SNOW CLEANERS INC.

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Alameda County
Environmental Health

June 18, 2010

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

SUBJECT: GROUNDWATER MONITORING AND SAMPLING REPORT

CERTIFICATION

ACEH Case # RO 0000357

Snow Cleaners

2678 Coolidge Avenue

Oakland, CA

Dear Mr. Wickham:

You will find enclosed one copy of the following document prepared by P&D Environmental Inc.

• Groundwater Monitoring and Sampling Report (May 21, 2010 Sampling Event) dated June 18, 2010 (document 0298.R9).

I declare, under penalty of perjury, that the information and/or recommendations contained in the above-mentioned work plan for the subject site 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.

m Zum

Cordially,

Snow Cleaners, Inc.

Hárold Turner President

Cc: Mr. LeRoy Griffin, Oakland Fire Department, Emergency Services, 250 Frank Ogawa Plaza, Suite 3341, Oakland, CA 94612 (with enclosure)

0298.L48

"SERVING THE CLEANING INDUSTRY FOR OVER 90 YEARS"

P&D ENVIRONMENTAL, INC.

55 Santa Clara Ave, Suite 240 Oakland, CA 94610 (510) 658-6916

June 18, 2010 Report 0298.R9

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

SUBJECT: GROUNDWATER MONITORING AND SAMPLING REPORT

(May 21, 2010 SAMPLING EVENT)

ACDEH Case # RO 0000357

Snow Cleaners

2678 Coolidge Avenue

Oakland, CA

Dear Mr. Turner:

P&D Environmental Inc. (P&D) is pleased to present this report documenting the monitoring and sampling of four groundwater monitoring wells, designated as MW1 through MW4, near the subject site. During the reporting period the wells were monitored for depth to water on a monthly basis from January 2010 through June 2010, and the wells were sampled on May 21, 2010. A Site Location Map is attached as Figure 1, and a Site Vicinity Map showing the groundwater monitoring well locations is attached as Figure 2.

The well sampling was performed in accordance with a letter from Jerry Wickham of the Alameda County Department of Environmental Health (ACDEH) dated September 24, 2009 which included the approval of recommendations set forth in P&D's August 19, 2009 Subsurface Investigation Report (document 0298.R6). The recommendations included monitoring the existing groundwater monitoring wells on a monthly basis for water level fluctuations for one year and sampling the wells on a semi-annual basis for Total Petroleum Hydrocarbons (TPH) and Volatile Organic Compounds (VOCs).

BACKGROUND

Underground Storage Tanks (USTs) associated with the former dry cleaning facility were removed and associated limited excavation of the UST pit was performed by others in 1990. In January, 1994 two groundwater monitoring wells (MW1 and MW2) were installed by others in Davis Street approximately five feet south of the former UST pit. P&D subsequently oversaw the installation of groundwater monitoring wells MW3 and MW4 on September 9, 2008. A detailed discussion of the site background and historic monitoring, sampling, and investigation are provided in P&D's Subsurface Investigation Report dated August 19, 2009 (document 0298.R6).

FIELD ACTIVITIES

Since the previous monitoring and sampling event on December 1, 2009, P&D personnel monitored wells MW1, MW2, MW3, and MW4 for depth to water measurement on January 27, February 19, March 19, April 16, May 21, and June 18, 2010. The depth to water was measured to the nearest 0.01 foot using an electric water level indicator. A summary of the depth to water measurements is attached with this report as Table 1.

On May 21, 2010, P&D personnel also monitored all of the wells for the presence of free product or sheen using a transparent bailer. No free product or sheen was observed in any of the groundwater monitoring wells.

Following the measurement of depth to water and monitoring for free product or sheen, each well was purged of a minimum of three casing volumes of water or until it was purged dry. During purging operations, the field parameters of electrical conductivity, temperature, and pH were monitored. No sheen, petroleum hydrocarbon odor, or solvent odor was detected on the purge water from any of the wells, except for well MW2, which had observable sheen and a moderate to strong petroleum hydrocarbon (mineral spirits) odor. Once the field parameters were observed to stabilize during well purging and a minimum of three casing volumes had been purged, or the well was purged dry, water samples were collected from each of the wells using a clean disposable bailer. No sheen or separate phase layers of petroleum hydrocarbons were observed on the groundwater samples from any of the wells, with the exception of the sample collected from well MW2, which was observed to have sheen. The water samples were transferred from the disposable bailers to 40milliliter glass VOA vials and 1-liter amber glass bottles that were sealed with Teflon-lined screw caps. The VOA vials were overturned and tapped to assure that no air bubbles were present. The VOA vials and bottles were then transferred to a cooler with ice, pending transport 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.

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 500 feet to the east and approximately 400 feet to the southeast of the subject site. The creek flows towards the southwest. Portions of the creek located directly to the east of the site are lined with concrete. Based on evaluation of the concrete channel for Peralta Creek that is located beneath Davis Street, the water that flows through Peralta Hacienda Historic Park is not the same water that flows in Peralta Creek on the north side of Davis Street.

Based on review of documents obtained from the City of Oakland and from the County Flood Control District (see P&D's November 24, 2009 Subsurface Investigation Work Plan (document 0298.W4)), it was determined that the water flowing in the creek through the Park is groundwater that originates from the storm drain that is located beneath Humboldt Street (located to the southeast of Peralta Creek), and that Peralta Creek flows in an underground concrete-lined channel beginning at the north side of Davis Street. The water flowing in the Creek channel in the Park drains through a

grate at the south end of the park into the underground concrete-lined channel that contains Peralta Creek.

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. Based on these observations, the anticipated groundwater flow direction in the vicinity of 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.

The site geology and hydrogeology is complex, and a detailed discussion of the site geology and hydrogeology is provided in P&D's Subsurface Investigation Report dated August 19, 2009 (document 0298.R6). The interpreted groundwater flow direction in the vicinity of the site was developed using multiple lines of evidence (topography, lithology, soil discoloration, contaminant concentration distribution, and the measured depth to water in the different wells). Groundwater is interpreted to generally move in an unconfined A-aquifer in the immediate vicinity of the site towards the southeast, based on the elevations and slope of the surface of the fine-grained materials that are encountered beginning at a depth of approximately 25 feet bgs in the vicinity of the site. Based on the presence of coarse-grained materials at depths greater than 30 feet bgs that are located between borehole B6 and well MW3, groundwater is interpreted to move vertically in a southerly-trending paleo-channel from the A-water-bearing zone to a confined B-water-bearing zone in the area between the northeast side of the subject site and 34th Avenue, and then move horizontally in the B-water-bearing zone to the south towards Peralta Creek and Peralta Hacienda Historical Park.

Review of the water levels in Table 1 and on Figure 2 shows that the water levels in wells MW1 and MW4 (screened in the B-water-bearing zone) are and have been consistently similar, and that the water levels in wells MW2 and MW3 (screened in the A-water-bearing zone) are and have been consistently similar, with a difference of approximately 6 to 7 feet in the elevations between the two sets of wells during dry season months and a difference of approximately 8 to 10 feet during wet season months. The water elevations in the wells that are screened in the A-water-bearing zone are higher than the water elevations in the wells that are screened in the B-water-bearing zone. Additionally, both the A-water-bearing zone and the B-water bearing zone respond similarly to seasonal changes in water levels, with a seasonal vertical range of water elevations to date of approximately 4.5 feet in wells MW1, MW3 and MW4, and approximately 7.5 feet in well MW2.

