RO357

P&D ENVIRONMENTAL

A Division of Paul H. King, Inc.
55 Santa Clara Avenue, Suite 240
Oakland, CA 94610
(510) 658-6916

September 19, 2005
Letter 0298.L17

Mr. Jerry Wickham
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

SUBJECT: DOCUMENT TRANSMITTAL
Fuel Leak Site RO0000357
Snow Cleaners, Inc.
2678 Coolidge Avenue
Oakland, CA

Dear Mr. Wickham:

You will find enclosed one copy each of the following documents for the subject site prepared by P&D Environmental, a division of Paul H. King, Inc.

- Subsurface Investigation Work Plan – B8 to B14 dated September 12, 2005 (document 0298.W2).
- Preferential Pathway/Conduit Study dated September 12, 2005 (document 0298.R3).
- Sensitive Receptor Survey dated September 12, 2005 (document 0298.R4).

A copy of the work plan was previously transmitted to you electronically on September 12, 2005. The required penalty of perjury statement for the enclosed documents will be provided in a letter from Snow Cleaners, Inc. under separate cover.

Should you have any questions, please do not hesitate to contact us at (510) 658-6916.

Sincerely,
P&D Environmental

Paul H. King

Paul H. King
President

Enclosures

cc: Mr. Harold Turner, Snow Cleaners, Inc.
Mr. LeRoy Griffin, Oakland Fire Department, Emergency Services, 250 Frank Ogawa Plaza, Suite 3341, Oakland, CA 94612 (with enclosures)

PHK/0298.L17

RO357

SNOW CLEANERS INC.

EXPERT FINISHING • ALL LEATHER GOODS

MAIN OFFICE & PLANT
38 WEST SONORA ST.
STOCKTON, CA 95203
209 / 547-1454

Since 1910

March 2, 2005

Mr. Amir Gholami
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Alameda County
MAR 8 2005
Environmental Health

SUBJECT: REPORT TRANSMITTAL
Snow Cleaners
2678 Coolidge Avenue
Oakland, CA 94601

Dear Mr. Gholami:

You will find enclosed one copy of P&D Environmental report 0298.R2, titled "Subsurface Investigation Report (B3 Through B7)", dated February 28, 2005.

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

Should you have any questions, please do not hesitate to call me at (800) 818-7669.

Sincerely,

Snow Cleaners, Inc.

Harold Turner

cc: LeRoy Griffin, Oakland Fire Department Emergency Services
1605 Martin Luther King Jr. Way, 2nd Floor, Oakland, CA 94612

"SERVING THE CLEANING INDUSTRY FOR 90 YEARS"

P & D ENVIRONMENTAL
A Division of Paul H. King, Inc.
4020 Panama Court
Oakland, CA 94611
(510) 658-6916

February 28, 2005
Report 0298.R2

Mr. Harold Turner
Snow Cleaners
2678 Coolidge Avenue
Oakland, CA

SUBJECT: **SUBSURFACE INVESTIGATION REPORT (B3 Through B7)**
ACEH Case # RO 0000357
Snow Cleaners
2678 Coolidge Avenue
Oakland, CA

Dear Mr. Turner:

P&D Environmental (P&D), a division of Paul H. King, Inc., is pleased to present this report documenting the drilling and sampling of five exploratory boreholes, designated as B3 through B7, and purging and sampling of two existing groundwater monitoring wells designated as MW1 and MW2 at the subject site. Boreholes B3 and B7 were drilled on September 22, 2004. Boreholes B4, B5 and B6 were drilled on October 22, 2004. The wells were sampled on October 27, 2004. A Site Location Map is attached as Figure 1, and a Site Vicinity Map showing the borehole and well locations is attached as Figure 3.

The scope of work documented in this report was set forth in P&D's Subsurface Investigation Work Plan dated January 30, 2003 (document 0298.W1) and P&D's Subsurface Investigation Work Plan Addendum dated February 6, 2003 (document 0298.L3). The Work Plan and associated addendum were approved in a letter from the Alameda County Environmental Health Department (ACEH) in a letter dated February 27, 2003. Based on subsurface conditions encountered during drilling in September 2004, the ACEH approved on September 23, 2004 modification of borehole locations B4 through B6 from the locations originally proposed in the work plan.

BACKGROUND

Review of the file for the subject site at the ACEH offices identified the following reports documenting underground tank removal and subsurface investigation at the subject site.

- Tank Removal Activities and Work Plan For a Preliminary Groundwater Investigation dated August 21, 1990 prepared by C.M. Chambers and Associates.
- Proposal for Work Plan and Site Safety Plan dated July 30, 1993 prepared by Joslin Geotechnical.
- Interim Report on Underground Tank Release Investigation dated May 20, 1994 prepared by Joslin Geotechnical (the report documents installation of two groundwater monitoring wells).

- Transmittal of Test Results dated November 30, 1998 prepared by Joslin Geotechnical. The following documents were attached to the transmittal.
  - March 5, 1991 letter prepared by C.M. Chambers and Associates documenting soil disposal related to the UST removal activities.
  - January 20, 1994 letter prepared by Joslin Geotechnical documenting soil (collected on January 4, 1994) and water (collected on January 26, 1994) sample results associated with installation of the two groundwater monitoring wells.
  - July 27, 1994 letter prepared by Joslin Geotechnical documenting water sample results for samples collected from the two wells on May 31, 1994.
  - August 20, 1994 letter prepared by Joslin Geotechnical documenting water sample results for samples collected from the two wells on July 29, 1994.
  - October 5, 1994 letter prepared by Joslin Geotechnical documenting water sample results for samples collected from the two wells on September 14, 1994.
  - January 20, 1995 letter prepared by Joslin Geotechnical documenting water sample results for samples collected from the two wells on December 22, 1994.
  - June 10, 1995 letter prepared by Joslin Geotechnical documenting water sample results for samples collected from the two wells on May 15, 1995.
  - November 20, 1998 letter prepared by Joslin Geotechnical documenting water sample results for samples collected from the two wells on November 3, 1998.

The site is presently operated as a dry cleaning establishment, and is reported to have historically been used for dry cleaning operations since approximately 1907. Review of the above documents shows that a total of six underground storage tanks (USTs) were removed from the site in 1990. Soil samples collected from beneath the USTs showed detectable concentrations of petroleum hydrocarbons identified as paint thinner. The quality of the sample results is questionable because the samples were stored in glass jars and extracted at the laboratory 30 days or more after the date of sample collection. Limited excavation of soil from the UST pit was performed to remove discolored soil and soil that exhibited a head space concentration greater than 100 ppm using a combustible gas indicator. The UST pit dimensions after excavation were reported to be approximately 9 feet by 40 feet and 15 feet deep.

Based on conversations with Mr. Turner, the property owner, some of the excavated soil was placed into planters and landscaped areas surrounding the site building. During a site visit by P&D personnel, a total of seven areas were identified where the soil had been placed. The calculated volume of the soil is approximately 13 cubic yards. In addition, Mr. Turner is in the process of determining the disposition of excavated soil that was removed from the site.

In January, 1994 two groundwater monitoring wells were installed by others in Davis Street approximately five feet south of the former UST pit. The area of fresh concrete sidewalk, presumably from resurfacing of the UST pit is shown in Figure 2 of this report. The figure was obtained from the report documenting well installation prepared by others. Although the figure shows the UST locations and site details, the figure is not properly scaled with respect to the distance from the site to the intersection of Davis Street and 34th Avenue. In addition, the figure did not contain a scale.

Well B1 (the well closest to Coolidge Avenue, and subsequently re-named as well MW1) was drilled to a total depth of 46.1 feet, and was constructed using 2-inch diameter PVC pipe. The

screened interval is from 25 to 45 feet below the ground surface. Groundwater was initially encountered at a depth of 42.1 feet and subsequently stabilized at a depth of approximately 29 feet below the ground surface. The subsurface materials encountered in the borehole consisted predominantly of clay and silty clay. Soil samples were collected at depths of 2.5, 6.0, 11.0, 12.0, 16.0, 21.0, 25.5, 30.5, 36.0, 40.5 and 46.0 feet below the ground surface (the boring log does not show the sample ID number for the 46.0-foot depth sample, but the sample ID number in the laboratory report is consistent with the 46.0-foot depth sample on the boring log). After construction of the well in the borehole, a water sample was collected from the well. The soil samples were analyzed at McCampbell Analytical, Inc. (McCampbell) of Pacheco, California for Total Petroleum Hydrocarbons (TPH) as Stoddard Solvent and BTEX, and the water sample was analyzed for TPH as Gasoline and BTEX. No evidence of petroleum hydrocarbons was detected in the borehole at the time of drilling, and no petroleum hydrocarbons were detected in soil samples from the borehole or water the sample from the well.

Well B2 (subsequently re-named as well MW2) was drilled to a total depth of approximately 26.5 feet, and was constructed using 4-inch diameter PVC pipe. The screened interval is from 11 to 26 feet below the ground surface. Groundwater was initially encountered at a depth of approximately 18.5 feet, and subsequently stabilized at a depth of approximately 18.5 feet. The water in well MW2 was interpreted to be perched water. The subsurface materials encountered in the borehole consisted clay to a depth of 10 feet below the ground surface, underlain by clayey sand and clayey gravel between the depths of approximately 10 and 21.5 feet below the ground surface, which was in turn underlain by clay to the total depth explored of 26 feet below the ground surface. Soil samples were collected at depths of 4.0, 10.5, 16.0, 20.0, and 26.0 feet below the ground surface. After construction of the well in the borehole, a water sample was collected from the well. A layer of separate phase hydrocarbons was detected on the water in the well. The boring log identified a chemical odor in cuttings beginning at a depth of 5 feet below the ground surface and a Stoddard Solvent odor beginning at a depth of 10 feet below the ground surface.

The soil samples were analyzed at McCampbell for TPH as Stoddard Solvent and BTEX and the water sample was analyzed for TPH as Gasoline and BTEX. In addition, the soil sample collected at a depth of 20.0 feet (the sample exhibiting the highest Stoddard Solvent concentration) was also analyzed for Volatile Organic Compounds (VOCs) using EPA Method 8010. Review of the well B2 boring soil sample results shows that TPH as Stoddard Solvent and BTEX were not detected in the soil samples collected at depths of 4.0 and 26.0 feet. The soil samples collected at depths of 10.5, 16.0 and 20.0 feet showed TPH as Stoddard Solvent concentrations of 440, 2000, and 2100 mg/kg, respectively, and concentrations of toluene, ethylbenzene and xylenes ranging from 0.59 to 28 mg/kg. No VOCs were detected in the soil sample collected at a depth of 20.0 feet. The water sample showed concentrations of 3.4 mg/L TPH as Gasoline (which the laboratory report identified as Stoddard Solvent), 0.015 mg/L benzene, and toluene, ethylbenzene and xylenes at concentrations ranging from 0.039 to 0.20 mg/L.

Review of the historical water sample results from the wells shows that no hydrocarbons have been detected in well MW1, and have been consistently detected in well MW2. Although mention of removal of separate phase hydrocarbons appears in the quarterly groundwater sampling reports, no measurements of depth to water or free product thickness are provided. Based on discussions with Mr. Turner, it is P&D's understanding that no free product removal activities were performed.

On January 18, 2003 P&D personnel monitored the two wells for depth to water and the presence of free product. Depth to water was measured using an electric water level indicator to the nearest 0.01 foot. Free product was measured using a steel tape with water-finding and product-finding paste. The measured depth to water in well MW1 was 20.06 feet. No free product was present in the well, and no odors or other evidence of petroleum hydrocarbons were detected in the well. In well MW2, the measured depth to water was 11.55 feet, and 0.02 feet of free product was measured in the well.

P&D prepared a Subsurface Investigation Work Plan dated January 30, 2003 that addressed information previously requested by the ACEH. Following telephone conversations with Mr. Amir Gholami, the new ACEH caseworker for the site, a work plan addendum dated February 6, 2003 was submitted to the ACEH. In a letter dated February 27, 2003 from the ACEH, the work plan and work plan addendum were approved by the ACEH.

On February 14, 2003, P&D personnel placed a hydrocarbon-absorbent sock in well MW2 as an interim remedial action for separate phase hydrocarbon abatement. The two groundwater monitoring wells were monitored and sampled once on February 20, 2003. The samples were analyzed for petroleum hydrocarbons quantified as gasoline, diesel, motor oil, and Stoddard solvent, and for VOCs by EPA Method 8260. Documentation of the field activities and sample results are presented in P&D's March 10, 2003 Groundwater Monitoring and Sampling Report (document 0298.R1). With the exception of two near-detection limit compounds, no analytes were detected in well MW1. In well MW2, petroleum hydrocarbons quantified as gasoline, diesel, motor oil, and Stoddard solvent were detected at concentrations of 76, 370, 37, 75 mg/L respectively. However, review of the laboratory analytical reports shows that the highest concentrations correspond with results identified by the laboratory as Stoddard Solvent.

Review of the February 20, 2003 water sample results also shows that benzene, MTBE, the drycleaning chemical tetrachloroethene (PCE) and the associated decomposition product trichlorethene (TCE) were not detected in either of the wells. In both wells very low concentrations of gasoline constituents, including toluene, ethylbenzene, xylenes and naphthalene were detected in well MW2 at concentrations ranging from 0.032 to 0.16 mg/L. In addition, trans-1,2-dichloroethene, cis-1,2-dichloroethene and vinyl chloride were detected in well MW2 at concentrations of 0.022, 0.36 and 0.024 mg/L, respectively. Vinyl chloride is a decomposition product of dichloroethene. Dichloroethene is a possible decomposition product of PCE and TCE. However, no PCE or TCE were detected in either of the wells. Comparison of the sample results shows that the samples collected on February 20, 2003 are consistent with the results reported for previous sampling events by others. Historically, PCE and TCE have not been detected in either of the wells.

FIELD ACTIVITIES

Prior to performing field activities, permits were obtained from the Alameda County Public Works Department and the City of Oakland, drilling locations were marked with white paint, Underground Service Alert was notified for underground utility location, a traffic plan was prepared, and a health and safety plan was prepared. Notification of the drilling dates was also provided to the ACEH.

On September 22, 2004, P&D personnel oversaw the drilling of boreholes B3 and B7. On October 18, 2004, P&D personnel oversaw the drilling of boreholes B4, B5, and B6. All drilling was performed by Vironex, Inc. of San Leandro, California using GeoProbe direct push technology. Boreholes B3 and B7 were continuously cored to total depths of 40.0 and 45.0 feet below the ground surface, respectively. Boreholes B4, B5, and B6 were continuously cored to total depths of 44.0, 25.0 and 40.0 feet, respectively. Based on contamination detected in borehole B7, boreholes B4 through B6 were drilled at alternate locations than were originally proposed in the work plan. The alternate locations were verbally approved by Mr. Amir Gholami of ACEH on September 23, 2004.

Subsurface materials were identified and evaluated based on the continuous cores from the boreholes and relative drilling difficulty. The soil from all of the borings was logged in the field in accordance with standard geologic field techniques and the Unified Soil Classification System. All of the soil was evaluated with a 10.3 eV Photoionization Detector (PID) calibrated using a 100 ppm isobutylene standard, except for borehole B4 below a depth of 25.0 feet and borehole B6 because the PID was broken. No organic vapors were detected with the PID in any of the boreholes. No petroleum hydrocarbon or solvent odors were identified in any of the boreholes with the exception of B7, where a strong petroleum hydrocarbon odor described as WD-40 oil, shoe polish, and Stoddard Solvent was detected beginning at a depth of 37.5 feet and extending to the total depth explored of 45.0 feet below the ground surface. The locations of the soil borings are shown on the attached Site Vicinity Map, Figure 3. Copies of the boring logs are attached with this report.

Soil samples were collected every 5.0 feet in all boreholes and retained for laboratory analysis in the following manner. A six-inch long soil sample from the continuous core was retained in the cellulose acetate tube by cutting the core barrel sample liner at the depth corresponding to the desired sample interval. The ends of the selected portion of tube were sequentially covered with aluminum foil and plastic endcaps, and the tube was then labeled and stored in a cooler with ice pending delivery to the laboratory. Chain of custody procedures were observed for all sample handling.

Groundwater was initially encountered while drilling in boreholes B3, B4, B5, B6 and B7 at depths of 40.0, 25.0, 39.5, 45.0 and 40.0 feet below the ground surface, respectively, and was subsequently measured in the boreholes prior to grouting at depths of 24.8, 10.3, 39.0, 27.8 and 33.0 feet below the ground surface, respectively.

After the completion of drilling of each borehole, a temporary 1-inch diameter slotted PVC pipe was placed into each borehole for groundwater sample collection. One groundwater grab sample was collected from each borehole using polyethylene tubing and a stainless steel foot valve. No sheen or separate phase layers of petroleum hydrocarbons were observed and no petroleum hydrocarbon or solvent odors were detected in water from any of the boreholes. All water samples were transferred to 1-liter amber bottles and 40-milliliter glass Volatile Organic Analysis (VOA) vials containing hydrochloric acid preservative which were sealed with Teflon-lined screw caps. The VOAs were overturned and tapped to ensure that air bubbles were not present. The samples were labeled and then placed into a cooler with ice pending delivery to the laboratory. Chain of custody procedures were followed for all sample handling.

All drilling equipment was steam cleaned prior to use in each borehole. All sampling equipment was cleaned with an Alconox solution followed by a clean water rinse prior to use in each borehole. Following completion of sample collection activities, the boreholes were filled with neat cement grout. Soil and water generated during drilling were stored in labeled drums at the subject site pending characterization and disposal.

On October 27, 2004 monitoring wells MW1 and MW2 were monitored and sampled by P&D personnel. The monitoring wells were monitored for depth to water to the nearest 0.01 foot using an electric water level indicator. Depth to water in well MW2 was measured prior to removal of the hydrocarbon-absorbent sock. In addition, the monitoring wells were monitored for the presence of free product and sheen using a transparent bailer. No free product or sheen were observed on the water in well MW1. A separate phase layer measuring 1/16 inch in thickness was measured in well MW2 using a steel tape with water-finding and product-finding paste. The measured depth to water in wells MW1 and MW2 on October 27, 2004 was 22.89 and 16.18 feet, respectively.

Prior to sampling well MW1, the well was purged of a minimum of three casing volumes of water. Well MW1 was sampled first. During purging operations, the field parameters of electrical conductivity, temperature and pH were monitored. Once a minimum of three casing volumes had been purged, and the field parameters were observed to stabilize, a water sample was collected from well MW1 using a clean Teflon bailer. Well MW2 was not purged prior to sampling in an effort to obtain a separate phase hydrocarbon layer sample. The water samples were transferred to 40-milliliter glass Volatile Organic Analysis (VOA) vials containing hydrochloric acid preservative and into one-liter amber glass bottles, which were sealed with Teflon-lined screw caps. The VOA vials were overturned and tapped to ensure that no air bubbles were present. The sample containers were then transferred to a cooler with ice, pending delivery to the laboratory. Chain of custody procedures were observed for all sample handling. Records of the field parameters measured during well purging are attached with this report. Following sample collection, the hydrocarbon-absorbent sock was placed back into well MW2. Purged water was stored in a labeled drum at the site pending characterization and disposal.

GEOLOGY AND HYDROGEOLOGY

Review of Figure 1 shows that the site is located near the top of a northeasterly-trending interfluvial (ridge-like) structure. The topography in the area surrounding the site slopes to the east and south. Peralta Creek is located approximately 400 feet to the east and southeast of the subject site. During a site visit on January 18, 2002, portions of the creek directly to the east of the site were observed to be lined with concrete. Portions of the creek to the southeast of the site at the Peralta Hacienda Historic Park (south of Davis Street) were observed to not be lined with concrete. Although the site vicinity topography slopes to the east and south, the area between Coolidge Avenue (bordering the property on the west) and 34th Avenue (the first street encountered to the east of the site) is remarkably flat. Almost all of the change in elevation between the site and Peralta Creek occurs to the east of 34th Avenue. Although the groundwater flow direction at the site is unknown, based on these observations, the anticipated groundwater flow direction at the site is toward the southeast, towards Peralta Creek.

Based on review of regional geologic maps from U. S. Geological Survey Professional Paper 943, "Flatland Deposits - Their Geology and Engineering Properties and Their Importance to Comprehensive Planning," by E. J. Helley and K. R. Lajoie, 1979, the materials underlying the subject site and it's immediate vicinity consist of Late Pleistocene alluvium (Qpa). Late Pleistocene alluvium is described as weakly consolidated, slightly weathered, poorly sorted, irregularly interbedded clay, silt, sand, and gravel.

Review of the boring logs shows that the subsurface materials encountered in the boreholes consisted predominantly of clay, silty clay, and silt, with at least one layer of clayey sand, silty sand, or sand measuring from 5 to 10 feet in thickness encountered in each borehole. Groundwater was initially encountered while drilling at approximately the same depth in boreholes B3, B4, B6 and B7 (40.0, 39.5, 40.0 and 45.0 feet below the ground surface, respectively). This depth at which groundwater was initially encountered during drilling at these locations is consistent with the depth at which groundwater was initially encountered by others during the drilling of borehole B1 (42.0 feet below the ground surface). Groundwater was subsequently measured in boreholes B3, B4, B6 and B7 prior to grouting at depths of 24.8, 39.0, 27.8 and 33.0. These subsequent water level measurements suggest that water levels in B3 and B6 were approaching static water levels similar to the static water level encountered in well MW1 (formerly B1) at the site (22.89 feet below the top of the well casing on October 27, 2004) and that the water levels in B4 and B7 may not have had adequate time to equilibrate to allow adequate evaluation of static water levels prior to grouting.

In borehole B5, groundwater was initially encountered while drilling at a depth of 25.0 feet, and was subsequently measured at a depth of 10.3 feet below the ground surface prior to grouting the borehole. This shallower depth of groundwater in borehole B5 is consistent with the measured depth to groundwater reported by others of 18.5 feet 2 hours after drilling borehole B2, and the static water level encountered in well MW2 (formerly borehole B2) of 16.18 feet on October 27, 2004.

Based on depths at which water is encountered in the site vicinity, there appears to be a perched water table in the site vicinity. The perched water table was encountered by others at well MW2 and during the current investigation at borehole B5. The perched water table was not encountered at any of the other drilling locations.

LABORATORY RESULTS

All of the soil and groundwater samples collected from boreholes B3 through B7 and the water samples from wells MW1 and MW2 were analyzed for Total Petroleum Hydrocarbons as Gasoline (TPH-G), Total Petroleum Hydrocarbons as Diesel (TPH-D), Total Petroleum Hydrocarbons as Motor Oil (TPH-MO), and Total Petroleum Hydrocarbons as Stoddard Solvent (TPH-SS) using EPA Method 8021 and Modified EPA Method 8015 at McCampbell. In addition, all of the water samples and soil samples B7-29.5, B7-39.5 and B7-44.5 were analyzed for VOCs by EPA Method 8260B at McCampbell. Copies of the laboratory analytical reports are attached with this report.

The laboratory analytical results for the soil samples show that in boreholes B3 through B6 no analytes were detected, with the exception of TPH-D and TPH-MO in borehole B3 at a depth of 4.5 feet at concentrations of 1.5 and 5.7 mg/kg, respectively; TPH-MO in B4 at a depth of 24.0

feet at a concentration of 6.9 mg/kg; and TPH-MO in B6 at a depth of 4.5 feet at a concentration of 5.6 mg/kg. Review of the laboratory reports shows that the results reported as TPH-D in the soil sample from B3 at a depth of 4.5 feet are identified as oil-range compounds. In borehole B7 petroleum hydrocarbons were not detected in soil with the exception of samples at depths of 4.5, 14.5 and 44.5 feet. In the sample from a depth of 4.5 feet TPH-D and TPH-MO were detected at concentrations of 3.1 and 31 mg/kg, and in the sample from a depth of 14.5 feet TPH-D and TPH-MO were detected at concentrations of 4.3 and 39 mg/kg, respectively. Review of the laboratory reports shows that the results reported as TPH-D in the soil samples from a depth of 4.5 feet and 14.5 feet are identified as oil-range compounds. In the sample from a depth of 44.5 feet, TPH-G, TPH-SS and TPH-D were detected at concentrations of 13, 28 and 5.5 mg/kg. Review of the laboratory reports shows that the TPH-G and TPH-D results are identified as consisting of Stoddard Solvent. No VOCs were detected in any of the soil samples. The laboratory analytical results of the soil samples are summarized in Table 1.

The laboratory analytical results of the groundwater grab samples collected from the boreholes show that in boreholes B3 and B6 TPH-G, TPH-SS, TPH-D, and TPH-MO were not detected. In borehole B3 the VOCs MTBE, toluene and xylenes were detected at concentrations of 0.0010, 0.00080 and 0.0014 mg/L and in borehole B6 the VOC cis-1,2-dichloroethene was detected at a concentration of 0.0026 mg/L. In boreholes B4 and B5 TPH-G and TPH-SS were not detected. However, in B4 TPH-D and TPH-MO were detected at concentrations of 0.13 and 0.42 mg/L, and in B5 TPH-D and TPH-MO were detected at concentrations of 0.20 and 0.87 mg/L, respectively. Review of the laboratory reports shows that the results reported as TPH-D in the both water samples from B4 and B5 are identified by the laboratory as oil-range compounds. In B4 and B5 no VOCs were detected with the exception of 0.0026 mg/L MTBE in B4. In B7, TPH-G, TPH-SS, TPH-D, and TPH-MO were detected at concentrations of 1.8, 2.3, 96 and 17 mg/L, respectively. Review of the laboratory reports shows that the results reported as diesel are identified by the laboratory as Stoddard Solvent, and that an immiscible sheen was present on the sample. Various petroleum hydrocarbon VOCs were detected in the water sample from B7 at concentrations ranging from 0.0080 to 0.11 mg/L, in addition to trans-1,2-dicholorethene, cis-1,2-dichloroethene, and vinyl chloride at concentrations of 0.027, 0.36 and 0.034 mg/L, respectively. The laboratory analytical results of the groundwater grab samples from the boreholes are summarized in Table 2.

