
NSNR - No sample/no recovery
SC - Clayey sands, poorly graded
SM - Silty sands, poorly graded
SP - Gravelly sands, poorly graded
SW - Gravelly sands, well graded

GEOLOGIC LOG

DATE STARTED: 29-Sep-08
DATE COMPLETED: 29-Sep-08

LOGGER: Quin Kinnebrew
WEATHER: Cool, overcast

WELL NO. GMW-64

COMPANY NAME: PARSONS Pasadena, CA

DRILLING SUBCONTRACTOR: Gregg Drilling
DRILL RIG TYPE: Hollow Stem Auger
AUGER TYPE & SIZE: Hollow Stem Auger
BOREHOLE DIAMETER: 10 inches

SURFACE ELEV. 76.3 ft amsl
TOP CASING ELEV. 75.84 ft amsl
NORTHING: 1783485.720 ft
EASTING: 6541691.602 ft

PROJECT: DFSP, Hollifield Park Job Number: 746440
LOCATION: Holifield Park, Norwalk, CA

DEPTH (ft bgs)	DESCRIPTION OF MATERIALS	GRAPHIC LOG	USCS CODE	PID HEADSPACE (ppmv)	BLOW COUNTS
0	BLANK: [Soil not logged between surface and 5 feet.]		NSNR		N/A
5	SILTY SAND: Light olive brown, silty fine grained sand with trace medium to coarse sand, moist, friable, loose, no odor or visible staining.		SM		5, 5, 6
10	SILTY SAND: Dark grayish brown, silty fine grained sand, moist, loose, no odor or visible staining.		SM		4, 5, 7
15					

WELL CONSTR.

WELL CONSTRUCTION INFORMATION

SURFACE COMPLETION: Above Ground Completion

WELL CASING:
- Material: SCH 40 PVC
- Diameter: 4 inches

WELL SCREEN:
- Material: SCH 40 PVC
- Screen Opening: 0.02 inches

DEPTH INTERVALS: (feet bgs)
- Casing: 0 - 19.5
- Screen: 19.5 - 39.5
- Grout Seal: 2 - 14.4
- Bentonite Seal: 14.4 - 17.5
- Sand Pack: 17.5 - 41
- End Cap: 39.5 - 39.83

Total Depth = 41 ft bgs

bgs - Below Ground Surface
ft - feet
HSA - Hollow Stem Auger
N/A - Not Applicable
NS - Not Sampled
PID - Photoionization Detector
ppmv - Parts per Million, Volume per Volume
SAA - Same as Above
Horizontal Survey System: NAD 1983 State Plane California V-FIPS-0405 Feet
Elevations: ASP-NAD83-Zone 4-US Feet

USCS CODE DESCRIPTIONS:

CL - Gravelly, sandy, or silty clays
GC - Gravel/sand/clay mixtures, poorly graded
GM - Gravel/sand/silt mixtures, poorly graded
GP - Gravel/sand mixtures, poorly graded
GW - Gravel/sand mixtures, well graded
ML - Silty or clayey fine sands
NACM - Not applicable/consolidated material
NSNR - No sample/no recovery
SC - Clayey sands, poorly graded
SM - Silty sands, poorly graded
SP - Gravelly sands, poorly graded
SW - Gravelly sands, well graded

GEOLOGIC LOG

DATE STARTED: 29-Sep-08
DATE COMPLETED: 29-Sep-08

LOGGER: Quin Kinnebrew
WEATHER: Cool, overcast

PAGE 2 OF 3
WELL NO. GMW-64

COMPANY NAME: PARSONS Pasadena, CA

DRILLING SUBCONTRACTOR: Gregg Drilling
DRILL RIG TYPE: Hollow Stem Auger
AUGER TYPE & SIZE: Hollow Stem Auger
BOREHOLE DIAMETER: 10 inches

SURFACE ELEV. 76.3 ft amsl
TOP CASING ELEV. 75.84 ft amsl
NORTHING: 1783485.720 ft
EASTING: 6541691.602 ft

PROJECT: DFSP, Hollifield Park Job Number: 746440
LOCATION: Holifield Park, Norwalk, CA

DEPTH (ft bgs)	DESCRIPTION OF MATERIALS	GRAPHIC LOG	USCS CODE	PID HEADSPACE (ppmv)	BLOW COUNTS	WELL CONSTR.
15	SAND: Grayish brown, fine grained sand, moist, friable, loose, no odor or visible staining.		SP		5, 5, 7	
20	SAND: Light olive brown, fine grained sand, moist, friable, medium dense, no odor or visible staining.		SP		10, 12, 16	
25	SILT: Olive brown, wet, trace mica, stiff, no odor or visible chemical or petroleum staining, trace FeO staining.		ML		8, 9, 11	
30						

WELL CONSTRUCTION INFORMATION

bgs - Below Ground Surface
ft - feet
HSA - Hollow Stem Auger
N/A - Not Applicable
NS - Not Sampled
PID - Photoionization Detector
ppmv - Parts per Million, Volume per Volume
SAA - Same as Above
Horizontal Survey System: NAD 1983 State Plane California V-FIPS-0405 Feet
Elevations: ASP-NAD83-Zone 4-US Feet

USCS CODE DESCRIPTIONS:

CL - Gravelly, sandy, or silty clays
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GP - Gravel/sand mixtures, poorly graded
GW - Gravel/sand mixtures, well graded
ML - Silty or clayey fine sands
NACM - Not applicable/consolidated material
NSNR - No sample/no recovery
SC - Clayey sands, poorly graded
SM - Silty sands, poorly graded
SP - Gravelly sands, poorly graded
SW - Gravelly sands, well graded

GEOLOGIC LOG

DATE STARTED: 29-Sep-08
DATE COMPLETED: 29-Sep-08

LOGGER: Quin Kinnebrew
WEATHER: Cool, overcast

WELL NO. GMW-64

COMPANY NAME: PARSONS Pasadena, CA

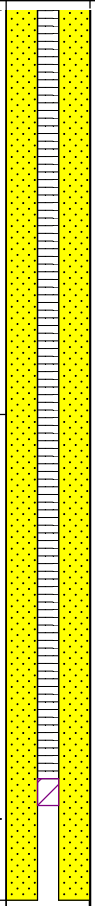
DRILLING SUBCONTRACTOR: Gregg Drilling
DRILL RIG TYPE: Hollow Stem Auger
AUGER TYPE & SIZE: Hollow Stem Auger
BOREHOLE DIAMETER: 10 inches

SURFACE ELEV. 76.3 ft amsl
TOP CASING ELEV. 75.84 ft amsl
NORTHING: 1783485.720 ft
EASTING: 6541691.602 ft

PROJECT: DFSP, Hollifield Park Job Number: 746440
LOCATION: Holifield Park, Norwalk, CA

DEPTH (ft bgs)	DESCRIPTION OF MATERIALS	GRAPHIC LOG	USCS CODE	PID HEADSPACE (ppmv)	BLOW COUNTS	WELL CONSTR.
30	SILT: Dark greenish gray, clayey silt, wet, micaceous, stiff, no odor or visible staining.		ML		7, 8, 11	
35	SAND: Dark gray, fine grained sand with trace medium to coarse sand, saturated, friable, medium dense, no odor or visible staining.		SP		5, 6, 10	
40	SAND: Same as above (SAA).		SP		5, 5, 7	
45						

WELL CONSTRUCTION INFORMATION



bgs - Below Ground Surface
ft - feet
HSA - Hollow Stem Auger
N/A - Not Applicable
NS - Not Sampled
PID - Photoionization Detector
ppmv - Parts per Million, Volume per Volume
SAA - Same as Above
Horizontal Survey System: NAD 1983 State Plane California V-FIPS-0405 Feet
Elevations: ASP-NAD83-Zone 4-US Feet

USCS CODE DESCRIPTIONS:

CL - Gravelly, sandy, or silty clays
GC - Gravel/sand/clay mixtures, poorly graded
GM - Gravel/sand/silt mixtures, poorly graded
GP - Gravel/sand mixtures, poorly graded
GW - Gravel/sand mixtures, well graded
ML - Silty or clayey fine sands
NACM - Not applicable/consolidated material
NSNR - No sample/no recovery
SC - Clayey sands, poorly graded
SM - Silty sands, poorly graded
SP - Gravelly sands, poorly graded
SW - Gravelly sands, well graded

Parsons

Field Boring Log

Location of Boring/Well:	
Job No.: 746440	Client/Site: DFSP, Hollifield Park
Drilling Co./Method	Vironex, Inc.
Sampling Method	Geoprobe / st. steel Drive sample
Background Conditions	cool and overcast
Surface Conditions	Soil
Boring/Well Number	B-124
Sheet	of
Datum:	
Notes:	Only sampled between 40 and 60' (continuously)

Drilling	Start	Finish
Date	09-24-08	→
Time	0728	1025

Geologist: Quin Kinnebrew

Reviewed By:

Type of Instrument/Serial No. PID / 110-014470

Calibration Date/Gas: 05-23-08 / Isobutylene

Sample Container: 1" O.D. Acetal tube

Sample Analyses: JP-5 / Gasoline / VOCs

Personal Sampling: Yes [ ] No [X]

Person Sampled: QK

Sample No. / Sample Depth	Time	Sampler Blows	Inches Driven / % Recovery	Auger	Sample	Breathing Zone	Depth in Feet	USCS Soil Type	Description
							40	ML	@40 dk. green gray to dk gray f. sandy silt, saturated, micaceous, no odor or visible staining
							41	SP	@40.5' dk gray f. sand, friable, saturated no odor or visible staining
							42		↓
							43		
							44		
					0.0		45	SP	SAME
							46		↓
							47		
~~B-124-48~~ B124 (44-48)	0940		~~0940~~				48	ML	@47.5 dk green gray to dk. gray f. sandy silt, saturated, micaceous, no odor or visible staining
							49	CL	@48.5' v. dk gray clay to silty clay wet, no odor or visible staining
					0.0		50		
							51	SP	@49.9' dk gray f-sand, friable, saturated, no odor or visible staining
							52		
							53	CL	@51 DK. greenish gray clay, wet, no odor or visible staining
							54		
					0.0		55	ML	@52' DK greenish gray, f. sandy silt to silt, wet, no odor or visible staining
							56	SM	@53'. DK gray silty f-sand, saturated, no odor or visible staining
B124 (54-58) ~~B-124-58~~	~~B-124-58 ... 1010~~ QK						57	ML	@55' DK gray f-sandy silt, wet, no odor or staining
	1010						58	SP	@56' DK gray f-sand, saturated, friable, no odor or visible staining
							59	ML	@59' DK gray silt, wet, micaceous, no odor or visible staining
					0.0		60		
							61		

Parsons

Field Boring Log

Location of Boring/Well:

Datum:

Job No.: 746440 | Client/Site: DFSP, Hollifield Park

Drilling Co./Method: Vironex, Inc.

Sampling Method: Geoprobe / 5ft. Steel Drive Sampler

Background Conditions: Clear & warm

Surface Conditions: Soil

Boring/Well Number: B-126

Sheet: 1 of 1

Drilling: Start Date 07.24.08 | Finish Date

Notes: Only sampled between 40 and 60' (continuously)

Time: 1030 | 1245

Geologist: Quin Kinnebrew

Reviewed By:

Type of Instrument/Serial No.: PID / 110-014470

Calibration Date/Gas: 05.23.08 / Isobutylene

Sample Container: 1" O.D. Acetate tube

Sample Analyses: JP-5 / Gasoline / VOCs

Personal Sampling: ☐ Yes ☒ No

Person Sampled:

Sample No. / Sample Depth	Time	Sampler Blows	Inches Driven / % Recovery	Instrument: Auger	Instrument: Sample	Instrument: Breathing Zone	Depth in Feet	USCS Soil Type	
							40	SP	@40' DK gray f. sand, saturated, friable, slight petroleum hydrocarbon odor, no apparent staining
							41		
							42		
							43	SP	
								ML	@43.5' : 1.5" thick lense of v. dk
							44	SP	gray silt, wet, micaceous, no apparent odor or staining.
B-126-45	1056				3.6		45	SP	@ ~43.6' same as @ 40'
							46		
							47		
B126-48	1200						48	ML	@48.5' DK gray to dk greenish gray f. sandy silt, saturated, micaceous, no odor or staining
B126 (44-48)							49	CL	@49.5' v. dk gray clay to silty clay, wet, no odor or visible staining
				0.0	0.0		50	SP	@50' DK gray f. sand, saturated, friable, no odor or visible staining
							51		
							52	CL	@52.5' DK greenish gray to v. dk gray clay, wet, no odor or staining
							53	ML	@53.5' DK. greenish gray f. sandy silt, wet, no odor or visible staining
							54	SM/SP	@54.5 DK greenish gray silty f. sand, to f. sand saturated, no odor or staining
				0.0	0.0		55		
							56		
B126 (54-58)							57		
B126-58-W	1225						58		
							59	ML	@59.5 v. dk gray f. sandy silt, wet, micaceous, no odor or visible staining
				0.0	0.0		60		
							61		

Parsons

Field Boring Log

Location of Boring/Well:

Datum:

Job No.: 746440 | Client/Site: DFSP, Hollifield Park

Drilling Co./Method: Vironex, Inc.

Sampling Method: Geoprobe / St. Steel Drive Sampler

Background Conditions: warm & clear

Surface Conditions: Soil

Boring/Well Number: B-131

Sheet: 1 of 1

Drilling: Start Date 05.24.08 → Finish Date

Notes: Only sampled between 40 and 60 feet. Continuously sampled.

Start Time: 1250 | Finish Time: 1425

Geologist: Quin Kinnebrew

Reviewed By:

Type of Instrument/Serial No.: PID / 110-014470

Calibration Date/Gas: 05.23.08 / Isobutylene

Sample Container: 1" O.D. Acetate tube

Sample Analyses: TPH / Gasoline / VOCs

Personal Sampling: ☐ Yes ☒ No

Person Sampled:

Sample No / Sample Depth	Time	Sampler Blows	Inches Driven / % Recovery	Instrument: Auger	Instrument: Sample	Instrument: Breathing Zone	Depth in Feet	USCS Soil Type	Description
							40	SP	@40' DK gray f. sand, saturated, friable, no odor or visible staining
							41		
							42		
							43		
							44	ML	@43.5 V. dk gray silt, saturated, micaceous, no odor or visible staining
					0.0		45	SP	@43.7' DK gray f. sand, saturated, friable, no odor or staining
							46		
							47		
							48		
B131 (49-48)	0725						49	ML	@49.5 DK gray to dk greenish gray f. sandy silt, wet, micaceous, no odor or visible stainings
					0.0		50		
							51	CL	@50' V. DK. gray clay, wet, no odor or stainings
							52	SP	@51' DK grey f. sand, saturated, friable, no odor or visibl staining
							53		
							54	CL	@54 DK. greenish gray to dk gray clay to silty clay, wet, no odor or visible staing
					0.0		55	SP	@55' DK gray fine sand, saturated, friable, no odor or visible stainings
							56	ML	@56' DK gray f. sandy silt, wet, no odor or visible staining
							57		
							58	SM	@58.5 DK gray silty f. sand, wet-saturated micaceous no odor or staining
B131 (55-54)	0750						59	ML	@59.0' DK gray f. sandy silt, wet, no odor or visible stainins
					0.0		60		
							61		

Parsons

Field Boring Log

Location of Boring/Well:

Datum:

Job No.: 746440 01000 | Client/Site: DESC / Holifield Park

Drilling Co./Method: Gregg Drilling

Sampling Method: Push probe

Background Conditions: clear and cool

Surface Conditions: Asphalt

Boring/Well Number: B-134

Sheet 1 of 3

Drilling: Start Date 1-7-09 → Finish Date

Start Time: 0808 | Finish Time: 1510

Notes: Boring hand augered to 5' (not logged)

Geologist:

Reviewed By:

Type of Instrument/Serial No.

Calibration Date/Gas:

Sample Container:

Sample Analyses:

Personal Sampling: ☐ No ☐ Yes

Person Sampled:

Sample No. / Sample Depth	Time	Sampler Blows	Inches Driven / % Recovery	Instrument: Auger	Instrument: Sample	Instrument: Breathing Zone	Depth in Feet	USCS Soil Type	
							0		
							1		
							2		
							3		
							4		
				(not measured)	NM moisture		5	SM	@5' V. DK. gray silty f. sand, moist, no odor or visible staining (*)
				PID sensitive			6	SM	@6' Becomes brown with few fine sandy silt lenses
							7	SP	@7' Lt. olive brown f. sand w/ trace silt, moist, friable, *
							8	ML	@8.5' Lt. olive brown silt to f. sandy silt, moist, *
						0817	9	SM	@9.2' Lt. olive brown silty f. sand, moist, *
				NM			10	ML	@10.5' DK. brown f. sandy silt, moist, *
							11		
							12	SP	@12.5' Two-inch thick lens of Lt. olive brown f. sand, moist, friable, *
						0825	13	ML	@12.7' Same as at 10.5'
							14	SP	@13.5' Lt. olive brown f. sand, moist, friable, *
				NM			15	ML	@13.9' DK. grayish brown silty f. sand, moist, *
							16	SP	@14.1' Lt. yellowish brown fine sand, moist, friable, few gray-colored patches, *
						0846	17		@17' Lt. brownish gray f. sand w/ trace m. to c. sand, moist, friable, *
							18		
							19		
				NM			20	SP/SW	@20' Lt. brownish gray f. sand w/ abundant med. to c. sand, moist, friable
							21		

Parsons

Field Boring Log

Location of Boring/Well:

Datum:

Job No.: 746440 01000	Client/Site: DESC / Holifield Park
Drilling Co./Method: Gregg Drilling	Boring/Well Number: B-134
Sampling Method	Sheet 2 of 3
Background Conditions — see page 1	Drilling Start Date: 1.7.09 → Finish Date
Surface Conditions	Start Time: 0808 — Finish Time: 1510
Notes:	

Instrument: (Not measured)

Sample No. / Sample Depth	Time	Sampler Blows	~~Inches Driven~~ / ~~Recovery~~ sampling interval +	~~Auger~~	lithology ~~Sample~~	Breathing Zone	Depth in Feet	USCS Soil Type	Notes
							20		
						0855	21	ML	@21' Olive gray silt, damp, *
								SW	@21.2' Lt. brownish gray f. to c. sand, moist, friable, *
							22	CL	@21.6' Olive brown silty clay, moist to wet, *
								SW	@21.8' Same as at 21.2; w/ trace gravel
							23	CL	@22.1' Two inch thick lens of olive brown silty clay, wet, *
							24	SW	@22.3' Same as at 21.8'
							25	ML	@24.5' Olive brown f. sandy silt, moist, *
								SW	@24.7' Same as at 22.3'
	water not encountered (30 minutes waiting)		26				26	SM	@24.9' Olive brown silty f. sand, wet, *
								ML	@25.0' DK. olive brown silt, saturated, *
							27	SM	@27.7' Olive brown silty f. sand, wet to saturated, *
							28		~~@30.5~~ (?)
						0925	29		
			30				30	ML	@30.5' Dark greenish gray clayey silt to silt, moist to wet, *
							31		
			32				32		
B134 (32-35)	1320					0938	33	SP	@33' Greenish gray silty fine sand, saturated, *
							34	ML/CL	@34.4' DK. greenish gray silty clay to clayey silt, moist, *
			35				35		
			36				36	SP	@35.9' DK. gray fine sand w/ trace silt, saturated, *
						0954	37		
B134 (36-40)	1350						38		
							39		
			40				40	ML	@40.1' DK. greenish gray silt, wet, *
								SP	@40.4' DK. gray f. sand, saturated, friable, *
							41		

Geologist:

Reviewed By:

Type of Instrument/Serial No.:

Calibration Date/Gas:

Sample Container:

Sample Analyses:

Personal Sampling: ☐ Yes ☐ No

Person Sampled:

Parsons

Field Boring Log

Location of Boring/Well:	Job No.: 746440 01000 — Client/Site: DESC / Holifield Park
	Drilling Co./Method: Gregg Drilling
	Sampling Method: see page 1
	Background Conditions:
	Surface Conditions:
Datum:	Notes:

Boring/Well Number	B-134
Sheet	3 of 3
Drilling Start Date	1-7-09
Drilling Finish Date	→
Start Time	0808
Finish Time	1510

Sample No. / Sample Depth	Time	Sampler Blows	Sampling Interval / Recovery	Auger	Lithology	Breathing Zone (not measured)	Depth in Feet	USCS Soil Type	Notes
							40		
						1008	41	SP	@41' DK gray f. sand, saturated, friable, * (SAME)
							42		↓
							43		↓
			44				44		↓
			↓			1026	45		↓
B134 (44-48)	1420		↓				46		↓
			↓				47		↓
			48				48		↓
						1058	49		↓
							50		↓
							51		↓
			52				52	ML	@52.4' v. dk. gray silt, wet, micaceous, *
B134 (52-55)	1510		↓				53	SP	@52.6' v. dk. gray fine sand, saturated, friable, *
			↓				54	CL	@54.4' DK. gray clay, moist to wet, trace wood fragments, *
			55				55		
							56	ML	@55.7' DK. gray silt to clayey silt, moist to wet, micaceous, *
							57	ML	@56.5' DK. gray f. sandy silt, wet, micaceous, *
							58		
							59		TD = 58'
							60		
							61		

Geologist: ______ Reviewed By: ______

Type of Instrument/Serial No.: ______ Calibration Date/Gas: ______

Sample Container: ______ Sample Analyses: ______

Personal Sampling: ☐ Yes ☐ No Person Sampled: ______

Parsons

Field Boring Log

Location of Boring/Well:

Datum:

Job No.: 746440 01000 | Client/Site: DESC / Holifield Park

Drilling Co./Method: Gregg Drilling

Sampling Method: Push probe

Background Conditions: Clear & cool

Surface Conditions: Concrete

Notes: Hand augered to 5' (Not logged)

Boring/Well Number: B-136

Sheet: 1 of 3

Drilling: Start Date 01-08-09 Time 0736 | Finish Date ~~01-08-09~~ 01-09-09 Time 1510

Geologist:

Reviewed By:

Type of Instrument/Serial No.:

Calibration Date/Gas:

Sample Container:

Sample Analyses:

Personal Sampling: ☐ No ☐ Yes

Person Sampled:

Sample No. / Sample Depth	Time	Sampler Blows	Inches Driven / % Recovery	Instrument: Auger	Instrument: Sample	Instrument: Breathing Zone	Depth in Feet	USCS Soil Type	
							0		
							1		
							2		
							3		
							4		(No odor or visible staining) ↓
					0.0		5	ML	@5' Brown f. sandy silt, damp, * Grades to
								SP	@5.5' Byel. brown f. sand, damp, friable, *
							6	ML	@7.7' DK grayish brown f. sandy silt, moist, *
							7		
							8		
							9	SP	@9.4' Yel. brown f. sand, moist, friable, *
								ML	@9.6' V. DK. grayish brown f. sandy silt, moist, *
					0.0		10	SM	@10.4' Brown to DK grayish brown silty f. sand, moist, *
							11		
							12	SP	@12' Brown f. sand w/ some silt, moist, friable, *
							13	ML	@13' DK grayish brown f. sandy silt, damp, *
							14	SP	@13.4' Gray to light brownish gray f. sand, damp, friable, *
					0.0		15	ML	@15.2' DK grayish brown silt, damp, micaceous, *
							16	SP	@15.5' Lt. brownish gray f. sand w/ trace vn. to c. sand, damp, friable, *
							17	ML	@17' DK grayish brown f. sandy silt, damp, *
							18	SP	@17.3' Light brownish gray fine sand w/ trace med. sand, damp to moist, friable, *
							19		
					0.0		20		
							21		

Parsons

Field Boring Log

Location of Boring/Well:	Job No.: 746440 01000 — Client/Site: DESC / Holifield Park
Drilling Co./Method	Gregg Drilling
Sampling Method	
Background Conditions	
Surface Conditions	
Datum:	Notes: Cf. page 1
Boring/Well Number	B-136
Sheet	2 of 3
Drilling Start Date	01-08-09
Drilling Finish Date	→
Start Time	0756
Finish Time	1510

Sample No. / Sample Depth	Time	Sampler Blows	Sampling interval / Recovery	Sample (Instrument)	Lithology	Breathing Zone	Depth in Feet	USCS Soil Type	Description
							20		
							21	SM	@21' Lt. olive brown silty f. sand, damp, *
	0835							ML	@21.9' Brown f. sandy silt, moist,
							22	SP	@22.3' Lt. brownish gray fine sand w/ trace med sand, moist, friable, *
							23		
						24	24		
	0904			0.0			25	ML	@25.1' Dark grayish brown silt to clayey silt, wet to saturated, *
							26		
							27	SM	@27.5' Olive brown silty f. sand, wet to saturated (@ ~28.9' = saturated), *
						28	28		
	0914		▽				29	ML	@29.3 DK greenish gray silt to clayey silt, moist to wet, *
				0.0			30		
						31	31	ML	@31.5' Greenish gray w/ grey mottling - silt to f. sandy silt, wet, *
							32		
	0935						33	ML	@33.5' v. dk gray silt, saturated, *
			▽				34	SP	@34.0' dk gray f. sand w/ trace med. to c. sand, saturated, *
			35	0.0		35	35		
~~B136 (35-39)~~	sampler broke in hole. Sample not collected					36	36		
	0950						37		
							38		
			39				39	ML	@39.5' v. dk gray silt, saturated, *
				0.0		40	40	SP	@39.8' DK gray f. sand w/ trace m. to c. sand, saturated, friable, *
							41		

Geologist: ____ Reviewed By: ____

Type of Instrument/Serial No. ____ Calibration Date/Gas: ____

Sample Container: ____ Sample Analyses: ____

Personal Sampling: ☐ Yes ☐ No Person Sampled: ____

Parsons

Field Boring Log

Location of Boring/Well:	Job No.: 746440 01000	Client/Site: DESC / Holifield Park
	Drilling Co./Method: Gregg Drilling	Boring/Well Number: B-136
	Sampling Method	Sheet 3 of 3
	Background Conditions (See pg 1)	Drilling Start Date: 01-08-09 / Finish Date: →
Datum:	Surface Conditions	Start Time: 0756 / Finish Time: 1510
	Notes:	

Geologist: ______ Reviewed By: ______

Type of Instrument/Serial No.: ______ Calibration Date/Gas: ______

Sample Container: ______ Sample Analyses: ______

Personal Sampling: ☐ Yes ☐ No Person Sampled: ______

Sample No. / Sample Depth	Time	Sampler Blows	Sample interval & Recovery	Instrument: Sample	Lithology	Breathing Zone	Depth in Feet	USCS Soil Type	Description
			40				40		fine sand ↓
B136 (40-43)	1255		40–43				41	1030	
							42		
			43				43	ML	@43.5' DK. greenish gray f. sandy silt, saturated, *, few sand lenses
						44	44	SP	@44.8 DK gray, fine sand, saturated, friable, *
				0.0			45	1049	↓
			46				46		
							47		
B136 (46-49)	1425		46–49			48	48		
			49				49	1123 SM	@49.5 DK greenish gray silty f. sand, saturated, friable, *
				0.0			50	CL	@49.8' DK. gray clay, wet, trace wood fragments, *
			51				51		
B136 (51-54)	1510		51–54				52	ML	@51.0' DK green gray silt, wet, *, micaceous
								SP	@51.2' DK gray f. sand, saturated, friable, *
							53	SM	@53.5' DK greenish gray silty f. sand, saturated, *
			54				54	ML	@54.0' DK greenish gray silt, saturated, micaceous, *
				0.0		55	55	CL	@54.5 Black clay, wet, organic rich (wood fragments), *
							56	CL	@54.7' DK. greenish gray clay, moist to wet, *, trace $CaCO_3$ inclusions 56.5-58
							57		↓
						58	58		
							59		TD = 58
				0.0			60		
							61		

Parsons

Field Boring Log

Location of Boring/Well:

Datum:

Job No.: 746440 01000 | Client/Site: DESC / Holifield Park

Drilling Co./Method: Gregg Drilling

Sampling Method: Push Probe

Background Conditions: Cool & clear

Surface Conditions: Grass

Boring/Well Number: B-139

Sheet 1 of 3

Drilling Start Date: 01-07-09 Time: 1113

Drilling Finish Date: 01-12-09 Time: 1255

Notes: Hand augered to 5'

Geologist:

Reviewed By:

Type of Instrument/Serial No.

Calibration Date/Gas:

Sample Container:

Sample Analyses:

Personal Sampling: ☒ No ☐ Yes

Person Sampled:

Sample No. / Sample Depth	Time	Sampler Blows	Inches Driven / % Recovery	Instrument: Auger	Instrument: Sample	Instrument: Breathing Zone	Depth in Feet	USCS Soil Type	
							0	SM	@0' Brown silty f. sand, moist, no odor or visible staining (*)
							1	SP	@2' Yel. brown fine sand w/ trace silt, moist, friable, *
							2	SM	@3' Same as @0'
							3		
							4		
					0.0		1115 5		
							6	SP	@6' Lt. yel. brown f. sand, moist, friable, *
							7		
							8	ML	@8.5' Lt. yel. brown f. sandy silt, moist, micaceous, *
							1128 9	ML	@9.5 V. dk. gray silt, moist, *
					0.0		10	ML	@9.9' Brown to dk grayish brown f. sandy silt, damp to moist, micaceous, *
							11		
							12	SP	@12.4' Brown f. sand, moist, friable, * trace silt
						1137	13		
							14		
				@	0.0		15		
							16	ML	@16' Lt. olive brown silt, moist, micaceous, *
						1148	17	SM	@16.2' Mottled yellowish brown and gray silty f. sand, damp, moist, friable, *
							18	CL	@17.8' Olive brown silty clay, moist, *
							19	SM	@18.2' Olive brown silty f. sand, damp to moist, *
					0.0		20		
							21		

Parsons

Field Boring Log

Location of Boring/Well:	
Job No.: 746440 01000	Client/Site: DESC / Hollifield Park
Drilling Co./Method	Gregg Drilling
Sampling Method	see page 1
Background Conditions	
Surface Conditions	
Datum:	
Boring/Well Number	B-139
Sheet	2 of 3

Drilling	Start	Finish
Date	01-09-09	01-12-09
Time	1113	1255

Notes:

Geologist: [signature]

Reviewed By:

Type of Instrument/Serial No.

Calibration Date/Gas:

Sample Container:

Sample Analyses:

Personal Sampling: Yes ☐ No ☒

Person Sampled:

Sample No. / Sample Depth	Time	Sampler Blows	Inches Driven / Recovery (4' sampling interval)	Instrument: Auger Sample	Lithology Sample	Breathing Zone	Depth in Feet	USCS Soil Type	Notes
							20		
						1153	21	SP	@21' lt. yel. brown to light brownish gray fine sand, moist, friable, *
							22		
							23	ML	@23.8' Olive brown silt to f. sandy silt, moist, micaceous, *
						24	24		
			25	0.0	▽	1157	25	SM	@25.4' Olive brown silty f. sand, saturated, *
							26	ML	@25.8' Olive brown f-sandy silt, saturated, micaceous, *
B139 (25-29)	dry (1" water after 15 min)						27	SP	@26.5' Olivebrown fine sand w/ trace silt, saturated, *
						28	28		
			29			1203	29	ML	@29.3' DK gray silt, wet, micaceous, *
				0.0			30		
						31	31	ML	@31.8' Gray silt to f-sandy silt, wet, $CaCO_3$ inclusions, * micaceous
							32		
						1211	33	SM	@33.3' DK gray silty f. sand, saturated, *
							34	ML	@34.0 DK gray silt, wet, micaceous, *
								SM	@34.5' v. DK gray silty f. sand, saturated, friable, *
			35	0.0		35	35	SP	@34.9 v. DK gray f. sand, saturated, friable, *
						36	36		
B139 (35-39) A (Dup-1)	0950						37		
							38		
			39				39	ML	@39.5' DK gray silt, wet, micaceous, *
				0.0		40	40	SP	@39.7' v. DK gray f. sand, saturated, friable, *
							41		

Parsons

Field Boring Log

Location of Boring/Well:	Job No.: 746440 01000	Client/Site: DESC / Holifield Park
Drilling Co./Method: Gregg Drilling	Boring/Well Number: B-139	
Sampling Method: see page 1	Sheet 3 of 3	
Background Conditions	Drilling Start Date: 01-09-05, Time: 1113	Finish Date: 01-12-05, Time: 1255
Surface Conditions		
Datum:	Notes:	

Sample No. / Sample Depth	Time	Sampler Blows	Inches Driven / % Recovery	Auger	Lithology	Breathing Zone	Depth in Feet	USCS Soil Type	Notes
							40		
							41	SM	@41' v. dk. gray silty f. sand, saturated, micaceous
							42		
							43	ML	@43' Two inch thick lense of dk. gray f. sandy silt, saturated, micaceous, *
						44	44	SP	@43.2' v. dk. gray f. sand w/ trace silt, saturated, friable, *
							45	ML	@44.8' v. dk. gray f. sandy silt, saturated, *
								SP	@45.2' DK. gray f. sand, saturated, friable, *
			46				46		(arrow down to 51')
B139 (46-49)	1010						47		
						48	48		
			49				49		
							50		
			51				51	ML	@51' One inch thick lens of dk. gray silt, saturated, micaceous, *
B139 (51-54)	1050						52	SP	@51.1' same as @ 45.2'
								ML	@52.6' DK. gray silt to f. sandy silt, saturated, micaceous, *
							53	SP	@53.0' DK. gray f. sand, saturated, friable, *
			54				54	ML	@54.5' DK. greenish gray silt, saturated, micaceous, *
						55	55	CL	@54.9' Black and DK. greenish gray clay, organic rich, *
							56	CL	@55.2' DK. greenish gray clay, moist to wet, trace $CaCO_3$ inclusions between 56.2 and 58', trace wood fragments
							57		
						58	58		
							59		TD = 58
							60		
							61		

Geologist: ______ Reviewed By: ______

Type of Instrument/Serial No.: ______ Calibration Date/Gas: ______

Sample Container: ______ Sample Analyses: ______

Personal Sampling: Yes ☐ No ☐ Person Sampled: ______

Parsons

Field Boring Log

Location of Boring/Well:

Datum:

Job No.: 746440 | Client/Site: DFSP, Hollifield Park

Drilling Co./Method: mar (fm-11) Gregg Drilling / Hollowstem

Sampling Method: 2" ID sampler

Background Conditions: cool & overcast

Surface Conditions: soil / lawn

Boring/Well Number: GMW-63

Sheet: 1 of 3

Drilling Start Date: 09.29.08 → Finish Date

Drilling Start Time: 0750 | Finish Time: 1015

Notes:

Geologist: Quin Kinnebrew

Reviewed By:

Type of Instrument/Serial No.: PID / 110-014470

Calibration Date/Gas: 09.29.08 / Hexane

Sample Container: 2" x 6" brass tubes

Sample Analyses: TP-5 / Gasoline / VOCs

Personal Sampling: ☐ Yes ☒ No

Person Sampled: QL

Sample No. / Sample Depth	Time	Sampler Blows	Inches Driven / % Recovery	Instrument: Auger	Instrument: Sample	Instrument: Breathing Zone	Depth in Feet	USCS Soil Type	Notes
GMW-63-5	0803	4, 3, 5	18 / 100		0.0		5	SM	Brown silty f. sand w/ trace med. to coarse sand, damp, friable, loose, no odor or visible staining
GMW-63-10	0809	5, 6, 8	18 / 100		0.0		10	SP	Brown f. sand, moist, friable, loose, no odor or visible staining
				0.0			12		
GMW-63-15	0816	8, 13, 15	18 / 100		0.0		15	SP	Gray f. sand, moist, friable, med. dense, no odor or visible staining
GMW-63-20	0824	10, 17, 19	18 / 100		0.0		20	SP	Grayish brown f. sand, moist, friable, medium dense, no odor or visible staining

Parsons

Field Boring Log

Location of Boring/Well:

Datum:

Job No.: 746440 | Client/Site: DFSP, Hollifield Park

Drilling Co./Method: Gregg Drilling (Marl-Mill, ~~Vironex, Inc.~~ Hollow stem auger

Sampling Method: ~~Geoprobe~~ 2" I.D. SS. Steel sampler

Background Conditions: cool & overcast

Surface Conditions: Soil/lawn

Boring/Well Number: GMW-63

Sheet 2 of 3

Drilling Start Date: 09-29-08 → Finish Date

Drilling Start Time: 0750 | Finish Time: 1015

Notes:

Geologist: Quin Kinnebrew

Reviewed By:

Type of Instrument/Serial No.: PID/110-014470

Calibration Date/Gas: 9-29-08/Hexane

Sample Container: 2"x6" brass tubes

Sample Analyses: TP-5/Gasoline/VOCs

Personal Sampling: ☐ Yes ☒ No

Person Sampled:

Sample No. / Sample Depth	Time	Sampler Blows	Inches Driven / % Recovery	Instrument: Auger	Instrument: Sample	Instrument: Breathing Zone	Depth in Feet	USCS Soil Type	
GMW-63 25	0836	8 8 14	18 / 100		0.0		25	ML	Olive brown silt, wet to saturated, trace mica, stiff, no chemical or petroleum odor or staining, trace FeO staining
				0.0			29	ML	Olive gray f. sandy silt, saturated, trace mica, stiff, no odor or visible staining
GMW-63 30	0843	4 5 12	18 / 100		0.0		30		
GMW-63 35	0850	10 10 13	18 / 100		0.0		35	SP	Gray to dk gray f. sand w/ trace mod. to coarse sand, saturated, med. dense, no odor or visible staining
							39	SP	@39' Same as above
GMW-63 40	0857	5 5 7	18 / 100		0.0		40		@40' v. dk gray silt to fine sandy silt, saturated, micaceous, no odor or visible staining
							61		

Parsons

Field Boring Log

Location of Boring/Well:

Datum:

Job No.: 746440 | Client/Site: DFSP, Hollifield Park

Drilling Co./Method: Gregg Drilling Hollow Stem Auger / mark M-11

Sampling Method: 2" I.D. ct. Steel sampler

Background Conditions: cool & overcast

Surface Conditions: Soil / Lawn

Boring/Well Number: GMW-63

Sheet 3 of 3

Drilling: Start Date 09.29.08 | Finish Date →

Start Time 0750 | Finish Time 1015

Notes:

Geologist: Quin Kinnebrew

Reviewed By:

Type of Instrument/Serial No.: PID/110-014470

Calibration Date/Gas: 09.29.08 / Hexane

Sample Container: 2"x6" brass tubes

Sample Analyses: TPH/Gasoline/VOCs

Personal Sampling: ☐ Yes ☒ No

Person Sampled: QK

Sample No. / Sample Depth	Time	Sampler Blows	Inches Driven / % Recovery	Instrument: Auger	Instrument: Sample	Instrument: Breathing Zone	Depth in Feet	USCS Soil Type
							0	
							1	
							2	
							3	
							4	
							5	
							6	
							7	
							8	
							9	
							10	
							11	
							12	
							13	
							14	
							15	
							16	
							17	
							18	
							19	
							20	

Well construction notes:

- 10" O.D. Boring to 41'
- schedule 40 PVC solid casing: 0-20'
- schedule 40 PVC screen (0.02" slots): 20-40'
- No. 3 sand: 17.7 - 41'
- Medium bentonite chips: 14.7 - 17.7'
- Bentonite grout: 2 - 14.7
- 12" well box set at surface in concrete

Parsons

100 W. Walnut Street, Pasadena, CA

WELL DEVELOPMENT LOG

METHOD(S)	PUMP	BAILER	SURGE BLOCK
TYPE	12v. Mini Typhoon	3" O.D. X 10' L	3.5-4" O.D.
MATERIAL	plastic	St. Steel	rubber & Steel
DIMENSION	1.5" O.D/12" L.	3" O.D. X 10' L	3.5-4" O.D.
OTHER	New plastic tubing used w/ pump		

PROJECT NO.	WELL ID	PROJECT NAME	LOCATION	PREPARED BY
7464440	GMW-63	DESC/Holifield Park	Holifield Park	Quin Kinnebrew

DEVELOPMENT CRITERIA: Remove bottom sediment, surge well screen, pump till clear

DECONTAMINATION METHOD: steam clean w/ soapy water, clean water rinse

HOLE DIAMETER d_h= 10"

WELL CASING

INSIDE DIAMETER d_w= 4"

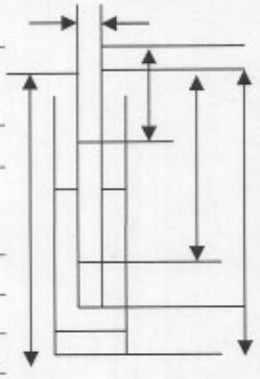
CASING STICKUP SU= —

DEPTH TO water WELL LEVEL DTW= 28.79

TOP SCREEN SU+S_T= ~20'

BASE SCREEN SU+S_g= ~40'

BOTTOM WELL SU+TD= 40.02



CASING VOLUME CALCULATION (USE CONSISTENT UNITS)

CASING VOLUME = $V_c = \pi\left(\frac{d_w}{2}\right)^2 (TD - H)$ = 0.653 gal/ft * 11.23' = 7.33

Gallons per linear ft for casing diameter of 2"=0.163 4"=0.653 4.5"=0.83 8"=2.6

FIELD EQUIPMENT CALIBRATIONS

EQUIPMENT MODEL/TYPE: Horiba (No. 601010)

SERIAL NO.: ↳ water checker U-10

DATE CALIBRATED: — Not Known (provided by Gregg)

TEMP (C):

STANDARD / ACTUAL:

DATE	TIME (24:00 Hr)	VOLUME (gal ~~liters~~)	DTW (ft)	TEMP (°C))	pH (std. units)	EC (µS@25°C)	TURBIDITY (NTU)	COMMENTS (i.e. color/ odor)
10.01.08	0755-0815	18 gal	28.79					Bail w/ 3" O.D. St. Steel bailer (10' length)
	0820-0837							use surge block to clean sand pack & screen
	0840-0857	+ 18 gal (36)						Bail w/ 3" O.D. St. Steel bailer (10' length)
	0912							Begin pumping w/ "Mini typhoon" 12 V. pump
	0916	+ 7 gal (43)	- begins to clear, clear @ 10 gal.				(46 total)	- pumping @ 1.79 gallons / minute
	0920	# 50		20.5	6.74	2.04	350	
	0923	52		20.0	6.75	2.02	176	
	0925	55		20.0	6.71	2.01	89	
	0926	57		19.9	6.72	2.01	53	
	0927	59		19.8	6.72	2.00	33	
	0929	61		19.8	6.72	2.01	20	
	0930	63		19.8	6.72	2.01	10	
	0931	65		19.7	6.72	2.00	7	
	0933	67		19.7	6.72	2.01	4	
	0934	69		19.7	6.72	2.00	2	
	0935	71		19.7	6.72	2.00	0	v. clear

REMARKS: 71 gallons removed during development (9.68 well volumes)

DEVELOPED BY: Gregg Drilling / Stuart Fuller w/ Quin Kinnebrew

REVIEWED BY:

SIGNATURE: Quin Kinnebrew

Parsons

Field Boring Log

Location of Boring/Well:

Datum:

Job No.: 746440 | Client/Site: DFSP, Hollifield Park

Drilling Co./Method: Gregg Drilling / Hollow Stem - mod. M-11

Sampling Method: 2" ID SS steel sample

Background Conditions: Cool & overcast

Surface Conditions: Soil / Lawn

Boring/Well Number: GMW-64

Sheet 1 of 2

Drilling Start Date: 09-29-08 | Drilling Finish Date: →

Notes:

Drilling Start Time: 1020 | Drilling Finish Time: 1330

Geologist: Quin Kinnebrew

Reviewed By:

Type of Instrument/Serial No: PID / 110-014470

Calibration Date/Gas: 09-29-08 / Hexane

Sample Container: 2"x6" brass tubes

Sample Analyses: SP-5 / Gasoline / VOC

Personal Sampling: ☒ No ☐ Yes

Person Sampled:

Sample No. / Sample Depth	Time	Sampler Blows	Inches Driven / % Recovery	Instrument: Auger	Instrument: Sample	Instrument: Breathing Zone	Depth in Feet	USCS Soil Type	Notes
GMW-64-5	1048	5/5/6	18/100		0.0		5–6	SM	Lt. olive brown silty f. sand w/ trace med. to coarse sand, moist, friable, loose, no odor or visible staining
GMW-64-10	1055	4/5/7	18/100		0.0		9–10	SM	v. dk. grayish brown silty f. sand, moist, loose, no odor or visible staining
				0.0			13–14	SP	Grayish brown f. sand, moist, friable, loose, no odor or visible staining
GMW-64-15	1104	5/5/7	18/100		0.0		14–15		
GMW-64-20	1110	10/12/16	18		0.0		19–20	SP	Lt. olive brown f. sand, moist, friable, med. dense, no odor or visible staining

Parsons

Field Boring Log

Location of Boring/Well:

Datum:

Job No.: 746440	Client/Site: DFSP, Hollifield Park
Drilling Co./Method: Gregg Drilling / Hollow Stem Auger	Boring/Well Number: GMW-64
Sampling Method: 2" ID. Stainless steel sampler	Sheet: 2 of 2
Background Conditions: cool & overcast	Drilling Start Date: 09-29-08
Surface Conditions: Soil / Lawn	Drilling Finish Date: →
Notes:	Drilling Start Time: 1020
	Drilling Finish Time: 1330

Geologist: Quin Kinnebrew

Reviewed By:

Type of Instrument/Serial No.: PID / 110-014470

Calibration Date/Gas: 09-29-08 / Hexane

Sample Container: 2'x6" Brass Tubes

Sample Analyses: SP-5 / Gasoline / VOCs

Personal Sampling: ☐ Yes ☒ No

Person Sampled:

Sample No. / Sample Depth	Time	Sampler Blows	Inches Driven / % Recovery	Instrument: Auger	Instrument: Sample	Instrument: Breathing Zone	Depth in Feet	USCS Soil Type	
							20		well construction notes: - 10" O.D. boring to 41' - schedule 40 PVC solid casing: 0-19.5 - schedule 40 PVC screen (0.02" slots): 19.5-39.5' - No. 3 sand: 17.5-41.0' - medium bentonite chips: 14.4-17.5 - Bentonite grout - 2-14.4' - 12" well box set @ surface in concrete
							21		
							22		
							23		
							24		
GMW-64-25	1119	8 8 11	18 / 100		0.0		25	ML	Olive brown silt, wet, trace mica, stiff, no odor or visible chemical or petroleum staining, trace FeO staining
							26		
							27		
							28		
							29		
GMW-64-30	1122	7 8 11	18 / 100		0.0		30	ML	DK greenish gray clayey silt, wet, micaceous, stiff, no odor or visible staining
							31		
				0.0			32		
							33		
							34	SP	Dark gray f. sand w/ trace med. to coarse sand, saturated, friable, med. dense, no odor or visible staining
GMW-64-35		5 6 10	18 / 100		0.0		35		
							36		
							37		
							38		
							39	SP	@ 39' same
GMW-64-40		5 5 7	18 / 100		0.0		40		
							1		

Parsons

100 W. Walnut Street, Pasadena, CA

WELL DEVELOPMENT LOG

METHOD(S)

	PUMP	BAILER	SURGE BLOCK
TYPE	12 v. Mini Typhoon		
MATERIAL	plastic	St. Steel	rubber & steel
DIMENSION	1.5" OD X 12" L	3" O.D. X 10' L	3.5-4" O.D.
OTHER	New plastic tubing w/pump		

PROJECT NO. 746440 | WELL ID GMW-64

PROJECT NAME DESE/Holifield Park | LOCATION Holifield Park | PREPARED BY Quin Kinnebrew

DEVELOPMENT CRITERIA

Remove bottom sediment, surge well screen, pump 'till clear

DECONTAMINATION METHOD

steam clean & wash w/ soapy water, rinse w/ clean tap water

HOLE DIAMETER d_h= 10"

WELL CASING

INSIDE DIAMETER d_w= 4"

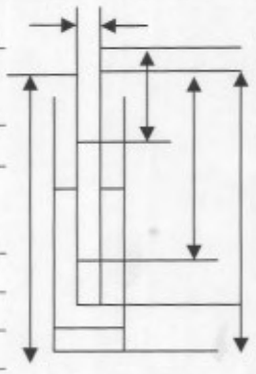
CASING STICKUP SU= —

DEPTH TO water WELL LEVEL DTW= 27.22

TOP SCREEN $SU+S_T$=

BASE SCREEN $SU+S_B$=

BOTTOM WELL SU+TD= 39.72



CASING VOLUME CALCULATION (USE CONSISTENT UNITS)

CASING VOLUME = $V_c = \pi\left(\frac{d_w}{2}\right)^2 (TD - H)$ = 8.1625 gal

Gallons per linear ft for casing diameter of 2"=0.163 4"=0.653 4.5"=0.83 8"=2.6

FIELD EQUIPMENT CALIBRATIONS

EQUIPMENT MODEL/TYPE	Horiba Water Checker U-10		
SERIAL NO.	601010		
DATE CALIBRATED	- Not Known - provided by driller		
TEMP (C)			
STANDARD / ACTUAL			

DATE	TIME (24:00 Hr)	VOLUME (gal ~~liters~~)	DTW (ft)	TEMP (°C))	pH (std. units)	EC (µS@25°C)	TURBIDITY (NTU)	COMMENTS (i.e. color/ odor)
10-01-08	1014-1023	~~2~~ 9 gal	27.22	—				Bail w/ 3" O.D. St. Steel bailer (10' length)
	1029-1040	—						Use surge block to clean sandpack and screen
	1042-1048	18 ~~gal~~ total						Bail w/ 3" O.D. St. Steel bailer (10' length)
	1054			Becomes ~ 5% cloudy	to clear	@ ~40		Begin pumping w/ Mini Typhoon 12 volt pump
	1109	43		21.5	6.87	2.15	999+	Pumping @ 1.8 gal/min
	1112	48		21.1	6.86	2.10	943	
	1115	53		20.5	6.80	2.11	535	
	1116	55		20.4	6.79	2.10	407	
	1118	57		20.3	6.78	2.10	304	
	1119	59		20.2	6.78	2.10	212	
	1120	61		20.2	6.75	2.11	134	
	1122	63		20.1	6.74	2.10	85	
	1123	65		20.2	6.74	2.10	59	
	1125	68		20.2	6.74	2.10	46	
	1126	70		20.1	6.74	2.10	30	
	1127	72		20.0	6.73	2.10	20	
	1129	75		20.0	6.73	2.10	13	
	1130	77		20.0	6.72	2.10	8	85 gallons removed during ~~purging~~ development (10.41 well volumes)
	1132	79		20.0	6.72	2.10	8	
	1133	81		20.0	6.72	2.11	~~7~~ ~~6~~ 7	
	1134	83		20.0	6.72	2.11	6	

REMARKS:

DEVELOPED BY: Gregg Drilling/Stuart Fuller w/Quin Kinnebrew

REVIEWED BY:

SIGNATURE: Quin Kinnebrew

Parsons

Field Boring Log

Location of Boring/Well:

Datum:

Job No. 746440	Client/Site DESC / Hollifield Park
Drilling Co./Method Vironex / Geoprobe	Boring/Well Number VMP-29
Sampling Method Not Sampled	Sheet 1 of 1
Background Conditions Warm & clear	Drilling Start Date 09-26-08 → Finish Date
Surface Conditions Soil / Lawn	Time 0714 / Time 0745

Notes:

Geologist: _____ Reviewed By: _____

Type of Instrument/Serial No. _____ Calibration Date/Gas: _____

Sample Container: _____ Sample Analyses: _____

Personal Sampling: ☐ Yes ☐ No Person Sampled: _____

Sample No. / Sample Depth	Time	Sampler Blows	Inches Driven / % Recovery	Instrument: Auger	Instrument: Sample	Instrument: Breathing Zone	Depth in Feet	USCS Soil Type
							0	
							1	
							2	
							3	
							4	
							5	
							6	
							7	
							8	
							9	
							10	
							11	
							12	
							13	
							14	
							15	
							16	
							17	
							18	
							19	
							20	
							21	

VMP-29 construction notes:

- 1" length ceramic vapor probes installed @ 5.5' @ 0743
  14.5' @ 0733
- Tubing = Nylon (0.25" O.D./0.18" ID)
- No. 3 Monterey Sand @:
  5-6'
  14-15'
- Granular bentonite placed in 1' lifts (then hydrated) above sand.