LABORATORY RESULTS

All of the groundwater samples were analyzed at McCampbell Analytical, Inc. (McCampbell) of Pacheco, California. McCampbell is a State-accredited hazardous waste testing laboratory. The samples were analyzed for Total Petroleum Hydrocarbons as Gasoline (TPH-G) and for Total

Petroleum Hydrocarbons as Stoddard solvent (TPH-SS) by EPA Methods 5030B in conjunction with EPA Method 8021B and modified EPA Method 8015B, and for Total Petroleum Hydrocarbons as Diesel (TPH-D) and for Total Petroleum Hydrocarbons as Bunker Oil (TPH-BO) by EPA Method 3510C in conjunction with EPA Method 8015C. In addition, all of the samples were analyzed for VOCs including Methyl tert-Butyl Ether (MTBE); benzene, toluene, ethylbenzene, and total xylenes (BTEX); and haologenated volatile organic compounds by EPA Method 8260B.

No analytes were detected in the groundwater sample collected from well MW3. No analytes were detected in the groundwater samples collected from wells MW1 and MW4, with the exceptions of chloroform in MW1 at a concentration of 0.80 micrograms per liter (ug/L), and cis-1,2-dichloroethene and chloroform in well MW4 at concentrations of 8.7 and 1.3 ug/L, respectively. In well MW2, TPH-G, TPH-SS, TPH-D, and TPH-BO, were detected at concentrations of 2,400, 2,500, 3,900, 4,700 ug/L, respectively. Review of the laboratory report shows that the TPH-G and TPH-SS results are both described as Stoddard solvent/mineral spirit-range compounds. The TPH-D and TPH-BO results are both described as Stoddard solvent/mineral spirit-range compounds, diesel-range compounds with no recognizable pattern, and oil-range compounds. Additionally, in well MW2 cis-1,2-dichloroethene, vinyl chloride, and 1,2,4-trimethylbenzene were detected at concentrations of 1,700, 180, and 89 ug/L, respectively.

The groundwater sample results are summarized in Table 2, and copies of the laboratory analytical reports and chain of custody documentation are attached with this report.

DISCUSSION AND RECOMMENDATIONS

Review of the water levels in Table 1 and on Figure 2 shows that the water levels in wells MW1 and MW4 have been consistently similar, and that the water levels in wells MW2 and MW3 have been consistently similar, with a difference of approximately 6 feet in the elevations between the two sets of wells. As discussed in the geology and hydrogeology section above, the site geology and hydrogeology are complex. However, groundwater is interpreted to generally move in an unconfined A-water-bearing zone in the immediate vicinity of the site towards the southeast, groundwater is interpreted to move vertically in a southerly-trending paleo-channel from the A-water-bearing zone to a confined B-water-bearing in the area between the northeast side of the subject site and 34th Avenue, and then move horizontally in the B-water-bearing zone to the south towards Peralta Creek and Peralta Hacienda Historical Park.

Review of the water levels in Table 1 and on Figure 2 shows that the water levels in wells MW1 and MW4 (screened in the B-water-bearing zone) are and have been consistently similar, and that the water levels in wells MW2 and MW3 (screened in the A-water-bearing zone) are and have been consistently similar, with a difference of approximately 6 to 7 feet in the elevations between the two sets of wells during dry season months and a difference of approximately 8 to 10 feet during wet season months. The water elevations in the wells that are screened in the A-water-bearing zone are higher than the water elevations in the wells that are screened in the B-water-bearing zone. Additionally, both the A-water-bearing zone and the B-water bearing zone respond similarly to seasonal changes in water levels, with a seasonal vertical range of water elevations to date of approximately 4.5 feet in wells MW1, MW3 and MW4, and approximately 7.5 feet in well MW2.

During well sampling, the only well where odor or sheen were detected was in well MW2. Since the previous monitoring and sampling event on December 1, 2009 TPH has remained not detected in wells MW1 and MW4, and has decreased to not detected in well MW3. No VOCs were detected in well MW3. The one VOC detected in well MW1 and the two VOCs detected in well MW4 are the same VOCs detected in 2008 and 2009 in these wells. The VOC concentrations in wells MW1 and MW4 continue to remain below their respective May 2008 Table A San Francisco Bay Regional Water Quality Control Board groundwater Environmental Screening Levels (ESLs) with the exception of cis-1,2-dichloroethene in well MW4 which was detected at a concentration of 8.7 ug/L exceeding the May 2008 Table A groundwater ESL of 6.0 ug/L. In well MW2, all detected compound concentrations have decreased since 2009, with the exception of vinyl chloride, which increased.

In well MW2, TPH-G, TPH-SS, TPH-D, and TPH-BO, were detected at concentrations of 2,400, 2,500, 3,900, 4,700 ug/L, respectively. Review of the laboratory report shows that the TPH-G and TPH-SS results are both described as Stoddard solvent/mineral spirit-range compounds. The TPH-D and TPH-BO results are both described as Stoddard solvent/mineral spirit-range compounds, diesel-range compounds with no recognizable pattern, and oil-range compounds. Additionally, in well MW2 cis-1,2-dichloroethene, vinyl chloride, and 1,2,4-trimethylbenzene were detected at concentrations of 1,700, 180, and 89 ug/L, respectively.

Based on the sample results, P&D recommends that the monthly monitoring and semi-annual sampling of the wells be continued.

DISTRIBUTION

A copy of this report will be uploaded to the ACDEH website, in accordance with ACDEH requirements. In addition, a copy of this report will be uploaded to the GeoTracker database, and one copy of this report will be mailed to LeRoy Griffin of the City of Oakland Fire Department

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.

PAUL H. KING No. 5901

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

Sincerely,

P&D Environmental, Inc.

Paul H. King President

Professional Geologist #5901

Expires: 12/31/11

Attachments:

Table 1 – Summary of Groundwater Elevation Data

Table 2 - Summary of Groundwater Sample Results

Figure 1 - Site Location Map

Figure 2 - Site Vicinity Map

Groundwater Monitoring/Well Purging Data Sheets

Laboratory Reports and Chain of Custody Documentation

PHK/sjc

0298.R9

TABLES

Change in Water Table Water Table Elevation (ft) Well No Date Top Of Casing Elevation (ft)** Depth To Water (ft) Elevation MW1 6/18/2010 132.78 -0.80 21.06 111.72 5/21/2010 112.52 20.26 -1.02 4/16/2010 113.54 19.24 -0.17 3/19/2010 19.07 113.71 1.49 2/19/2010 20.56 112.22 0.52 1/27/2010 111.70 2.28 21.08 12/1/2009 23.36 109.42 0.06 11/30/2009 23.42 109.36 -0.32 11/25/2009 car parked on well could not measure 10/29/2009 0.30 23.10 109.68 9/24/2009 23.40 109.38 -0.52 8/20/2009 22.88 109.90 0.12 9/26/2008 23.00 109.78 0.02 9/18/2008 23.02 109.76 -2.37 2/20/2003 20.65 112.13 -0.59 1/18/2003 20.06 112.72 MW2 6/18/2010 133.59 15.41 118.18 -1.37 5/21/2010 119.55 -2.25 14.04 4/16/2010 11.79 121.80 -0.30 3/19/2010 11.49 122.10 1.91 2/19/2010 13.40 120.19 -0.65 1/27/2010 12.75 120.84 5.71 12/1/2009 18.46 115.13 -1.00 car parked on well 11/30/2009 could not measure 11/25/2009 car parked on well could not measure 10/29/2009 17.46 116.13 1.37 9/24/2009 18.83 114.76 -0.37 8/20/2009 18.46 115.13 0.04 9/18/2008 18.50 115.09 -5.41 2/20/2003 13.09 120.50 -1.54 1/18/2003 11.55# 122.04 MW3 6/18/2010 136.35 19.32 117.03 -0.59 5/21/2010 18.73 117.62 -1.34 4/16/2010 17.39 118.96 -0.44 3/19/2010 119.40 16 95 1.01 -0.25 2/19/2010 118.39 17.96 1/27/2010 17.71 118.64 3.45 12/1/2009 21.16 115.19 -0.02 11/30/2009 21.14 115.21 -0.12 11/25/2009 21.02 115.33 -1.07 10/29/2009 19.95 116.40 1.72 9/24/2009 21.67 114.68 -0.59 115.27 8/20/2009 21.08 -0.17 9/26/2008 20.91 115.44 2.78 9/19/2008 23 69 112.66 4.37 9/18/2008 28.06 108.29 5.25 9/15/2008 33.31 103.04 -6.51 9/15/2008 26.80 109.55 MW4 6/18/2010 134.09 23.11 110.98 -0.78 5/21/2010 22.33 111.76 -0.97 4/16/2010 21.36 112.73 -0.18 3/19/2010 112.91 21.18 1.41 2/19/2010 22.59 111.50 0.52 1/27/2010 23.11 110.98 2.20 12/1/2009 25.31 108.78 0.06 11/30/2009 25.37 108.72 -0.11 11/25/2009 108.83 -0.20 25.26 10/29/2009 109.03 25.06 0.31 9/24/2009 25.37 108.72 -0.51 8/20/2009 109.23 0.14 24.86 9/26/2008 109.09 25.00 0.00 9/19/2008 109.09 25.00 0.02 9/18/2008 25.02 109.07 0.09 9/15/2008 25.11 108.98 -0.08 9/15/2008 25.03 109.06 NOTES

^{* =} Prior to well development.

^{** =} Wells surveyed on September 22-23, 2008.

^{# =} Depth to water not corrected for free product thickness; free product with thickness of 0.02 feet encountered.

Well Number	Sample Date	TPH-G	TPH-SS	TPH-D	TPH-MO	ТРН-ВО	VOCs by 8260B
MW1	5/21/2010 12/1/2009 9/18/2008	ND<50 ND<50 ND<50	ND<50 ND<50 ND<50	ND<50 ND<50 ND<50	NA NA NA	ND<100 ND<100 ND<100	ND, except: Chloroform=0.80 ND, except: Chloroform=0.71 ND, except: Chloroform=0.74
	10/27/2004	ND<50	ND<50	ND<50	ND<250	NA	ND, except: Chloroform=0.78
	2/20/2003	ND<50	ND<50	ND<50	ND<250	NA	ND, except: Chloroform=1.2, Xylenes = 0.61
	5/15/1995	ND<50	NA	NA	NA	NA	** ND
	12/22/1994	ND<50	NA	NA	NA	NA	** ND
	9/14/1994 7/29/1994	ND, a ND<50	NA NA	NA NA	NA NA	NA NA	** ND ** ND
	5/31/1994	ND<50	NA	NA	NA	NA	** ND
MWA	1/24/1994	ND<50	NA 2 500 -	ND	NA NA	NA 4700 h : :	** ND
MW2	5/21/2010	2,400, g	2,500, g	3,900, h,i,j	NA	4,700, h,i,j	ND, except: cis-1,2-dichloroethene= 1,700, Vinyl Chloride = 180, 1,2,4-Trimethylbenzene = 89
	12/1/2009	34,000, b,c	47,000, b,c	74,000, b,d,e,f	NA	91,000, b,d,e,f	ND, except: cis-1,2-dichloroethene= 1,800 , Vinyl Chloride = 73 , 1,2,4-Trimethylbenzene = 140
	9/18/2008	11,000, c,b	14,000	28,000, b,d,e	NA	33,000	ND, except: cis-1,2-dichloroethene= 880 , Vinyl Chloride = 44 , Xylenes = 46 , 1,2,4-Trimethylbenzene = 140, 1,3,5-Trimethylbenzene = 41
	10/27/2004	320,000, с	500,000	280,000 , b,d, f	ND<50,000	NA	*ND, except: cis-1,2-dichloroethene = 3,300
	2/20/2003	76,000, b,c	75,000	370,000, b,d,f	37,000	NA	ND, except: Toluene = 47, Ethylbenzene = 43, Xylenes = 160, cis-1,2-Dichloroethene = 360, trans-1,2-Dichloroethene = 22, n-Butyl benzene = 43, Isopropylbenzene = 35, sec-Butyl benzene = 48, n-Propyl benzene = 86, 4-Isopropyl toluene = 25, 1,3,5-Trimethylbenzene = 160, Naphthalene = 32, Vinyl Chloride = 24.
	5/15/1995	12,000, c	NA	NA	NA	NA	**Benzene = 17, **Toluene = 96, **Ethylbenzene = 50, **Xylenes = 200
	12/22/1994	20,000, a,c	NA	NA	NA	NA	**Benzene = 22, **Toluene = 170, **Ethylbenzene = 89, **Xylenes = 470
	12/22/1994						ND, except: +Benzene = 21, +Toluene = 170, +Ethylbenzene = 48, +Xylenes = 180, +cis-1,2-Dichloroethene = 1,100, +trans-1,2-Dichloroethene = 15, +1,1-Dichloroethane = 2.8, +Chloroethane = 6.7
	9/14/1994	200,000, b,c	NA	NA	NA	NA	**Benzene = ND < 15 **Toluene = 170, **Ethylbenzene = 400, **Xylenes = 2,600
	9/14/1994						ND, except: +Benzene = 24 +Toluene = 440, +Ethylbenzene = 300, +Xylenes = 830 +cis-1,2-dichloroethene = 720 +Chloroform = 25, +Acetone = 120