The laboratory analytical results of the groundwater grab samples collected from the two groundwater monitoring wells show that no analytes were detected in well MW1 with the exception of 0.00078 mg/L chloroform. In well MW2, TPH-G, TPH-SS, and TPH-D were detected at concentrations of 0.32, 0.5, and 0.28 mg/L, respectively, and the only VOC detected was 3.3 mg/L cis-1,2-dichloroethene (detection limits were elevated for all VOC analytes for this sample because of a dilution factor of 500). Review of the laboratory reports shows that the results reported as gasoline are identified by the laboratory as Stoddard Solvent-range compounds, and that the results reported as diesel are identified by the laboratory as both Stoddard Solvent-range compounds and oil-range compounds. In addition, the laboratory identified a sheen on the water sample. The laboratory analytical results of the groundwater samples from the two wells are summarized in Table 3.

A hand written letter from the laboratory that discusses the chromatograms for the water samples from well MW2 and boreholes B4, B5 and B7, and which also discusses the chromatogram of the soil sample collected at the 44.5-foot depth in borehole B7 is attached with this report. The letter

concludes that the chromatograms of the petroleum hydrocarbons detected in water samples B4 and B5 resemble hydraulic oil, and are different from the petroleum hydrocarbons detected in water samples from well MW2 and borehole B7 and the 44.5-foot depth soil sample from borehole B7, which resemble Stoddard Solvent.

DISCUSSION AND RECOMMENDATIONS

The results of soil and water samples collected from boreholes B3 through B7 suggest that a Stoddard Solvent groundwater plume originates at the former UST pit on Davis Street and extends in a southeasterly direction from the site, with the plume oriented approximately parallel to Davis Street. The extent of Stoddard Solvent impact to soil in the source area is presently unknown, and the extent of the Stoddard Solvent in groundwater is presently not defined. Preliminary groundwater iso-concentration contours for 10 and 100 mg/L TPH-D (identified by the laboratory as TPH-SS) are shown on Figure 3.

Water levels in the two existing groundwater monitoring wells show that a perched water table is present at or near the site. The known extent of the perched water table is limited to well MW2 and borehole B5. Review of the boring logs suggest that the perched water table does not appear to extend to boreholes B3, B4, B6 or B7. Based on field observations and the laboratory results of water samples from well MW2, the perched water table is impacted with separate phase Stoddard Solvent. The absence of Stoddard Solvent in soil samples from surrounding soil borings B1 (now well MW1), B3, B4, B5, B6, and B7 also suggests that the known extent of Stoddard Solvent impact to the perched water table is presently limited to the vicinity of well MW2. The relatively low concentrations of petroleum hydrocarbons detected in the soil samples from boreholes B3, B4 and borehole B7 at depths of 4.5 and 14.5 feet are identified as hydraulic oil and not Stoddard Solvent. The petroleum hydrocarbons detected in these samples are interpreted to be associated with either petroleum-impacted surface water infiltration or possibly heating oil tanks associated with the many older residences in the area.

Stoddard Solvent has only been encountered in groundwater in well MW2 and borehole B7. Between the former UST pit and borehole B7 the Stoddard Solvent has moved vertically downward from the perched water table (static water level of approximately 16 feet below the ground surface) to the regional water table (static water level of approximately 23 feet below the ground surface). At borehole B2 (now well MW2) strong Stoddard Solvent odors were detected between the depths of 10 and 16.5 feet (the B2 boring log interval of 10.0 to 21.5 feet below the ground surface is described as clayey sand and gravelly clayey sand). At borehole B7 strong Stoddard Solvent odors were detected between the depths of 37.5 feet and the total depth explored of 45.0 feet. The absence of Stoddard Solvent in well MW1 and boreholes B3 and B5 indicates that the upgradient extent of Stoddard Solvent has been defined, and the absence of Stoddard Solvent in boreholes B4 and B6 indicates that the transgradient extent of Stoddard Solvent has been defined.

Although PCE and TCE have not been detected in any samples, cis-1,2-dichloroethene was detected in well MW2 and in boreholes B6 and B7 at concentrations of 3.3, 0.00067 and 0.36 mg/L, respectively. The near-detection limit concentration of cis-1,2-dichloroethene in B6 relative to the concentrations at MW2 and B7 suggests a potential source in the UST pit vicinity and that the distribution of cis-1,2-dichloroethene may be nearly coincidental in location with the

distribution shown in Figure 3 for TPH-D in groundwater that was identified by the laboratory as Stoddard Solvent.

The absence of petroleum hydrocarbons in soil samples from borehole B1 (now well MW1) shows that the extent of petroleum hydrocarbons in soil has been defined towards the end of the UST pit closest to Coolidge Avenue. The presence of Stoddard Solvent at concentrations as high as 2100 mg/kg between the depths of 10 and 20 feet in borehole B2 indicates that the extent of the Stoddard Solvent in soil in the source area has not yet been completely defined.

P&D recommends that two boreholes be drilled to evaluate the groundwater plume width and the extent of the perched water table (proposed boreholes B8 and B9 on Figure 3); that two boreholes be drilled to evaluate the groundwater plume length and width relative to Peralta Creek (proposed boreholes B10 and B11 on Figure 3); that two boreholes be drilled to evaluate the extent of Stoddard Solvent in soil in the vicinity of the former UST pit and to evaluate the extent of the perched water table (proposed boreholes B12 and B13 on Figure 3); and that one borehole be drilled to evaluate soil and groundwater at an additional source area at the site identified on Figure 2 as the perc unit and to also evaluate the extent of the perched water table in this area (proposed borehole B14 on Figure 3). Analysis of soil and water samples from the proposed boreholes for EPA Method 8260B compounds will also allow additional investigation of PCE, TCE and cis-1,2-dichloroethene.

DISTRIBUTION

Copies of this report should be sent to Mr. LeRoy Griffin of the City of Oakland Fire Department and Mr. Amir Gholami of the ACEH. Copies of this report should be accompanied by a transmittal letter signed by an authorized representative of Snow Cleaners.

LIMITATIONS

This report was prepared solely for the use of Snow Cleaners. The content and conclusions provided by P&D in this assessment are based on information collected during our investigation, which may include, but not be limited to, visual site inspections; interviews with the site owner, regulatory agencies and other pertinent individuals; review of available public documents; subsurface exploration and our professional judgment based on said information at the time of preparation of this document. Any subsurface sample results and observations presented herein are considered to be representative of the area of investigation; however, geological conditions may vary between borings and may not necessarily apply to the general site as a whole. If future subsurface or other conditions are revealed which vary from these findings, the newly-revealed conditions must be evaluated and may invalidate the findings of this report.

This report is issued with the understanding that it is the responsibility of the owner, or his representative, to ensure that the information contained herein is brought to the attention of the appropriate regulatory agencies, where required by law. Additionally, it is the sole responsibility of the owner to properly dispose of any hazardous materials or hazardous wastes left onsite, in accordance with existing laws and regulations.

This report has been prepared in accordance with generally accepted practices using standards of care and diligence normally practiced by recognized consulting firms performing services of a similar nature. P&D is not responsible for the accuracy or completeness of information provided by other individuals or entities used in this report. This report presents our professional judgment based upon data and findings identified in this report and interpretation of such data based upon our experience and background, and no warranty, either express or implied, is made. The conclusions presented are based upon the current regulatory climate and may require revision if future regulatory changes occur.

Should you have any questions, please do not hesitate to contact us at (510) 658-6916.

Sincerely,

P&D Environmental

Paul H. King

Paul H. King
President
California Registered Geologist #5901
Expires: 12/31/05

Attachments: Tables 1, 2, and 3
Site Location Map (Figure 1)
Site Vicinity Map (Figure 2)
Site Vicinity Map (Figure 3)
Boring Logs
Groundwater Monitoring/Well Purging Data Sheets
Laboratory Analytical Reports
Chain of Custody Documentation

PHK/wrw/tb
0298.R2

TABLE 1
SUMMARY OF LABORATORY ANALYTICAL RESULTS
SOIL SAMPLES - BOREHOLE B3
(Samples Collected September 22 and October 13, 2004)

Sample Name	TPH-G	TPH-SS	TPH-D	TPH-MO
B3-4.5	ND<1.0	ND<1.0	1.5,a	5.7
B3-9.5	ND<1.0	ND<1.0	ND<1.0	ND<5.0
B3-14.5	ND<1.0	ND<1.0	ND<1.0	ND<5.0
B3-19.5	ND<1.0	ND<1.0	ND<1.0	ND<5.0
B3-24.5	ND<1.0	ND<1.0	ND<1.0	ND<5.0
B3-29.5	ND<1.0	ND<1.0	ND<1.0	ND<5.0
B3-34.5	ND<1.0	ND<1.0	ND<1.0	ND<5.0
B3-39.5	ND<1.0	ND<1.0	ND<1.0	ND<5.0
B4-9.5	ND<1.0	ND<1.0	ND<1.0	ND<5.0
B4-14.5	ND<1.0	ND<1.0	ND<1.0	ND<5.0
B4-19.5	ND<1.0	ND<1.0	ND<1.0	ND<5.0
B4-24.0	ND<1.0	ND<1.0	ND<1.0	6.9
B4-29.5	ND<1.0	ND<1.0	ND<1.0	ND<5.0
B4-34.5	ND<1.0	ND<1.0	ND<1.0	ND<5.0
B4-39.5	ND<1.0	ND<1.0	ND<1.0	ND<5.0
B4-43-5	ND<1.0	ND<1.0	ND<1.0	ND<5.0
B5-9.5	ND<1.0	ND<1.0	ND<1.0	ND<5.0
B5-14.5	ND<1.0	ND<1.0	ND<1.0	ND<5.0
B5-19.5	ND<1.0	ND<1.0	ND<1.0	ND<5.0
B6-4.5	ND<1.0	ND<1.0	ND<1.0	5.6
B6-9.5	ND<1.0	ND<1.0	ND<1.0	ND<5.0
B6-14.5	ND<1.0	ND<1.0	ND<1.0	ND<5.0
B6-19.5	ND<1.0	ND<1.0	ND<1.0	ND<5.0
B6-24.0	ND<1.0	ND<1.0	ND<1.0	ND<5.0
B6-29.5	ND<1.0	ND<1.0	ND<1.0	ND<5.0

Notes:
TPH-G = Total Petroleum Hydrocarbons as Gasoline.
TPH-SS = Total Petroleum Hydrocarbons as Stoddard Solvent.
TPH-D = Total Petroleum Hydrocarbons as Diesel.
TPH-MO = Total Petroleum Hydrocarbons as Motor Oil.
ND = Not Detected.
a = Laboratory analytical report note: results reported as diesel consist of oil-range compounds.
Results in mg/kg, unless otherwise indicated.

TABLE 1 (CONT.)
SUMMARY OF LABORATORY ANALYTICAL RESULTS
SOIL SAMPLES - BOREHOLE B7
(Samples Collected September 22, 2004)

Sample Name	TPH-G	TPH-SS	TPH-D	TPH-MO	VOCs by 8260
B7-4.5	ND<1.0	ND<1.0	3.1,a	31	--
B7-9.5	ND<1.0	ND<1.0	ND<1.0	ND<5.0	--
B7-14.5	ND<1.0	ND<1.0	4.3,a	39	--
B7-19.5	ND<1.0	ND<1.0	ND<1.0	ND<5.0	--
B7-24.5	ND<1.0	ND<1.0	ND<1.0	ND<5.0	--
B7-29.5	ND<1.0	ND<1.0	ND<1.0	ND<5.0	ND
B7-34.5	ND<1.0	ND<1.0	ND<1.0	ND<5.0	--
B7-39.5	ND<1.0	ND<1.0	ND<1.0	ND<5.0	ND
B7-44.5	13,b	28	5.5,c	ND<5.0	ND

Notes:
TPH-G = Total Petroleum Hydrocarbons as Gasoline.
TPH-SS = Total Petroleum Hydrocarbons as Stoddard Solvent.
TPH-D = Total Petroleum Hydrocarbons as Diesel.
TPH-MO = Total Petroleum Hydrocarbons as Motor Oil.
VOCs = Volatile Organic Compounds.
ND = Not Detected.
-- = Not Analyzed.
a = Laboratory analytical report note: results reported as diesel consist of oil-range compounds.
b = Laboratory analytical report note: results reported as gasoline consist of Stoddard Solvent/mineral spirit.
c = Laboratory analytical report note: results reported as diesel consist of Stoddard Solvent/mineral spirit.
Results in mg/kg, unless otherwise indicated.

TABLE 2
SUMMARY OF LABORATORY ANALYTICAL RESULTS
BOREHOLE GROUNDWATER SAMPLES
(Samples Collected September 22 and October 13, 2004)

Sample Name	TPH-G	TPH-SS	TPH-D	TPH-MO	VOCs by 8260
B3-water	ND<0.05	ND<0.05	ND<0.05	ND<0.25	ND, except: MTBE = 0.0010 toluene= 0.00080 xylenes= 0.0014
B4-water	ND<0.05	ND<0.05	0.13,a,d, e	0.42	ND, except: MTBE = 0.0026
B5-water	ND<0.05	ND<0.05	0.20,a	0.87	ND
B6-water	ND<0.05	ND<0.05	ND<0.05	ND<0.25	ND, except: cis-1,2-dichloroethene= 0.00067
B7-water	1.8	2.3	96,c,d,f	17	ND, except: n-butyl benzene= 0.0080 sec-butyl benzene= 0.012 trans-1,2-dichloroethene= 0.027 cis-1,2-dichloroethene= 0.36 ethylbenzene= 0.028 isopropylbenzene= 0.017 n-propyl-benzene=0.035 toluene= 0.014 1,2,4-trimethylbenzene= 0.11 1,3,5-trimethylbenzene= 0.037 vinyl chloride= 0.034 xylenes= 0.066

Notes:

TPH-D = Total Petroleum Hydrocarbons as Diesel.
TPH-MO = Total Petroleum Hydrocarbons as Motor Oil.
TPH-G = Total Petroleum Hydrocarbons as Gasoline.
TPH-SS = Total Petroleum Hydrocarbons as Stoddard Solvent.
VOCs = Volatile Organic Compounds.
ND = Not Detected.
a = Laboratory analytical report note: results reported as diesel consist of oil-range compounds.
c = Laboratory analytical report note: results reported as diesel consist of Stoddard Solvent/mineral spirit.
d = Laboratory analytical report note: results reported as diesel consist of unrecognizable diesel-range compounds.
e = Laboratory analytical report note: one to a few isolated peaks present.
f = Laboratory analytical report note: lighter than water immiscible sheen/product is present.

Results in mg/L, unless otherwise indicated.

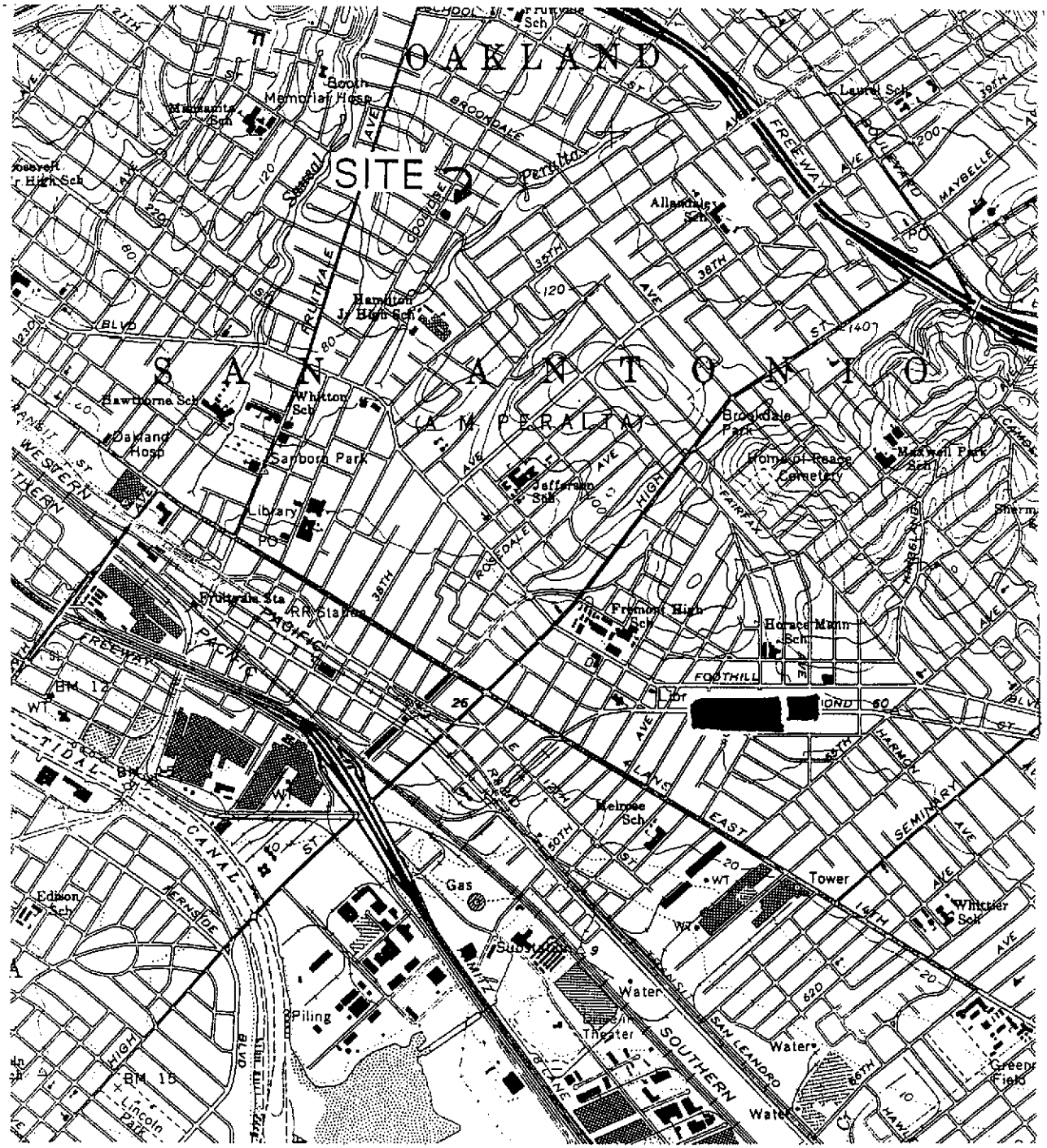
TABLE 3
SUMMARY OF LABORATORY ANALYTICAL RESULTS
GROUNDWATER MONITORING WELL SAMPLES
(Samples Collected October 27, 2004)

Sample Name	TPH-G	TPH-SS	TPH-D	TPH-MO	VOCs by 8260
MW1	ND<0.05	ND<0.05	ND<0.05	ND<0.25	ND, except: Chloroform = 0.00078
MW2	320,b	500	280,a,c,f	ND<50	ND*, except: cis-1,2-dichloroethene = 3.3

Notes:

TPH-D = Total Petroleum Hydrocarbons as Diesel.
TPH-MO = Total Petroleum Hydrocarbons as Motor Oil.
TPH-G = Total Petroleum Hydrocarbons as Gasoline.
TPH-SS = Total Petroleum Hydrocarbons as Stoddard Solvent.
VOCs = Volatile Organic Compounds.
ND = Not Detected.
a = Laboratory analytical report note: results reported as diesel consist of oil-range compounds.
b = Laboratory analytical report note: results reported as gasoline consist of Stoddard Solvent/mineral spirit.
c = Laboratory analytical report note: results reported as diesel consist of Stoddard Solvent/mineral spirit.
f = Laboratory analytical report note: lighter than water immiscible sheen/product is present.
* = MW2 VOC detection limits are all increased because of a sample dilution factor of 500.
Results in mg/L, unless otherwise indicated.

P & D ENVIRONMENTAL
A Division of Paul H. King, Inc.
4020 Panama Court
Oakland, CA 94611
(510) 658-6916

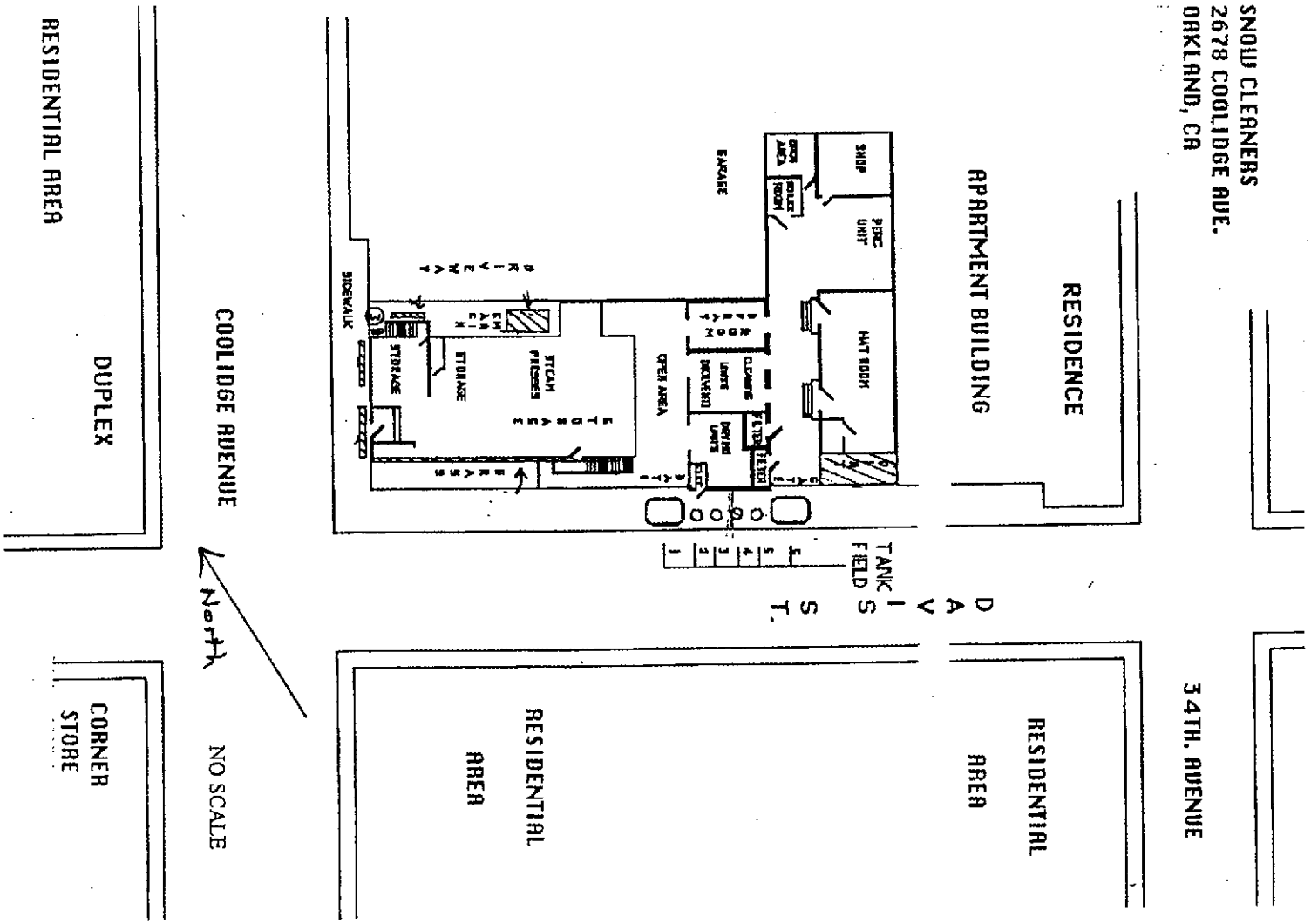


Base Map From
U.S. Geological Survey
Oakland East, Calif.
7.5 Minute Quadrangle
Photorevised 1980

Figure 1
SITE LOCATION MAP
2678 Coolidge Ave.
Oakland, CA

P & D ENVIRONMENTAL

A Division of Paul H. King, Inc.
4020 Panama Court
Oakland, CA 94611
(510) 658-6916

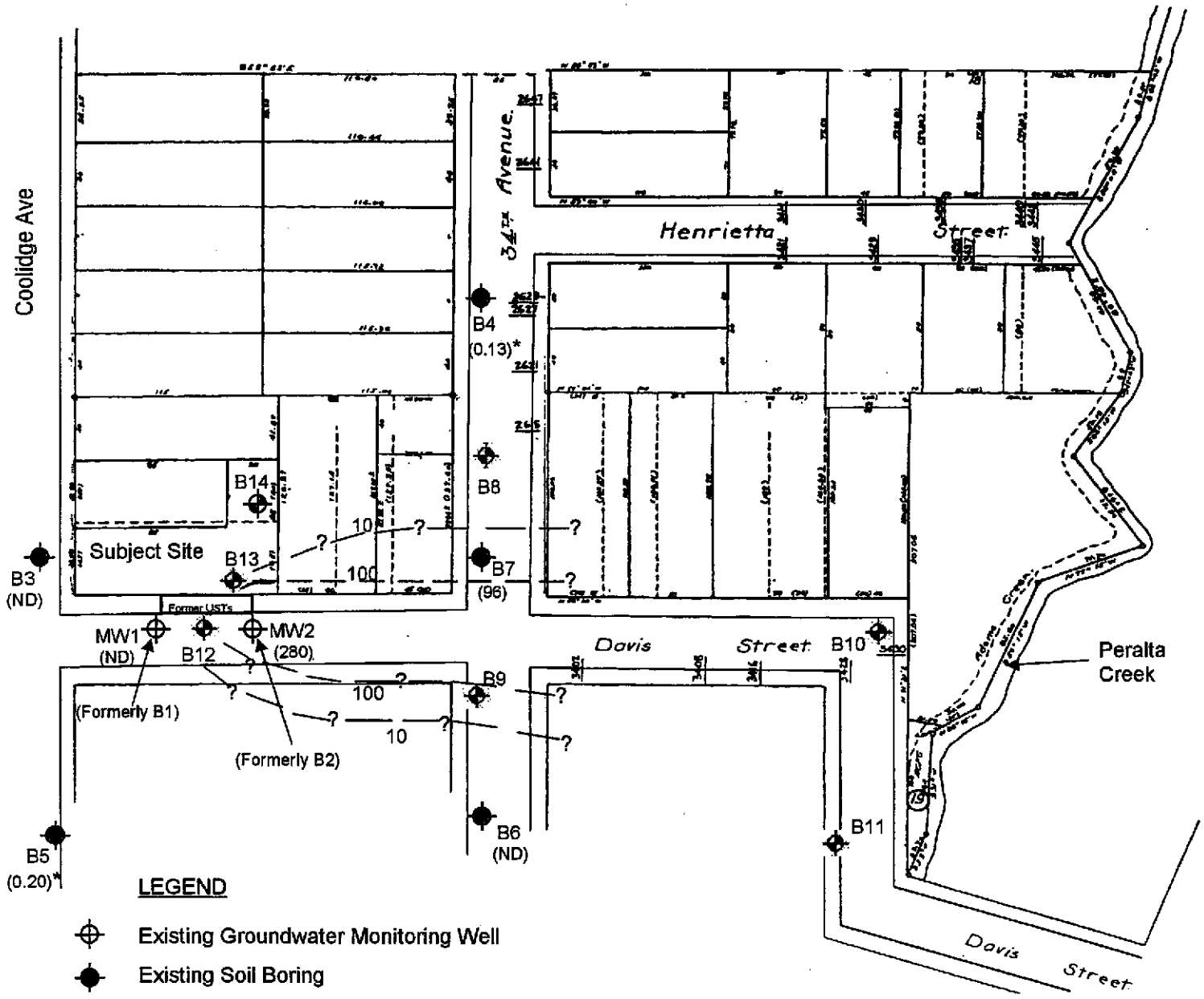


Base Map From
Underground Tank Closure/
Modification Plans
June 16, 1990

Figure 2
SITE VICINITY MAP
2678 Coolidge Ave
Oakland, CA

P & D ENVIRONMENTAL

A Division of Paul H. King, Inc.
4020 Panama Court
Oakland, CA 94611
(510) 658-6916



