

SNOW CLEANERS INC.

EXPERT FINISHING • ALL LEATHER GOODS

MAIN OFFICE & PLANT

38 WEST SONORA ST.
STOCKTON, CA 95203

209 / 547-1454
January 24, 2012



RECEIVED

3:51 pm, Apr 10, 2012

Alameda County
Environmental Health

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

SUBJECT: SEMI-ANNUAL 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 (January Through December 2011) dated January 24, 2012 (document 0298.R14).

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.

Cordially,
Snow Cleaners, Inc.

Harold Turner
President

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

0298.L69

P&D ENVIRONMENTAL, INC.

55 Santa Clara Ave, Suite 240

Oakland, CA 94610

(510) 658-6916

January 24, 2012

Report 0298.R14

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

**SUBJECT: GROUNDWATER MONITORING AND SAMPLING REPORT
(JANUARY THROUGH DECEMBER 2011)
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 three groundwater monitoring wells designated as MW2 through MW4 located near the subject site, and four groundwater extraction wells designated as DP1 through DP4 located at the subject site. All of the wells in the groundwater monitoring network were monitored on December 5, 2011 and all of the wells were sampled on December 5 and 6, 2011 except for offsite groundwater monitoring well MW1 which was inaccessible due to a car being parked on top of the well. A Site Location Map is attached as Figure 1, and a Site Vicinity Map Detail showing all of the well locations is attached as Figure 2.

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 at offsite locations 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 at offsite locations on September 9, 2008. A detailed discussion of the site background and historical monitoring, sampling, and investigation are provided in P&D's Subsurface Investigation Report dated August 19, 2009 (document 0298.R6). On September 27 through 29, 2010 P&D oversaw the installation of dual-phase extraction wells DP1 through DP4, and vapor extraction wells VE1 and VE2. A detailed discussion of well installation is provided in P&D's Well Installation Report dated December 2, 2010 (document 0298.R11). The initial monitoring and sampling of the new wells was performed on October 15, 2010 in conjunction with the periodic monitoring and sampling of the existing offsite groundwater monitoring wells. Documentation of the October 15, 2010 sampling event is provided in P&D's Semi-Annual Groundwater Monitoring and Sampling Report (document 0298.R12) dated December 17, 2010.

In December 2010 a vapor extraction feasibility test was performed at well DP1. During 2011 a discharge permit was obtained from East Bay Municipal Utility District (EBMUD), a pump was installed in well DP1, and groundwater extraction feasibility testing was performed. Documentation of the vapor extraction and groundwater extraction feasibility testing is provided in P&D's Vapor Extraction and Groundwater Extraction Feasibility Test Report (document 0298.R13) dated January 24, 2012.

FIELD ACTIVITIES

P&D personnel monitored offsite groundwater monitoring wells MW2, MW3, and MW4, and onsite extraction wells DP1, DP2, DP3, and DP4 for depth to water on December 5, 2011 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 December 5, 2011 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 or extraction wells with the exception of well DP1. In well DP1 the depth to water and depth to free product were measured to the nearest 1/32-inch with a steel tape and water-finding and product-finding paste. The measured free product thickness in well DP1 was 0.25 feet. No water was encountered in vapor extraction wells VE1 and VE2.

Following the measurement of depth to water and monitoring for free product or sheen on December 5, 2011, each well was purged with a peristaltic pump for a minimum of 15 minutes and sampled on either December 5 or December 6, 2011. Purging was performed at low flow rates to minimize turbulence and minimize the likelihood of sediments in the samples. During purging operations, the field parameters of electrical conductivity, temperature, pH, turbidity, and depth to water were monitored and recorded on a groundwater monitoring/well purging data sheet. The free product detected in well DP1 was pumped from the well (approximately 225 milliliters) and stored at the site in a 55-gallon steel drum. Petroleum hydrocarbon odors were detected on the purge water from wells MW2, DP1, DP2 and DP3, and petroleum hydrocarbon sheen was observed on the purge water from well DP1. Records of the field parameters measured during well purging are included with this report.

Once the field parameters were observed to stabilize, and the wells had been purged for a minimum of 15 minutes, water samples were collected directly from the discharge tubing from the pump. The samples were transferred to 40-milliliter glass Volatile Organic Analysis (VOA) vials and 1-liter amber glass bottles that were preserved with hydrochloric acid and 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 labeled and 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.

The site geology and hydrogeology are 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-water-bearing zone in the immediate vicinity of the site northeastwards and eastwards in the vicinity of the former UST pit and then towards the southeast (towards Peralta Creek) to the north of the former UST pit, 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 below the ground surface (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 unconfined A-water-bearing zone to a confined B-water-bearing zone in the area between the northeast side of well DP2 at 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 Table 1 and Figure 2 shows that historically there has been a difference in water table elevation of as much as approximately 4.5 to 5.0 feet between wells DP2 and DP1. The horizontal distance is approximately 18 feet between these two wells, and the location of this change in water table elevation corresponds with an increase in depth to fine-grained materials which are encountered at a depth of approximately 22 to 25 feet bgs between well DP2 and Davis Street to the southwest. Based on the depth of approximately 22 to 25 feet bgs to fine-grained materials between well DP2 and Davis Street to the southwest, the thickness of the water layer overlying the fine-grained materials to the southwest of DP2 ranges seasonally between approximately 1 and 4 feet. The depth to fine-grained materials and the saturated thickness of the water-bearing sediments to the northeast of DP2 is unknown. A discussion of geologic cross sections in P&D's Well Installation Report dated December 2, 2010 (document 0298.R11) identifies a east-northeasterly-trending channel in the surface of the fine-grained materials that drains the area beneath the former UST pit towards the northeast and towards the change in water table elevation of approximately 4.5 to 5.0 feet that is located between wells DP2 and DP1.

Based on water level information available (see Table 1) the historically measured depth to water in the offsite groundwater monitoring wells MW1 through MW4 has ranged from 11.49 to 18.83 feet in well MW2; 16.95 to 22.97 feet in well MW3 (after September 19, 2008); 19.07 to 23.92 feet in well MW1; and 21.18 to 25.86 feet in well MW4. Review of historical groundwater monitoring well water levels shows that the water levels in wells MW2 and MW3 (screened in the A-water-bearing zone) have been consistently similar, and that the water levels in wells MW1 and MW4 (screened in the B-water-bearing zone) 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 7.0 feet in wells MW2 and MW3, and approximately 4.0 feet in wells MW1 and MW4. Historical well water levels are shown for August 2009 through December 2011 in Figure 3 to illustrate the relationships of water level changes for wells MW1 through MW4.

Figure 4 shows water level changes in all of the wells for October 2010 through December 2011 (wells DP1 through DP4 were not installed until September 2010). Review of Figure 4 shows the following.

- Water levels in wells MW2, DP2 and DP3 are similar.
- Water levels and changes in water levels in wells DP1 and DP4 are similar (the water level in well DP1 was depressed in June 2011 because of groundwater extraction in well DP1).
- Water levels and changes in water levels in wells MW1 and MW4 are similar.
- Changes in water levels in wells DP2 and DP3 are similar.

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 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 8015B. In addition, all of the samples were analyzed for Volatile Organic Compounds (VOCs) including Methyl tert-Butyl Ether (MTBE); benzene, toluene, ethylbenzene, and total xylenes (BTEX); and halogenated volatile organic compounds (HVOCs) by EPA Method 8260B. 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.

No analytes were detected in the groundwater sample collected from well MW3, with the exception of carbon disulfide at a concentration of 1.9 micrograms per liter (ug/L), and no analytes were detected in the groundwater samples collected from wells MW4 and DP4, with the exceptions of cis-1,2-dichloroethene in MW4 at a concentration of 12 ug/L, and chloroform in both wells at concentrations of 1.2 and 0.96 ug/L, respectively.

TPH-G was detected in the samples collected from wells MW2, DP1, DP2, and DP3 at concentrations of 1,200, 2,000, 1,300, and 480 ug/L, respectively; TPH-SS was detected in the same four wells at concentrations of 1,800, 940, 480, and 630 ug/L, respectively; TPH-D was detected in the same four wells at concentrations of 2,400, 47,000, 670, and 3,600 ug/L, respectively; and TPH-BO was detected at concentrations of 2,700, 59,000, 1,000, and 4,500 ug/L, respectively. Review of

the laboratory report shows that the laboratory described the TPH-G and TPH-SS results for wells MW2, DP1, DP2 and DP3 as consisting of Stoddard solvent/mineral spirit-range compounds, with the samples from wells MW2, DP1, and DP2 having one to a few isolated peaks present in the TPH-G chromatogram.