Report 0298.R9 TABLE 2

SUMMARY OF GROUNDWATER SAMPLE RESULTS

Well Number	Sample Date	TPH-G	TPH-SS	TPH-D	ТРН-МО	ТРН-ВО	VOCs by 8260B
MW2 Continued	7/29/1994	21,000, b, с	NA	NA	NA	NA	**Benzene = 21, **Toluene = 150, **Ethylbenzene = 53, **Xylenes = 150
	5/31/1994	6,400, c	NA	NA	NA	NA	**Benzene = 15, **Toluene = 100, **Ethylbenzene = 43, **Xylenes = 220
	1/28/1994	2,800, c	NA	12,000, d	NA	NA	ND, except: **Xylenes = 43
	1/19/1994++	3,400, c	NA	20,000	NA	NA	**Benzene = 15, **Toluene = 180, **Ethylbenzene = 39, **Xylenes = 200
MW3	5/21/2010 12/1/2009 9/18/2008	ND<50 ND<50 ND<50	ND<50 ND<50 ND<50	ND<50 63, e ND<50	NA NA NA	ND<100 120, e ND<100	ND ND ND, except: Bromoform = 0.57, Chloroform = 1.3
MW4	5/21/2010	ND<50	ND<50	ND<50	NA	ND<100	ND, except: Cis-1,2-dichloroethene = 8.7 , Chloroform = 1.3
	12/1/2009	ND<50	ND<50	ND<50	NA	ND<100	ND, except: Cis-1,2-dichloroethene = 5.8, Chloroform = 0.97
	9/18/2008	ND<50	ND<50	ND<50	NA	ND<100	ND, except: Cis-1,2-dichloroethene = 4.8, Chloroform = 0.96
ESL		100	100	100	100	100	Benzene = 1.0, Toluene = 40, Ethylbenzene = 30, Xylenes = 20, cis-1,2-Dichloroethene=6.0, trans-1,2-Dichloroethene = 10, 1,1-Dichloroethane = 5.0, Chloroethane = 12, Vinyl Chloride = 0.5, Naphthalene = 17, Chloroform = 70, Bromoform = 100, Acetone = 6,300, n-Butylbenzene = None, Isopropylbenzene = None
	N. A.						

Abbreviations and 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

TPH-BO = Total Petroleum Hydrocarbons as Bunker Oil VOCs = Volatile Organic Compounds

ND = Not Detected.

NA = Not Analyzed.

- NA = Not Analyzed.

 a = Laboratory Note: one to a few isolated peaks present.

 b = Laboratory Note: lighter than water immiscible sheen/product present.

 c = Laboratory Note: results reported as gasoline consist of Stoddard Solvent/mineral spirit.

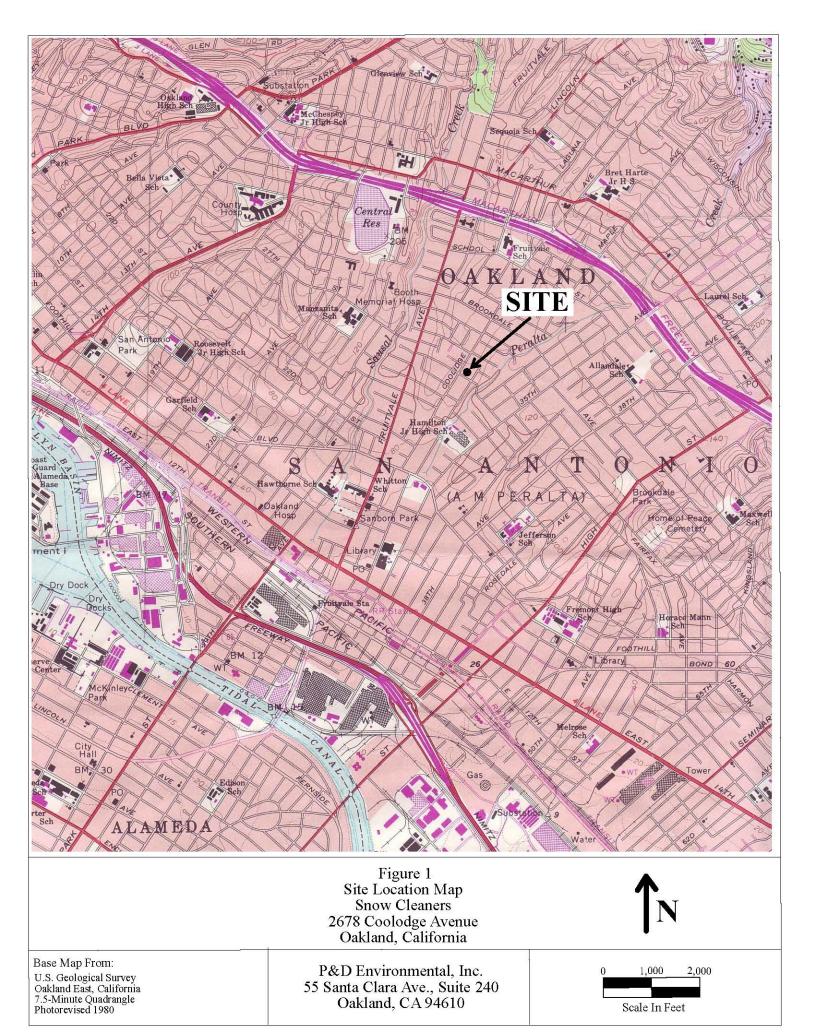
 d = Laboratory Note: results reported as diesel consist of Stoddard Solvent/mineral spirit.
- e = results reported as diesel consist of diesel range compounds; no recognizable pattern. f = results reported as diesel consist of oil range compounds.
- g = Laboratory Note: results reported as gasoline and Stoddard solvent consist of Stoddard Solvent/mineral spirit.
- h = Laboratory Note: results reported as diesel and bunker oil consist of Stoddard Solvent/mineral spirit.
 i = Laboratory Note: results reported as diesel and bunker oil consist of diesel range compounds; no recognizable pattern.
- j = Laboratory Note: results reported as diesel and bunker oil consist of oil range compounds. * = MW2 VOC detection limits are all increased because of a sample dilution factor of 500.
- ** = Analysis by EPA Method 8020.

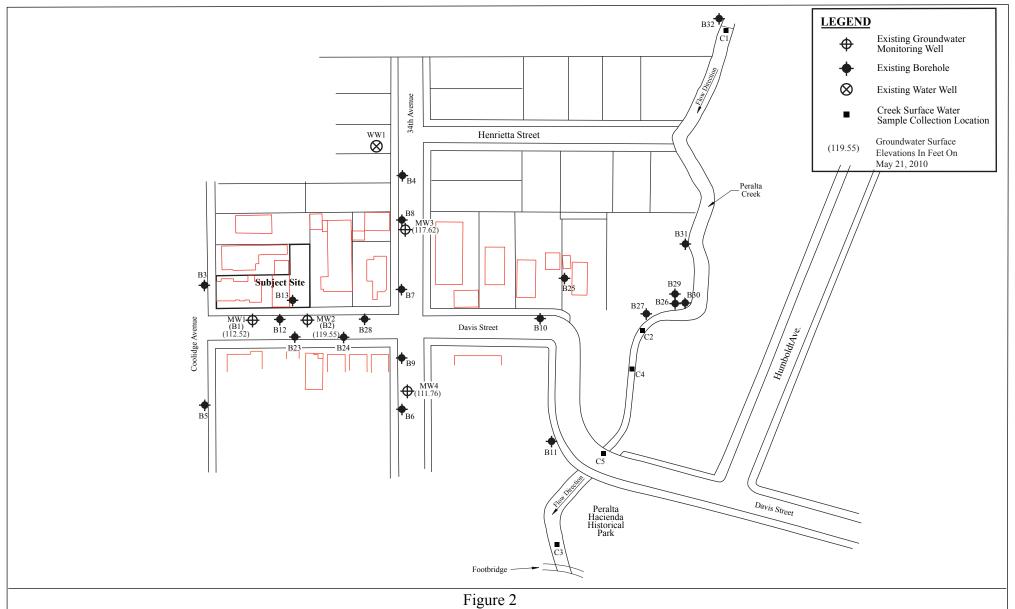
- Analysis by LA Method 0220.
+ = Samples subcontracted to different lab for VOC analysisby EPA Method 8260..
++ = Well Development Water stored at site in drum; submitted to lab on January 28, 1994. '
ESL=Environmental Screening Level, developed by San Francisco Bay - Regional Water Quality Control Board (SF-RWQCB)) updated May 2008,

from Table A – Shallow Soil Screening Levels, Groundwater is a current or potential source of drinking water. Values in bold indicate concentrations that exceed their respective ESL values.