LEGEND

- Existing Groundwater Monitoring Well
- Existing Soil Boring
- Proposed Soil Boring
- (96) TPH-D in groundwater in mg/L identified by lab as Stoddard Solvent
- * Lab Identified results as oil and not Stoddard Solvent
- 100 TPH-D Groundwater Iso-concentration Contour in mg/L

Base Map From
Parcel Quest
Assesor's Parcel Maps
Alameda County Map Disc
July 2001

0 40 80
Scale in Feet

North

Figure 3
SITE VICINITY MAP
2678 Coolidge Ave
Oakland, CA

P&D ENVIRONMENTAL

BORING NO.: B3	PROJECT NO.: 0298	PROJECT NAME: Snow Cleaners	
BORING LOCATION: E side Coolidge Ave 35' N of Davis St		ELEVATION AND DATUM: NONE	
DRILLING AGENCY: VIRONEX	DRILLER: Tim	DATE & TIME STARTED: 9/22/04	DATE & TIME FINISHED: 9/22/04
DRILLING EQUIPMENT: Track-mounted Geoprobe 6610DT			
COMPLETION DEPTH: 40.0 FEET	BEDROCK DEPTH: NONE ENCOUNTERED	LOGGED BY: WRW	CHECKED BY:
FIRST WATER DEPTH: 40.0 FEET	NO. OF SAMPLES: 8 Soil, 1 Water		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	WELL CONSTRUCTION LOG	BLOW COUNT PER 6"	PID	REMARKS
	4" Asphalt 12" Baserock		No Well Con-structed		0	Borehole continuously cored using a 5-foot long 2-inch O.D. Geoprobe Macrocore barrel sampler. Samples collected in 4-foot intervals. The sampler was lined with 4.8-foot long 1 3/4 inch O.D. cellulose acetate tubes.
	1.3 to 6.0 ft. Gray silty clay (CL); orange mottling, stiff, moist. No Petroleum Hydrocarbon (PHC) odor.	CL			0	
5			B3-4.5		0	
	6.0 to 8.5 ft. Medium brown clay (CL); coarse sand, stiff, slightly moist. No PHC odor.	CL			0	
	8.5 to 15.5 ft. Light green clayey sand (SC); gravel <1" dia., slightly moist. No PHC odor.	SC	B3-9.5		0	
10					0	
15			B3-14.5		0	
	15.5 to 25.0 ft. Medium brown silty clay (CL); gray mottling, very stiff, slightly moist. No PHC odor.	CL			0	
20			B3-19.5		0	
					0	
25		▼	B3-24.5		0	Water at 24.8 feet at 12:55 PM (after water sample collection).
	25.0 to 40.0 ft. Brown clayey silt (ML); stiff, moist. No PHC odor.	ML			0	
					0	Water at 29.0 feet at 12:15 PM (immediately after setting casing)
30			B3-29.5		0	

RGA ENVIRONMENTAL, INC.

BORING NO.: B3	PROJECT NO.: 0298	PROJECT NAME: Snow Cleaners	
BORING LOCATION: E side Coolidge Ave 35' N of Davis St		ELEVATION AND DATUM: NONE	
DRILLING AGENCY: Vironex	DRILLER: Tim	DATE & TIME STARTED: 9/22/04	DATE & TIME FINISHED: 9/22/04
DRILLING EQUIPMENT: Track-mounted Geoprobe 6610DT			
COMPLETION DEPTH: 40.0 FEET	BEDROCK DEPTH: NONE ENCOUNTERED	LOGGED BY: WRW	CHECKED BY:
FIRST WATER DEPTH: 40.0 FEET	NO. OF SAMPLES: 8 Soil, 1 Water		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	WELL CONSTRUCTION LOG	BLOW COUNT PER 6"	PID	REMARKS
30	Brown clayey silt (ML); stiff, moist. No PHC odor.	CL	No Well Constructed		0	
35			B3-34.5		0	
					0	
40		▽	B3-39.5		0	Groundwater first encountered at 40.0 ft. 9/22/04.
45						Borehole terminated at 40.0 foot depth, 9/22/04. A temporary 1-inch diameter slotted PVC pipe was placed in the borehole for water sample collection. A groundwater sample was collected using a polyethylene tube with a stainless steel foot valve. No sheen or PHC odor in water sample. Borehole grouted 9/22/04 using neat cement.
50						
55						
60						

P&D ENVIRONMENTAL

BORING NO.: B4 PROJECT NO.: 0298 PROJECT NAME: Snow Cleaners

BORING LOCATION: W side 34th Ave 185' N of Davis St ELEVATION AND DATUM: NONE

DRILLING AGENCY: VIRONEX DRILLER: Brian

DRILLING EQUIPMENT: Track-mounted Geoprobe 6610DT

COMPLETION DEPTH: 44.0 FEET BEDROCK DEPTH: NONE ENCOUNTERED

FIRST WATER DEPTH: 39.5 FEET NO. OF SAMPLES: 8 Soil, 1 Water

DATE & TIME STARTED:	DATE & TIME FINISHED:
10/13/04	10/13/04

LOGGED BY:	CHECKED BY:
WRW	

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	WELL CONSTRUCTION LOG	BLOW COUNT PER 6"	PID	REMARKS
	3" Asphalt 5" Baserock (fill)		No Well Constructed			Borehole continuously cored using a 5-foot long 2-inch O.D. Geoprobe Macrocore barrel sampler. Samples collected in 4-foot intervals. The sampler was lined with 4.8-foot long 1 3/4 inch O.D. cellulose acetate tubes.
	8 in. to 5.0 ft. Medium to light brown silty clay (CL); medium stiff, slightly moist. No Petroleum Hydrocarbon (PHC) odor.	CL			0	
5					0	
	5.0 to 10.5 ft. Medium brown sandy clay (CL); orange mottling, medium stiff to soft, moist. No PHC odor.	CL			0	
10			B4-9.5		0	
	10.5 to 16.0 ft. Orangish brown silty sand (SM); gravel (<1/2 in. in diameter), white and red mottling, loose, slightly moist. No PHC odor.	SM			0	
15			B4-14.5		0	
	16.0 to 21.0 ft. Light gray silty clay (CL); orange mottling, very stiff, slightly moist. No PHC odor.	CL			0	
20			B4-19.5		0	
	21.0 to 44.0 ft. Medium to light brown clayey silt (ML); medium stiff, slightly moist. No PHC odor.	ML				Sampling depth shifted up 0.5 ft., due to crushed sample tube end.
25			B4-24.0		0	
	26.0 to 28.0 ft., soft and very moist. No PHC odor.					Hard drilling and expansive clay 25.0 to 40.0 ft.
	28.0 to 38.0 ft. very stiff and slightly moist.					No PID readings below 25.0 ft depth because PID was broken
30			B4-29.5			

P&D ENVIRONMENTAL

BORING NO.: B4	PROJECT NO.: 0298	PROJECT NAME: Snow Cleaners	
BORING LOCATION: W side 34th Ave 185' N of Davis St		ELEVATION AND DATUM: NONE	
DRILLING AGENCY: Vironex	DRILLER: Brian	DATE & TIME STARTED: 10/13/04	DATE & TIME FINISHED: 10/13/04
DRILLING EQUIPMENT: Track-mounted Geoprobe 6610DT			
COMPLETION DEPTH: 44.0 FEET	BEDROCK DEPTH: NONE ENCOUNTERED	LOGGED BY: WRW	CHECKED BY:
FIRST WATER DEPTH: 39.5 FEET	NO. OF SAMPLES: 8 Soil, 1 Water		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	WELL CONSTRUCTION LOG	BLOW COUNT PER 6"	PID	REMARKS
30	21.0 ft. to 44.0 ft. Medium to light brown clayey silt (ML); medium stiff, slightly moist. No PHC odor. 28.0 to 38.0 ft., very stiff and slightly moist.	ML	No Well Constructed B4-34.5			
35	38.0 to 40.0 ft., soft and saturated.					Water first encountered at 39.5 ft. at 10:40 AM, 10/13/04. Waited for water to enter borehole. Water at 39.0 ft. at 10:45 AM. Not enough water subsequently entered the borehole for a sample.
40	40.0 to 44.0 ft., very stiff and moist.		B4-39.5 B4-43.5			Borehole deepened to 44.0 ft. Water was then measured at 39.0 ft.
45						Borehole terminated at 44.0 foot depth, 10/13/04. A temporary 1-inch diameter slotted PVC pipe was placed in the borehole for groundwater sample collection. A groundwater sample was collected using a polyethylene tube with a stainless steel foot valve. No sheen or PHC odor in water sample. Borehole sealed with Bentonite from 44.0 to 41.0 ft. depth and grouted from 41.0 ft. to surface using neat cement, 10/13/04.
50						
55						
60						

P&D ENVIRONMENTAL

BORING NO.: B5	PROJECT NO.: 0298	PROJECT NAME: Snow Cleaners	
BORING LOCATION: E side Coolidge Ave 90' S of Davis St		ELEVATION AND DATUM: NONE	
DRILLING AGENCY: VIRONEX	DRILLER: Brian	DATE & TIME STARTED: 10/13/04	DATE & TIME FINISHED: 10/13/04
DRILLING EQUIPMENT: Track-mounted Geoprobe 6610DT			
COMPLETION DEPTH: 25.0 FEET	BEDROCK DEPTH: NONE ENCOUNTERED	LOGGED BY: WRW	CHECKED BY:
FIRST WATER DEPTH: 25.0 FEET	NO. OF SAMPLES: 3 Soil, 1 Water		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	WELL CONSTRUCTION LOG	BLOW COUNT PER 6"	PID	REMARKS
	4" Asphalt 4" Baserock (fill)		No Well Constructed			
	8 in. to 5.0 ft. Dark gray and black clayey silt (ML); soft, slightly moist. No Petroleum Hydrocarbon (PHC) odor.	ML			0	Borehole continuously cored using a 5-foot long 2-inch O.D. Geoprobe Macrocore barrel sampler. Samples collected in 4-foot intervals. The sampler was lined with 4.8-foot long 1 3/4 inch O.D. cellulose acetate tubes.
5					0	
	5.0 to 11.0 ft. Green sand (SP); some clayey sand layers measuring less than 6 inches thick; loose, slightly moist. No PHC odor.	SP			0	
10			B5-9.5		0	Water measured at 10.3 ft. at 1:05 PM, 10/13/04 after having drilled to 25.0 ft depth.
	11.0 to 17.5 ft. Light brown clay (CL); medium stiff, slightly moist. No PHC odor.	CL			0	
15			B5-14.5		0	
	17.5 to 23.0 ft. Brown medium-grained sand (SP); loose, wet to saturated. No PHC odor.	SP			0	Saturated conditions from 18 ft. to total depth.
20			B5-19.5		0	
	23.0 to 23.2 ft. Black gravel with sand (GP); loose, saturated. No PHC odor.	SW	<GP			Groundwater first encountered at 25.0 ft. 10/13/04. Borehole terminated at 25.0 ft. depth, 10/13/04. A temporary 1-inch diameter slotted PVC pipe was placed in the borehole for water sample collection.
	23.2 to 25.0 ft. Light brown fine sand (SW); very dense, slightly moist to moist. No PHC odor.					A groundwater sample was collected using a polyethylene tube with a stainless steel foot valve. No sheen or PHC odor in water sample. Borehole sealed with Bentonite from 21 to 25 ft. and grouted from 21 ft. to surface using neat cement, 10/13/04.
30						

P&D ENVIRONMENTAL

BORING NO.: B6	PROJECT NO.: 0298	PROJECT NAME: Snow Cleaners	
BORING LOCATION: W side 34th Ave 90' S of Davis St		ELEVATION AND DATUM: NONE	
DRILLING AGENCY: VIRONEX	DRILLER: Brian	DATE & TIME STARTED: 10/13/04	DATE & TIME FINISHED: 10/13/04
DRILLING EQUIPMENT: Track-mounted Geoprobe 6610DT			
COMPLETION DEPTH: 40.0 FEET	BEDROCK DEPTH: NONE ENCOUNTERED	LOGGED BY: WRW	CHECKED BY:
FIRST WATER DEPTH: 27.8 FEET	NO. OF SAMPLES: 6 Soil, 1 Water		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	WELL CONSTRUCTION LOG	BLOW COUNT PER 6"	PID	REMARKS
	4" Asphalt 4" Baserock (fill)		No Well Constructed			Borehole continuously cored using a 5-foot long 2-inch O.D. Geoprobe Macrocore barrel sampler. Samples collected in 4-foot intervals. The sampler was lined with 4.8-foot long 1 3/4 inch O.D. cellulose acetate tubes. PID broken during drilling of this borehole
	8 in. to 2.0 ft. Light gray clay (CL); soft, moist. No Petroleum Hydrocarbon (PHC) odor.					
5	2.0 to 10.4 ft. Light gray silty clay (CL); orange mottling, medium stiff to very stiff, slightly moist. No PHC odor.	CL	B6-4.5			
10			B6-9.5			
	10.4 to 15.5 ft. Medium brown coarse sand (SW); small gravel (<1/2" diameter), loose, slightly moist. No PHC odor.	SW				
15			B6-14.5			
	15.5 to 26.2 ft. Light brown clay (CL); very stiff to medium stiff, slightly moist. No PHC odor.	CL				
20			B6-19.5			
25			B6-24.0			Sampling depth shifted up 0.5 ft., due to crushed sample tube end.
	26.2 to 26.4 ft. Black gravel (GW) (<1/2" diameter); loose, slightly moist. No PHC odor.	CL	<GW			
	26.4 to 30.0 ft. Medium to brown silty clay (CL)with white gravel (<1/2" diameter); very stiff, slightly moist. No PHC odor.					Water at 27.8 ft. at 4:03 PM (immediately after setting temporary casing).
30		SP	B6-29.5			

P&D ENVIRONMENTAL

BORING NO.: B6	PROJECT NO.: 0298	PROJECT NAME: Snow Cleaners	
BORING LOCATION: W side 34th Ave 90' S of Davis St		ELEVATION AND DATUM: NONE	
DRILLING AGENCY: Vironex	DRILLER: Brian	DATE & TIME STARTED: 10/13/04	DATE & TIME FINISHED: 10/13/04
DRILLING EQUIPMENT: Track-mounted Geoprobe 6610DT			
COMPLETION DEPTH: 40.0 FEET	BEDROCK DEPTH: NONE ENCOUNTERED	LOGGED BY: WRW	CHECKED BY:
FIRST WATER DEPTH: 27.8 FEET	NO. OF SAMPLES: 6 Soil, 1 Water		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	WELL CONSTRUCTION LOG	BLOW COUNT PER 6"	PID	REMARKS
30	30.0 to 40.0 ft. Medium brown fine sand (SP); medium dense, slightly moist. No PHC odor.	SP	No Well Con-structed			Hard drilling 30.0 to 33.0 ft. depth.
	Saturated beginning at 33.0 ft.					Driller pushed 33.0 to 35.0 ft.
35						
40		▽				Groundwater first encountered at 40.0 ft.
45						Borehole terminated at 40.0 ft. depth, 10/13/04. A temporary 1-inch diameter slotted PVC pipe was placed in the borehole for water sample collection.
						A groundwater sample was collected using a polyethylene tube with a stainless steel foot valve. No sheen or PHC odor in water sample. Borehole sealed with Bentonite from 37.0 to 40.0 ft. and grouted from 37.0 ft. to surface using neat cement, 10/13/04.
50						
55						
60						

P&D ENVIRONMENTAL

BORING NO.: B7	PROJECT NO.: 0298	PROJECT NAME: Snow Cleaners	
BORING LOCATION: W side 34th Ave, 40' N of Davis St		ELEVATION AND DATUM: NONE	
DRILLING AGENCY: VIRONEX	DRILLER: Tim	DATE & TIME STARTED: 9/22/04	DATE & TIME FINISHED: 9/22/04
DRILLING EQUIPMENT: Track-mounted Geoprobe 6610DT			
COMPLETION DEPTH: 45.0 FEET	BEDROCK DEPTH: NONE ENCOUNTERED	LOGGED BY: PHK	CHECKED BY:
FIRST WATER DEPTH: 45.0 FEET	NO. OF SAMPLES: 9 Soil, 1 Water		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	WELL CONSTRUCTION LOG	BLOW COUNT PER 6"	PID	REMARKS
	3" Asphalt/ 6" Baserock		No Well Constructed		0	Borehole continuously cored using a 5-foot long 2-inch O.D. Geoprobe Macrocore barrel sampler. Samples collected in 4-foot intervals. The sampler was lined with 4.8-foot long 1 3/4 inch O.D. cellulose acetate tubes.
	9" to 7.0 ft. Brown silty clay (CL); medium black sand, black mottling, very stiff, moist. No Petroleum Hydrocarbon (PHC) odor.	CL			0	
5			B7-4.5		0	
	7.0 to 21.0 ft. Gravelly clay (CL); fine to coarse sand, gravel 1/4" to 1" diameter, red mottling , intermittent fine sand layers approx. 1/2" thick, stiff, moist. No PHC odor.				0	
10			B7-9.5		0	10 ft. to 20 ft. very hard drilling. Expansive clay. Shorter drive to collect samples to prevent core barrel from jamming with soil.
					0	
15			B7-14.5		0	
					0	
20			B7-19.5		0	
	21.0 to 25.0 ft. Tan silt (ML); minor fine to coarse sand, moist, medium stiff. No PHC odor.	ML			0	
25			B7-24.5		0	
	25.0 to 30.0 ft. Tan silty fine sand (SM); medium dense, moist. No PHC odor.	SM			0	
	Increasing sand content with depth.				0	Water at 29.0 feet at 12:15 PM (immediately after setting temporary casing).
30			B7-29.5		0	
		SW				

RGA ENVIRONMENTAL, INC.

BORING NO.: B7	PROJECT NO.: 0298	PROJECT NAME: Snow Cleaners	
BORING LOCATION: W side 34th Ave, 40' N of Davis St		ELEVATION AND DATUM: NONE	
DRILLING AGENCY: Vironex	DRILLER: Tim	DATE & TIME STARTED: 9/22/04	DATE & TIME FINISHED: 9/22/04
DRILLING EQUIPMENT: Track-mounted Geoprobe 6610DT			
COMPLETION DEPTH: 45.0 FEET	BEDROCK DEPTH: NONE ENCOUNTERED	LOGGED BY: WRW	CHECKED BY:
FIRST WATER DEPTH: 45.0 FEET	NO. OF SAMPLES: 9 Soil, 1 Water		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	WELL CONSTRUCTION LOG	BLOW COUNT PER 6"	PID	REMARKS
30	30.0 to 35.0 ft. Brown fine sand (SW); green discoloration gradational color contact from 32.0' to 32.5'. Green below 32.5'. Wet from 34.5' to 35.0'. No PHC odor.	SW			0	Water measured at 33.0 ft. 5:25 PM after drilling to 45.0 ft.
35	35.0 to 37.5 ft. Brown sandy clay (CL); dense, wet. No PHC odor.	CL	B7-34.5		0	Water measured in borehole at 34.0 ft. 3:52 PM after drilling to 45.0 ft.
	37.5 to 38.5 ft. Green silty fine to coarse sand (SW);dense, moist. Strong PHC odor	SW			0	3:09 PM No free water in borehole at 35.0 ft.
40	38.5 to 40.0 ft. Brown sandy clay (CL); fine to coarse sand, soft, wet. Strong PHC odor.	CL	B7-39.5		0	3:18 PM No free water at 40.0 ft.
	40.0 to 41.0 ft. Green silty clay (CL); very soft, wet. Strong PHC odor.					3:38 PM No free water, begin drilling again.
	41.0 to 45.0 ft. Brown clay (CL); black mottling, hard. Strong PHC odor.					Water first encountered at 45.0 ft. 3:50 PM 9/22/94.
45			B7-44.5			40.0 to 45.0 ft. liner jammed in sampler.
	The PHC odor resembled WD-40 oil/shoe polish/ Stoddard solvent.					Borehole terminated at 45.0 foot depth, 9/22/04. A temporary 1-inch diameter slotted PVC pipe was placed in the borehole for water sample collection. A groundwater sample was collected using a polyethylene tube with a stainless steel foot valve. No sheen on sample, but a strong Stoddard solvent odor (similar to WD-40) was present from the sample. Borehole grouted 9/22/04 using neat cement.
50						
55						
60						

P&D ENVIRONMENTAL
GROUNDWATER MONITORING/WELL PURGING
DATA SHEET

Site Name Snow Cleaners, Oakland Well No. MW1

Job No. 0298 Date 10/27/04

TOC to Water (ft.) 22.89 Sheen None

Well Depth (ft.) 46 Free Product Thickness Ø

Well Diameter 2in. Sample Collection Method

Gal./Casing Vol. 3.8 Teflon Bailer

Σ = 11.4

TIME	GAL. PURGED	pH	TEMPERATURE (°F)	ELECTRICAL CONDUCTIVITY (mS/cm)
2:30	1	2.51	70.9	0.89
2:31	2	2.51	71.9	0.87
2:32	4	2.57	72.4	0.87
2:33	7	2.59	72.7	0.85
2:34	9.5	2.60	73.3	0.86
2:35	+2 10.5	2.61	73.8	0.88
2:35	12.0	2.66	74.3	0.88
2:36	13.0	2.68	74.5	0.89
2:40	Sampling time.			

NOTES: No PHC odor or sheen on purge water.
Water in Chrisite box below T.O.C.

PURGE10.92

P&D ENVIRONMENTAL
GROUNDWATER MONITORING/WELL PURGING
DATA SHEET

Site Name Snow Cleaners, Oakland
Job No. 0298
TOC to Water (ft.) 16.18
Well Depth (ft.) 26.5
Well Diameter 4 in.
Gal./Casing Vol. 6.6
Σ = 19.8

Well No. MW2
Date 10/27/04
Sheen 1/16"
Free Product Thickness 1/16"
Sample Collection Method
Transparent bailer

TIME	GAL. PURGED	pH	TEMPERATURE	ELECTRICAL CONDUCTIVITY
	2			
	5			
	9			
	13			
	17			
	20			

NOTES: well not purged, in attempt to collect sample of free product.

PURGE10.92

McCAMPBELL ANALYTICAL INC.
110 2nd Ave South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

Date: 2/4/05

ATTN: Paul King

Message: Upon review of samples: "MW-2" (MAIID 0410446-0024)
"B7-44.5" (" " 0409375-0094)
"B7-Water" (" " 0409379-0024)
"B4-Water" (" " 0410199-0014)
"B5-Water" (" " 0410199-0024)
I can conclude that "MW-2", "B7-44.5" and "B7-Water" have similar TPH (hydrocarbon) patterns closely resembling Stoddard solvents.

"B4-Water" and "B5-Water" do not appear to contain Stoddard solvent at any significant level. These two samples have a late eluting oil range pattern - perhaps hydraulic oil.