The TPH-D and TPH-BO results for wells MW2, DP1, and DP4 are described by the laboratory as consisting of Stoddard solvent/mineral spirit-range compounds and diesel-range compounds with no recognizable pattern. The TPH-D and TPH-BO results for well DP1 are also described as oil-range compounds, and the DP2 results are described as diesel-range compounds with no recognizable pattern and oil-range compounds. The TPH-D and TPH-BO results for well DP3 are described as consisting of kerosene or jet fuel range compounds.

VOCs were detected in all of the wells. However, as discussed above, the detected VOCs in wells MW3, MW4 and DP4 were limited in number and concentration.

DISCUSSION AND RECOMMENDATIONS

All of the groundwater monitoring wells and dual phase extraction wells were sampled with the exception of well MW1, which was not accessible because a car was parked on top of the well. Petroleum hydrocarbon odors were detected on the purge water from wells MW2, DP1, DP2 and DP3, and petroleum hydrocarbon sheen was observed on the purge water from well DP1. No water was encountered in vapor extraction wells VE1 and VE2.

The water level in well DP2 was 3.95 feet higher than the water level in well DP1, which is located 18 feet horizontally from well DP1. This difference in water levels is consistent with historic differences in the water levels between these two wells, and is attributed to the geology of the site. A detailed discussion of the similarities and relationships of water level changes in the different wells is provided above in the geology and hydrogeology section of this report. Based on the geology identified in boreholes at and near these wells the groundwater drains from the vicinity of the former UST pit and the vicinity of wells DP2, DP3 and MW2 northeastwards towards well DP1. A detailed discussion of the extent of petroleum and HVOCs in groundwater with figures is provided in P&D's Well Installation Report dated December 2, 2010 (document 0298.R11). A detailed discussion of observations regarding the extent of petroleum hydrocarbons and HVOCs in groundwater is also provided in P&D's December 17, 2010 Groundwater Monitoring and Sampling Report (document 0298.R12).

The decrease in TPH and VOC concentrations in well DP4 and the increase in TPH, PCE and TCE concentrations in well DP1 are suspected of being related to groundwater extraction feasibility testing that was performed at well DP1 during 2011. Based on the sample results, P&D recommends that wells DP1 through DP4 be sampled on a quarterly basis and that wells MW1, MW3 and MW4 be sampled on a semi-annual basis. P&D also recommends that site remediation be performed in accordance with recommendations set forth in P&D's Vapor Extraction and Groundwater Extraction Feasibility Test Report

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.

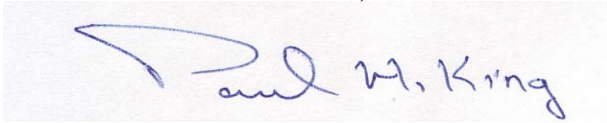
This report has been prepared in accordance with generally accepted practices using standards of care and diligence normally practiced by recognized consulting firms performing services of a similar nature. P&D is not responsible for the accuracy or completeness of information provided by other individuals 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.

January 24, 2012
Report 0298.R14

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: 12/31/13



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 Detail Showing Well Locations

Figure 3 – Graph of Water Levels in Site Groundwater Monitoring Network Wells for August 2009 Through December 2011

Figure 4 – Graph of Water Levels in Site Groundwater Monitoring Network Wells for October 2010 Through December 2011

Groundwater Monitoring/Well Purging Data Sheets

Laboratory Reports and Chain of Custody Documentation

PHK/sjc
0298.R14

TABLES

TABLE 1

SUMMARY OF GROUNDWATER ELEVATION DATA

Well No	Date	Top Of Casing Elevation (ft) ¹	Depth To Water (ft)	Water Table Elevation (ft)	Change in Water Table Elevation		
MW1	12/5/2011	132.78	car parked on well	could not measure			
	9/2/2011		22.55	110.23	-1.62		
	6/1/2011		20.93	111.85	-0.52		
	5/20/2011		20.41	112.37	-0.95		
	4/15/2011		19.46	113.32	-0.21		
	3/18/2011		19.25	113.53	2.65		
	2/18/2011		21.90	110.88	-1.14		
	1/21/2011		20.76	112.02	2.39		
	12/10/2010		23.15	109.63	0.70		
	11/19/2010		23.85	108.93	0.07		
	10/15/2010		23.92	108.86	-0.42		
	9/22/2010		23.50	109.28	-0.63		
	8/20/2010		22.87	109.91	-0.86		
	7/16/2010		22.01	110.77	-0.95		
	6/18/2010		21.06	111.72	-0.80		
	5/21/2010		20.26	112.52	-1.02		
	4/16/2010		19.24	113.54	-0.17		
	3/19/2010		19.07	113.71	1.49		
	2/19/2010		20.56	112.22	0.52		
	1/27/2010		21.08	111.70	2.28		
	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				23.10	109.68	0.30
	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			132.78	20.06	112.72	
	MW2		12/5/2011	133.59	18.10	115.49	-1.04
9/2/2011		17.06	116.53		-1.99		
6/1/2011		15.07	118.52		-1.04		
5/20/2011		14.03	119.56		-2.99		
4/15/2011		11.04	122.55		0.57		
3/18/2011		11.61	121.98		2.09		
2/18/2011		13.70	119.89		0.20		
1/21/2011		13.90	119.69		1.88		
12/13/2010		15.78	117.81		-0.05		
12/10/2010		15.73	117.86		0.96		
11/23/2010		16.69	116.90		0.97		
11/19/2010		17.66	115.93		-0.07		
11/12/2010		17.59	116.00		0.47		
10/15/2010		18.06	115.53		-0.34		
9/22/2010		17.72	115.87		-0.37		
8/20/2010		17.35	116.24		-0.60		
7/16/2010		16.75	116.84		-1.34		
6/18/2010		15.41	118.18		-1.37		
5/21/2010		14.04	119.55		-2.25		
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		
11/30/2009					car parked on well	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		133.59	11.55 ⁴	122.04			
MW3	12/5/2011	136.35	20.51	115.84	0.78		
	9/2/2011		21.29	115.06	-1.34		
	6/1/2011		19.95	116.40	-0.98		
	5/20/2011		18.97	117.38	-2.45		
	4/15/2011		16.52	119.83	0.67		
	3/18/2011		17.19	119.16	1.40		
	2/18/2011		18.59	117.76	-0.51		
	1/21/2011		18.08	118.27	1.20		
	12/10/2010		19.28	117.07	1.87		
	11/19/2010		21.15	115.20	1.82		
	10/15/2010		22.97	113.38	-0.42		
	9/22/2010		22.55	113.80	-0.93		
	8/20/2010		21.62	114.73	-1.25		
	7/16/2010		20.37	115.98	-1.05		
	6/18/2010		19.32	117.03	-0.59		
	5/21/2010		18.73	117.62	-1.34		
	4/16/2010		17.59	118.96	-0.44		
	3/19/2010		16.95	119.40	1.01		
	2/19/2010		17.96	118.39	-0.25		
	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		
	8/20/2009		21.08	115.27	-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			136.35	26.80	109.55	