Results are in micrograms per liter (µg/L), unless otherwise noted.

FIGURES





Site Vicinity Map Showing Monitoring Well And Offsite Sample Collection Locations
Snow Cleaners
2678 Coolidge Avenue
Oakland, California

N

Base Map from: Kier & Wright Engineers Surveyors, Inc. September 2008 Survey and Parcel Quest Assesor's Parcel Maps Alameda County Map Disc, July 2001

P&D Environmental, Inc. 55 Santa Clara Ave., Suite 240 Oakland, CA 94610



GROUNDWATER MONITORING/WELL PURGING DATA SHEETS



<i>(</i> * <i>(</i> 1)	data si		4
site Name <u>Snow Cleaners</u>		Well No.	MW-1
Job No. 0298		Date_5/3	71/10
TOC to Water (ft.) 30.26	······································	Sheen ${\cal N}$	0
Well Depth (ft.) 44.5		Pree Produ	ct Thickness 🗡
Well Diameter 2" (0.16)	₩	Sample Col	lection Method
Gal./Casing Vol. 3.9	4-7 €	Vispo	suble bailer
3vol=11.7		· · · · · · · · · · · · · · · · · · ·	ELECTRICAL MIKE
TIME GAL. PURGED	OH r. 7	TEMPERATURE	
1130- 1.3	6,51	20,5	+3+
1133 2.6	6.52	30.3	729
1176 3.9	6.50	1.06	723
1128 5.3	6.52	20.1	718
1130 6.5	6.53	<u> </u>	690
1132 7.8	6.53	20-1	636
1134 9.1	6.55	20.1	638
1137 10.4	6,54	30.0	616
1141 11.7	6.53	19.9	604
			
			
			Annual Control of the
			
	-,		
NOTES: Notes	sheen + A	looder, Samp	letine => 1200

(4)

		DATA	Sheet	
Site Name	Drow Cleaners		Well No. /	NW-7
Job No	0398		2	Yo
TOC to Wate	er (ft.) 14.04	-	Sheen V	ο΄ς
Well Depth			Pree Produ	ct Thickness $\underline{\widehat{\mathcal{C}}}$
Well Diamet	er 4" (0.646)	***	Sample Col	lection Method
Gal./Casing			Dispos	safle tades
	3 vol = 30 =	7	0(BLECTRICAL CONDUCTIVITY LS /c in
1709	GAL PURGED	(C Z -	TEMPERATURE	CONDUCTIVITY
120	<u> </u>	155	10.0 10.0	5 d 2
17/2	19	654 654	19.9	578
1212	<u> </u>	6.55	19.9	583
1330	<u> </u>	1.55	19.7	580
	11.5	6.51	19/	<u> </u>
1997	15.0	(E X	194	582
1029	18.4	6 EL	19 6	<u> </u>
1233		<u>0.70</u>	19.6	
1237	20.7	6.28	_11.6	301
				delandarden der Görde Greiner im Gereiner
			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	the same of the sa
	· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·
				
<u> </u>				
				
		· 		
NOTES:	Sheenomo	d-Strong	Stoddard solvent/	nine of Spirits add or.
		J	Sample time	>1245

3

DATA SHI	EET
site Name Snow Clemers	Well No. MW-3
Job No. 0798	Date 5/21/10
TOC to Water (ft.) 18.73	Sheen No
Well Depth (ft.) 35.4	Pree Product Thickness 8
Well Diameter 2" (0.16)	Sample Collection Method
Well Diameter 2" (0.16) Gal./Casing Vol. 3.7 3v. 1=8.1	Disposable bailer
1, 8=KVC	TEMPERATURE CONDUCTIVITY 15/ca
TIME GAL PURGED DH 7.48	· · · · · · · · · · · · · · · · · · ·
	, /
1347 1.8 7.45	19.3 422
1350 2.7 7.28	19.3
1358 3.6 7.23	19.2 484
1354 4.5 7.18	19-1 508
1356 5.4 7.20	19.1 518
1358 6.3 7.20	19.0 537
1401 7.21 Well downtered (ON bitgallons
3.+	
	waterday-fragething interest specification.
	Application of the control of the co
And the same of th	
NOTES: No sheen + no pho ade	er (mon smiferodor) pletime => 1430 hrs
San	eletime => 1430 hrc



		SHEET	4
site Name Snow Cleaners		Well No	MW-4
Job No. 0798	_	Date_5/6	71/10
TOC to Water (ft.) 22.33		sheen N	0
Well Depth (ft.) 37.2		Pree Produc	ct Thickness Ø
Well Diameter 2" (0.16)	Andrews	Sample Coll	lection Method
Gal./Casing Vol. 7.4	nerge	Disposa	ble bailer
31173		0(ELECTRICAL MS/CA
TIME GAL. PURGED	10,21	TEMPERATURE	SAMPLE TALL
1259 0.8	5 111	30,3	309
1307 1.6	7.99	19,8	424
1302 3.4	6.75	19,8	506
1307 3.2	6.71	19.7	515
1309 4.0	6.64	19.5	538
1310 4.8	6.66	19.4	540
(3) 5.6	6.68	19.5	537
1313 6.4	6.65	19.2	540
1315 7.2	6,63	19 3	574
	0107		

	•		
			With the state of
	· 		
NOTES: No sheen on	o odor;	Sampletime -> 1	330

LABORATORY REPORTS AND CHAIN OF CUSTODY DOCUMENTATION

McCampbell Analytical, Inc.

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental	Client Project ID: #0298; Snow Cleaners, Oakland	Date Sampled: 05/21/10
55 Santa Clara, Ste.240		Date Received: 05/21/10
55 Sunta Giara, Sto.2 To	Client Contact: Steve Carmack	Date Reported: 05/28/10
Oakland, CA 94610	Client P.O.:	Date Completed: 05/27/10

WorkOrder: 1005570

May 28, 2010

1	Door	Steve:
ı	Dear	oueve:

Enclosed within are:

- 1) The results of the 4 analyzed samples from your project: #0298; Snow Cleaners, Oakland,
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius Laboratory Manager

McCampbell Analytical, Inc.