Parsons

Field Boring Log

Location of Boring/Well:

Datum:

Job No.: 746440 | Client/Site: DFSP, Hollifield Park

Drilling Co./Method: Vironex/Geoprobe

Boring/Well Number: VMP-30

Sampling Method: Not Sampled

Sheet: 1 of 1

Background Conditions: Warm + clear

Drilling Start Date: 09.26.08 → Drilling Finish Date

Surface Conditions: Soil/lawn

Notes:

Drilling Start Time: 0750

Drilling Finish Time: 0820

Geologist:

Reviewed By:

Type of Instrument/Serial No.

Calibration Date/Gas:

Sample Container:

Sample Analyses:

Personal Sampling: ☐ No ☐ Yes

Person Sampled:

Sample No. / Sample Depth	Time	Sampler Blows	Inches Driven / % Recovery	Instrument: Auger	Instrument: Sample	Instrument: Breathing Zone	Depth in Feet	USCS Soil Type
							0	
							1	
							2	
							3	
							4	
							5	
							6	
							7	
							8	
							9	
							10	
							11	
							12	
							13	
							14	
							15	
							16	
							17	
							18	
							19	
							20	
							21	

VMP-30 construction notes:

- 1" length ceramic vapor probes installed @ 5.5' @ 0818
  14.5' @ 0812
- Tubing = Nylon (0.25" O.D/0.18" I.D.)
- No. 3 Monterey Sand @:
  5-6'
  14.0-15'
- Granular bentonite placed in 1' lifts (then hydrated) above sand

Parsons

Field Boring Log

Location of Boring/Well:

Datum:

Job No.: 746440 | Client/Site: DFSP, Hollifield Park

Drilling Co./Method: Vironex/Geoprobe

Sampling Method: Not Sampled

Background Conditions: warm & clear

Surface Conditions: Soil / lawn

Boring/Well Number: VMP-31

Sheet: of

Drilling: Start Date 09-26-08 | Finish Date —

Time: Start 0823 | Finish 0926

Notes:

Geologist: Quin Kinnebrew

Reviewed By:

Type of Instrument/Serial No.:

Calibration Date/Gas:

Sample Container:

Sample Analyses:

Personal Sampling: ☐ Yes ☐ No

Person Sampled:

Sample No. / Sample Depth	Time	Sampler Blows	Inches Driven / % Recovery	Instrument: Auger	Instrument: Sample	Instrument: Breathing Zone	Depth in Feet	USCS Soil Type
							0	
							1	
							2	
							3	
							4	
							5	
							6	
							7	
							8	
							9	
							10	
							11	
							12	
							13	
							14	
							15	
							16	
							17	
							18	
							19	
							20	

VMP-31 construction notes:

- 1" length ceramic vapor probes installed @ 5.5' @ 0856
  14.5' @ 0851
- Tubing = Nylon (0.25" O.D./0.18" I.D.)
- No. 3 Monterey Sand @:
  5-6' [redacted]
  14-15' [redacted]
- Granular bentonite placed in 1' lifts (then hydrated) above sand

APPENDIX D

ANALYTICAL DATA SUMMARY TABLES

Table D1
Fixed Laboratory Soil Gas Analytical Results Summary

Sample Location	Sample Depth	Sample Date	Benzene	Toluene	Ethylbenzene	o-Xylene	p/m-Xylene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	Methyl-t-Butyl Ether (MTBE)	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloro-1,2,2-Trifluoroeth	1,1,2-Trichloroethane
VMP-29	5	10-Oct-08	**0.019**	**0.037**	**0.0032**	**0.0055**	< 0.012	< 0.007	< 0.0029	< 0.01	< 0.0039	< 0.0097	< 0.011	< 0.0039
	15	10-Oct-08	**0.039**	**0.084**	**0.0064**	**0.012**	< 0.013	< 0.0071	< 0.0029	< 0.01	< 0.004	< 0.01	< 0.011	< 0.004
VMP-30	5	10-Oct-08	**0.02**	**0.04**	**0.0031**	**0.006**	< 0.012	< 0.0068	< 0.0028	< 0.01	< 0.0038	< 0.0095	< 0.011	< 0.0038
	15	10-Oct-08	**0.058**	**0.099**	**0.0063**	**0.013**	< 0.013	< 0.0071	< 0.0029	< 0.01	< 0.0039	< 0.0099	< 0.011	< 0.0039
	15 (dup)	10-Oct-08	**0.062**	**0.11**	**0.0085**	**0.017**	< 0.012	**0.0088**	< 0.0029	< 0.01	< 0.0038	< 0.0097	< 0.011	< 0.0038
VMP-31	5	10-Oct-08	**0.022**	**0.044**	**0.0035**	**0.008**	< 0.013	< 0.0071	< 0.0029	< 0.01	< 0.0039	< 0.0099	< 0.011	< 0.0039
	16	10-Oct-08	**0.014**	**0.028**	0.0032	**0.0044**	< 0.013	< 0.0072	< 0.003	< 0.011	< 0.004	< 0.01	< 0.011	< 0.004
Screening Level:			**0.084**	**320**	**2300**	**740**	**820**	**7.9**						

Table D1
Fixed Laboratory Soil Gas Analytical Results Summary

Sample Location	Sample Depth	Sample Date	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trichlorobenzene	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Ethyltoluene
VMP-29	5	10-Oct-08	< 0.0029	< 0.0028	< 0.021	< 0.0055	< 0.0043	< 0.0033	< 0.0035	< 0.0043	< 0.0043	**0.0071**	< 0.0058	< 0.0035
	15	10-Oct-08	< 0.0029	< 0.0029	< 0.022	< 0.0056	< 0.0044	< 0.0034	< 0.0036	< 0.0044	< 0.0044	**0.0096**	< 0.0059	< 0.0036
VMP-30	5	10-Oct-08	< 0.0028	< 0.0028	< 0.021	< 0.0053	< 0.0042	< 0.0032	< 0.0034	< 0.0042	< 0.0042	**0.0088**	< 0.0057	< 0.0034
	15	10-Oct-08	< 0.0029	< 0.0029	< 0.021	< 0.0055	< 0.0043	< 0.0033	< 0.0035	< 0.0043	< 0.0043	**0.0083**	< 0.0059	< 0.0035
	15 (dup)	10-Oct-08	< 0.0029	< 0.0028	< 0.021	< 0.0054	< 0.0042	< 0.0033	< 0.0035	< 0.0042	< 0.0042	**0.008**	< 0.0058	< 0.0035
VMP-31	5	10-Oct-08	< 0.0029	< 0.0029	< 0.021	< 0.0055	< 0.0043	< 0.0033	< 0.0035	< 0.0043	< 0.0043	**0.0046**	< 0.0059	< 0.0035
	16	10-Oct-08	< 0.003	< 0.0029	< 0.022	< 0.0056	< 0.0044	< 0.0034	< 0.0036	< 0.0044	< 0.0044	**0.0052**	< 0.006	< 0.0036

Table D1
Fixed Laboratory Soil Gas Analytical Results Summary

Sample Location	Sample Depth	Sample Date	4-Methyl-2-Pentanone	Acetone	Benzyl Chloride	Bromodichloromethane	Bromoform	Bromomethane	c-1,2-Dichloroethene	c-1,3-Dichloropropene	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane
VMP-29	5	10-Oct-08	< 0.0058	**0.04**	< 0.0074	< 0.0048	< 0.0073	< 0.0028	< 0.0028	< 0.0032	**0.015**	< 0.0045	**0.039**	< 0.0019
	15	10-Oct-08	< 0.0059	**0.14**	< 0.0075	< 0.0049	< 0.0075	< 0.0028	< 0.0029	< 0.0033	< 0.0023	< 0.0046	**0.092**	< 0.0019
VMP-30	5	10-Oct-08	< 0.0057	**0.038**	< 0.0072	< 0.0047	< 0.0072	< 0.0027	< 0.0028	< 0.0032	< 0.0022	< 0.0044	**0.047**	< 0.0018
	15	10-Oct-08	< 0.0059	**0.12**	< 0.0075	< 0.0048	**0.0086**	< 0.0028	< 0.0029	< 0.0033	< 0.0022	< 0.0045	**0.1**	< 0.0019
	15 (dup)	10-Oct-08	< 0.0058	**0.12**	< 0.0073	< 0.0047	**0.0074**	< 0.0027	< 0.0028	< 0.0032	< 0.0022	< 0.0044	**0.11**	< 0.0019
VMP-31	5	10-Oct-08	< 0.0059	**0.043**	< 0.0075	< 0.0048	< 0.0074	< 0.0028	< 0.0029	< 0.0033	< 0.0022	< 0.0045	**0.055**	< 0.0019
	16	10-Oct-08	< 0.006	**0.036**	< 0.0076	< 0.0049	< 0.0075	< 0.0028	< 0.0029	< 0.0033	< 0.0023	< 0.0046	**0.035**	< 0.0019

Table D1
Fixed Laboratory Soil Gas Analytical Results Summary

Sample Location	Sample Depth	Sample Date	Chloroform	Chloromethane	Dibromochloromethane	Dichlorodifluoromethane	Dichlorotetrafluoroethane	Diisopropyl Ether (DIPE)	Ethyl-t-Butyl Ether (ETBE)	Hexachloro-1,3-Butadiene	Methylene Chloride	Styrene	t-1,2-Dichloroethene	t-1,3-Dichloropropene
VMP-29	5	10-Oct-08	**0.012**	< 0.0015	< 0.006	< 0.0035	< 0.02	< 0.012	< 0.012	< 0.015	< 0.025	< 0.006	< 0.0028	< 0.0064
	15	10-Oct-08	< 0.0035	< 0.0015	< 0.0062	< 0.0036	< 0.02	< 0.012	< 0.012	< 0.015	< 0.025	< 0.0062	< 0.0029	< 0.0066
VMP-30	5	10-Oct-08	< 0.0034	< 0.0014	< 0.0059	< 0.0034	< 0.019	< 0.012	< 0.012	< 0.015	< 0.024	< 0.0059	< 0.0028	< 0.0063
	15	10-Oct-08	**0.012**	**0.0053**	< 0.0061	< 0.0036	< 0.02	< 0.012	< 0.012	< 0.015	< 0.025	< 0.0061	< 0.0029	< 0.0065
	15 (dup)	10-Oct-08	**0.078**	< 0.0015	< 0.006	< 0.0035	< 0.02	< 0.012	< 0.012	< 0.015	< 0.024	< 0.006	< 0.0028	< 0.0064
VMP-31	5	10-Oct-08	**0.0038**	< 0.0015	< 0.0061	< 0.0036	< 0.02	< 0.012	< 0.012	< 0.015	< 0.025	< 0.0061	< 0.0029	< 0.0065
	16	10-Oct-08	< 0.0036	< 0.0015	< 0.0062	< 0.0036	< 0.02	< 0.012	< 0.012	< 0.016	< 0.025	< 0.0062	< 0.0029	< 0.0066

Table D1
Fixed Laboratory Soil Gas Analytical Results Summary

Sample Location	Sample Depth	Sample Date	Tert-Amyl-Methyl Ether (TAME)	Tert-Butyl Alcohol (TBA)	Tetrachloroethene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride
VMP-29	5	10-Oct-08	< 0.012	< 0.0086	< 0.0048	< 0.0038	< 0.008	< 0.01	< 0.0018
	15	10-Oct-08	< 0.012	< 0.0088	< 0.0049	< 0.0039	< 0.0081	< 0.01	< 0.0019
VMP-30	5	10-Oct-08	< 0.012	< 0.0084	< 0.0047	< 0.0037	< 0.0078	< 0.0098	< 0.0018
	15	10-Oct-08	< 0.012	< 0.0087	< 0.0049	< 0.0039	< 0.0081	< 0.01	< 0.0018
	15 (dup)	10-Oct-08	< 0.012	< 0.0085	< 0.0048	< 0.0038	< 0.0079	< 0.0099	< 0.0018
VMP-31	5	10-Oct-08	< 0.012	< 0.0087	< 0.0049	< 0.0039	< 0.0081	< 0.01	< 0.0018
	16	10-Oct-08	< 0.012	< 0.0089	< 0.005	< 0.0039	< 0.0082	< 0.01	< 0.0019
		Screening Level:							

Notes:
All units are micrograms per liter (µg/L).
Screening levels are residential California Human Health Screening Levels (CHHSLs) assuming the presence of engineered fill (CalEPA 2005).
VMP = vapor monitoring probe
dup = duplicate sammple

Table D2
Soil Analytical Results Summary

Sample Location	Sample Depth	Sample Date	TPH as Gasoline	TPH as Jet Propellant 5	Benzene	Toluene	Ethylbenzene	o-Xylene	p/m-Xylene	1,2-Dichloroethane	Methyl-t-Butyl Ether (MTBE)	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloro-1,2,2-Trifluoroethan	1,1,2-Trichloroethane	1,1-Dichloroethane
B-126	45	24-Sep-08	< 500	< 5000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 50	< 5.0	< 5.0
GMW-63	25	29-Sep-08	< 500	< 5000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 50	< 5.0	< 5.0
GMW-63	30	29-Sep-08	< 500	< 5000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 50	< 5.0	< 5.0
GMW-64	25	29-Sep-08	< 500	< 5000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 50	< 5.0	< 5.0
GMW-64	30	29-Sep-08	< 500	< 5000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 50	< 5.0	< 5.0

Table D2
Soil Analytical Results Summary

Sample Location	Sample Depth	Sample Date	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-Chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane
B-126	45	24-Sep-08	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
GMW-63	25	29-Sep-08	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
GMW-63	30	29-Sep-08	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
GMW-64	25	29-Sep-08	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
GMW-64	30	29-Sep-08	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

Table D2
Soil Analytical Results Summary

Sample Location	Sample Depth	Sample Date	2-Butanone	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene	4-Methyl-2-Pentanone	Acetone	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	c-1,2-Dichloroethene	c-1,3-Dichloropropene	Carbon Disulfide	Carbon Tetrachloride
B-126	45	24-Sep-08	< 50	< 5.0	< 50	< 5.0	< 50	< 120	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 50	< 5.0
GMW-63	25	29-Sep-08	< 50	< 5.0	< 50	< 5.0	< 50	< 120	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 50	< 5.0
GMW-63	30	29-Sep-08	< 50	< 5.0	< 50	< 5.0	< 50	< 120	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 50	< 5.0
GMW-64	25	29-Sep-08	< 50	< 5.0	< 50	< 5.0	< 50	< 120	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 50	< 5.0
GMW-64	30	29-Sep-08	< 50	< 5.0	< 50	< 5.0	< 50	< 120	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 50	< 5.0

Table D2
Soil Analytical Results Summary

Sample Location	Sample Depth	Sample Date	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Diisopropyl Ether (DIPE)	Ethanol	Ethyl-t-Butyl Ether (ETBE)	Isopropylbenzene	Methylene Chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene
B-126	45	24-Sep-08	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 10	< 250	< 10	< 5.0	< 50	< 50	< 5.0	< 5.0
GMW-63	25	29-Sep-08	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 10	< 250	< 10	< 5.0	< 50	< 50	< 5.0	< 5.0
GMW-63	30	29-Sep-08	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 10	< 250	< 10	< 5.0	< 50	< 50	< 5.0	< 5.0
GMW-64	25	29-Sep-08	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 10	< 250	< 10	< 5.0	< 50	< 50	< 5.0	< 5.0
GMW-64	30	29-Sep-08	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 10	< 250	< 10	< 5.0	< 50	< 50	< 5.0	< 5.0

Table D2
Soil Analytical Results Summary

Sample Location	Sample Depth	Sample Date	p-Isopropyltoluene	sec-Butylbenzene	Styrene	t-1,2-Dichloroethene	t-1,3-Dichloropropene	Tert-Amyl-Methyl Ether (TAME)	Tert-Butyl Alcohol (TBA)	tert-Butylbenzene	Tetrachloroethene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride
B-126	45	24-Sep-08	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 50	< 5.0	< 5.0	< 5.0	< 50	< 50	< 5.0
GMW-63	25	29-Sep-08	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 50	< 5.0	< 5.0	< 5.0	< 50	< 50	< 5.0
GMW-63	30	29-Sep-08	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 50	< 5.0	< 5.0	< 5.0	< 50	< 50	< 5.0
GMW-64	25	29-Sep-08	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 50	< 5.0	< 5.0	< 5.0	< 50	< 50	< 5.0
GMW-64	30	29-Sep-08	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 50	< 5.0	< 5.0	< 5.0	< 50	< 50	< 5.0

Notes:
All units are milligrams per kilograms (mg/kg).
B = boring
GMW = groundwater monitoring well
TPH = total petroleum hydrocarbons

Table D3
Groundwater Analytical Results Summary

Sample Location	Sample Depth	Sample Date	TPH as Gasoline	TPH as JP5	Benzene	Toluene	Ethylbenzene	Total Xylenes	o-Xylene	p/m-Xylene	1,2-Dichloroethane	Methyl-t-Butyl Ether (MTBE)	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloro-1,2,2-Trifluoroethane	1,1,2-Trichloroethane
B-123	46-50	25-Sep-08	< 100	< 100	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
	56-60	25-Sep-08	< 100	< 100	< 0.50	**0.52**	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
B-124	44-48	24-Sep-08	< 100	< 100	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
	54-58	24-Sep-08	< 100	< 100	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
B-125	44-48	25-Sep-08	**440**	**440**	**5.8**	**32**	**7.6**	**42**	**12**	**30**	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
	54-58	25-Sep-08	**700**	**390**	**31**	**85**	**9.7**	**50**	**17**	**33**	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
B-126	44-48	24-Sep-08	< 100	< 100	< 0.50	< 0.50	< 0.50	**0.59**	< 0.50	**0.59**	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
	54-58	24-Sep-08	< 100	< 100	< 0.50	< 0.50	**0.63**	**2.25**	**0.65**	**1.6**	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
B-127	44-48	25-Sep-08	< 100	< 100	**0.91**	< 0.50	< 0.50	**0.65**	< 0.50	**0.65**	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
	54-58	25-Sep-08	< 100	< 100	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
B-128	44-48	25-Sep-08	**120**	**130**	**0.95**	**4.9 J**	**1.3**	**7.2**	**2**	**5.2**	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
	44-48 (dup)	25-Sep-08	**120**	**140**	**0.66**	**3.3 J**	**1.1**	**6.4**	**1.7**	**4.7**	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
	54-58	25-Sep-08	**520**	**160**	**2.1**	**9.3**	**1.3**	**6.1**	**1.9**	**4.2**	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
B-129	44-48	25-Sep-08	< 100	< 100	< 0.50	**1.7**	**0.79**	**4.4**	**1.3**	**3.1**	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
	54-58	25-Sep-08	< 100	< 100	**3.5**	**16**	**2.3**	**10**	**2.9**	**7.1**	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
B-130	44-48	25-Sep-08	< 100	< 100	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
	54-58	25-Sep-08	< 100	< 100	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
B-131	44-48	25-Sep-08	< 100	< 100	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
	55-59	25-Sep-08	< 100	**140**	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
B-132	44-48	25-Sep-08	< 100	< 100	< 0.50	**0.74**	< 0.50	**2.26**	**0.66**	**1.6**	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
	44-48 (dup)	25-Sep-08	< 100	< 100	< 0.50	**0.66**	< 0.50	**2.16**	**0.56**	**1.6**	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
	55-59	25-Sep-08	< 100	< 100	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
B-133	44-48	25-Sep-08	**740**	**160**	**0.55**	**5**	**1.6**	**10.9**	**3**	**7.9**	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
	55-59	25-Sep-08	< 100	< 100	< 0.50	**1.9**	< 0.50	**0.98**	< 0.50	**0.98**	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
B-134	32-35	07-Jan-09	< 100	< 500	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
	36-40	07-Jan-09	< 100	< 100	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
	44-48	07-Jan-09	< 100	< 100	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
	52-55	07-Jan-09	< 100	< 500	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
B-135	35-39	09-Jan-09	< 100	< 100	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
	40-43	09-Jan-09	< 100	< 100	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
	46-49	09-Jan-09	< 100	**410**	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0

Table D3
Groundwater Analytical Results Summary

Sample Location	Sample Depth	Sample Date	TPH as Gasoline	TPH as JP5	Benzene	Toluene	Ethylbenzene	Total Xylenes	o-Xylene	p/m-Xylene	1,2-Dichloroethane	Methyl-t-Butyl Ether (MTBE)	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloro-1,2,2-Trifluoroethane	1,1,2-Trichloroethane
	51-54	09-Jan-09	< 100	< 100	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
B-136	40-43	08-Jan-09	< 100	**170**	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	**0.63**	< 1.0	< 1.0	< 1.0	< 10	< 1.0
	44-49	08-Jan-09	< 100	< 100	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
	51-54	08-Jan-09	< 100	< 100	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
B-137	40-43	09-Jan-09	< 100	< 100	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
	46-49	09-Jan-09	< 100	< 100	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
	51-54	09-Jan-09	< 100	< 100	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
B-138	35-39	12-Jan-09	< 100	< 100	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
	35-39 (dup)	12-Jan-09	< 100	< 100	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
	46-49	12-Jan-09	< 100	< 100	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
	51-54	12-Jan-09	< 100	< 100	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
B-139	35-39	12-Jan-09	< 100	**410 J**	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
	35-39 (dup)	12-Jan-09	< 100	**280 J**	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
	46-49	12-Jan-09	< 100	**380**	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0
	51-54	12-Jan-09	< 100	**490**	< 0.50	< 0.50	< 0.50	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 10	< 1.0

Table D3
Groundwater Analytical Results Summary

Sample Location	Sample Depth	Sample Date	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-Chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene
B-123	46-50	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	56-60	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
B-124	44-48	24-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	54-58	24-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
B-125	44-48	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	**7**	< 5.0	< 1.0	< 1.0	< 1.0	**2.5**	< 1.0	< 1.0	< 1.0
	54-58	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	**6**	< 5.0	< 1.0	< 1.0	< 1.0	**2**	< 1.0	< 1.0	< 1.0
B-126	44-48	24-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	54-58	24-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
B-127	44-48	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	54-58	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
B-128	44-48	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	**1.7**	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	44-48 (dup)	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	**1.5**	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	54-58	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
B-129	44-48	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	54-58	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
B-130	44-48	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	54-58	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
B-131	44-48	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	55-59	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
B-132	44-48	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	44-48 (dup)	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	55-59	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
B-133	44-48	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	**3.2**	< 5.0	< 1.0	< 1.0	< 1.0	**1.5**	< 1.0	< 1.0	< 1.0
	55-59	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
B-134	32-35	07-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	36-40	07-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	44-48	07-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	52-55	07-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
B-135	35-39	09-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	40-43	09-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	46-49	09-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Table D3
Groundwater Analytical Results Summary

Sample Location	Sample Depth	Sample Date	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-Chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene
	51-54	09-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
B-136	40-43	08-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	44-49	08-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	51-54	08-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
B-137	40-43	09-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	46-49	09-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	51-54	09-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
B-138	35-39	12-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	35-39 (dup)	12-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	46-49	12-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	51-54	12-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
B-139	35-39	12-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	35-39 (dup)	12-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	46-49	12-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	51-54	12-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Table D3
Groundwater Analytical Results Summary

Sample Location	Sample Depth	Sample Date	2,2-Dichloropropane	2-Butanone	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene	4-Methyl-2-Pentanone	Acetone	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	c-1,2-Dichloroethene	c-1,3-Dichloropropene	Carbon Disulfide
B-123	46-50	25-Sep-08	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
	56-60	25-Sep-08	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
B-124	44-48	24-Sep-08	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
	54-58	24-Sep-08	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
B-125	44-48	25-Sep-08	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
	54-58	25-Sep-08	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
B-126	44-48	24-Sep-08	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
	54-58	24-Sep-08	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
B-127	44-48	25-Sep-08	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
	54-58	25-Sep-08	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
B-128	44-48	25-Sep-08	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
	44-48 (dup)	25-Sep-08	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
	54-58	25-Sep-08	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
B-129	44-48	25-Sep-08	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
	54-58	25-Sep-08	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
B-130	44-48	25-Sep-08	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
	54-58	25-Sep-08	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
B-131	44-48	25-Sep-08	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
	55-59	25-Sep-08	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
B-132	44-48	25-Sep-08	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
	44-48 (dup)	25-Sep-08	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
	55-59	25-Sep-08	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
B-133	44-48	25-Sep-08	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
	55-59	25-Sep-08	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
B-134	32-35	07-Jan-09	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
	36-40	07-Jan-09	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
	44-48	07-Jan-09	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
	52-55	07-Jan-09	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
B-135	35-39	09-Jan-09	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
	40-43	09-Jan-09	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
	46-49	09-Jan-09	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10

Table D3
Groundwater Analytical Results Summary

Sample Location	Sample Depth	Sample Date	2,2-Dichloropropane	2-Butanone	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene	4-Methyl-2-Pentanone	Acetone	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	c-1,2-Dichloroethene	c-1,3-Dichloropropene	Carbon Disulfide
	51-54	09-Jan-09	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
B-136	40-43	08-Jan-09	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
	44-49	08-Jan-09	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
	51-54	08-Jan-09	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
B-137	40-43	09-Jan-09	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
	46-49	09-Jan-09	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
	51-54	09-Jan-09	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
B-138	35-39	12-Jan-09	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
	35-39 (dup)	12-Jan-09	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
	46-49	12-Jan-09	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
	51-54	12-Jan-09	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
B-139	35-39	12-Jan-09	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
	35-39 (dup)	12-Jan-09	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
	46-49	12-Jan-09	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10
	51-54	12-Jan-09	< 1.0	< 10	< 1.0	< 10	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 0.50	< 10

Table D3
Groundwater Analytical Results Summary

Sample Location	Sample Depth	Sample Date	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Diisopropyl Ether (DIPE)	Ethanol	Ethyl-t-Butyl Ether (ETBE)	Isopropylbenzene	Methylene Chloride	Naphthalene	n-Butylbenzene
B-123	46-50	25-Sep-08	< 0.50	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
	56-60	25-Sep-08	< 0.50	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
B-124	44-48	24-Sep-08	< 0.50	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
	54-58	24-Sep-08	< 0.50	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
B-125	44-48	25-Sep-08	< 0.50	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	**1.3**	< 5.0	< 10	< 1.0
	54-58	25-Sep-08	< 0.50	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	**1.2**	< 5.0	< 10	< 1.0
B-126	44-48	24-Sep-08	< 0.50	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
	54-58	24-Sep-08	< 0.50	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
B-127	44-48	25-Sep-08	< 0.50	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
	54-58	25-Sep-08	< 0.50	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
B-128	44-48	25-Sep-08	< 0.50	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
	44-48 (dup)	25-Sep-08	< 0.50	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
	54-58	25-Sep-08	< 0.50	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
B-129	44-48	25-Sep-08	< 0.50	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
	54-58	25-Sep-08	< 0.50	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
B-130	44-48	25-Sep-08	< 0.50	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
	54-58	25-Sep-08	< 0.50	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
B-131	44-48	25-Sep-08	< 0.50	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
	55-59	25-Sep-08	< 0.50	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
B-132	44-48	25-Sep-08	< 0.50	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
	44-48 (dup)	25-Sep-08	< 0.50	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
	55-59	25-Sep-08	< 0.50	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
B-133	44-48	25-Sep-08	< 0.50	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
	55-59	25-Sep-08	< 0.50	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
B-134	32-35	07-Jan-09	< 0.50	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
	36-40	07-Jan-09	< 0.50	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
	44-48	07-Jan-09	< 0.50	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
	52-55	07-Jan-09	< 0.50	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
B-135	35-39	09-Jan-09	< 0.50	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
	40-43	09-Jan-09	< 0.50	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
	46-49	09-Jan-09	< 0.50	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0

Table D3
Groundwater Analytical Results Summary

Sample Location	Sample Depth	Sample Date	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Diisopropyl Ether (DIPE)	Ethanol	Ethyl-t-Butyl Ether (ETBE)	Isopropylbenzene	Methylene Chloride	Naphthalene	n-Butylbenzene
	51-54	09-Jan-09	< 0.50	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
B-136	40-43	08-Jan-09	< 0.50	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
	44-49	08-Jan-09	< 0.50	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
	51-54	08-Jan-09	< 0.50	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
B-137	40-43	09-Jan-09	< 0.50	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
	46-49	09-Jan-09	< 0.50	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
	51-54	09-Jan-09	< 0.50	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
B-138	35-39	12-Jan-09	< 0.50	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
	35-39 (dup)	12-Jan-09	< 0.50	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
	46-49	12-Jan-09	< 0.50	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
	51-54	12-Jan-09	< 0.50	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
B-139	35-39	12-Jan-09	< 0.50	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
	35-39 (dup)	12-Jan-09	< 0.50	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
	46-49	12-Jan-09	< 0.50	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0
	51-54	12-Jan-09	< 0.50	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 100	< 2.0	< 1.0	< 5.0	< 10	< 1.0

Table D3
Groundwater Analytical Results Summary

Sample Location	Sample Depth	Sample Date	n-Propylbenzene	p-Isopropyltoluene	sec-Butylbenzene	Styrene	t-1,2-Dichloroethene	t-1,3-Dichloropropene	Tert-Amyl-Methyl Ether (TAME)	Tert-Butyl Alcohol (TBA)	tert-Butylbenzene	Tetrachloroethene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride
B-123	46-50	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
	56-60	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
B-124	44-48	24-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
	54-58	24-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
B-125	44-48	25-Sep-08	**1.7**	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
	54-58	25-Sep-08	**1.2**	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
B-126	44-48	24-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
	54-58	24-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
B-127	44-48	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
	54-58	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
B-128	44-48	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
	44-48 (dup)	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
	54-58	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
B-129	44-48	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
	54-58	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
B-130	44-48	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
	54-58	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
B-131	44-48	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
	55-59	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
B-132	44-48	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
	44-48 (dup)	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
	55-59	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
B-133	44-48	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
	55-59	25-Sep-08	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
B-134	32-35	07-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
	36-40	07-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
	44-48	07-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
	52-55	07-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
B-135	35-39	09-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
	40-43	09-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
	46-49	09-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50

Table D3
Groundwater Analytical Results Summary

Sample Location	Sample Depth	Sample Date	n-Propylbenzene	p-Isopropyltoluene	sec-Butylbenzene	Styrene	t-1,2-Dichloroethene	t-1,3-Dichloropropene	Tert-Amyl-Methyl Ether (TAME)	Tert-Butyl Alcohol (TBA)	tert-Butylbenzene	Tetrachloroethene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride
	51-54	09-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
B-136	40-43	08-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	**14**	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
	44-49	08-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
	51-54	08-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
B-137	40-43	09-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
	46-49	09-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
	51-54	09-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
B-138	35-39	12-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
	35-39 (dup)	12-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
	46-49	12-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
	51-54	12-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
B-139	35-39	12-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
	35-39 (dup)	12-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
	46-49	12-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50
	51-54	12-Jan-09	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 10	< 0.50

Notes:
All units are micrograms per liter (µg/L).
B = boring
(dup) = duplicate sample

APPENDIX E

LABORATORY REPORTS

Calscience Environmental Laboratories, Inc.

October 02, 2008

Mary Lucas
Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Subject: **Calscience Work Order No.: 08-09-2368**
Client Reference: DFSP NORWALK

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 9/25/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Ranjit K. J. Clarke

Calscience Environmental
Laboratories, Inc.
Ranjit Clarke
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2368
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ppb (v/v)
Project: DFSP NORWALK			Page 1 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-15-27	**08-09-2368-1-A**	**09/24/08 10:27**	**Air**	**GC/MS AA**	**N/A**	**09/26/08 00:53**	**080925L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	330	163		t-1,3-Dichloropropene	ND	160	163	
Benzene	100	82	163		Ethyl-t-Butyl Ether (ETBE)	ND	330	163	
Benzyl Chloride	ND	160	163		Ethylbenzene	ND	82	163	
Bromodichloromethane	ND	82	163		4-Ethyltoluene	ND	82	163	
Bromoform	ND	82	163		Hexachloro-1,3-Butadiene	ND	160	163	
Bromomethane	ND	82	163		2-Hexanone	ND	160	163	
2-Butanone	ND	160	163		Methyl-t-Butyl Ether (MTBE)	ND	330	163	
Carbon Disulfide	190	82	163		Methylene Chloride	ND	820	163	
Carbon Tetrachloride	ND	82	163		4-Methyl-2-Pentanone	ND	160	163	
Chlorobenzene	ND	82	163		o-Xylene	ND	82	163	
Chloroethane	ND	82	163		p/m-Xylene	ND	330	163	
Chloroform	ND	82	163		Styrene	ND	160	163	
Chloromethane	ND	82	163		Tert-Amyl-Methyl Ether (TAME)	ND	330	163	
Dibromochloromethane	ND	82	163		Tert-Butyl Alcohol (TBA)	ND	330	163	
Dichlorodifluoromethane	ND	82	163		Tetrachloroethene	ND	82	163	
Diisopropyl Ether (DIPE)	ND	330	163		Toluene	350	82	163	
1,1-Dichloroethane	ND	82	163		Trichloroethene	ND	82	163	
1,1-Dichloroethene	ND	82	163		Trichlorofluoromethane	ND	160	163	
1,2-Dibromoethane	ND	82	163		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	160	163	
Dichlorotetrafluoroethane	ND	330	163		1,1,1-Trichloroethane	ND	82	163	
1,2-Dichlorobenzene	ND	82	163		1,1,2-Trichloroethane	ND	82	163	
1,2-Dichloroethane	ND	82	163		1,3,5-Trimethylbenzene	ND	82	163	
1,2-Dichloropropane	ND	82	163		1,1,2,2-Tetrachloroethane	ND	160	163	
1,3-Dichlorobenzene	ND	82	163		1,2,4-Trimethylbenzene	ND	160	163	
1,4-Dichlorobenzene	ND	82	163		1,2,4-Trichlorobenzene	ND	330	163	
c-1,3-Dichloropropene	ND	82	163		Vinyl Acetate	ND	330	163	
c-1,2-Dichloroethene	ND	82	163		Vinyl Chloride	ND	82	163	
t-1,2-Dichloroethene	ND	82	163						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	121	57-129		1,2-Dichloroethane-d4	114	47-137	
Toluene-d8	97	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received: 09/25/08
100 West Walnut Street	Work Order No: 08-09-2368
Pasadena, CA 91124-0002	Preparation: N/A
	Method: EPA TO-15
	Units: ppb (v/v)

Project: DFSP NORWALK

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-4-8	**08-09-2368-2-A**	**09/24/08 14:10**	**Air**	**GC/MS AA**	**N/A**	**09/26/08 01:39**	**080925L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	200	32	16.1		t-1,3-Dichloropropene	ND	16	16.1	
Benzene	76	8.0	16.1		Ethyl-t-Butyl Ether (ETBE)	ND	32	16.1	
Benzyl Chloride	ND	16	16.1		Ethylbenzene	48	8.0	16.1	
Bromodichloromethane	ND	8.0	16.1		4-Ethyltoluene	ND	8.0	16.1	
Bromoform	ND	8.0	16.1		Hexachloro-1,3-Butadiene	ND	16	16.1	
Bromomethane	ND	8.0	16.1		2-Hexanone	ND	16	16.1	
2-Butanone	17	16	16.1		Methyl-t-Butyl Ether (MTBE)	ND	32	16.1	
Carbon Disulfide	ND	8.0	16.1		Methylene Chloride	ND	80	16.1	
Carbon Tetrachloride	ND	8.0	16.1		4-Methyl-2-Pentanone	ND	16	16.1	
Chlorobenzene	ND	8.0	16.1		o-Xylene	66	8.0	16.1	
Chloroethane	ND	8.0	16.1		p/m-Xylene	230	32	16.1	
Chloroform	ND	8.0	16.1		Styrene	ND	16	16.1	
Chloromethane	ND	8.0	16.1		Tert-Amyl-Methyl Ether (TAME)	ND	32	16.1	
Dibromochloromethane	ND	8.0	16.1		Tert-Butyl Alcohol (TBA)	ND	32	16.1	
Dichlorodifluoromethane	ND	8.0	16.1		Tetrachloroethene	ND	8.0	16.1	
Diisopropyl Ether (DIPE)	ND	32	16.1		Toluene	250	8.0	16.1	
1,1-Dichloroethane	ND	8.0	16.1		Trichloroethene	ND	8.0	16.1	
1,1-Dichloroethene	ND	8.0	16.1		Trichlorofluoromethane	ND	16	16.1	
1,2-Dibromoethane	ND	8.0	16.1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	16	16.1	
Dichlorotetrafluoroethane	ND	32	16.1		1,1,1-Trichloroethane	ND	8.0	16.1	
1,2-Dichlorobenzene	ND	8.0	16.1		1,1,2-Trichloroethane	ND	8.0	16.1	
1,2-Dichloroethane	ND	8.0	16.1		1,3,5-Trimethylbenzene	9.9	8.0	16.1	
1,2-Dichloropropane	ND	8.0	16.1		1,1,2,2-Tetrachloroethane	ND	16	16.1	
1,3-Dichlorobenzene	ND	8.0	16.1		1,2,4-Trimethylbenzene	ND	16	16.1	
1,4-Dichlorobenzene	ND	8.0	16.1		1,2,4-Trichlorobenzene	ND	32	16.1	
c-1,3-Dichloropropene	ND	8.0	16.1		Vinyl Acetate	ND	32	16.1	
c-1,2-Dichloroethene	ND	8.0	16.1		Vinyl Chloride	ND	8.0	16.1	
t-1,2-Dichloroethene	ND	8.0	16.1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	148	57-129	2	1,2-Dichloroethane-d4	114	47-137	
Toluene-d8	90	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2368
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ppb (v/v)
Project: DFSP NORWALK			Page 3 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-5-7	**08-09-2368-3-A**	**09/25/08 10:05**	**Air**	**GC/MS AA**	**N/A**	**09/26/08 02:26**	**080925L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	110	77	38.5		t-1,3-Dichloropropene	ND	38	38.5	
Benzene	ND	19	38.5		Ethyl-t-Butyl Ether (ETBE)	ND	77	38.5	
Benzyl Chloride	ND	38	38.5		Ethylbenzene	ND	19	38.5	
Bromodichloromethane	ND	19	38.5		4-Ethyltoluene	ND	19	38.5	
Bromoform	ND	19	38.5		Hexachloro-1,3-Butadiene	ND	38	38.5	
Bromomethane	ND	19	38.5		2-Hexanone	ND	38	38.5	
2-Butanone	ND	38	38.5		Methyl-t-Butyl Ether (MTBE)	ND	77	38.5	
Carbon Disulfide	ND	19	38.5		Methylene Chloride	ND	190	38.5	
Carbon Tetrachloride	ND	19	38.5		4-Methyl-2-Pentanone	ND	38	38.5	
Chlorobenzene	ND	19	38.5		o-Xylene	ND	19	38.5	
Chloroethane	ND	19	38.5		p/m-Xylene	ND	77	38.5	
Chloroform	ND	19	38.5		Styrene	ND	38	38.5	
Chloromethane	ND	19	38.5		Tert-Amyl-Methyl Ether (TAME)	ND	77	38.5	
Dibromochloromethane	ND	19	38.5		Tert-Butyl Alcohol (TBA)	ND	77	38.5	
Dichlorodifluoromethane	ND	19	38.5		Tetrachloroethene	ND	19	38.5	
Diisopropyl Ether (DIPE)	ND	77	38.5		Toluene	ND	19	38.5	
1,1-Dichloroethane	ND	19	38.5		Trichloroethene	ND	19	38.5	
1,1-Dichloroethene	ND	19	38.5		Trichlorofluoromethane	ND	38	38.5	
1,2-Dibromoethane	ND	19	38.5		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	38	38.5	
Dichlorotetrafluoroethane	ND	77	38.5		1,1,1-Trichloroethane	ND	19	38.5	
1,2-Dichlorobenzene	ND	19	38.5		1,1,2-Trichloroethane	ND	19	38.5	
1,2-Dichloroethane	ND	19	38.5		1,3,5-Trimethylbenzene	ND	19	38.5	
1,2-Dichloropropane	ND	19	38.5		1,1,2,2-Tetrachloroethane	ND	38	38.5	
1,3-Dichlorobenzene	ND	19	38.5		1,2,4-Trimethylbenzene	ND	38	38.5	
1,4-Dichlorobenzene	ND	19	38.5		1,2,4-Trichlorobenzene	ND	77	38.5	
c-1,3-Dichloropropene	ND	19	38.5		Vinyl Acetate	ND	77	38.5	
c-1,2-Dichloroethene	ND	19	38.5		Vinyl Chloride	ND	19	38.5	
t-1,2-Dichloroethene	ND	19	38.5						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	155	57-129	2	1,2-Dichloroethane-d4	111	47-137	
Toluene-d8	93	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received:	09/25/08
100 West Walnut Street	Work Order No:	08-09-2368
Pasadena, CA 91124-0002	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ppb (v/v)