SUMMARY OF GROUNDWATER ELEVATION DATA

Well No	Date	Top Of Casing Elevation (ft) ¹⁾	Depth To Water (ft)	Water Table Elevation (ft)	Change in Water Table Elevation		
MW4	12/5/2011	134.09	25.20	108.89	-0.65		
	9/2/2011		24.55	109.54	-1.57		
	6/1/2011		22.98	111.11	-0.52		
	5/20/2011		22.46	111.63	-1.87		
	4/15/2011		20.59	113.50	0.76		
	3/18/2011		21.35	112.74	1.59		
	2/18/2011		22.94	111.15	-0.16		
	1/21/2011		22.78	111.31	2.32		
	12/10/2010		25.10	108.99	0.69		
	11/19/2010		25.79	108.30	0.07		
	10/15/2010		25.86	108.23	-0.39		
	9/22/2010		25.47	108.62	-0.62		
	8/20/2010		24.85	109.24	-0.82		
	7/16/2010		24.03	110.06	-0.92		
	6/18/2010		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		21.18	112.91	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		25.26	108.83	-0.20		
	10/29/2009		25.06	109.03	0.31		
	9/24/2009		25.37	108.72	-0.51		
	8/20/2009		24.86	109.23	0.14		
	9/26/2008		25.00	109.09	0.00		
	9/19/2008		25.00	109.09	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			
	DP1		12/5/2011	137.22	25.17 (0.25) ##	112.24	-2.73
			9/2/2011		22.25	114.97	1.44
6/1/2011		23.69	113.53				
5/20/2011		Adjusting pump rates - water level fluctuating.					
4/15/2011		14.19	123.03		1.46		
3/18/2011		15.65	121.57		3.26		
2/18/2011		18.91	118.31		-1.08		
1/21/2011		17.83	119.39		7.08		
12/13/2010		24.91	112.31		0.50		
12/10/2010		25.41	111.81		1.06		
11/23/2010		26.47	110.75		0.24		
11/19/2010		26.71	110.51		0.13		
11/12/2010		26.84	110.38		-0.33		
10/15/2010		25.68	110.71		-0.26		
10/5/2010*		25.42	110.97		0.33		
9/28/2010*		25.75	110.64				
DP2		12/5/2011	136.59		21.16	115.43	-0.79
		9/2/2011			20.37	116.22	-1.89
		6/1/2011			18.48	118.11	
		5/20/2011			Not Measured		
		4/15/2011			13.12	123.47	1.06
	3/18/2011	14.18		122.41	2.73		
	2/18/2011	16.91		119.68	-0.17		
	1/21/2011	16.74		119.85	3.40		
	12/13/2010	20.14		116.45	-0.01		
	12/10/2010	20.13		116.46	0.81		
	11/23/2010	20.94		115.65	0.71		
	11/19/2010	21.65		114.94	-0.07		
	11/12/2010	21.58		115.01	0.35		
	10/15/2010	21.11		114.66	-0.15		
	10/5/2010*	20.96		114.81	-1.39		
9/28/2010*	19.57	116.20					
DP3	12/5/2011	135.75	20.20	115.55	0.33		
	9/2/2011		19.07	116.68	1.31		
	6/1/2011		17.09	118.66			
	5/20/2011		Not Measured				
	4/15/2011		12.35	123.40	0.95		
	3/18/2011		13.30	122.45	2.60		
	2/18/2011		15.90	119.85	-0.27		
	1/21/2011		15.63	120.12	2.61		
	12/13/2010		18.24	117.51	0.11		
	12/10/2010		18.35	117.40	0.91		
	11/23/2010		19.26	116.49	0.89		
	11/19/2010		20.15	115.60	-0.09		
	11/12/2010		20.06	115.69	0.47		
	10/15/2010		19.29	115.22	-0.15		
	10/5/2010*		19.14	115.37	0.28		
9/28/2010*	19.42	115.09					
DP4	12/5/2011	137.60	23.18	114.42	-2.00		
	9/2/2011		21.18	116.42	-1.87		
	6/1/2011		19.31	118.29			
	5/20/2011		Not Measured				
	4/15/2011		13.14	124.46	1.28		
	3/18/2011		14.42	123.18	3.13		
	2/18/2011		17.55	120.05	-0.46		
	1/21/2011		17.09	120.51	6.76		
	12/13/2010		23.85	113.75	0.76		
	12/10/2010		24.61	112.99	1.63		
	11/23/2010		26.24	111.36	0.21		
	11/19/2010		26.45	111.15	0.16		
	11/12/2010		26.61	110.99	-0.38		
	10/15/2010		25.40	111.37	-0.37		
	10/5/2010*		25.03	111.74	0.79		
	9/28/2010*		25.82	110.95			

NOTES:

1) Top of well casing amended on 11/12/2010 in preparation for vapor extraction pilot test.

* = Prior to well development.

** = Wells MW3 and MW4 surveyed on September 22-23, 2008; wells DP1 through DP4 surveyed on October 5, 2010.

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

= Indicates free product thickness in feet. The water table elevation has been corrected for the presence of free product by assuming a specific gravity of 0.75.

TABLE 2

SUMMARY OF GROUNDWATER SAMPLE RESULTS

Well Number	Sample Date	TPH-G	TPH-SS	TPH-D	TPH-MO	TPH-BO	VOCs by 8260B
MW1	12/6/2011	ND<50	ND<50	ND<50	Well Inaccessible; car parked on top of well.		ND, except: Chloroform=0.85
	10/15/2010	ND<50	ND<50	ND<50	NA	ND<99	ND, except: Chloroform=0.80
	5/21/2010	ND<50	ND<50	ND<50	NA	ND<100	ND, except: Chloroform=0.71
	12/1/2009	ND<50	ND<50	ND<50	NA	ND<100	ND, except: Chloroform=0.74
	9/18/2008	ND<50	ND<50	ND<50	NA	ND<100	ND, except: Chloroform=0.78
	10/27/2004	ND<50	ND<50	ND<50	ND<250	NA	ND, except: Chloroform=1.2, Xylenes = 0.61
	2/20/2003	ND<50	ND<50	ND<50	ND<250	NA	** ND
	5/15/1995	ND<50	NA	NA	NA	NA	** ND
	12/22/1994	ND<50	NA	NA	NA	NA	** ND
	9/14/1994	ND, a	NA	NA	NA	NA	** ND
	7/29/1994	ND<50	NA	NA	NA	NA	** ND
	5/31/1994	ND<50	NA	NA	NA	NA	** ND
1/24/1994	ND<50	NA	ND	NA	NA	** ND	
MW2	12/5/2011	1,200, a,g	1,800, a,g	2,400, h,i	NA	2,700, h,i	ND, except: Toluene = 15, Ethylbenzene = 18, Xylenes = 57, cis-1,2-Dichloroethene = 310, trans-1,2-Dichloroethene = 12, Naphthalene = 9.8, Vinyl Chloride = 50, n-Butyl benzene = 5.3, Isopropylbenzene = 12, sec-Butyl benzene = 8.4, n-Propyl benzene = 17, 1,2,4-Trimethylbenzene = 120, 1,3,5-Trimethylbenzene = 35, ND, except: cis-1,2-dichloroethene= 1,500, Vinyl Chloride = 160, 1,2,4-Trimethylbenzene = 100
	10/15/2010	3,600, a,b,g	3,900, a,b,g	25,000, b,h,i,j	NA	22,000, b,h,i,j	ND, except: cis-1,2-dichloroethene= 1,700, Vinyl Chloride = 180, 1,2,4-Trimethylbenzene = 89
	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= 1,800, Vinyl Chloride = 73, 1,2,4-Trimethylbenzene = 140
	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= 880, Vinyl Chloride = 44, Xylenes = 46, 1,2,4-Trimethylbenzene = 140, 1,3,5-Trimethylbenzene = 41
	9/18/2008	11,000, c,b	14,000	28,000, b,d,e	NA	33,000	*ND, except: cis-1,2-dichloroethene = 3,300
	10/27/2004	320,000, c	500,000	280,000, b,d, f	ND<50,000	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
	2/20/2003	76,000, b,c	75,000	370,000, b,d,f	37,000	NA	**Benzene = 17, **Toluene = 96, **Ethylbenzene = 50, **Xylenes = 200, **Benzene = 22, **Toluene = 170, **Ethylbenzene = 89, **Xylenes = 470
	5/15/1995	12,000, c	NA	NA	NA	NA	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, **Benzene = ND < 15
	12/22/1994	20,000, a,c	NA	NA	NA	NA	**Toluene = 170, **Ethylbenzene = 400, **Xylenes = 2,600
	12/22/1994	--	--	--	--	--	ND, except: +Benzene = 24, +Toluene = 440, +Ethylbenzene = 300, +Xylenes = 830, +cis-1,2-dichloroethene = 720, +Chloroform = 25, +Acetone = 120
	9/14/1994	200,000, b,c	NA	NA	NA	NA	
	9/14/1994	--	--	--	--	--	