NVIRONMENTAL, Santa Clara Ave, Suite 240 Oakland, CA 94610 (510) 658-6916	INC.			(CHAIN OF	CUS	TOD	Υ	F	RE	C	Of	RD		155	76 PAG) e	_ OF .	
PROJECT NUMBER:		Snow Cleaners, Oakland					LAM 1915(ES);			REMARKS									
SAMPLED BY: (PRI	nach	SIGNAT	URE)	d	•		ANER O	WALT	Mal	1	8	//	//	//	SERVA SERVA	/	REM	ARKS	
SAMPLE NUMBER	DATE	TIME	TYPE		SAMPLE LOCATIO	И	NUMBER OF CONTAINERS	1	1	1	1	/	/	1	4/				
MW-2 MW-3 MW-4	5/21/10	1330	Hao			,	7767	XXXX		X × ×				L	+	Imal	I Tw	t	nel
								ICE GO HEA DEC	DD CO	1.C) JE AF	DM SEI	1 K	/ - AFF	ONTA	IATE INERS RVED	V		
RELINQUISHED BY: (SCNATUR							PRE		VA.T	ON-	VO	ISIC		EALS	OTHER	LAB		_
RELINGUISHED BY: (DATE DATE	TIME	RECEIVED BY: (SE			TOTAL	HAS S	OF O	om) omw om) RY	CON	TAC	Ti LA	ACC	TORY:	PHONE	NUMB	ER:
RELINQUISHED BY: (SICHATURE) /	BATE	TIME	RECEIVED FOR LABORATORY BY: SAMPLE			LE.	Adelius (877) 252-9262 E ANALYSIS REQUEST SHEET CHEO: ()YTS (X)NO										
Results and billing to P&D Environmental, I lab@pdenviro.com	nc.				RFMARKS:	A	11 bot	les	pro	Se.	rse	edm	/ H	ICL.					

McCampbell Analytical, Inc.

1534 Willow Pass Rd

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

5

Prepared by: Melissa Valles

Pittsburg (925) 25	, CA 94565-1701 2-9262				WorkOrder: 1005570			570	(Client	Code: F	PDEO					
		WaterTrax	WriteOn	☐ EDF		Excel		Fax		✓ Email		Hard	dCopy	Thi	rdParty	☐ J-	flag
Report to: Steve Carma P & D Enviro 55 Santa Cla Oakland, CA (510) 658-6910	nmental ra, Ste.240 94610	cc: PO:	ab@pdenviro 0298; Snow	.com Cleaners, Oaklar	nd	Bill to: Accounts Payable P & D Environmental 55 Santa Clara, Ste.240)	Date Received: 05/2					days /2010 /2010	
							ı	1	Rec			(See le	Ť				
Lab ID	Client ID		Matrix	Collection Date	Hold	1	2	3	4	5	6	7	8	9	10	11	12
1005570-001	MW-1		Water	5/21/2010 12:00		В	Α										
1005570-002	MW-2		Water	5/21/2010 12:45		В	Α										
1005570-003	MW-3		Water	5/21/2010 14:30		В	Α										
1005570-004	MW-4		Water	5/21/2010 13:30		В	Α										

The following SampIDs: 001A, 002A, 003A, 004A contain testgroup.

2

7 12 G-MBTEX_W

Comments:

6

8260B_W

3

Sample Receipt Checklist

Client Name:	P & D Environme	ental			Date a	and Time Received:	5/21/2010	8:02:22 PM
Project Name:	#0298; Snow CI	eaners, Oakland			Check	dist completed and r	eviewed by:	Melissa Valles
WorkOrder N°:	1005570	Matrix Water			Carrie	r: Rob Pringle (M	IAI Courier)	
		Chain	of Cu	stody (C	OC) Informa	ation		
Chain of custody	present?		Yes	V	No 🗆			
Chain of custody	signed when relinqu	ished and received?	Yes	V	No 🗆			
Chain of custody	agrees with sample	labels?	Yes	✓	No 🗌			
Sample IDs noted	by Client on COC?		Yes	V	No 🗆			
Date and Time of	collection noted by C	Client on COC?	Yes	✓	No 🗆			
Sampler's name r	noted on COC?		Yes	V	No 🗆			
		<u>S</u> .	ample	Receipt	Information	<u>!</u>		
Custody seals in	tact on shipping cont	ainer/cooler?	Yes		No 🗆		NA 🗹	
Shipping containe	er/cooler in good con	dition?	Yes	V	No 🗆			
Samples in prope	er containers/bottles	?	Yes	~	No 🗆			
Sample containe	rs intact?		Yes	✓	No 🗆			
Sufficient sample	e volume for indicated	d test?	Yes	✓	No 🗌			
		Sample Prese	vatio	n and Ho	old Time (HT) Information		
All samples recei	ived within holding tir	ne?	Yes	✓	No 🗌			
Container/Temp I	Blank temperature		Coole	er Temp:	1°C		NA 🗆	
Water - VOA vial	ls have zero headsp	ace / no bubbles?	Yes	✓	No 🗆	No VOA vials subm	itted	
Sample labels ch	necked for correct pr	eservation?	Yes	~	No 🗌			
Metal - pH accep	table upon receipt (p	H<2)?	Yes		No 🗆		NA 🗹	
Samples Receive	ed on Ice?		Yes	✓	No 🗆			
		(Ice Type	e: WE	TICE)			
* NOTE: If the "N	No" box is checked, s	see comments below.						
=====		======			====	======		======
Client contacted:		Date contact	ed:			Contacted	by:	
Comments:								

P & D Environmental	Client Project ID: #0298; Snow	Date Sampled: 05/21/10
55 Santa Clara, Ste.240	Cleaners, Oakland	Date Received: 05/21/10
33 Santa Ciara, Stc.240	Client Contact: Steve Carmack	Date Extracted: 05/25/10
Oakland, CA 94610	Client P.O.:	Date Analyzed: 05/25/10

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

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 1005570

I I I		2 mary		1005570 001B	,, ork order. 1005		
Lab ID	1005570-001B						
Client ID	MW-1						
Matrix		Water Reporting Communication					
Compound	Concentration *	DF	Limit	Compound	Concentration *	DF	Reportin Limit
Acetone	ND	1.0	10	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	2.0
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	Chloroform	0.80	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	0.2	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	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
Vinvl Chloride	ND	1.0	0.5	Xvlenes	ND	1.0	0.5
		Surr	ogate Re	ecoveries (%)			
%SS1:	12	23		%SS2:	11	.9	
%SS3:		10			<u> </u>		
Comments:							

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

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.



^{*} water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in $\mu g/\text{wipe}$.