FROM:

Angela Rydelius

[Direct Fax #: 925-798-4612]

Number of pages faxed including this one: 1

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0298; Snow Cleaners-Oakland	Date Sampled: 09/22/04
		Date Received: 09/23/04
	Client Contact: Paul King	Date Extracted: 09/23/04
	Client P.O.:	Date Analyzed: 09/24/04-09/27/04

Gasoline Range (C6-C12) and Stoddard Solvent Range (C9-C12) Volatile Hydrocarbons*

Extraction method: SW5030B Analytical methods: SW8015Cm Work Order: 0409375

Lab ID	Client ID	Matrix	TPH(g)	TPH(ss)	DF	% SS
0409375-001A	B3-4.5	S	ND	ND	1	84.9
0409375-002A	B3-9.5	S	ND	ND	1	84.3
0409375-003A	B3-14.5	S	ND	ND	1	85.6
0409375-004A	B3-19.5	S	ND	ND	1	84.7
0409375-005A	B3-24.5	S	ND	ND	1	84.0
0409375-006A	B3-29.5	S	ND	ND	1	81.4
0409375-007A	B3-34.5	S	ND	ND	1	86.0
0409375-008A	B3-39.5	S	ND	ND	1	87.0

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	NA
	S	1.0	1.0	mg/Kg

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) results are reported by dry weight.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0298; Snow Cleaners-Oakland	Date Sampled: 09/22/04
		Date Received: 09/23/04
	Client Contact: Paul King	Date Extracted: 09/23/04
	Client P.O.:	Date Analyzed: 09/25/04

Diesel (C10-23) and Oil (C18+) Range Extractable Hydrocarbons as Diesel and Motor Oil*

Extraction method: SW3550C Analytical methods: SW8015C Work Order: 0409375

Lab ID	Client ID	Matrix	TPH(d)	TPH(mo)	DF	% SS
0409375-001A	B3-4.5	S	1.5,g	5.7	1	101
0409375-002A	B3-9.5	S	ND	ND	1	99.0
0409375-003A	B3-14.5	S	ND	ND	1	99.0
0409375-004A	B3-19.5	S	ND	ND	1	98.0
0409375-005A	B3-24.5	S	ND	ND	1	99.0
0409375-006A	B3-29.5	S	ND	ND	1	99.0
0409375-007A	B3-34.5	S	ND	ND	1	101
0409375-008A	B3-39.5	S	ND	ND	1	98.0

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	ug/L
	S	1.0	5.0	mg/Kg

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel (asphalt); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8021B/8015Cm

Matrix: S WorkOrder: 0409375

EPA Method: SW8021B/8015Cm Extraction: SW5030B BatchID: 13296 Spiked Sample ID: 0409374-005A

Analyte	Sample	Spiked	MS*	MSD*	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(btex)£	ND	0.60	95.8	97.7	1.93	94.5	97.6	3.26	70	130
MTBE	ND	0.10	81.1	86.8	6.78	95.4	88.4	7.58	70	130
Benzene	ND	0.10	97.3	99.9	2.71	106	99	6.51	70	130
Toluene	ND	0.10	89.1	82.2	8.10	85.8	81.4	5.16	70	130
Ethylbenzene	ND	0.10	99.5	104	3.98	100	99.5	0.630	70	130
Xylenes	ND	0.30	89.7	90.7	1.11	90.3	89.7	0.741	70	130
%SS:	83.5	0.10	100	98	1.63	105	102	3.57	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS Certification No. 1644

QA/QC Officer

McCampbell Analytical, Inc.

110 2nd Avenue South. #D7. Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8015C

Matrix: S WorkOrder: 0409375

EPA Method: SW8015C Extraction: SW3550C BatchID: 13280 Spiked Sample ID: 0409374-004A

Analyte	Sample mg/Kg	Spiked mg/Kg	MS* % Rec.	MSD* % Rec.	MS-MSD % RPD	LCS % Rec.	LCSD % Rec.	LCS-LCSD % RPD	Acceptance Criteria (%) Low	Acceptance Criteria (%) High
TPH(d)	ND	150	105	104	0.0911	89.6	88.2	1.53	70	130
%SS:	100	50	103	103	0	100	99	1.52	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS Certification No. 1644

QA/QC Officer

McCampbell Analytical, Inc.
110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0409375 **ClientID: PDEO**

eport to:
Paul King
P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610

TEL: (510) 658-6916
FAX: 510-834-0152
ProjectNo: #0298; Snow Cleaners-Oakland
PO:

Bill to:
Accounts Payable
P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610

Requested TAT: 5 days
Date Received: 9/23/04
Date Printed: 9/23/04

ample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
409375-001	B3-4.5	Soil	9/22/04	☐	A														
409375-002	B3-9.5	Soil	9/22/04	☐	A														
409375-003	B3-14.5	Soil	9/22/04	☐	A														
409375-004	B3-19.5	Soil	9/22/04	☐	A														
409375-005	B3-24.5	Soil	9/22/04	☐	A														
409375-006	B3-29.5	Soil	9/22/04	☐	A														
409375-007	B3-34.5	Soil	9/22/04	☐	A														
409375-008	B3-39.5	Soil	9/22/04	☐	A														

est Legend:

1	G-MBTEX_S	2		3		4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Elisa Venegas

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

P & D ENVIRONMENTAL
A Division of Paul H. King, Inc.
4020 Panama Court
Oakland, CA 94611
(510) 658-6916

040937

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

PROJECT NUMBER:	PROJECT NAME:
0298	Snow Cleaners – Oakland

SAMPLED BY: (PRINTED AND SIGNATURE) Paul H. King Paul H. King

SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION	NUMBER OF CONTAINERS	ANALYSIS(ES): TPH-Standard Softer / TPH-Mult. Range / Standard Solvent	PRESERVATIVE	REMARKS
B3-4.5	9/22/04		Soil		1	X	ICE	Normal Turn Around
B3-9.5	"		"		1	X	"	"
B3-14.5	"		"		1	X	"	"
B3-19.5	"		"		1	X	"	"
B3-24.5	"		"		1	X	"	"
B3-29.5	"		"		1	X	"	"
B3-34.5	"		"		1	X	"	"
B3-39.5	"		"		1	X	"	"

ICE? ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT
DECHLORINATED IN LAB
PRESERVATION

APPROPRIATE CONTAINERS ✓	PRESERVED IN LAB	VOAS	O&G	METALS	OTHER

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)
Paul H. King	09/23	11:00 AM	
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)
	09/22	4:30 PM	

REMARKS:

TOTAL NO. OF SAMPLES (THIS SHIPMENT)	8
TOTAL NO. OF CONTAINERS (THIS SHIPMENT)	8
LABORATORY CONTACT: Angela Rydelins	LABORATORY: McCampbell Analytical
	LABORATORY PHONE NUMBER: (925) 798-1620
SAMPLE ANALYSIS REQUEST SHEET ATTACHED: ( )YES (X)NO	

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0298; Snow Cleaners Oakland	Date Sampled: 10/13/04
		Date Received: 10/14/04
	Client Contact: Paul King	Date Extracted: 10/14/04
	Client P.O.:	Date Analyzed: 10/14/04-10/15/04

Gasoline Range (C6-C12) Stoddard Solvent Range (C9-C12) Volatile Hydrocarbons *

Extraction method: SW5030B Analytical methods: SW8015Cm Work Order: 0410196

Lab ID	Client ID	Matrix	TPH(g)	TPH(ss)	DF	% SS
0410196-002A	B4-9.5	S	ND	ND	1	89.0
0410196-003A	B4-14.5	S	ND	ND	1	83.0
0410196-004A	B4-19.5	S	ND	ND	1	88.0
0410196-005A	B4-24.0	S	ND	ND	1	92.0
0410196-006A	B4-29.5	S	ND	ND	1	90.0
0410196-007A	B4-34.5	S	ND	ND	1	88.0
0410196-008A	B4-39.5	S	ND	ND	1	96.0
0410196-009A	B4-43.5	S	ND	ND	1	86.0

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	NA
	S	1.0	1.0	mg/Kg

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) results are reported by dry weight.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0298; Snow Cleaners Oakland	Date Sampled: 10/13/04
		Date Received: 10/14/04
	Client Contact: Paul King	Date Extracted: 10/14/04
	Client P.O.:	Date Analyzed: 10/14/04-10/15/04

Diesel (C10-23) and Oil (C18+) Range Extractable Hydrocarbons as Diesel and Motor Oil*

Extraction method: SW3550C Analytical methods: SW8015C Work Order: 0410196

Lab ID	Client ID	Matrix	TPH(d)	TPH(mo)	DF	% SS
0410196-002A	B4-9.5	S	ND	ND	1	102
0410196-003A	B4-14.5	S	ND	ND	1	99.0
0410196-004A	B4-19.5	S	ND	ND	1	101
0410196-005A	B4-24.0	S	ND,g	6.9	1	103
0410196-006A	B4-29.5	S	ND	ND	1	100
0410196-007A	B4-34.5	S	ND	ND	1	100
0410196-008A	B4-39.5	S	ND	ND	1	101
0410196-009A	B4-43.5	S	ND	ND	1	101

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	ug/L
	S	1.0	5.0	mg/Kg

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel (asphalt); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8021B/8015Cm

Matrix: S WorkOrder: 0410196

EPA Method: SW8021B/8015Cm Extraction: SW5030B BatchID: 13571 Spiked Sample ID: 0410198-004A

Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(btex)£	ND	0.60	97.5	96.9	0.589	101	101	0	70	130
MTBE	ND	0.10	104	108	4.12	102	99.9	1.60	70	130
Benzene	ND	0.10	98.7	101	2.30	104	106	1.96	70	130
Toluene	ND	0.10	77.9	80.1	2.69	82.9	84.1	1.42	70	130
Ethylbenzene	ND	0.10	96.1	88.1	8.71	99.3	102	3.22	70	130
Xylenes	ND	0.30	85	85.7	0.781	86	90	4.55	70	130
%SS:	83.0	0.10	99	89	10.2	97	104	6.97	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS Certification No. 1644

QA/QC Officer

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8015C

Matrix: S WorkOrder: 0410196

EPA Method: SW8015C	Extraction: SW3550C	BatchID: 13557	Spiked Sample ID: 0410196-002A

Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(d)	ND	150	94.7	96	1.31	95.5	96.6	1.19	70	130
%SS:	102	50	95	96	0.917	94	96	1.94	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS Certification No. 1644

QA/QC Officer

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8015C

Matrix: S WorkOrder: 0410196

EPA Method: SW8015C Extraction: SW3550C BatchID: 13570 Spiked Sample ID: 0410196-006A

Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(d)	ND	150	96.6	96.7	0.0260	96.3	98.4	2.15	70	130
%SS:	100	50	94	95	0.446	95	96	1.44	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS Certification No. 1644

QA/QC Officer

McCampbell Analytical, Inc.
110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0410196 **ClientID: PDEO**

Report to:
Paul King
P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610
TEL: (510) 658-6916
FAX: 510-834-0152
ProjectNo: #0298; Snow Cleaners Oakland
PO:

Bill to:
Accounts Payable
P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610

Requested TAT: 5 days
Date Received: 10/14/04
Date Printed: 10/14/04

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)														
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0410196-001	B4-4.5	Soil	10/13/04	☐	A														
0410196-002	B4-9.5	Soil	10/13/04	☐	A														
0410196-003	B4-14.5	Soil	10/13/04	☐	A														
0410196-004	B4-19.5	Soil	10/13/04	☐	A														
0410196-005	B4-24.0	Soil	10/13/04	☐	A														
0410196-006	B4-29.5	Soil	10/13/04	☐	A														
0410196-007	B4-34.5	Soil	10/13/04	☐	A														
0410196-008	B4-39.5	Soil	10/13/04	☐	A														
0410196-009	B4-43.5	Soil	10/13/04	☐	A														

Test Legend:

1	G-MBTEX_S	2		3		4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Elisa Venegas

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

P & D ENVIRONMENTAL
A Division of Paul H. King, Inc.
4020 Panama Court
Oakland, CA 94611
(510) 658-6916

C410194

CHAIN OF CUSTODY RECORD

Stoddard Solvent

PAGE 1 OF 1

PROJECT NUMBER:	PROJECT NAME:
0298	Snow Cleaners - Oakland

SAMPLED BY: (PRINTED AND SIGNATURE) Wilhelm Welzenbach Wilhelm Welzenbach

SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION	NUMBER OF CONTAINERS	ANALYSIS(ES): TPH-mg H (gas)	PRESERVATIVE	REMARKS
CHANGE LOCATION PER WILLY 10/15					1	X	ICE	Normal Turnaround
B4 - 9.5						X		
B4 - 14.5						X		
B4 - 19.5						X		
B4 - 24.0						X		
B4 - 29.5						X		
B4 - 34.5						X		
B4 - 39.5						X		
B4 - 43.5						X		

ICE/t°
GOOD CONDITION
HEAD SPACE ABSENT
DECHLORINATED IN LAB
PRESERVATION (VOAS | O&G | METALS | OTHER)
APPROPRIATE CONTAINERS
PRESERVED IN LAB

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)
Wilhelm Welzenbach	10/14	1:40	
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)
	10/14/04	5:15pm	

REMARKS:

TOTAL NO. OF SAMPLES (THIS SHIPMENT): 9
TOTAL NO. OF CONTAINERS (THIS SHIPMENT): 9

LABORATORY: McCampbell Analytical
LABORATORY CONTACT: Angela Rydelius
LABORATORY PHONE NUMBER: (925) 798-1620

SAMPLE ANALYSIS REQUEST SHEET ATTACHED: ( )YES (X)NO

ICE/t°
GOOD CONDITION
HEAD SPACE ABSENT
DECHLORINATED IN LAB
PRESERVATION (VOAS | O&G | METALS | OTHER)
APPROPRIATE CONTAINERS
PRESERVED IN LAB

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0298; Snow Cleaners Oakland	Date Sampled: 10/13/04
		Date Received: 10/14/04
	Client Contact: Paul King	Date Extracted: 10/14/04
	Client P.O.:	Date Analyzed: 10/15/04

Gasoline Range (C6-C12) and Stoddard Solvent Range (C9-C12) Volatile Hydrocarbons*

Extraction method: SW5030B Analytical methods: SW8015Cm Work Order: 0410198

Lab ID	Client ID	Matrix	TPH(g)	TPH(ss)	DF	% SS
0410198-002A	B5-9.5	S	ND	ND	1	84.0
0410198-003A	B5-14.5	S	ND	ND	1	93.0
0410198-004A	B5-19.5	S	ND	ND	1	83.0

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	NA
	S	1.0	1.0	mg/Kg

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) results are reported by dry weight.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

P & D Environmental	Client Project ID: #0298; Snow Cleaners Oakland	Date Sampled: 10/13/04
55 Santa Clara, Ste.240		Date Received: 10/14/04
Oakland, CA 94610	Client Contact: Paul King	Date Extracted: 10/14/04
	Client P.O.:	Date Analyzed: 10/15/04

Diesel (C10-23) and Oil (C18+) Range Extractable Hydrocarbons as Diesel and Motor Oil*

Work Order: 0410198

Extraction method: SW3550C Analytical methods: SW8015C

Lab ID	Client ID	Matrix	TPH(d)	TPH(mo)	DF	% SS
0410198-002A	B5-9.5	S	ND	ND	1	105
0410198-003A	B5-14.5	S	ND	ND	1	100
0410198-004A	B5-19.5	S	ND	ND	1	100
Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	ug/L		
	S	1.0	5.0	mg/Kg		

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel (asphalt); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit.

Angela Rydelius, Lab Manager

DHS Certification No. 1644

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8021B/8015Cm

WorkOrder: 0410198

Matrix: S

EPA Method: SW8021B/8015Cm Extraction: SW5030B BatchID: 13571 Spiked Sample ID: 0410198-004A

Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(btex)£	ND	0.60	97.5	96.9	0.589	101	101	0	70	130
MTBE	ND	0.10	104	108	4.12	102	99.9	1.60	70	130
Benzene	ND	0.10	98.7	101	2.30	104	106	1.96	70	130
Toluene	ND	0.10	77.9	80.1	2.69	82.9	84.1	1.42	70	130
Ethylbenzene	ND	0.10	96.1	88.1	8.71	99.3	102	3.22	70	130
Xylenes	ND	0.30	85	85.7	0.781	86	90	4.55	70	130
%SS:	83.0	0.10	99	89	10.2	97	104	6.97	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

QA/QC Officer

DHS Certification No. 1644

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8015C

Matrix: S WorkOrder: 0410198

EPA Method: SW8015C Extraction: SW3550C BatchID: 13570 Spiked Sample ID: 0410196-006A

Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(d)	ND	150	96.6	96.7	0.0260	96.3	98.4	2.15	70	130
%SS:	100	50	94	95	0.446	95	96	1.44	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS Certification No. 1644

QA/QC Officer

McCampbell Analytical, Inc.
110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0410198 **ClientID: PDEO**

Report to:
Paul King
P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610

TEL: (510) 658-6916
FAX: 510-834-0152
ProjectNo: #0298; Snow Cleaners Oakland
PO:

Bill to:
Accounts Payable
P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610

Requested TAT: 5 days
Date Received: 10/14/04
Date Printed: 10/14/04

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)														
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0410198-001	B5-4.5	Soil	10/13/04	☐	A														
0410198-002	B5-9.5	Soil	10/13/04	☐	A														
0410198-003	B5-14.5	Soil	10/13/04	☐	A														
0410198-004	B5-19.5	Soil	10/13/04	☐	A														

Test Legend:

1	G-MBTEX_S	2		3		4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Elisa Venegas

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

P & D ENVIRONMENTAL
A Division of Paul H. King, Inc
4020 Panama Court
Oakland, CA 94611
(510) 658-6916

PDEO

G410198

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

PROJECT NUMBER:	PROJECT NAME:
0298	Snow Cleaners - Oakland

SAMPLED BY: (PRINTED AND SIGNATURE)
Wilhelm Welzenbach Wilhelm Welzenbach

SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION	NUMBER OF CONTAINERS	ANALYSIS(ES): TPH-Mo(Range)	Standard Solvent	PRESERVATIVE	REMARKS
* BLANK (DELIVERED PER WILLY 10/15						X		ICE	Normal Turnaround
B5 - 9,5	↓		↓			X		↓	↓
B5 - 14,5						X			
B5 - 19,5						X			

RELINQUISHED BY: (SIGNATURE) Wilhelm Welzenbach	DATE 10/14	TIME 1:40	RECEIVED BY: (SIGNATURE) Scott Sommer	TOTAL NO. OF SAMPLES (THIS SHIPMENT) 4	LABORATORY: McCampbell Analytical
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	TOTAL NO. OF CONTAINERS (THIS SHIPMENT) 4	
				LABORATORY CONTACT: Angela Rydelius	LABORATORY PHONE NUMBER: (925) 798-1620
RELINQUISHED BY: (SIGNATURE) Scott Sommer	DATE 10/14/04	TIME 5:15 pm	RECEIVED FOR LABORATORY BY: (SIGNATURE) Mc Vall	SAMPLE ANALYSIS REQUEST SHEET ATTACHED: ( )YES (X)NO	

REMARKS:

ICE/t° ____
GOOD CONDITION ____
HEAD SPACE ABSENT ____
DECHLORINATED IN LAB ____
APPROPRIATE CONTAINERS ____
PRESERVED IN LAB ____

PRESERVATION	VOAS	O&G	METALS	OTHER

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0298; Snow Cleaners Oakland	Date Sampled: 10/13/04
		Date Received: 10/14/04
	Client Contact: Paul King	Date Extracted: 10/14/04
	Client P.O.:	Date Analyzed: 10/15/04

Gasoline Range (C6-C12) and Stoddard Solvent Range (C9-C12) Volatile Hydrocarbons*

Extraction method: SW5030B Analytical methods: SW8015Cm Work Order: 0410200

Lab ID	Client ID	Matrix	TPH(g)	TPH(ss)	DF	% SS
0410200-001A	B6-4.5	S	ND	ND	1	91.0
0410200-002A	B6-9.5	S	ND	ND	1	91.0
0410200-003A	B6-14.5	S	ND	ND	1	88.0
0410200-004A	B6-19.5	S	ND	ND	1	90.0
0410200-005A	B6-24.0	S	ND	ND	1	84.0
0410200-006A	B6-29.5	S	ND	ND	1	89.0
Reporting Limit for DF =1; ND means not detected at or above the reporting limit		W	NA	NA	NA	
		S	1.0	1.0	mg/Kg	

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) results are reported by dry weight.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0298; Snow Cleaners Oakland	Date Sampled: 10/13/04
		Date Received: 10/14/04
	Client Contact: Paul King	Date Extracted: 10/14/04
	Client P.O.:	Date Analyzed: 10/14/04-10/15/04

Diesel (C10-23) and Oil (C18+) Range Extractable Hydrocarbons as Diesel and Motor Oil*

Extraction method: SW3550C Analytical methods: SW8015C Work Order: 0410200

Lab ID	Client ID	Matrix	TPH(d)	TPH(mo)	DF	% SS
0410200-001A	B6-4.5	S	ND,g	5.6	1	92.0
0410200-002A	B6-9.5	S	ND	ND	1	101
0410200-003A	B6-14.5	S	ND	ND	1	97.0
0410200-004A	B6-19.5	S	ND	ND	1	99.0
0410200-005A	B6-24.0	S	ND	ND	1	102
0410200-006A	B6-29.5	S	ND	ND	1	102

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	ug/L
	S	1.0	5.0	mg/Kg

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel (asphalt); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8015C

Matrix: S WorkOrder: 0410200

EPA Method: SW8015C Extraction: SW3550C BatchID: 13570 Spiked Sample ID: 0410196-006A

Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(d)	ND	150	96.6	96.7	0.0260	96.3	98.4	2.15	70	130
%SS:	100	50	94	95	0.446	95	96	1.44	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS Certification No. 1644

QA/QC Officer

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8021B/8015Cm

Matrix: S WorkOrder: 0410200

EPA Method: SW8021B/8015Cm Extraction: SW5030B BatchID: 13571 Spiked Sample ID: 0410198-004A

Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(btex)£	ND	0.60	97.5	96.9	0.589	101	101	0	70	130
MTBE	ND	0.10	104	108	4.12	102	99.9	1.60	70	130
Benzene	ND	0.10	98.7	101	2.30	104	106	1.96	70	130
Toluene	ND	0.10	77.9	80.1	2.69	82.9	84.1	1.42	70	130
Ethylbenzene	ND	0.10	96.1	88.1	8.71	99.3	102	3.22	70	130
Xylenes	ND	0.30	85	85.7	0.781	86	90	4.55	70	130
%SS:	83.0	0.10	99	89	10.2	97	104	6.97	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS Certification No. 1644

QA/QC Officer

McCampbell Analytical, Inc.
110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0410200 **ClientID: PDEO**

Report to:
Paul King
P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610
TEL: (510) 658-6916
FAX: 510-834-0152
ProjectNo: #0298; Snow Cleaners Oakland
PO:

Bill to:
Accounts Payable
P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610

Requested TAT: 5 days
Date Received: 10/14/04
Date Printed: 10/14/04

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)														
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0410200-001	B6-4.5	Soil	10/13/04	☐	A														
0410200-002	B6-9.5	Soil	10/13/04	☐	A														
0410200-003	B6-14.5	Soil	10/13/04	☐	A														
0410200-004	B6-19.5	Soil	10/13/04	☐	A														
0410200-005	B6-24.0	Soil	10/13/04	☐	A														
0410200-006	B6-29.5	Soil	10/13/04	☐	A														

Test Legend:

1	G-MBTEX_S	2		3		4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Elisa Venegas

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

DOEC

P & D ENVIRONMENTAL
A Division of Paul H. King, Inc.
4020 Panama Court
Oakland, CA 94611
(510) 658-6916

0410200

CHAIN OF CUSTODY RECORD

Stoddard Solvent

PAGE 1 OF 1

PROJECT NUMBER:	PROJECT NAME:
0298	Snow Cleaners - Oakland

SAMPLED BY: (PRINTED AND SIGNATURE) Wilhelm Welzenbach Wilhelm Welzenbach

SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION	NUMBER OF CONTAINERS	ANALYSIS(ES): TPH-Mo (Orange)	PRESERVATIVE	REMARKS
B6 - 4.5	10/13/04		Soil		1	X	ICE	Normal Turnaround
B6 - 9.5						X		
B6 - 14.5						X		
B6 - 19.5						X		
B6 - 24.0						X		
B6 - 29.5						X		

	DATE	TIME		
RELINQUISHED BY: (SIGNATURE) Wilhelm Welzenbach	10/14	1:40	RECEIVED BY: (SIGNATURE) Scott Bom	TOTAL NO. OF SAMPLES (THIS SHIPMENT) 6
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	TOTAL NO. OF CONTAINERS (THIS SHIPMENT) 6
RELINQUISHED BY: (SIGNATURE) Scott Bom	DATE 10/14/04	TIME 5:15pm	RECEIVED FOR LABORATORY BY: (SIGNATURE) M Vall	

LABORATORY: McCampbell Analytical
LABORATORY CONTACT: Angela Rydelins
LABORATORY PHONE NUMBER: (925) 798-1620
SAMPLE ANALYSIS REQUEST SHEET ATTACHED: ( )YES (X)NO

REMARKS:

ICE/t° ____
GOOD CONDITION ____ APPROPRIATE ____
HEAD SPACE ABSENT ____ CONTAINERS ____
DECHLORINATED IN LAB ____ PRESERVED IN LAB ____

PRESERVATION	VOAS	O&G	METALS	OTHER

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0298; Snow Cleaners - Oakland	Date Sampled: 09/22/04
		Date Received: 09/23/04
	Client Contact: Paul King	Date Extracted 09/23/04
	Client P.O.:	Date Analyzed 09/24/04-09/27/04

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm Work Order: 0409374

Lab ID	Client ID	Matrix	TPH(g)	TPH(ss)	DF	% SS
0409374-001A	B7-4.5	S	ND	ND	1	80.9
0409374-002A	B7-9.5	S	ND	ND	1	87.8
0409374-003A	B7-14.5	S	ND	ND	1	88.1
0409374-004A	B7-19.5	S	ND	ND	1	102
0409374-005A	B7-24.5	S	ND	ND	1	83.5
0409374-006A	B7-29.5	S	ND	ND	1	85.3
0409374-007A	B7-34.5	S	ND	ND	1	98.0
0409374-008A	B7-39.5	S	ND	ND	1	85.0
0409374-009A	B7-44.5	S	13,e	28	1	96.3

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	NA
	S	1.0	1.0	mg/Kg

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/nc aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altere gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks pres g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviati gas). m) no recognizable pattern; n) results are reported by dry weight.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0298; Snow Cleaners - Oakland	Date Sampled: 09/22/04
		Date Received: 09/23/04
	Client Contact: Paul King	Date Extracted: 09/23/04
	Client P.O.:	Date Analyzed: 09/24/04-09/27/04

Diesel (C10-23) and Oil (C18+) Range Extractable Hydrocarbons as Diesel and Motor Oil*

Extraction method: SW3550C Analytical methods: SW8015C Work Order: 0409374

Lab ID	Client ID	Matrix	TPH(d)	TPH(mo)	DF	% SS
0409374-001A	B7-4.5	S	3.1,g	31	1	99.2
0409374-002A	B7-9.5	S	ND	ND	1	102
0409374-003A	B7-14.5	S	4.3,g	39	1	99.8
0409374-004A	B7-19.5	S	ND	ND	1	100
0409374-005A	B7-24.5	S	ND	ND	1	99.0
0409374-006A	B7-29.5	S	ND	ND	1	100
0409374-007A	B7-34.5	S	ND	ND	1	100
0409374-008A	B7-39.5	S	ND	ND	1	100
0409374-009A	B7-44.5	S	5.5,n	ND	1	101

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	ug/L
	S	1.0	5.0	mg/Kg

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel (asphalt); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8021B/8015Cm