TABLE 2
SUMMARY OF GROUNDWATER SAMPLE RESULTS

Well Number	Sample Date	TPH-G	TPH-SS	TPH-D	TPH-MO	TPH-BO	VOCs by 8260B
MW2 Continued	7/29/1994	21,000, b, c	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 ND, except:
	1/28/1994	2,800, c	NA	12,000, d	NA	NA	**Xylenes = 43
	1/19/1994++	3,400, c	NA	20,000	NA	NA	**Benzene = 15 , **Toluene = 180 , **Ethylbenzene = 39 , **Xylenes = 200
MW3	12/5/2011	ND<50	ND<50	ND<50	NA	ND<100	ND, except: Carbon disulfide = 1.9
	10/15/2010	ND<50	ND<50	ND<50	NA	ND<100	ND
	5/21/2010	ND<50	ND<50	ND<50	NA	ND<100	ND
	12/1/2009	ND<50	ND<50	63, e	NA	120, e	ND
	9/18/2008	ND<50	ND<50	ND<50	NA	ND<100	ND, except: Bromoform = 0.57, Chloroform = 1.3
MW4	12/5/2011	ND<50	ND<50	ND<50	NA	ND<100	ND, except: Cis-1,2-dichloroethene = 12 , Chloroform = 1.2
	10/15/2010	ND<50	ND<50	ND<50	NA	ND<100	ND, except: Cis-1,2-dichloroethene = 8.4 , Trans-1,2-dichloroethene = 0.84, Chloroform = 1.3
	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
DP1	12/6/2011	2,000, a,g	940, a,g	47,000, h,i,j	NA	59,000, h,i,j	ND, except: Tetrachloroethene = 2,800 , Trichloroethene = 850 , cis-1,2-Dichloroethene = 260
	10/15/2010	10,000, b,g,k	5,100, b,g	9,000, b,h,j	NA	9,800, b,h,j	ND, except: Cis-1,2-dichloroethene = 17,000 , Vinyl Chloride = 2,600
DP2	12/6/2011	1,300, a,g	480, a,g	670, i,l	NA	1,000, i,l	ND, except:
	10/15/2010	4,800, a,g	2,900, a,g	3,900, h,i	NA	2,900, h,i	Cis-1,2-dichloroethene = 14,000 ND, except: Cis-1,2-dichloroethene = 22,000

TABLE 2
SUMMARY OF GROUNDWATER SAMPLE RESULTS

Well Number	Sample Date	TPH-G	TPH-SS	TPH-D	TPH-MO	TPH-BO	VOCs by 8260B
DP3	12/6/2011	480, g	630, g	3,600, m	NA	4,500, m	ND, except: Benzene = 0.97, Toluene = 1.1, Ethylbenzene = 1.7, Xylenes = 3.1, cis-1,2-Dichloroethene = 22, trans-1,2-Dichloroethene = 2.3, Vinyl Chloride = 17, Naphthalene = 2.2, n-Butyl benzene = 1.7, 1,2,4-Trimethylbenzene = 24, 1,3,5-Trimethylbenzene = 3.5, sec-Butyl benzene = 2.5, Isopropylbenzene = 2.8, n-Propyl benzene = 4.2, 4-Isopropyl toluene = 0.99
	10/15/2010	5,700, g	8,000, g	10,000, h,i,j	NA	9,800, h,i,j	ND, except: Toluene = 2.7, Ethylbenzene = 4.0, Xylenes = 23, cis-1,2-Dichloroethene = 44, trans-1,2-Dichloroethene = 4.5, Vinyl Chloride = 28, Naphthalene = 7.5, n-Butyl benzene = 4.4, 1,2,4-Trimethylbenzene = 69, 1,3,5-Trimethylbenzene = 24, sec-Butyl benzene = 6.0, Isopropylbenzene = 7.2, n-Propyl benzene = 10,
DP4	12/5/2011	ND<50	ND<50	ND<50	NA	ND<100	ND, except: Chloroform = 0.96
	10/15/2010	1,800, g,k	1,500, g,k	1,200, h,i	NA	920, h,i	ND, except: Tetrachloroethene = 22, Trichloroethene = 40, cis-1,2-Dichloroethene = 80, trans-1,2-Dichloroethene = 33, Vinyl Chloride = 2.9, tert-Butyl benzene = 3.8, 4-Isopropyl toluene = 4.5
ESL		100	100	100	100	100	Benzene = 1.0, Toluene = 40, Ethylbenzene = 30, Xylenes = 20, Tetrachloroethene = 5.0, Trichloroethene = 5.0, 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-Butyl benzene = None, 1,2,4-Trimethylbenzene = None, 1,3,5-Trimethylbenzene = None, sec-Butyl benzene = None, Isopropylbenzene = None, tert-Butyl benzene = None, n-Propyl benzene = None, Carbon disulfide = None.

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.
 -- = See TPH-G results in the line above.
 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.
 k = Laboratory Note: no recognizable pattern.
 l = Laboratory Note: results reported as diesel and bunker oil consist of gasoline range compounds.
 m = Laboratory Note: results reported as diesel and bunker oil consist of kerosene or jet fuel range compounds.
 * = MW2 VOC detection limits are all increased because of a sample dilution factor of 500.
 ** = Analysis by EPA Method 8020.
 + = Samples subcontracted to different lab for VOC analysis by 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

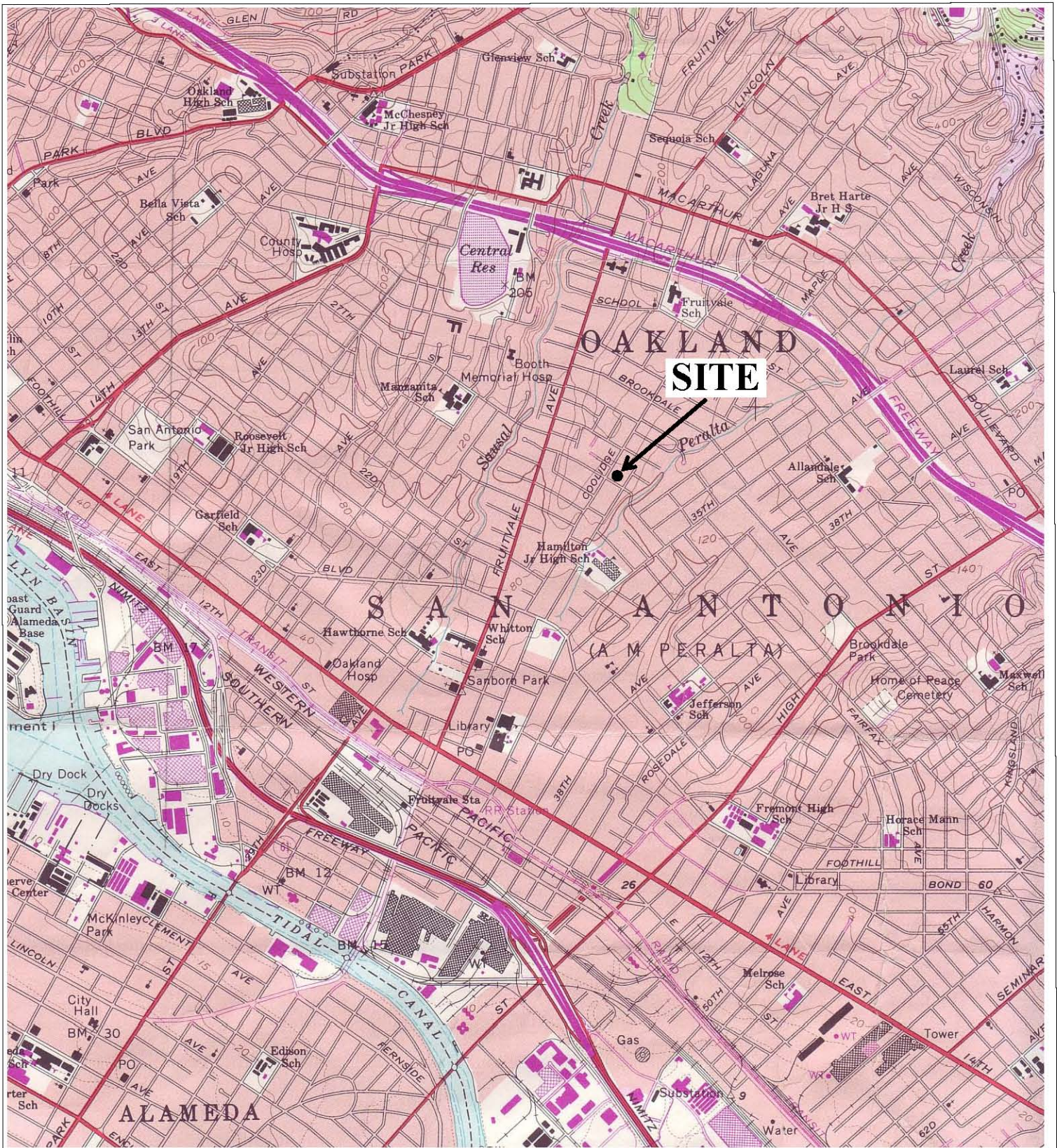
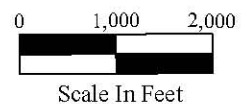


Figure 1
 Site Location Map
 Snow Cleaners
 2678 Coolidge Avenue
 Oakland, California