P & D Environmental	Client Project ID: #0298; Snow	Date Sampled: 05/21/10
55 Santa Clara, Ste.240	Cleaners, Oakland	Date Received: 05/21/10
33 Santa Ciara, Stc.240	Client Contact: Steve Carmack	Date Extracted: 05/26/10
Oakland, CA 94610	Client P.O.:	Date Analyzed: 05/26/10

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

Analytical Method: SW8260B Extraction Method: SW5030B Work Order: 1005570

Lab ID	1005570-002B							
Client ID		MW-2						
Matrix		Water						
Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit	
Acetone	ND<1000	100	10	tert-Amyl methyl ether (TAME)	ND<50	100	0.5	
Benzene	ND<50	100	0.5	Bromobenzene	ND<50	100	0.5	
Bromochloromethane	ND<50	100	0.5	Bromodichloromethane	ND<50	100	0.5	
Bromoform	ND<50	100	0.5	Bromomethane	ND<50	100	0.5	
2-Butanone (MEK)	ND<200	100	2.0	t-Butyl alcohol (TBA)	ND<200	100	2.0	
n-Butyl benzene	ND<50	100	0.5	sec-Butyl benzene	ND<50	100	0.5	
tert-Butyl benzene	ND<50	100	0.5	Carbon Disulfide	ND<50	100	0.5	
Carbon Tetrachloride	ND<50	100	0.5	Chlorobenzene	ND<50	100	0.5	
Chloroethane	ND<50	100	0.5	Chloroform	ND<50	100	0.5	
Chloromethane	ND<50	100	0.5	2-Chlorotoluene	ND<50	100	0.5	
4-Chlorotoluene	ND<50	100	0.5	Dibromochloromethane	ND<50	100	0.5	
1,2-Dibromo-3-chloropropane	ND<20	100	0.2	1,2-Dibromoethane (EDB)	ND<50	100	0.5	
Dibromomethane	ND<50	100	0.5	1,2-Dichlorobenzene	ND<50	100	0.5	
1,3-Dichlorobenzene	ND<50	100	0.5	1,4-Dichlorobenzene	ND<50	100	0.5	
Dichlorodifluoromethane	ND<50	100	0.5	1,1-Dichloroethane	ND<50	100	0.5	
1,2-Dichloroethane (1,2-DCA)	ND<50	100	0.5	1,1-Dichloroethene	ND<50	100	0.5	
cis-1,2-Dichloroethene	1700	100	0.5	trans-1,2-Dichloroethene	ND<50	100	0.5	
1,2-Dichloropropane	ND<50	100	0.5	1,3-Dichloropropane	ND<50	100	0.5	
2,2-Dichloropropane	ND<50	100	0.5	1,1-Dichloropropene	ND<50	100	0.5	
cis-1,3-Dichloropropene	ND<50	100	0.5	trans-1,3-Dichloropropene	ND<50	100	0.5	
Diisopropyl ether (DIPE)	ND<50	100	0.5	Ethylbenzene	ND<50	100	0.5	
Ethyl tert-butyl ether (ETBE)	ND<50	100	0.5	Freon 113	ND<1000	100	10	
Hexachlorobutadiene	ND<50	100	0.5	Hexachloroethane	ND<50	100	0.5	
2-Hexanone	ND<50	100	0.5	Isopropylbenzene	ND<50	100	0.5	
4-Isopropyl toluene	ND<50	100	0.5	Methyl-t-butyl ether (MTBE)	ND<50	100	0.5	
Methylene chloride	ND<50	100	0.5	4-Methyl-2-pentanone (MIBK)	ND<50	100	0.5	
Naphthalene	ND<50	100	0.5	n-Propyl benzene	ND<50	100	0.5	
Styrene	ND<50	100	0.5	1,1,1,2-Tetrachloroethane	ND<50	100	0.5	
1,1,2,2-Tetrachloroethane	ND<50	100	0.5	Tetrachloroethene	ND<50	100	0.5	
Toluene	ND<50	100	0.5	1,2,3-Trichlorobenzene	ND<50	100	0.5	
1,2,4-Trichlorobenzene	ND<50	100	0.5	1,1,1-Trichloroethane	ND<50	100	0.5	
1,1,2-Trichloroethane	ND<50	100	0.5	Trichloroethene	ND<50	100	0.5	
Trichlorofluoromethane	ND<50	100	0.5	1,2,3-Trichloropropane	ND<50	100	0.5	
1,2,4-Trimethylbenzene	89	100	0.5	1,3,5-Trimethylbenzene	ND<50	100	0.5	
Vinvl Chloride	180	100	0.5	Xvlenes	ND<50	100	0.5	
		Surr	ogate Re	ecoveries (%)				
%SS1:	9	6		%SS2:	10)1		
%SS3:)2						
Comments:								

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

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.



^{*} water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in $\mu g/\text{wipe}$.

P & D Environmental	Client Project ID: #0298; Snow	Date Sampled: 05/21/10
55 Santa Clara, Ste.240	Cleaners, Oakland	Date Received: 05/21/10
55 Santa Ciara, Stc.240	Client Contact: Steve Carmack	Date Extracted: 05/26/10
Oakland, CA 94610	Client P.O.:	Date Analyzed: 05/26/10

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

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 1005570

Extraction Method. Sw 3030B	iction Method: Sw 5050B Analytical Method: Sw 8200B work Order: 1005570						
Lab ID	1005570-003B						
Client ID	MW-3						
Matrix		Water					
Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	10	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	2.0
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	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	0.2	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	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			ND	1.0	0.5
1,2,4-Trimethylbenzene	ND			ND	1.0	0.5	
Vinvl Chloride	ND	1.0	0.5	Xvlenes	ND	1.0	0.5
		Surr	ogate Re	ecoveries (%)			
%SS1:	10)2		%SS2:	10)3	
%SS3:	11			, to not had too to	, 10		
Comments: b1							

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

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.



^{*} water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in $\mu g/\text{wipe}$.

P & D Environmental	Client Project ID: #0298; Snow	Date Sampled: 05/21/10
55 Santa Clara, Ste.240	Cleaners, Oakland	Date Received: 05/21/10
55 Santa Ciara, Stc.240	Client Contact: Steve Carmack	Date Extracted: 05/26/10
Oakland, CA 94610	Client P.O.:	Date Analyzed: 05/26/10

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

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 1005570

Extraction friction. BW 3030B		7 thary	tical Meth	54. B 11 0200B	,, ork Order. 100:	3310	
Lab ID		1005570-004B					
Client ID	MW-4						
Matrix		Water					
Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	10	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	2.0
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	Chloroform	1.3	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	0.2	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	8.7	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	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
Vinvl Chloride	ND	1.0	0.5	Xvlenes	ND	1.0	0.5
		Suri	rogate Re	ecoveries (%)			
%SS1:	90		9	%SS2:	11	02	
%SS3:	10			70002.		<i>-</i>	
Comments:				•			

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

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.



^{*} water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in $\mu g/\text{wipe}$.

P & D Environmental	Client Project ID: #0298; Snow Cleaners, Oakland	Date Sampled:	05/21/10
55 Santa Clara, Ste.240	Cleaners, Oakland	Date Received:	05/21/10
	Client Contact: Steve Carmack	Date Extracted:	05/24/10-05/26/10
Oakland, CA 94610	Client P.O.:	Date Analyzed:	05/24/10-05/26/10

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

	line Range (C6-C12), Stoddar	_	· ·				
Extraction method:	SW5030B	Ana	Analytical methods: SW8021B/8015Bm			Order: 10	005570
Lab ID	Client ID	Matrix	TPH(g)	TPH(ss)	DF	% SS	Comments
001A	MW-1	W	ND	ND	1	108	
002A	MW-2	W	2400	2500	3.3	107	d5
003A	MW-3	W	ND	ND	1	102	b1
004A	MW-4	W	ND	ND	1	103	
							1
	porting Limit for DF =1; ans not detected at or above	W	50	50		μg/L	
ND IIIe	the reporting limit	S	NA	NA		NA	

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

- b1) aqueous sample that contains greater than ~1 vol. % sediment
- d5) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?)