Matrix: S WorkOrder: 0409374

EPA Method: SW8021B/8015Cm Extraction: SW5030B BatchID: 13289 Spiked Sample ID: 0409374-004A

Analyte	Sample	Spiked	MS*	MSD*	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(btex)[£]	ND	0.60	107	97.9	9.00	96.1	93	3.37	70	130
MTBE	ND	0.10	94.1	83	12.6	88.8	89.4	0.719	70	130
Benzene	ND	0.10	99.7	97.7	2.08	99.4	99.9	0.511	70	130
Toluene	ND	0.10	85.2	80.7	5.34	80.7	80.7	0	70	130
Ethylbenzene	ND	0.10	101	101	0	98.5	97.7	0.786	70	130
Xylenes	ND	0.30	90	89.7	0.371	85.7	85.7	0	70	130
%SS:	102	0.10	107	101	5.62	104	105	0.897	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS Certification No. 1644

QA/QC Officer

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8021B/8015Cm

Matrix: S WorkOrder: 0409374

EPA Method: SW8021B/8015Cm Extraction: SW5030B BatchID: 13296 Spiked Sample ID: 0409374-005A

Analyte	Sample mg/Kg	Spiked mg/Kg	MS* % Rec.	MSD* % Rec.	MS-MSD % RPD	LCS % Rec.	LCSD % Rec.	LCS-LCSD % RPD	Acceptance Criteria (%) Low	Acceptance Criteria (%) High
TPH(btex)£	ND	0.60	95.8	97.7	1.93	94.5	97.6	3.26	70	130
MTBE	ND	0.10	81.1	86.8	6.78	95.4	88.4	7.58	70	130
Benzene	ND	0.10	97.3	99.9	2.71	106	99	6.51	70	130
Toluene	ND	0.10	89.1	82.2	8.10	85.8	81.4	5.16	70	130
Ethylbenzene	ND	0.10	99.5	104	3.98	100	99.5	0.630	70	130
Xylenes	ND	0.30	89.7	90.7	1.11	90.3	89.7	0.741	70	130
%SS:	83.5	0.10	100	98	1.63	105	102	3.57	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS Certification No. 1644

QA/QC Officer

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8015C

Matrix: S WorkOrder: 0409374

EPA Method: SW8015C	Extraction: SW3550C	BatchID: 13280	Spiked Sample ID: 0409374-004A

Analyte	Sample mg/Kg	Spiked mg/Kg	MS* % Rec.	MSD* % Rec.	MS-MSD % RPD	LCS % Rec.	LCSD % Rec.	LCS-LCSD % RPD	Acceptance Criteria (%) Low	Acceptance Criteria (%) High
TPH(d)	ND	150	105	104	0.0911	89.6	88.2	1.53	70	130
%SS:	100	50	103	103	0	100	99	1.52	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS Certification No. 1644

QA/QC Officer

McCampbell Analytical, Inc.
110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0409374 **ClientID: PDEO**

Report to:
Paul King
P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610

TEL: (510) 658-6916
FAX: 510-834-0152
ProjectNo: #0298; Snow Cleaners - Oakland
PO:

Bill to:
Accounts Payable
P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610

Requested TAT: 5 days
Date Received: 9/23/04
Date Printed: 9/23/04

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0409374-001	B7-4.5	Soil	9/22/04	☐	A														
0409374-002	B7-9.5	Soil	9/22/04	☐	A														
0409374-003	B7-14.5	Soil	9/22/04	☐	A														
0409374-004	B7-19.5	Soil	9/22/04	☐	A														
0409374-005	B7-24.5	Soil	9/22/04	☐	A														
0409374-006	B7-29.5	Soil	9/22/04	☐	A														
0409374-007	B7-34.5	Soil	9/22/04	☐	A														
0409374-008	B7-39.5	Soil	9/22/04	☐	A														
0409374-009	B7-44.5	Soil	9/22/04	☐	A														

Test Legend:

1 G-MBTEX_S	2	3	4	5
6	7	8	9	10
11	12	13	14	15

Prepared by: Elisa Venegas

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

PDEO

P & D ENVIRONMENTAL
A Division of Paul H. King, Inc.
4020 Panama Court
Oakland, CA 94611
(510) 658-6916

0409374

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

PROJECT NUMBER:	PROJECT NAME:
0298	Snow Cleaners - Oakland

SAMPLED BY: (PRINTED AND SIGNATURE) Paul H. King Paul H. King

SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION	NUMBER OF CONTAINERS	ANALYSIS(ES): TPH Multi-Range Stoddard Solvent	PRESERVATIVE	REMARKS
B7 - 4.5	9/22/04		Soil		1	X	ICE	Normal Turn Around
B7 - 9.5	"		"		1	X	"	"
B7 - 14.5	"		"		1	X	"	"
B7 - 19.5	"		"		1	X	"	"
B7 - 24.5	"		"		1	X	"	"
B7 - 29.5	"		"		1	X	"	"
B7 - 34.5	"		"		1	X	"	"
B7 - 39.5	"		"		1	X	"	"
B7 - 44.5	"		"		1	X	"	"

ICE/T ✓
GOOD CONDITION ✓ APPROPRIATE ✓
HEAD SPACE ABSENT ___ CONTAINERS ___
DECHLORINATED IN LAB ___ PRESERVED IN LAB ___

PRESERVATION	VOAS	O&G	METALS	OTHER

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)
Paul H. King	09/23	11:00	Scott Brun
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)
Scott Brun	9/22	4:30 pm	✓

REMARKS:

TOTAL NO. OF SAMPLES (THIS SHIPMENT)	9
TOTAL NO. OF CONTAINERS (THIS SHIPMENT)	9

LABORATORY: McCampbell Analytical

LABORATORY CONTACT: Angela Rydelius

LABORATORY PHONE NUMBER: (925) 798-1620

SAMPLE ANALYSIS REQUEST SHEET ATTACHED: ( )YES (X)NO

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

P & D Environmental	Client Project ID: #0298; Snow Cleaners - Oakland	Date Sampled: 09/22/04
55 Santa Clara, Ste.240		Date Received: 09/23/04
	Client Contact: Paul King	Date Extracted: 10/05/04
Oakland, CA 94610	Client P.O.:	Date Analyzed: 10/06/04

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B | Analytical Method: SW8260B | Work Order: 0409374

Lab ID	0409374-006A
Client ID	B7-29.5
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	50	Acrolein (Propenal)	ND	1.0	50
Acrylonitrile	ND	1.0	20	tert-Amyl methyl ether (TAME)	ND	1.0	5.0
Benzene	ND	1.0	5.0	Bromobenzene	ND	1.0	5.0
Bromochloromethane	ND	1.0	5.0	Bromodichloromethane	ND	1.0	5.0
Bromoform	ND	1.0	5.0	Bromomethane	ND	1.0	5.0
2-Butanone (MEK)	ND	1.0	20	t-Butyl alcohol (TBA)	ND	1.0	25
n-Butyl benzene	ND	1.0	5.0	sec-Butyl benzene	ND	1.0	5.0
tert-Butyl benzene	ND	1.0	5.0	Carbon Disulfide	ND	1.0	5.0
Carbon Tetrachloride	ND	1.0	5.0	Chlorobenzene	ND	1.0	5.0
Chloroethane	ND	1.0	5.0	2-Chloroethyl Vinyl Ether	ND	1.0	10
Chloroform	ND	1.0	5.0	Chloromethane	ND	1.0	5.0
2-Chlorotoluene	ND	1.0	5.0	4-Chlorotoluene	ND	1.0	5.0
Dibromochloromethane	ND	1.0	5.0	1,2-Dibromo-3-chloropropane	ND	1.0	5.0
1,2-Dibromoethane (EDB)	ND	1.0	5.0	Dibromomethane	ND	1.0	5.0
1,2-Dichlorobenzene	ND	1.0	5.0	1,3-Dichlorobenzene	ND	1.0	5.0
1,4-Dichlorobenzene	ND	1.0	5.0	Dichlorodifluoromethane	ND	1.0	5.0
1,1-Dichloroethane	ND	1.0	5.0	1,2-Dichloroethane (1,2-DCA)	ND	1.0	5.0
1,1-Dichloroethene	ND	1.0	5.0	cis-1,2-Dichloroethene	ND	1.0	5.0
trans-1,2-Dichloroethene	ND	1.0	5.0	1,2-Dichloropropane	ND	1.0	5.0
1,3-Dichloropropane	ND	1.0	5.0	2,2-Dichloropropane	ND	1.0	5.0
1,1-Dichloropropene	ND	1.0	5.0	cis-1,3-Dichloropropene	ND	1.0	5.0
trans-1,3-Dichloropropene	ND	1.0	5.0	Diisopropyl ether (DIPE)	ND	1.0	5.0
Ethylbenzene	ND	1.0	5.0	Ethyl tert-butyl ether (ETBE)	ND	1.0	5.0
Freon 113	ND	1.0	100	Hexachlorobutadiene	ND	1.0	5.0
Hexachloroethane	ND	1.0	5.0	2-Hexanone	ND	1.0	5.0
Isopropylbenzene	ND	1.0	5.0	4-Isopropyl toluene	ND	1.0	5.0
Methanol	ND	1.0	2500	Methyl-t-butyl ether (MTBE)	ND	1.0	5.0
Methylene chloride	ND	1.0	5.0	4-Methyl-2-pentanone (MIBK)	ND	1.0	5.0
Naphthalene	ND	1.0	5.0	Nitrobenzene	ND	1.0	100
n-Propyl benzene	ND	1.0	5.0	Styrene	ND	1.0	5.0
1,1,1,2-Tetrachloroethane	ND	1.0	5.0	1,1,2,2-Tetrachloroethane	ND	1.0	5.0
Tetrachloroethene	ND	1.0	5.0	Toluene	ND	1.0	5.0
1,2,3-Trichlorobenzene	ND	1.0	5.0	1,2,4-Trichlorobenzene	ND	1.0	5.0
1,1,1-Trichloroethane	ND	1.0	5.0	1,1,2-Trichloroethane	ND	1.0	5.0
Trichloroethene	ND	1.0	5.0	Trichlorofluoromethane	ND	1.0	5.0
1,2,3-Trichloropropane	ND	1.0	5.0	1,2,4-Trimethylbenzene	ND	1.0	5.0
1,3,5-Trimethylbenzene	ND	1.0	5.0	Vinyl Chloride	ND	1.0	5.0
Xylenes	ND	1.0	5.0				

Surrogate Recoveries (%)			
%SS1:	105	%SS2:	107
%SS3:	128		
Comments:			

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil/sludge/solid samples in µg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

P & D Environmental	Client Project ID: #0298; Snow Cleaners - Oakland	Date Sampled: 09/22/04
55 Santa Clara, Ste.240		Date Received: 09/23/04
	Client Contact: Paul King	Date Extracted: 10/05/04
Oakland, CA 94610	Client P.O.:	Date Analyzed: 10/06/04

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B | Analytical Method: SW8260B | Work Order: 0409374

Lab ID	0409374-008A
Client ID	B7-39.5
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	50	Acrolein (Propenal)	ND	1.0	50
Acrylonitrile	ND	1.0	20	tert-Amyl methyl ether (TAME)	ND	1.0	5.0
Benzene	ND	1.0	5.0	Bromobenzene	ND	1.0	5.0
Bromochloromethane	ND	1.0	5.0	Bromodichloromethane	ND	1.0	5.0
Bromoform	ND	1.0	5.0	Bromomethane	ND	1.0	5.0
2-Butanone (MEK)	ND	1.0	20	t-Butyl alcohol (TBA)	ND	1.0	25
n-Butyl benzene	ND	1.0	5.0	sec-Butyl benzene	ND	1.0	5.0
tert-Butyl benzene	ND	1.0	5.0	Carbon Disulfide	ND	1.0	5.0
Carbon Tetrachloride	ND	1.0	5.0	Chlorobenzene	ND	1.0	5.0
Chloroethane	ND	1.0	5.0	2-Chloroethyl Vinyl Ether	ND	1.0	10
Chloroform	ND	1.0	5.0	Chloromethane	ND	1.0	5.0
2-Chlorotoluene	ND	1.0	5.0	4-Chlorotoluene	ND	1.0	5.0
Dibromochloromethane	ND	1.0	5.0	1,2-Dibromo-3-chloropropane	ND	1.0	5.0
1,2-Dibromoethane (EDB)	ND	1.0	5.0	Dibromomethane	ND	1.0	5.0
1,2-Dichlorobenzene	ND	1.0	5.0	1,3-Dichlorobenzene	ND	1.0	5.0
1,4-Dichlorobenzene	ND	1.0	5.0	Dichlorodifluoromethane	ND	1.0	5.0
1,1-Dichloroethane	ND	1.0	5.0	1,2-Dichloroethane (1,2-DCA)	ND	1.0	5.0
1,1-Dichloroethene	ND	1.0	5.0	cis-1,2-Dichloroethene	ND	1.0	5.0
trans-1,2-Dichloroethene	ND	1.0	5.0	1,2-Dichloropropane	ND	1.0	5.0
1,3-Dichloropropane	ND	1.0	5.0	2,2-Dichloropropane	ND	1.0	5.0
1,1-Dichloropropene	ND	1.0	5.0	cis-1,3-Dichloropropene	ND	1.0	5.0
trans-1,3-Dichloropropene	ND	1.0	5.0	Diisopropyl ether (DIPE)	ND	1.0	5.0
Ethylbenzene	ND	1.0	5.0	Ethyl tert-butyl ether (ETBE)	ND	1.0	5.0
Freon 113	ND	1.0	100	Hexachlorobutadiene	ND	1.0	5.0
Hexachloroethane	ND	1.0	5.0	2-Hexanone	ND	1.0	5.0
Isopropylbenzene	ND	1.0	5.0	4-Isopropyl toluene	ND	1.0	5.0
Methanol	ND	1.0	2500	Methyl-t-butyl ether (MTBE)	ND	1.0	5.0
Methylene chloride	ND	1.0	5.0	4-Methyl-2-pentanone (MIBK)	ND	1.0	5.0
Naphthalene	ND	1.0	5.0	Nitrobenzene	ND	1.0	100
n-Propyl benzene	ND	1.0	5.0	Styrene	ND	1.0	5.0
1,1,1,2-Tetrachloroethane	ND	1.0	5.0	1,1,2,2-Tetrachloroethane	ND	1.0	5.0
Tetrachloroethene	ND	1.0	5.0	Toluene	ND	1.0	5.0
1,2,3-Trichlorobenzene	ND	1.0	5.0	1,2,4-Trichlorobenzene	ND	1.0	5.0
1,1,1-Trichloroethane	ND	1.0	5.0	1,1,2-Trichloroethane	ND	1.0	5.0
Trichloroethene	ND	1.0	5.0	Trichlorofluoromethane	ND	1.0	5.0
1,2,3-Trichloropropane	ND	1.0	5.0	1,2,4-Trimethylbenzene	ND	1.0	5.0
1,3,5-Trimethylbenzene	ND	1.0	5.0	Vinyl Chloride	ND	1.0	5.0
Xylenes	ND	1.0	5.0				

Surrogate Recoveries (%)			
%SS1:	104	%SS2:	106
%SS3:	125		

Comments:

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil/sludge/solid samples in µg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

P & D Environmental	Client Project ID: #0298; Snow Cleaners - Oakland	Date Sampled: 09/22/04
55 Santa Clara, Ste.240		Date Received: 09/23/04
	Client Contact: Paul King	Date Extracted: 10/05/04
Oakland, CA 94610	Client P.O.:	Date Analyzed: 10/06/04

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B | Analytical Method: SW8260B | Work Order: 0409374

Lab ID	0409374-009A
Client ID	B7-44.5
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	50	Acrolein (Propenal)	ND	1.0	50
Acrylonitrile	ND	1.0	20	tert-Amyl methyl ether (TAME)	ND	1.0	5.0
Benzene	ND	1.0	5.0	Bromobenzene	ND	1.0	5.0
Bromochloromethane	ND	1.0	5.0	Bromodichloromethane	ND	1.0	5.0
Bromoform	ND	1.0	5.0	Bromomethane	ND	1.0	5.0
2-Butanone (MEK)	ND	1.0	20	t-Butyl alcohol (TBA)	ND	1.0	25
n-Butyl benzene	ND	1.0	5.0	sec-Butyl benzene	ND	1.0	5.0
tert-Butyl benzene	ND	1.0	5.0	Carbon Disulfide	ND	1.0	5.0
Carbon Tetrachloride	ND	1.0	5.0	Chlorobenzene	ND	1.0	5.0
Chloroethane	ND	1.0	5.0	2-Chloroethyl Vinyl Ether	ND	1.0	10
Chloroform	ND	1.0	5.0	Chloromethane	ND	1.0	5.0
2-Chlorotoluene	ND	1.0	5.0	4-Chlorotoluene	ND	1.0	5.0
Dibromochloromethane	ND	1.0	5.0	1,2-Dibromo-3-chloropropane	ND	1.0	5.0
1,2-Dibromoethane (EDB)	ND	1.0	5.0	Dibromomethane	ND	1.0	5.0
1,2-Dichlorobenzene	ND	1.0	5.0	1,3-Dichlorobenzene	ND	1.0	5.0
1,4-Dichlorobenzene	ND	1.0	5.0	Dichlorodifluoromethane	ND	1.0	5.0
1,1-Dichloroethane	ND	1.0	5.0	1,2-Dichloroethane (1,2-DCA)	ND	1.0	5.0
1,1-Dichloroethene	ND	1.0	5.0	cis-1,2-Dichloroethene	ND	1.0	5.0
trans-1,2-Dichloroethene	ND	1.0	5.0	1,2-Dichloropropane	ND	1.0	5.0
1,3-Dichloropropane	ND	1.0	5.0	2,2-Dichloropropane	ND	1.0	5.0
1,1-Dichloropropene	ND	1.0	5.0	cis-1,3-Dichloropropene	ND	1.0	5.0
trans-1,3-Dichloropropene	ND	1.0	5.0	Diisopropyl ether (DIPE)	ND	1.0	5.0
Ethylbenzene	ND	1.0	5.0	Ethyl tert-butyl ether (ETBE)	ND	1.0	5.0
Freon 113	ND	1.0	100	Hexachlorobutadiene	ND	1.0	5.0
Hexachloroethane	ND	1.0	5.0	2-Hexanone	ND	1.0	5.0
Isopropylbenzene	ND	1.0	5.0	4-Isopropyl toluene	ND	1.0	5.0
Methanol	ND	1.0	2500	Methyl-t-butyl ether (MTBE)	ND	1.0	5.0
Methylene chloride	ND	1.0	5.0	4-Methyl-2-pentanone (MIBK)	ND	1.0	5.0
Naphthalene	ND	1.0	5.0	Nitrobenzene	ND	1.0	100
n-Propyl benzene	ND	1.0	5.0	Styrene	ND	1.0	5.0
1,1,1,2-Tetrachloroethane	ND	1.0	5.0	1,1,2,2-Tetrachloroethane	ND	1.0	5.0
Tetrachloroethene	ND	1.0	5.0	Toluene	ND	1.0	5.0
1,2,3-Trichlorobenzene	ND	1.0	5.0	1,2,4-Trichlorobenzene	ND	1.0	5.0
1,1,1-Trichloroethane	ND	1.0	5.0	1,1,2-Trichloroethane	ND	1.0	5.0
Trichloroethene	ND	1.0	5.0	Trichlorofluoromethane	ND	1.0	5.0
1,2,3-Trichloropropane	ND	1.0	5.0	1,2,4-Trimethylbenzene	ND	1.0	5.0
1,3,5-Trimethylbenzene	ND	1.0	5.0	Vinyl Chloride	ND	1.0	5.0
Xylenes	ND	1.0	5.0				

Surrogate Recoveries (%)			
%SS1:	103	%SS2:	108
%SS3:	121		

Comments:

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil/sludge/solid samples in µg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8260B

Matrix: S WorkOrder: 0409374

EPA Method: SW8260B Extraction: SW5030B BatchID: 13452 Spiked Sample ID: 0409374-006A

Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/Kg	µg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
tert-Amyl methyl ether (TAME)	ND	50	88.4	86.1	2.63	87.7	90.4	3.03	70	130
Benzene	ND	50	126	124	1.75	127	126	0.581	70	130
t-Butyl alcohol (TBA)	ND	250	84.8	91.4	7.56	89	91	2.18	70	130
Chlorobenzene	ND	50	107	105	2.18	108	108	0	70	130
1,2-Dibromoethane (EDB)	ND	50	99.6	96.9	2.71	98.5	100	1.68	70	130
1,2-Dichloroethane (1,2-DCA)	ND	50	118	114	3.60	117	120	2.42	70	130
1,1-Dichloroethene	ND	50	102	99.4	2.60	102	103	1.22	70	130
Diisopropyl ether (DIPE)	ND	50	127	124	2.34	127	130	2.25	70	130
Ethyl tert-butyl ether (ETBE)	ND	50	110	107	2.60	106	110	3.43	70	130
Methanol	ND	12500	100	102	2.20	101	101	0	70	130
Methyl-t-butyl ether (MTBE)	ND	50	96.8	94.5	2.37	96.3	98.6	2.34	70	130
Toluene	ND	50	113	111	1.81	119	119	0	70	130
Trichloroethene	ND	50	86.9	83.6	3.93	87.2	86.2	1.23	70	130
%SS1:	105	50	103	101	1.48	100	101	1.44	70	130
%SS2:	107	50	102	101	0.992	103	103	0	70	130
%SS3:	128	50	112	112	0	121	119	1.51	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS Certification No. 1644

QA/QC Officer

McCampbell Analytical, Inc.
110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0409374 **ClientID: PDEO**

Report to:
Paul King
P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610
TEL: (510) 658-6916
FAX: 510-834-0152
ProjectNo: #0298; Snow Cleaners - Oakland
PO:

Bill to:
Accounts Payable
P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610

Requested TAT: **5 days**
Date Received: **9/23/04**
Date Add-On: **10/5/04**
Date Printed: **10/5/04**

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)														
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0409374-006	B7-29.5	Soil	9/22/04	☐	A														
0409374-008	B7-39.5	Soil	9/22/04	☐	A														
0409374-009	B7-44.5	Soil	9/22/04	☐	A														

Test Legend:

1	8260B_S	2		3		4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Elisa Venegas

Comments: 8260 added 10/05 per fax s.t.a.t

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

PDDEO

P & D ENVIRONMENTAL
A Division of Paul H. King, Inc.
4020 Panama Court
Oakland, CA 94611
(510) 658-6916

0409374

CHAIN OF COUNTY CUSTODY RECORD

PAGE 1 OF 1

PROJECT NUMBER: 0298

PROJECT NAME: Snow Cleaners - Oakland

SAMPLED BY: (PRINTED AND SIGNATURE) Paul H. King   Paul H. King

SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION	NUMBER OF CONTAINERS	ANALYSIS(ES): TPH Multi Range / Std and Sil per	8260 add Pd w/ fos Ltd per				PRESERVATIVE	REMARKS
B7-4.5	9/22/04		Soil		1	X					ICE	Normal Turn Around
B7-9.5	"		"		1	X					"	" " "
B7-14.5	"		"		1	X					"	" " "
B7-19.5	"		"		1	X					"	" " "
B7-24.5	"		"		1	X					"	" " "
B7-29.5	"		"		1	X	X				"	" " "
B7-34.5	"		"		1	X					"	" " "
B7-39.5	"		"		1	X	X				"	" " "
B7-44.5	"		"		1	X	X				"	" " "

ICE/t° ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT
DECHLORINATED IN LAB
APPROPRIATE CONTAINERS ✓
PRESERVED IN LAB

PRESERVATION | VOAS | O&G | METALS | OTHER

TOTAL NO. OF SAMPLES (THIS SHIPMENT): 9
TOTAL NO. OF CONTAINERS (THIS SHIPMENT): 9

LABORATORY: McCampbell Analytical

LABORATORY CONTACT: Angela Rydelius

LABORATORY PHONE NUMBER: (925) 798-1620

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)
Paul H. King	9/23	11:00 am	Scott Brown
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)
Scott Brown	9/22	4:30 pm	[signature]

SAMPLE ANALYSIS REQUEST SHEET ATTACHED: ( )YES (X)NO

REMARKS:

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0298; Snow Cleaners-Oakland	Date Sampled: 09/22/04
		Date Received: 09/23/04
	Client Contact: Paul King	Date Extracted: 09/23/04
	Client P.O.:	Date Analyzed: 09/25/04-09/27/04

Diesel (C10-23) and Oil (C18+) Range Extractable Hydrocarbons as Diesel and Motor Oil*

Extraction method: SW3510C Analytical methods: SW8015C Work Order: 0409379

Lab ID	Client ID	Matrix	TPH(d)	TPH(mo)	DF	% SS
0409379-001A	B3-Water	W	ND,i	ND	1	100
0409379-002A	B7-Water	W	96,000,n,b,h,i	17,000	20	118

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	250	µg/L
	S	NA	NA	mg/Kg

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel (automatic transmission fluid); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0298; Snow Cleaners-Oakland	Date Sampled: 09/22/04
		Date Received: 09/23/04
	Client Contact: Paul King	Date Extracted: 09/26/04-09/29/04
	Client P.O.:	Date Analyzed: 09/26/04-09/29/04

Gasoline Range (C6-C12) and Stoddard Solvent Range (C9-C12) Volatile Hydrocarbons with BTEX and MTBE*

Extraction Method: SW5030B | Analytical Method: SW8021B/8015Cm | Work Order: 0409379

					Reporting Limit for DF =1	
Lab ID	0409379-001A	0409379-002A				
Client ID	B3-Water	B7-Water				
Matrix	W	W				
DF	1	5			S	W
Compound	**Concentration**				ug/kg	µg/L
TPH(g)	ND	1800			NA	50
TPH(ss)	ND	2300			NA	50
MTBE	ND	ND<60			NA	5.0
Benzene	ND	ND<2.5			NA	0.5
Toluene	1.1	8.5			NA	0.5
Ethylbenzene	ND	20			NA	0.5
Xylenes	1.5	46			NA	0.5
Surrogate Recoveries (%)						
%SS:	107	82.0				
Comments	i	e,h,i				