Project: DFSP NORWALK

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-5-15	**08-09-2368-4-A**	**09/25/08 10:12**	**Air**	**GC/MS AA**	**N/A**	**09/26/08 16:03**	**080926L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	3500	470	236		t-1,3-Dichloropropene	ND	240	236	
Benzene	120	120	236		Ethyl-t-Butyl Ether (ETBE)	ND	470	236	
Benzyl Chloride	ND	240	236		Ethylbenzene	190	120	236	
Bromodichloromethane	ND	120	236		4-Ethyltoluene	ND	120	236	
Bromoform	ND	120	236		Hexachloro-1,3-Butadiene	ND	240	236	
Bromomethane	ND	120	236		2-Hexanone	ND	240	236	
2-Butanone	ND	240	236		Methyl-t-Butyl Ether (MTBE)	ND	470	236	
Carbon Disulfide	1500	120	236		Methylene Chloride	ND	1200	236	
Carbon Tetrachloride	ND	120	236		4-Methyl-2-Pentanone	ND	240	236	
Chlorobenzene	ND	120	236		o-Xylene	170	120	236	
Chloroethane	ND	120	236		p/m-Xylene	ND	470	236	
Chloroform	ND	120	236		Styrene	ND	240	236	
Chloromethane	ND	120	236		Tert-Amyl-Methyl Ether (TAME)	ND	470	236	
Dibromochloromethane	ND	120	236		Tert-Butyl Alcohol (TBA)	ND	470	236	
Dichlorodifluoromethane	ND	120	236		Tetrachloroethene	ND	120	236	
Diisopropyl Ether (DIPE)	ND	470	236		Toluene	2400	120	236	
1,1-Dichloroethane	ND	120	236		Trichloroethene	ND	120	236	
1,1-Dichloroethene	ND	120	236		Trichlorofluoromethane	ND	240	236	
1,2-Dibromoethane	ND	120	236		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	240	236	
Dichlorotetrafluoroethane	ND	470	236		1,1,1-Trichloroethane	ND	120	236	
1,2-Dichlorobenzene	ND	120	236		1,1,2-Trichloroethane	ND	120	236	
1,2-Dichloroethane	ND	120	236		1,3,5-Trimethylbenzene	ND	120	236	
1,2-Dichloropropane	ND	120	236		1,1,2,2-Tetrachloroethane	ND	240	236	
1,3-Dichlorobenzene	ND	120	236		1,2,4-Trimethylbenzene	ND	240	236	
1,4-Dichlorobenzene	ND	120	236		1,2,4-Trichlorobenzene	ND	470	236	
c-1,3-Dichloropropene	ND	120	236		Vinyl Acetate	ND	470	236	
c-1,2-Dichloroethene	ND	120	236		Vinyl Chloride	ND	120	236	
t-1,2-Dichloroethene	ND	120	236						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	129	57-129		1,2-Dichloroethane-d4	113	47-137	
Toluene-d8	97	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received:	09/25/08
100 West Walnut Street	Work Order No:	08-09-2368
Pasadena, CA 91124-0002	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ppb (v/v)

Project: DFSP NORWALK

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-9-15	**08-09-2368-5-A**	**09/25/08 10:45**	**Air**	**GC/MS AA**	**N/A**	**09/26/08 04:03**	**080925L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	530	250	123		t-1,3-Dichloropropene	ND	120	123	
Benzene	ND	62	123		Ethyl-t-Butyl Ether (ETBE)	ND	250	123	
Benzyl Chloride	ND	120	123		Ethylbenzene	ND	62	123	
Bromodichloromethane	ND	62	123		4-Ethyltoluene	ND	62	123	
Bromoform	ND	62	123		Hexachloro-1,3-Butadiene	ND	120	123	
Bromomethane	ND	62	123		2-Hexanone	ND	120	123	
2-Butanone	ND	120	123		Methyl-t-Butyl Ether (MTBE)	ND	250	123	
Carbon Disulfide	240	62	123		Methylene Chloride	ND	620	123	
Carbon Tetrachloride	ND	62	123		4-Methyl-2-Pentanone	ND	120	123	
Chlorobenzene	ND	62	123		o-Xylene	ND	62	123	
Chloroethane	ND	62	123		p/m-Xylene	ND	250	123	
Chloroform	ND	62	123		Styrene	ND	120	123	
Chloromethane	ND	62	123		Tert-Amyl-Methyl Ether (TAME)	ND	250	123	
Dibromochloromethane	ND	62	123		Tert-Butyl Alcohol (TBA)	ND	250	123	
Dichlorodifluoromethane	ND	62	123		Tetrachloroethene	ND	62	123	
Diisopropyl Ether (DIPE)	ND	250	123		Toluene	380	62	123	
1,1-Dichloroethane	ND	62	123		Trichloroethene	ND	62	123	
1,1-Dichloroethene	ND	62	123		Trichlorofluoromethane	ND	120	123	
1,2-Dibromoethane	ND	62	123		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	120	123	
Dichlorotetrafluoroethane	ND	250	123		1,1,1-Trichloroethane	ND	62	123	
1,2-Dichlorobenzene	ND	62	123		1,1,2-Trichloroethane	ND	62	123	
1,2-Dichloroethane	ND	62	123		1,3,5-Trimethylbenzene	ND	62	123	
1,2-Dichloropropane	ND	62	123		1,1,2,2-Tetrachloroethane	ND	120	123	
1,3-Dichlorobenzene	ND	62	123		1,2,4-Trimethylbenzene	ND	120	123	
1,4-Dichlorobenzene	ND	62	123		1,2,4-Trichlorobenzene	ND	250	123	
c-1,3-Dichloropropene	ND	62	123		Vinyl Acetate	ND	250	123	
c-1,2-Dichloroethene	ND	62	123		Vinyl Chloride	ND	62	123	
t-1,2-Dichloroethene	ND	62	123						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	141	57-129	2	1,2-Dichloroethane-d4	111	47-137	
Toluene-d8	90	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2368
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ppb (v/v)

Project: DFSP NORWALK

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-8-15	**08-09-2368-6-A**	**09/25/08 11:15**	**Air**	**GC/MS AA**	**N/A**	**09/26/08 04:52**	**080925L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	910	456		t-1,3-Dichloropropene	ND	460	456	
Benzene	ND	230	456		Ethyl-t-Butyl Ether (ETBE)	ND	910	456	
Benzyl Chloride	ND	460	456		Ethylbenzene	ND	230	456	
Bromodichloromethane	ND	230	456		4-Ethyltoluene	ND	230	456	
Bromoform	ND	230	456		Hexachloro-1,3-Butadiene	ND	460	456	
Bromomethane	ND	230	456		2-Hexanone	ND	460	456	
2-Butanone	ND	460	456		Methyl-t-Butyl Ether (MTBE)	ND	910	456	
Carbon Disulfide	1100	230	456		Methylene Chloride	ND	2300	456	
Carbon Tetrachloride	ND	230	456		4-Methyl-2-Pentanone	ND	460	456	
Chlorobenzene	ND	230	456		o-Xylene	ND	230	456	
Chloroethane	ND	230	456		p/m-Xylene	ND	910	456	
Chloroform	ND	230	456		Styrene	ND	460	456	
Chloromethane	ND	230	456		Tert-Amyl-Methyl Ether (TAME)	ND	910	456	
Dibromochloromethane	ND	230	456		Tert-Butyl Alcohol (TBA)	ND	910	456	
Dichlorodifluoromethane	ND	230	456		Tetrachloroethene	ND	230	456	
Diisopropyl Ether (DIPE)	ND	910	456		Toluene	1600	230	456	
1,1-Dichloroethane	ND	230	456		Trichloroethene	ND	230	456	
1,1-Dichloroethene	ND	230	456		Trichlorofluoromethane	ND	460	456	
1,2-Dibromoethane	ND	230	456		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	460	456	
Dichlorotetrafluoroethane	ND	910	456		1,1,1-Trichloroethane	ND	230	456	
1,2-Dichlorobenzene	ND	230	456		1,1,2-Trichloroethane	ND	230	456	
1,2-Dichloroethane	ND	230	456		1,3,5-Trimethylbenzene	ND	230	456	
1,2-Dichloropropane	ND	230	456		1,1,2,2-Tetrachloroethane	ND	460	456	
1,3-Dichlorobenzene	ND	230	456		1,2,4-Trimethylbenzene	ND	460	456	
1,4-Dichlorobenzene	ND	230	456		1,2,4-Trichlorobenzene	ND	910	456	
c-1,3-Dichloropropene	ND	230	456		Vinyl Acetate	ND	910	456	
c-1,2-Dichloroethene	ND	230	456		Vinyl Chloride	ND	230	456	
t-1,2-Dichloroethene	ND	230	456						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	127	57-129		1,2-Dichloroethane-d4	110	47-137	
Toluene-d8	95	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 09/25/08
Work Order No: 08-09-2368
Preparation: N/A
Method: EPA TO-15
Units: ppb (v/v)

Project: DFSP NORWALK

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**095-01-021-6,646**	**N/A**	**Air**	**GC/MS AA**	**N/A**	**09/25/08 11:02**	**080925L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	2.0	1		t-1,3-Dichloropropene	ND	1.0	1	
Benzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
Benzyl Chloride	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromodichloromethane	ND	0.50	1		4-Ethyltoluene	ND	0.50	1	
Bromoform	ND	0.50	1		Hexachloro-1,3-Butadiene	ND	1.0	1	
Bromomethane	ND	0.50	1		2-Hexanone	ND	1.0	1	
2-Butanone	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	2.0	1	
Carbon Disulfide	ND	0.50	1		Methylene Chloride	ND	5.0	1	
Carbon Tetrachloride	ND	0.50	1		4-Methyl-2-Pentanone	ND	1.0	1	
Chlorobenzene	ND	0.50	1		o-Xylene	ND	0.50	1	
Chloroethane	ND	0.50	1		p/m-Xylene	ND	2.0	1	
Chloroform	ND	0.50	1		Styrene	ND	1.0	1	
Chloromethane	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
Dibromochloromethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	2.0	1	
Dichlorodifluoromethane	ND	0.50	1		Tetrachloroethene	ND	0.50	1	
Diisopropyl Ether (DIPE)	ND	2.0	1		Toluene	ND	0.50	1	
1,1-Dichloroethane	ND	0.50	1		Trichloroethene	ND	0.50	1	
1,1-Dichloroethene	ND	0.50	1		Trichlorofluoromethane	ND	1.0	1	
1,2-Dibromoethane	ND	0.50	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	1	
Dichlorotetrafluoroethane	ND	2.0	1		1,1,1-Trichloroethane	ND	0.50	1	
1,2-Dichlorobenzene	ND	0.50	1		1,1,2-Trichloroethane	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		1,3,5-Trimethylbenzene	ND	0.50	1	
1,2-Dichloropropane	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
1,3-Dichlorobenzene	ND	0.50	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	0.50	1		1,2,4-Trichlorobenzene	ND	2.0	1	
c-1,3-Dichloropropene	ND	0.50	1		Vinyl Acetate	ND	2.0	1	
c-1,2-Dichloroethene	ND	0.50	1		Vinyl Chloride	ND	0.50	1	
t-1,2-Dichloroethene	ND	0.50	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	109	57-129		1,2-Dichloroethane-d4	129	47-137	
Toluene-d8	97	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received:	09/25/08
100 West Walnut Street	Work Order No:	08-09-2368
Pasadena, CA 91124-0002	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ppb (v/v)

Project: DFSP NORWALK

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**095-01-021-6,651**	**N/A**	**Air**	**GC/MS AA**	**N/A**	**09/26/08 11:13**	**080926L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	2.0	1		t-1,3-Dichloropropene	ND	1.0	1	
Benzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
Benzyl Chloride	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromodichloromethane	ND	0.50	1		4-Ethyltoluene	ND	0.50	1	
Bromoform	ND	0.50	1		Hexachloro-1,3-Butadiene	ND	1.0	1	
Bromomethane	ND	0.50	1		2-Hexanone	ND	1.0	1	
2-Butanone	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	2.0	1	
Carbon Disulfide	ND	0.50	1		Methylene Chloride	ND	5.0	1	
Carbon Tetrachloride	ND	0.50	1		4-Methyl-2-Pentanone	ND	1.0	1	
Chlorobenzene	ND	0.50	1		o-Xylene	ND	0.50	1	
Chloroethane	ND	0.50	1		p/m-Xylene	ND	2.0	1	
Chloroform	ND	0.50	1		Styrene	ND	1.0	1	
Chloromethane	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
Dibromochloromethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	2.0	1	
Dichlorodifluoromethane	ND	0.50	1		Tetrachloroethene	ND	0.50	1	
Diisopropyl Ether (DIPE)	ND	2.0	1		Toluene	ND	0.50	1	
1,1-Dichloroethane	ND	0.50	1		Trichloroethene	ND	0.50	1	
1,1-Dichloroethene	ND	0.50	1		Trichlorofluoromethane	ND	1.0	1	
1,2-Dibromoethane	ND	0.50	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	1	
Dichlorotetrafluoroethane	ND	2.0	1		1,1,1-Trichloroethane	ND	0.50	1	
1,2-Dichlorobenzene	ND	0.50	1		1,1,2-Trichloroethane	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		1,3,5-Trimethylbenzene	ND	0.50	1	
1,2-Dichloropropane	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
1,3-Dichlorobenzene	ND	0.50	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	0.50	1		1,2,4-Trichlorobenzene	ND	2.0	1	
c-1,3-Dichloropropene	ND	0.50	1		Vinyl Acetate	ND	2.0	1	
c-1,2-Dichloroethene	ND	0.50	1		Vinyl Chloride	ND	0.50	1	
t-1,2-Dichloroethene	ND	0.50	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	106	57-129		1,2-Dichloroethane-d4	118	47-137	
Toluene-d8	97	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 08-09-2368
Preparation: N/A
Method: EPA TO-15

Project: DFSP NORWALK

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-6,646	**Air**	**GC/MS AA**	**N/A**	**09/25/08**	**080925L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	94	76	60-156	44-172	21	0-40	
Carbon Tetrachloride	119	96	64-154	49-169	22	0-32	
1,2-Dibromoethane	98	81	54-144	39-159	19	0-36	
1,2-Dichlorobenzene	80	66	34-160	13-181	19	0-47	
1,2-Dichloroethane	124	98	69-153	55-167	23	0-30	
1,2-Dichloropropane	95	77	67-157	52-172	21	0-35	
1,4-Dichlorobenzene	83	68	36-156	16-176	19	0-47	
c-1,3-Dichloropropene	104	83	61-157	45-173	23	0-35	
Ethylbenzene	96	78	52-154	35-171	20	0-38	
o-Xylene	98	81	52-148	36-164	19	0-38	
p/m-Xylene	97	80	42-156	23-175	19	0-41	
Tetrachloroethene	92	76	56-152	40-168	19	0-40	
Toluene	91	74	56-146	41-161	20	0-43	
Trichloroethene	102	83	63-159	47-175	21	0-34	
1,1,2-Trichloroethane	99	80	65-149	51-163	21	0-37	
Vinyl Chloride	102	80	45-177	23-199	24	0-36	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 08-09-2368
Preparation: N/A
Method: EPA TO-15

Project: DFSP NORWALK

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-6,651	**Air**	**GC/MS AA**	**N/A**	**09/26/08**	**080926L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	92	96	60-156	44-172	5	0-40	
Carbon Tetrachloride	112	113	64-154	49-169	1	0-32	
1,2-Dibromoethane	94	103	54-144	39-159	8	0-36	
1,2-Dichlorobenzene	91	100	34-160	13-181	10	0-47	
1,2-Dichloroethane	113	117	69-153	55-167	3	0-30	
1,2-Dichloropropane	93	96	67-157	52-172	4	0-35	
1,4-Dichlorobenzene	92	100	36-156	16-176	9	0-47	
c-1,3-Dichloropropene	99	104	61-157	45-173	5	0-35	
Ethylbenzene	91	101	52-154	35-171	10	0-38	
o-Xylene	94	104	52-148	36-164	10	0-38	
p/m-Xylene	92	101	42-156	23-175	9	0-41	
Tetrachloroethene	90	96	56-152	40-168	7	0-40	
Toluene	88	95	56-146	41-161	9	0-43	
Trichloroethene	98	101	63-159	47-175	3	0-34	
1,1,2-Trichloroethane	95	100	65-149	51-163	4	0-37	
Vinyl Chloride	103	103	45-177	23-199	0	0-36	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-09-2368

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Calscience Environmental Laboratories, Inc.

☐ SoCal Laboratory
7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494

☐ NorCal Service Center
5063 Commercial Circle, Suite H
Concord, CA 94520-8577
(925) 689-9022

CHAIN OF CUSTODY RECORD

Date 9/25/2008

Page 1 of 2

LABORATORY CLIENT: PARSONS

ADDRESS: 100. W. WALNUT ST.

CITY PASADENA STATE CA ZIP 91124

TEL: (626) 440 6032 E-MAIL: MARY.LUCAS@PARSONS.COM

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ STANDARD

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING FORMS ☐ COELT EDF ☐ ____________

SPECIAL INSTRUCTIONS:

CLIENT PROJECT NAME / NUMBER: DFSP NORWALK

P.O. NO.:

PROJECT CONTACT: MARY LUCAS

LAB USE ONLY: 09-2368

SAMPLER(S): (PRINT) D. TRAN

COELT LOG CODE: ☐☐☐☐

COOLER RECEIPT: TEMP= ______ °C

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (FOR COELT EDF)	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (g)	TPH (d) or (C6-C36) or (C6-C44)	TPH ( )	BTEX / MTBE (8260B) or ( )	VOCs (8260B)	Oxygenates (8260B)	Encore Prep (5035)	SVOCs (8270C)	Pesticides (8081A)	PCBs (8082)	PNAs (8310) or (8270C)	T22 Metals (6010B/747X)	Cr(VI) [7196A or 7199 or 218.6]	~~VOCs (TO-14A) or~~ (TO-15)	TPH (g) [TO-3]+			
1	VMP_15_27		9/24	10:27	A	1														X				
	Cannister # LC 361 - Regulator # A175																							
2	VMP_4_8		9/24	14:10	A	1														X				
	Cannister # LC193 - Regulator # A190																							
3	VMP_5_7		9/25	10:05	A	1														X				
	Cannister # LC434 - Regulator # A136																							
4	VMP_5_15		9/25	10:12		1														X				
	Cannister # LC135 - Regulator # A125																							
5	VMP_9_15		9/25	10:45		1														X				
	Cannister # LC138 - Regulator # A17																							

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
[signature]	[signature] CEL	9/25/08	16:22
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

DISTRIBUTION: White with final report, Green and Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Green and Yellow copies respectively.

Calscience Environmental Laboratories, Inc.

☐ SoCal Laboratory
7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494

☐ NorCal Service Center
5063 Commercial Circle, Suite H
Concord, CA 94520-8577
(925) 689-9022

CHAIN OF CUSTODY RECORD

Date 9/25/2008

Page 2 of 2

LABORATORY CLIENT: PARSONS		CLIENT PROJECT NAME / NUMBER: DFSP NORWALK	P.O. NO.:
ADDRESS: 100 W. WALNUT ST.		PROJECT CONTACT: MARY LUCAS	LAB USE ONLY 0 9 - 2 3 6 8
CITY: PASADENA	STATE: CA. ZIP: 91124	SAMPLER(S): (PRINT) D. TRAN	COELT LOG CODE ☐☐☐☐
TEL: (626)440 6032	E-MAIL: MARY.LUCAS@PARSONS.COM		COOLER RECEIPT TEMP=_____°C

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ STANDARD

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING FORMS ☐ COELT EDF ☐ _____

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (FOR COELT EDF)	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (g)	TPH (d) or (C6-C36) or (C6-C44)	TPH (_____)	BTEX / MTBE (8260B) or (_____)	VOCs (8260B)	Oxygenates (8260B)	Encore Prep (5035)	SVOCs (8270C)	Pesticides (8081A)	PCBs (8082)	PNAs (8310) or (8270C)	T22 Metals (6010B/747X)	Cr(VI) [7196A or 7199 or 218.6]	~~VOCs (TO-14A)~~ or (TO-15)	TPH (g) [TO-3]+_____			
6	VMP-8-15		9/25	11:15	A	1														X				
	Canister #LC378 – Regulator #A149																							

Relinquished by: (Signature)	Received by: (Signature/Affiliation) DUNNGLE CEL	Date: 9/25/08	Time: 16:22
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

DISTRIBUTION: White with final report, Green and Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Green and Yellow copies respectively.

05/01/07 Revision

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 09 - 2368

Cooler 0 of 0

SAMPLE RECEIPT FORM

CLIENT: Parsons DATE: 9/25/08

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

___ Chilled, cooler with temperature blank provided.
___ Chilled, cooler without temperature blank.
___ Chilled and placed in cooler with wet ice.
___ Ambient and placed in cooler with wet ice.
___ Ambient temperature (For Air & Filter Only).
___ . ___ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

___ . ___ °C Temperature blank.
___ . ___ °C IR Thermometer.
✓ Ambient temperature (For Air & Filter Only).
Summa Cans

Initial: D.L

CUSTODY SEAL INTACT:

Sample(s): ___ Cooler: ___ No (Not Intact) : ___ Not Present: ✓

Initial: D.L

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)			✓
VOA vial(s) free of headspace.			✓
Tedlar bag(s) free of condensation			✓

Initial: D.L

COMMENTS:

Calscience
Environmental
Laboratories, Inc.

October 03, 2008

Mary Lucas
Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Subject: **Calscience Work Order No.: 08-09-2313**
Client Reference: DESC -Hollifield Park / 746440

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 9/25/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Ranjit K. F. Clarke

Calscience Environmental
Laboratories, Inc.
Ranjit Clarke
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 09/25/08
Work Order No: 08-09-2313
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B124 (44-48)	**08-09-2313-1-D**	**09/24/08 09:40**	**Aqueous**	**GC 5**	**10/01/08**	**10/02/08 13:22**	**081001B02**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	85	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B124 (54-58)	**08-09-2313-2-D**	**09/24/08 10:10**	**Aqueous**	**GC 5**	**09/29/08**	**09/30/08 09:26**	**080929B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	165	38-134	2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B126 (44-48)	**08-09-2313-3-D**	**09/24/08 12:00**	**Aqueous**	**GC 5**	**10/01/08**	**10/02/08 02:53**	**081001B02**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	86	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B126 (54-58)	**08-09-2313-4-D**	**09/24/08 12:25**	**Aqueous**	**GC 5**	**10/01/08**	**10/02/08 08:48**	**081001B02**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	90	38-134	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 09/25/08
Work Order No: 08-09-2313
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B131 (44-48)	**08-09-2313-6-D**	**09/25/08 07:25**	**Aqueous**	**GC 5**	**10/01/08**	**10/02/08 14:00**	**081001B02**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	84	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B131 (55-59)	**08-09-2313-7-D**	**09/25/08 07:50**	**Aqueous**	**GC 5**	**10/01/08**	**10/02/08 09:25**	**081001B02**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	86	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B130 (44-48)	**08-09-2313-8-D**	**09/25/08 08:25**	**Aqueous**	**GC 5**	**10/01/08**	**10/02/08 14:38**	**081001B02**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	83	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B130 (54-58)	**08-09-2313-9-D**	**09/25/08 08:55**	**Aqueous**	**GC 5**	**10/01/08**	**10/02/08 10:03**	**081001B02**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	84	38-134			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received: 09/25/08
100 West Walnut Street	Work Order No: 08-09-2313
Pasadena, CA 91124-0002	Preparation: EPA 5030B
	Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440 Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B129 (44-48)	**08-09-2313-10-D**	**09/25/08 09:30**	**Aqueous**	**GC 5**	**10/01/08**	**10/02/08 15:16**	**081001B02**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	83	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B129 (54-58)	**08-09-2313-11-D**	**09/25/08 10:10**	**Aqueous**	**GC 5**	**10/01/08**	**10/02/08 12:08**	**081001B02**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	89	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B132 (44-48)	**08-09-2313-12-D**	**09/25/08 10:35**	**Aqueous**	**GC 5**	**10/01/08**	**10/02/08 15:54**	**081001B02**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	84	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B132 (55-59)	**08-09-2313-13-D**	**09/25/08 11:00**	**Aqueous**	**GC 5**	**10/01/08**	**10/02/08 12:45**	**081001B02**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	84	38-134			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 09/25/08
Work Order No: 08-09-2313
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Dup-1	**08-09-2313-14-D**	**09/25/08 10:40**	**Aqueous**	**GC 5**	**10/01/08**	**10/02/08 16:31**	**081001B02**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	86	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-247-2,373**	**N/A**	**Aqueous**	**GC 5**	**09/29/08**	**09/29/08 13:56**	**080929B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	87	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-247-2,374**	**N/A**	**Aqueous**	**GC 5**	**10/01/08**	**10/01/08 20:02**	**081001B02**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	86	38-134	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 09/25/08
Work Order No: 08-09-2313
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-126-45	**08-09-2313-5-A**	**09/24/08 10:56**	**Solid**	**GC 5**	**09/30/08**	**09/30/08 18:59**	**080930B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene - FID	85	42-126	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-279-2,280**	**N/A**	**Solid**	**GC 5**	**09/30/08**	**09/30/08 17:44**	**080930B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene - FID	77	42-126	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received:	09/25/08
Work Order No:	08-09-2313
Preparation:	EPA 3550B
Method:	EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-126-45	**08-09-2313-5-A**	**09/24/08 10:56**	**Solid**	**GC 43**	**09/26/08**	**09/27/08 07:21**	**080926B10**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	5.0	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	101	61-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-295-5**	**N/A**	**Solid**	**GC 43**	**09/26/08**	**09/27/08 05:41**	**080926B10**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	5.0	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	103	61-145	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 09/25/08
Work Order No: 08-09-2313
Preparation: EPA 3510C
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B124 (44-48)	**08-09-2313-1-G**	**09/24/08 09:40**	**Aqueous**	**GC 47**	**09/26/08**	**09/29/08 20:55**	**080926B16**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	90	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B124 (54-58)	**08-09-2313-2-G**	**09/24/08 10:10**	**Aqueous**	**GC 47**	**09/26/08**	**09/29/08 21:12**	**080926B16**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	86	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B126 (44-48)	**08-09-2313-3-G**	**09/24/08 12:00**	**Aqueous**	**GC 47**	**09/26/08**	**09/29/08 21:28**	**080926B16**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	74	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B126 (54-58)	**08-09-2313-4-G**	**09/24/08 12:25**	**Aqueous**	**GC 47**	**09/26/08**	**09/29/08 21:45**	**080926B16**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	99	68-140			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received: 09/25/08
100 West Walnut Street	Work Order No: 08-09-2313
Pasadena, CA 91124-0002	Preparation: EPA 3510C
	Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B131 (44-48)	**08-09-2313-6-G**	**09/25/08 07:25**	**Aqueous**	**GC 47**	**09/26/08**	**09/29/08 22:01**	**080926B16**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	78	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B131 (55-59)	**08-09-2313-7-G**	**09/25/08 07:50**	**Aqueous**	**GC 47**	**09/26/08**	**09/29/08 22:18**	**080926B16**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	140	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	110	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B130 (44-48)	**08-09-2313-8-G**	**09/25/08 08:25**	**Aqueous**	**GC 47**	**09/26/08**	**09/29/08 22:34**	**080926B16**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	101	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B130 (54-58)	**08-09-2313-9-G**	**09/25/08 08:55**	**Aqueous**	**GC 47**	**09/26/08**	**09/29/08 22:51**	**080926B16**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	93	68-140			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 09/25/08
Work Order No: 08-09-2313
Preparation: EPA 3510C
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B129 (44-48)	**08-09-2313-10-G**	**09/25/08 09:30**	**Aqueous**	**GC 47**	**09/26/08**	**09/29/08 23:08**	**080926B16**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	88	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B129 (54-58)	**08-09-2313-11-G**	**09/25/08 10:10**	**Aqueous**	**GC 47**	**09/26/08**	**09/29/08 23:41**	**080926B16**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	85	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B132 (44-48)	**08-09-2313-12-G**	**09/25/08 10:35**	**Aqueous**	**GC 47**	**09/26/08**	**09/29/08 23:58**	**080926B16**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	86	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B132 (55-59)	**08-09-2313-13-G**	**09/25/08 11:00**	**Aqueous**	**GC 47**	**09/26/08**	**09/30/08 00:14**	**080926B16**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	89	68-140			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 09/25/08
Work Order No: 08-09-2313
Preparation: EPA 3510C
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440 Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Dup-1	**08-09-2313-14-G**	**09/25/08 10:40**	**Aqueous**	**GC 47**	**09/26/08**	**09/30/08 00:31**	**080926B16**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	96	68-140	

Method Blank	**099-12-366-22**	**N/A**	**Aqueous**	**GC 47**	**09/26/08**	**09/29/08 20:06**	**080926B16**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	96	68-140	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2313
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B124 (44-48)	**08-09-2313-1-A**	**09/24/08 09:40**	**Aqueous**	**GC/MS S**	**09/26/08**	**09/27/08 05:28**	**080926L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	1.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	116	82-130		1,2-Dichloroethane-d4	116	75-141	
Toluene-d8	100	83-113		1,4-Bromofluorobenzene	91	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2313
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B124 (54-58)	**08-09-2313-2-A**	**09/24/08 10:10**	**Aqueous**	**GC/MS S**	**09/26/08**	**09/27/08 05:58**	**080926L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	1.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	119	82-130		1,2-Dichloroethane-d4	123	75-141	
Toluene-d8	100	83-113		1,4-Bromofluorobenzene	92	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received:	09/25/08
100 West Walnut Street	Work Order No:	08-09-2313
Pasadena, CA 91124-0002	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B126 (44-48)	**08-09-2313-3-A**	**09/24/08 12:00**	**Aqueous**	**GC/MS S**	**09/26/08**	**09/27/08 06:29**	**080926L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	1.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	0.59	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	112	82-130		1,2-Dichloroethane-d4	114	75-141	
Toluene-d8	98	83-113		1,4-Bromofluorobenzene	91	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2313
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B126 (54-58)	**08-09-2313-4-A**	**09/24/08 12:25**	**Aqueous**	**GC/MS S**	**09/26/08**	**09/27/08 06:59**	**080926L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	0.63	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	1.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	1.6	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	0.65	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	120	82-130		1,2-Dichloroethane-d4	124	75-141	
Toluene-d8	99	83-113		1,4-Bromofluorobenzene	94	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2313
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B131 (44-48)	**08-09-2313-6-A**	**09/25/08 07:25**	**Aqueous**	**GC/MS S**	**09/26/08**	**09/27/08 07:29**	**080926L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	1.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	120	82-130		1,2-Dichloroethane-d4	126	75-141	
Toluene-d8	100	83-113		1,4-Bromofluorobenzene	89	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received:	09/25/08
100 West Walnut Street	Work Order No:	08-09-2313
Pasadena, CA 91124-0002	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B131 (55-59)	**08-09-2313-7-A**	**09/25/08 07:50**	**Aqueous**	**GC/MS S**	**09/26/08**	**09/27/08 07:59**	**080926L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	1.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	119	82-130		1,2-Dichloroethane-d4	126	75-141	
Toluene-d8	99	83-113		1,4-Bromofluorobenzene	90	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received:	09/25/08
100 West Walnut Street	Work Order No:	08-09-2313
Pasadena, CA 91124-0002	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B130 (44-48)	**08-09-2313-8-A**	**09/25/08 08:25**	**Aqueous**	**GC/MS S**	**09/26/08**	**09/27/08 08:30**	**080926L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	1.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	119	82-130		1,2-Dichloroethane-d4	126	75-141	
Toluene-d8	98	83-113		1,4-Bromofluorobenzene	89	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received:	09/25/08
100 West Walnut Street	Work Order No:	08-09-2313
Pasadena, CA 91124-0002	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B130 (54-58)	**08-09-2313-9-A**	**09/25/08 08:55**	**Aqueous**	**GC/MS S**	**09/26/08**	**09/27/08 09:04**	**080926L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	1.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	112	82-130		1,2-Dichloroethane-d4	116	75-141	
Toluene-d8	98	83-113		1,4-Bromofluorobenzene	89	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2313
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B129 (44-48)	**08-09-2313-10-A**	**09/25/08 09:30**	**Aqueous**	**GC/MS S**	**09/26/08**	**09/27/08 09:34**	**080926L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	0.79	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	1.0	1		Toluene	1.7	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	3.1	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	1.3	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	119	82-130		1,2-Dichloroethane-d4	121	75-141	
Toluene-d8	98	83-113		1,4-Bromofluorobenzene	92	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2313
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B129 (54-58)	**08-09-2313-11-A**	**09/25/08 10:10**	**Aqueous**	**GC/MS S**	**09/27/08**	**09/27/08 14:10**	**080927L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	3.5	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	2.3	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	1.0	1		Toluene	16	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	7.1	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	2.9	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	114	82-130		1,2-Dichloroethane-d4	121	75-141	
Toluene-d8	98	83-113		1,4-Bromofluorobenzene	94	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2313
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B132 (44-48)	**08-09-2313-12-A**	**09/25/08 10:35**	**Aqueous**	**GC/MS S**	**09/27/08**	**09/27/08 16:12**	**080927L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	1.0	1		Toluene	0.74	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	1.6	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	0.66	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	114	82-130		1,2-Dichloroethane-d4	120	75-141	
Toluene-d8	98	83-113		1,4-Bromofluorobenzene	93	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2313
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B132 (55-59)	**08-09-2313-13-A**	**09/25/08 11:00**	**Aqueous**	**GC/MS S**	**09/27/08**	**09/27/08 16:43**	**080927L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	1.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	112	82-130		1,2-Dichloroethane-d4	116	75-141	
Toluene-d8	99	83-113		1,4-Bromofluorobenzene	91	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2313
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Dup-1	**08-09-2313-14-A**	**09/25/08 10:40**	**Aqueous**	**GC/MS S**	**09/27/08**	**09/27/08 17:13**	**080927L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	1.0	1		Toluene	0.66	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	1.6	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	0.56	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	119	82-130		1,2-Dichloroethane-d4	128	75-141	
Toluene-d8	101	83-113		1,4-Bromofluorobenzene	93	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2313
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-27,006**	**N/A**	**Aqueous**	**GC/MS S**	**09/26/08**	**09/27/08 02:26**	**080926L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	10	1		Methylene Chloride	ND	10	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	1.0	1		Toluene	ND	1.0	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	10	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	1.0	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	117	82-130		1,2-Dichloroethane-d4	122	75-141	
Toluene-d8	97	83-113		1,4-Bromofluorobenzene	86	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2313
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-27,008**	**N/A**	**Aqueous**	**GC/MS S**	**09/27/08**	**09/27/08 13:40**	**080927L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	10	1		Methylene Chloride	ND	10	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	1.0	1		Toluene	ND	1.0	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	10	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	1.0	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	116	82-130		1,2-Dichloroethane-d4	121	75-141	
Toluene-d8	100	83-113		1,4-Bromofluorobenzene	89	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2313
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/kg

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-126-45	**08-09-2313-5-A**	**09/24/08 10:56**	**Solid**	**GC/MS QQ**	**10/01/08**	**10/02/08 11:08**	**081001L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	120	1		c-1,3-Dichloropropene	ND	5.0	1	
Benzene	ND	5.0	1		t-1,3-Dichloropropene	ND	5.0	1	
Bromobenzene	ND	5.0	1		Ethylbenzene	ND	5.0	1	
Bromochloromethane	ND	5.0	1		2-Hexanone	ND	50	1	
Bromodichloromethane	ND	5.0	1		Isopropylbenzene	ND	5.0	1	
Bromoform	ND	5.0	1		p-Isopropyltoluene	ND	5.0	1	
Bromomethane	ND	25	1		Methylene Chloride	ND	50	1	
2-Butanone	ND	50	1		4-Methyl-2-Pentanone	ND	50	1	
n-Butylbenzene	ND	5.0	1		Naphthalene	ND	50	1	
sec-Butylbenzene	ND	5.0	1		n-Propylbenzene	ND	5.0	1	
tert-Butylbenzene	ND	5.0	1		Styrene	ND	5.0	1	
Carbon Disulfide	ND	50	1		1,1,1,2-Tetrachloroethane	ND	5.0	1	
Carbon Tetrachloride	ND	5.0	1		1,1,2,2-Tetrachloroethane	ND	5.0	1	
Chlorobenzene	ND	5.0	1		Tetrachloroethene	ND	5.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	5.0	1	
Chloroform	ND	5.0	1		1,2,3-Trichlorobenzene	ND	10	1	
Chloromethane	ND	25	1		1,2,4-Trichlorobenzene	ND	5.0	1	
2-Chlorotoluene	ND	5.0	1		1,1,1-Trichloroethane	ND	5.0	1	
4-Chlorotoluene	ND	5.0	1		1,1,2-Trichloroethane	ND	5.0	1	
Dibromochloromethane	ND	5.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1	
1,2-Dibromo-3-Chloropropane	ND	10	1		Trichloroethene	ND	5.0	1	
1,2-Dibromoethane	ND	5.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dibromomethane	ND	5.0	1		1,2,4-Trimethylbenzene	ND	5.0	1	
1,2-Dichlorobenzene	ND	5.0	1		Trichlorofluoromethane	ND	50	1	
1,3-Dichlorobenzene	ND	5.0	1		1,3,5-Trimethylbenzene	ND	5.0	1	
1,4-Dichlorobenzene	ND	5.0	1		Vinyl Acetate	ND	50	1	
Dichlorodifluoromethane	ND	5.0	1		Vinyl Chloride	ND	5.0	1	
1,1-Dichloroethane	ND	5.0	1		p/m-Xylene	ND	5.0	1	
1,2-Dichloroethane	ND	5.0	1		o-Xylene	ND	5.0	1	
1,1-Dichloroethene	ND	5.0	1		Methyl-t-Butyl Ether (MTBE)	ND	5.0	1	
c-1,2-Dichloroethene	ND	5.0	1		Tert-Butyl Alcohol (TBA)	ND	50	1	
t-1,2-Dichloroethene	ND	5.0	1		Diisopropyl Ether (DIPE)	ND	10	1	
1,2-Dichloropropane	ND	5.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	10	1	
1,3-Dichloropropane	ND	5.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	10	1	
2,2-Dichloropropane	ND	5.0	1		Ethanol	ND	250	1	
1,1-Dichloropropene	ND	5.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	98	73-139		1,2-Dichloroethane-d4	102	73-145	
Toluene-d8	98	90-108		1,4-Bromofluorobenzene	99	71-113	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2313
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/kg

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-211**	**N/A**	**Solid**	**GC/MS QQ**	**10/01/08**	**10/02/08 04:31**	**081001L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	120	1		c-1,3-Dichloropropene	ND	5.0	1	
Benzene	ND	5.0	1		t-1,3-Dichloropropene	ND	5.0	1	
Bromobenzene	ND	5.0	1		Ethylbenzene	ND	5.0	1	
Bromochloromethane	ND	5.0	1		2-Hexanone	ND	50	1	
Bromodichloromethane	ND	5.0	1		Isopropylbenzene	ND	5.0	1	
Bromoform	ND	5.0	1		p-Isopropyltoluene	ND	5.0	1	
Bromomethane	ND	25	1		Methylene Chloride	ND	50	1	
2-Butanone	ND	50	1		4-Methyl-2-Pentanone	ND	50	1	
n-Butylbenzene	ND	5.0	1		Naphthalene	ND	50	1	
sec-Butylbenzene	ND	5.0	1		n-Propylbenzene	ND	5.0	1	
tert-Butylbenzene	ND	5.0	1		Styrene	ND	5.0	1	
Carbon Disulfide	ND	50	1		1,1,1,2-Tetrachloroethane	ND	5.0	1	
Carbon Tetrachloride	ND	5.0	1		1,1,2,2-Tetrachloroethane	ND	5.0	1	
Chlorobenzene	ND	5.0	1		Tetrachloroethene	ND	5.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	5.0	1	
Chloroform	ND	5.0	1		1,2,3-Trichlorobenzene	ND	10	1	
Chloromethane	ND	25	1		1,2,4-Trichlorobenzene	ND	5.0	1	
2-Chlorotoluene	ND	5.0	1		1,1,1-Trichloroethane	ND	5.0	1	
4-Chlorotoluene	ND	5.0	1		1,1,2-Trichloroethane	ND	5.0	1	
Dibromochloromethane	ND	5.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1	
1,2-Dibromo-3-Chloropropane	ND	10	1		Trichloroethene	ND	5.0	1	
1,2-Dibromoethane	ND	5.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dibromomethane	ND	5.0	1		1,2,4-Trimethylbenzene	ND	5.0	1	
1,2-Dichlorobenzene	ND	5.0	1		Trichlorofluoromethane	ND	50	1	
1,3-Dichlorobenzene	ND	5.0	1		1,3,5-Trimethylbenzene	ND	5.0	1	
1,4-Dichlorobenzene	ND	5.0	1		Vinyl Acetate	ND	50	1	
Dichlorodifluoromethane	ND	5.0	1		Vinyl Chloride	ND	5.0	1	
1,1-Dichloroethane	ND	5.0	1		p/m-Xylene	ND	5.0	1	
1,2-Dichloroethane	ND	5.0	1		o-Xylene	ND	5.0	1	
1,1-Dichloroethene	ND	5.0	1		Methyl-t-Butyl Ether (MTBE)	ND	5.0	1	
c-1,2-Dichloroethene	ND	5.0	1		Tert-Butyl Alcohol (TBA)	ND	50	1	
t-1,2-Dichloroethene	ND	5.0	1		Diisopropyl Ether (DIPE)	ND	10	1	
1,2-Dichloropropane	ND	5.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	10	1	
1,3-Dichloropropane	ND	5.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	10	1	
2,2-Dichloropropane	ND	5.0	1		Ethanol	ND	250	1	
1,1-Dichloropropene	ND	5.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	103	73-139		1,2-Dichloroethane-d4	110	73-145	
Toluene-d8	101	90-108		1,4-Bromofluorobenzene	92	71-113	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2313
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-09-2408-1	**Aqueous**	**GC 5**	**09/29/08**	**09/29/08**	**080929S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	72	79	68-122	9	0-18	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2313
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-09-2598-1	**Aqueous**	**GC 5**	**10/01/08**	**10/01/08**	**081001S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	71	77	68-122	7	0-18	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2313
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
B-126-45	**Solid**	**GC 5**	**09/30/08**	**09/30/08**	**080930S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	67	67	48-114	0	0-23	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 09/25/08
Work Order No: 08-09-2313
Preparation: EPA 3550B
Method: EPA 8015B (M)

Project DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
B-126-45	**Solid**	**GC 43**	**09/26/08**	**09/27/08**	**080926S10**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as JP5	89	86	64-130	3	0-15	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 09/25/08
Work Order No: 08-09-2313
Preparation: EPA 5030B
Method: EPA 8260B

Project DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-09-2219-3	**Aqueous**	**GC/MS S**	**09/26/08**	**09/26/08**	**080926S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	93	94	88-118	1	0-7	
Carbon Tetrachloride	97	95	67-145	2	0-11	
Chlorobenzene	96	96	88-118	0	0-7	
1,2-Dibromoethane	101	100	70-130	2	0-30	
1,2-Dichlorobenzene	95	96	86-116	1	0-8	
1,1-Dichloroethene	93	99	70-130	7	0-25	
Ethylbenzene	101	101	70-130	0	0-30	
Toluene	97	98	87-123	1	0-8	
Trichloroethene	91	93	79-127	0	0-10	
Vinyl Chloride	94	97	69-129	3	0-13	
Methyl-t-Butyl Ether (MTBE)	98	100	71-131	2	0-13	
Tert-Butyl Alcohol (TBA)	86	87	36-168	2	0-45	
Diisopropyl Ether (DIPE)	91	93	81-123	2	0-9	
Ethyl-t-Butyl Ether (ETBE)	91	100	72-126	9	0-12	
Tert-Amyl-Methyl Ether (TAME)	106	107	72-126	1	0-12	
Ethanol	86	86	53-149	0	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 09/25/08
Work Order No: 08-09-2313
Preparation: EPA 5030B
Method: EPA 8260B

Project DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
B129 (54-58)	**Aqueous**	**GC/MS S**	**09/27/08**	**09/27/08**	**080927S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	93	95	88-118	2	0-7	
Carbon Tetrachloride	96	99	67-145	3	0-11	
Chlorobenzene	96	96	88-118	1	0-7	
1,2-Dibromoethane	103	100	70-130	2	0-30	
1,2-Dichlorobenzene	95	97	86-116	2	0-8	
1,1-Dichloroethene	92	96	70-130	5	0-25	
Ethylbenzene	103	102	70-130	1	0-30	
Toluene	101	101	87-123	0	0-8	
Trichloroethene	92	94	79-127	2	0-10	
Vinyl Chloride	90	96	69-129	7	0-13	
Methyl-t-Butyl Ether (MTBE)	100	102	71-131	3	0-13	
Tert-Butyl Alcohol (TBA)	86	92	36-168	6	0-45	
Diisopropyl Ether (DIPE)	93	96	81-123	3	0-9	
Ethyl-t-Butyl Ether (ETBE)	102	101	72-126	1	0-12	
Tert-Amyl-Methyl Ether (TAME)	108	109	72-126	1	0-12	
Ethanol	90	94	53-149	5	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 09/25/08
Work Order No: 08-09-2313
Preparation: EPA 5030B
Method: EPA 8260B

Project DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-10-0057-1	**Solid**	**GC/MS QQ**	**10/01/08**	**10/02/08**	**081001S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	58	62	79-115	8	0-13	3
Carbon Tetrachloride	87	83	55-139	4	0-15	
Chlorobenzene	64	53	79-115	19	0-17	3,4
1,2-Dibromoethane	97	95	70-130	2	0-30	
1,2-Dichlorobenzene	79	78	63-123	2	0-23	
1,1-Dichloroethene	82	76	69-123	8	0-16	
Ethylbenzene	152	147	70-130	3	0-30	3
Toluene	47	35	79-115	29	0-15	3,4
Trichloroethene	92	90	66-144	3	0-14	
Vinyl Chloride	84	87	60-126	4	0-14	
Methyl-t-Butyl Ether (MTBE)	0	0	68-128	6	0-14	3
Tert-Butyl Alcohol (TBA)	1322	1318	44-134	0	0-37	3
Diisopropyl Ether (DIPE)	92	89	75-123	3	0-12	
Ethyl-t-Butyl Ether (ETBE)	97	97	75-117	0	0-12	
Tert-Amyl-Methyl Ether (TAME)	96	96	79-115	0	0-12	
Ethanol	10	11	42-138	13	0-28	3

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.	Date Received:	N/A
100 West Walnut Street	Work Order No:	08-09-2313
Pasadena, CA 91124-0002	Preparation:	EPA 5030B
	Method:	EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-247-2,373	**Aqueous**	**GC 5**	**09/29/08**	**09/29/08**	**080929B01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	84	73	78-120	13	0-10	X

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.		Date Received:	N/A
100 West Walnut Street		Work Order No:	08-09-2313
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-247-2,374	**Aqueous**	**GC 5**	**10/01/08**	**10/01/08**	**081001B02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	80	80	78-120	0	0-10	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 08-09-2313
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-279-2,280	**Solid**	**GC 5**	**09/30/08**	**09/30/08**	**080930B01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	90	98	70-124	8	0-18	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 08-09-2313
Preparation: EPA 3550B
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-295-5	**Solid**	**GC 43**	**09/26/08**	**09/27/08**	**080926B10**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as JP5	84	80	75-123	5	0-12	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 08-09-2313
Preparation: EPA 3510C
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-366-22	**Aqueous**	**GC 47**	**09/26/08**	**09/29/08**	**080926B16**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as JP5	85	84	75-117	1	0-13	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 08-09-2313
Preparation: EPA 5030B
Method: EPA 8260B

Project: DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-27,006	**Aqueous**	**GC/MS S**	**09/26/08**	**09/26/08**	**080926L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	92	101	84-120	78-126	10	0-8	X
Carbon Tetrachloride	95	110	63-147	49-161	14	0-10	X
Chlorobenzene	92	101	89-119	84-124	9	0-7	X
1,2-Dibromoethane	96	103	80-120	73-127	7	0-20	
1,2-Dichlorobenzene	88	96	89-119	84-124	9	0-9	ME
1,1-Dichloroethene	90	110	77-125	69-133	20	0-16	X
Ethylbenzene	96	108	80-120	73-127	11	0-20	
Toluene	94	104	83-125	76-132	10	0-9	X
Trichloroethene	92	104	89-119	84-124	12	0-8	X
Vinyl Chloride	91	105	63-135	51-147	14	0-13	X
Methyl-t-Butyl Ether (MTBE)	95	99	82-118	76-124	4	0-13	
Tert-Butyl Alcohol (TBA)	87	96	46-154	28-172	10	0-32	
Diisopropyl Ether (DIPE)	95	95	81-123	74-130	0	0-11	
Ethyl-t-Butyl Ether (ETBE)	94	99	74-122	66-130	5	0-12	
Tert-Amyl-Methyl Ether (TAME)	101	106	76-124	68-132	5	0-10	
Ethanol	91	98	60-138	47-151	7	0-32	

Total number of LCS compounds : 16
Total number of ME compounds : 1
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.		Date Received:	N/A
100 West Walnut Street		Work Order No:	08-09-2313
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project: DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-27,008	**Aqueous**	**GC/MS S**	**09/27/08**	**09/27/08**	**080927L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	95	101	84-120	78-126	6	0-8	
Carbon Tetrachloride	100	107	63-147	49-161	7	0-10	
Chlorobenzene	97	101	89-119	84-124	5	0-7	
1,2-Dibromoethane	101	104	80-120	73-127	3	0-20	
1,2-Dichlorobenzene	97	98	89-119	84-124	2	0-9	
1,1-Dichloroethene	95	104	77-125	69-133	9	0-16	
Ethylbenzene	104	110	80-120	73-127	5	0-20	
Toluene	100	103	83-125	76-132	3	0-9	
Trichloroethene	95	102	89-119	84-124	7	0-8	
Vinyl Chloride	97	105	63-135	51-147	8	0-13	
Methyl-t-Butyl Ether (MTBE)	96	98	82-118	76-124	1	0-13	
Tert-Butyl Alcohol (TBA)	86	101	46-154	28-172	16	0-32	
Diisopropyl Ether (DIPE)	96	95	81-123	74-130	1	0-11	
Ethyl-t-Butyl Ether (ETBE)	96	99	74-122	66-130	3	0-12	
Tert-Amyl-Methyl Ether (TAME)	103	103	76-124	68-132	0	0-10	
Ethanol	89	101	60-138	47-151	12	0-32	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 08-09-2313
Preparation: EPA 5030B
Method: EPA 8260B

Project: DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-796-211	**Solid**	**GC/MS QQ**	**10/01/08**	**10/02/08**	**081001L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	97	96	84-114	79-119	1	0-7	
Carbon Tetrachloride	96	96	66-132	55-143	0	0-12	
Chlorobenzene	94	93	87-111	83-115	1	0-7	
1,2-Dibromoethane	97	96	80-120	73-127	0	0-20	
1,2-Dichlorobenzene	92	91	79-115	73-121	1	0-8	
1,1-Dichloroethene	87	87	73-121	65-129	0	0-12	
Ethylbenzene	94	93	80-120	73-127	1	0-20	
Toluene	90	90	78-114	72-120	1	0-7	
Trichloroethene	94	94	84-114	79-119	1	0-8	
Vinyl Chloride	88	90	63-129	52-140	2	0-15	
Methyl-t-Butyl Ether (MTBE)	100	101	77-125	69-133	1	0-11	
Tert-Butyl Alcohol (TBA)	90	91	47-137	32-152	2	0-27	
Diisopropyl Ether (DIPE)	98	98	76-130	67-139	0	0-8	
Ethyl-t-Butyl Ether (ETBE)	96	97	76-124	68-132	1	0-12	
Tert-Amyl-Methyl Ether (TAME)	98	98	82-118	76-124	0	0-11	
Ethanol	75	78	59-131	47-143	4	0-21	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-09-2313

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Calscience Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

☐ SoCal Laboratory
7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494

☐ NorCal Service Center
5063 Commercial Circle, Suite H
Concord, CA 94520-8577
(925) 689-9022

Date 09-24-08 & 09-25-08

Page 1 of 2

LABORATORY CLIENT: Parsons	CLIENT PROJECT NAME / NUMBER: DESC-Holifield Park / 746440
ADDRESS: 100 W. Walnut Street	P.O. NO.:
CITY: Pasadena STATE: CA ZIP: 91124	PROJECT CONTACT: Mary Lucas
TEL: 626-665-8336 E-MAIL:	SAMPLER(S): (PRINT) Quin Kinnebrew
COELT LOG CODE: ☐☐☐☐	COOLER RECEIPT TEMP= °C

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY): ☐ RWQCB REPORTING FORMS ☐ COELT EDF ☐ _____

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES

LAB USE ONL	SAMPLE ID	FIELD POINT NAME (FOR COELT EDF)	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (g)	TPH (d) or (C7-C36) or (C7-C44)*	TPH (_____)	BTEX / MTBE (8260B) or (_____)	VOCs (8260B)	Oxygenates (8260B)	Encore Prep (5035)	SVOCs (8270C)	Pesticides (8081A)	PCBs (8082)	PNAs (8310) or (8270C)	T22 Metals (6010B/747X)	Cr(VI) [7196A or 7199 or 218.6]	VOCs (TO-14A) or (TO-15)	TPH (g) [TO-3]+_____			
1	B124 (44-48)		09-24-08	0940	water	8	X	X			X													
2	B124 (54-58)			1010		8	X	X			X													
3	B126 (44-48)			1200		8	X	X			X													
4	B126 (54-58)			1225		8	X	X			X													
5	B-126 -45			1056	Soil	1	X	X			X													
6	B131 (44-48)		09-25-08	0725	water	7	X	X			X													
7	B131 (55-59)			0750		7	X	X			X													
8	B130 (44-48)			0825		7	X	X			X													
9	B130 (54-58)			0855		7	X	X			X													
10	B129 (44-48)			0930		7	X	X			X													

Relinquished by: (Signature) Quin Kinnebrew	Received by: (Signature/Affiliation) CEL	Date: 09-25-08	Time: 1109
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date: 9/25/08	Time: 1706
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

DISTRIBUTION: White with final report, Green and Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Green and Yellow copies respectively.