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

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



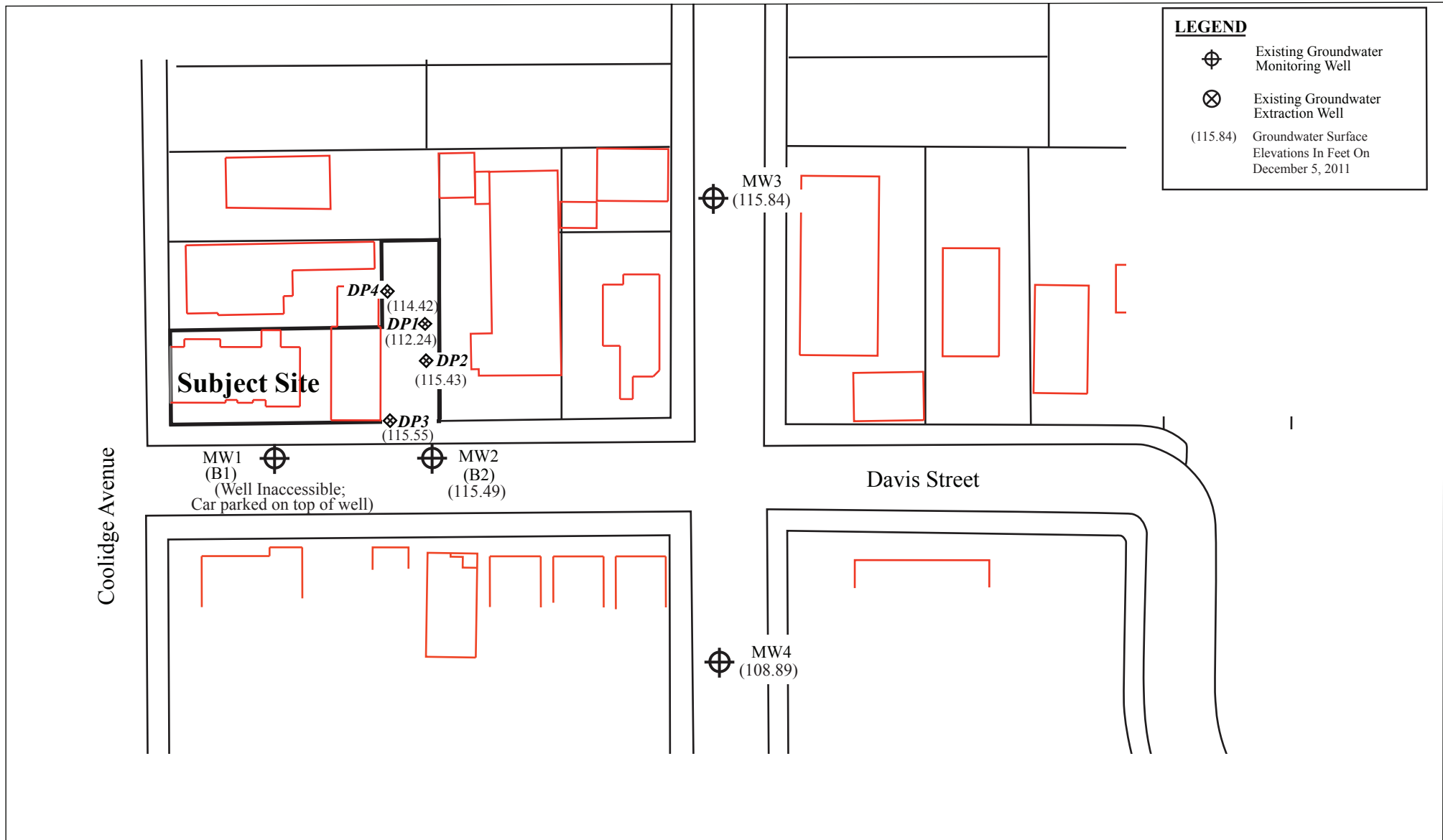
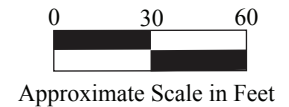


Figure 2
 Site Vicinity Map Detail Showing Well Locations
 Snow Cleaners
 2678 Coolidge Avenue
 Oakland, California



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

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



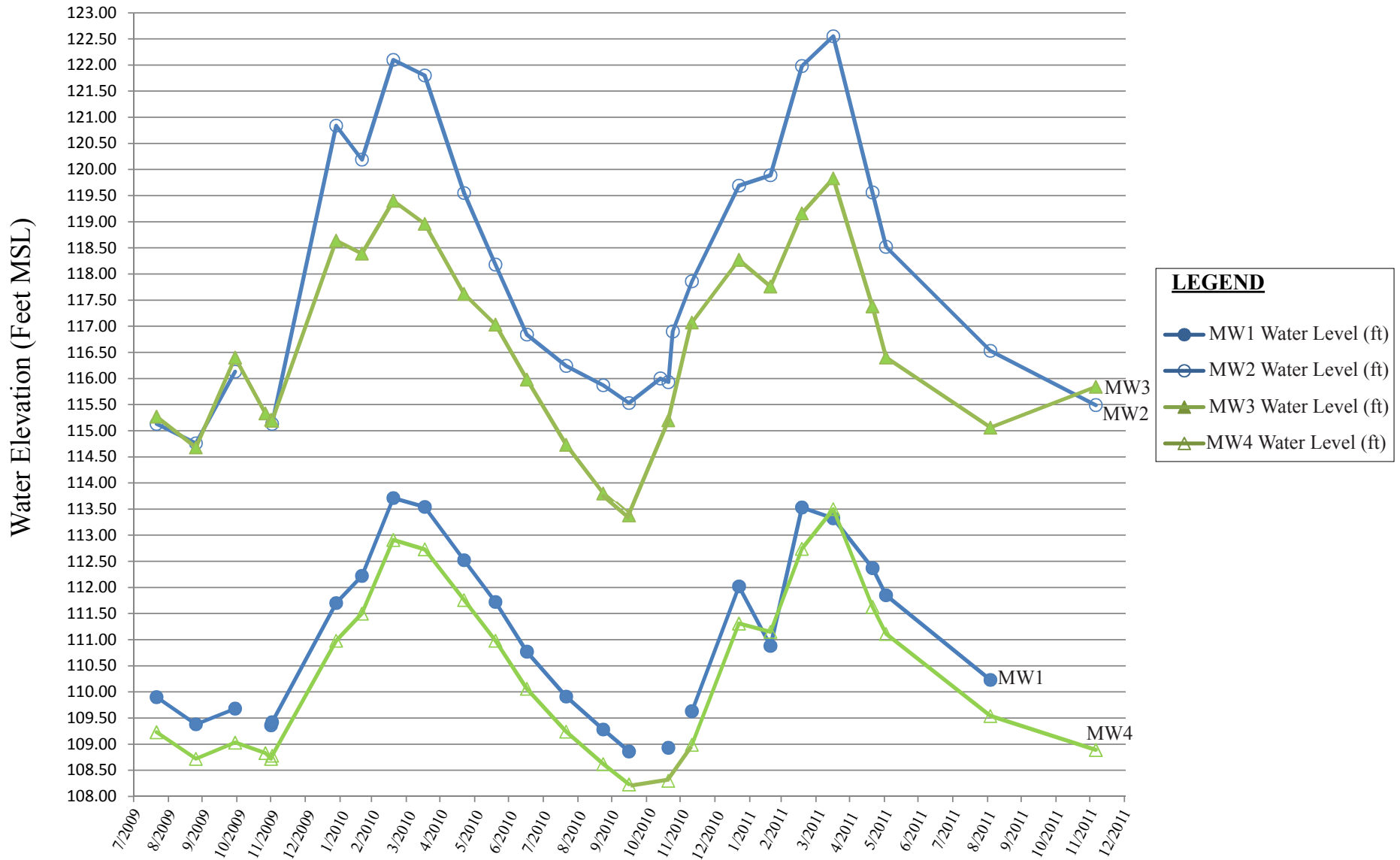


Figure 3
 Graph of Water Levels in Site Groundwater Monitoring Network Wells
 for August 2009 Through December 2011
 Snow Cleaners
 2678 Coolidge Avenue
 Oakland, California