[#] cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference.

⁺The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

McCampbell Analytical, Inc.

1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.mccampbell.com E-mail: main@mccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental	Client Project ID: #0298; Snow Cleaners,	Date Sampled:	05/21/10
55 Santa Clara, Ste.240	Oakland	Date Received:	05/21/10
	Client Contact: Steve Carmack	Date Extracted:	05/21/10
Oakland, CA 94610	Client P.O.:	Date Analyzed:	05/24/10-05/25/10

Total Extractable Petroleum Hydrocarbons*

Extraction method: SW3510C Analytical methods: SW8015B Work Order: 1005570

Extraction method:	73510C Analytical methods: SW8015B					Work Order: 1005570			
Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	TPH-Bunker Oil (C10-C36)	DF	% SS	Comments		
1005570-001A	MW-1	W	ND	ND	1	102			
1005570-002A	MW-2	W	3900	4700	1	100	e11,e2,e7		
1005570-003A	MW-3	W	ND	ND	1	99	b1		
1005570-004A	MW-4	W	ND	ND	1	100			

Reporting Limit for DF =1;	W	50	100	μg/L
ND means not detected at or above the reporting limit	S	NA	NA	mg/Kg

^{*} water samples are reported in μ g/L, wipe samples in μ g/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 μ g/L.

- b1) aqueous sample that contains greater than ~1 vol. % sediment
- e2) diesel range compounds are significant; no recognizable pattern
- e7) oil range compounds are significant
- e11) stoddard solvent/mineral spirit (?)



[#] 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:

QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 50809 WorkOrder 1005570

EPA Method SW8260B Extraction SW5030B Spiked Sample ID: 1005546-003)03A		
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	D LCS-LCSD Accept			tance Criteria (%)	
, may to	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	10	93.8	91.4	2.58	98.8	102	2.77	70 - 130	30	70 - 130	30
Benzene	ND	10	103	103	0	112	117	3.97	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND	50	91.9	93.7	1.94	87.5	90.5	3.39	70 - 130	30	70 - 130	30
Chlorobenzene	ND	10	115	116	0.409	115	123	6.50	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	10	100	114	12.8	110	117	6.01	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	10	105	101	3.62	109	113	3.66	70 - 130	30	70 - 130	30
1,1-Dichloroethene	ND	10	96.2	96.9	0.650	103	108	4.69	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND	10	112	113	1.23	126	127	0.338	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	10	105	105	0	116	120	3.30	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	ND	10	109	106	2.19	112	117	3.80	70 - 130	30	70 - 130	30
Toluene	ND	10	99.3	106	6.81	105	110	4.82	70 - 130	30	70 - 130	30
Trichloroethene	ND	10	93.1	92	1.22	98.3	102	3.52	70 - 130	30	70 - 130	30
%SS1:	128	25	105	103	2.11	106	104	1.87	70 - 130	30	70 - 130	30
% SS2:	116	25	107	114	6.81	117	116	0.323	70 - 130	30	70 - 130	30
%SS3:	113	2.5	122	115	5.52	117	117	0	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE

BATCH 50809 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1005570-001B	05/21/10 12:00 PM	I 05/25/10	05/25/10 3:45 AM	1005570-002B	05/21/10 12:45 PM	I 05/26/10	05/26/10 4:30 PM

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.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

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

QA/QC Officer

QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 50820 WorkOrder 1005570

EPA Method SW8260B Extraction SW5030B Spiked Sample ID: 1005617-002										002A		
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD Acceptance Criteria			Criteria (%)	1
7 tildiy to	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	10	101	101	0	93.3	98.5	5.50	70 - 130	30	70 - 130	30
Benzene	ND	10	122	121	0.149	112	119	5.76	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND	50	106	103	2.66	88.5	95.3	7.42	70 - 130	30	70 - 130	30
Chlorobenzene	ND	10	115	113	1.91	106	113	6.22	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	10	117	119	2.01	109	117	7.27	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	10	124	123	0.157	109	115	5.85	70 - 130	30	70 - 130	30
1,1-Dichloroethene	ND	10	109	108	0.688	100	106	5.55	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND	10	129	129	0	122	130	6.40	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	10	124	123	0.650	115	122	6.09	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	ND	10	128	129	0.699	115	122	5.54	70 - 130	30	70 - 130	30
Toluene	ND	10	107	107	0	101	106	4.72	70 - 130	30	70 - 130	30
Trichloroethene	ND	10	117	115	1.89	107	115	6.68	70 - 130	30	70 - 130	30
%SS1:	102	25	101	102	0.966	98	98	0	70 - 130	30	70 - 130	30
%SS2:	103	25	103	103	0	103	102	0.436	70 - 130	30	70 - 130	30
%SS3:	113	2.5	118	116	1.12	113	109	3.63	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE

BATCH 50820 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1005570-003B	05/21/10 2:30 PM	I 05/26/10	05/26/10 12:51 AM	1005570-004B	05/21/10 1:30 PM	05/26/10	05/26/10 1:34 AM

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.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

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

QA/QC Officer

QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 50829 WorkOrder 1005570

EPA Method SW8021B/8015Bm Extraction SW5030B Spiked Sample ID: 1005570-003/											03A	
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	CSD Acceptance Criteria (%)			
	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex ^f)	ND	60	93.6	88.3	5.90	94.3	92.5	1.86	70 - 130	20	70 - 130	20
MTBE	ND	10	114	103	9.98	111	109	1.69	70 - 130	20	70 - 130	20
Benzene	ND	10	101	101	0	103	101	2.13	70 - 130	20	70 - 130	20
Toluene	ND	10	91.6	89.7	2.13	92.2	91.3	0.995	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	91.8	88.9	3.21	90.9	91.7	0.794	70 - 130	20	70 - 130	20
Xylenes	ND	30	103	100	2.43	103	103	0	70 - 130	20	70 - 130	20
%SS:	102	10	101	106	4.77	104	104	0	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE

BATCH 50829 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1005570-001A	05/21/10 12:00 PM	05/24/10	05/24/10 8:05 PM	1005570-002A	05/21/10 12:45 PM	05/26/10	05/26/10 1:04 AM
1005570-003A	05/21/10 2:30 PM	05/24/10	05/24/10 8:35 PM	1005570-004A	05/21/10 1:30 PM	05/24/10	05/24/10 9:05 PM

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).

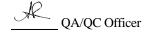
MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the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



QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 50810 WorkOrder 1005570

EPA Method SW8015B	Extrac	tion SW	3510C	510C Spiked Sample ID: N/A								
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			١
	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH-Diesel (C10-C23)	N/A	1000	N/A	N/A	N/A	95.9	96.3	0.382	N/A	N/A	70 - 130	30
%SS:	N/A	625	N/A	N/A	N/A	95	94	0.459	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE

BATCH 50810 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1005570-001A	05/21/10 12:00 PM	05/21/10	05/24/10 11:36 PM	1005570-002A	05/21/10 12:45 PM	05/21/10	05/25/10 12:44 AM
1005570-003A	05/21/10 2:30 PM	05/21/10	05/25/10 1:52 AM	1005570-004A	05/21/10 1:30 PM	05/21/10	05/25/10 3:00 AM

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.