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

P & D Environmental	Client Project ID: #0298; Snow Cleaners-Oakland	Date Sampled: 09/22/04
55 Santa Clara, Ste.240		Date Received: 09/23/04
	Client Contact: Paul King	Date Extracted: 09/25/04-09/27/04
Oakland, CA 94610	Client P.O.:	Date Analyzed: 09/25/04-09/27/04

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B | Analytical Method: SW8260B | Work Order: 0409379

Lab ID	0409379-001B
Client ID	B3-Water
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	5.0	Acrolein (Propenal)	ND	1.0	5.0
Acrylonitrile	ND	1.0	2.0	tert-Amyl methyl ether (TAME)	ND	1.0	0.5
Benzene	ND	1.0	0.5	Bromobenzene	ND	1.0	0.5
Bromochloromethane	ND	1.0	0.5	Bromodichloromethane	ND	1.0	0.5
Bromoform	ND	1.0	0.5	Bromomethane	ND	1.0	0.5
2-Butanone (MEK)	ND	1.0	2.0	t-Butyl alcohol (TBA)	ND	1.0	5.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	1.0	0.5	Carbon Disulfide	ND	1.0	0.5
Carbon Tetrachloride	ND	1.0	0.5	Chlorobenzene	ND	1.0	0.5
Chloroethane	ND	1.0	0.5	2-Chloroethyl Vinyl Ether	ND	1.0	1.0
Chloroform	ND	1.0	0.5	Chloromethane	ND	1.0	0.5
2-Chlorotoluene	ND	1.0	0.5	4-Chlorotoluene	ND	1.0	0.5
Dibromochloromethane	ND	1.0	0.5	1,2-Dibromo-3-chloropropane	ND	1.0	0.5
1,2-Dibromoethane (EDB)	ND	1.0	0.5	Dibromomethane	ND	1.0	0.5
1,2-Dichlorobenzene	ND	1.0	0.5	1,3-Dichlorobenzene	ND	1.0	0.5
1,4-Dichlorobenzene	ND	1.0	0.5	Dichlorodifluoromethane	ND	1.0	0.5
1,1-Dichloroethane	ND	1.0	0.5	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5
1,1-Dichloroethene	ND	1.0	0.5	cis-1,2-Dichloroethene	ND	1.0	0.5
trans-1,2-Dichloroethene	ND	1.0	0.5	1,2-Dichloropropane	ND	1.0	0.5
1,3-Dichloropropane	ND	1.0	0.5	2,2-Dichloropropane	ND	1.0	0.5
1,1-Dichloropropene	ND	1.0	0.5	cis-1,3-Dichloropropene	ND	1.0	0.5
trans-1,3-Dichloropropene	ND	1.0	0.5	Diisopropyl ether (DIPE)	ND	1.0	0.5
Ethylbenzene	ND	1.0	0.5	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.5
Freon 113	ND	1.0	10	Hexachlorobutadiene	ND	1.0	0.5
Hexachloroethane	ND	1.0	0.5	2-Hexanone	ND	1.0	0.5
Isopropylbenzene	ND	1.0	0.5	4-Isopropyl toluene	ND	1.0	0.5
Methyl-t-butyl ether (MTBE)	1.0	1.0	0.5	Methylene chloride	ND	1.0	0.5
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5	Naphthalene	ND	1.0	0.5
Nitrobenzene	ND	1.0	10	n-Propyl benzene	ND	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	ND	1.0	0.5
1,1,2,2-Tetrachloroethane	ND	1.0	0.5	Tetrachloroethene	ND	1.0	0.5
Toluene	0.80	1.0	0.5	1,2,3-Trichlorobenzene	ND	1.0	0.5
1,2,4-Trichlorobenzene	ND	1.0	0.5	1,1,1-Trichloroethane	ND	1.0	0.5
1,1,2-Trichloroethane	ND	1.0	0.5	Trichloroethene	ND	1.0	0.5
Trichlorofluoromethane	ND	1.0	0.5	1,2,3-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	ND	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinyl Chloride	ND	1.0	0.5	Xylenes	1.4	1.0	0.5

Surrogate Recoveries (%)			
%SS1:	101	%SS2:	100
%SS3:	117		

Comments: i

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil / sludge / solid samples in µg/kg, wipe samples in µg/wipe, product / oil / non-aqueous liquid samples in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

P & D Environmental	Client Project ID: #0298; Snow Cleaners-Oakland	Date Sampled: 09/22/04
55 Santa Clara, Ste.240		Date Received: 09/23/04
	Client Contact: Paul King	Date Extracted: 09/27/04
Oakland, CA 94610	Client P.O.:	Date Analyzed: 09/27/04

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B | Analytical Method: SW8260B | Work Order: 0409379

Lab ID	0409379-002B
Client ID	B7-Water
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<50	10	5.0	Acrolein (Propenal)	ND<50	10	5.0
Acrylonitrile	ND<20	10	2.0	tert-Amyl methyl ether (TAME)	ND<5.0	10	0.5
Benzene	ND<5.0	10	0.5	Bromobenzene	ND<5.0	10	0.5
Bromochloromethane	ND<5.0	10	0.5	Bromodichloromethane	ND<5.0	10	0.5
Bromoform	ND<5.0	10	0.5	Bromomethane	ND<5.0	10	0.5
2-Butanone (MEK)	ND<20	10	2.0	t-Butyl alcohol (TBA)	ND<50	10	5.0
n-Butyl benzene	8.0	10	0.5	sec-Butyl benzene	12	10	0.5
tert-Butyl benzene	ND<5.0	10	0.5	Carbon Disulfide	ND<5.0	10	0.5
Carbon Tetrachloride	ND<5.0	10	0.5	Chlorobenzene	ND<5.0	10	0.5
Chloroethane	ND<5.0	10	0.5	2-Chloroethyl Vinyl Ether	ND<10	10	1.0
Chloroform	ND<5.0	10	0.5	Chloromethane	ND<5.0	10	0.5
2-Chlorotoluene	ND<5.0	10	0.5	4-Chlorotoluene	ND<5.0	10	0.5
Dibromochloromethane	ND<5.0	10	0.5	1,2-Dibromo-3-chloropropane	ND<5.0	10	0.5
1,2-Dibromoethane (EDB)	ND<5.0	10	0.5	Dibromomethane	ND<5.0	10	0.5
1,2-Dichlorobenzene	ND<5.0	10	0.5	1,3-Dichlorobenzene	ND<5.0	10	0.5
1,4-Dichlorobenzene	ND<5.0	10	0.5	Dichlorodifluoromethane	ND<5.0	10	0.5
1,1-Dichloroethane	ND<5.0	10	0.5	1,2-Dichloroethane (1,2-DCA)	ND<5.0	10	0.5
1,1-Dichloroethene	ND<5.0	10	0.5	cis-1,2-Dichloroethene	360	10	0.5
trans-1,2-Dichloroethene	27	10	0.5	1,2-Dichloropropane	ND<5.0	10	0.5
1,3-Dichloropropane	ND<5.0	10	0.5	2,2-Dichloropropane	ND<5.0	10	0.5
1,1-Dichloropropene	ND<5.0	10	0.5	cis-1,3-Dichloropropene	ND<5.0	10	0.5
trans-1,3-Dichloropropene	ND<5.0	10	0.5	Diisopropyl ether (DIPE)	ND<5.0	10	0.5
Ethylbenzene	28	10	0.5	Ethyl tert-butyl ether (ETBE)	ND<5.0	10	0.5
Freon 113	ND<100	10	10	Hexachlorobutadiene	ND<5.0	10	0.5
Hexachloroethane	ND<5.0	10	0.5	2-Hexanone	ND<5.0	10	0.5
Isopropylbenzene	17	10	0.5	4-Isopropyl toluene	ND<5.0	10	0.5
Methyl-t-butyl ether (MTBE)	ND<5.0	10	0.5	Methylene chloride	ND<5.0	10	0.5
4-Methyl-2-pentanone (MIBK)	ND<5.0	10	0.5	Naphthalene	ND<5.0	10	0.5
Nitrobenzene	ND<100	10	10	n-Propyl benzene	35	10	0.5
Styrene	ND<5.0	10	0.5	1,1,1,2-Tetrachloroethane	ND<5.0	10	0.5
1,1,2,2-Tetrachloroethane	ND<5.0	10	0.5	Tetrachloroethene	ND<5.0	10	0.5
Toluene	14	10	0.5	1,2,3-Trichlorobenzene	ND<5.0	10	0.5
1,2,4-Trichlorobenzene	ND<5.0	10	0.5	1,1,1-Trichloroethane	ND<5.0	10	0.5
1,1,2-Trichloroethane	ND<5.0	10	0.5	Trichloroethene	ND<5.0	10	0.5
Trichlorofluoromethane	ND<5.0	10	0.5	1,2,3-Trichloropropane	ND<5.0	10	0.5
1,2,4-Trimethylbenzene	110	10	0.5	1,3,5-Trimethylbenzene	37	10	0.5
Vinyl Chloride	34	10	0.5	Xylenes	66	10	0.5

Surrogate Recoveries (%)

%SS1:	100	%SS2:	99.0
%SS3:	108		

Comments: h,i

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil / sludge / solid samples in µg/kg, wipe samples in µg/wipe, product / oil / non-aqueous liquid samples in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8021B/8015Cm

Matrix: W WorkOrder: 0409379

EPA Method: SW8021B/8015Cm Extraction: SW5030B BatchID: 13288 Spiked Sample ID: 0409370-008A

Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
MTBE	ND	10	100	101	0.468	98.5	102	3.50	70	130
Benzene	ND	10	108	103	4.72	102	101	1.08	70	130
Toluene	ND	10	101	96.7	4.68	94.6	94.2	0.458	70	130
Ethylbenzene	ND	10	105	102	3.49	98.4	99.7	1.26	70	130
Xylenes	ND	30	91	89.7	1.48	85.7	86.3	0.775	70	130
%SS:	99.5	10	106	106	0	105	103	1.61	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not applicable or not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS Certification No. 1644

QA/QC Officer

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8021B/8015Cm

Matrix: W WorkOrder: 0409379

EPA Method: SW8021B/8015Cm Extraction: SW5030B BatchID: 13288 Spiked Sample ID: 0409370-008A

Analyte	Sample	Spiked	MS*	MSD*	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(btex)£	ND	60	96.9	95.8	1.20	93.7	95.7	2.12	70	130
MTBE	ND	10	100	101	0.468	98.5	102	3.50	70	130
Benzene	ND	10	108	103	4.72	102	101	1.08	70	130
Toluene	ND	10	101	96.7	4.68	94.6	94.2	0.458	70	130
Ethylbenzene	ND	10	105	102	3.49	98.4	99.7	1.26	70	130
Xylenes	ND	30	91	89.7	1.48	85.7	86.3	0.775	70	130
%SS:	99.5	10	106	106	0	105	103	1.61	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not applicable or not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS Certification No. 1644

QA/QC Officer

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8015C

Matrix: W WorkOrder: 0409379

EPA Method: SW8015C Extraction: SW3510C BatchID: 13297 Spiked Sample ID: N/A

Analyte	Sample	Spiked	MS*	MSD*	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(d)	N/A	7500	N/A	N/A	N/A	97	97.4	0.426	70	130
%SS:	N/A	2500	N/A	N/A	N/A	95	95	0	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS Certification No. 1644

QA/QC Officer

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8260B

Matrix: W WorkOrder: 0409379

EPA Method: SW8260B Extraction: SW5030B BatchID: 13281 Spiked Sample ID: 0409368-001A

Analyte	Sample	Spiked	MS*	MSD*	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
tert-Amyl methyl ether (TAME)	ND	10	83.4	80.6	3.43	79.4	77.4	2.57	70	130
Benzene	0.0781	10	114	118	4.08	116	111	3.87	70	130
t-Butyl alcohol (TBA)	ND	50	82.2	84.7	3.05	85.1	88.4	3.81	70	130
Chlorobenzene	0.0584	10	96.8	99.4	2.70	96.8	92.9	4.07	70	130
1,2-Dibromoethane (EDB)	ND	10	92.4	94	1.72	92.2	92.3	0.0416	70	130
1,2-Dichloroethane (1,2-DCA)	ND	10	104	110	5.27	108	107	1.10	70	130
1,1-Dichloroethene	0.163	10	96.2	101	4.66	100	96.2	3.96	70	130
Diisopropyl ether (DIPE)	ND	10	116	120	3.64	118	114	3.67	70	130
Ethyl tert-butyl ether (ETBE)	ND	10	97.8	101	3.66	102	99	2.51	70	130
Methyl-t-butyl ether (MTBE)	0.0252	10	85.4	90.5	5.71	93.6	93.4	0.263	70	130
Toluene	0.160	10	106	108	1.61	107	101	5.67	70	130
Trichloroethene	0.127	10	79.4	83.1	4.42	83	78.9	5.17	70	130
%SS1:	99.1	10	98	99	0.844	101	101	0	70	130
%SS2:	99.5	10	102	102	0	104	103	0.195	70	130
%SS3:	110	10	120	119	0.516	116	115	0.830	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS Certification No. 1644

QA/QC Officer

McCampbell Analytical, Inc.
110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0409379 **ClientID: PDEO**

Report to:
Paul King
P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610

TEL: (510) 658-6916
FAX: 510-834-0152
ProjectNo: #0298; Snow Cleaners-Oakland
PO:

Bill to:
Accounts Payable
P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610

Requested TAT: 5 days
Date Received: 9/23/04
Date Printed: 9/23/04

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0409379-001	B3-Water	Water	9/22/04	☐	B	A													
0409379-002	B7-Water	Water	9/22/04	☐	B	A													

Test Legend:

1	8260B_W	2	G-MBTEX_W	3		4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Melissa Valles

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

pdeo

P & D ENVIRONMENTAL
A Division of Paul H. King, Inc.
4020 Panama Court
Oakland, CA 94611
(510) 658-6916

CHAIN OF CUSTODY RECORD

040937 9

PAGE 1 OF 1

PROJECT NUMBER:	PROJECT NAME:
0298	Snow Cleaners - Oakland

SAMPLED BY: (PRINTED AND SIGNATURE) Paul H. King Paul H. King

SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION	NUMBER OF CONTAINERS	ANALYSIS(ES): TPH-Stoddard Solvent & Mult. Ranges	EPA 8260	PRESERVATIVE	REMARKS
+20 B3 - water	9/22/04		water		7	X	X	ICE	Normal Turn Around
+20 B7 - water			"		7	X	X	"	"

ICE/T ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
DECHLORINATED IN LAB ____
APPROPRIATE CONTAINERS ✓
PRESERVED IN LAB ____

PRESERVATION	VOAS	O&G	METALS	OTHER
	✓			

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)
Paul H. King	09/23	11:00	
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)
	9/22	4:30pm	
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)

REMARKS:

TOTAL NO. OF SAMPLES (THIS SHIPMENT)	2
TOTAL NO. OF CONTAINERS (THIS SHIPMENT)	14
LABORATORY:	McCampbell Analytical
LABORATORY CONTACT:	Angela Rydelins
LABORATORY PHONE NUMBER:	(925) 798-1620

SAMPLE ANALYSIS REQUEST SHEET ATTACHED: ( )YES (X)NO

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0298; Snow Cleaners-Oakland	Date Sampled: 10/13/04
		Date Received: 10/14/04
	Client Contact: Wilhelm Welzenbach	Date Extracted: 10/15/04
	Client P.O.:	Date Analyzed: 10/15/04

Gasoline Range (C6-C12) and Stoddard Solvent Range (C9-C12) Volatile Hydrocarbons*

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm Work Order: 0410199

Lab ID	Client ID	Matrix	TPH(g)	TPH(ss)	DF	% SS
0410199-001A	B4-Water	W	ND,i	ND	1	101
0410199-002A	B5-Water	W	ND,i	ND	1	99.0
0410199-003A	B6-Water	W	ND,i	ND	1	102

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	50	µg/L
	S	NA	NA	NA

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0298; Snow Cleaners-Oakland	Date Sampled: 10/13/04
		Date Received: 10/14/04
	Client Contact: Wilhelm Welzenbach	Date Extracted: 10/14/04
	Client P.O.:	Date Analyzed: 10/15/04-10/18/04

Diesel (C10-23) and Oil (C18+) Range Extractable Hydrocarbons as Diesel and Motor Oil*

Extraction method: SW3510C Analytical methods: SW8015C Work Order: 0410199

Lab ID	Client ID	Matrix	TPH(d)	TPH(mo)	DF	% SS
0410199-001A	B4-Water	W	130,g,b,f,i	420	1	95.0
0410199-002A	B5-Water	W	200,g,i	870	1	111
0410199-003A	B6-Water	W	ND,i	ND	1	102

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	250	µg/L
	S	NA	NA	mg/Kg

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel (automatic transmission fluid); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0298; Snow Cleaners-Oakland	Date Sampled: 10/13/04
		Date Received: 10/14/04
	Client Contact: Wilhelm Welzenbach	Date Extracted: 10/15/04
	Client P.O.:	Date Analyzed: 10/15/04

Gasoline Range (C6-C12) and Stoddard Solvent Range (C9-C12) Volatile Hydrocarbons with BTEX and MTBE*

Extraction Method: SW5030B Analytical Method: SW8021B/8015Cm Work Order: 0410199

Lab ID	0410199-001A	0410199-002A	0410199-003A		Reporting Limit for DF =1	
Client ID	B4-Water	B5-Water	B6-Water			
Matrix	W	W	W			
DF	1	1	1		S	W
Compound	**Concentration**				ug/kg	µg/L
TPH(g)	ND,i	ND,i	ND,i		NA	50
TPH(ss)	ND	ND	ND		NA	50
MTBE	ND	ND	ND		NA	5.0
Benzene	ND	ND	ND		NA	0.5
Toluene	ND	ND	ND		NA	0.5
Ethylbenzene	ND	ND	ND		NA	0.5
Xylenes	ND	ND	ND		NA	0.5
Surrogate Recoveries (%)						
%SS:	101	99.0	102			
Comments	i	i	i			

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

P & D Environmental	Client Project ID: #0298; Snow Cleaners-Oakland	Date Sampled: 10/13/04
55 Santa Clara, Ste.240		Date Received: 10/14/04
	Client Contact: Wilhelm Welzenbach	Date Extracted: 10/14/04-10/15/04
Oakland, CA 94610	Client P.O.:	Date Analyzed: 10/14/04-10/15/04

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B | Analytical Method: SW8260B | Work Order: 0410199

Lab ID	0410199-001B
Client ID	B4-Water
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	5.0	Acrolein (Propenal)	ND	1.0	5.0
Acrylonitrile	ND	1.0	2.0	tert-Amyl methyl ether (TAME)	ND	1.0	0.5
Benzene	ND	1.0	0.5	Bromobenzene	ND	1.0	0.5
Bromochloromethane	ND	1.0	0.5	Bromodichloromethane	ND	1.0	0.5
Bromoform	ND	1.0	0.5	Bromomethane	ND	1.0	0.5
2-Butanone (MEK)	ND	1.0	2.0	t-Butyl alcohol (TBA)	ND	1.0	5.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	1.0	0.5	Carbon Disulfide	ND	1.0	0.5
Carbon Tetrachloride	ND	1.0	0.5	Chlorobenzene	ND	1.0	0.5
Chloroethane	ND	1.0	0.5	2-Chloroethyl Vinyl Ether	ND	1.0	1.0
Chloroform	ND	1.0	0.5	Chloromethane	ND	1.0	0.5
2-Chlorotoluene	ND	1.0	0.5	4-Chlorotoluene	ND	1.0	0.5
Dibromochloromethane	ND	1.0	0.5	1,2-Dibromo-3-chloropropane	ND	1.0	0.5
1,2-Dibromoethane (EDB)	ND	1.0	0.5	Dibromomethane	ND	1.0	0.5
1,2-Dichlorobenzene	ND	1.0	0.5	1,3-Dichlorobenzene	ND	1.0	0.5
1,4-Dichlorobenzene	ND	1.0	0.5	Dichlorodifluoromethane	ND	1.0	0.5
1,1-Dichloroethane	ND	1.0	0.5	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5
1,1-Dichloroethene	ND	1.0	0.5	cis-1,2-Dichloroethene	ND	1.0	0.5
trans-1,2-Dichloroethene	ND	1.0	0.5	1,2-Dichloropropane	ND	1.0	0.5
1,3-Dichloropropane	ND	1.0	0.5	2,2-Dichloropropane	ND	1.0	0.5
1,1-Dichloropropene	ND	1.0	0.5	cis-1,3-Dichloropropene	ND	1.0	0.5
trans-1,3-Dichloropropene	ND	1.0	0.5	Diisopropyl ether (DIPE)	ND	1.0	0.5
Ethylbenzene	ND	1.0	0.5	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.5
Freon 113	ND	1.0	10	Hexachlorobutadiene	ND	1.0	0.5
Hexachloroethane	ND	1.0	0.5	2-Hexanone	ND	1.0	0.5
Isopropylbenzene	ND	1.0	0.5	4-Isopropyl toluene	ND	1.0	0.5
Methyl-t-butyl ether (MTBE)	2.6	1.0	0.5	Methylene chloride	ND	1.0	0.5
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5	Naphthalene	ND	1.0	0.5
Nitrobenzene	ND	1.0	10	n-Propyl benzene	ND	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	ND	1.0	0.5
1,1,2,2-Tetrachloroethane	ND	1.0	0.5	Tetrachloroethene	ND	1.0	0.5
Toluene	ND	1.0	0.5	1,2,3-Trichlorobenzene	ND	1.0	0.5
1,2,4-Trichlorobenzene	ND	1.0	0.5	1,1,1-Trichloroethane	ND	1.0	0.5
1,1,2-Trichloroethane	ND	1.0	0.5	Trichloroethene	ND	1.0	0.5
Trichlorofluoromethane	ND	1.0	0.5	1,2,3-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	ND	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinyl Chloride	ND	1.0	0.5	Xylenes	ND	1.0	0.5

Surrogate Recoveries (%)			
%SS1:	100	%SS2:	102
%SS3:	118		

Comments: i

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil / sludge / solid samples in µg/kg, wipe samples in µg/wipe, product / oil / non-aqueous liquid samples in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content; m) the concentration for this compound was above our upper calibration standard and is reported as an estimated value. This data was requested 3 weeks after initial analysis thereby precluding re-analysis at the correct dilution.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

P & D Environmental	Client Project ID: #0298; Snow Cleaners-Oakland	Date Sampled: 10/13/04
55 Santa Clara, Ste.240		Date Received: 10/14/04
	Client Contact: Wilhelm Welzenbach	Date Extracted: 10/14/04-10/15/04
Oakland, CA 94610	Client P.O.:	Date Analyzed: 10/14/04-10/15/04

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B | Analytical Method: SW8260B | Work Order: 0410199

Lab ID	0410199-002B
Client ID	B5-Water
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	5.0	Acrolein (Propenal)	ND	1.0	5.0
Acrylonitrile	ND	1.0	2.0	tert-Amyl methyl ether (TAME)	ND	1.0	0.5
Benzene	ND	1.0	0.5	Bromobenzene	ND	1.0	0.5
Bromochloromethane	ND	1.0	0.5	Bromodichloromethane	ND	1.0	0.5
Bromoform	ND	1.0	0.5	Bromomethane	ND	1.0	0.5
2-Butanone (MEK)	ND	1.0	2.0	t-Butyl alcohol (TBA)	ND	1.0	5.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	1.0	0.5	Carbon Disulfide	ND	1.0	0.5
Carbon Tetrachloride	ND	1.0	0.5	Chlorobenzene	ND	1.0	0.5
Chloroethane	ND	1.0	0.5	2-Chloroethyl Vinyl Ether	ND	1.0	1.0
Chloroform	ND	1.0	0.5	Chloromethane	ND	1.0	0.5
2-Chlorotoluene	ND	1.0	0.5	4-Chlorotoluene	ND	1.0	0.5
Dibromochloromethane	ND	1.0	0.5	1,2-Dibromo-3-chloropropane	ND	1.0	0.5
1,2-Dibromoethane (EDB)	ND	1.0	0.5	Dibromomethane	ND	1.0	0.5
1,2-Dichlorobenzene	ND	1.0	0.5	1,3-Dichlorobenzene	ND	1.0	0.5
1,4-Dichlorobenzene	ND	1.0	0.5	Dichlorodifluoromethane	ND	1.0	0.5
1,1-Dichloroethane	ND	1.0	0.5	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5
1,1-Dichloroethene	ND	1.0	0.5	cis-1,2-Dichloroethene	ND	1.0	0.5
trans-1,2-Dichloroethene	ND	1.0	0.5	1,2-Dichloropropane	ND	1.0	0.5
1,3-Dichloropropane	ND	1.0	0.5	2,2-Dichloropropane	ND	1.0	0.5
1,1-Dichloropropene	ND	1.0	0.5	cis-1,3-Dichloropropene	ND	1.0	0.5
trans-1,3-Dichloropropene	ND	1.0	0.5	Diisopropyl ether (DIPE)	ND	1.0	0.5
Ethylbenzene	ND	1.0	0.5	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.5
Freon 113	ND	1.0	10	Hexachlorobutadiene	ND	1.0	0.5
Hexachloroethane	ND	1.0	0.5	2-Hexanone	ND	1.0	0.5
Isopropylbenzene	ND	1.0	0.5	4-Isopropyl toluene	ND	1.0	0.5
Methyl-t-butyl ether (MTBE)	ND	1.0	0.5	Methylene chloride	ND	1.0	0.5
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5	Naphthalene	ND	1.0	0.5
Nitrobenzene	ND	1.0	10	n-Propyl benzene	ND	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	ND	1.0	0.5
1,1,2,2-Tetrachloroethane	ND	1.0	0.5	Tetrachloroethene	ND	1.0	0.5
Toluene	ND	1.0	0.5	1,2,3-Trichlorobenzene	ND	1.0	0.5
1,2,4-Trichlorobenzene	ND	1.0	0.5	1,1,1-Trichloroethane	ND	1.0	0.5
1,1,2-Trichloroethane	ND	1.0	0.5	Trichloroethene	ND	1.0	0.5
Trichlorofluoromethane	ND	1.0	0.5	1,2,3-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	ND	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinyl Chloride	ND	1.0	0.5	Xylenes	ND	1.0	0.5