10/01/07 Revision

Calscience Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

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Garden Grove, CA 92841-1427
(714) 895-5494

☐ NorCal Service Center
5063 Commercial Circle, Suite H
Concord, CA 94520-8577
(925) 689-9022

Date 09.25.08

Page 2 of 2

LABORATORY CLIENT: Parsons

ADDRESS: 100 W. Walnut Street

CITY: Pasadena STATE: CA ZIP: 91124

TEL: 626.665.8336 E-MAIL:

CLIENT PROJECT NAME / NUMBER: DESC - Holifield Park / 746440

P.O. NO.:

PROJECT CONTACT: Mary Lucas

0 9 2 3 1 3

SAMPLER(S): (PRINT) Quin Kinnebrew

COELT LOG CODE: ☐☐☐☐

COOLER RECEIPT TEMP= °C

TURNAROUND TIME:
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING FORMS ☐ COELT EDF ☐ _____

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES

LAB USE ONL	SAMPLE ID	FIELD POINT NAME (FOR COELT EDF)	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (g)	TPH (d) or (C7-C36) or (C7-C44)*	TPH (_____)	BTEX / MTBE (8260B) or (_____)	VOCs (8260B)	Oxygenates (8260B)	Encore Prep (5035)	SVOCs (8270C)	Pesticides (8081A)	PCBs (8082)	PNAs (8310) or (8270C)	T22 Metals (6010B/747X)	Cr(VI) [7196A or 7199 or 218.6]	VOCs (TO-14A) or (TO-15)	TPH (g) [TO-3]+_____			
11	B129 (54-58)		09.25.08	1010	water		X	X			X												
12	B132 (44-48)		↓	1035	↓		X	X			X												
13	B132 (55-59)			1100			X	X			X												
14	Dup-1			1040			X	X			X												

Relinquished by: (Signature) Quin Kinnebrew	Received by: (Signature/Affiliation) CEL	Date: 09.25.08	Time: 1109
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date: 9/25/08	Time: 1306
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

DISTRIBUTION: White with final report, Green and Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Green and Yellow copies respectively.

10/01/07 Revision

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 09 - 2313

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: PARSONS DATE: 9/25/08

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

- ____ Chilled, cooler with temperature blank provided.
- ____ Chilled, cooler without temperature blank.
- ✓ Chilled and placed in cooler with wet ice.
- ____ Ambient and placed in cooler with wet ice.
- ____ Ambient temperature (For Air & Filter Only).
- 3.3 °C Temperature blank.

LABORATORY (Other than Calscience Courier):

- ___.___ °C Temperature blank.
- ___.___ °C IR Thermometer.
- ____ Ambient temperature (For Air & Filter Only).

Initial: AH

CUSTODY SEAL INTACT:

Sample(s): ____ Cooler: ____ No (Not Intact) : ____ Not Present: ✓

Initial: AH

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)	✓		
VOA vial(s) free of headspace.	✓		
Tedlar bag(s) free of condensation			✓

Initial: AH

COMMENTS:

Calscience
Environmental
Laboratories, Inc.

October 06, 2008

Mary Lucas
Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Subject: **Calscience Work Order No.: 08-09-2392**
Client Reference: DESC -Hollifield Park / 746440

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 9/25/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Ranjit K. F. Clarke

Calscience Environmental
Laboratories, Inc.
Ranjit Clarke
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 09/25/08
Work Order No: 08-09-2392
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B125 (44-48)	**08-09-2392-1-E**	**09/25/08 11:30**	**Aqueous**	**GC 25**	**09/26/08**	**09/26/08 21:44**	**080926B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	440	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	91	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B125 (54-58)	**08-09-2392-2-E**	**09/25/08 11:55**	**Aqueous**	**GC 25**	**09/26/08**	**09/26/08 22:18**	**080926B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	700	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	95	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B128 (44-48)	**08-09-2392-3-D**	**09/25/08 12:25**	**Aqueous**	**GC 25**	**10/03/08**	**10/03/08 15:50**	**081003B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	120	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	90	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B128 (54-58)	**08-09-2392-4-E**	**09/25/08 12:50**	**Aqueous**	**GC 25**	**09/26/08**	**09/27/08 00:35**	**080926B01**

Comment(s): -The sample chromatographic pattern for TPH does not match the chromatographic pattern of the specified standard. Quantitation of the unknown hydrocarbon(s) in the sample was based upon the specified standard.

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	520	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	90	38-134	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 09/25/08
Work Order No: 08-09-2392
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B133 (44-48)	**08-09-2392-5-E**	**09/25/08 13:50**	**Aqueous**	**GC 25**	**09/26/08**	**09/27/08 01:10**	**080926B01**

Comment(s): -The sample chromatographic pattern for TPH does not match the chromatographic pattern of the specified standard. Quantitation of the unknown hydrocarbon(s) in the sample was based upon the specified standard.

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	740	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	92	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B133 (55-59)	**08-09-2392-6-E**	**09/25/08 14:15**	**Aqueous**	**GC 25**	**09/27/08**	**09/27/08 09:44**	**080927B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	86	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B123 (46-50)	**08-09-2392-7-D**	**09/25/08 15:05**	**Aqueous**	**GC 4**	**10/02/08**	**10/02/08 12:52**	**081002B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	78	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B123 (56-60)	**08-09-2392-8-E**	**09/25/08 15:40**	**Aqueous**	**GC 25**	**09/26/08**	**09/27/08 02:18**	**080926B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	83	38-134	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 09/25/08
Work Order No: 08-09-2392
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440 Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B127 (44-48)	**08-09-2392-9-E**	**09/25/08 16:25**	**Aqueous**	**GC 25**	**09/26/08**	**09/27/08 02:52**	**080926B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	88	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B127 (54-58)	**08-09-2392-10-E**	**09/25/08 16:45**	**Aqueous**	**GC 25**	**09/26/08**	**09/27/08 03:27**	**080926B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	86	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DUP-2	**08-09-2392-11-E**	**09/25/08 12:30**	**Aqueous**	**GC 25**	**09/26/08**	**09/27/08 04:01**	**080926B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	120	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	89	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-247-2,368**	**N/A**	**Aqueous**	**GC 25**	**09/26/08**	**09/26/08 14:20**	**080926B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	87	38-134			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 09/25/08
Work Order No: 08-09-2392
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440 Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-247-2,371**	**N/A**	**Aqueous**	**GC 25**	**09/27/08**	**09/27/08 06:53**	**080927B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	85	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-247-2,377**	**N/A**	**Aqueous**	**GC 4**	**10/02/08**	**10/02/08 10:53**	**081002B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	71	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-247-2,383**	**N/A**	**Aqueous**	**GC 25**	**10/03/08**	**10/03/08 06:43**	**081003B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	86	38-134	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 09/25/08
Work Order No: 08-09-2392
Preparation: EPA 3510C
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B125 (44-48)	**08-09-2392-1-G**	**09/25/08 11:30**	**Aqueous**	**GC 47**	**09/26/08**	**09/29/08 16:33**	**080926B15**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	440	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	94	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B125 (54-58)	**08-09-2392-2-F**	**09/25/08 11:55**	**Aqueous**	**GC 47**	**09/26/08**	**09/29/08 16:50**	**080926B15**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	390	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	88	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B128 (44-48)	**08-09-2392-3-F**	**09/25/08 12:25**	**Aqueous**	**GC 47**	**09/26/08**	**09/29/08 17:06**	**080926B15**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	130	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	96	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B128 (54-58)	**08-09-2392-4-F**	**09/25/08 12:50**	**Aqueous**	**GC 47**	**09/26/08**	**09/29/08 17:23**	**080926B15**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	160	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	95	68-140			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 09/25/08
Work Order No: 08-09-2392
Preparation: EPA 3510C
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440 Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B133 (44-48)	**08-09-2392-5-F**	**09/25/08 13:50**	**Aqueous**	**GC 47**	**09/26/08**	**09/29/08 17:39**	**080926B15**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	160	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	84	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B133 (55-59)	**08-09-2392-6-F**	**09/25/08 14:15**	**Aqueous**	**GC 47**	**09/26/08**	**09/29/08 17:56**	**080926B15**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	89	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B123 (46-50)	**08-09-2392-7-F**	**09/25/08 15:05**	**Aqueous**	**GC 47**	**09/26/08**	**09/29/08 18:12**	**080926B15**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	88	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B123 (56-60)	**08-09-2392-8-F**	**09/25/08 15:40**	**Aqueous**	**GC 47**	**09/26/08**	**10/01/08 13:19**	**080926B15**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	98	68-140			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 09/25/08
Work Order No: 08-09-2392
Preparation: EPA 3510C
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B127 (44-48)	**08-09-2392-9-F**	**09/25/08 16:25**	**Aqueous**	**GC 47**	**09/26/08**	**09/29/08 18:45**	**080926B15**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	92	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B127 (54-58)	**08-09-2392-10-F**	**09/25/08 16:45**	**Aqueous**	**GC 47**	**09/26/08**	**09/29/08 19:02**	**080926B15**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	94	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DUP-2	**08-09-2392-11-F**	**09/25/08 12:30**	**Aqueous**	**GC 47**	**09/26/08**	**09/29/08 19:49**	**080926B15**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	140	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	94	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-366-21**	**N/A**	**Aqueous**	**GC 47**	**09/26/08**	**09/29/08 15:44**	**080926B15**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	94	68-140			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2392
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B125 (44-48)	**08-09-2392-1-A**	**09/25/08 11:30**	**Aqueous**	**GC/MS JJ**	**09/26/08**	**09/27/08 06:05**	**080926L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	5.8	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	7.6	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	1.3	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	1.7	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	1.0	1		Toluene	32	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	7.0	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	2.5	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	30	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	12	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	102	82-130		1,2-Dichloroethane-d4	111	75-141	
Toluene-d8	102	83-113		1,4-Bromofluorobenzene	98	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2392
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B125 (54-58)	**08-09-2392-2-A**	**09/25/08 11:55**	**Aqueous**	**GC/MS JJ**	**09/26/08**	**09/27/08 06:33**	**080926L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	31	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	9.7	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	1.2	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	1.2	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	1.0	1		Toluene	85	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	6.0	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	2.0	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	33	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	17	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	101	82-130		1,2-Dichloroethane-d4	108	75-141	
Toluene-d8	103	83-113		1,4-Bromofluorobenzene	98	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2392
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B128 (44-48)	**08-09-2392-3-A**	**09/25/08 12:25**	**Aqueous**	**GC/MS JJ**	**09/26/08**	**09/27/08 07:02**	**080926L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	0.95	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	1.3	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	1.0	1		Toluene	4.9	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	1.7	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	5.2	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	2.0	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	109	82-130		1,2-Dichloroethane-d4	117	75-141	
Toluene-d8	101	83-113		1,4-Bromofluorobenzene	96	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2392
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B128 (54-58)	**08-09-2392-4-A**	**09/25/08 12:50**	**Aqueous**	**GC/MS JJ**	**09/26/08**	**09/27/08 07:31**	**080926L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	2.1	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	1.3	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	1.0	1		Toluene	9.3	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	4.2	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	1.9	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	108	82-130		1,2-Dichloroethane-d4	116	75-141	
Toluene-d8	101	83-113		1,4-Bromofluorobenzene	97	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2392
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B133 (44-48)	**08-09-2392-5-A**	**09/25/08 13:50**	**Aqueous**	**GC/MS JJ**	**09/26/08**	**09/27/08 07:59**	**080926L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	0.55	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	1.6	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	1.0	1		Toluene	5.0	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	3.2	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	1.5	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	7.9	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	3.0	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	109	82-130		1,2-Dichloroethane-d4	117	75-141	
Toluene-d8	103	83-113		1,4-Bromofluorobenzene	97	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2392
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B133 (55-59)	**08-09-2392-6-A**	**09/25/08 14:15**	**Aqueous**	**GC/MS JJ**	**09/26/08**	**09/27/08 08:27**	**080926L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	1.0	1		Toluene	1.9	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	0.98	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	111	82-130		1,2-Dichloroethane-d4	120	75-141	
Toluene-d8	98	83-113		1,4-Bromofluorobenzene	94	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received:	09/25/08
Work Order No:	08-09-2392
Preparation:	EPA 5030B
Method:	EPA 8260B
Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B123 (46-50)	**08-09-2392-7-B**	**09/25/08 15:05**	**Aqueous**	**GC/MS JJ**	**09/27/08**	**09/27/08 15:06**	**080927L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	1.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	117	82-130		1,2-Dichloroethane-d4	124	75-141	
Toluene-d8	98	83-113		1,4-Bromofluorobenzene	96	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received:	09/25/08
100 West Walnut Street	Work Order No:	08-09-2392
Pasadena, CA 91124-0002	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B123 (56-60)	**08-09-2392-8-A**	**09/25/08 15:40**	**Aqueous**	**GC/MS JJ**	**09/26/08**	**09/27/08 09:24**	**080926L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	1.0	1		Toluene	0.52	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	113	82-130		1,2-Dichloroethane-d4	122	75-141	
Toluene-d8	98	83-113		1,4-Bromofluorobenzene	94	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2392
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B127 (44-48)	**08-09-2392-9-B**	**09/25/08 16:25**	**Aqueous**	**GC/MS JJ**	**09/27/08**	**09/27/08 17:06**	**080927L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	0.91	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	1.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	0.65	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	113	82-130		1,2-Dichloroethane-d4	117	75-141	
Toluene-d8	97	83-113		1,4-Bromofluorobenzene	95	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2392
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B127 (54-58)	**08-09-2392-10-B**	**09/25/08 16:45**	**Aqueous**	**GC/MS JJ**	**09/27/08**	**09/27/08 17:36**	**080927L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	1.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	115	82-130		1,2-Dichloroethane-d4	119	75-141	
Toluene-d8	98	83-113		1,4-Bromofluorobenzene	93	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received:	09/25/08
100 West Walnut Street	Work Order No:	08-09-2392
Pasadena, CA 91124-0002	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DUP-2	**08-09-2392-11-B**	**09/25/08 12:30**	**Aqueous**	**GC/MS JJ**	**09/27/08**	**09/27/08 18:05**	**080927L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	0.66	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	1.1	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	1.0	1		Toluene	3.3	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	1.5	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	4.7	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	1.7	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	115	82-130		1,2-Dichloroethane-d4	118	75-141	
Toluene-d8	101	83-113		1,4-Bromofluorobenzene	98	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2392
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-27,007**	**N/A**	**Aqueous**	**GC/MS JJ**	**09/26/08**	**09/27/08 03:14**	**080926L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	10	1		Methylene Chloride	ND	10	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	1.0	1		Toluene	ND	1.0	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	10	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	1.0	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	107	82-130		1,2-Dichloroethane-d4	116	75-141	
Toluene-d8	98	83-113		1,4-Bromofluorobenzene	91	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2392
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-27,014**	**N/A**	**Aqueous**	**GC/MS JJ**	**09/27/08**	**09/27/08 13:08**	**080927L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	10	1		Methylene Chloride	ND	10	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	1.0	1		Toluene	ND	1.0	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	10	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	1.0	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	116	82-130		1,2-Dichloroethane-d4	121	75-141	
Toluene-d8	97	83-113		1,4-Bromofluorobenzene	92	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 09/25/08
Work Order No: 08-09-2392
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-09-2074-8	**Aqueous**	**GC 25**	**09/26/08**	**09/26/08**	**080926S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	95	97	68-122	2	0-18	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 09/25/08
Work Order No: 08-09-2392
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
B133 (55-59)	**Aqueous**	**GC 25**	**09/27/08**	**09/27/08**	**080927S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	102	107	68-122	5	0-18	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2392
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-09-2307-1	**Aqueous**	**GC 4**	**10/02/08**	**10/02/08**	**081002S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	93	112	68-122	6	0-18	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Parsons, Inc.		Date Received:	09/25/08
100 West Walnut Street		Work Order No:	08-09-2392
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-09-2624-18	**Aqueous**	**GC 25**	**10/03/08**	**10/03/08**	**081003S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	97	102	68-122	5	0-18	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 09/25/08
Work Order No: 08-09-2392
Preparation: EPA 5030B
Method: EPA 8260B

Project DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-09-2417-1	**Aqueous**	**GC/MS JJ**	**09/26/08**	**09/26/08**	**080926S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	97	100	88-118	3	0-7	
Carbon Tetrachloride	94	96	67-145	2	0-11	
Chlorobenzene	99	103	88-118	3	0-7	
1,2-Dibromoethane	101	103	70-130	2	0-30	
1,2-Dichlorobenzene	95	100	86-116	5	0-8	
1,1-Dichloroethene	94	97	70-130	3	0-25	
Ethylbenzene	104	106	70-130	2	0-30	
Toluene	100	102	87-123	1	0-8	
Trichloroethene	99	101	79-127	2	0-10	
Vinyl Chloride	98	97	69-129	2	0-13	
Methyl-t-Butyl Ether (MTBE)	100	103	71-131	3	0-13	
Tert-Butyl Alcohol (TBA)	100	106	36-168	6	0-45	
Diisopropyl Ether (DIPE)	100	103	81-123	4	0-9	
Ethyl-t-Butyl Ether (ETBE)	101	104	72-126	3	0-12	
Tert-Amyl-Methyl Ether (TAME)	104	107	72-126	3	0-12	
Ethanol	106	107	53-149	1	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 09/25/08
Work Order No: 08-09-2392
Preparation: EPA 5030B
Method: EPA 8260B

Project DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
B123 (46-50)	**Aqueous**	**GC/MS JJ**	**09/27/08**	**09/27/08**	**080927S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	97	95	88-118	2	0-7	
Carbon Tetrachloride	95	93	67-145	2	0-11	
Chlorobenzene	99	98	88-118	1	0-7	
1,2-Dibromoethane	102	102	70-130	0	0-30	
1,2-Dichlorobenzene	96	97	86-116	1	0-8	
1,1-Dichloroethene	95	94	70-130	0	0-25	
Ethylbenzene	102	103	70-130	0	0-30	
Toluene	101	99	87-123	2	0-8	
Trichloroethene	97	96	79-127	1	0-10	
Vinyl Chloride	97	96	69-129	1	0-13	
Methyl-t-Butyl Ether (MTBE)	104	103	71-131	2	0-13	
Tert-Butyl Alcohol (TBA)	97	99	36-168	2	0-45	
Diisopropyl Ether (DIPE)	102	100	81-123	1	0-9	
Ethyl-t-Butyl Ether (ETBE)	104	102	72-126	2	0-12	
Tert-Amyl-Methyl Ether (TAME)	107	106	72-126	1	0-12	
Ethanol	106	107	53-149	1	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.		Date Received:	N/A
100 West Walnut Street		Work Order No:	08-09-2392
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-247-2,368	**Aqueous**	**GC 25**	**09/26/08**	**09/26/08**	**080926B01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	108	108	78-120	0	0-10	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.		Date Received:	N/A
100 West Walnut Street		Work Order No:	08-09-2392
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-247-2,371	**Aqueous**	**GC 25**	**09/27/08**	**09/27/08**	**080927B01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	104	104	78-120	1	0-10	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.		Date Received:	N/A
100 West Walnut Street		Work Order No:	08-09-2392
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-247-2,377	**Aqueous**	**GC 4**	**10/02/08**	**10/02/08**	**081002B01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	102	97	78-120	5	0-10	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received:	N/A
Work Order No:	08-09-2392
Preparation:	EPA 5030B
Method:	EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-247-2,383	**Aqueous**	**GC 25**	**10/03/08**	**10/03/08**	**081003B01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	103	107	78-120	4	0-10	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.		Date Received:	N/A
100 West Walnut Street		Work Order No:	08-09-2392
Pasadena, CA 91124-0002		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-366-21	**Aqueous**	**GC 47**	**09/26/08**	**09/29/08**	**080926B15**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as JP5	83	84	75-117	2	0-13	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 08-09-2392
Preparation: EPA 5030B
Method: EPA 8260B

Project: DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-27,007	**Aqueous**	**GC/MS JJ**	**09/26/08**	**09/27/08**	**080926L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	93	87	84-120	78-126	6	0-8	
Carbon Tetrachloride	90	83	63-147	49-161	8	0-10	
Chlorobenzene	95	90	89-119	84-124	5	0-7	
1,2-Dibromoethane	93	90	80-120	73-127	3	0-20	
1,2-Dichlorobenzene	89	87	89-119	84-124	3	0-9	ME
1,1-Dichloroethene	92	86	77-125	69-133	6	0-16	
Ethylbenzene	101	94	80-120	73-127	7	0-20	
Toluene	95	90	83-125	76-132	5	0-9	
Trichloroethene	95	91	89-119	84-124	3	0-8	
Vinyl Chloride	111	91	63-135	51-147	19	0-13	X
Methyl-t-Butyl Ether (MTBE)	88	90	82-118	76-124	2	0-13	
Tert-Butyl Alcohol (TBA)	98	94	46-154	28-172	5	0-32	
Diisopropyl Ether (DIPE)	90	91	81-123	74-130	1	0-11	
Ethyl-t-Butyl Ether (ETBE)	89	92	74-122	66-130	4	0-12	
Tert-Amyl-Methyl Ether (TAME)	91	93	76-124	68-132	2	0-10	
Ethanol	103	103	60-138	47-151	0	0-32	

Total number of LCS compounds : 16
Total number of ME compounds : 1
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 08-09-2392
Preparation: EPA 5030B
Method: EPA 8260B

Project: DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-27,014	**Aqueous**	**GC/MS JJ**	**09/27/08**	**09/27/08**	**080927L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	102	101	84-120	78-126	1	0-8	
Carbon Tetrachloride	98	100	63-147	49-161	2	0-10	
Chlorobenzene	104	105	89-119	84-124	1	0-7	
1,2-Dibromoethane	104	103	80-120	73-127	1	0-20	
1,2-Dichlorobenzene	100	100	89-119	84-124	0	0-9	
1,1-Dichloroethene	100	102	77-125	69-133	2	0-16	
Ethylbenzene	110	112	80-120	73-127	2	0-20	
Toluene	105	104	83-125	76-132	1	0-9	
Trichloroethene	105	107	89-119	84-124	2	0-8	
Vinyl Chloride	105	108	63-135	51-147	3	0-13	
Methyl-t-Butyl Ether (MTBE)	102	98	82-118	76-124	5	0-13	
Tert-Butyl Alcohol (TBA)	103	110	46-154	28-172	6	0-32	
Diisopropyl Ether (DIPE)	103	99	81-123	74-130	4	0-11	
Ethyl-t-Butyl Ether (ETBE)	103	98	74-122	66-130	6	0-12	
Tert-Amyl-Methyl Ether (TAME)	108	101	76-124	68-132	6	0-10	
Ethanol	111	112	60-138	47-151	0	0-32	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-09-2392

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Calscience Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

☐ SoCal Laboratory
7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494

☐ NorCal Service Center
5063 Commercial Circle, Suite H
Concord, CA 94520-8577
(925) 689-9022

Date 09.25.08

Page 1 of 2

LABORATORY CLIENT: Parsons

ADDRESS: 100 W. Walnut Street

CITY: Pasadena STATE: CA ZIP: 91124

TEL: 626.665.8336 E-MAIL:

CLIENT PROJECT NAME / NUMBER: DESC - Holifield Park / 746440

P.O. NO.:

PROJECT CONTACT: Mary Lucas

0923 92

SAMPLER(S): (PRINT) Quin Kinnebrew

COELT LOG CODE

COOLER RECEIPT TEMP= °C

TURNAROUND TIME:
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING FORMS ☐ COELT EDF ☐

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES

LAB USE ONL	SAMPLE ID	FIELD POINT NAME (FOR COELT EDF)	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (g)	TPH (d) as TP-5 ~~or (C7-C36) or (C7-C44)~~	TPH ( )	BTEX / MTBE (8260B) or ( )	VOCs (8260B)	Oxygenates (8260B)	Encore Prep (5035)	SVOCs (8270C)	Pesticides (8081A)	PCBs (8082)	PNAs (8310) or (8270C)	T22 Metals (6010B/747X)	Cr(VI) [7196A or 7199 or 218.6]	VOCs (TO-14A) or (TO-15)	TPH (g) [TO-3]+			
1	B125 (44-48)		09.25.08	1130	water	7	X	X			X													
2	B125 (54-58)			1155		6	X	X			X													
3	B128 (44-48)			1225		6	X	X			X													
4	B128 (54-58)			1250		6	X	X			X													
5	B133 (44-48)			1350		6	X	X			X													
6	B133 (55-59)			1415		6	X	X			X													
7	B123 (46-50)			1505		6	X	X			X													
8	B123 (56-60)			1540		6	X	X			X													
9	B127 (44-48)			1625		6	X	X			X													
10	B127 (54-58)			1645		6	X	X			X													

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Quin Kinnebrew	Danny Le CEL	09.25.08	1721
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

DISTRIBUTION: White with final report, Green and Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Green and Yellow copies respectively.

10/01/07 Revision

Calscience Environmental Laboratories, Inc.

☐ SoCal Laboratory
7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494

☐ NorCal Service Center
5063 Commercial Circle, Suite H
Concord, CA 94520-8577
(925) 689-9022

CHAIN OF CUSTODY RECORD

Date 09.25.08

LABORATORY CLIENT: Parsons

ADDRESS: 100 W. Walnut Street

CITY: Pasadena STATE: CA ZIP: 91124

TEL: 626-665-8336 E-MAIL:

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING FORMS ☐ COELT EDF ☐ _____

SPECIAL INSTRUCTIONS:

CLIENT PROJECT NAME / NUMBER: DESC - Holifield Pond / 746446

P.O. NO.:

PROJECT CONTACT: Mary Lucas

0 9 2 3 9 2

SAMPLER(S): (PRINT) Quin Kinnebrew

COELT LOG CODE ☐☐☐☐

COOLER RECEIPT TEMP= °C

REQUESTED ANALYSES

LAB USE ONL	SAMPLE ID	FIELD POINT NAME (FOR COELT EDF)	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (g)	TPH (d) or (C7-C36) or (C7-C44)	TPH (as JP-5)	BTEX / MTBE (8260B) or ( )	VOCs (8260B)	Oxygenates (8260B)	Encore Prep (5035)	SVOCs (8270C)	Pesticides (8081A)	PCBs (8082)	PNAs (8310) or (8270C)	T22 Metals (6010B/747X)	Cr(VI) [7196A or 7199 or 218.6]	VOCs (TO-14A) or (TO-15)	TPH (g) [TO-3]+			
11	Dup-2		09.25.08	1230	water	6	X		X		X												

Relinquished by: (Signature) Quin Kinnebrew	Received by: (Signature/Affiliation) DANNYle CEL	Date: 09.25.08	Time: 1721
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

DISTRIBUTION: White with final report, Green and Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Green and Yellow copies respectively.

10/01/07 Revision

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 09 - 2392

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: Parsons DATE: 9/25/08

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature (For Air & Filter Only).
___ ___ . ___ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

___ ___ . ___ °C Temperature blank.
__4__ . __1__ °C IR Thermometer.
_____ Ambient temperature (For Air & Filter Only).

Initial: D.L

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Present: ✓

Initial: D.L

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC	✓		
Sample container label(s) consistent with custody papers	✓	HL	
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)	✓		
VOA vial(s) free of headspace.	✓		
Tedlar bag(s) free of condensation			✓

Initial: D.L

COMMENTS:

(-7) B123 (46-50) 2 of 5 vials + 1x 500 ml amber labeled as B123 (46-60) 9/25/08 @ 15:05 HL

09.25.08

Calscience Environmental Laboratories, Inc.

October 06, 2008

Mary Lucas
Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Subject: **Calscience Work Order No.: 08-09-2581**
Client Reference: DESC -Hollifield Park / 746440

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 9/29/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Ranjit K. F. Clarke

Calscience Environmental
Laboratories, Inc.
Ranjit Clarke
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 09/29/08
Work Order No: 08-09-2581
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GMW-63-25	**08-09-2581-1-A**	**09/29/08 08:36**	**Solid**	**GC 24**	**09/30/08**	**10/01/08 13:35**	**080930B05**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene - FID	77	42-126	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GMW-63-30	**08-09-2581-2-A**	**09/29/08 08:43**	**Solid**	**GC 24**	**09/30/08**	**10/01/08 20:54**	**080930B05**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene - FID	76	42-126	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GMW-64-25	**08-09-2581-3-A**	**09/29/08 11:19**	**Solid**	**GC 24**	**09/30/08**	**10/01/08 21:27**	**080930B05**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene - FID	77	42-126	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GMW-64-30	**08-09-2581-4-A**	**09/29/08 11:22**	**Solid**	**GC 24**	**09/30/08**	**10/01/08 22:01**	**080930B05**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene - FID	77	42-126	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 09/29/08
Work Order No: 08-09-2581
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-279-2,284**	**N/A**	**Solid**	**GC 24**	**09/30/08**	**10/01/08 11:54**	**080930B05**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene - FID	78	42-126	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received: 09/29/08
100 West Walnut Street	Work Order No: 08-09-2581
Pasadena, CA 91124-0002	Preparation: EPA 3550B
	Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GMW-63-25	**08-09-2581-1-A**	**09/29/08 08:36**	**Solid**	**GC 27**	**09/30/08**	**10/01/08 04:05**	**080930B03**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	5.0	1		mg/kg
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	108	61-145			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GMW-63-30	**08-09-2581-2-A**	**09/29/08 08:43**	**Solid**	**GC 27**	**09/30/08**	**10/01/08 04:24**	**080930B03**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	5.0	1		mg/kg
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	112	61-145			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GMW-64-25	**08-09-2581-3-A**	**09/29/08 11:19**	**Solid**	**GC 27**	**09/30/08**	**10/01/08 04:42**	**080930B03**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	5.0	1		mg/kg
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	108	61-145			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GMW-64-30	**08-09-2581-4-A**	**09/29/08 11:22**	**Solid**	**GC 27**	**09/30/08**	**10/01/08 05:00**	**080930B03**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	5.0	1		mg/kg
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	106	61-145			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 09/29/08
Work Order No: 08-09-2581
Preparation: EPA 3550B
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-295-6**	**N/A**	**Solid**	**GC 27**	**09/30/08**	**10/01/08 02:34**	**080930B03**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	5.0	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	110	61-145	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received:	09/29/08
100 West Walnut Street	Work Order No:	08-09-2581
Pasadena, CA 91124-0002	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Units:	ug/kg

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GMW-63-25	**08-09-2581-1-A**	**09/29/08 08:36**	**Solid**	**GC/MS S**	**10/01/08**	**10/02/08 02:24**	**081001L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	120	1		c-1,3-Dichloropropene	ND	5.0	1	
Benzene	ND	5.0	1		t-1,3-Dichloropropene	ND	5.0	1	
Bromobenzene	ND	5.0	1		Ethylbenzene	ND	5.0	1	
Bromochloromethane	ND	5.0	1		2-Hexanone	ND	50	1	
Bromodichloromethane	ND	5.0	1		Isopropylbenzene	ND	5.0	1	
Bromoform	ND	5.0	1		p-Isopropyltoluene	ND	5.0	1	
Bromomethane	ND	25	1		Methylene Chloride	ND	50	1	
2-Butanone	ND	50	1		4-Methyl-2-Pentanone	ND	50	1	
n-Butylbenzene	ND	5.0	1		Naphthalene	ND	50	1	
sec-Butylbenzene	ND	5.0	1		n-Propylbenzene	ND	5.0	1	
tert-Butylbenzene	ND	5.0	1		Styrene	ND	5.0	1	
Carbon Disulfide	ND	50	1		1,1,1,2-Tetrachloroethane	ND	5.0	1	
Carbon Tetrachloride	ND	5.0	1		1,1,2,2-Tetrachloroethane	ND	5.0	1	
Chlorobenzene	ND	5.0	1		Tetrachloroethene	ND	5.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	5.0	1	
Chloroform	ND	5.0	1		1,2,3-Trichlorobenzene	ND	10	1	
Chloromethane	ND	25	1		1,2,4-Trichlorobenzene	ND	5.0	1	
2-Chlorotoluene	ND	5.0	1		1,1,1-Trichloroethane	ND	5.0	1	
4-Chlorotoluene	ND	5.0	1		1,1,2-Trichloroethane	ND	5.0	1	
Dibromochloromethane	ND	5.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1	
1,2-Dibromo-3-Chloropropane	ND	10	1		Trichloroethene	ND	5.0	1	
1,2-Dibromoethane	ND	5.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dibromomethane	ND	5.0	1		1,2,4-Trimethylbenzene	ND	5.0	1	
1,2-Dichlorobenzene	ND	5.0	1		Trichlorofluoromethane	ND	50	1	
1,3-Dichlorobenzene	ND	5.0	1		1,3,5-Trimethylbenzene	ND	5.0	1	
1,4-Dichlorobenzene	ND	5.0	1		Vinyl Acetate	ND	50	1	
Dichlorodifluoromethane	ND	5.0	1		Vinyl Chloride	ND	5.0	1	
1,1-Dichloroethane	ND	5.0	1		p/m-Xylene	ND	5.0	1	
1,2-Dichloroethane	ND	5.0	1		o-Xylene	ND	5.0	1	
1,1-Dichloroethene	ND	5.0	1		Methyl-t-Butyl Ether (MTBE)	ND	5.0	1	
c-1,2-Dichloroethene	ND	5.0	1		Tert-Butyl Alcohol (TBA)	ND	50	1	
t-1,2-Dichloroethene	ND	5.0	1		Diisopropyl Ether (DIPE)	ND	10	1	
1,2-Dichloropropane	ND	5.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	10	1	
1,3-Dichloropropane	ND	5.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	10	1	
2,2-Dichloropropane	ND	5.0	1		Ethanol	ND	250	1	
1,1-Dichloropropene	ND	5.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	108	73-139		1,2-Dichloroethane-d4	120	73-145	
Toluene-d8	98	90-108		1,4-Bromofluorobenzene	88	71-113	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received:	09/29/08
100 West Walnut Street	Work Order No:	08-09-2581
Pasadena, CA 91124-0002	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Units:	ug/kg

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GMW-63-30	**08-09-2581-2-A**	**09/29/08 08:43**	**Solid**	**GC/MS S**	**10/01/08**	**10/02/08 02:55**	**081001L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	120	1		c-1,3-Dichloropropene	ND	5.0	1	
Benzene	ND	5.0	1		t-1,3-Dichloropropene	ND	5.0	1	
Bromobenzene	ND	5.0	1		Ethylbenzene	ND	5.0	1	
Bromochloromethane	ND	5.0	1		2-Hexanone	ND	50	1	
Bromodichloromethane	ND	5.0	1		Isopropylbenzene	ND	5.0	1	
Bromoform	ND	5.0	1		p-Isopropyltoluene	ND	5.0	1	
Bromomethane	ND	25	1		Methylene Chloride	ND	50	1	
2-Butanone	ND	50	1		4-Methyl-2-Pentanone	ND	50	1	
n-Butylbenzene	ND	5.0	1		Naphthalene	ND	50	1	
sec-Butylbenzene	ND	5.0	1		n-Propylbenzene	ND	5.0	1	
tert-Butylbenzene	ND	5.0	1		Styrene	ND	5.0	1	
Carbon Disulfide	ND	50	1		1,1,1,2-Tetrachloroethane	ND	5.0	1	
Carbon Tetrachloride	ND	5.0	1		1,1,2,2-Tetrachloroethane	ND	5.0	1	
Chlorobenzene	ND	5.0	1		Tetrachloroethene	ND	5.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	5.0	1	
Chloroform	ND	5.0	1		1,2,3-Trichlorobenzene	ND	10	1	
Chloromethane	ND	25	1		1,2,4-Trichlorobenzene	ND	5.0	1	
2-Chlorotoluene	ND	5.0	1		1,1,1-Trichloroethane	ND	5.0	1	
4-Chlorotoluene	ND	5.0	1		1,1,2-Trichloroethane	ND	5.0	1	
Dibromochloromethane	ND	5.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1	
1,2-Dibromo-3-Chloropropane	ND	10	1		Trichloroethene	ND	5.0	1	
1,2-Dibromoethane	ND	5.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dibromomethane	ND	5.0	1		1,2,4-Trimethylbenzene	ND	5.0	1	
1,2-Dichlorobenzene	ND	5.0	1		Trichlorofluoromethane	ND	50	1	
1,3-Dichlorobenzene	ND	5.0	1		1,3,5-Trimethylbenzene	ND	5.0	1	
1,4-Dichlorobenzene	ND	5.0	1		Vinyl Acetate	ND	50	1	
Dichlorodifluoromethane	ND	5.0	1		Vinyl Chloride	ND	5.0	1	
1,1-Dichloroethane	ND	5.0	1		p/m-Xylene	ND	5.0	1	
1,2-Dichloroethane	ND	5.0	1		o-Xylene	ND	5.0	1	
1,1-Dichloroethene	ND	5.0	1		Methyl-t-Butyl Ether (MTBE)	ND	5.0	1	
c-1,2-Dichloroethene	ND	5.0	1		Tert-Butyl Alcohol (TBA)	ND	50	1	
t-1,2-Dichloroethene	ND	5.0	1		Diisopropyl Ether (DIPE)	ND	10	1	
1,2-Dichloropropane	ND	5.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	10	1	
1,3-Dichloropropane	ND	5.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	10	1	
2,2-Dichloropropane	ND	5.0	1		Ethanol	ND	250	1	
1,1-Dichloropropene	ND	5.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	116	73-139		1,2-Dichloroethane-d4	130	73-145	
Toluene-d8	100	90-108		1,4-Bromofluorobenzene	92	71-113	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/29/08
100 West Walnut Street		Work Order No:	08-09-2581
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/kg

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GMW-64-25	**08-09-2581-3-A**	**09/29/08 11:19**	**Solid**	**GC/MS S**	**10/01/08**	**10/02/08 03:25**	**081001L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	120	1		c-1,3-Dichloropropene	ND	5.0	1	
Benzene	ND	5.0	1		t-1,3-Dichloropropene	ND	5.0	1	
Bromobenzene	ND	5.0	1		Ethylbenzene	ND	5.0	1	
Bromochloromethane	ND	5.0	1		2-Hexanone	ND	50	1	
Bromodichloromethane	ND	5.0	1		Isopropylbenzene	ND	5.0	1	
Bromoform	ND	5.0	1		p-Isopropyltoluene	ND	5.0	1	
Bromomethane	ND	25	1		Methylene Chloride	ND	50	1	
2-Butanone	ND	50	1		4-Methyl-2-Pentanone	ND	50	1	
n-Butylbenzene	ND	5.0	1		Naphthalene	ND	50	1	
sec-Butylbenzene	ND	5.0	1		n-Propylbenzene	ND	5.0	1	
tert-Butylbenzene	ND	5.0	1		Styrene	ND	5.0	1	
Carbon Disulfide	ND	50	1		1,1,1,2-Tetrachloroethane	ND	5.0	1	
Carbon Tetrachloride	ND	5.0	1		1,1,2,2-Tetrachloroethane	ND	5.0	1	
Chlorobenzene	ND	5.0	1		Tetrachloroethene	ND	5.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	5.0	1	
Chloroform	ND	5.0	1		1,2,3-Trichlorobenzene	ND	10	1	
Chloromethane	ND	25	1		1,2,4-Trichlorobenzene	ND	5.0	1	
2-Chlorotoluene	ND	5.0	1		1,1,1-Trichloroethane	ND	5.0	1	
4-Chlorotoluene	ND	5.0	1		1,1,2-Trichloroethane	ND	5.0	1	
Dibromochloromethane	ND	5.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1	
1,2-Dibromo-3-Chloropropane	ND	10	1		Trichloroethene	ND	5.0	1	
1,2-Dibromoethane	ND	5.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dibromomethane	ND	5.0	1		1,2,4-Trimethylbenzene	ND	5.0	1	
1,2-Dichlorobenzene	ND	5.0	1		Trichlorofluoromethane	ND	50	1	
1,3-Dichlorobenzene	ND	5.0	1		1,3,5-Trimethylbenzene	ND	5.0	1	
1,4-Dichlorobenzene	ND	5.0	1		Vinyl Acetate	ND	50	1	
Dichlorodifluoromethane	ND	5.0	1		Vinyl Chloride	ND	5.0	1	
1,1-Dichloroethane	ND	5.0	1		p/m-Xylene	ND	5.0	1	
1,2-Dichloroethane	ND	5.0	1		o-Xylene	ND	5.0	1	
1,1-Dichloroethene	ND	5.0	1		Methyl-t-Butyl Ether (MTBE)	ND	5.0	1	
c-1,2-Dichloroethene	ND	5.0	1		Tert-Butyl Alcohol (TBA)	ND	50	1	
t-1,2-Dichloroethene	ND	5.0	1		Diisopropyl Ether (DIPE)	ND	10	1	
1,2-Dichloropropane	ND	5.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	10	1	
1,3-Dichloropropane	ND	5.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	10	1	
2,2-Dichloropropane	ND	5.0	1		Ethanol	ND	250	1	
1,1-Dichloropropene	ND	5.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	109	73-139		1,2-Dichloroethane-d4	117	73-145	
Toluene-d8	97	90-108		1,4-Bromofluorobenzene	93	71-113	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/29/08
100 West Walnut Street		Work Order No:	08-09-2581
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/kg