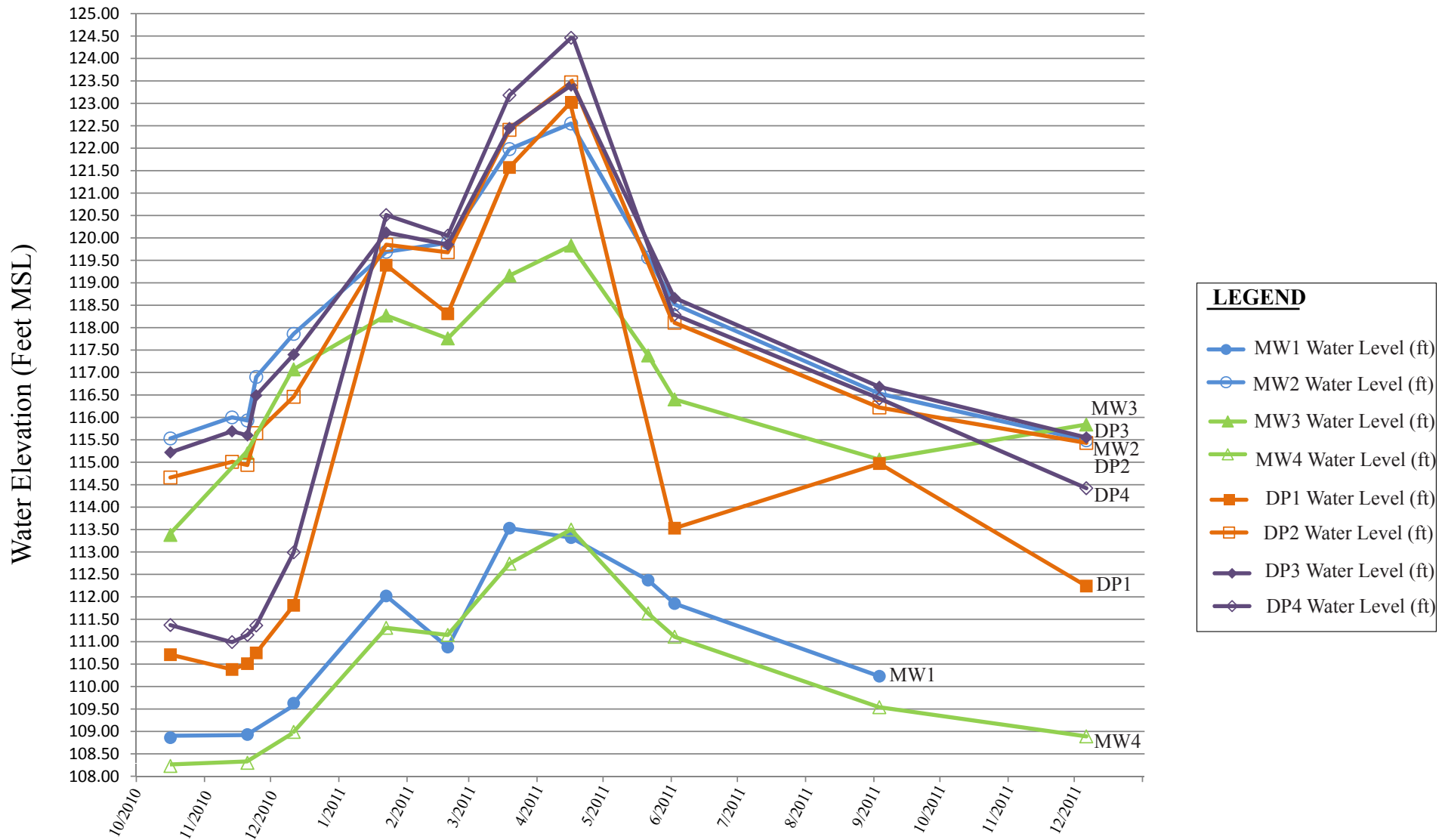


Figure 4
 Graph of Water Levels in Site Groundwater Monitoring Network Wells
 for October Through December 2011
 Snow Cleaners
 2678 Coolidge Avenue
 Oakland, California

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

**GROUNDWATER MONITORING/WELL
PURGING DATA SHEETS**

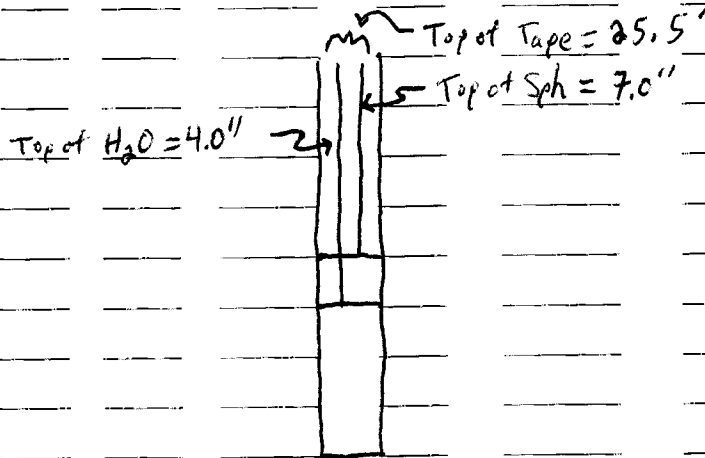
5

P&D Environmental, Inc.
Groundwater Monitoring/Well Purging Data Sheet

Site Name Snow Cleaners
Job Number 0798
TOC to Water (ft.) 25.17
Well Depth (ft.) 37.0
Well Diameter 4"
Flow Rate (mL/minute) ~225
Start Purge Time 11:22

Well No. DP-1
monitored Date 12/5/11 + 12/6/11 ← purged + sampled
Sheen Yes
Free Product Thickness sil ~~0.19~~
Sample Collection Method Peristaltic pump + new unseal PET tubing

Time	Vol. Purged (mL)	Depth to Water (ft.)	pH	Temperature (C°)	Electrical Conductivity (µS/cm)	Turbidity (NTU)
1133	225	25.42	6.87	17.1	478	34.70
1138	1,350	25.51	6.76	17.6	470	66
1143	2,475	25.56	6.78	17.6	470	48.44
1146	3,150	25.62	6.78	17.6	468	48.52
1147	3,375	End purge				



$$25.5' - 7.0" = 25.5' - 0.58' = 24.92'$$

$$25.5' - 4.0" = 25.5' - 0.33' = 25.17'$$

$$FP \text{ thickness} = 0.25' \quad FP \text{ correction} = 0.25' \times 0.75 = 0.19'$$

$$\text{Corrected water level} = 25.17' - 0.19' = 24.98'$$

NOTES

Stability Parameters
p.H. = +/- 0.1
Sp. Conductivity = +/- 3%
Turbidity = +/- 10%

Removed free product prior to purging + sampling (approx 450 mL)
Strong Stoddard solvent odor + sheen: DP#1 collected @ 1700
Inlet to tubing set at approx 27 feet below top of casing

**LABORATORY REPORTS AND CHAIN OF
CUSTODY DOCUMENTATION**



Analytical Report

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0298; Snow Cleaners, Oakland	Date Sampled: 12/05/11-12/06/11
		Date Received: 12/06/11
	Client Contact: Steve Carmack	Date Reported: 12/14/11
	Client P.O.:	Date Completed: 12/14/11

WorkOrder: 1112151

December 14, 2011

Dear Steve:

Enclosed within are:

- 1) The results of the **7** analyzed samples from your project: **#0298; Snow Cleaners, Oakland,**
- 2) QC data for the above samples, and
- 3) A copy of the chain of custody.

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

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
 Laboratory Manager
 McC Campbell Analytical, Inc.

The analytical results relate only to the items tested.