Surrogate Recoveries (%)			
%SS1:	104	%SS2:	101
%SS3:	114		

Comments: i

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil / sludge / solid samples in µg/kg, wipe samples in µg/wipe, product / oil / non-aqueous liquid samples in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content; m) the concentration for this compound was above our upper calibration standard and is reported as an estimated value. This data was requested 3 weeks after initial analysis thereby precluding re-analysis at the correct dilution.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

P & D Environmental	Client Project ID: #0298; Snow Cleaners-Oakland	Date Sampled: 10/13/04
55 Santa Clara, Ste.240		Date Received: 10/14/04
	Client Contact: Wilhelm Welzenbach	Date Extracted: 10/14/04-10/15/04
Oakland, CA 94610	Client P.O.:	Date Analyzed: 10/14/04-10/15/04

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B | Analytical Method: SW8260B | Work Order: 0410199

Lab ID	0410199-003B
Client ID	B6-Water
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	5.0	Acrolein (Propenal)	ND	1.0	5.0
Acrylonitrile	ND	1.0	2.0	tert-Amyl methyl ether (TAME)	ND	1.0	0.5
Benzene	ND	1.0	0.5	Bromobenzene	ND	1.0	0.5
Bromochloromethane	ND	1.0	0.5	Bromodichloromethane	ND	1.0	0.5
Bromoform	ND	1.0	0.5	Bromomethane	ND	1.0	0.5
2-Butanone (MEK)	ND	1.0	2.0	t-Butyl alcohol (TBA)	ND	1.0	5.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	1.0	0.5	Carbon Disulfide	ND	1.0	0.5
Carbon Tetrachloride	ND	1.0	0.5	Chlorobenzene	ND	1.0	0.5
Chloroethane	ND	1.0	0.5	2-Chloroethyl Vinyl Ether	ND	1.0	1.0
Chloroform	ND	1.0	0.5	Chloromethane	ND	1.0	0.5
2-Chlorotoluene	ND	1.0	0.5	4-Chlorotoluene	ND	1.0	0.5
Dibromochloromethane	ND	1.0	0.5	1,2-Dibromo-3-chloropropane	ND	1.0	0.5
1,2-Dibromoethane (EDB)	ND	1.0	0.5	Dibromomethane	ND	1.0	0.5
1,2-Dichlorobenzene	ND	1.0	0.5	1,3-Dichlorobenzene	ND	1.0	0.5
1,4-Dichlorobenzene	ND	1.0	0.5	Dichlorodifluoromethane	ND	1.0	0.5
1,1-Dichloroethane	ND	1.0	0.5	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5
1,1-Dichloroethene	ND	1.0	0.5	cis-1,2-Dichloroethene	0.67	1.0	0.5
trans-1,2-Dichloroethene	ND	1.0	0.5	1,2-Dichloropropane	ND	1.0	0.5
1,3-Dichloropropane	ND	1.0	0.5	2,2-Dichloropropane	ND	1.0	0.5
1,1-Dichloropropene	ND	1.0	0.5	cis-1,3-Dichloropropene	ND	1.0	0.5
trans-1,3-Dichloropropene	ND	1.0	0.5	Diisopropyl ether (DIPE)	ND	1.0	0.5
Ethylbenzene	ND	1.0	0.5	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.5
Freon 113	ND	1.0	10	Hexachlorobutadiene	ND	1.0	0.5
Hexachloroethane	ND	1.0	0.5	2-Hexanone	ND	1.0	0.5
Isopropylbenzene	ND	1.0	0.5	4-Isopropyl toluene	ND	1.0	0.5
Methyl-t-butyl ether (MTBE)	ND	1.0	0.5	Methylene chloride	ND	1.0	0.5
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5	Naphthalene	ND	1.0	0.5
Nitrobenzene	ND	1.0	10	n-Propyl benzene	ND	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	ND	1.0	0.5
1,1,2,2-Tetrachloroethane	ND	1.0	0.5	Tetrachloroethene	ND	1.0	0.5
Toluene	ND	1.0	0.5	1,2,3-Trichlorobenzene	ND	1.0	0.5
1,2,4-Trichlorobenzene	ND	1.0	0.5	1,1,1-Trichloroethane	ND	1.0	0.5
1,1,2-Trichloroethane	ND	1.0	0.5	Trichloroethene	ND	1.0	0.5
Trichlorofluoromethane	ND	1.0	0.5	1,2,3-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	ND	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinyl Chloride	ND	1.0	0.5	Xylenes	ND	1.0	0.5

Surrogate Recoveries (%)			
%SS1:	99.0	%SS2:	103
%SS3:	118		

Comments: i

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil / sludge / solid samples in µg/kg, wipe samples in µg/wipe, product / oil / non-aqueous liquid samples in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content; m) the concentration for this compound was above our upper calibration standard and is reported as an estimated value. This data was requested 3 weeks after initial analysis thereby precluding re-analysis at the correct dilution.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8021B/8015Cm

Matrix: W WorkOrder: 0410199

EPA Method: SW8021B/8015Cm Extraction: SW5030B BatchID: 13568 Spiked Sample ID: 0410177-011A

Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(btex) £	ND	60	97	92.3	5.00	97.9	96.9	1.05	70	130
MTBE	ND	10	96.5	97.4	0.878	97.9	91.2	7.06	70	130
Benzene	ND	10	99.1	97.7	1.41	102	98	4.13	70	130
Toluene	ND	10	93.8	90.9	3.21	97	91.2	6.13	70	130
Ethylbenzene	ND	10	98.4	93	5.64	99.9	93.4	6.75	70	130
Xylenes	ND	30	85.7	84.7	1.17	86	85.3	0.778	70	130
%SS:	100	10	104	102	1.82	104	102	2.79	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not applicable or not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS Certification No. 1644

QA/QC Officer

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8015C

Matrix: W WorkOrder: 0410199

EPA Method: SW8015C Extraction: SW3510C BatchID: 13561 Spiked Sample ID: N/A

Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(d)	N/A	7500	N/A	N/A	N/A	101	103	2.39	70	130
%SS:	N/A	2500	N/A	N/A	N/A	107	109	2.21	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS Certification No. 1644

QA/QC Officer

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8260B

Matrix: W WorkOrder: 0410199

EPA Method: SW8260B Extraction: SW5030B BatchID: 13560 Spiked Sample ID: 0410184-002A

Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
tert-Amyl methyl ether (TAME)	ND	10	86.5	92.6	6.85	84.1	78	7.60	70	130
Benzene	ND	10	114	121	5.73	113	111	1.60	70	130
t-Butyl alcohol (TBA)	ND	50	92.2	95	2.94	90.4	83.8	7.61	70	130
Chlorobenzene	ND	10	103	106	2.92	103	98.7	3.82	70	130
1,2-Dibromoethane (EDB)	ND	10	101	105	3.80	97.1	95.2	2.00	70	130
1,2-Dichloroethane (1,2-DCA)	ND	10	108	118	8.42	115	117	1.06	70	130
1,1-Dichloroethene	ND	10	102	104	2.12	78.4	79.4	1.28	70	130
Diisopropyl ether (DIPE)	ND	10	118	128	8.16	121	115	5.28	70	130
Ethyl tert-butyl ether (ETBE)	ND	10	109	115	5.20	104	98.2	5.42	70	130
Methyl-t-butyl ether (MTBE)	ND	10	104	112	6.96	96.4	94.2	2.27	70	130
Toluene	ND	10	111	114	2.74	112	106	5.19	70	130
Trichloroethene	ND	10	86.8	89.8	3.41	75.5	75	0.633	70	130
%SS1:	110	10	102	106	3.41	100	99	1.31	70	130
%SS2:	104	10	102	102	0	104	103	1.12	70	130
%SS3:	117	10	108	108	0	116	118	2.33	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

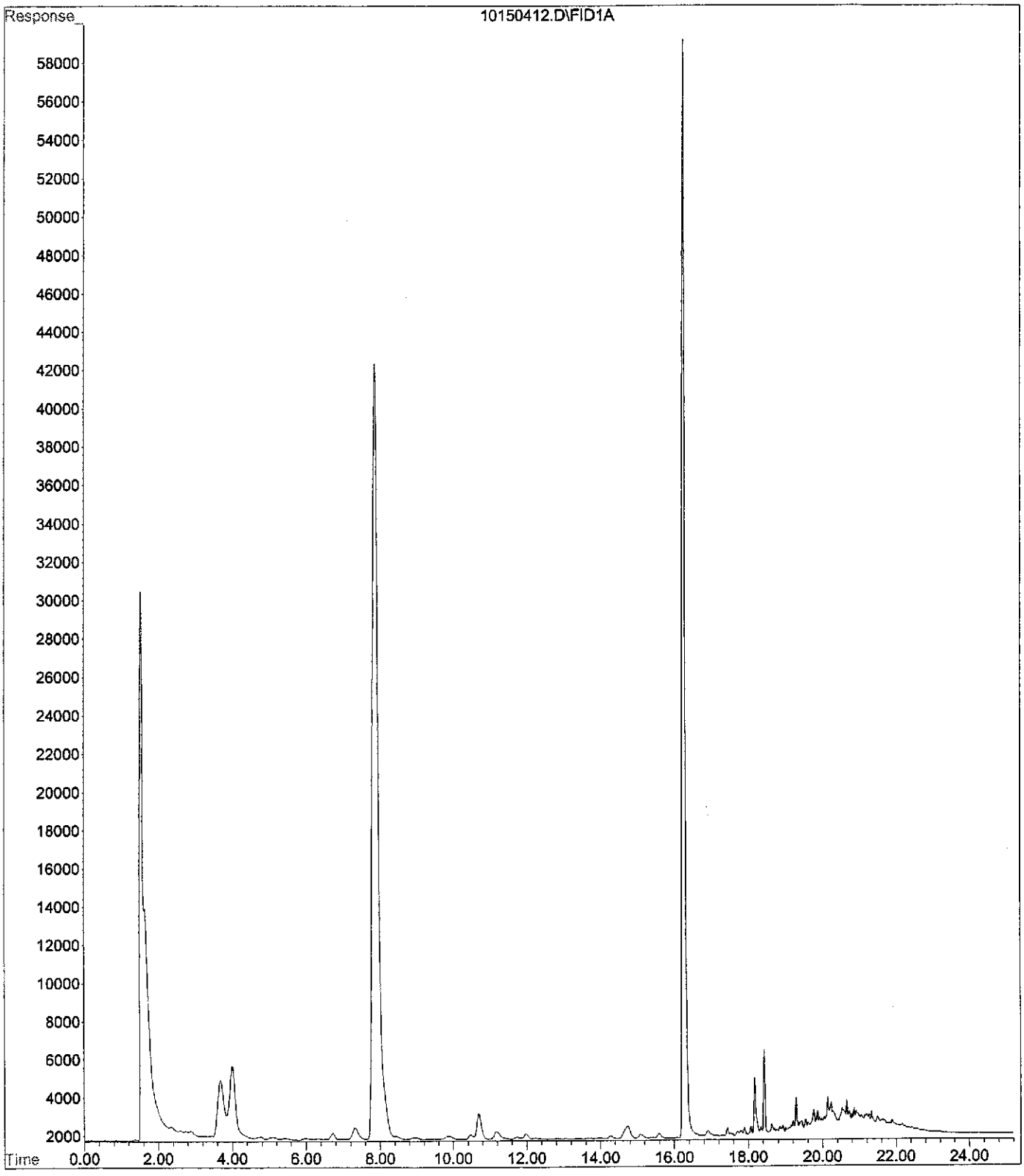
Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS Certification No. 1644

QA/QC Officer

File : D:\HPCHEM\GC3\DATA\10150412.D
Operator :
Acquired : 15 Oct 2004 7:48 pm using AcqMethod GC3K.M
Instrument : GC-3
Sample Name: 0410199-001A W
Misc Info : G-MBTEX_W
Vial Number: 12

B 4 (Gas chromatogram



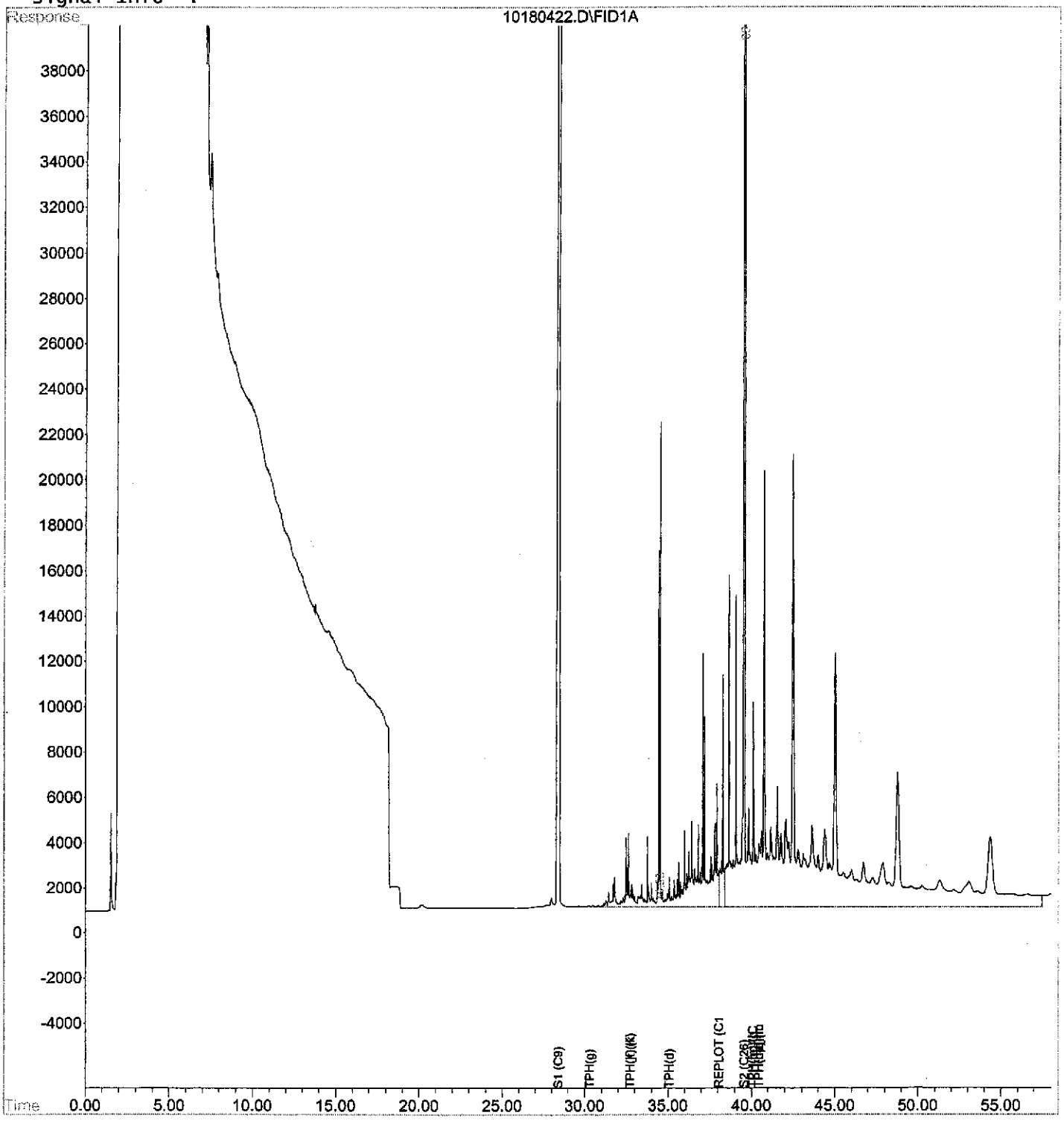
Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\GC2\DATAA\10180422.D Vial: 11
Acq On : 18 Oct 2004 9:36 pm Operator: Thu
Sample : 0410199-001A W RE Inst : GC-2
Misc : TPH(DMO)_W Multiplr: 1.0
IntFile : EVENTS.E
Quant Time: Oct 18 22:34 2004 Quant Results File: GC2AR.RES

Quant Method : D:\HPCHEM\GC2\METHODS\GC2AR.M (Chemstation Integrator)
Title : DIESEL 1
Last Update : Fri Oct 08 16:29:44 2004
Response via : Multiple Level Calibration
DataAcq Meth : GC2AR.M

B-4 (1) Diesel chromatogra

Volume Inj. :
Signal Phase :
Signal Info :

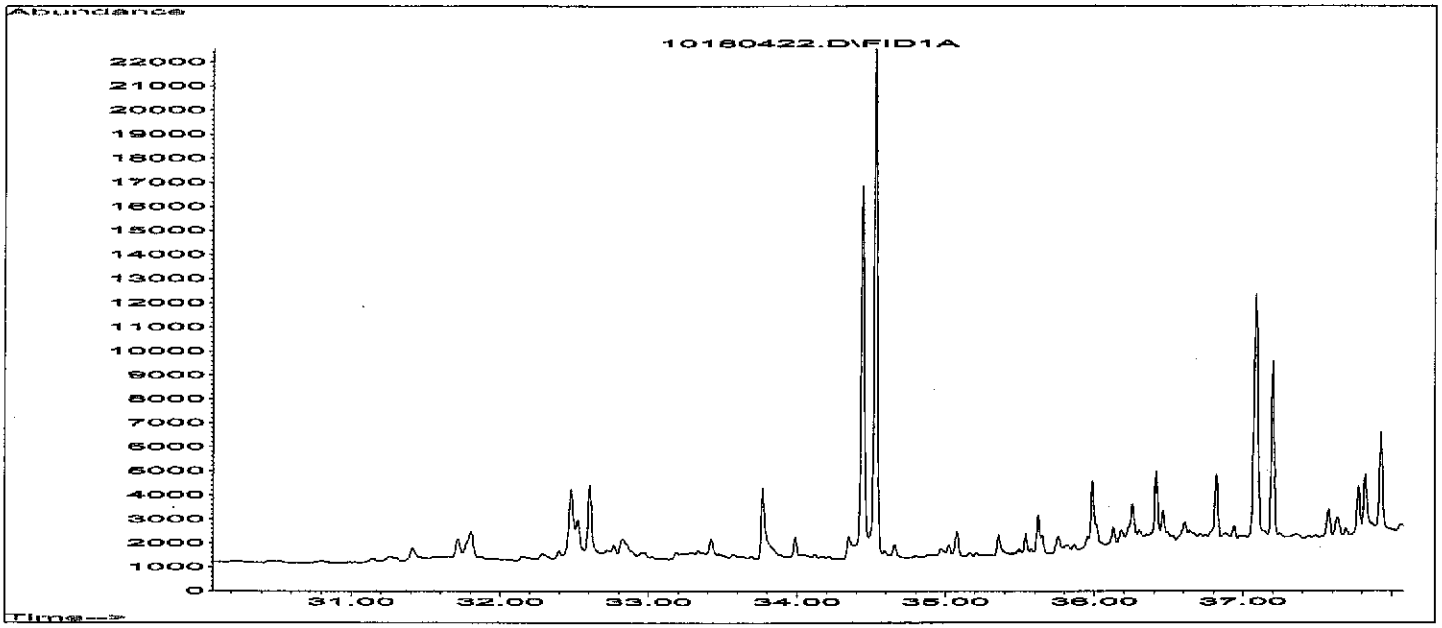


Instrument Name	GC-2	DETECTOR A	
Data File Name	10180422.D	Sample Name	0410199-001A W RE
Date Acquired	10/18/2004 9:36	Data File Path	D:\HPCHEM\GC2\DATAA\
Acq. Method File	GC2AR.M	Misc Info	TPH(DMO)_W
Vial Number	11	Sample Multiplier	1

NOTE: THE MULTIPLIER IS THE DILUTION FACTOR ONLY, NOT WITH THE EXTRACTION FACTOR
NOTE: S1 & S2 % recoveries are based on dilution without SS
NOTE: TPH(d,bo) and TPH(mo) values are based on diesel & motor oil calibrations; TPH(bo) has TPH(mo) RL
NOTE: Ignore TPH(g) & TPH(k) values from Chem Station; after that they are based on the diesel RF & area

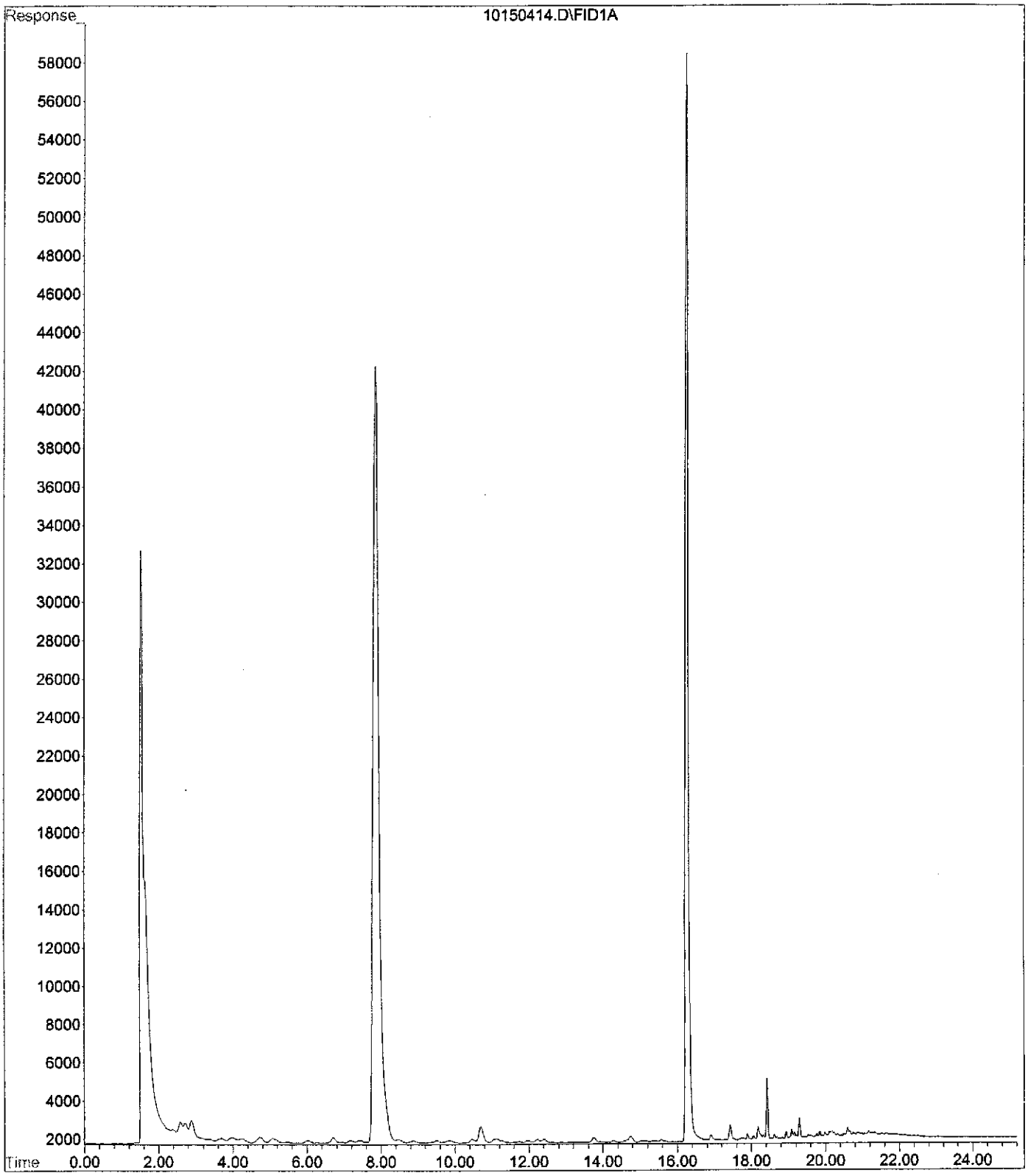
Name	Ret Time	CS (mg/Ls)	Area	Amount Using D & MO RFs only (mg/Ls)	Soil mg/kg)	Water (ug/L)
S1 (C9)	28.40	95.1	21606723	95.1	95%	95%
S2 (C26)	39.56	99.4	22483879	99.4	99%	99%
TPH(d)	C10-C23	5.2	4507771	5.2	2.6	131
TPH(mo)	C18+	16.8	16534769	16.8	8.4	420
TPH(k)(K)	C10-C18	2.0	2273366	2.6	1.3	66
TPH(g)	<C12	8.6	1363839	1.6	ND	ND
TPH(bo) (C10+)	C10+	28.0	24195042	28.0	14.0	701

REPLOT (C10-C25)



File : D:\HPCHEM\GC3\DATA\10150414.D
Operator :
Acquired : 15 Oct 2004 8:55 pm using AcqMethod GC3K.M
Instrument : GC-3
Sample Name: 0410199-002A W
Misc Info : G-MBTEX_W
Vial Number: 14