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GMW-64-30	**08-09-2581-4-A**	**09/29/08 11:22**	**Solid**	**GC/MS S**	**10/01/08**	**10/02/08 03:56**	**081001L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	120	1		c-1,3-Dichloropropene	ND	5.0	1	
Benzene	ND	5.0	1		t-1,3-Dichloropropene	ND	5.0	1	
Bromobenzene	ND	5.0	1		Ethylbenzene	ND	5.0	1	
Bromochloromethane	ND	5.0	1		2-Hexanone	ND	50	1	
Bromodichloromethane	ND	5.0	1		Isopropylbenzene	ND	5.0	1	
Bromoform	ND	5.0	1		p-Isopropyltoluene	ND	5.0	1	
Bromomethane	ND	25	1		Methylene Chloride	ND	50	1	
2-Butanone	ND	50	1		4-Methyl-2-Pentanone	ND	50	1	
n-Butylbenzene	ND	5.0	1		Naphthalene	ND	50	1	
sec-Butylbenzene	ND	5.0	1		n-Propylbenzene	ND	5.0	1	
tert-Butylbenzene	ND	5.0	1		Styrene	ND	5.0	1	
Carbon Disulfide	ND	50	1		1,1,1,2-Tetrachloroethane	ND	5.0	1	
Carbon Tetrachloride	ND	5.0	1		1,1,2,2-Tetrachloroethane	ND	5.0	1	
Chlorobenzene	ND	5.0	1		Tetrachloroethene	ND	5.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	5.0	1	
Chloroform	ND	5.0	1		1,2,3-Trichlorobenzene	ND	10	1	
Chloromethane	ND	25	1		1,2,4-Trichlorobenzene	ND	5.0	1	
2-Chlorotoluene	ND	5.0	1		1,1,1-Trichloroethane	ND	5.0	1	
4-Chlorotoluene	ND	5.0	1		1,1,2-Trichloroethane	ND	5.0	1	
Dibromochloromethane	ND	5.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1	
1,2-Dibromo-3-Chloropropane	ND	10	1		Trichloroethene	ND	5.0	1	
1,2-Dibromoethane	ND	5.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dibromomethane	ND	5.0	1		1,2,4-Trimethylbenzene	ND	5.0	1	
1,2-Dichlorobenzene	ND	5.0	1		Trichlorofluoromethane	ND	50	1	
1,3-Dichlorobenzene	ND	5.0	1		1,3,5-Trimethylbenzene	ND	5.0	1	
1,4-Dichlorobenzene	ND	5.0	1		Vinyl Acetate	ND	50	1	
Dichlorodifluoromethane	ND	5.0	1		Vinyl Chloride	ND	5.0	1	
1,1-Dichloroethane	ND	5.0	1		p/m-Xylene	ND	5.0	1	
1,2-Dichloroethane	ND	5.0	1		o-Xylene	ND	5.0	1	
1,1-Dichloroethene	ND	5.0	1		Methyl-t-Butyl Ether (MTBE)	ND	5.0	1	
c-1,2-Dichloroethene	ND	5.0	1		Tert-Butyl Alcohol (TBA)	ND	50	1	
t-1,2-Dichloroethene	ND	5.0	1		Diisopropyl Ether (DIPE)	ND	10	1	
1,2-Dichloropropane	ND	5.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	10	1	
1,3-Dichloropropane	ND	5.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	10	1	
2,2-Dichloropropane	ND	5.0	1		Ethanol	ND	250	1	
1,1-Dichloropropene	ND	5.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	113	73-139		1,2-Dichloroethane-d4	119	73-145	
Toluene-d8	100	90-108		1,4-Bromofluorobenzene	91	71-113	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/29/08
100 West Walnut Street		Work Order No:	08-09-2581
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/kg

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-208**	**N/A**	**Solid**	**GC/MS S**	**10/01/08**	**10/02/08 01:54**	**081001L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	120	1		c-1,3-Dichloropropene	ND	5.0	1	
Benzene	ND	5.0	1		t-1,3-Dichloropropene	ND	5.0	1	
Bromobenzene	ND	5.0	1		Ethylbenzene	ND	5.0	1	
Bromochloromethane	ND	5.0	1		2-Hexanone	ND	50	1	
Bromodichloromethane	ND	5.0	1		Isopropylbenzene	ND	5.0	1	
Bromoform	ND	5.0	1		p-Isopropyltoluene	ND	5.0	1	
Bromomethane	ND	25	1		Methylene Chloride	ND	50	1	
2-Butanone	ND	50	1		4-Methyl-2-Pentanone	ND	50	1	
n-Butylbenzene	ND	5.0	1		Naphthalene	ND	50	1	
sec-Butylbenzene	ND	5.0	1		n-Propylbenzene	ND	5.0	1	
tert-Butylbenzene	ND	5.0	1		Styrene	ND	5.0	1	
Carbon Disulfide	ND	50	1		1,1,1,2-Tetrachloroethane	ND	5.0	1	
Carbon Tetrachloride	ND	5.0	1		1,1,2,2-Tetrachloroethane	ND	5.0	1	
Chlorobenzene	ND	5.0	1		Tetrachloroethene	ND	5.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	5.0	1	
Chloroform	ND	5.0	1		1,2,3-Trichlorobenzene	ND	10	1	
Chloromethane	ND	25	1		1,2,4-Trichlorobenzene	ND	5.0	1	
2-Chlorotoluene	ND	5.0	1		1,1,1-Trichloroethane	ND	5.0	1	
4-Chlorotoluene	ND	5.0	1		1,1,2-Trichloroethane	ND	5.0	1	
Dibromochloromethane	ND	5.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1	
1,2-Dibromo-3-Chloropropane	ND	10	1		Trichloroethene	ND	5.0	1	
1,2-Dibromoethane	ND	5.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dibromomethane	ND	5.0	1		1,2,4-Trimethylbenzene	ND	5.0	1	
1,2-Dichlorobenzene	ND	5.0	1		Trichlorofluoromethane	ND	50	1	
1,3-Dichlorobenzene	ND	5.0	1		1,3,5-Trimethylbenzene	ND	5.0	1	
1,4-Dichlorobenzene	ND	5.0	1		Vinyl Acetate	ND	50	1	
Dichlorodifluoromethane	ND	5.0	1		Vinyl Chloride	ND	5.0	1	
1,1-Dichloroethane	ND	5.0	1		p/m-Xylene	ND	5.0	1	
1,2-Dichloroethane	ND	5.0	1		o-Xylene	ND	5.0	1	
1,1-Dichloroethene	ND	5.0	1		Methyl-t-Butyl Ether (MTBE)	ND	5.0	1	
c-1,2-Dichloroethene	ND	5.0	1		Tert-Butyl Alcohol (TBA)	ND	50	1	
t-1,2-Dichloroethene	ND	5.0	1		Diisopropyl Ether (DIPE)	ND	10	1	
1,2-Dichloropropane	ND	5.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	10	1	
1,3-Dichloropropane	ND	5.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	10	1	
2,2-Dichloropropane	ND	5.0	1		Ethanol	ND	250	1	
1,1-Dichloropropene	ND	5.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	118	73-139		1,2-Dichloroethane-d4	124	73-145	
Toluene-d8	98	90-108		1,4-Bromofluorobenzene	93	71-113	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 09/29/08
Work Order No: 08-09-2581
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
GMW-63-25	**Solid**	**GC 24**	**09/30/08**	**10/01/08**	**080930S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	106	106	48-114	1	0-23	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 09/29/08
Work Order No: 08-09-2581
Preparation: EPA 3550B
Method: EPA 8015B (M)

Project DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
GMW-63-25	**Solid**	**GC 27**	**09/30/08**	**10/01/08**	**080930S03**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as JP5	80	78	64-130	2	0-15	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 09/29/08
Work Order No: 08-09-2581
Preparation: EPA 5030B
Method: EPA 8260B

Project DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-09-2695-2	**Solid**	**GC/MS S**	**10/01/08**	**10/02/08**	**081001S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	93	91	79-115	2	0-13	
Carbon Tetrachloride	99	97	55-139	3	0-15	
Chlorobenzene	94	94	79-115	0	0-17	
1,2-Dibromoethane	99	97	70-130	2	0-30	
1,2-Dichlorobenzene	89	93	63-123	4	0-23	
1,1-Dichloroethene	95	94	69-123	2	0-16	
Ethylbenzene	98	99	70-130	1	0-30	
Toluene	97	95	79-115	2	0-15	
Trichloroethene	94	93	66-144	1	0-14	
Vinyl Chloride	103	107	60-126	3	0-14	
Methyl-t-Butyl Ether (MTBE)	108	107	68-128	1	0-14	
Tert-Butyl Alcohol (TBA)	94	91	44-134	3	0-37	
Diisopropyl Ether (DIPE)	97	95	75-123	2	0-12	
Ethyl-t-Butyl Ether (ETBE)	103	102	75-117	0	0-12	
Tert-Amyl-Methyl Ether (TAME)	110	109	79-115	2	0-12	
Ethanol	92	87	42-138	5	0-28	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.		Date Received:	N/A
100 West Walnut Street		Work Order No:	08-09-2581
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-279-2,284	**Solid**	**GC 24**	**09/30/08**	**10/01/08**	**080930B05**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	109	109	70-124	0	0-18	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received:	N/A
Work Order No:	08-09-2581
Preparation:	EPA 3550B
Method:	EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-295-6	**Solid**	**GC 27**	**09/30/08**	**10/01/08**	**080930B03**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as JP5	79	79	75-123	0	0-12	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 08-09-2581
Preparation: EPA 5030B
Method: EPA 8260B

Project: DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-796-208	**Solid**	**GC/MS S**	**10/01/08**	**10/02/08**	**081001L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	91	89	84-114	79-119	2	0-7	
Carbon Tetrachloride	93	93	66-132	55-143	0	0-12	
Chlorobenzene	90	91	87-111	83-115	0	0-7	
1,2-Dibromoethane	99	100	80-120	73-127	1	0-20	
1,2-Dichlorobenzene	88	88	79-115	73-121	0	0-8	
1,1-Dichloroethene	93	92	73-121	65-129	1	0-12	
Ethylbenzene	93	94	80-120	73-127	1	0-20	
Toluene	93	93	78-114	72-120	0	0-7	
Trichloroethene	90	91	84-114	79-119	2	0-8	
Vinyl Chloride	86	89	63-129	52-140	3	0-15	
Methyl-t-Butyl Ether (MTBE)	107	108	77-125	69-133	0	0-11	
Tert-Butyl Alcohol (TBA)	95	96	47-137	32-152	1	0-27	
Diisopropyl Ether (DIPE)	95	97	76-130	67-139	2	0-8	
Ethyl-t-Butyl Ether (ETBE)	103	106	76-124	68-132	3	0-12	
Tert-Amyl-Methyl Ether (TAME)	109	109	82-118	76-124	1	0-11	
Ethanol	93	100	59-131	47-143	7	0-21	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-09-2581

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Calscience Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

☐ SoCal Laboratory
7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494

☐ NorCal Service Center
5063 Commercial Circle, Suite H
Concord, CA 94520-8577
(925) 689-9022

Date 09.29.08

Page 1 of 1

LABORATORY CLIENT: Parsons	CLIENT PROJECT NAME / NUMBER: DESC-Hollifield Park / 746440
ADDRESS: 100 W. Walnut Street	PROJECT CONTACT: Mary Lucas
CITY: Pasadena STATE: CA ZIP: 91124	09 2581
TEL: 626.665.8336 E-MAIL:	SAMPLER(S): (PRINT) Quin Kinnebrew
TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ 10 DAYS	COELT LOG CODE: ☐☐☐☐
SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY) ☐ RWQCB REPORTING FORMS ☐ COELT EDF ☐	COOLER RECEIPT TEMP= °C
SPECIAL INSTRUCTIONS:	P.O. NO.:

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (FOR COELT EDF)	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (g)	TPH (d) or (C7-C36) or (C7-C44)	TPH (as JP-5)	BTEX / MTBE (8260B) or ( )	VOCs (8260B)	Oxygenates (8260B)	Encore Prep (5035)	SVOCs (8270C)	Pesticides (8081A)	PCBs (8082)	PNAs (8310) or (8270C)	T22 Metals (6010B/747X)	Cr(VI) [7196A or 7199 or 218.6]	VOCs (TO-14A) or (TO-15)	TPH (g) [TO-3]+			
	GMW-63-25		09.29.08	0836	Soil	1	X		X		X													
	GMW-63-30			0843		1	X		X		X													
	GMW-64-25			1119		1	X		X		X													
	GMW-64-30			1122		1	X		X		X													

Relinquished by: (Signature) Quin Kinnebrew	Received by: (Signature/Affiliation) Woodard CEL	Date: 09.29.08	Time: 1601
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

DISTRIBUTION: White with final report, Green and Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Green and Yellow copies respectively.

10/01/07 Revision

Calscience Environmental Laboratories, Inc.

Supplemental Report 1

October 20, 2008

The original report has been revised/corrected.

Mary Lucas
Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Subject: **Calscience Work Order No.: 08-10-0934**
Client Reference: DESC -Hollifield Park / 746440

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 10/10/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Ranjit K. F. Clarke

Calscience Environmental
Laboratories, Inc.
Ranjit Clarke
Project Manager

Calscience Environmental Laboratories, Inc.

ACCREDITED IN ACCORDANCE WITH nelac

Work Order Case Narrative

Project Name: **DESC -Hollifield Park / 746440**
Calscience Work Order Number: **08-10-0934**

1. Volatile Organic Compounds + Oxygenates – EPA TO-15:

   The results in this supplemental report are reported in ug/L units instead of ppb (v/v). No other changes have been made to the results previously reported.

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received:	10/10/08
100 West Walnut Street	Work Order No:	08-10-0934
Pasadena, CA 91124-0002	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-29-5	**08-10-0934-1-A**	**10/10/08 07:40**	**Air**	**GC/MS AA**	**N/A**	**10/10/08 22:53**	**081010L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.040	0.0067	1.42		t-1,3-Dichloropropene	ND	0.0064	1.42	
Benzene	0.019	0.0023	1.42		Ethyl-t-Butyl Ether (ETBE)	ND	0.012	1.42	
Benzyl Chloride	ND	0.0074	1.42		Ethylbenzene	0.0032	0.0031	1.42	
Bromodichloromethane	ND	0.0048	1.42		4-Ethyltoluene	ND	0.0035	1.42	
Bromoform	ND	0.0073	1.42		Hexachloro-1,3-Butadiene	ND	0.015	1.42	
Bromomethane	ND	0.0028	1.42		2-Hexanone	ND	0.0058	1.42	
2-Butanone	0.0071	0.0042	1.42		Methyl-t-Butyl Ether (MTBE)	ND	0.010	1.42	
Carbon Disulfide	0.015	0.0022	1.42		Methylene Chloride	ND	0.025	1.42	
Carbon Tetrachloride	ND	0.0045	1.42		4-Methyl-2-Pentanone	ND	0.0058	1.42	
Chlorobenzene	0.039	0.0033	1.42		o-Xylene	0.0055	0.0031	1.42	
Chloroethane	ND	0.0019	1.42		p/m-Xylene	ND	0.012	1.42	
Chloroform	0.012	0.0035	1.42		Styrene	ND	0.0060	1.42	
Chloromethane	ND	0.0015	1.42		Tert-Amyl-Methyl Ether (TAME)	ND	0.012	1.42	
Dibromochloromethane	ND	0.0060	1.42		Tert-Butyl Alcohol (TBA)	ND	0.0086	1.42	
Dichlorodifluoromethane	ND	0.0035	1.42		Tetrachloroethene	ND	0.0048	1.42	
Diisopropyl Ether (DIPE)	ND	0.012	1.42		Toluene	0.037	0.0027	1.42	
1,1-Dichloroethane	ND	0.0029	1.42		Trichloroethene	ND	0.0038	1.42	
1,1-Dichloroethene	ND	0.0028	1.42		Trichlorofluoromethane	ND	0.0080	1.42	
1,2-Dibromoethane	ND	0.0055	1.42		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1.42	
Dichlorotetrafluoroethane	ND	0.020	1.42		1,1,1-Trichloroethane	ND	0.0039	1.42	
1,2-Dichlorobenzene	ND	0.0043	1.42		1,1,2-Trichloroethane	ND	0.0039	1.42	
1,2-Dichloroethane	ND	0.0029	1.42		1,3,5-Trimethylbenzene	ND	0.0035	1.42	
1,2-Dichloropropane	ND	0.0033	1.42		1,1,2,2-Tetrachloroethane	ND	0.0097	1.42	
1,3-Dichlorobenzene	ND	0.0043	1.42		1,2,4-Trimethylbenzene	ND	0.0070	1.42	
1,4-Dichlorobenzene	ND	0.0043	1.42		1,2,4-Trichlorobenzene	ND	0.021	1.42	
c-1,3-Dichloropropene	ND	0.0032	1.42		Vinyl Acetate	ND	0.010	1.42	
c-1,2-Dichloroethene	ND	0.0028	1.42		Vinyl Chloride	ND	0.0018	1.42	
t-1,2-Dichloroethene	ND	0.0028	1.42						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	93	57-129		1,2-Dichloroethane-d4	83	47-137	
Toluene-d8	95	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	10/10/08
100 West Walnut Street		Work Order No:	08-10-0934
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-29-15	**08-10-0934-2-A**	**10/10/08 07:55**	**Air**	**GC/MS AA**	**N/A**	**10/10/08 23:42**	**081010L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.14	0.0069	1.45		t-1,3-Dichloropropene	ND	0.0066	1.45	
Benzene	0.039	0.0023	1.45		Ethyl-t-Butyl Ether (ETBE)	ND	0.012	1.45	
Benzyl Chloride	ND	0.0075	1.45		Ethylbenzene	0.0064	0.0031	1.45	
Bromodichloromethane	ND	0.0049	1.45		4-Ethyltoluene	ND	0.0036	1.45	
Bromoform	ND	0.0075	1.45		Hexachloro-1,3-Butadiene	ND	0.015	1.45	
Bromomethane	ND	0.0028	1.45		2-Hexanone	ND	0.0059	1.45	
2-Butanone	0.0096	0.0043	1.45		Methyl-t-Butyl Ether (MTBE)	ND	0.010	1.45	
Carbon Disulfide	ND	0.0023	1.45		Methylene Chloride	ND	0.025	1.45	
Carbon Tetrachloride	ND	0.0046	1.45		4-Methyl-2-Pentanone	ND	0.0059	1.45	
Chlorobenzene	0.092	0.0033	1.45		o-Xylene	0.012	0.0031	1.45	
Chloroethane	ND	0.0019	1.45		p/m-Xylene	ND	0.013	1.45	
Chloroform	ND	0.0035	1.45		Styrene	ND	0.0062	1.45	
Chloromethane	ND	0.0015	1.45		Tert-Amyl-Methyl Ether (TAME)	ND	0.012	1.45	
Dibromochloromethane	ND	0.0062	1.45		Tert-Butyl Alcohol (TBA)	ND	0.0088	1.45	
Dichlorodifluoromethane	ND	0.0036	1.45		Tetrachloroethene	ND	0.0049	1.45	
Diisopropyl Ether (DIPE)	ND	0.012	1.45		Toluene	0.084	0.0027	1.45	
1,1-Dichloroethane	ND	0.0029	1.45		Trichloroethene	ND	0.0039	1.45	
1,1-Dichloroethene	ND	0.0029	1.45		Trichlorofluoromethane	ND	0.0081	1.45	
1,2-Dibromoethane	ND	0.0056	1.45		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1.45	
Dichlorotetrafluoroethane	ND	0.020	1.45		1,1,1-Trichloroethane	ND	0.0040	1.45	
1,2-Dichlorobenzene	ND	0.0044	1.45		1,1,2-Trichloroethane	ND	0.0040	1.45	
1,2-Dichloroethane	ND	0.0029	1.45		1,3,5-Trimethylbenzene	ND	0.0036	1.45	
1,2-Dichloropropane	ND	0.0034	1.45		1,1,2,2-Tetrachloroethane	ND	0.010	1.45	
1,3-Dichlorobenzene	ND	0.0044	1.45		1,2,4-Trimethylbenzene	ND	0.0071	1.45	
1,4-Dichlorobenzene	ND	0.0044	1.45		1,2,4-Trichlorobenzene	ND	0.022	1.45	
c-1,3-Dichloropropene	ND	0.0033	1.45		Vinyl Acetate	ND	0.010	1.45	
c-1,2-Dichloroethene	ND	0.0029	1.45		Vinyl Chloride	ND	0.0019	1.45	
t-1,2-Dichloroethene	ND	0.0029	1.45						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	94	57-129		1,2-Dichloroethane-d4	86	47-137	
Toluene-d8	94	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received:	10/10/08
100 West Walnut Street	Work Order No:	08-10-0934
Pasadena, CA 91124-0002	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-30-5	**08-10-0934-3-A**	**10/10/08 08:17**	**Air**	**GC/MS AA**	**N/A**	**10/11/08 00:30**	**081010L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.038	0.0066	1.39		t-1,3-Dichloropropene	ND	0.0063	1.39	
Benzene	0.020	0.0022	1.39		Ethyl-t-Butyl Ether (ETBE)	ND	0.012	1.39	
Benzyl Chloride	ND	0.0072	1.39		Ethylbenzene	0.0031	0.0030	1.39	
Bromodichloromethane	ND	0.0047	1.39		4-Ethyltoluene	ND	0.0034	1.39	
Bromoform	ND	0.0072	1.39		Hexachloro-1,3-Butadiene	ND	0.015	1.39	
Bromomethane	ND	0.0027	1.39		2-Hexanone	ND	0.0057	1.39	
2-Butanone	0.0088	0.0041	1.39		Methyl-t-Butyl Ether (MTBE)	ND	0.010	1.39	
Carbon Disulfide	ND	0.0022	1.39		Methylene Chloride	ND	0.024	1.39	
Carbon Tetrachloride	ND	0.0044	1.39		4-Methyl-2-Pentanone	ND	0.0057	1.39	
Chlorobenzene	0.047	0.0032	1.39		o-Xylene	0.0060	0.0030	1.39	
Chloroethane	ND	0.0018	1.39		p/m-Xylene	ND	0.012	1.39	
Chloroform	ND	0.0034	1.39		Styrene	ND	0.0059	1.39	
Chloromethane	ND	0.0014	1.39		Tert-Amyl-Methyl Ether (TAME)	ND	0.012	1.39	
Dibromochloromethane	ND	0.0059	1.39		Tert-Butyl Alcohol (TBA)	ND	0.0084	1.39	
Dichlorodifluoromethane	ND	0.0034	1.39		Tetrachloroethene	ND	0.0047	1.39	
Diisopropyl Ether (DIPE)	ND	0.012	1.39		Toluene	0.040	0.0026	1.39	
1,1-Dichloroethane	ND	0.0028	1.39		Trichloroethene	ND	0.0037	1.39	
1,1-Dichloroethene	ND	0.0028	1.39		Trichlorofluoromethane	ND	0.0078	1.39	
1,2-Dibromoethane	ND	0.0053	1.39		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1.39	
Dichlorotetrafluoroethane	ND	0.019	1.39		1,1,1-Trichloroethane	ND	0.0038	1.39	
1,2-Dichlorobenzene	ND	0.0042	1.39		1,1,2-Trichloroethane	ND	0.0038	1.39	
1,2-Dichloroethane	ND	0.0028	1.39		1,3,5-Trimethylbenzene	ND	0.0034	1.39	
1,2-Dichloropropane	ND	0.0032	1.39		1,1,2,2-Tetrachloroethane	ND	0.0095	1.39	
1,3-Dichlorobenzene	ND	0.0042	1.39		1,2,4-Trimethylbenzene	ND	0.0068	1.39	
1,4-Dichlorobenzene	ND	0.0042	1.39		1,2,4-Trichlorobenzene	ND	0.021	1.39	
c-1,3-Dichloropropene	ND	0.0032	1.39		Vinyl Acetate	ND	0.0098	1.39	
c-1,2-Dichloroethene	ND	0.0028	1.39		Vinyl Chloride	ND	0.0018	1.39	
t-1,2-Dichloroethene	ND	0.0028	1.39						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	94	57-129		1,2-Dichloroethane-d4	88	47-137	
Toluene-d8	95	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received:	10/10/08
100 West Walnut Street	Work Order No:	08-10-0934
Pasadena, CA 91124-0002	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-30-15	**08-10-0934-4-A**	**10/10/08 08:40**	**Air**	**GC/MS AA**	**N/A**	**10/11/08 01:19**	**081010L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.12	0.0068	1.44		t-1,3-Dichloropropene	ND	0.0065	1.44	
Benzene	0.058	0.0023	1.44		Ethyl-t-Butyl Ether (ETBE)	ND	0.012	1.44	
Benzyl Chloride	ND	0.0075	1.44		Ethylbenzene	0.0063	0.0031	1.44	
Bromodichloromethane	ND	0.0048	1.44		4-Ethyltoluene	ND	0.0035	1.44	
Bromoform	0.0086	0.0074	1.44		Hexachloro-1,3-Butadiene	ND	0.015	1.44	
Bromomethane	ND	0.0028	1.44		2-Hexanone	ND	0.0059	1.44	
2-Butanone	0.0083	0.0042	1.44		Methyl-t-Butyl Ether (MTBE)	ND	0.010	1.44	
Carbon Disulfide	ND	0.0022	1.44		Methylene Chloride	ND	0.025	1.44	
Carbon Tetrachloride	ND	0.0045	1.44		4-Methyl-2-Pentanone	ND	0.0059	1.44	
Chlorobenzene	0.10	0.0033	1.44		o-Xylene	0.013	0.0031	1.44	
Chloroethane	ND	0.0019	1.44		p/m-Xylene	ND	0.013	1.44	
Chloroform	0.012	0.0035	1.44		Styrene	ND	0.0061	1.44	
Chloromethane	0.0053	0.0015	1.44		Tert-Amyl-Methyl Ether (TAME)	ND	0.012	1.44	
Dibromochloromethane	ND	0.0061	1.44		Tert-Butyl Alcohol (TBA)	ND	0.0087	1.44	
Dichlorodifluoromethane	ND	0.0036	1.44		Tetrachloroethene	ND	0.0049	1.44	
Diisopropyl Ether (DIPE)	ND	0.012	1.44		Toluene	0.099	0.0027	1.44	
1,1-Dichloroethane	ND	0.0029	1.44		Trichloroethene	ND	0.0039	1.44	
1,1-Dichloroethene	ND	0.0029	1.44		Trichlorofluoromethane	ND	0.0081	1.44	
1,2-Dibromoethane	ND	0.0055	1.44		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1.44	
Dichlorotetrafluoroethane	ND	0.020	1.44		1,1,1-Trichloroethane	ND	0.0039	1.44	
1,2-Dichlorobenzene	ND	0.0043	1.44		1,1,2-Trichloroethane	ND	0.0039	1.44	
1,2-Dichloroethane	ND	0.0029	1.44		1,3,5-Trimethylbenzene	ND	0.0035	1.44	
1,2-Dichloropropane	ND	0.0033	1.44		1,1,2,2-Tetrachloroethane	ND	0.0099	1.44	
1,3-Dichlorobenzene	ND	0.0043	1.44		1,2,4-Trimethylbenzene	ND	0.0071	1.44	
1,4-Dichlorobenzene	ND	0.0043	1.44		1,2,4-Trichlorobenzene	ND	0.021	1.44	
c-1,3-Dichloropropene	ND	0.0033	1.44		Vinyl Acetate	ND	0.010	1.44	
c-1,2-Dichloroethene	ND	0.0029	1.44		Vinyl Chloride	ND	0.0018	1.44	
t-1,2-Dichloroethene	ND	0.0029	1.44						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	95	57-129		1,2-Dichloroethane-d4	88	47-137	
Toluene-d8	95	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received:	10/10/08
100 West Walnut Street	Work Order No:	08-10-0934
Pasadena, CA 91124-0002	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-31-5	**08-10-0934-5-A**	**10/10/08 08:59**	**Air**	**GC/MS AA**	**N/A**	**10/11/08 02:09**	**081010L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.043	0.0068	1.44		t-1,3-Dichloropropene	ND	0.0065	1.44	
Benzene	0.022	0.0023	1.44		Ethyl-t-Butyl Ether (ETBE)	ND	0.012	1.44	
Benzyl Chloride	ND	0.0075	1.44		Ethylbenzene	0.0035	0.0031	1.44	
Bromodichloromethane	ND	0.0048	1.44		4-Ethyltoluene	ND	0.0035	1.44	
Bromoform	ND	0.0074	1.44		Hexachloro-1,3-Butadiene	ND	0.015	1.44	
Bromomethane	ND	0.0028	1.44		2-Hexanone	ND	0.0059	1.44	
2-Butanone	0.0046	0.0042	1.44		Methyl-t-Butyl Ether (MTBE)	ND	0.010	1.44	
Carbon Disulfide	ND	0.0022	1.44		Methylene Chloride	ND	0.025	1.44	
Carbon Tetrachloride	ND	0.0045	1.44		4-Methyl-2-Pentanone	ND	0.0059	1.44	
Chlorobenzene	0.055	0.0033	1.44		o-Xylene	0.0080	0.0031	1.44	
Chloroethane	ND	0.0019	1.44		p/m-Xylene	ND	0.013	1.44	
Chloroform	0.0038	0.0035	1.44		Styrene	ND	0.0061	1.44	
Chloromethane	ND	0.0015	1.44		Tert-Amyl-Methyl Ether (TAME)	ND	0.012	1.44	
Dibromochloromethane	ND	0.0061	1.44		Tert-Butyl Alcohol (TBA)	ND	0.0087	1.44	
Dichlorodifluoromethane	ND	0.0036	1.44		Tetrachloroethene	ND	0.0049	1.44	
Diisopropyl Ether (DIPE)	ND	0.012	1.44		Toluene	0.044	0.0027	1.44	
1,1-Dichloroethane	ND	0.0029	1.44		Trichloroethene	ND	0.0039	1.44	
1,1-Dichloroethene	ND	0.0029	1.44		Trichlorofluoromethane	ND	0.0081	1.44	
1,2-Dibromoethane	ND	0.0055	1.44		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1.44	
Dichlorotetrafluoroethane	ND	0.020	1.44		1,1,1-Trichloroethane	ND	0.0039	1.44	
1,2-Dichlorobenzene	ND	0.0043	1.44		1,1,2-Trichloroethane	ND	0.0039	1.44	
1,2-Dichloroethane	ND	0.0029	1.44		1,3,5-Trimethylbenzene	ND	0.0035	1.44	
1,2-Dichloropropane	ND	0.0033	1.44		1,1,2,2-Tetrachloroethane	ND	0.0099	1.44	
1,3-Dichlorobenzene	ND	0.0043	1.44		1,2,4-Trimethylbenzene	ND	0.0071	1.44	
1,4-Dichlorobenzene	ND	0.0043	1.44		1,2,4-Trichlorobenzene	ND	0.021	1.44	
c-1,3-Dichloropropene	ND	0.0033	1.44		Vinyl Acetate	ND	0.010	1.44	
c-1,2-Dichloroethene	ND	0.0029	1.44		Vinyl Chloride	ND	0.0018	1.44	
t-1,2-Dichloroethene	ND	0.0029	1.44						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	94	57-129		1,2-Dichloroethane-d4	87	47-137	
Toluene-d8	94	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received:	10/10/08
100 West Walnut Street	Work Order No:	08-10-0934
Pasadena, CA 91124-0002	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-31-15	**08-10-0934-6-A**	**10/10/08 09:08**	**Air**	**GC/MS AA**	**N/A**	**10/11/08 02:58**	**081010L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.036	0.0069	1.46		t-1,3-Dichloropropene	ND	0.0066	1.46	
Benzene	0.014	0.0023	1.46		Ethyl-t-Butyl Ether (ETBE)	ND	0.012	1.46	
Benzyl Chloride	ND	0.0076	1.46		Ethylbenzene	ND	0.0032	1.46	
Bromodichloromethane	ND	0.0049	1.46		4-Ethyltoluene	ND	0.0036	1.46	
Bromoform	ND	0.0075	1.46		Hexachloro-1,3-Butadiene	ND	0.016	1.46	
Bromomethane	ND	0.0028	1.46		2-Hexanone	ND	0.0060	1.46	
2-Butanone	0.0052	0.0043	1.46		Methyl-t-Butyl Ether (MTBE)	ND	0.011	1.46	
Carbon Disulfide	ND	0.0023	1.46		Methylene Chloride	ND	0.025	1.46	
Carbon Tetrachloride	ND	0.0046	1.46		4-Methyl-2-Pentanone	ND	0.0060	1.46	
Chlorobenzene	0.035	0.0034	1.46		o-Xylene	0.0044	0.0032	1.46	
Chloroethane	ND	0.0019	1.46		p/m-Xylene	ND	0.013	1.46	
Chloroform	ND	0.0036	1.46		Styrene	ND	0.0062	1.46	
Chloromethane	ND	0.0015	1.46		Tert-Amyl-Methyl Ether (TAME)	ND	0.012	1.46	
Dibromochloromethane	ND	0.0062	1.46		Tert-Butyl Alcohol (TBA)	ND	0.0089	1.46	
Dichlorodifluoromethane	ND	0.0036	1.46		Tetrachloroethene	ND	0.0050	1.46	
Diisopropyl Ether (DIPE)	ND	0.012	1.46		Toluene	0.028	0.0028	1.46	
1,1-Dichloroethane	ND	0.0030	1.46		Trichloroethene	ND	0.0039	1.46	
1,1-Dichloroethene	ND	0.0029	1.46		Trichlorofluoromethane	ND	0.0082	1.46	
1,2-Dibromoethane	ND	0.0056	1.46		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1.46	
Dichlorotetrafluoroethane	ND	0.020	1.46		1,1,1-Trichloroethane	ND	0.0040	1.46	
1,2-Dichlorobenzene	ND	0.0044	1.46		1,1,2-Trichloroethane	ND	0.0040	1.46	
1,2-Dichloroethane	ND	0.0030	1.46		1,3,5-Trimethylbenzene	ND	0.0036	1.46	
1,2-Dichloropropane	ND	0.0034	1.46		1,1,2,2-Tetrachloroethane	ND	0.010	1.46	
1,3-Dichlorobenzene	ND	0.0044	1.46		1,2,4-Trimethylbenzene	ND	0.0072	1.46	
1,4-Dichlorobenzene	ND	0.0044	1.46		1,2,4-Trichlorobenzene	ND	0.022	1.46	
c-1,3-Dichloropropene	ND	0.0033	1.46		Vinyl Acetate	ND	0.010	1.46	
c-1,2-Dichloroethene	ND	0.0029	1.46		Vinyl Chloride	ND	0.0019	1.46	
t-1,2-Dichloroethene	ND	0.0029	1.46						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	95	57-129		1,2-Dichloroethane-d4	87	47-137	
Toluene-d8	93	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received:	10/10/08
100 West Walnut Street	Work Order No:	08-10-0934
Pasadena, CA 91124-0002	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DUP-1	**08-10-0934-7-A.**	**10/10/08 08:30**	**Air**	**GC/MS AA**	**N/A**	**10/11/08 03:47**	**081010L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.12	0.0067	1.41		t-1,3-Dichloropropene	ND	0.0064	1.41	
Benzene	0.062	0.0023	1.41		Ethyl-t-Butyl Ether (ETBE)	ND	0.012	1.41	
Benzyl Chloride	ND	0.0073	1.41		Ethylbenzene	0.0085	0.0031	1.41	
Bromodichloromethane	ND	0.0047	1.41		4-Ethyltoluene	ND	0.0035	1.41	
Bromoform	0.0074	0.0073	1.41		Hexachloro-1,3-Butadiene	ND	0.015	1.41	
Bromomethane	ND	0.0027	1.41		2-Hexanone	ND	0.0058	1.41	
2-Butanone	0.0080	0.0042	1.41		Methyl-t-Butyl Ether (MTBE)	ND	0.010	1.41	
Carbon Disulfide	ND	0.0022	1.41		Methylene Chloride	ND	0.024	1.41	
Carbon Tetrachloride	ND	0.0044	1.41		4-Methyl-2-Pentanone	ND	0.0058	1.41	
Chlorobenzene	0.11	0.0032	1.41		o-Xylene	0.017	0.0031	1.41	
Chloroethane	ND	0.0019	1.41		p/m-Xylene	ND	0.012	1.41	
Chloroform	0.078	0.0034	1.41		Styrene	ND	0.0060	1.41	
Chloromethane	ND	0.0015	1.41		Tert-Amyl-Methyl Ether (TAME)	ND	0.012	1.41	
Dibromochloromethane	ND	0.0060	1.41		Tert-Butyl Alcohol (TBA)	ND	0.0085	1.41	
Dichlorodifluoromethane	ND	0.0035	1.41		Tetrachloroethene	ND	0.0048	1.41	
Diisopropyl Ether (DIPE)	ND	0.012	1.41		Toluene	0.11	0.0027	1.41	
1,1-Dichloroethane	ND	0.0029	1.41		Trichloroethene	ND	0.0038	1.41	
1,1-Dichloroethene	ND	0.0028	1.41		Trichlorofluoromethane	ND	0.0079	1.41	
1,2-Dibromoethane	ND	0.0054	1.41		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1.41	
Dichlorotetrafluoroethane	ND	0.020	1.41		1,1,1-Trichloroethane	ND	0.0038	1.41	
1,2-Dichlorobenzene	ND	0.0042	1.41		1,1,2-Trichloroethane	ND	0.0038	1.41	
1,2-Dichloroethane	ND	0.0029	1.41		1,3,5-Trimethylbenzene	ND	0.0035	1.41	
1,2-Dichloropropane	ND	0.0033	1.41		1,1,2,2-Tetrachloroethane	ND	0.0097	1.41	
1,3-Dichlorobenzene	ND	0.0042	1.41		1,2,4-Trimethylbenzene	0.0088	0.0069	1.41	
1,4-Dichlorobenzene	ND	0.0042	1.41		1,2,4-Trichlorobenzene	ND	0.021	1.41	
c-1,3-Dichloropropene	ND	0.0032	1.41		Vinyl Acetate	ND	0.0099	1.41	
c-1,2-Dichloroethene	ND	0.0028	1.41		Vinyl Chloride	ND	0.0018	1.41	
t-1,2-Dichloroethene	ND	0.0028	1.41						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	96	57-129		1,2-Dichloroethane-d4	88	47-137	
Toluene-d8	95	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received:	10/10/08
100 West Walnut Street	Work Order No:	08-10-0934
Pasadena, CA 91124-0002	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**095-01-021-6,709**	**N/A**	**Air**	**GC/MS AA**	**N/A**	**10/10/08 11:33**	**081010L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0052	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.011	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0041	1	
2-Butanone	ND	0.0029	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	ND	0.0016	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0041	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0043	1	
Chloromethane	ND	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	ND	0.0025	1		Tetrachloroethene	ND	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.0077	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,2-Dichloropropane	ND	0.0023	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0049	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,3-Dichloropropene	ND	0.0023	1		Vinyl Acetate	ND	0.0070	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
t-1,2-Dichloroethene	ND	0.0020	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	97	57-129		1,2-Dichloroethane-d4	94	47-137	
Toluene-d8	96	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 08-10-0934
Preparation: N/A
Method: EPA TO-15

Project: DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-6,709	**Air**	**GC/MS AA**	**N/A**	**10/10/08**	**081010L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	114	109	60-156	44-172	4	0-40	
Carbon Tetrachloride	103	100	64-154	49-169	2	0-32	
1,2-Dibromoethane	108	110	54-144	39-159	1	0-36	
1,2-Dichlorobenzene	102	105	34-160	13-181	2	0-47	
1,2-Dichloroethane	102	100	69-153	55-167	2	0-30	
1,2-Dichloropropane	109	106	67-157	52-172	3	0-35	
1,4-Dichlorobenzene	102	104	36-156	16-176	2	0-47	
c-1,3-Dichloropropene	120	117	61-157	45-173	2	0-35	
Ethylbenzene	109	113	52-154	35-171	3	0-38	
o-Xylene	106	109	52-148	36-164	4	0-38	
p/m-Xylene	105	108	42-156	23-175	3	0-41	
Tetrachloroethene	108	108	56-152	40-168	0	0-40	
Toluene	107	108	56-146	41-161	1	0-43	
Trichloroethene	109	105	63-159	47-175	4	0-34	
1,1,2-Trichloroethane	105	102	65-149	51-163	2	0-37	
Vinyl Chloride	109	112	45-177	23-199	3	0-36	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-10-0934

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Calscience Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

☐ SoCal Laboratory
7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494

☐ NorCal Service Center
5063 Commercial Circle, Suite H
Concord, CA 94520-8577
(925) 689-9022

Date 10.10.08

Page 1 of 1

LABORATORY CLIENT: Parsons

ADDRESS: 100 W. Walnut Street

CITY: Pasadena STATE: CA ZIP: 91124

TEL: 626.665.8336 E-MAIL:

CLIENT PROJECT NAME / NUMBER: DESC - Holifield Park / 746440

P.O. NO.:

PROJECT CONTACT: Mary Lucas

1 0 0 9 3 4

SAMPLER(S): (PRINT) Quin Kinnebrew

COELT LOG CODE

COOLER RECEIPT TEMP= °C

TURNAROUND TIME:
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAYS ☐ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING FORMS ☐ COELT EDF ☐

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES

LAB USE ONL	SAMPLE ID	FIELD POINT NAME (FOR COELT EDF)	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (g)	TPH (d) or (C7-C36) or (C7-C44)	TPH ( )	BTEX / MTBE (8260B) or ( )	VOCs (8260B)	Oxygenates (8260B)	Encore Prep (5035)	SVOCs (8270C)	Pesticides (8081A)	PCBs (8082)	PNAs (8310) or (8270C)	T22 Metals (6010B/747X)	Cr(VI) [7196A or 7199 or 218.6]	VOCs (TO-14A) or (TO-15)	TPH (g) [TO-3]+			
1	VMP-29-5		10.10.08	0740	Vapor	1														X				
2	VMP-29-15			0755		1														X				
3	VMP-30-5			0817		1														X				
4	VMP-30-15			0840		1														X				
5	VMP-31-5			0859		1														X				
6	VMP-31-15			0908		1														X				
7	Dup-1			0830		1														X				

Relinquished by: (Signature)	Received by: (Signature/Affiliation) CEL	Date: 10.10.08	Time: 0955
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

DISTRIBUTION: White with final report, Green and Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Green and Yellow copies respectively.

10/01/07 Revision

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 10 - 0934

Cooler 0 of 0

SAMPLE RECEIPT FORM

CLIENT: Parsons DATE: 10/10/08

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature (For Air & Filter Only).
___ ___ . ___ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

___ ___ . ___ °C Temperature blank.
___ ___ . ___ °C IR Thermometer.
✓ Ambient temperature (For Air & Filter Only).

Initial: MC

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Present: ✓

Initial: M

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)			✓
VOA vial(s) free of headspace.			
Tedlar bag(s) free of condensation			✓

Initial: ME

COMMENTS:

Summa Cans (7) + FC (7)

Calscience
Environmental
Laboratories, Inc.

January 15, 2009

Mary Lucas
Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Subject: **Calscience Work Order No.: 09-01-0389**
Client Reference: DESC - Hollifield Park / 746440

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 1/7/2009 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Ranjit K. J. Clarke

Calscience Environmental
Laboratories, Inc.
Ranjit Clarke
Project Manager

Calscience Environmental Laboratories, Inc.

ACCREDITED IN ACCORDANCE WITH nelac

Work Order Case Narrative

Project Name: **DESC - Hollifield Park / 746440**
Calscience Work Order Number: **09-01-0389**

1. Sample IDs:

   Sample ID "B134 (36-50)" was written on the COC while "B134 (36-40)" was labeled on the containers. The ID as listed on the container will be used.

2. Total Petroleum Hydrocarbons (JP5) – EPA 8015B(M):

   Samples "B134 (32-35)" and "B134 (52-55)" were analyzed with a reporting limit of 500ppb instead of 100ppb. This was done because of a limited sample volume.