CHAIN OF CUSTODY RECORD

112151

P&D ENVIRONMENTAL, INC.
 55 Santa Clara Ave., Suite 240
 Oakland, CA 94610
 (510) 658-6916

PROJECT NUMBER:

0298

PROJECT NAME:

Snow Cleaners,
Oakland

SAMPLED BY: (PRINTED & SIGNATURE)

Steve Carmack

[Signature]

NUMBER OF CONTAINERS

ANALYSIS(ES):

TPH Multi (GP, SS, Bo)
8760B

PRESERVATIVE

REMARKS

SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION
AW-1 sic				sic 7
MW-2	12/5/11	1605	H ₂ O	
MW-3	↓	1410		
MW-4	↓	1315		
DP-1	12/6/11	1200		
DP-2	↓	1010		
DP-3	↓	1050		
DP-4	12/5/11	1510		

~~AW-1~~ sic

DATE

TIME

TYPE

SAMPLE LOCATION

sic 7

ICE Normal Turnaround

MW-2

12/5/11

1605

H₂O

7

X

X

MW-3

↓

1410

7

X

X

MW-4

↓

1315

7

X

X

DP-1

12/6/11

1200

7

X

X

DP-2

↓

1010

7

X

X

DP-3

↓

1050

7

X

X

DP-4

12/5/11

1510

7

X

X

ICE 3.4c

GOOD CONDITION	<input checked="" type="checkbox"/>	APPROPRIATE	<input checked="" type="checkbox"/>
HEAD SPACE ABSENT	<input checked="" type="checkbox"/>	CONTAINERS	<input checked="" type="checkbox"/>
DECHLORINATED IN LAB	<input type="checkbox"/>	PRESERVED IN LAB	<input type="checkbox"/>
PRESERVATION	<input checked="" type="checkbox"/>	VEALS G & G	METALS OTHER

RELINQUISHED BY: (SIGNATURE)

[Signature]

DATE

TIME

RECEIVED BY: (SIGNATURE)

12/6/11

1512

[Signature]

Total No. of Samples (This Shipment)

7

LABORATORY:

Total No. of Containers (This Shipment)

49

McCampbell

RELINQUISHED BY: (SIGNATURE)

[Signature]

DATE

TIME

RECEIVED BY: (SIGNATURE)

12/6/11

1700

[Signature]

LABORATORY CONTACT:

Angela Rydelius

LABORATORY PHONE NUMBER:

(877) 252-9262

RELINQUISHED BY: (SIGNATURE)

[Signature]

DATE

TIME

RECEIVED FOR LABORATORY BY: (SIGNATURE)

SAMPLE ANALYSIS REQUEST SHEET

ATTACHED: () YES (X) NO

Results and billing to:
 P&D Environmental, Inc.
 lab@pdenviro.com

REMARKS:

All bottles preserved w/ HCL.

McC Campbell Analytical, Inc.



1534 Willow Pass Rd
 Pittsburg, CA 94565-1701
 (925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1112151

ClientCode: PDEO

- WaterTrax
 WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:

Steve Carmack
 P & D Environmental
 55 Santa Clara, Ste.240
 Oakland, CA 94610
 (510) 658-6916 FAX: 510-834-0152

Email: lab@pdenviro.com
 cc:
 PO:
 ProjectNo: #0298; Snow Cleaners, Oakland

Bill to:

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

Requested TAT:

5 days

Date Received: 12/06/2011

Date Printed: 12/06/2011

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1112151-001	MW-2	Water	12/5/2011 16:05	<input type="checkbox"/>	B	A											
1112151-002	MW-3	Water	12/5/2011 14:10	<input type="checkbox"/>	B	A											
1112151-003	MW-4	Water	12/5/2011 13:15	<input type="checkbox"/>	B	A											
1112151-004	DP-1	Water	12/6/2011 12:00	<input type="checkbox"/>	B	A											
1112151-005	DP-2	Water	12/6/2011 10:10	<input type="checkbox"/>	B	A											
1112151-006	DP-3	Water	12/6/2011 10:50	<input type="checkbox"/>	B	A											
1112151-007	DP-4	Water	12/5/2011 15:10	<input type="checkbox"/>	B	A											

Test Legend:

1	8260B_W	2	G-MBTX_W	3		4		5	
6		7		8		9		10	
11		12							

The following SampIDs: 001A, 002A, 003A, 004A, 005A, 006A, 007A contain testgroup.

Prepared by: Melissa Valles

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
 Hazardous samples will be returned to client or disposed of at client expense.



Sample Receipt Checklist

Client Name: **P & D Environmental** Date and Time Received: **12/6/2011 5:34:18 PM**
 Project Name: **#0298; Snow Cleaners, Oakland** Checklist completed and reviewed by: **Melissa Valles**
 WorkOrder N°: **1112151** Matrix: Water Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

Chain of custody present? Yes No
 Chain of custody signed when relinquished and received? Yes No
 Chain of custody agrees with sample labels? Yes No
 Sample IDs noted by Client on COC? Yes No
 Date and Time of collection noted by Client on COC? Yes No
 Sampler's name noted on COC? Yes No

Sample Receipt Information

Custody seals intact on shipping container/cooler? Yes No NA
 Shipping container/cooler in good condition? Yes No
 Samples in proper containers/bottles? Yes No
 Sample containers intact? Yes No
 Sufficient sample volume for indicated test? Yes No

Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes No
 Container/Temp Blank temperature Cooler Temp: 3.4°C NA
 Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
 Sample labels checked for correct preservation? Yes No
 Metal - pH acceptable upon receipt (pH<2)? Yes No NA
 Samples Received on Ice? Yes No

(Ice Type: WET ICE)

* NOTE: If the "No" box is checked, see comments below.

 Comments:



Table with 4 columns: Client Project ID, Date Sampled, Client Contact, Date Analyzed. Values include #0298; Snow Cleaners, Oakland; 12/05/11; Steve Carmack; 12/12/11.

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1112151

Table with 2 columns: Lab ID, Client ID, Matrix. Values include 1112151-001B, MW-2, Water.

Main data table with 8 columns: Compound, Concentration, DF, Reporting Limit, Compound, Concentration, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table with 2 columns: %SS1, %SS2. Values include 103, 102, 101.

Comments:

* 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 µg/wipe.
ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor
surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.



Table with 4 columns: Client Project ID, Date Sampled, Client Contact, Date Analyzed. Includes details for P & D Environmental, 55 Santa Clara, Ste.240, Oakland, CA 94610.

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1112151

Summary table with 2 columns: Lab ID (1112151-002B), Client ID (MW-3), Matrix (Water).

Main data table with 8 columns: Compound, Concentration, DF, Reporting Limit, Compound, Concentration, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 103, %SS2: 107, %SS3: 105.

Comments:

* 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 µg/wipe.
ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor
surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.



Table with client information: P & D Environmental, Client Project ID: #0298; Snow Cleaners, Oakland, Date Sampled: 12/05/11, Date Received: 12/06/11, Client Contact: Steve Carmack, Date Extracted: 12/10/11, Oakland, CA 94610, Client P.O., Date Analyzed: 12/10/11

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1112151

Table with Lab ID: 1112151-003B, Client ID: MW-4, Matrix: Water

Main data table with columns: Compound, Concentration *, DF, Reporting Limit, Compound, Concentration *, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 107, %SS2: 105, %SS3: 103

Comments:

* 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 µg/wipe.
ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor
surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.



Table with 4 columns: Client Project ID, Date Sampled, Client Contact, Date Analyzed. Includes details for P & D Environmental, 55 Santa Clara, Ste.240, Oakland, CA 94610.

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

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 1112151

Table with 2 columns: Lab ID (1112151-004B), Client ID (DP-1), Matrix (Water)

Main data table with 8 columns: Compound, Concentration, DF, Reporting Limit, Compound, Concentration, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table with 2 columns: %SS1 (102), %SS2 (105), %SS3 (103)

Comments:

* 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 µg/wipe.
ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor
surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.



P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0298; Snow Cleaners, Oakland	Date Sampled: 12/06/11
	Client Contact: Steve Carmack	Date Received: 12/06/11
	Client P.O.:	Date Extracted: 12/13/11
		Date Analyzed: 12/13/11

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1112151

Lab ID	1112151-005B
Client ID	DP-2
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<5000	500	10	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<1000	500	2.0
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	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<100	500	0.2	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	14,000	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	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, Total	ND<250	500	0.5

Surrogate Recoveries (%)

%SS1:	104	%SS2:	104
%SS3:	102		

Comments:

* 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 µg/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0298; Snow Cleaners, Oakland	Date Sampled: 12/06/11
	Client Contact: Steve Carmack	Date Received: 12/06/11
	Client P.O.:	Date Extracted: 12/13/11
		Date Analyzed: 12/13/11

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1112151

Lab ID	1112151-006B
Client ID	DP-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	0.97	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	1.7	1.0	0.5	sec-Butyl benzene	2.5	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	22	1.0	0.5	trans-1,2-Dichloroethene	2.3	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	1.7	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	2.8	1.0	0.5
4-Isopropyl toluene	0.99	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	2.2	1.0	0.5	n-Propyl benzene	4.2	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	1.1	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	24	1.0	0.5	1,3,5-Trimethylbenzene	3.5	1.0	0.5
Vinyl Chloride	17	1.0	0.5	Xylenes, Total	3.1	1.0	0.5

Surrogate Recoveries (%)

%SS1:	114	%SS2:	114
%SS3:	101		

Comments:

* 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 µg/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0298; Snow Cleaners, Oakland	Date Sampled: 12/05/11
	Client Contact: Steve Carmack	Date Received: 12/06/11
	Client P.O.:	Date Extracted: 12/13/11
		Date Analyzed: 12/13/11

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1112151

Lab ID	1112151-007B
Client ID	DP-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	0.96	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
Vinyl Chloride	ND	1.0	0.5	Xylenes, Total	ND	1.0	0.5

Surrogate Recoveries (%)

%SS1:	102	%SS2:	103
%SS3:	98		

Comments:

* 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 µg/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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



P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0298; Snow Cleaners, Oakland	Date Sampled: 12/05/11-12/06/11
	Client Contact: Steve Carmack	Date Received: 12/06/11
	Client P.O.:	Date Extracted: 12/10/11-12/11/11
		Date Analyzed: 12/10/11-12/11/11

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

Extraction method: SW5030B

Analytical methods: SW8015Bm

Work Order: 1112151

Lab ID	Client ID	Matrix	TPH(g)	TPH(ss)	DF	% SS	Comments
001A	MW-2	W	1200	1800	1	112	d5,d6
002A	MW-3	W	ND	ND	1	107	
003A	MW-4	W	ND	ND	1	101	
004A	DP-1	W	2000	940	1	106	d5,d6
005A	DP-2	W	1300	480	1	115	d5,d6
006A	DP-3	W	480	630	1	108	d5
007A	DP-4	W	ND	ND	1	101	

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 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.

cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference. %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:
 d5) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?)
 d6) one to a few isolated non-target peaks present in the TPH(g) chromatogram



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://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: 12/05/11-12/06/11
	Client Contact: Steve Carmack	Date Received: 12/06/11
	Client P.O.:	Date Extracted: 12/06/11
		Date Analyzed: 12/07/11-12/08/11

Total Extractable Petroleum Hydrocarbons*

Extraction method: SW3510C

Analytical methods: SW8015B

Work Order: 1112151

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	TPH-Bunker Oil (C10-C36)	DF	% SS	Comments
1112151-001A	MW-2	W	2400	2700	1	99	e2,e11
1112151-002A	MW-3	W	ND	ND	1	96	
1112151-003A	MW-4	W	ND	ND	1	98	
1112151-004A	DP-1	W	47,000	59,000	20	124	e11,e7,e2
1112151-005A	DP-2	W	670	1000	1	101	e2,e4
1112151-006A	DP-3	W	3600	4500	1	102	e8
1112151-007A	DP-4	W	ND	ND	1	102	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	100	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.

%SS = Percent Recovery of Surrogate Standard. DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:
e2) diesel range compounds are significant; no recognizable pattern
e4) gasoline range compounds are significant.
e7) oil range compounds are significant
e8) kerosene/kerosene range/jet fuel range
e11) stoddard solvent/mineral spirit (?)



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 63117

WorkOrder: 1112151

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
tert-Amyl methyl ether (TAME)	ND	10	94.5	90	4.89	100	70 - 130	30	70 - 130
Benzene	ND	10	98.9	93.4	5.75	101	70 - 130	30	70 - 130
t-Butyl alcohol (TBA)	ND	50	103	99.2	3.23	115	70 - 130	30	70 - 130
Chlorobenzene	ND	10	89.8	85.6	4.77	101	70 - 130	30	70 - 130
1,2-Dibromoethane (EDB)	ND	10	91.1	87.4	4.10	107	70 - 130	30	70 - 130
1,2-Dichloroethane (1,2-DCA)	ND	10	94.9	88.6	6.85	115	70 - 130	30	70 - 130
1,1-Dichloroethene	ND	10	124	119	4.23	96.5	70 - 130	30	70 - 130
Diisopropyl ether (DIPE)	ND	10	108	104	3.84	111	70 - 130	30	70 - 130
Ethyl tert-butyl ether (ETBE)	ND	10	98.9	94.8	4.24	97.4	70 - 130	30	70 - 130
Methyl-t-butyl ether (MTBE)	ND	10	114	109	4.88	118	70 - 130	30	70 - 130
Toluene	ND	10	91.8	87	5.36	97.9	70 - 130	30	70 - 130
Trichloroethene	ND	10	92.8	88.4	4.89	97.1	70 - 130	30	70 - 130
%SS1:	105	25	117	116	0.253	108	70 - 130	30	70 - 130
%SS2:	111	25	109	109	0	105	70 - 130	30	70 - 130
%SS3:	85	2.5	99	97	1.97	93	70 - 130	30	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

BATCH 63117 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1112151-001B	12/05/11 4:05 PM	12/12/11	12/12/11 11:08 PM	1112151-002B	12/05/11 2:10 PM	12/10/11	12/10/11 12:38 PM
1112151-003B	12/05/11 1:15 PM	12/10/11	12/10/11 1:18 PM	1112151-004B	12/06/11 12:00 PM	12/10/11	12/10/11 8:01 PM
1112151-005B	12/06/11 10:10 AM	12/13/11	12/13/11 1:41 PM	1112151-006B	12/06/11 10:50 AM	12/13/11	12/13/11 9:57 PM
1112151-007B	12/05/11 3:10 PM	12/13/11	12/13/11 2:31 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.



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 63228

WorkOrder: 1112151

EPA Method: SW8021B/8015Bm		Extraction: SW5030B					Spiked Sample ID: 1112150-006A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH(btex) [£]	ND	60	106	107	0.711	113	70 - 130	20	70 - 130	
MTBE	ND	10	85.2	96.8	12.8	110	70 - 130	20	70 - 130	
Benzene	ND	10	104	105	1.42	96	70 - 130	20	70 - 130	
Toluene	ND	10	103	102	1.11	98.9	70 - 130	20	70 - 130	
Ethylbenzene	ND	10	101	100	0.535	92.5	70 - 130	20	70 - 130	
Xylenes	ND	30	104	102	2.32	97.4	70 - 130	20	70 - 130	
%SS:	106	10	107	106	1.12	103	70 - 130	20	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

BATCH 63228 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1112151-001A	12/05/11 4:05 PM	12/10/11	12/10/11 3:56 AM	1112151-001A	12/05/11 4:05 PM	12/10/11	12/10/11 4:22 PM
1112151-002A	12/05/11 2:10 PM	12/10/11	12/10/11 11:52 AM	1112151-003A	12/05/11 1:15 PM	12/10/11	12/10/11 12:22 PM
1112151-004A	12/06/11 12:00 PM	12/10/11	12/10/11 3:52 PM	1112151-005A	12/06/11 10:10 AM	12/10/11	12/10/11 12:52 PM
1112151-006A	12/06/11 10:50 AM	12/11/11	12/11/11 6:47 AM	1112151-007A	12/05/11 3:10 PM	12/10/11	12/10/11 1:52 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: 63173

WorkOrder: 1112151

EPA Method: SW8015B		Extraction: SW3510C							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	MS / MSD	RPD	LCS/LCSD	RPD
TPH-Diesel (C10-C23)	N/A	1000	N/A	N/A	N/A	111	116	4.48	N/A	N/A	70 - 130	30
%SS:	N/A	625	N/A	N/A	N/A	105	106	1.43	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 63173 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1112151-001A	12/05/11 4:05 PM	12/06/11	12/07/11 8:33 PM	1112151-002A	12/05/11 2:10 PM	12/06/11	12/07/11 9:51 PM
1112151-003A	12/05/11 1:15 PM	12/06/11	12/08/11 1:35 AM	1112151-004A	12/06/11 12:00 PM	12/06/11	12/08/11 9:04 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.



QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 63231

WorkOrder: 1112151

EPA Method: SW8015B		Extraction: SW3510C							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	MS / MSD	RPD	LCS/LCSD	RPD
TPH-Diesel (C10-C23)	N/A	1000	N/A	N/A	N/A	100	99.4	0.964	N/A	N/A	70 - 130	30
%SS:	N/A	625	N/A	N/A	N/A	89	89	0	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 63231 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1112151-005A	12/06/11 10:10 AM	12/06/11	12/07/11 6:19 PM	1112151-006A	12/06/11 10:50 AM	12/06/11	12/07/11 5:09 PM
1112151-007A	12/05/11 3:10 PM	12/06/11	12/07/11 7:29 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 $\% \text{ Recovery} = 100 * (\text{MS} - \text{Sample}) / (\text{Amount Spiked})$; $\text{RPD} = 100 * (\text{MS} - \text{MSD}) / ((\text{MS} + \text{MSD}) / 2)$.
 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.