B_5 Gas chromatogram



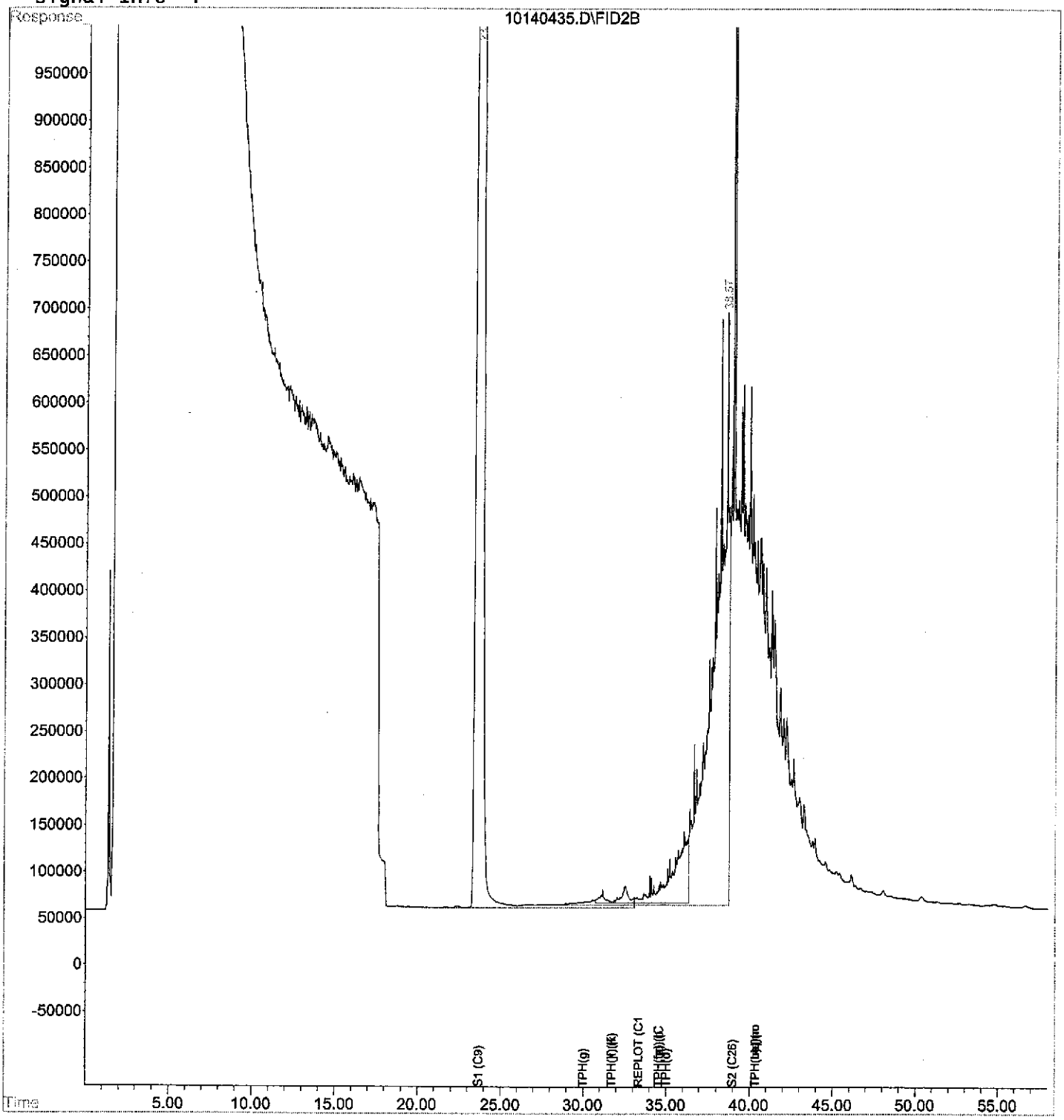
Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\GC11\DATAB\10140435.D Vial: 68
Acq On : 15 Oct 2004 7:32 am Operator: Thu
Sample : 0410199-002A W Inst : GC-11
Misc : TPH(DMO)_W Multiplr: 1.0
IntFile : EVENTS.E
Quant Time: Oct 15 8:39 2004 Quant Results File: GC11BS.RES

Quant Method : D:\HPCHEM\GC11\METHODS\GC11BS.M (Chemstation Integrator)
Title : GC-11A
Last Update : Wed Sep 22 15:37:06 2004
Response via : Multiple Level Calibration
DataAcq Meth : GC11AS.M

B_5 (1) Diesel chromatogr

Volume Inj. :
Signal Phase :
Signal Info :



D:\HPCHEM\GC11\DATAB\10140435.D

B-S (2)

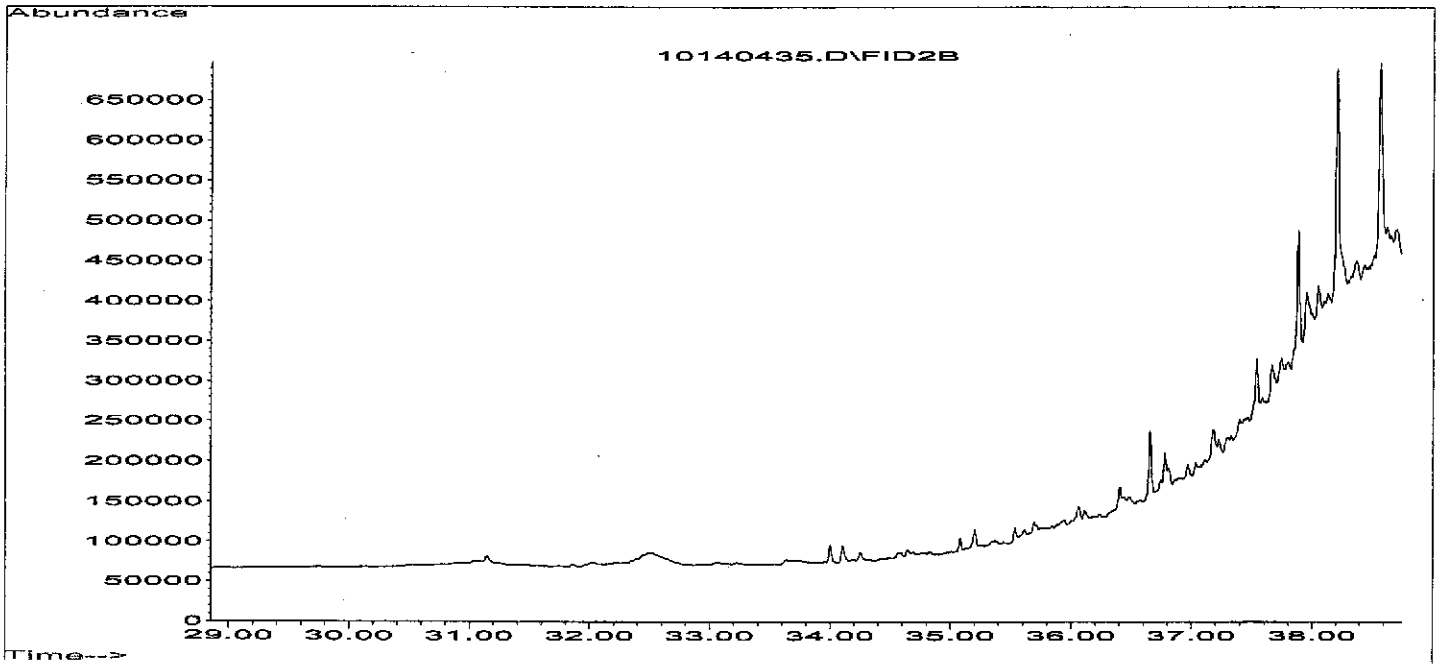
Diesel chromatogram

Instrument Name	GC-11	DETECTOR B	
Data File Name	10140435.D	Sample Name	0410199-002A W
Date Acquired	10/15/2004 7:32	Data File Path	D:\HPCHEM\GC11\DATAB\
Acq. Method File	GC11AS.M	Misc Info	TPH(DMO)_W
Vial Number	68	Sample Multiplier	1

NOTE: THE MULTIPLIER IS THE DILUTION FACTOR ONLY, NOT WITH THE EXTRACTION FACTOR
NOTE: S1 & S2 % recoveries are based on dilution without SS
NOTE: TPH(d,bo) and TPH(mo) values are based on diesel & motor oil calibrations, TPH(bo) and TPH(mo) use the same RL
NOTE: Ignore TPH(g) & TPH(k) values from Chem Station; after that they are based on the diesel RF & area

Name	Ret Time	CS (mg/Ls)	Area	Amount Using D & MO RFs only (mg/Ls)	Soil mg/kg)	Water (ug/L)
S1 (C9)	23.66	110.8	960310342	110.8	111%	111%
S2 (C26)	38.98	107.3	932915603	107.3	107%	107%
TPH(d)	C10-C23	8.0	289579141	8.0	4.0	201
TPH(mo)	C18+	34.9	1293213384	34.9	17.4	872
TPH(k)(K)	C10-C18	2.1	56414244	1.6	ND	ND
TPH(g)	<C12	10.5	38342307	1.1	ND	ND
TPH(bo) (C10+)	C10+	35.2	1357417419	35.2	17.6	879

REPLOT (C10-C25)



McCampbell Analytical, Inc.
110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0410199 **ClientID: PDEO**

Report to:
Wilhelm Welzenbach
P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610

TEL: (510) 658-6916
FAX: 510-834-0152
ProjectNo: #0298; Snow Cleaners-Oakland
PO:

Bill to:
Accounts Payable
P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610

Requested TAT: 5 days
Date Received: 10/14/04
Date Printed: 10/14/04

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)														
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0410199-001	B4-Water	Water	10/13/04	☐	B	A													
0410199-002	B5-Water	Water	10/13/04	☐	B	A													
0410199-003	B6-Water	Water	10/13/04	☐	B	A													

Test Legend:

1	8260B_W	2	G-MBTEX_W	3		4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Melissa Valles

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

pdeo

P & D ENVIRONMENTAL
A Division of Paul H. King, Inc.
4020 Panama Court
Oakland, CA 94611
(510) 658-6916

0410199

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

PROJECT NUMBER: 0298

PROJECT NAME: Snow Cleaners - Oakland

SAMPLED BY: (PRINTED AND SIGNATURE) Wilhelm Welzenbach

SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION	NUMBER OF CONTAINERS	ANALYSIS(ES): TPH-Multirange (Stoddard solvent)	VOCs by 8260	PRESERVATIVE	REMARKS
115 B4 - water	10/13/04		water			X	X	ICE	Normal Turnaround
150 B5 - water	↓		↓			X	X	↓	↓
150 B6 - water						X	X		

ICE/t° ✓
GOOD CONDITION ✓ APPROPRIATE CONTAINERS ✓
HEAD SPACE ABSENT ✓ PRESERVED IN LAB —
DECHLORINATED IN LAB ✓

PRESERVATION	VOAs	O&G	METALS	OTHER
	✓			

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)
Wilhelm Welzenbach	10/14	1:40	Scott Sommer
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)
Scott Sommer	10/14/04	5:15 PM	Jill Van

TOTAL NO. OF SAMPLES (THIS SHIPMENT)
TOTAL NO. OF CONTAINERS (THIS SHIPMENT)

LABORATORY: McCampbell Analytical

LABORATORY CONTACT: Angela Rydelins

LABORATORY PHONE NUMBER: (925) 798-1620

SAMPLE ANALYSIS REQUEST SHEET ATTACHED: ( )YES (X)NO

REMARKS: VOAs preserved w HCl.

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0298; Snow Cleaners, Oakland	Date Sampled: 10/27/04
		Date Received: 10/28/04
	Client Contact: Wilhelm Welzenbach	Date Extracted: 10/28/04
	Client P.O.:	Date Analyzed: 10/30/04-11/01/04

Diesel (C10-23) and Oil (C18+) Range Extractable Hydrocarbons as Diesel and Motor Oil*

Extraction method: SW3510C Analytical methods: SW8015C Work Order: 0410446

Lab ID	Client ID	Matrix	TPH(d)	TPH(mo)	DF	% SS
0410446-001A	MW1	W	ND	ND	1	86.0
0410446-002A	MW2	W	280,000,n,b,h	ND<50,000	200	---#

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	250	µg/L
	S	NA	NA	mg/Kg

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel (automatic transmission fluid); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0298; Snow Cleaners, Oakland	Date Sampled: 10/27/04
		Date Received: 10/28/04
	Client Contact: Wilhelm Welzenbach	Date Extracted: 10/28/04
	Client P.O.:	Date Analyzed: 11/02/04

Gasoline Range (C6-C12) Stoddard Solvent Range (C9-C12) Volatile Hydrocarbons as Gasoline & Stoddard Solvent*

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm Work Order: 0410446

Lab ID	Client ID	Matrix	TPH(g)	TPH(ss)	DF	% SS
0410446-001A	MW1	W	ND	ND	1	111
0410446-002A	MW2	W	320,000,e,h	500,000	200	107

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	50	µg/L
	S	NA	NA	mg/Kg

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

P & D Environmental	Client Project ID: #0298; Snow Cleaners, Oakland	Date Sampled: 10/27/04
55 Santa Clara, Ste.240		Date Received: 10/28/04
	Client Contact: Wilhelm Welzenbach	Date Extracted: 10/30/04-11/01/04
Oakland, CA 94610	Client P.O.:	Date Analyzed: 10/30/04-11/01/04

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B | Analytical Method: SW8260B | Work Order: 0410446

Lab ID	0410446-001B
Client ID	MW1
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	5.0	Acrolein (Propenal)	ND	1.0	5.0
Acrylonitrile	ND	1.0	2.0	tert-Amyl methyl ether (TAME)	ND	1.0	0.5
Benzene	ND	1.0	0.5	Bromobenzene	ND	1.0	0.5
Bromochloromethane	ND	1.0	0.5	Bromodichloromethane	ND	1.0	0.5
Bromoform	ND	1.0	0.5	Bromomethane	ND	1.0	0.5
2-Butanone (MEK)	ND	1.0	2.0	t-Butyl alcohol (TBA)	ND	1.0	5.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	1.0	0.5	Carbon Disulfide	ND	1.0	0.5
Carbon Tetrachloride	ND	1.0	0.5	Chlorobenzene	ND	1.0	0.5
Chloroethane	ND	1.0	0.5	2-Chloroethyl Vinyl Ether	ND	1.0	1.0
Chloroform	0.78	1.0	0.5	Chloromethane	ND	1.0	0.5
2-Chlorotoluene	ND	1.0	0.5	4-Chlorotoluene	ND	1.0	0.5
Dibromochloromethane	ND	1.0	0.5	1,2-Dibromo-3-chloropropane	ND	1.0	0.5
1,2-Dibromoethane (EDB)	ND	1.0	0.5	Dibromomethane	ND	1.0	0.5
1,2-Dichlorobenzene	ND	1.0	0.5	1,3-Dichlorobenzene	ND	1.0	0.5
1,4-Dichlorobenzene	ND	1.0	0.5	Dichlorodifluoromethane	ND	1.0	0.5
1,1-Dichloroethane	ND	1.0	0.5	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5
1,1-Dichloroethene	ND	1.0	0.5	cis-1,2-Dichloroethene	ND	1.0	0.5
trans-1,2-Dichloroethene	ND	1.0	0.5	1,2-Dichloropropane	ND	1.0	0.5
1,3-Dichloropropane	ND	1.0	0.5	2,2-Dichloropropane	ND	1.0	0.5
1,1-Dichloropropene	ND	1.0	0.5	cis-1,3-Dichloropropene	ND	1.0	0.5
trans-1,3-Dichloropropene	ND	1.0	0.5	Diisopropyl ether (DIPE)	ND	1.0	0.5
Ethylbenzene	ND	1.0	0.5	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.5
Freon 113	ND	1.0	10	Hexachlorobutadiene	ND	1.0	0.5
Hexachloroethane	ND	1.0	0.5	2-Hexanone	ND	1.0	0.5
Isopropylbenzene	ND	1.0	0.5	4-Isopropyl toluene	ND	1.0	0.5
Methyl-t-butyl ether (MTBE)	ND	1.0	0.5	Methylene chloride	ND	1.0	0.5
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5	Naphthalene	ND	1.0	0.5
Nitrobenzene	ND	1.0	10	n-Propyl benzene	ND	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	ND	1.0	0.5
1,1,2,2-Tetrachloroethane	ND	1.0	0.5	Tetrachloroethene	ND	1.0	0.5
Toluene	ND	1.0	0.5	1,2,3-Trichlorobenzene	ND	1.0	0.5
1,2,4-Trichlorobenzene	ND	1.0	0.5	1,1,1-Trichloroethane	ND	1.0	0.5
1,1,2-Trichloroethane	ND	1.0	0.5	Trichloroethene	ND	1.0	0.5
Trichlorofluoromethane	ND	1.0	0.5	1,2,3-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	ND	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinyl Chloride	ND	1.0	0.5	Xylenes	ND	1.0	0.5

Surrogate Recoveries (%)

%SS1:	98.0	%SS2:	102
%SS3:	118		

Comments:

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil / sludge / solid samples in µg/kg, wipe samples in µg/wipe, product / oil / non-aqueous liquid samples in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content; m) the concentration for this compound was above our upper calibration standard and is reported as an estimated value. This data was requested 3 weeks after initial analysis thereby precluding re-analysis at the correct dilution.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

P & D Environmental	Client Project ID: #0298; Snow Cleaners, Oakland	Date Sampled: 10/27/04
55 Santa Clara, Ste.240		Date Received: 10/28/04
	Client Contact: Wilhelm Welzenbach	Date Extracted: 10/30/04-11/01/04
Oakland, CA 94610	Client P.O.:	Date Analyzed: 10/30/04-11/01/04

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B | Analytical Method: SW8260B | Work Order: 0410446

Lab ID	0410446-002B
Client ID	MW2
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<2500	500	5.0	Acrolein (Propenal)	ND<2500	500	5.0
Acrylonitrile	ND<1000	500	2.0	tert-Amyl methyl ether (TAME)	ND<250	500	0.5
Benzene	ND<250	500	0.5	Bromobenzene	ND<250	500	0.5
Bromochloromethane	ND<250	500	0.5	Bromodichloromethane	ND<250	500	0.5
Bromoform	ND<250	500	0.5	Bromomethane	ND<250	500	0.5
2-Butanone (MEK)	ND<1000	500	2.0	t-Butyl alcohol (TBA)	ND<2500	500	5.0
n-Butyl benzene	ND<250	500	0.5	sec-Butyl benzene	ND<250	500	0.5
tert-Butyl benzene	ND<250	500	0.5	Carbon Disulfide	ND<250	500	0.5
Carbon Tetrachloride	ND<250	500	0.5	Chlorobenzene	ND<250	500	0.5
Chloroethane	ND<250	500	0.5	2-Chloroethyl Vinyl Ether	ND<500	500	1.0
Chloroform	ND<250	500	0.5	Chloromethane	ND<250	500	0.5
2-Chlorotoluene	ND<250	500	0.5	4-Chlorotoluene	ND<250	500	0.5
Dibromochloromethane	ND<250	500	0.5	1,2-Dibromo-3-chloropropane	ND<250	500	0.5
1,2-Dibromoethane (EDB)	ND<250	500	0.5	Dibromomethane	ND<250	500	0.5
1,2-Dichlorobenzene	ND<250	500	0.5	1,3-Dichlorobenzene	ND<250	500	0.5
1,4-Dichlorobenzene	ND<250	500	0.5	Dichlorodifluoromethane	ND<250	500	0.5
1,1-Dichloroethane	ND<250	500	0.5	1,2-Dichloroethane (1,2-DCA)	ND<250	500	0.5
1,1-Dichloroethene	ND<250	500	0.5	cis-1,2-Dichloroethene	3300	500	0.5
trans-1,2-Dichloroethene	ND<250	500	0.5	1,2-Dichloropropane	ND<250	500	0.5
1,3-Dichloropropane	ND<250	500	0.5	2,2-Dichloropropane	ND<250	500	0.5
1,1-Dichloropropene	ND<250	500	0.5	cis-1,3-Dichloropropene	ND<250	500	0.5
trans-1,3-Dichloropropene	ND<250	500	0.5	Diisopropyl ether (DIPE)	ND<250	500	0.5
Ethylbenzene	ND<250	500	0.5	Ethyl tert-butyl ether (ETBE)	ND<250	500	0.5
Freon 113	ND<5000	500	10	Hexachlorobutadiene	ND<250	500	0.5
Hexachloroethane	ND<250	500	0.5	2-Hexanone	ND<250	500	0.5
Isopropylbenzene	ND<250	500	0.5	4-Isopropyl toluene	ND<250	500	0.5
Methyl-t-butyl ether (MTBE)	ND<250	500	0.5	Methylene chloride	ND<250	500	0.5
4-Methyl-2-pentanone (MIBK)	ND<250	500	0.5	Naphthalene	ND<250	500	0.5
Nitrobenzene	ND<5000	500	10	n-Propyl benzene	ND<250	500	0.5
Styrene	ND<250	500	0.5	1,1,1,2-Tetrachloroethane	ND<250	500	0.5
1,1,2,2-Tetrachloroethane	ND<250	500	0.5	Tetrachloroethene	ND<250	500	0.5
Toluene	ND<250	500	0.5	1,2,3-Trichlorobenzene	ND<250	500	0.5
1,2,4-Trichlorobenzene	ND<250	500	0.5	1,1,1-Trichloroethane	ND<250	500	0.5
1,1,2-Trichloroethane	ND<250	500	0.5	Trichloroethene	ND<250	500	0.5
Trichlorofluoromethane	ND<250	500	0.5	1,2,3-Trichloropropane	ND<250	500	0.5
1,2,4-Trimethylbenzene	ND<250	500	0.5	1,3,5-Trimethylbenzene	ND<250	500	0.5
Vinyl Chloride	ND<250	500	0.5	Xylenes	ND<250	500	0.5

Surrogate Recoveries (%)

%SS1:	99.0	%SS2:	98.0
%SS3:	90.0		

Comments: h

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil / sludge / solid samples in µg/kg, wipe samples in µg/wipe, product / oil / non-aqueous liquid samples in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content; m) the concentration for this compound was above our upper calibration standard and is reported as an estimated value. This data was requested 3 weeks after initial analysis thereby precluding re-analysis at the correct dilution.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8021B/8015Cm

Matrix: W WorkOrder: 0410446

EPA Method: SW8021B/8015Cm Extraction: SW5030B BatchID: 13748 Spiked Sample ID: 0410443-006A

Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
MTBE	ND	10	96.9	90.7	6.55	109	111	1.70	70	130
Benzene	ND	10	115	109	5.70	119	101	16.4	70	130
Toluene	ND	10	107	101	6.13	94.3	92.7	1.75	70	130
Ethylbenzene	ND	10	108	103	4.21	95.1	96.4	1.32	70	130
Xylenes	0.830	30	92.9	87.9	5.37	85.3	85.7	0.390	70	130
%SS:	105	10	118	115	3.22	118	106	10.4	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not applicable or not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS Certification No. 1644

QA/QC Officer

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8015C

Matrix: W WorkOrder: 0410446

EPA Method: SW8015C Extraction: SW3510C BatchID: 13751 Spiked Sample ID: N/A

Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(d)	N/A	7500	N/A	N/A	N/A	88.1	98.7	11.3	70	130
%SS:	N/A	2500	N/A	N/A	N/A	92	104	12.7	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS Certification No. 1644

QA/QC Officer

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0410446

EPA Method: SW8260B Extraction: SW5030B BatchID: 13747 Spiked Sample ID: 0410433-013A

Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
tert-Amyl methyl ether (TAME)	ND	10	86.7	87	0.345	86.8	84.2	2.97	70	130
Benzene	ND	10	126	127	0.827	119	124	4.05	70	130
t-Butyl alcohol (TBA)	ND	50	90.8	88.9	2.10	97.3	92.4	5.12	70	130
Chlorobenzene	ND	10	107	105	1.56	101	104	3.13	70	130
1,2-Dibromoethane (EDB)	ND	10	93.8	92.2	1.71	90.4	93.6	3.53	70	130
1,2-Dichloroethane (1,2-DCA)	ND	10	119	123	3.61	112	118	5.65	70	130
1,1-Dichloroethene	ND	10	108	113	4.03	114	112	1.67	70	130
Diisopropyl ether (DIPE)	ND	10	127	126	0.627	124	128	2.64	70	130
Ethyl tert-butyl ether (ETBE)	ND	10	110	110	0	108	108	0	70	130
Methyl-t-butyl ether (MTBE)	ND	10	105	99.4	5.80	95.4	97.7	2.35	70	130
Toluene	ND	10	118	113	4.42	109	115	5.01	70	130
Trichloroethene	ND	10	87.1	87.4	0.347	86.7	86.7	0	70	130
%SS1:	112	10	104	104	0	100	100	0	70	130
%SS2:	97.0	10	102	99	3.15	101	103	1.43	70	130
%SS3:	101	10	116	116	0	119	117	2.22	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS Certification No. 1644

QA/QC Officer

McCampbell Analytical, Inc.
110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0410446 **ClientID: PDEO**

Report to:
Wilhelm Welzenbach
P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610
TEL: (510) 658-6916
FAX: 510-834-0152
ProjectNo: #0298; Snow Cleaners, Oakland
PO:

Bill to:
Accounts Payable
P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610

Requested TAT: 5 days
Date Received: 9:10 PM
Date Printed: 10/28/04

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)														
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0410446-001	MW1	Water	10/27/04	☐	B	A													
0410446-002	MW2	Water	10/27/04	☐	B	A													

Test Legend:

1	8260B_W	2	G-MBTEX_W	3		4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Melissa Valles

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

P&D

P & D ENVIRONMENTAL
A Division of Paul H. King, Inc.
55 Santa Clara Ave, Suite 240
Oakland, CA 94610
(510) 658-6916

0411044b

CHAIN OF CUSTODY RECORD

incl. Stoddard Solvent

PAGE 1 OF 1

PROJECT NUMBER:	PROJECT NAME:
0298	Snow Cleaners, Oakland

SAMPLED BY: (PRINTED AND SIGNATURE)
Wilhelm Welzenbach

	SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION	NUMBER OF CONTAINERS	ANALYSIS(ES): TPH-MW/Hydrocarbon	VOCs by 8260	PRESERVATIVE	REMARKS
+	MW1	10/27/04		water		7	X	X	ICE	Normal Turnaround
+	MW2	" "		" "		2	X	X	" "	" "

ICE/°: ✓
GOOD CONDITION: ✓
HEAD SPACE ABSENT: ✓
DECHLORINATED IN LAB: ____
APPROPRIATE CONTAINERS: ✓
PRESERVED IN LAB: ____
PRESERVATION: ✓

VOAS	O&G	METALS	OTHER
✓			

	DATE	TIME		
RELINQUISHED BY: (SIGNATURE) W. Welzenbach	10/28/04	12:23	RECEIVED BY: (SIGNATURE)	
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	
RELINQUISHED BY: (SIGNATURE)	DATE 10/28/04	TIME 4:00pm	RECEIVED FOR LABORATORY BY: (SIGNATURE) MC Vall	

REMARKS:

TOTAL NO. OF SAMPLES (THIS SHIPMENT): 2
TOTAL NO. OF CONTAINERS (THIS SHIPMENT): 9

LABORATORY: McCampbell Analytical
LABORATORY CONTACT: Angela Rydelius
LABORATORY PHONE NUMBER: 925) 798-1620

SAMPLE ANALYSIS REQUEST SHEET ATTACHED: ( )YES (X)NO