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 01/07/09
Work Order No: 09-01-0389
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: DESC - Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B134 (32-35)	**09-01-0389-1-F**	**01/07/09 13:20**	**Aqueous**	**GC 1**	**01/08/09**	**01/08/09 19:26**	**090108B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	67	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B134 (36-40)	**09-01-0389-2-D**	**01/07/09 13:50**	**Aqueous**	**GC 1**	**01/08/09**	**01/08/09 19:58**	**090108B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	68	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B134 (44-48)	**09-01-0389-3-D**	**01/07/09 14:20**	**Aqueous**	**GC 1**	**01/08/09**	**01/08/09 20:30**	**090108B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	69	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B134 (52-55)	**09-01-0389-4-D**	**01/07/09 15:10**	**Aqueous**	**GC 1**	**01/08/09**	**01/08/09 21:02**	**090108B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	68	38-134	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 01/07/09
Work Order No: 09-01-0389
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: DESC - Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Equip. Blank-1	**09-01-0389-5-F**	**01/07/09 15:55**	**Aqueous**	**GC 1**	**01/08/09**	**01/08/09 22:37**	**090108B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	67	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-247-2,720**	**N/A**	**Aqueous**	**GC 1**	**01/08/09**	**01/08/09 10:57**	**090108B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	65	38-134	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 01/07/09
Work Order No: 09-01-0389
Preparation: EPA 3510C
Method: EPA 8015B (M)

Project: DESC - Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B134 (36-40)	**09-01-0389-2-G**	**01/07/09 13:50**	**Aqueous**	**GC 49**	**01/08/09**	**01/09/09 21:17**	**090108B21**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	120	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B134 (44-48)	**09-01-0389-3-G**	**01/07/09 14:20**	**Aqueous**	**GC 49**	**01/08/09**	**01/09/09 21:32**	**090108B21**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	105	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Equip. Blank-1	**09-01-0389-5-G**	**01/07/09 15:55**	**Aqueous**	**GC 49**	**01/08/09**	**01/09/09 21:46**	**090108B21**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	112	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-366-30**	**N/A**	**Aqueous**	**GC 49**	**01/08/09**	**01/09/09 20:32**	**090108B21**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	106	68-140			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 01/07/09
Work Order No: 09-01-0389
Preparation: EPA 3510C
Method: EPA 8015B (M)

Project: DESC - Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B134 (32-35)	**09-01-0389-1-G**	**01/07/09 13:20**	**Aqueous**	**GC 49**	**01/08/09**	**01/09/09 20:02**	**090108B20**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	108	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B134 (52-55)	**09-01-0389-4-G**	**01/07/09 15:10**	**Aqueous**	**GC 49**	**01/08/09**	**01/09/09 20:17**	**090108B20**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	108	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-368-4**	**N/A**	**Aqueous**	**GC 49**	**01/08/09**	**01/09/09 19:18**	**090108B20**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	98	68-140	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	01/07/09
100 West Walnut Street		Work Order No:	09-01-0389
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC - Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B134 (32-35)	**09-01-0389-1-A**	**01/07/09 13:20**	**Aqueous**	**GC/MS CC**	**01/09/09**	**01/10/09 06:43**	**090109L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	113	82-130		1,2-Dichloroethane-d4	117	75-141	
Toluene-d8	103	83-113		1,4-Bromofluorobenzene	95	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	01/07/09
100 West Walnut Street		Work Order No:	09-01-0389
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC - Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B134 (36-40)	**09-01-0389-2-A**	**01/07/09 13:50**	**Aqueous**	**GC/MS CC**	**01/09/09**	**01/10/09 05:47**	**090109L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	106	82-130		1,2-Dichloroethane-d4	107	75-141	
Toluene-d8	101	83-113		1,4-Bromofluorobenzene	91	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	01/07/09
100 West Walnut Street		Work Order No:	09-01-0389
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC - Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B134 (44-48)	**09-01-0389-3-A**	**01/07/09 14:20**	**Aqueous**	**GC/MS CC**	**01/09/09**	**01/10/09 06:15**	**090109L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	104	82-130		1,2-Dichloroethane-d4	103	75-141	
Toluene-d8	101	83-113		1,4-Bromofluorobenzene	96	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	01/07/09
100 West Walnut Street		Work Order No:	09-01-0389
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC - Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B134 (52-55)	**09-01-0389-4-A**	**01/07/09 15:10**	**Aqueous**	**GC/MS CC**	**01/09/09**	**01/10/09 03:28**	**090109L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	110	82-130		1,2-Dichloroethane-d4	111	75-141	
Toluene-d8	103	83-113		1,4-Bromofluorobenzene	96	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	01/07/09
100 West Walnut Street		Work Order No:	09-01-0389
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC - Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Equip. Blank-1	**09-01-0389-5-A**	**01/07/09 15:55**	**Aqueous**	**GC/MS CC**	**01/09/09**	**01/10/09 03:56**	**090109L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	19	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	106	82-130		1,2-Dichloroethane-d4	106	75-141	
Toluene-d8	102	83-113		1,4-Bromofluorobenzene	97	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received:	01/07/09
100 West Walnut Street	Work Order No:	09-01-0389
Pasadena, CA 91124-0002	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Units:	ug/L

Project: DESC - Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-28,055**	**N/A**	**Aqueous**	**GC/MS CC**	**01/09/09**	**01/10/09 00:38**	**090109L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	20	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	10	1		Methylene Chloride	ND	10	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	2.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	1.0	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	10	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	10	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	20	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	1.0	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	103	82-130		1,2-Dichloroethane-d4	102	75-141	
Toluene-d8	101	83-113		1,4-Bromofluorobenzene	95	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Parsons, Inc.		Date Received:	01/07/09
100 West Walnut Street		Work Order No:	09-01-0389
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project DESC - Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-01-0390-1	**Aqueous**	**GC 1**	**01/08/09**	**01/08/09**	**090108S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	105	106	68-122	1	0-18	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 01/07/09
Work Order No: 09-01-0389
Preparation: EPA 5030B
Method: EPA 8260B

Project DESC - Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-01-0409-1	**Aqueous**	**GC/MS CC**	**01/09/09**	**01/09/09**	**090109S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	98	101	88-118	3	0-7	
Toluene	100	101	87-123	1	0-8	
Ethylbenzene	101	103	70-130	2	0-30	
Methyl-t-Butyl Ether (MTBE)	96	96	71-131	1	0-13	
Tert-Butyl Alcohol (TBA)	94	96	36-168	2	0-45	
Diisopropyl Ether (DIPE)	90	102	81-123	12	0-9	4
Ethyl-t-Butyl Ether (ETBE)	99	102	72-126	3	0-12	
Tert-Amyl-Methyl Ether (TAME)	96	101	72-126	5	0-12	
Ethanol	98	101	53-149	3	0-31	
1,1-Dichloroethene	94	96	70-130	2	0-25	
1,2-Dibromoethane	105	106	70-130	1	0-30	
1,2-Dichlorobenzene	99	105	86-116	5	0-8	
Carbon Tetrachloride	101	105	67-145	4	0-11	
Chlorobenzene	101	98	88-118	2	0-7	
Trichloroethene	98	97	79-127	1	0-10	
Vinyl Chloride	92	94	69-129	3	0-13	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received:	N/A
Work Order No:	09-01-0389
Preparation:	EPA 5030B
Method:	EPA 8015B (M)

Project: DESC - Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-247-2,720	**Aqueous**	**GC 1**	**01/08/09**	**01/08/09**	**090108B01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	102	102	78-120	0	0-10	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 09-01-0389
Preparation: EPA 3510C
Method: EPA 8015B (M)

Project: DESC - Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-366-30	**Aqueous**	**GC 49**	**01/08/09**	**01/09/09**	**090108B21**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as JP5	88	79	75-117	11	0-13	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.		Date Received:	N/A
100 West Walnut Street		Work Order No:	09-01-0389
Pasadena, CA 91124-0002		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)

Project: DESC - Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-368-4	**Aqueous**	**GC 49**	**01/08/09**	**01/09/09**	**090108B20**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as JP5	78	88	75-117	11	0-13	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 09-01-0389
Preparation: EPA 5030B
Method: EPA 8260B

Project: DESC - Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-28,055	**Aqueous**	**GC/MS CC**	**01/09/09**	**01/09/09**	**090109L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	97	99	84-120	78-126	1	0-8	
Carbon Tetrachloride	101	104	63-147	49-161	2	0-10	
Chlorobenzene	100	101	89-119	84-124	2	0-7	
1,2-Dibromoethane	109	108	80-120	73-127	1	0-20	
1,2-Dichlorobenzene	102	104	89-119	84-124	2	0-9	
1,1-Dichloroethene	93	97	77-125	69-133	4	0-16	
Ethylbenzene	103	104	80-120	73-127	2	0-20	
Toluene	97	100	83-125	76-132	3	0-9	
Trichloroethene	96	98	89-119	84-124	2	0-8	
Vinyl Chloride	89	92	63-135	51-147	3	0-13	
Methyl-t-Butyl Ether (MTBE)	99	101	82-118	76-124	2	0-13	
Tert-Butyl Alcohol (TBA)	103	109	46-154	28-172	6	0-32	
Diisopropyl Ether (DIPE)	93	98	81-123	74-130	5	0-11	
Ethyl-t-Butyl Ether (ETBE)	98	99	74-122	66-130	1	0-12	
Tert-Amyl-Methyl Ether (TAME)	99	100	76-124	68-132	1	0-10	
Ethanol	98	107	60-138	47-151	9	0-32	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 09-01-0389

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 • FAX: (714) 894-7501

CHAIN OF COUSTODY RECORD

Date 01·07·09

Page 1 of 1

LABORATORY CLIENT: Parsons
ADDRESS: 100 W. Walnut Street
CITY: Pasadena STATE: CA ZIP: 91124
TEL: 626·665·8336 E-MAIL:

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY): ☐ RWQCB REPORTING FORMS ☐ COELT EDF ☐

SPECIAL INSTRUCTIONS:

CLIENT PROJECT NAME / NUMBER: DESC-Holifield Park / 746440
P.O. NO.:
PROJECT CONTACT: Mary Lucas
LAB USE ONLY: 01-0389
SAMPLER(S): (SIGNATURE) [signature]
COELT LOG CODE: ☐☐☐☐
COOLER RECEIPT TEMP = ____ °C

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (FOR COELT EDF)	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (G)	TPH (~~D~~ or JP-5)	BTEX / MTBE (8260B) or	OXYGENATES (8260B)	VOCs (8260B)	5035 ENCORE PREP	SVOCs (8270C)	PEST (8081A)	PCBs (8082)	CAC, T22 METALS (6010B) / 747	PNAs (8310) or (8270C)	VOCs (TO-14A) or (TO-15)	TPH(G) (TO-3M)
1	B134 (32-35)		01·07·09	1320	Water	7	X	X			X								
2	B134 (36-50)		↓	1350	↓	7	X	X			X								
3	B134 (44-48)		↓	1420	↓	7	X	X			X								
4	B134 (52-55)		↓	1510	↓	7	X	X			X								
5	Equip. Blank-1		↓	1555	↓	7	X	X			X								

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
[signature]	Danny Le CEL	01·07·09	1702
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received for Laboratory by: (Signature)	Date:	Time:

DISTRIBUTION: When with final report, Green to file, Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Green and Yellow copies respectively.

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 09-01-0389

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Parsons

DATE: 01/07/09

TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 3.1 °C - 0.2 °C (CF) = 2.9 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by:_____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only **Initial:** D.L

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Initial:** D.L

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** AO

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	☑	☐	☐
COC document(s) received complete.....	☑	☐	☐
Sampler's name indicated on COC.....	☑	☐	☐
Sample container label(s) consistent with COC.....	☐	☑	☐
Sample container(s) intact and good condition.....	☑	☐	☐
Correct containers and volume for analyses requested.....	☑	☐	☐
Analyses received within holding time.....	☑	☐	☐
Proper preservation noted on COC or sample container.....	☑	☐	☐
Volatile analysis container(s) free of headspace.....	☐	☑	☐
Tedlar bag(s) free of condensation.....	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☑VOAh ☐$VOANa_2$ ☐125AGB ☐125AGBh ☐$125AGBpo_4$ ☐1AGB ☐$1AGBna_2$ ☐1AGBs ☑500AGB ☐500AGBs ☐250CGB ☐250CGBs ☐1PB ☐500PB ☐500PBna ☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PBsterile ☐$100PBna_2$ ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® ☐_____

Container: C:Clear A:Amber P:Poly/Plastic G:Glass J:Jar B:Bottle

Preservative: h:HCL n:HNO_3 na_2:$Na_2S_2O_3$ na:NaOH po_4:H_3PO_4 s:H_2SO_4 znna:$ZnAc_2$+NaOH

Checked/Labeled by: AO

Reviewed by: MM

Scanned by: AO

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 09-01-0389

SAMPLE ANOMALY FORM

CHAIN OF CUSTODY (COC):

Comments:

- ☐ **Not relinquished by client – no signature**
- ☐ **No date/time relinquished**
- ☐ **COC not received with samples** – notify PM
- ☐ **Incomplete information regarding samples, tests, etc.**

SAMPLES - CONTAINERS & LABELS:

Comments:

- ☐ **Samples NOT RECEIVED but listed on COC**
- ☐ **Samples received but NOT LISTED on COC**
- ☐ **Holding time expired** – list sample ID(s) and test
- ☐ **Insufficient quantities for analysis** – list test
- ☐ **Improper container(s) used** – list test
- ☐ **No preservative noted on label** – list test and notify lab
- ☐ **Sample labels illegible** – note test/container type
- ☑ **Sample labels do not match COC** – Note in comments
  - ☑ **Sample ID**
  - ☐ **Date and Time Collected**
  - ☐ **Project Information**
  - ☐ **# of containers**
- ☐ **Sample containers compromised** – Note in comments
  - ☐ **Leaking**
  - ☐ **Broken**
  - ☐ **Without Labels**
- ☐ **Other:** _____

(-2) B134 (36-50) labeled as B134 (36-40) per label

HEADSPACE – Containers with Bubble > 6mm or ¼ inch:

Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of RSK or CO_2 or DO or Organic Lead Received
-1	A,C,D,E	6						
-2	C,F	6						
-3	A,E,D,F	6						
-4	A,B,C,D,E,F	6						

Comments: _____

Initial / Date AO - 1-7-09

Calscience Environmental Laboratories, Inc.

January 15, 2009

Mary Lucas
Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Subject: **Calscience Work Order No.: 09-01-0557**
Client Reference: DESC -Hollifield Park / 746440

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 1/8/2009 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Ranjit K. J. Clarke

Calscience Environmental
Laboratories, Inc.
Ranjit Clarke
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 01/08/09
Work Order No: 09-01-0557
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B136(40-43)	**09-01-0557-1-E**	**01/08/09 12:55**	**Aqueous**	**GC 25**	**01/11/09**	**01/11/09 16:39**	**090111B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	73	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B136(44-49)	**09-01-0557-2-E**	**01/08/09 14:25**	**Aqueous**	**GC 25**	**01/11/09**	**01/11/09 16:05**	**090111B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	74	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B136(51-54)	**09-01-0557-3-E**	**01/08/09 15:10**	**Aqueous**	**GC 25**	**01/11/09**	**01/11/09 15:31**	**090111B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	74	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Equip Blank-2	**09-01-0557-4-E**	**01/08/09 16:00**	**Aqueous**	**GC 25**	**01/11/09**	**01/11/09 14:57**	**090111B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	70	38-134			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 01/08/09
Work Order No: 09-01-0557
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-247-2,729**	**N/A**	**Aqueous**	**GC 25**	**01/11/09**	**01/11/09 09:50**	**090111B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	67	38-134	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 01/08/09
Work Order No: 09-01-0557
Preparation: EPA 3510C
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B136(40-43)	**09-01-0557-1-G**	**01/08/09 12:55**	**Aqueous**	**GC 49**	**01/09/09**	**01/14/09 13:59**	**090109B09**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	170	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	88	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B136(44-49)	**09-01-0557-2-G**	**01/08/09 14:25**	**Aqueous**	**GC 49**	**01/09/09**	**01/10/09 21:07**	**090109B09**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	70	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B136(51-54)	**09-01-0557-3-G**	**01/08/09 15:10**	**Aqueous**	**GC 49**	**01/09/09**	**01/14/09 14:14**	**090109B09**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	82	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Equip Blank-2	**09-01-0557-4-G**	**01/08/09 16:00**	**Aqueous**	**GC 49**	**01/09/09**	**01/14/09 14:29**	**090109B09**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	82	68-140			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 01/08/09
Work Order No: 09-01-0557
Preparation: EPA 3510C
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-366-31**	**N/A**	**Aqueous**	**GC 49**	**01/09/09**	**01/10/09 20:07**	**090109B09**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	103	68-140	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 01/08/09
Work Order No: 09-01-0557
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B136(40-43)	**09-01-0557-1-A**	**01/08/09 12:55**	**Aqueous**	**GC/MS CC**	**01/10/09**	**01/10/09 18:45**	**090110L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	0.63	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	14	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	106	82-130		1,2-Dichloroethane-d4	108	75-141	
Toluene-d8	102	83-113		1,4-Bromofluorobenzene	97	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received:	01/08/09
100 West Walnut Street	Work Order No:	09-01-0557
Pasadena, CA 91124-0002	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B136(44-49)	**09-01-0557-2-A**	**01/08/09 14:25**	**Aqueous**	**GC/MS CC**	**01/10/09**	**01/10/09 19:13**	**090110L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	105	82-130		1,2-Dichloroethane-d4	107	75-141	
Toluene-d8	101	83-113		1,4-Bromofluorobenzene	96	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received:	01/08/09
100 West Walnut Street	Work Order No:	09-01-0557
Pasadena, CA 91124-0002	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B136(51-54)	**09-01-0557-3-A**	**01/08/09 15:10**	**Aqueous**	**GC/MS CC**	**01/10/09**	**01/10/09 19:41**	**090110L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	101	82-130		1,2-Dichloroethane-d4	102	75-141	
Toluene-d8	100	83-113		1,4-Bromofluorobenzene	97	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received:	01/08/09
100 West Walnut Street	Work Order No:	09-01-0557
Pasadena, CA 91124-0002	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Equip Blank-2	**09-01-0557-4-A**	**01/08/09 16:00**	**Aqueous**	**GC/MS CC**	**01/10/09**	**01/10/09 17:49**	**090110L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	105	82-130		1,2-Dichloroethane-d4	101	75-141	
Toluene-d8	99	83-113		1,4-Bromofluorobenzene	95	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	01/08/09
100 West Walnut Street		Work Order No:	09-01-0557
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-28,059**	**N/A**	**Aqueous**	**GC/MS CC**	**01/10/09**	**01/10/09 12:42**	**090110L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	20	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	10	1		Methylene Chloride	ND	10	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	2.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	1.0	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	10	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	10	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	20	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	1.0	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	108	82-130		1,2-Dichloroethane-d4	112	75-141	
Toluene-d8	102	83-113		1,4-Bromofluorobenzene	97	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 01/08/09
Work Order No: 09-01-0557
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-01-0450-6	**Aqueous**	**GC 25**	**01/11/09**	**01/11/09**	**090111S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	101	102	68-122	1	0-18	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 01/08/09
Work Order No: 09-01-0557
Preparation: EPA 5030B
Method: EPA 8260B

Project DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-01-0569-1	**Aqueous**	**GC/MS CC**	**01/10/09**	**01/10/09**	**090110S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	96	99	88-118	3	0-7	
Carbon Tetrachloride	101	108	67-145	6	0-11	
Chlorobenzene	100	99	88-118	0	0-7	
1,2-Dibromoethane	105	102	70-130	3	0-30	
1,2-Dichlorobenzene	101	101	86-116	0	0-8	
1,1-Dichloroethene	88	102	70-130	15	0-25	
Ethylbenzene	100	102	70-130	2	0-30	
Toluene	100	101	87-123	1	0-8	
Trichloroethene	97	99	79-127	3	0-10	
Vinyl Chloride	88	99	69-129	13	0-13	
Methyl-t-Butyl Ether (MTBE)	90	96	71-131	6	0-13	
Tert-Butyl Alcohol (TBA)	91	105	36-168	14	0-45	
Diisopropyl Ether (DIPE)	90	102	81-123	12	0-9	4
Ethyl-t-Butyl Ether (ETBE)	92	104	72-126	12	0-12	
Tert-Amyl-Methyl Ether (TAME)	98	100	72-126	2	0-12	
Ethanol	94	111	53-149	16	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 09-01-0557
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-247-2,729	**Aqueous**	**GC 25**	**01/11/09**	**01/11/09**	**090111B01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	97	98	78-120	1	0-10	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received:	N/A
Work Order No:	09-01-0557
Preparation:	EPA 3510C
Method:	EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-366-31	**Aqueous**	**GC 49**	**01/09/09**	**01/10/09**	**090109B09**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as JP5	77	79	75-117	3	0-13	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 09-01-0557
Preparation: EPA 5030B
Method: EPA 8260B

Project: DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-28,059	**Aqueous**	**GC/MS CC**	**01/10/09**	**01/10/09**	**090110L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	102	98	84-120	78-126	4	0-8	
Carbon Tetrachloride	110	105	63-147	49-161	5	0-10	
Chlorobenzene	102	99	89-119	84-124	3	0-7	
1,2-Dibromoethane	109	103	80-120	73-127	6	0-20	
1,2-Dichlorobenzene	103	103	89-119	84-124	0	0-9	
1,1-Dichloroethene	103	96	77-125	69-133	7	0-16	
Ethylbenzene	106	102	80-120	73-127	4	0-20	
Toluene	103	100	83-125	76-132	3	0-9	
Trichloroethene	103	99	89-119	84-124	5	0-8	
Vinyl Chloride	96	91	63-135	51-147	6	0-13	
Methyl-t-Butyl Ether (MTBE)	97	98	82-118	76-124	1	0-13	
Tert-Butyl Alcohol (TBA)	102	101	46-154	28-172	1	0-32	
Diisopropyl Ether (DIPE)	102	97	81-123	74-130	5	0-11	
Ethyl-t-Butyl Ether (ETBE)	103	97	74-122	66-130	7	0-12	
Tert-Amyl-Methyl Ether (TAME)	104	99	76-124	68-132	5	0-10	
Ethanol	104	100	60-138	47-151	5	0-32	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 09-01-0557

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 • FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

Date 01-08-09

LABORATORY CLIENT: Parsons
ADDRESS: 100 W. Walnut Street
CITY: Pasadena STATE: CA ZIP: 91124
TEL: 626-665-8336 E-MAIL:
TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ 10 DAYS
SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING FORMS ☐ COELT EDF ☐ _____
SPECIAL INSTRUCTIONS:

CLIENT PROJECT NAME / NUMBER: DESC-Hollifield Park/746440
PROJECT CONTACT: Mary Lucas
SAMPLER(S): (SIGNATURE)
COELT LOG CODE ☐☐☐☐
P.O. NO.:
LAB USE ONLY 01-0557
COOLER RECEIPT TEMP = _____ °C

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (FOR COELT EDF)	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (G)	TPH (~~D~~ or JP-5)	BTEX / MTBE (8260B) or _____	OXYGENATES (8260B)	VOCs (8260B)	5035 ENCORE PREP	SVOCs (8270C)	PEST (8081A)	PCBs (8082)	CAC, T22 METALS (6010B) / 747_____	PNAs (8310) or (8270C)	VOCs (TO-14A) or (TO-15)	TPH(G) (TO-3M)					
1	B136 (40-43)		01-08-09	1255	water	7	X	X			X													
2	B136 (44-49)		↓	1425	↓	7	X	X			X													
3	B136 (51-54)		↓	1510	↓	7	X	X			X													
4	Equip. Blank-2		↓	1600	↓	7	X	X			X													

Relinquished by: (Signature)	Received by: (Signature)	Date: 01-08-09	Time: 1645
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received for Laboratory by: (Signature)	Date:	Time:

DISTRIBUTION: When with final report, Green to file, Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Green and Yellow copies respectively.

02/20/06 Revision

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 09-01-0557

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: PARSONS DATE: 01/08/09

TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 6.0 °C - 0.2 °C (CF) = 5.8 °C ☐ Blank ☑ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by:_____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only **Initial:** PS

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Initial:** PS

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** W.S.C

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Correct containers and volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Proper preservation noted on COC or sample container	☑	☐	☐
Volatile analysis container(s) free of headspace	☐	☑	☐
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☑6VOAh ☐$VOANa_2$ ☐125AGB ☐125AGBh ☐$125AGBpo_4$ ☐1AGB ☐$1AGBna_2$ ☐1AGBs ☑500AGB ☐500AGBs ☐250CGB ☐250CGBs ☐1PB ☐500PB ☐500PBna ☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PBsterile ☐$100PBna_2$ ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® ☐_____

Checked/Labeled by: W.S.C

Reviewed by: D.L

Scanned by: W.S.C

Container: C:Clear A:Amber P:Poly/Plastic G:Glass J:Jar B:Bottle

Preservative: h:HCL n:HNO_3 na_2:$Na_2S_2O_3$ na:NaOH po_4:H_3PO_4 s:H_2SO_4 znna:$ZnAc_2$+NaOH

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 09-01-0557

SAMPLE ANOMALY FORM

CHAIN OF CUSTODY (COC):

Comments:

- ☐ **Not relinquished by client** – no signature
- ☐ **No date/time relinquished**
- ☐ **COC not received with samples** – notify PM
- ☐ **Incomplete information regarding samples, tests, etc.**

SAMPLES - CONTAINERS & LABELS:

Comments:

- ☐ **Samples NOT RECEIVED but listed on COC**
- ☐ **Samples received but NOT LISTED on COC**
- ☐ **Holding time expired** – list sample ID(s) and test
- ☐ **Insufficient quantities for analysis** – list test
- ☐ **Improper container(s) used** – list test
- ☐ **No preservative noted on label** – list test and notify lab
- ☐ **Sample labels illegible** – note test/container type
- ☐ **Sample labels do not match COC** – Note in comments
  - ☐ **Sample ID**
  - ☐ **Date and Time Collected**
  - ☐ **Project Information**
  - ☐ **# of containers**
- ☐ **Sample containers compromised** – Note in comments
  - ☐ **Leaking**
  - ☐ **Broken**
  - ☐ **Without Labels**
- ☐ **Other:** _____

HEADSPACE – Containers with Bubble > 6mm or ¼ inch:

Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of RSK or CO_2 or DO or Organic Lead Received
1, 2, 3	A, B, C, D, E, F	6						

Comments: _____

Initial / Date W.S.C. 01-08-09

Calscience
Environmental
Laboratories, Inc.

January 16, 2009

Mary Lucas
Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Subject: **Calscience Work Order No.: 09-01-0679**
Client Reference: DESC - Hollifield Park / 746440

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 1/9/2009 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Ranjit K. J. Clarke

Calscience Environmental
Laboratories, Inc.
Ranjit Clarke
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 01/09/09
Work Order No: 09-01-0679
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: DESC - Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B135 (35-39)	**09-01-0679-1-D**	**01/09/09 08:10**	**Aqueous**	**GC 21**	**01/10/09**	**01/11/09 01:37**	**090110B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	110	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B135 (40-43)	**09-01-0679-2-D**	**01/09/09 08:25**	**Aqueous**	**GC 21**	**01/10/09**	**01/10/09 21:16**	**090110B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	111	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B135 (46-49)	**09-01-0679-3-D**	**01/09/09 08:40**	**Aqueous**	**GC 21**	**01/10/09**	**01/11/09 02:10**	**090110B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	111	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B135 (51-54)	**09-01-0679-4-D**	**01/09/09 09:05**	**Aqueous**	**GC 21**	**01/10/09**	**01/11/09 02:43**	**090110B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	108	38-134	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 01/09/09
Work Order No: 09-01-0679
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: DESC - Hollifield Park / 746440 Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B137 (40-43)	**09-01-0679-5-D**	**01/09/09 10:00**	**Aqueous**	**GC 21**	**01/10/09**	**01/11/09 03:16**	**090110B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	113	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B137 (46-49)	**09-01-0679-6-D**	**01/09/09 10:15**	**Aqueous**	**GC 21**	**01/10/09**	**01/11/09 03:48**	**090110B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	92	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B137 (51-54)	**09-01-0679-7-D**	**01/09/09 10:40**	**Aqueous**	**GC 21**	**01/10/09**	**01/11/09 04:21**	**090110B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	112	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Equip. Blank-3	**09-01-0679-8-D**	**01/09/09 12:45**	**Aqueous**	**GC 21**	**01/10/09**	**01/11/09 05:59**	**090110B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	111	38-134	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 01/09/09
Work Order No: 09-01-0679
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: DESC - Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-247-2,724**	**N/A**	**Aqueous**	**GC 21**	**01/10/09**	**01/10/09 16:52**	**090110B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	99	38-134	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 01/09/09
Work Order No: 09-01-0679
Preparation: EPA 3510C
Method: EPA 8015B (M)

Project: DESC - Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B135 (35-39)	**09-01-0679-1-G**	**01/09/09 08:10**	**Aqueous**	**GC 6**	**01/12/09**	**01/15/09 10:02**	**090112B16**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	82	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B135 (40-43)	**09-01-0679-2-G**	**01/09/09 08:25**	**Aqueous**	**GC 6**	**01/12/09**	**01/14/09 19:54**	**090112B16**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	80	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B135 (46-49)	**09-01-0679-3-G**	**01/09/09 08:40**	**Aqueous**	**GC 6**	**01/12/09**	**01/14/09 20:37**	**090112B16**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	410	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	94	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B135 (51-54)	**09-01-0679-4-G**	**01/09/09 09:05**	**Aqueous**	**GC 6**	**01/12/09**	**01/14/09 21:18**	**090112B16**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	94	68-140			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 01/09/09
Work Order No: 09-01-0679
Preparation: EPA 3510C
Method: EPA 8015B (M)

Project: DESC - Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B137 (40-43)	**09-01-0679-5-G**	**01/09/09 10:00**	**Aqueous**	**GC 6**	**01/12/09**	**01/14/09 21:59**	**090112B16**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	112	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B137 (46-49)	**09-01-0679-6-G**	**01/09/09 10:15**	**Aqueous**	**GC 6**	**01/12/09**	**01/14/09 22:42**	**090112B16**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	78	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B137 (51-54)	**09-01-0679-7-G**	**01/09/09 10:40**	**Aqueous**	**GC 6**	**01/12/09**	**01/14/09 23:24**	**090112B16**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	90	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Equip. Blank-3	**09-01-0679-8-G**	**01/09/09 12:45**	**Aqueous**	**GC 6**	**01/12/09**	**01/15/09 00:07**	**090112B16**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	110	68-140			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received: 01/09/09
100 West Walnut Street	Work Order No: 09-01-0679
Pasadena, CA 91124-0002	Preparation: EPA 3510C
	Method: EPA 8015B (M)

Project: DESC - Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-366-32**	**N/A**	**Aqueous**	**GC 6**	**01/12/09**	**01/14/09 15:38**	**090112B16**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	112	68-140	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	01/09/09
100 West Walnut Street		Work Order No:	09-01-0679
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC - Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B135 (35-39)	**09-01-0679-1-A**	**01/09/09 08:10**	**Aqueous**	**GC/MS QQ**	**01/11/09**	**01/12/09 02:25**	**090111L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	104	82-130		1,2-Dichloroethane-d4	94	75-141	
Toluene-d8	98	83-113		1,4-Bromofluorobenzene	87	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	01/09/09
100 West Walnut Street		Work Order No:	09-01-0679
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC - Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B135 (40-43)	**09-01-0679-2-A**	**01/09/09 08:25**	**Aqueous**	**GC/MS QQ**	**01/11/09**	**01/12/09 02:48**	**090111L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	105	82-130		1,2-Dichloroethane-d4	97	75-141	
Toluene-d8	97	83-113		1,4-Bromofluorobenzene	86	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	01/09/09
100 West Walnut Street		Work Order No:	09-01-0679
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC - Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B135 (46-49)	**09-01-0679-3-A**	**01/09/09 08:40**	**Aqueous**	**GC/MS QQ**	**01/11/09**	**01/12/09 03:11**	**090111L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	108	82-130		1,2-Dichloroethane-d4	99	75-141	
Toluene-d8	99	83-113		1,4-Bromofluorobenzene	86	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received:	01/09/09
100 West Walnut Street	Work Order No:	09-01-0679
Pasadena, CA 91124-0002	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Units:	ug/L

Project: DESC - Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B135 (51-54)	**09-01-0679-4-A**	**01/09/09 09:05**	**Aqueous**	**GC/MS QQ**	**01/11/09**	**01/12/09 03:34**	**090111L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	105	82-130		1,2-Dichloroethane-d4	97	75-141	
Toluene-d8	98	83-113		1,4-Bromofluorobenzene	86	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received:	01/09/09
100 West Walnut Street	Work Order No:	09-01-0679
Pasadena, CA 91124-0002	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Units:	ug/L

Project: DESC - Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B137 (40-43)	**09-01-0679-5-A**	**01/09/09 10:00**	**Aqueous**	**GC/MS QQ**	**01/11/09**	**01/12/09 03:57**	**090111L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	105	82-130		1,2-Dichloroethane-d4	100	75-141	
Toluene-d8	98	83-113		1,4-Bromofluorobenzene	85	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received:	01/09/09
100 West Walnut Street	Work Order No:	09-01-0679
Pasadena, CA 91124-0002	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Units:	ug/L

Project: DESC - Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B137 (46-49)	**09-01-0679-6-A**	**01/09/09 10:15**	**Aqueous**	**GC/MS QQ**	**01/11/09**	**01/12/09 04:21**	**090111L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	105	82-130		1,2-Dichloroethane-d4	98	75-141	
Toluene-d8	97	83-113		1,4-Bromofluorobenzene	88	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received:	01/09/09
100 West Walnut Street	Work Order No:	09-01-0679
Pasadena, CA 91124-0002	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Units:	ug/L

Project: DESC - Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B137 (51-54)	**09-01-0679-7-A**	**01/09/09 10:40**	**Aqueous**	**GC/MS QQ**	**01/11/09**	**01/12/09 00:52**	**090111L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	108	82-130		1,2-Dichloroethane-d4	99	75-141	
Toluene-d8	99	83-113		1,4-Bromofluorobenzene	86	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	01/09/09
100 West Walnut Street		Work Order No:	09-01-0679
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC - Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Equip. Blank-3	**09-01-0679-8-A**	**01/09/09 12:45**	**Aqueous**	**GC/MS QQ**	**01/11/09**	**01/12/09 04:44**	**090111L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	107	82-130		1,2-Dichloroethane-d4	101	75-141	
Toluene-d8	99	83-113		1,4-Bromofluorobenzene	85	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received:	01/09/09
100 West Walnut Street	Work Order No:	09-01-0679
Pasadena, CA 91124-0002	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Units:	ug/L

Project: DESC - Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-28,064**	**N/A**	**Aqueous**	**GC/MS QQ**	**01/11/09**	**01/12/09 00:29**	**090111L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	10	1		Methylene Chloride	ND	10	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	1.0	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	10	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	1.0	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	103	82-130		1,2-Dichloroethane-d4	96	75-141	
Toluene-d8	97	83-113		1,4-Bromofluorobenzene	84	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 01/09/09
Work Order No: 09-01-0679
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project DESC - Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-01-0685-1	**Aqueous**	**GC 21**	**01/10/09**	**01/10/09**	**090110S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	102	104	68-122	2	0-18	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 01/09/09
Work Order No: 09-01-0679
Preparation: EPA 5030B
Method: EPA 8260B

Project DESC - Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
B137 (51-54)	**Aqueous**	**GC/MS QQ**	**01/11/09**	**01/12/09**	**090111S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	92	94	88-118	2	0-7	
Carbon Tetrachloride	94	96	67-145	3	0-11	
Chlorobenzene	91	94	88-118	3	0-7	
1,2-Dibromoethane	90	91	70-130	1	0-30	
1,2-Dichlorobenzene	86	87	86-116	0	0-8	
1,1-Dichloroethene	101	103	70-130	2	0-25	
Ethylbenzene	85	89	70-130	4	0-30	
Toluene	90	92	87-123	2	0-8	
Trichloroethene	87	88	79-127	2	0-10	
Vinyl Chloride	93	93	69-129	0	0-13	
Methyl-t-Butyl Ether (MTBE)	98	100	71-131	2	0-13	
Tert-Butyl Alcohol (TBA)	94	96	36-168	2	0-45	
Diisopropyl Ether (DIPE)	101	101	81-123	1	0-9	
Ethyl-t-Butyl Ether (ETBE)	100	101	72-126	1	0-12	
Tert-Amyl-Methyl Ether (TAME)	85	88	72-126	3	0-12	
Ethanol	116	120	53-149	3	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received:	N/A
Work Order No:	09-01-0679
Preparation:	EPA 5030B
Method:	EPA 8015B (M)

Project: DESC - Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-247-2,724	**Aqueous**	**GC 21**	**01/10/09**	**01/10/09**	**090110B01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	110	109	78-120	1	0-10	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 09-01-0679
Preparation: EPA 3510C
Method: EPA 8015B (M)

Project: DESC - Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-366-32	**Aqueous**	**GC 6**	**01/12/09**	**01/14/09**	**090112B16**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as JP5	88	87	75-117	1	0-13	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.		Date Received:	N/A
100 West Walnut Street		Work Order No:	09-01-0679
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project: DESC - Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-28,064	**Aqueous**	**GC/MS QQ**	**01/11/09**	**01/11/09**	**090111L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	94	95	84-120	78-126	2	0-8	
Carbon Tetrachloride	96	96	63-147	49-161	0	0-10	
Chlorobenzene	94	94	89-119	84-124	1	0-7	
1,2-Dibromoethane	90	89	80-120	73-127	1	0-20	
1,2-Dichlorobenzene	89	89	89-119	84-124	0	0-9	
1,1-Dichloroethene	101	103	77-125	69-133	1	0-16	
Ethylbenzene	86	88	80-120	73-127	2	0-20	
Toluene	91	93	83-125	76-132	2	0-9	
Trichloroethene	93	93	89-119	84-124	0	0-8	
Vinyl Chloride	91	91	63-135	51-147	1	0-13	
Methyl-t-Butyl Ether (MTBE)	102	101	82-118	76-124	0	0-13	
Tert-Butyl Alcohol (TBA)	101	97	46-154	28-172	4	0-32	
Diisopropyl Ether (DIPE)	104	104	81-123	74-130	0	0-11	
Ethyl-t-Butyl Ether (ETBE)	102	102	74-122	66-130	0	0-12	
Tert-Amyl-Methyl Ether (TAME)	87	88	76-124	68-132	0	0-10	
Ethanol	122	115	60-138	47-151	6	0-32	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 09-01-0679

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 • FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

Date 01.09.09

Page 1 of 1

LABORATORY CLIENT: Parsons
ADDRESS: 100 W. Walnut Street
CITY: Pasadena STATE: CA ZIP: 91124
TEL: 626.665.8336 E-MAIL:
TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ 10 DAYS
SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY): ☐ RWQCB REPORTING FORMS ☐ COELT EDF ☐ _____
SPECIAL INSTRUCTIONS:

CLIENT PROJECT NAME / NUMBER: DESC - Holifield Park / 746440
PROJECT CONTACT: Mary Lucas
SAMPLER(S): (SIGNATURE)
COELT LOG CODE
P.O. NO.:
LAB USE ONLY 01-0679
COOLER RECEIPT TEMP = _____ °C

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (FOR COELT EDF)	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (G)	TPH (D) or TP-5	BTEX / MTBE (8260B) or	OXYGENATES (8260B)	VOCs (8260B)	5035 ENCORE PREP	SVOCs (8270C)	PEST (8081A)	PCBs (8082)	CAC, T22 METALS (6010B) / 747	PNAs (8310) or (8270C)	VOCs (TO-14A) or (TO-15)	TPH(G) (TO-3M)
1	B135 (35-39)		01.09.09	0810	water	7	X	X			X								
2	B135 (40-43)			0825		7	X	X			X								
3	B135 (46-49)			0840		7	X	X			X								
4	B135 (51-54)			0905		7	X	X			X								
5	B137 (40-43)			1000		7	X	X			X								
6	B137 (46-49)			1015		7	X	X			X								
7	B137 (51-54)			1040		7	X	X			X								
8	Equip. Blank-3			1245		7	X	X			X								

Relinquished by: (Signature)	Received by: (Signature)	Date: 01.09.09	Time: 1345
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received for Laboratory by: (Signature)	Date:	Time:

DISTRIBUTION: When with final report, Green to file, Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Green and Yellow copies respectively.

02/20/06 Revision

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 09-01-0679

SAMPLE RECEIPT FORM

Cooler 1 **of** 1

CLIENT: PARSONS **DATE:** 1/9/09

TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 4.9 °C - 0.2 °C (CF) = 4.7 °C ☐ Blank ☑ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by:_____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only **Initial:** WB

CUSTODY SEALS INTACT:

☐ Cooler	☐_____	☐ No (Not Intact)	☑ Not Present	☐ N/A	**Initial:** WB
☐ Sample	☐_____	☐ No (Not Intact)	☑ Not Present		**Initial:** WB

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Correct containers and volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Proper preservation noted on COC or sample container	☑	☐	☐
Volatile analysis container(s) free of headspace	☐	☑	☐
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☑VOAh (6) ☐$VOAna_2$ ☐125AGB ☐125AGBh ☐$125AGBpo_4$ ☐1AGB ☐$1AGBna_2$ ☐1AGBs ☑500AGB (1) ☐500AGBs ☐250CGB ☐250CGBs ☐1PB ☐500PB ☐500PBna ☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PBsterile ☐$100PBna_2$ ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® ☐_____

Checked/Labeled by: WB

Reviewed by: D.L

Scanned by: WB

Container: C:Clear A:Amber P:Poly/Plastic G:Glass J:Jar B:Bottle

Preservative: h:HCL n:HNO_3 na_2:$Na_2S_2O_3$ na:NaOH po_4:H_3PO_4 s:H_2SO_4 znna:$ZnAc_2$+NaOH

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 09-01-0679

SAMPLE ANOMALY FORM

CHAIN OF CUSTODY (COC):

Comments:

- ☐ **Not relinquished by client – no signature**
- ☐ **No date/time relinquished**
- ☐ **COC not received with samples** – notify PM
- ☐ **Incomplete information regarding samples, tests, etc.**

SAMPLES - CONTAINERS & LABELS:

Comments:

- ☐ **Samples NOT RECEIVED but listed on COC**
- ☐ **Samples received but NOT LISTED on COC**
- ☐ **Holding time expired** – list sample ID(s) and test
- ☐ **Insufficient quantities for analysis** – list test
- ☐ **Improper container(s) used** – list test
- ☐ **No preservative noted on label** – list test and notify lab
- ☐ **Sample labels illegible** – note test/container type
- ☐ **Sample labels do not match COC** – Note in comments
  - ☐ **Sample ID**
  - ☐ **Date and Time Collected**
  - ☐ **Project Information**
  - ☐ **# of containers**
- ☐ **Sample containers compromised** – Note in comments
  - ☐ **Leaking**
  - ☐ **Broken**
  - ☐ **Without Labels**
- ☐ **Other:** _____

HEADSPACE – Containers with Bubble > 6mm or ¼ inch:

Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of RSK or CO_2 or DO or Organic Lead Received
1	A-F	6						
2	D-E	6						
6	F	6						

Comments: _____

Initial / Date UB 1/9/09

SOP T100_081 (09/19/08)

Calscience
Environmental
Laboratories, Inc.

January 20, 2009

Mary Lucas
Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Subject: **Calscience Work Order No.: 09-01-0797**
Client Reference: DESC -Hollifield Park / 746440

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 1/12/2009 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Ranjit K. J. Clarke

Calscience Environmental
Laboratories, Inc.
Ranjit Clarke
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 01/12/09
Work Order No: 09-01-0797
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B139(35-39)	**09-01-0797-1-D**	**01/12/09 09:50**	**Aqueous**	**GC 1**	**01/14/09**	**01/14/09 14:33**	**090114B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	77	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B139(46-49)	**09-01-0797-2-D**	**01/12/09 10:10**	**Aqueous**	**GC 1**	**01/14/09**	**01/14/09 15:05**	**090114B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	77	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B139(51-54)	**09-01-0797-3-D**	**01/12/09 10:50**	**Aqueous**	**GC 1**	**01/14/09**	**01/14/09 15:37**	**090114B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	77	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B138(35-39)	**09-01-0797-4-D**	**01/12/09 11:50**	**Aqueous**	**GC 1**	**01/14/09**	**01/14/09 12:25**	**090114B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	74	38-134	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 01/12/09
Work Order No: 09-01-0797
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440 Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B138(46-49)	**09-01-0797-5-D**	**01/12/09 12:15**	**Aqueous**	**GC 1**	**01/14/09**	**01/14/09 16:09**	**090114B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	77	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B138(51-54)	**09-01-0797-6-D**	**01/12/09 12:30**	**Aqueous**	**GC 1**	**01/14/09**	**01/14/09 17:45**	**090114B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	75	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Dup-1	**09-01-0797-7-D**	**01/12/09 00:00**	**Aqueous**	**GC 1**	**01/14/09**	**01/14/09 18:16**	**090114B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	77	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Dup-2	**09-01-0797-8-D**	**01/12/09 00:00**	**Aqueous**	**GC 1**	**01/14/09**	**01/14/09 19:20**	**090114B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	78	38-134			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 01/12/09
Work Order No: 09-01-0797
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Equip.Blank-4	**09-01-0797-9-D**	**01/12/09 12:45**	**Aqueous**	**GC 1**	**01/14/09**	**01/14/09 14:01**	**090114B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	79	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-247-2,740**	**N/A**	**Aqueous**	**GC 1**	**01/14/09**	**01/14/09 10:50**	**090114B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	75	38-134	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 01/12/09
Work Order No: 09-01-0797
Preparation: EPA 3510C
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B139(35-39)	**09-01-0797-1-G**	**01/12/09 09:50**	**Aqueous**	**GC 49**	**01/15/09**	**01/15/09 20:53**	**090115B08**

Comment(s): -The sample chromatographic pattern for TPH does not match the chromatographic pattern of the specified standard. Quantitation of the unknown hydrocarbon(s) in the sample was based upon the specified standard.

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	410	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	80	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B139(46-49)	**09-01-0797-2-G**	**01/12/09 10:10**	**Aqueous**	**GC 49**	**01/15/09**	**01/15/09 21:08**	**090115B08**

Comment(s): -The sample chromatographic pattern for TPH does not match the chromatographic pattern of the specified standard. Quantitation of the unknown hydrocarbon(s) in the sample was based upon the specified standard.

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	380	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	98	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B139(51-54)	**09-01-0797-3-G**	**01/12/09 10:50**	**Aqueous**	**GC 49**	**01/15/09**	**01/15/09 21:23**	**090115B08**

Comment(s): -The sample chromatographic pattern for TPH does not match the chromatographic pattern of the specified standard. Quantitation of the unknown hydrocarbon(s) in the sample was based upon the specified standard.

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	490	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	88	68-140	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 01/12/09
Work Order No: 09-01-0797
Preparation: EPA 3510C
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440 Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B138(35-39)	**09-01-0797-4-G**	**01/12/09 11:50**	**Aqueous**	**GC 49**	**01/15/09**	**01/15/09 21:38**	**090115B08**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	95	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B138(46-49)	**09-01-0797-5-G**	**01/12/09 12:15**	**Aqueous**	**GC 49**	**01/15/09**	**01/15/09 21:53**	**090115B08**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	83	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B138(51-54)	**09-01-0797-6-G**	**01/12/09 12:30**	**Aqueous**	**GC 49**	**01/15/09**	**01/15/09 22:08**	**090115B08**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	87	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Dup-1	**09-01-0797-7-G**	**01/12/09 00:00**	**Aqueous**	**GC 49**	**01/15/09**	**01/15/09 22:23**	**090115B08**

Comment(s): -The sample chromatographic pattern for TPH does not match the chromatographic pattern of the specified standard. Quantitation of the unknown hydrocarbon(s) in the sample was based upon the specified standard.

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	280	100	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	83	68-140			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 01/12/09
Work Order No: 09-01-0797
Preparation: EPA 3510C
Method: EPA 8015B (M)

Project: DESC -Hollifield Park / 746440 Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Dup-2	**09-01-0797-8-G**	**01/12/09 00:00**	**Aqueous**	**GC 49**	**01/15/09**	**01/15/09 22:38**	**090115B08**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	87	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Equip.Blank-4	**09-01-0797-9-G**	**01/12/09 12:45**	**Aqueous**	**GC 49**	**01/15/09**	**01/15/09 22:53**	**090115B08**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	76	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-366-33**	**N/A**	**Aqueous**	**GC 49**	**01/15/09**	**01/15/09 20:07**	**090115B08**

Parameter	Result	RL	DF	Qual	Units
TPH as JP5	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	87	68-140	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	01/12/09
100 West Walnut Street		Work Order No:	09-01-0797
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B139(35-39)	**09-01-0797-1-C**	**01/12/09 09:50**	**Aqueous**	**GC/MS EE**	**01/16/09**	**01/17/09 03:41**	**090116L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	101	82-130		1,2-Dichloroethane-d4	110	75-141	
Toluene-d8	97	83-113		1,4-Bromofluorobenzene	99	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	01/12/09
100 West Walnut Street		Work Order No:	09-01-0797
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B139(46-49)	**09-01-0797-2-C**	**01/12/09 10:10**	**Aqueous**	**GC/MS EE**	**01/16/09**	**01/17/09 05:47**	**090116L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	109	82-130		1,2-Dichloroethane-d4	116	75-141	
Toluene-d8	100	83-113		1,4-Bromofluorobenzene	99	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	01/12/09
100 West Walnut Street		Work Order No:	09-01-0797
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B139(51-54)	**09-01-0797-3-C**	**01/12/09 10:50**	**Aqueous**	**GC/MS EE**	**01/16/09**	**01/17/09 06:19**	**090116L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	102	82-130		1,2-Dichloroethane-d4	111	75-141	
Toluene-d8	98	83-113		1,4-Bromofluorobenzene	100	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	01/12/09
100 West Walnut Street		Work Order No:	09-01-0797
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B138(35-39)	**09-01-0797-4-B**	**01/12/09 11:50**	**Aqueous**	**GC/MS EE**	**01/15/09**	**01/16/09 01:56**	**090115L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	105	82-130		1,2-Dichloroethane-d4	110	75-141	
Toluene-d8	97	83-113		1,4-Bromofluorobenzene	99	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	01/12/09
100 West Walnut Street		Work Order No:	09-01-0797
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B138(46-49)	**09-01-0797-5-C**	**01/12/09 12:15**	**Aqueous**	**GC/MS EE**	**01/16/09**	**01/17/09 06:50**	**090116L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	104	82-130		1,2-Dichloroethane-d4	106	75-141	
Toluene-d8	99	83-113		1,4-Bromofluorobenzene	100	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	01/12/09
100 West Walnut Street		Work Order No:	09-01-0797
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B138(51-54)	**09-01-0797-6-C**	**01/12/09 12:30**	**Aqueous**	**GC/MS EE**	**01/16/09**	**01/17/09 07:22**	**090116L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	100	82-130		1,2-Dichloroethane-d4	108	75-141	
Toluene-d8	98	83-113		1,4-Bromofluorobenzene	100	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	01/12/09
100 West Walnut Street		Work Order No:	09-01-0797
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Dup-1	**09-01-0797-7-B**	**01/12/09 00:00**	**Aqueous**	**GC/MS EE**	**01/15/09**	**01/16/09 04:02**	**090115L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	97	82-130		1,2-Dichloroethane-d4	101	75-141	
Toluene-d8	97	83-113		1,4-Bromofluorobenzene	103	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	01/12/09
100 West Walnut Street		Work Order No:	09-01-0797
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Dup-2	**09-01-0797-8-C**	**01/12/09 00:00**	**Aqueous**	**GC/MS EE**	**01/16/09**	**01/17/09 07:54**	**090116L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	100	82-130		1,2-Dichloroethane-d4	115	75-141	
Toluene-d8	98	83-113		1,4-Bromofluorobenzene	99	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	01/12/09
100 West Walnut Street		Work Order No:	09-01-0797
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Equip.Blank-4	**09-01-0797-9-C**	**01/12/09 12:45**	**Aqueous**	**GC/MS EE**	**01/16/09**	**01/17/09 08:25**	**090116L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	0.50	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	5.0	1		Methylene Chloride	ND	5.0	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	0.50	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	106	82-130		1,2-Dichloroethane-d4	117	75-141	
Toluene-d8	97	83-113		1,4-Bromofluorobenzene	105	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	01/12/09
100 West Walnut Street		Work Order No:	09-01-0797
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-28,107**	**N/A**	**Aqueous**	**GC/MS EE**	**01/15/09**	**01/15/09 23:19**	**090115L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	10	1		Methylene Chloride	ND	10	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	1.0	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	10	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	1.0	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	102	82-130		1,2-Dichloroethane-d4	108	75-141	
Toluene-d8	103	83-113		1,4-Bromofluorobenzene	100	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	01/12/09
100 West Walnut Street		Work Order No:	09-01-0797
Pasadena, CA 91124-0002		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L

Project: DESC -Hollifield Park / 746440

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-28,145**	**N/A**	**Aqueous**	**GC/MS EE**	**01/16/09**	**01/17/09 03:10**	**090116L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	10	1		Methylene Chloride	ND	10	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	1.0	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	10	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	1.0	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	102	82-130		1,2-Dichloroethane-d4	110	75-141	
Toluene-d8	101	83-113		1,4-Bromofluorobenzene	101	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received:	01/12/09
Work Order No:	09-01-0797
Preparation:	EPA 5030B
Method:	EPA 8015B (M)

Project DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
B138(35-39)	**Aqueous**	**GC 1**	**01/14/09**	**01/14/09**	**090114S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	105	105	68-122	0	0-18	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 01/12/09
Work Order No: 09-01-0797
Preparation: EPA 5030B
Method: EPA 8260B

Project DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
B138(35-39)	**Aqueous**	**GC/MS EE**	**01/15/09**	**01/16/09**	**090115S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	93	92	88-118	1	0-7	
Carbon Tetrachloride	96	99	67-145	4	0-11	
Chlorobenzene	103	98	88-118	4	0-7	
1,2-Dibromoethane	106	105	70-130	0	0-30	
1,2-Dichlorobenzene	97	99	86-116	3	0-8	
1,1-Dichloroethene	95	112	70-130	17	0-25	
Ethylbenzene	99	98	70-130	1	0-30	
Toluene	95	94	87-123	1	0-8	
Trichloroethene	93	94	79-127	1	0-10	
Vinyl Chloride	79	79	69-129	0	0-13	
Methyl-t-Butyl Ether (MTBE)	102	110	71-131	8	0-13	
Tert-Butyl Alcohol (TBA)	98	105	36-168	6	0-45	
Diisopropyl Ether (DIPE)	101	112	81-123	10	0-9	4
Ethyl-t-Butyl Ether (ETBE)	102	110	72-126	8	0-12	
Tert-Amyl-Methyl Ether (TAME)	99	101	72-126	2	0-12	
Ethanol	80	95	53-149	16	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 01/12/09
Work Order No: 09-01-0797
Preparation: EPA 5030B
Method: EPA 8260B

Project DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
B139(35-39)	**Aqueous**	**GC/MS EE**	**01/16/09**	**01/17/09**	**090116S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	94	95	88-118	1	0-7	
Carbon Tetrachloride	95	100	67-145	4	0-11	
Chlorobenzene	100	99	88-118	1	0-7	
1,2-Dibromoethane	106	104	70-130	2	0-30	
1,2-Dichlorobenzene	94	94	86-116	1	0-8	
1,1-Dichloroethene	104	109	70-130	4	0-25	
Ethylbenzene	100	99	70-130	1	0-30	
Toluene	96	96	87-123	0	0-8	
Trichloroethene	94	99	79-127	5	0-10	
Vinyl Chloride	91	96	69-129	5	0-13	
Methyl-t-Butyl Ether (MTBE)	107	106	71-131	1	0-13	
Tert-Butyl Alcohol (TBA)	100	107	36-168	7	0-45	
Diisopropyl Ether (DIPE)	106	109	81-123	3	0-9	
Ethyl-t-Butyl Ether (ETBE)	108	108	72-126	0	0-12	
Tert-Amyl-Methyl Ether (TAME)	103	102	72-126	1	0-12	
Ethanol	87	98	53-149	12	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received:	N/A
Work Order No:	09-01-0797
Preparation:	EPA 5030B
Method:	EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-247-2,740	**Aqueous**	**GC 1**	**01/14/09**	**01/14/09**	**090114B01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	101	101	78-120	0	0-10	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received:	N/A
Work Order No:	09-01-0797
Preparation:	EPA 3510C
Method:	EPA 8015B (M)

Project: DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-366-33	**Aqueous**	**GC 49**	**01/15/09**	**01/15/09**	**090115B08**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as JP5	98	104	75-117	6	0-13	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.	Date Received:	N/A
100 West Walnut Street	Work Order No:	09-01-0797
Pasadena, CA 91124-0002	Preparation:	EPA 5030B
	Method:	EPA 8260B

Project: DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-28,107	**Aqueous**	**GC/MS EE**	**01/15/09**	**01/15/09**	**090115L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	93	91	84-120	78-126	1	0-8	
Carbon Tetrachloride	96	100	63-147	49-161	5	0-10	
Chlorobenzene	100	99	89-119	84-124	1	0-7	
1,2-Dibromoethane	107	102	80-120	73-127	4	0-20	
1,2-Dichlorobenzene	99	97	89-119	84-124	2	0-9	
1,1-Dichloroethene	92	98	77-125	69-133	7	0-16	
Ethylbenzene	100	98	80-120	73-127	2	0-20	
Toluene	94	95	83-125	76-132	1	0-9	
Trichloroethene	93	97	89-119	84-124	4	0-8	
Vinyl Chloride	77	83	63-135	51-147	8	0-13	
Methyl-t-Butyl Ether (MTBE)	97	106	82-118	76-124	9	0-13	
Tert-Butyl Alcohol (TBA)	96	106	46-154	28-172	10	0-32	
Diisopropyl Ether (DIPE)	98	105	81-123	74-130	7	0-11	
Ethyl-t-Butyl Ether (ETBE)	99	107	74-122	66-130	8	0-12	
Tert-Amyl-Methyl Ether (TAME)	99	101	76-124	68-132	1	0-10	
Ethanol	91	104	60-138	47-151	13	0-32	

Total number of LCS compounds : 16

Total number of ME compounds : 0

Total number of ME compounds allowed : 1

LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.	Date Received:	N/A
100 West Walnut Street	Work Order No:	09-01-0797
Pasadena, CA 91124-0002	Preparation:	EPA 5030B
	Method:	EPA 8260B

Project: DESC -Hollifield Park / 746440

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-28,145	**Aqueous**	**GC/MS EE**	**01/16/09**	**01/17/09**	**090116L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	91	96	84-120	78-126	5	0-8	
Carbon Tetrachloride	108	107	63-147	49-161	1	0-10	
Chlorobenzene	103	103	89-119	84-124	0	0-7	
1,2-Dibromoethane	104	106	80-120	73-127	2	0-20	
1,2-Dichlorobenzene	101	97	89-119	84-124	4	0-9	
1,1-Dichloroethene	111	116	77-125	69-133	4	0-16	
Ethylbenzene	104	105	80-120	73-127	1	0-20	
Toluene	98	100	83-125	76-132	2	0-9	
Trichloroethene	102	109	89-119	84-124	6	0-8	
Vinyl Chloride	102	102	63-135	51-147	1	0-13	
Methyl-t-Butyl Ether (MTBE)	112	113	82-118	76-124	1	0-13	
Tert-Butyl Alcohol (TBA)	116	116	46-154	28-172	1	0-32	
Diisopropyl Ether (DIPE)	110	111	81-123	74-130	1	0-11	
Ethyl-t-Butyl Ether (ETBE)	113	114	74-122	66-130	1	0-12	
Tert-Amyl-Methyl Ether (TAME)	99	100	76-124	68-132	1	0-10	
Ethanol	113	108	60-138	47-151	4	0-32	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 09-01-0797

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 • FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

Date 01.12.09

Page 1 of 1

LABORATORY CLIENT: Parsons
ADDRESS: 100 W. Walnut St.
CITY: Pasadena STATE: CA ZIP: 91124
TEL: 626.665.8336 E-MAIL:
TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ 10 DAYS
SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY) ☐ RWQCB REPORTING FORMS ☐ COELT EDF ☐ _____
SPECIAL INSTRUCTIONS:

CLIENT PROJECT NAME / NUMBER: DESC-Holifield Park/146440
PROJECT CONTACT: Mary Lucas
SAMPLER(S): (SIGNATURE) Quin Kunielow
COELT LOG CODE ☐☐☐☐
P.O. NO.:
LAB USE ONLY 01-0797
COOLER RECEIPT TEMP = _____ °C

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (FOR COELT EDF)	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (G)	TPH (D) or JP-5	BTEX / MTBE (8260B) or	OXYGENATES (8260B)	VOCs (8260B)	5035 ENCORE PREP	SVOCs (8270C)	PEST (8081A)	PCBs (8082)	CAC, T22 METALS (6010B) / 747	PNAs (8310) or (8270C)	VOCs (TO-14A) or (TO-15)	TPH(G) (TO-3M)				
1	B139 (35-39)		01.12.09	0950	water	7	X	X			X												
2	B139 (46-49)			1010		7	X	X			X												
3	B139 (51-54)			1050		7	X	X			X												
4	B138 (35-39)			1150		7	X	X			X												
5	B138 (46-49)			1215		7	X	X			X												
6	B138 (51-54)			1230		7	X	X			X												
7	Dup-1			—		7	X	X			X												
8	Dup-2			—		7	X	X			X												
9	Equip. Blank-4		↓	1245	↓	7	X	X			X												
10																							

Relinquished by: (Signature) Quin Kunielow	Received by: (Signature) DANNYLE CCL	Date: 01.12.09	Time: 1343
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received for Laboratory by: (Signature)	Date:	Time:

DISTRIBUTION: When with final report, Green to file, Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Green and Yellow copies respectively.

02/20/06 Revision

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 09-01-0797

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Parsons

DATE: 01/12/09

TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 3.4 °C - 0.2 °C (CF) = 3.2 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by:_____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only **Initial:** DL

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Initial:** DL

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** AO

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Correct containers and volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Proper preservation noted on COC or sample container	☑	☐	☐
Volatile analysis container(s) free of headspace	☐	☑	☐
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☑VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBpo_4 ☐1AGB ☐1AGBna_2

☐1AGBs ☑500AGB ☐500AGBs ☐250CGB ☐250CGBs ☐1PB ☐500PB ☐500PBna ☐250PB

☐250PBn ☐125PB ☐125PBznna ☐100PBsterile ☐100PBna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® ☐_____ **Checked/Labeled by:** AO

Container: C:Clear A:Amber P:Poly/Plastic G:Glass J:Jar B:Bottle **Reviewed by:** RM

Preservative: h:HCL n:HNO_3 na_2:$Na_2S_2O_3$ na:NaOH po_4:H_3PO_4 s:H_2SO_4 znna:$ZnAc_2$+NaOH **Scanned by:**

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 09-01-0797

SAMPLE ANOMALY FORM

CHAIN OF CUSTODY (COC):

Comments:

- ☐ **Not relinquished by client – no signature**
- ☐ **No date/time relinquished**
- ☐ **COC not received with samples** – notify PM
- ☐ **Incomplete information regarding samples, tests, etc.**

SAMPLES - CONTAINERS & LABELS:

Comments:

- ☐ **Samples NOT RECEIVED but listed on COC**
- ☐ **Samples received but NOT LISTED on COC**
- ☐ **Holding time expired** – list sample ID(s) and test
- ☐ **Insufficient quantities for analysis** – list test
- ☐ **Improper container(s) used** – list test
- ☐ **No preservative noted on label** – list test and notify lab
- ☐ **Sample labels illegible** – note test/container type
- ☐ **Sample labels do not match COC** – Note in comments
  - ☐ **Sample ID**
  - ☐ **Date and Time Collected**
  - ☐ **Project Information**
  - ☐ **# of containers**
- ☐ **Sample containers compromised** – Note in comments
  - ☐ **Leaking**
  - ☐ **Broken**
  - ☐ **Without Labels**
- ☐ **Other:** _____

HEADSPACE – Containers with Bubble > 6mm or ¼ inch:

Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of RSK or CO_2 or DO or Organic Lead Received
-2	F	6						
-3	C, F	6						
-4	F	6						
-6	F	6						

Comments: _____

Initial / Date AO 1-12-09

APPENDIX F

DATA VALIDATION REPORT

Appendix F
Data Validation Report

1.0 DATA VALIDATION REVIEW

Soil, groundwater, and soil gas samples were collected as part of supplemental investigation sampling at adjacent areas from the DESC Site (Holifield Park and Dolland Elementary) Norwalk, California project. This sampling program consisted of collection and analysis of five soil, fifty groundwater (including four field duplicates) and seven soil gas (including one field duplicate) samples. All phase 3 samples were collected between September 24 and October 10, 2008 and January 7 and 12, 2009 as part of the DESC Site (Holifield Park and Dolland Elementary) Norwalk, California project.

Soil, groundwater and soil gas samples collected were submitted to CalScience Environmental Laboratories Inc. in Garden Grove, California for the following analyses:

(1) Volatile Organic Compounds EPA 5030B/8260B (groundwater) and EPA 5035/8260B (soil),

(2) Total Petroleum Hydrocarbons as Gasoline EPA 5030B/8015B Mod,

(3) TPH as JP-5 EPA 3510C/8015 mod (groundwater) and EPA 3550B/8015 Mod (soil) and

(4) EPA TO-15 (soil gas).

The data was reviewed in accordance with Holifield Park and Dolland Elementary School Soil and Groundwater Investigation Work Plan and subsequent addendum.

Results for these samples are summarized in Calscience report numbers **08-09-2313**, **08-09-2392**, **08-09-2581**, **08-10-0934**, **09-01-0389**, **09-01-0557**, **09-01-0679** and **09-01-0797**. Laboratory data were reviewed to evaluate compliance with the method and the quality of the data reported. This data review did not include recalculation or transcription error checking from the raw data. The following areas were covered in this review:

- Data Completeness
- Holding Times and Preservation
- Method and Equipment Rinseate Blanks
- Surrogates
- Laboratory Control Samples
- Matrix Spike/Matrix Spike Duplicates
- Field Duplicates
- Data Anomalies, and
- Case Narrative: if necessary.

Data qualifiers were applied to analytical results during the data validation process, based on adherence to method protocols and QA/QC limits. The following summarizes the results of the review.

1.1 Data completeness

All analyses were performed as requested on the chain-of-custody records (COCs).

1.2 Holding Times and Preservation

All samples were analyzed within the method specified holding times. Sample cooler temperatures were measured at 2.9 to 5.8 ºC for water and soil samples upon receipt at the laboratory meeting the required 4±2 ºC criteria.

1.3 Method and Equipment Rinseate Blanks

Target compounds were not detected in the equipment rinseate blanks or any method blanks associated with project samples with the following exception. TBA (19 µg/L) was detected in Equip. Blank-1: however, this compound was not detected in any associated project samples (collected January 7th) and data qualification is not required. Method blanks were analyzed at the proper frequency for the number and types of samples analyzed.

1.4 Surrogates

All surrogates for all samples were within the laboratory's statistically determined acceptance ranges with the following exception:

- High surrogate recovery (165%) reported for TPH as gasoline analysis of B124 (54-58); however, this result was reported as non-detect and data qualification is not required.

1.5 Laboratory Control Samples

A LCS or LCS/LCSD pair was prepared and analyzed at the proper frequency. The recoveries of all spiked analytes and the relative percent differences (RPDs) between LCS/LCSD recoveries were within the laboratory's statistically determined acceptance ranges with the following exceptions.

- Low LCSD recovery of TPHgas was reported for batch 080929B01; however, data qualification is not required as LCS recovery was acceptable and all associated project samples were reported non-detect.
- Low 1,2-dichlorobenzene (88%) was reported in the LCS for VOC batch 80926L02; however, the LCSD recovery was within acceptance levels and the relative percent difference (RPD) between LCS/LCSD recoveries was acceptable. The RPD between LCS/LCSD recoveries was high for benzene; carbon tetrachloride; chlorobenzene; 1,1-dichloroethene; toluene; TCE and vinyl chloride. VOC results reported for batch 080926L02 will not be qualified based on these observations alone.
- Low 1,2-dichlorobenzene (87%) was reported in the LCSD for VOC batch 080926L02; however, the LCS recovery was within acceptance levels and the relative percent difference (RPD) between LCS/LCSD recoveries was acceptable. The RPD between LCS/LCSD recoveries was high for vinyl chloride. VOC results reported for batch 080926L02 will not be qualified based on these observations alone.

LCS/LCSD pairs were analyzed in lieu of MS/MSD pairs for TPH as JP-5 and TO-15 analyses demonstrating acceptable method precision and accuracy.

1.6 Matrix Spike/Matrix Spike Duplicate

Recoveries of all spiked analytes and the relative percent differences (RPDs) between MS/MSD recoveries were within the laboratory's acceptance criteria with the following exceptions:

- Low MS/MSD recoveries of benzene, chlorobenzene, toluene, MTBE and ethanol and high MS/MSD recoveries of ethylbenzene and TBA reported in VOC batch 081001L02. Additionally, high RPDs between MS/MSD recoveries were calculated due to matrix interference for chlorobenzene (19%) and toluene (29%). Since MS/MSD analysis was not performed on a project sample and the LCS/LCSD pair demonstrated acceptable precision, data qualification is not required (Calscience report 08-09-2313).
- MS/MSD analyses not reported for TPH as gasoline batch 080930B05 and VOC batch 081001L02; however, LCS/LCSD pairs were reported for these batches demonstrating acceptable method precision and accuracy.
- High RPDs were calculated between MS/MSD recoveries of di-isopropyl ether in VOC analytical batches 090109L01 and 090110L01; however, MS/MSD analyses were performed on non-project samples and data qualification is not required.
- A high RPD was calculated between MS/MSD recoveries of di-isopropyl ether in VOC analytical batch 090115L01; however, this compound was not detected in B138 (35-39) and data qualification is not required.

1.7 Field Duplicates

Field duplicate pairs were collected to assess the precision of field and laboratory practices. Validation qualifiers were applied only to the duplicate pair for non-compliant soil, water and vapor samples. Four field duplicates were collected during the sampling: Dup-1 [B132 (44-48)] and Dup-2 [B128(44-48)] both collected on September 25, 2008; Dup-1 (VMP-30-15) collected on October 10, 2008; Dup-1 [B139 (35-39)] and Dup-2 [B138 (35-39)] both collected January 12, 2009. Field duplicate pairs demonstrated acceptable precision with the following exceptions:

- A high RPD (37%) was calculated between the toluene concentrations reported for the B128(44-48)/Dup-2 field duplicate pair (Calscience report 08-09-2392) resulting in qualification of these results as estimates ("J" flag). The RPD between benzene results reported for this duplicate pair was also high; however, both results were with two times the reporting limit and data qualification is not required.
- A high RPD (38%) was calculated between JP-5 results reported for field duplicate pair results for B139 (35-39) and Dup-1 collected January 12, 2009 resulting in qualification of these JP-5 results as estimates ("J" flag).

1.8 Data Anomalies

The sample chromatographic pattern of TPH-gasoline for project samples B128 (54-58) and B133 (44-48) does not match the chromatographic pattern of the gasoline standard. Quantification of the unknown hydrocarbons in B128 (54-58) and B133 (44-48) was based on the gasoline standard.

The sample chromatographic pattern of TPH as JP-5 for project samples B139 (35-39), B139 (46-49), B139 (51-54), and Dup-1 (collected January 12, 2009) do not match the chromatographic pattern of the JP-5 standard. Quantification of the unknown hydrocarbons in B139 (35-39), B139 (46-49), B139 (51-54), and Dup-1 (collected January 12, 2009) are based on the JP-5 standard.

1.9 Case Narratives: Comments on Special Issues

Sample B134 (36-40) was listed on the chain-of-custody as B134 (36-50); however, the sample container was appropriately labeled and sample data is presented in the laboratory report as B134 (36-40).

2.0 OVERALL ASSESSMENT OF DATA

All data were reviewed and found acceptable based on compliance of quality control procedures as reported. Data may be used for project purposes with the addition of data qualifiers discussed above.

Sample ID	Date Sampled	Matrix	Report Number	Laboratory Sample ID
B124 (44-48)	09-24-08	Water	08-09-2313	08-09-2313-1
B124 (54-58)	09-24-08	Water	08-09-2313	08-09-2313-2
B126 (44-48)	09-24-08	Water	08-09-2313	08-09-2313-3
B126 (54-58)	09-24-08	Water	08-09-2313	08-09-2313-4
B126-45	09-24-08	Soil	08-09-2313	08-09-2313-5
B131 (44-48)	09-25-08	Water	08-09-2313	08-09-2313-6
B131 (55-59)	09-25-08	Water	08-09-2313	08-09-2313-7
B130 (44-48)	09-25-08	Water	08-09-2313	08-09-2313-8
B130 (54-58)	09-25-08	Water	08-09-2313	08-09-2313-9
B129 (44-48)	09-25-08	Water	08-09-2313	08-09-2313-10
B129 (54-58)	09-25-08	Water	08-09-2313	08-09-2313-11
B132 (44-48)	09-25-08	Water	08-09-2313	08-09-2313-12

Sample ID	Date Sampled	Matrix	Report Number	Laboratory Sample ID
B132 (55-59)	09-25-08	Water	08-09-2313	08-09-2313-13
Dup-1	09-25-08	Water	08-09-2313	08-09-2313-14
B125 (44-48)	09-25-08	Water	08-09-2392	08-09-2392-1
B125 (54-58)	09-25-08	Water	08-09-2392	08-09-2392-2
B128 (44-48)	09-25-08	Water	08-09-2392	08-09-2392-3
B128 (54-58)	09-25-08	Water	08-09-2392	08-09-2392-4
B133 (44-48)	09-25-08	Water	08-09-2392	08-09-2392-5
B133 (54-59)	09-25-08	Water	08-09-2392	08-09-2392-6
B123 (46-50)	09-25-08	Water	08-09-2392	08-09-2392-7
B123 (56-60)	09-25-08	Water	08-09-2392	08-09-2392-8
B127 (44-48)	09-25-08	Water	08-09-2392	08-09-2392-9
B127 (54-58)	09-25-08	Water	08-09-2392	08-09-2392-10
Dup-2	09-25-08	Water	08-09-2392	08-09-2392-11
GMW=63-25	09-29-08	Soil	08-09-2581	08-09-2581-1
GMW-63-30	09-29-08	Soil	08-09-2581	08-09-2581-2
GMW-64-25	09-29-08	Soil	08-09-2581	08-09-2581-3
GMW-64-30	09-29-08	Soil	08-09-2581	08-09-2581-4
VMP-29-5	10-10-08	Vapor	08-10-0934	08-10-0934-1
VMP-29-15	10-10-08	Vapor	08-10-0934	08-10-0934-2
VMP-30-5	10-10-08	Vapor	08-10-0934	08-10-0934-3
VMP-30-15	10-10-08	Vapor	08-10-0934	08-10-0934-4
VMP-31-5	10-10-08	Vapor	08-10-0934	08-10-0934-5
VMP-31-15	10-10-08	Vapor	08-10-0934	08-10-0934-6
Dup-1	10-10-08	Vapor	08-10-0934	08-10-0934-7
B134 (32-35)	01-07-09	Water	09-01-0389	09-01-0389-1
B134 (36-50)	01-07-09	Water	09-01-0389	09-01-0389-2
B134 (44-48)	01-07-09	Water	09-01-0389	09-01-0389-3
B134 (52-55)	01-07-09	Water	09-01-0389	09-01-0389-4
Equip. Blank-1	01-07-09	Water	09-01-0389	09-01-0389-5

Sample ID	Date Sampled	Matrix	Report Number	Laboratory Sample ID
B136 (40-43)	01-08-09	Water	09-01-0557	09-01-0557-1
B136 (44-49)	01-08-09	Water	09-01-0557	09-01-0557-2
B136 (51-54)	01-08-09	Water	09-01-0557	09-01-0557-3
Equip. Blank-2	01-08-09	Water	09-01-0557	09-01-0557-4
B135 (35-39)	01-09-09	Water	09-01-0679	09-01-0679-1
B135 (40-43)	01-09-09	Water	09-01-0679	09-01-0679-2
B135 (46-49)	01-09-09	Water	09-01-0679	09-01-0679-3
B135 (51-54)	01-09-09	Water	09-01-0679	09-01-0679-4
B137 (40-43)	01-09-09	Water	09-01-0679	09-01-0679-5
B137 (46-49)	01-09-09	Water	09-01-0679	09-01-0679-6
B137 (51-54)	01-09-09	Water	09-01-0679	09-01-0679-7
Equip. Blank-3	01-09-09	Water	09-01-0679	09-01-0679-8
B139 (35-39)	01-12-09	Water	09-01-0797	09-01-0797-1
B139 (46-49)	01-12-09	Water	09-01-0797	09-01-0797-2
B139 (51-54)	01-12-09	Water	09-01-0797	09-01-0797-3
B138 (35-39)	01-12-09	Water	09-01-0797	09-01-0797-4
B138 (46-49)	01-12-09	Water	09-01-0797	09-01-0797-5
B138 (51-54)	01-12-09	Water	09-01-0797	09-01-0797-6
Dup-1	01-12-09	Water	09-01-0797	09-01-0797-7
Dup-2	01-12-09	Water	09-01-0797	09-01-0797-8
Equip. Blank-4	01-12-09	Water	09-01-0797	09-01-0797-9

APPENDIX G

AQUIFER PUMP TEST

TABLE 1
PUMPING TEST SUMMARY
DFSP NORWALK
GW-15

Well ID	Distance from Pumping Well	Corrected Drawdown[1]	Recovery[2]
	(ft)	(ft)	(ft)
GW-15	0	3.1	6.9
GMW-61	71	0.77	0.49
GMW-60	92	0.72	0.48
GMW-62	98	0.73	NA
GMW-58	105	NA	0.47
GMW-59	157	NA	0.25
GMW-57	188	NA	0.25
Approximate Average Flow Rate (gpm)	6.5		

1. Drawdowns corrected for baraometric changes, which were shown to affect water levels in background well. GW-15 was corrected for 45% wells loss at at 7 gpm.

2. Uncorrected recovery data from mannual measurements, except GW-15 (logger recovey data). Recovery was not corrected for barometric changes. Complete recovery was not realized in curves. GMW-62 recovery was apprently afffected by unknown error, therefore it was not not used.

TABLE 2
DFSP NORWALK
PUMPING TEST RESULTS

			Estimated Hydraulic Properties		
Analysis ID	**Distance from Pumping Well (ft)**	**Method**	**Transmissivity (ft^2/day)**	**Storage coefficient (dimensionless)**	**Hydraulic Conductivity (ft/day)***
GMW-61	71	Theis, C.V. 1935	660	2.7E-03	18
GMW-60	92	Hantush, M.S. and C.E. Jacob, 1955	462	1.2E-03	13
GMW-62	98	Hantush, M.S. and C.E. Jacob, 1955	478	1.1E-03	13
GMW-58	105	Theis, C.V. 1935	863	8.3E-04	24
GMW-59	157	Theis, C.V. 1935	728	2.1E-03	20
GMW-57	188	Theis, C.V. 1935	893	3.7E-04	25
Jacob Distant Drawdown	0 - 188	Cooper, H.H. Jr. and C.E. Jacob. 1945	380	1.1E-02	11
Minimum			380	3.7E-04	11
Maximum			893	1.1E-02	25
Geometric Mean			609	1.6E-03	17

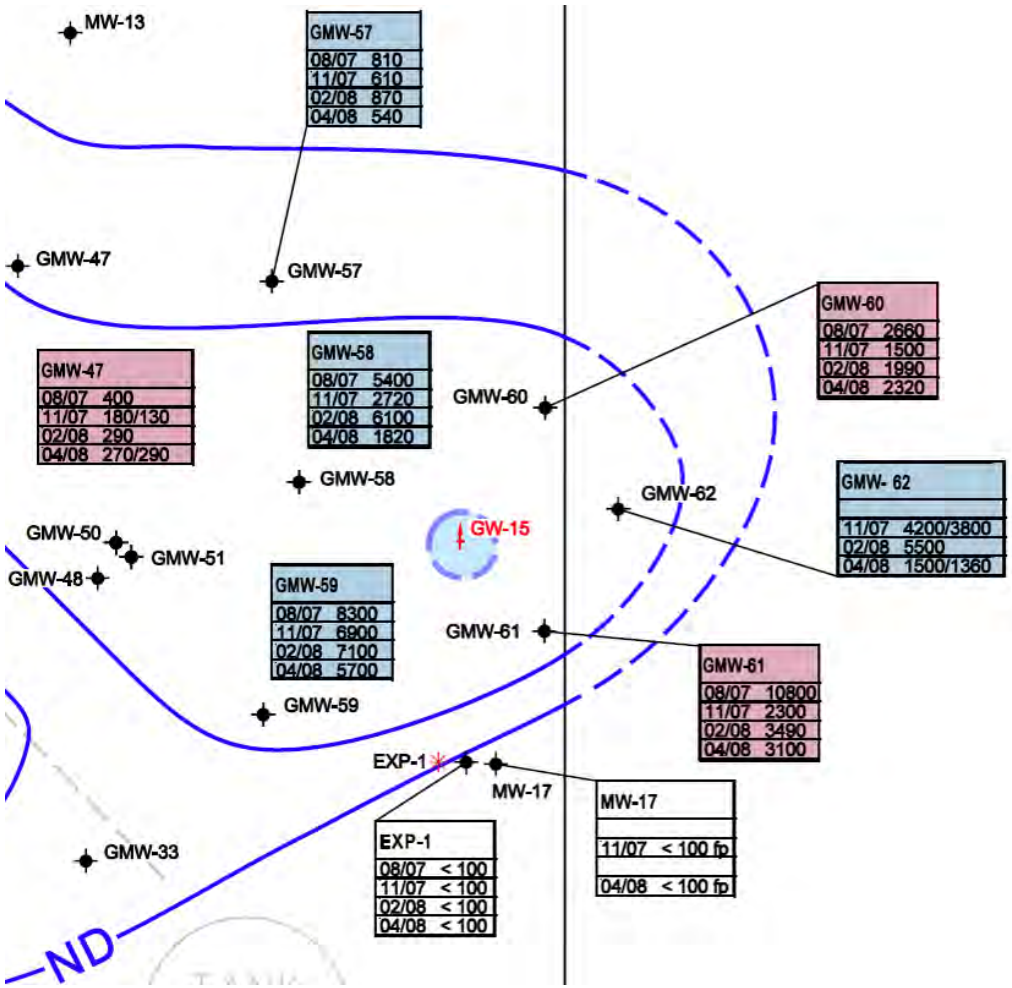
* Hydraulic conductivity based on assumed saturated thickness of 36 feet.

References:

Hantush, M.S. and C.E. Jacob, 1955. "Non-Steady Radial Flow in an Infinite Leaky Aquifer". Transactions, American Geophysical Union. vol. 36, no. 1.

Theis, C.V. 1935. The relation between the lowering of the piezometric surface and the rate and duration of discharge of a well using groundwater storage. *Transactions, American Geophysical Union*. vol. 16, pp. 519-524.

Cooper, H.H. Jr. and C.E. Jacob. 1945. "A Generalized Graphical Method for Evaluating Formation Constants and Summarizing Well-Field History". Transactions. American Geophysical Union. vol. 27, no. 4. pp. 526-534.



EXPLANATION

GMW-5 — MONITORING WELL AND DESIGNATION

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

MW-13
11/07 < 100 fp
04/08 < 100 fp

TPH (TPHg AND TPHfp) RESULTS IN MICROGRAMS PER LITER (µg/l) FOR THE TWO MOST RECENT SEMI-ANNUAL AND SENTRY EVENTS; WHERE THE DATABOX IS SHOWN IN WHITE, THE CONCENTRATION OF TPH (OR TPHfp WHERE TPHg WAS NOT ANALYZED) HAS REMAINED SIMILAR (CONCENTRATION CHANGE IS LESS THAN 10%) AT THAT LOCATION SINCE THE PREVIOUS SEMI-ANNUAL MONITORING EVENT OR THE DATASET SHOWN DOES NOT PROVIDE A BASIS FOR COMPARISON

GMW-60
08/07 2660
11/07 1500
02/08 1990
04/08 2320

WHERE THE DATABOX IS SHOWN IN RED THE CONCENTRATION OF TPH (OR TPHfp WHERE TPHg WAS NOT ANALYZED) HAS INCREASED BY 10% OR MORE AT THAT LOCATION SINCE THE PREVIOUS SEMI-ANNUAL MONITORING EVENT

GMW- 62
11/07 4200/3800
02/08 5500
04/08 1500/1360

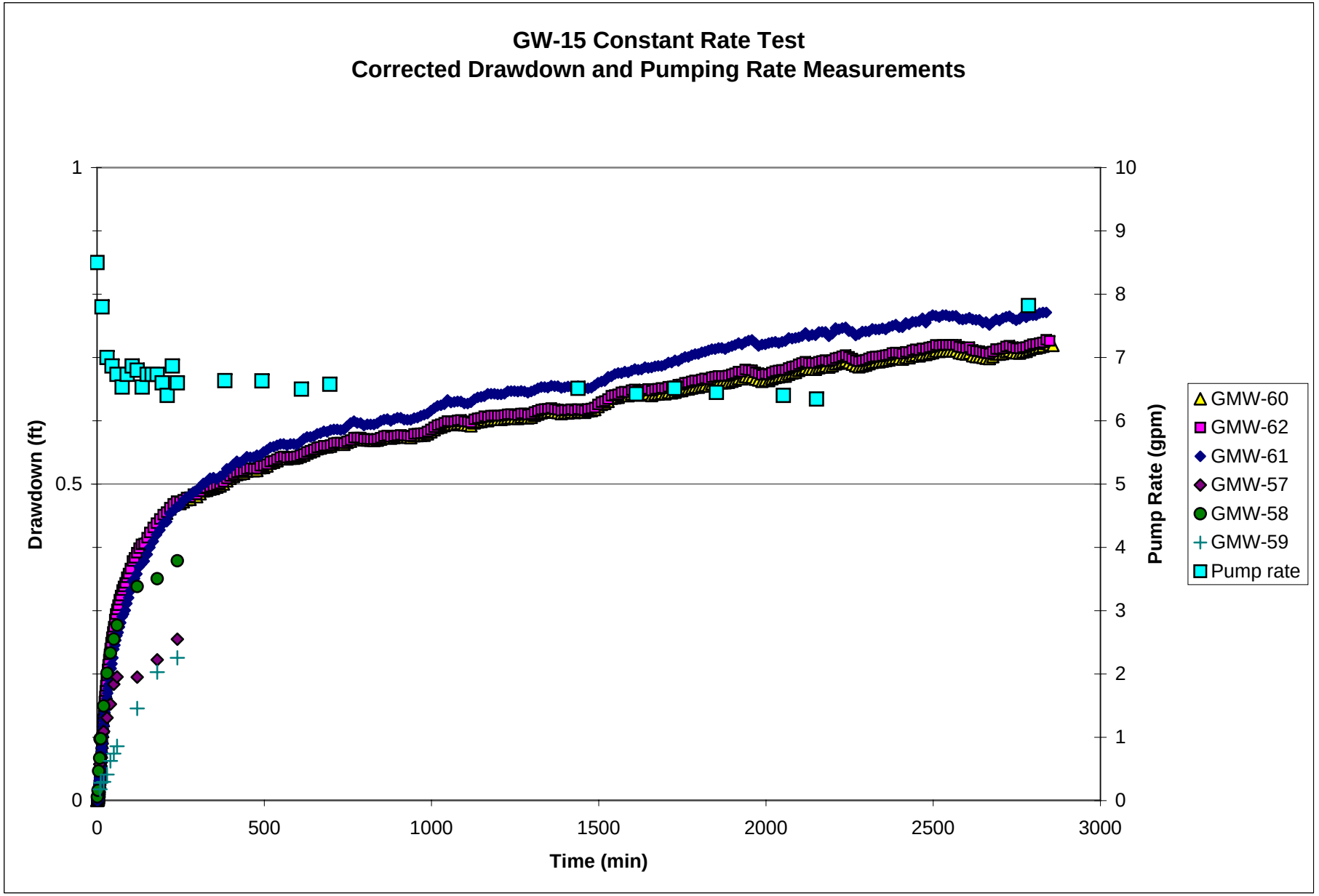
WHERE THE DATABOX IS SHOWN IN BLUE THE CONCENTRATION OF TPH (OR TPHfp WHERE TPHg WAS NOT ANALYZED) HAS DECREASED BY 10% OR MORE AT THAT LOCATION SINCE THE PREVIOUS SEMI-ANNUAL MONITORING EVENT

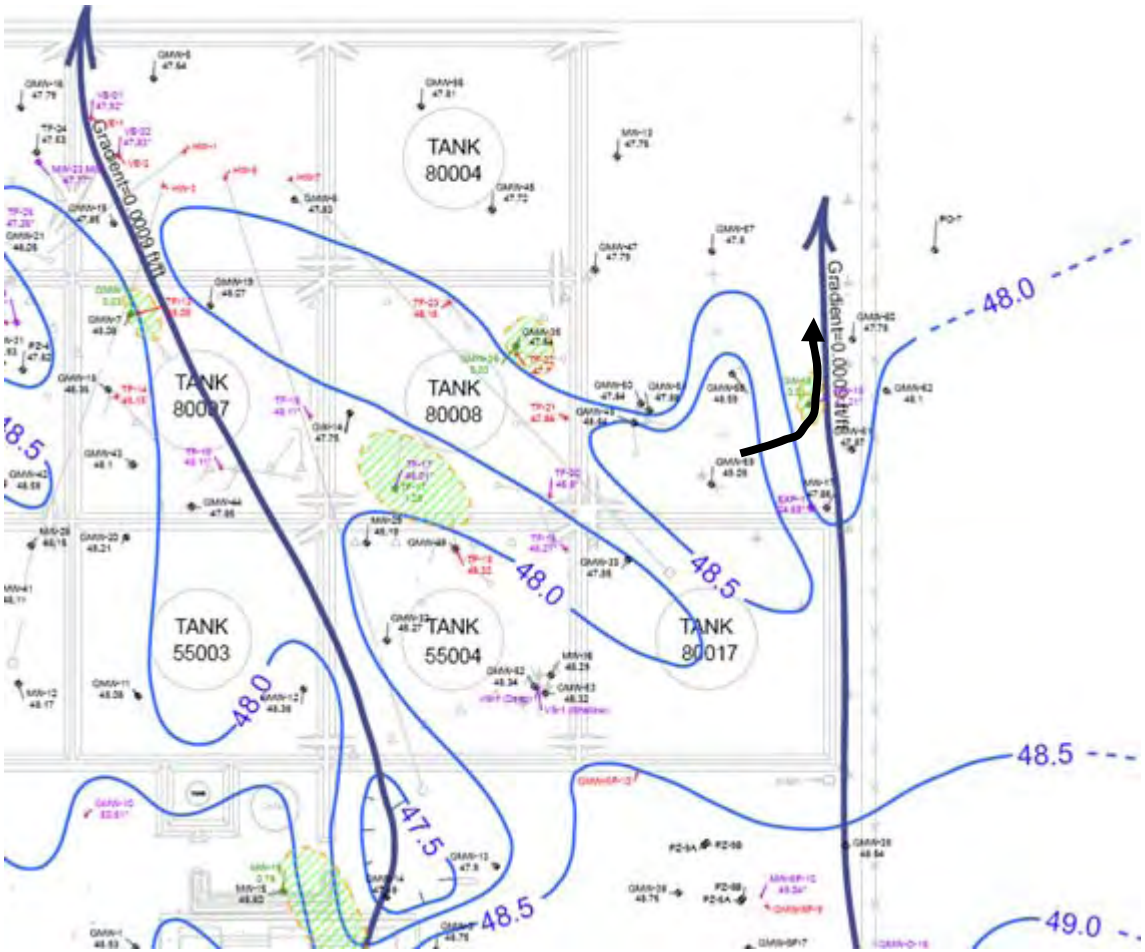
FIGURE 1
PUMPING TEST AREA

DFSP NORWALK

Source: Figure 4 dated 7/14/2008, Titled TOTAL PETROLEUM HYDROCARBONS IN UPPERMOST GROUNDWATER ZONE APRIL 2008, by Geomatrix.

FIGURE 2

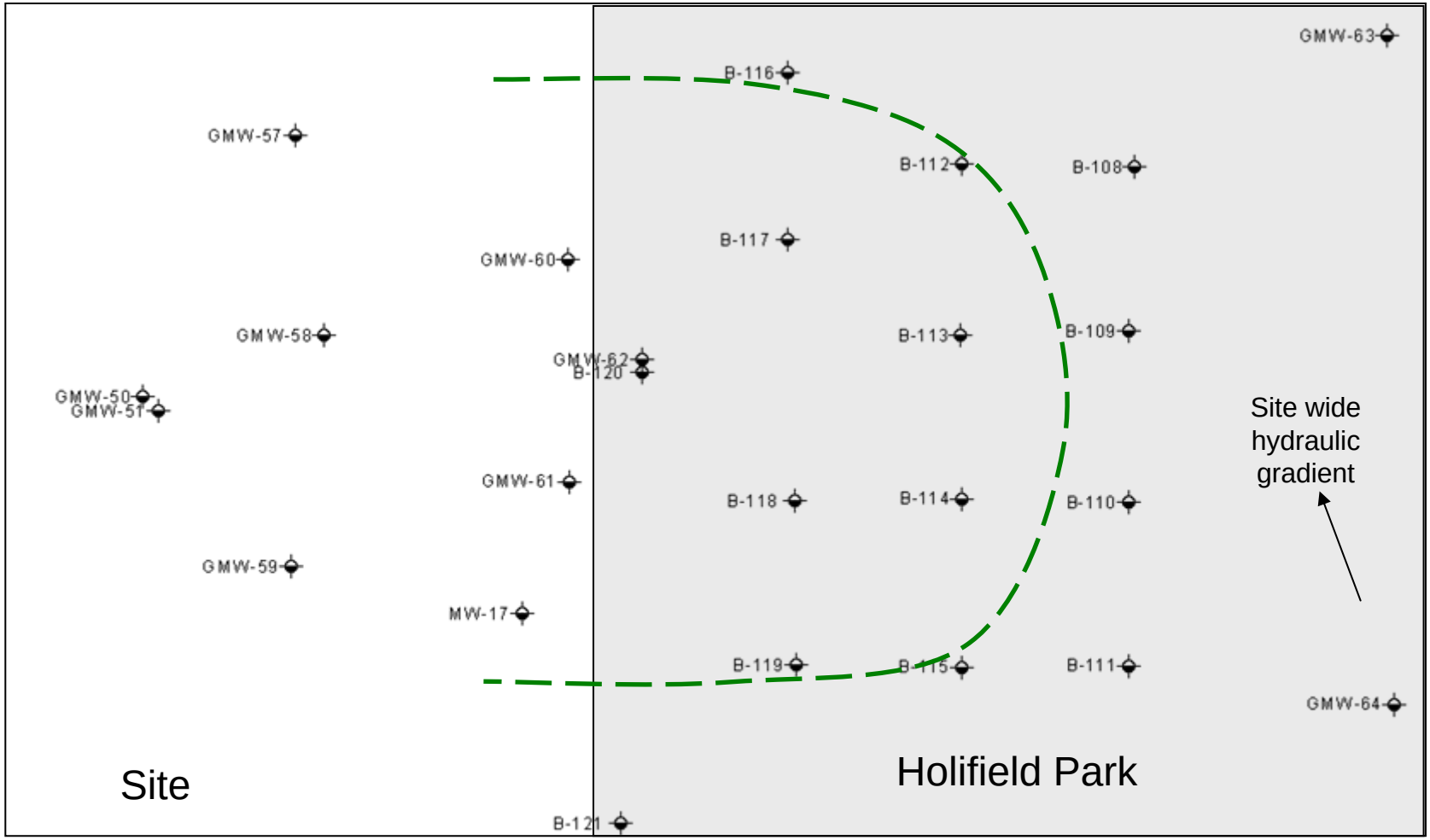

GW-15 Constant Rate Test
Corrected Drawdown and Pumping Rate Measurements
Drawdown (ft)
Pump Rate (gpm)
Time (min)
0
0.5
1
0
1
2
3
4
5
6
7
8
9
10
0
500
1000
1500
2000
2500
3000
GMW-60
GMW-62
GMW-61
GMW-57
GMW-58
GMW-59
Pump rate



Site wide hydraulic gradient

FIGURE 3
SITE WIDE GROUNDWATER FLOW DIRECTION
GW-15 AREA
DFSP NORWALK

BASEMAP: "FIGURE 2 GROUNDWATER EQUIPOTENTIAL MAP AND FREE PRODUCT PLUMES UPPERMOST GROUNDWATER ZONE. OCTOBER, 2008. PARSONS



Scale Bar

0 100 200

Target capture zone

DRAFT

FIGURE 4
TARGET CAPTURE ZONE
GW-15 AREA AND HOLIFIELD PARK
DFSP NORWALK

BASEMAP: "FIGURE 2 GROUNDWATER EQUIPOTENTIAL MAP AND FREE PRODUCT PLUMES UPPERMOST GROUNDWATER ZONE. OCTOBER, 2008. PARSONS

P:\DFSP Norwalk\tech\PTest_capture_report\Figs_v2.ppt

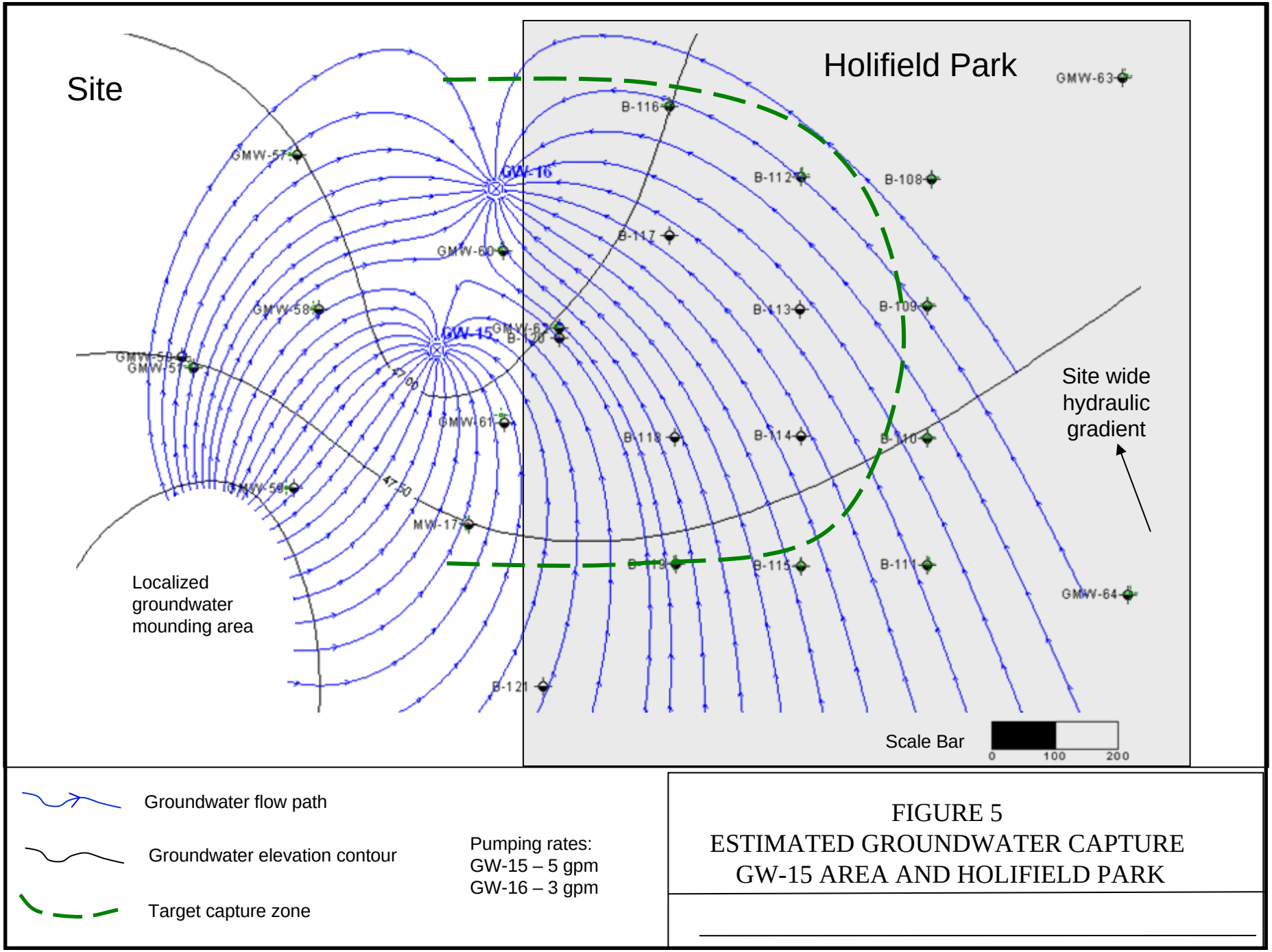


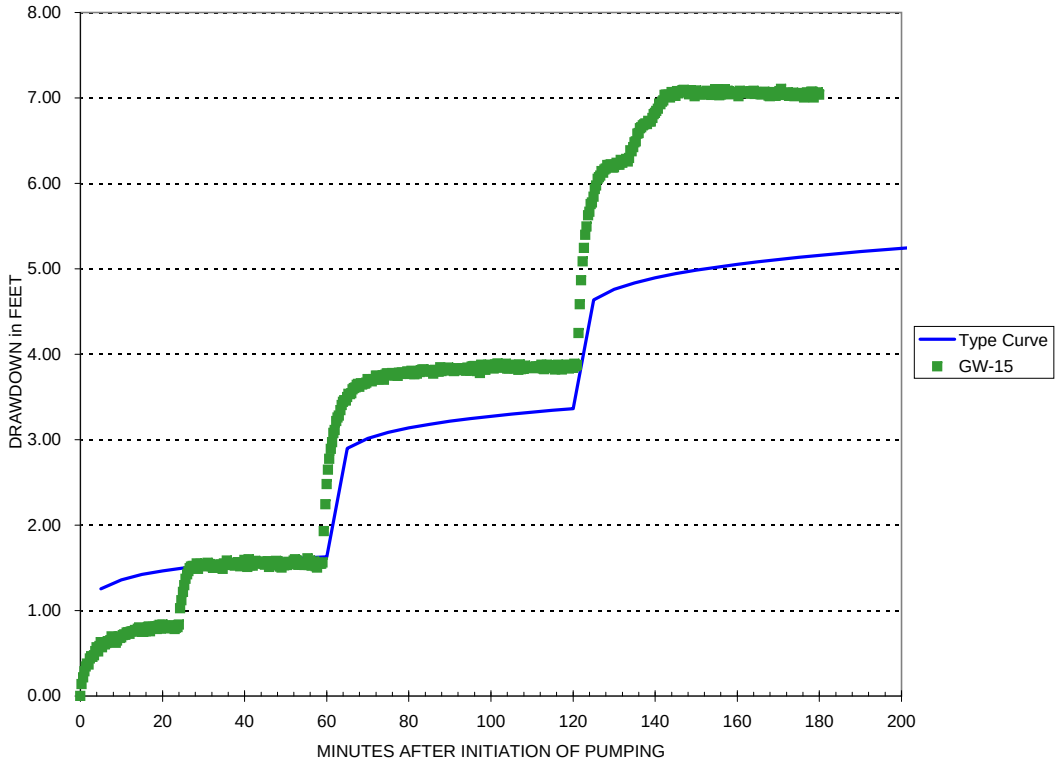
FIGURE 5
ESTIMATED GROUNDWATER CAPTURE
GW-15 AREA AND HOLIFIELD PARK

CALCULATIONS[1]

$$s = \frac{Q}{4\pi T} W(u)$$

Where:
s = Drawdown in feet
W(u) = Theis Well Function
and $u = \frac{r^2 S_y}{4Tt}$

K = Hydraulic Conductivity	=	**8.5**	ft/day
m = Aquifer thickness	=	**36**	feet
T = Transmissivity = ***K*** x ***m***	=	**306**	ft^2/day
Sy = Storage Constant	=	**0.005**	
Q = Well discharge			
Step 1	=	**3.0**	gpm
Step 2	=	**6.0**	gpm
Step 3	=	**9.0**	gpm
	=		
d = Diameter of well	=	**8**	inches
t = Step size	=	**60**	minutes



[1] Theis, C.V. 1935. The relation between the lowering of the piezometric surface and the rate and duration of discharge of a well using groundwater storage. *Transactions, American Geophysical Union*. vol. 16, pp. 519-524.

NORWALK GW-15

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FIGURE
CALCULATED STEP-TEST TIME-DRAWDOWN CURVE
USING "AVERAGE" HYDRAULIC CONDUCTIVITY

CALCULATIONS[1]

Calculated values for effective discharge and effective drawdown use the Theis [2] unsteady state formula. The approximation formula to obtain the value of W(u) is from Prickett [3].

$$Q' = \frac{4\pi T' s}{W(u)}$$

$$s' = \frac{Q'}{4\pi T'} W(u)$$

Where:
Q' = effective discharge
s' = Effective drawdown
W(u) = Theis Well Function
and

$$u = \frac{r^2 S y}{4 T t}$$

S = Storage Constant	=	**0.002**
d = Diameter of well	=	**10** inches
t = time	=	**180** minutes

STEP TEST RESULTS

Step	*Q* Discharge (gpm)	*Δ Q* Discharge (gpm)	*s* Drawdown (feet)	*Δ s* Drawdown (feet)
1	**3**	**3**	**1.56**	**1.56**
2	**6**	**3**	**3.87**	**2.31**
3	**9**	**3**	**7.07**	**3.2**
4				
5				

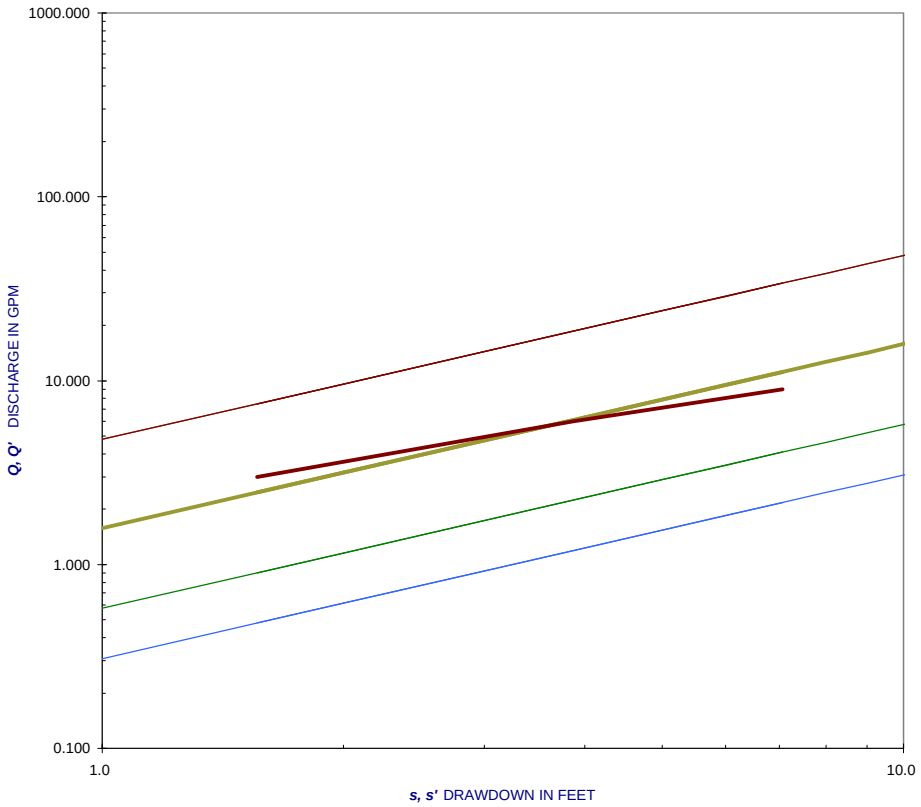
EFFECTIVE TRANSMISSIVITY ESTIMATES

Trial	T' (ft^2/day)
T1	50
T2	100
T3	300
T4	1000
T5	1000

WELL LOSS CALCULATIONS[4]

Step	*C* sec^2/ft^5	Well Loss (feet)	Efficiency (percent)
1			
2	8392.560	1.50	61%
3	9959.171	4.01	43%

DISCHARGE DRAWDOWN RELATIONSHIP



(1) J.E. Kelly and Keith E. Anderson, 1980. "The 'Cheat Sheet': A New tool for the Field Evaluation by Step-Testing. Groundwater, vol 18, no. 3.
(2) Theis, C.V. 1935. The relation between the lowering of the piezometric surface and the rate and duration of discharge of a well using groundwater storage. Transactions, American Geophysical Union. vol. 16, pp. 519-524.
(3) Prickett, 1972, 1Selected Hand-Held Calculator Codes for the Evaluation of Cumulative Strip mining Impacts on Groundwater Resources.
(4) Walton, W.C., 1970 in Weight and Sondergegger 2000 (page 377).

$$C(ft/(ft^3/\sec)^2) \approx \frac{(\frac{\Delta S_n}{\Delta Q_n}) - (\frac{\Delta S_{n-1}}{\Delta Q_{n-1}})}{\Delta Q_n + \Delta Q_{n-1}}$$

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FIGURE
STEP-DRAWDOWN TEST ANALYSIS - C by Walton (1970)

CALCULATIONS[1]

$$T = \frac{Q}{4\pi s} W(u)$$

$$= \frac{0.87 \text{ ft3/min} \times 1.00}{12.56 \times 0.11 \text{ feet}}$$

$$= 7.13\text{E-}01 \text{ ft}^2\text{/min}$$

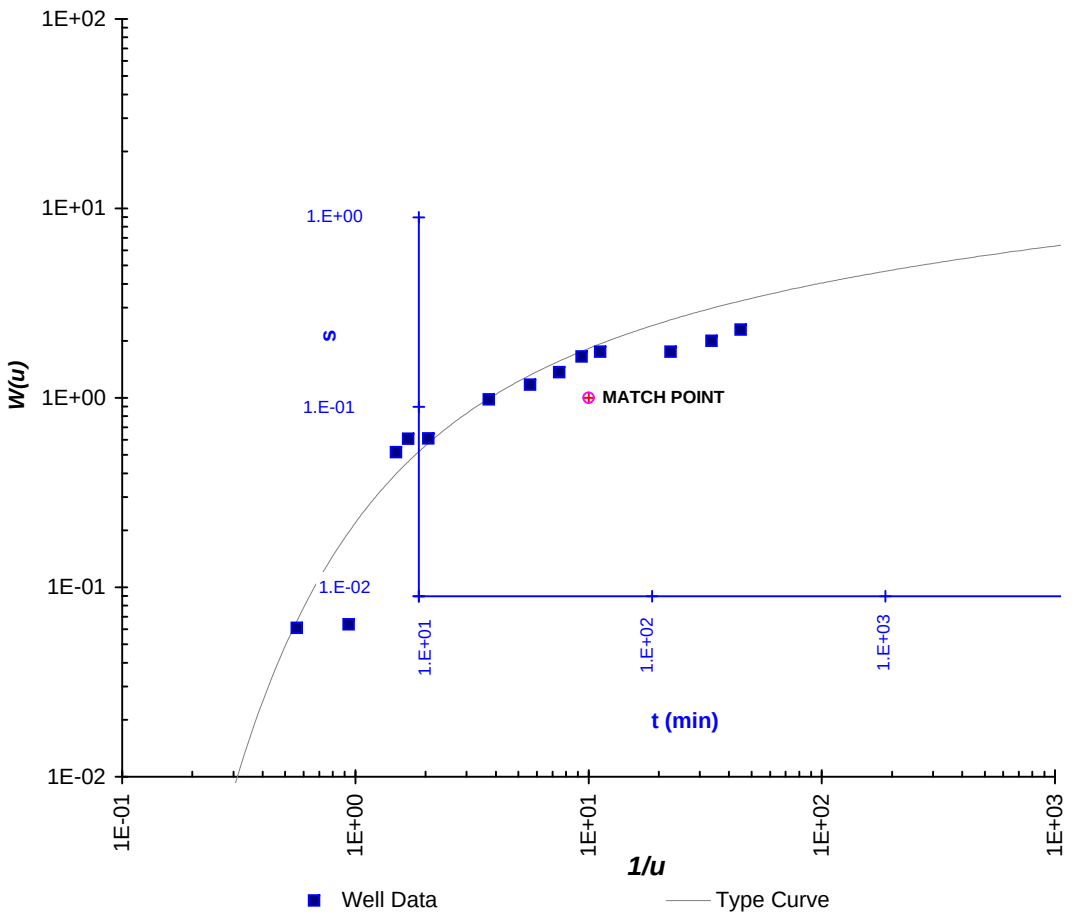
$$S = \frac{4Tt}{r^2 \frac{1}{u}}$$

$$= \frac{4 \times 892.70 \text{ ft2/min} \times 53.43 \text{ min.}}{35456.89 \text{ ft2} \times 10}$$

$$= 3.74\text{E-}04$$

Q = pumping rate (ft^3/min)
r = radius of or from the pumping well (ft)
s = drawdown (ft)
m = aquifer saturated thickness (ft)
t = elapsed time (min)

T = transmissivity (ft^2/min)
S = storage coefficient
K = hydraulic conductivity (ft/min)



[1] Theis, C.V. 1935. The relation between the lowering of the piezometric surface and the rate and duration of discharge of a well using groundwater storage. *Transactions, American Geophysical Union*. vol. 16, pp. 519-524.

MATCH POINT				PUMPING AND AQUIFER DATA				AQUIFER CONSTANTS			
1/u	W(u)	s (feet)	t (minutes)	Q (gal/min)	Q (ft^3/min)	r (feet)	m (feet)	T (ft^2/min)	T (ft^2/day)	S	K (ft/day)
10.00	**1.00**	0.11	53.4	**6.5**	0.87	**188**	**36**	6.20E-01	893	3.74E-04	25

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FIGURE
GW-15 CONSTANT-RATE PUMPING TEST
OBSERVATION WELL GMW-57

CALCULATIONS[1]

$$T = \frac{Q}{4\pi s} W(u)$$

$$= \frac{0.87\ ft3/min \times 1.00}{12.56 \times 0.12\ feet}$$

$$= 6.90E\text{-}01\ ft^2/min$$

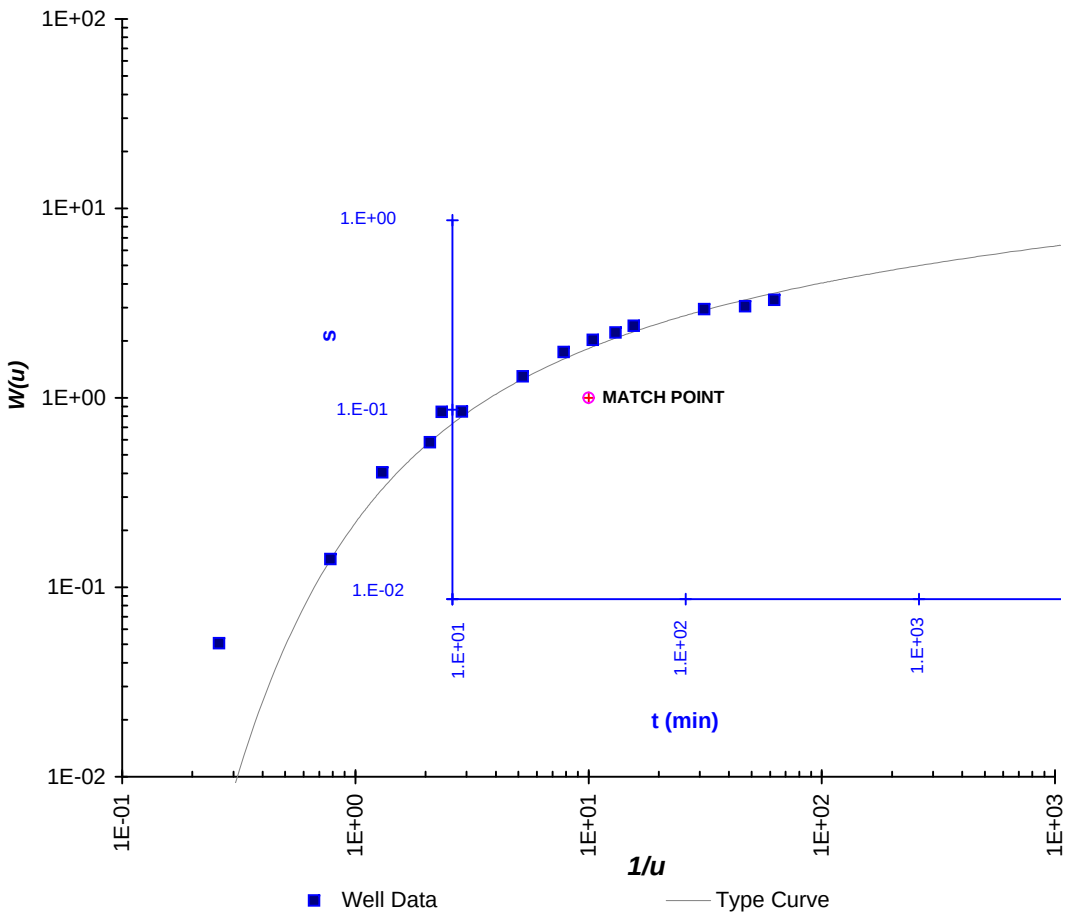
$$S = \frac{4Tt}{r^2 \frac{1}{u}}$$

$$= \frac{4 \times 863.20\ ft2/min \times 38.34\ min.}{11088.09\ ft2 \times 10}$$

$$= 8.29E\text{-}04$$

Q = pumping rate (ft^3/min)
r = radius of or from the pumping well (ft)
s = drawdown (ft)
m = aquifer saturated thickness (ft)
t = elapsed time (min)

T = transmissivity (ft^2/min)
S = storage coefficient
K = hydraulic conductivity (ft/min)



[1] Theis, C.V. 1935. The relation between the lowering of the piezometric surface and the rate and duration of discharge of a well using groundwater storage. *Transactions, American Geophysical Union*. vol. 16, pp. 519-524.

MATCH POINT				PUMPING AND AQUIFER DATA				AQUIFER CONSTANTS			
1/u	W(u)	s (feet)	t (minutes)	Q (gal/min)	Q (ft^3/min)	r (feet)	m (feet)	T (ft^2/min)	T (ft^2/day)	S	K (ft/day)
10.00	**1.00**	0.12	38.3	**6.5**	0.87	**105**	**36**	5.99E-01	863	8.29E-04	24

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FIGURE
GW-15 CONSTANT-RATE PUMPING TEST
OBSERVATION WELL GMW-58

CALCULATIONS[1]

$$T = \frac{Q}{4\pi s} W(u)$$

$$= \frac{0.87 \text{ ft3/min} \times 1.00}{12.56 \times 0.14 \text{ feet}}$$

$$= 5.82\text{E-}01 \text{ ft}^2\text{/min}$$

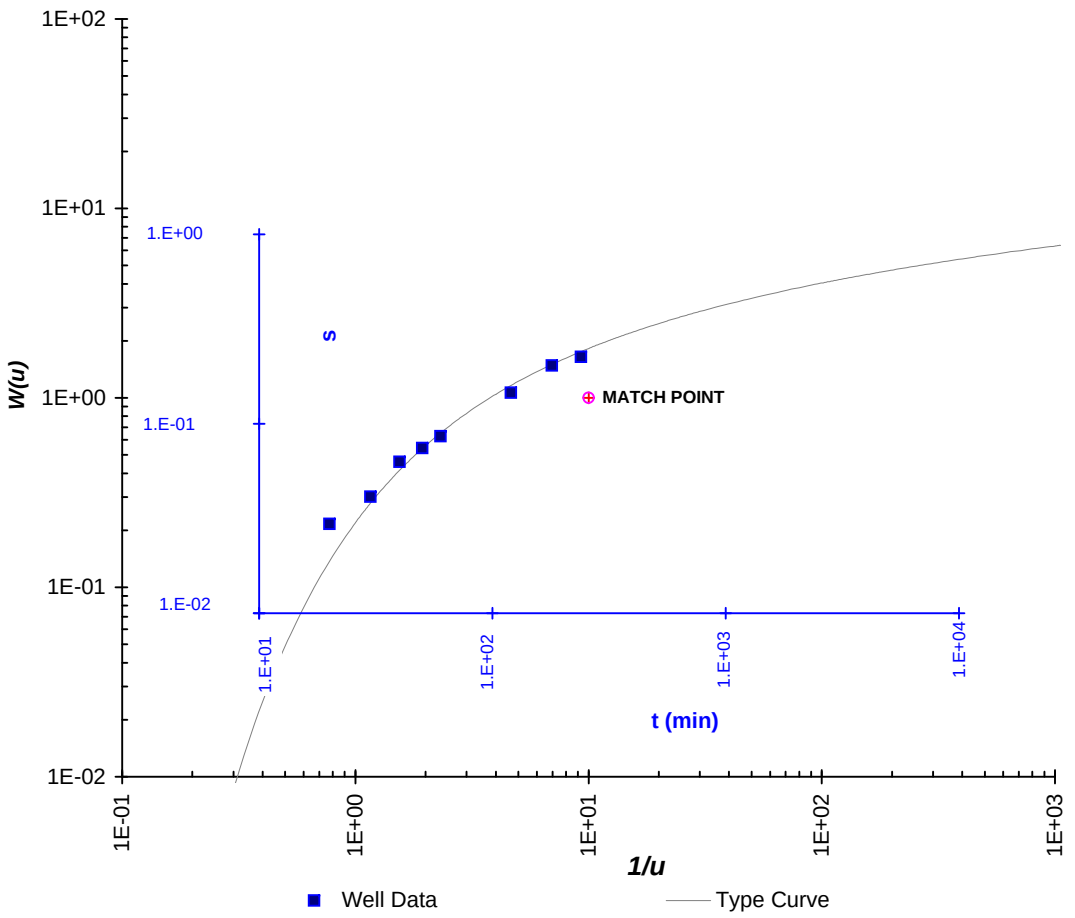
$$S = \frac{4Tt}{r^2 \frac{1}{u}}$$

$$= \frac{4 \times 727.94 \text{ ft2/min} \times 258.34 \text{ min.}}{24492.25 \text{ ft2} \times 10}$$

$$= 2.13\text{E-}03$$

Q = pumping rate (ft^3/min)
r = radius of or from the pumping well (ft)
s = drawdown (ft)
m = aquifer saturated thickness (ft)
t = elapsed time (min)

T = transmissivity (ft^2/min)
S = storage coefficient
K = hydraulic conductivity (ft/min)



[1] Theis, C.V. 1935. The relation between the lowering of the piezometric surface and the rate and duration of discharge of a well using groundwater storage. *Transactions, American Geophysical Union*. vol. 16, pp. 519-524.

MATCH POINT				PUMPING AND AQUIFER DATA				AQUIFER CONSTANTS			
1/u	W(u)	s (feet)	t (minutes)	Q (gal/min)	Q (ft^3/min)	r (feet)	m (feet)	T (ft^2/min)	T (ft^2/day)	S	K (ft/day)
10.00	**1.00**	0.14	258.3	**6.5**	0.87	**157**	**36**	5.06E-01	728	2.13E-03	20

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FIGURE
GW-15 CONSTANT-RATE PUMPING TEST
OBSERVATION WELL GMW-59

CALCULATIONS[1]

$$T = \frac{Q}{4\pi s} W_{u,r/B}$$

$$= \frac{0.87\ ft^3/min \times 0.50}{12.56637 \times 0.11\ feet}$$

$$= 3.21E\text{-}01\ ft^2/min$$

$$S = \frac{4\,u\,T\,t}{r^2}$$

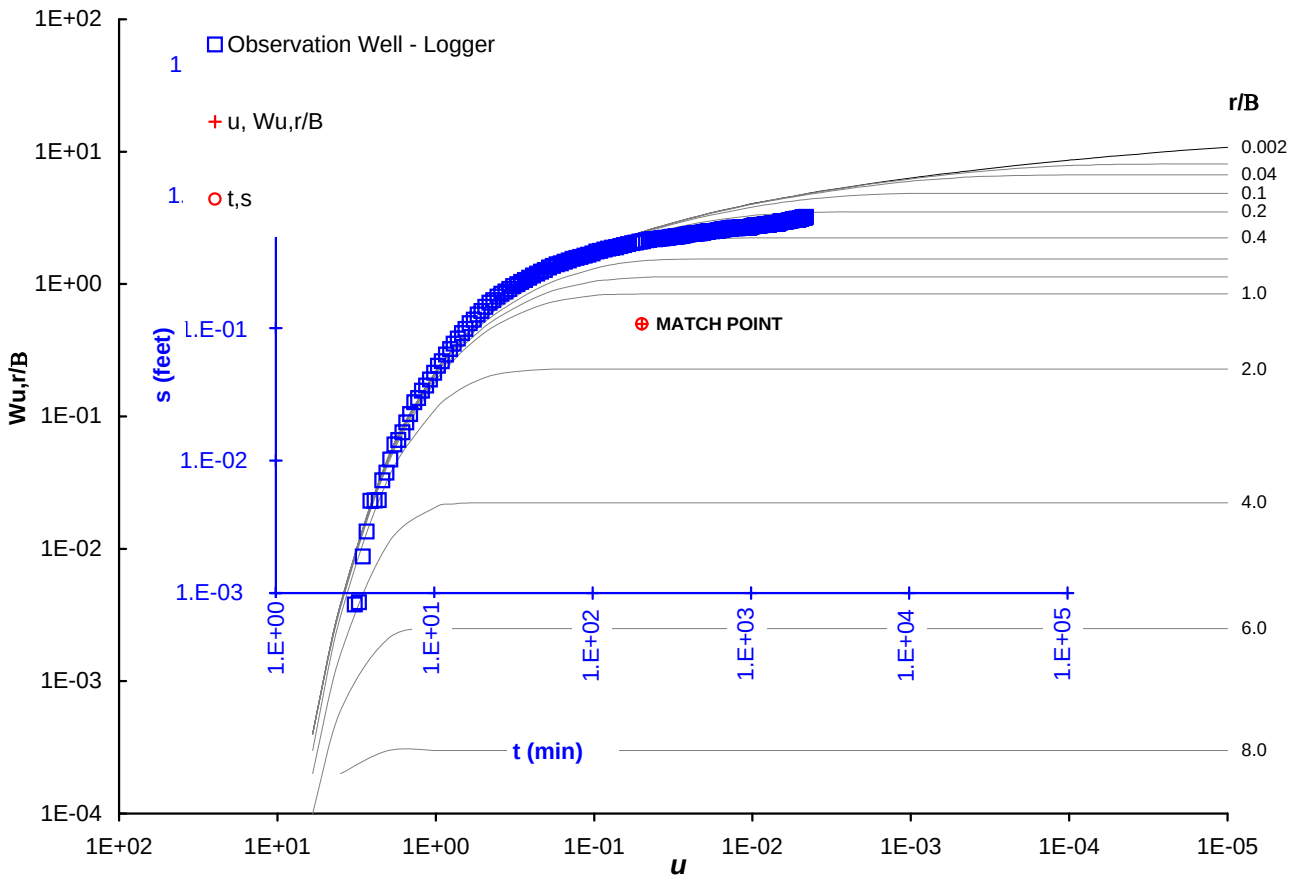
$$= \frac{(4 \times 0.05 \times 3.21E\text{-}01\ ft2/min \times 204.57\ min)}{105.30\ feet^2}$$

$$= 1.18E\text{-}03$$

$$K = \frac{Sb'\,(r/B)^2 / u}{t}$$

$$= (1.18E\text{-}03 \times 36\ feet \times 0.3^2 / 0.05) / 204.572\ min$$

$$= 3.75E\text{-}04\ ft/min$$



(1) Hantush, M.S. and C.E. Jacob, 1955. "Non-Steady Radial Flow in an Infinite Leaky Aquifer". Transactions, American Geophysical Union. vol. 36, no. 1.

Bar

MATCH POINT					PUMPING AND AQUIFER DATA				AQUIFER CONSTANTS					
u	Wu,r/B	s (feet)	t (minutes)	r/B	Q (gpm)	Q (ft^3/min)	r (feet)	b' (feet)	T (ft^2/min)	T (ft^2/day)	K (ft/day)	S	K' (ft/min)	K' (ft/day)
0.05	**0.50**	0.11	205	**0.3**	**6.5**	0.87	**105**	**36**	3.21E-01	462	13	1.2E-03	3.7E-04	5.4E-01

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FIGURE
GW-15 PUMPING TEST
OBSERVATION WELL GWM-60

CALCULATIONS[1]

$$T = \frac{Q}{4\pi s} W(u)$$

$$= \frac{0.87\ ft3/min \times 1.00}{12.56 \times 0.15\ feet}$$

$$= 5.27E\text{-}01\ ft^2/min$$

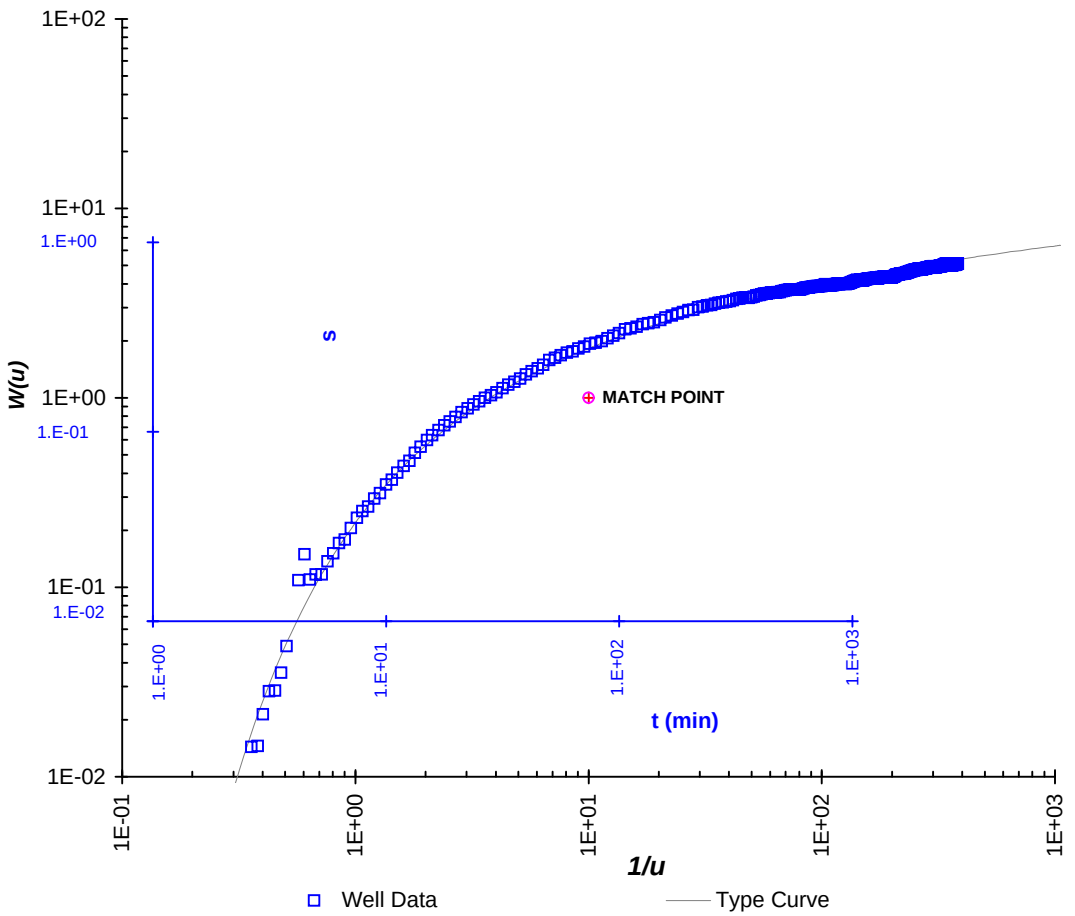
$$S = \frac{4Tt}{r^2 \frac{1}{u}}$$

$$= \frac{4 \times 659.72\ ft2/min \times 73.87\ min.}{5045.26\ ft2 \times 10}$$

$$= 2.68E\text{-}03$$

Q = pumping rate (ft^3/min)
r = radius of or from the pumping well (ft)
s = drawdown (ft)
m = aquifer saturated thickness (ft)
t = elapsed time (min)

T = transmissivity (ft^2/min)
S = storage coefficient
K = hydraulic conductivity (ft/min)



[1] Theis, C.V. 1935. The relation between the lowering of the piezometric surface and the rate and duration of discharge of a well using groundwater storage. *Transactions, American Geophysical Union*. vol. 16, pp. 519-524.

MATCH POINT				PUMPING AND AQUIFER DATA				AQUIFER CONSTANTS			
1/u	W(u)	s (feet)	t (minutes)	Q (gal/min)	Q (ft^3/min)	r (feet)	m (feet)	T (ft^2/min)	T (ft^2/day)	S	K (ft/day)
10.00	**1.00**	0.15	74	**6.5**	0.87	**71**	**36**	4.58E-01	660	2.7E-03	18

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FIGURE
GMW-15 CONSTANT-RATE PUMPING TEST
OBSERVATION WELL GMW-61

CALCULATIONS[1]

$$T = \frac{Q}{4\pi s} Wu, r/B$$

$$= \frac{0.87\ ft^3/min \times 0.50}{12.56637 \times 0.10\ feet}$$

$$= 3.32E\text{-}01\ ft^2/min$$

$$S = \frac{4\,u\,T\,t}{r^2}$$

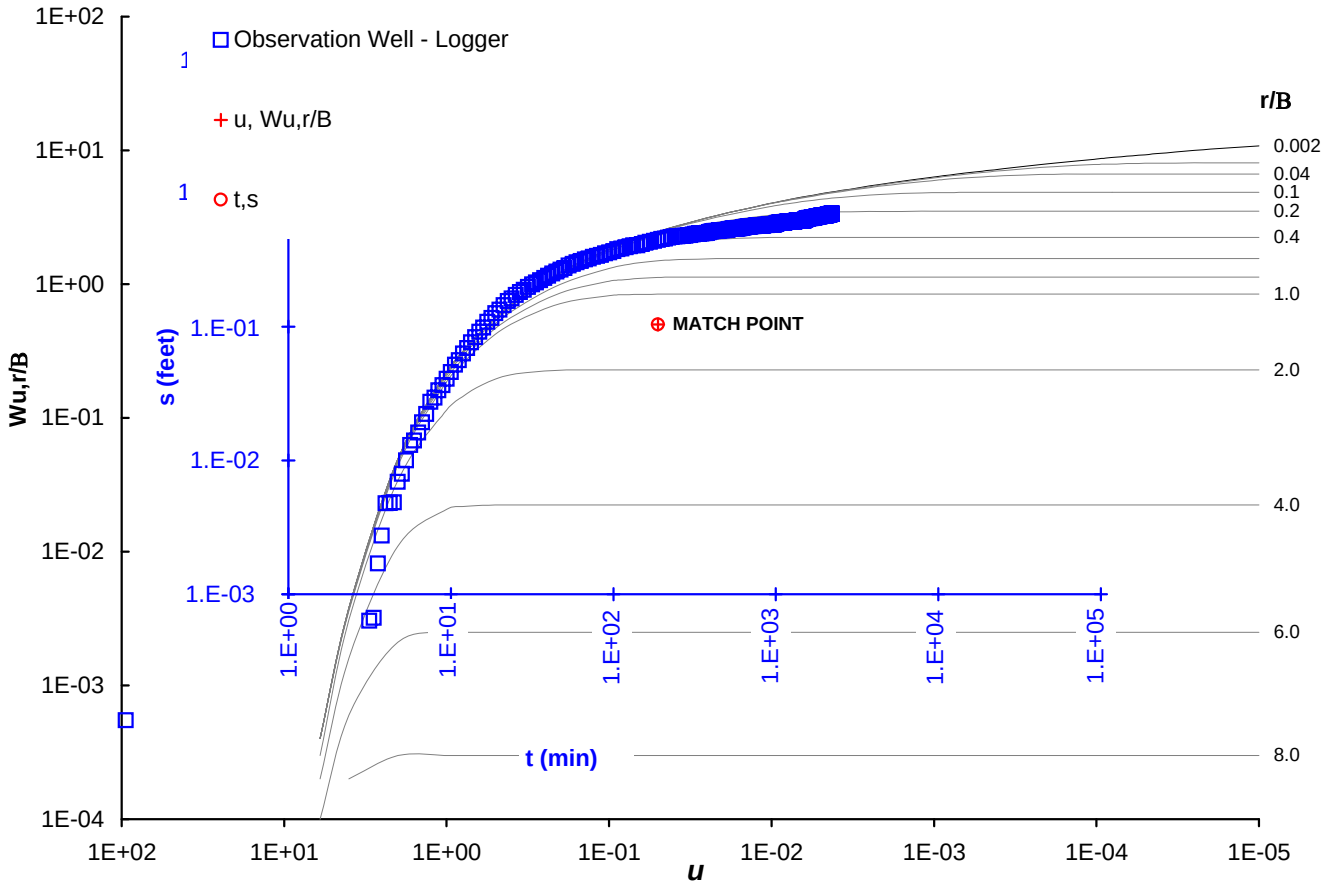
$$= \frac{(4 \times 0.05 \times 3.32E\text{-}01\ ft2/min \times 188.16\ min)}{105.30\ feet^2}$$

$$= 1.13E\text{-}03$$

$$K = \frac{Sb'(r/B)^2/u}{t}$$

$$= (1.13E\text{-}03 \times 36\ feet \times 0.2^2 / 0.05) / 188.163\ min$$

$$= 1.73E\text{-}04\ ft/min$$



(1) Hantush, M.S. and C.E. Jacob, 1955. "Non-Steady Radial Flow in an Infinite Leaky Aquifer". Transactions, American Geophysical Union. vol. 36, no. 1.

MATCH POINT					PUMPING AND AQUIFER DATA				AQUIFER CONSTANTS					
u	Wu,r/B	s (feet)	t (minutes)	r/B	Q (gpm)	Q (ft^3/min)	r (feet)	b' (feet)	T (ft^2/min)	T (ft^2/day)	K (ft/day)	S	K' (ft/min)	K' (ft/day)
0.05	**0.50**	0.10	188	**0.2**	**6.5**	0.87	**105**	**36**	3.32E-01	478	13	1.1E-03	1.7E-04	2.5E-01

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FIGURE
GW-15 PUMPING TEST
OBSERVATION WELL GWM-62

CALCULATIONS[1]

$$T = \frac{0.366Q}{\Delta s}$$

$$= \frac{0.366 \times 0.87 \ ft^3/min}{1.20 \ feet}$$

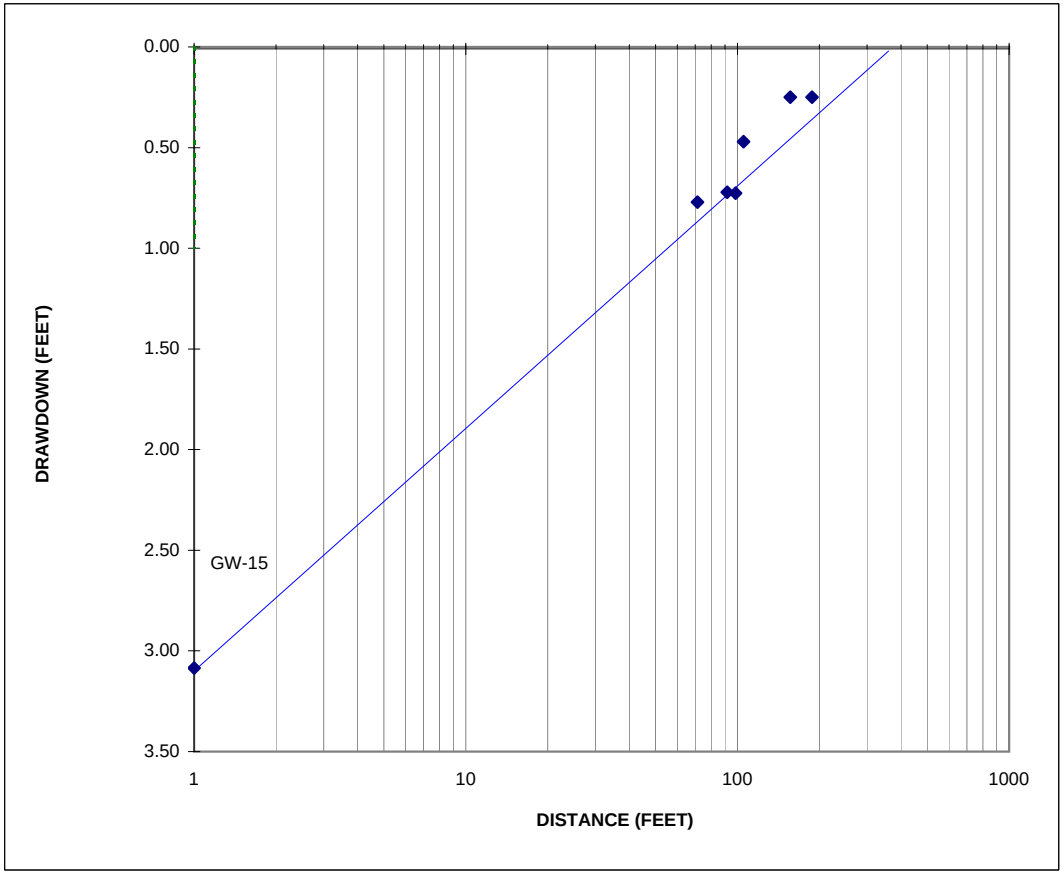
$$= 2.64E\text{-}01 \ ft^2/min$$

$$S = \frac{2.25Tt}{r_o^2}$$

$$= \frac{2.25 \times 2.64E\text{-}01 \ ft^2/min \times 2.79E+03 \ min.}{360.0^{\ 2}}$$

$$= 1.13E\text{-}02$$

Q = pumping rate (ft^3/min)
r = radius of or from the pumping well (ft)
s = drawdown (ft)
m = aquifer saturated thickness (feet)
r = radius of or from the pumping well (ft)
T = transmissivity (ft^2/min)
S = storage coefficient
K = hydraulic conductivity (ft/min)



(1) Cooper, H.H. Jr. and C.E. Jacob. 1945. "A Generalized Graphical Method for Evaluating Formation Constants and Summarizing Well-Field History".

Transactions. American Geophysical Union. vol. 27, no. 4. pp. 526-534.

Note: Recovery values were used for three farthest observation wells and may under represent drawdown.

GRAPH DATA			PUMPING AND AQUIFER DATA				AQUIFER CONSTANTS			
R_0 (feet)	Δs (feet)		t (minutes)	Q (gal/min)	Q (ft^3/min)	m (feet)	T (ft^2/min)	T (ft^2/day)	S	K (ft/day)
360	**1.20**		**2785**	**6.5**	0.87	**36**	2.64E-01	380	0.011	11

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FIGURE
PUMPING TEST GW-15
DISTANCE-DRAWDOWN ANALYSIS