BES

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EVALUATION OF SITE CONTAMINATION AND RECENT GROUNDWATER SAMPLING ONE, DUNNE PAINTS, CALIFORNIA LINEN OAKLAND/EMERYVILLE, CALIFORNIA

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Prepared for:

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1. INTRODUCTION

Block Environmental Services, Inc. (BES) prepared the following report on behalf of ONE Color Communications (ONE) for submission to the Alameda County Department of Environmental Health (ADEH) and the San Francisco Bay Regional Water Quality Control Board (RWQCB). A workplan outlining the tasks described in this report was submitted to the ADEH on June 8, 1998, and subsequently approved by Ms. Susan Hugo. This report collectively addresses three pieces of property, the ONE property as well as the adjacent California Linen and Dunne Paints properties, which collectively comprise the site. Included in the report are a summary of all available historical documentation regarding site contamination, investigation, and clean-up activities, a description of the procedures and results from the recent groundwater sampling event of all of the site's remaining wells conducted by BES, and a discussion of these results as well as trends at the site. BES concludes that the most appropriate way to address contamination at this site is by assessing the risk posed to human health and the environment by contamination remaining at the site.

2. SITE LOCATION AND DESCRIPTION

There are three adjacent properties that comprise the site, which are owned separately by ONE, California Linen, and Dunne Paints. The site vicinity and a site map are included in Figures 1 and 2. The site is approximately 1 mile east of the San Francisco Bay on the north edge of Oakland, with the Oakland/Emeryville common boundary passing through the ONE and Dunne Paints properties. Land use in the area is both light industrial and residential.

The ONE facility is located at 1001 42nd Street in Oakland and extends across the eastern portion of the block to 41st Street. The property was formerly owned by Boysen Paint Company, which began manufacturing paints and varnish on the property in the mid-1930's (NAC, 1998). Boysen was merged into the Ameritone Paint Corporation, a wholly owned subsidiary of Grow Group, Inc., in 1980. In May 1981, Mr. and Mrs. Kozel purchased the property from Grow Group. Boysen ceased operations in 1990 and subsequently Oakland National Engraving Company began operating a printing business on the property. From the late 1980's until July, 1993, a portion of the property was also occupied by Rockridge Antiques (Rockridge), which used the former etching room to refinish antiques, and stripped furniture in a trough near a former truck loading dock on 41st Street. Oakland National Engraving changed its name to ONE Color Communications, Inc. in January 1994 and currently occupies the property.

California Linen Rental is located on the southeast corner of 41st and Linden Streets at 989 41st Street in Oakland. California Linen has operated a linen supply rental service and commercial laundry at this location since October 1924.

Adjacent to ONE to the south across 41st Street, Dunne Paints is located at 1007 41st Street, Emeryville. Operations at this facility have historically consisted of mixing, blending, and packaging bulk paint products for consumer sales.

3. BACKGROUND

3.1. Summary of Previous Site Activities and Analytical Data Collected

Table A (attached) summarizes all groundwater analytical data for the site for the chemicals of concern.

3.1.1. ONE

At least two former underground storage tanks (USTs) were associated with the ONE property. A 10,000 gallon UST that had stored mineral spirits (a.k.a. paint thinner or stoddard solvent) was located in the truck loading area. This tank was excavated in the first half of 1987. Two soil samples collected from below the former UST indicated concentrations of total hydrocarbons of 6.5 and 43.5 mg/kg, of benzene of 0.07 mg/kg and non-detect, of toluene of 0.6 mg/kg (both), and of xylenes of 17.6 and 4.3 mg/kg (4M Construction, 1987). A monitoring well, MW-LD4, was installed adjacent to the loading dock. Details of the removal of this tank and the date of well installation are unknown. It appears that MW-LD4 was constructed in the excavation pit using the same methods as for MW-D1 and MW-D2, described later in this report.

In 1987, O.H. Materials Corp. (OHM) began investigating a UST located under the sidewalk along 41st Street. The tank was reportedly used by the former Boysen Paint Company to store mineral spirits. Following a ground penetrating radar survey for underground utilities and the installation of a temporary monitoring well during 1988 and 1989, approximately 610 gallons of solvents, sludge, and water were pumped from the tank and disposed of in April, 1990. In May, 1990 monitoring well MW-B1 was installed at the western end of the UST. Compounds detected in the first groundwater sample collected included 57,000 µg/L of Total Petroleum Hydrocarbon (TPH) of unknown type and 11.4 µg/L of methylene chloride (ESC, 1993). On September 30, 1991, Aqua Terra Technologies (ATT) collected groundwater samples from MW-B1 (identified as MW-41st in their report) and MW-LD4 (ATT, 1992). The laboratory analysis for MW-B1 indicated 18,000 µg/L TPH-g, 29,000 µg/L kerosene, 5.6 µg/L toluene, 250 µg/L ethylbenzene, 980 µg/L total xylenes, and non-detect for all volatile organic compounds (VOCs), and halogenated organic compounds, including methylene chloride.

In May 1993 ESC began activities to close the tank in place. After removing the sidewalk and fill, the tank was measured to have a capacity of 8,000 gallons. Signs of weakness and holes were found in the tank piping and soil discoloration was observed in the product-line trench. Approximately 25 tons of soil were excavated from above the tank and hauled for disposal. Soil samples collected in the excavation pit around the tank and piping contained TPH matching the

mineral spirit standard, however the samples were not quantified using this standard. The samples did not contain detectable levels of VOCs except for low levels of xylenes (400 to 800 µg/L) in the west, east, and pipeline soil samples. A total of 39 cubic yards of cement slurry was pumped into the tank to fill it. The excavation pit was backfilled with pea gravel and the sidewalk replaced.

ESC installed three more monitoring wells (MW-B2, MW-B3, and MW-B4) in May of 1993. These wells are all located in 41st Street and nearly form a line running east to west. On June 10, 1993 and again on September 29, 1993 ESC sampled the five monitoring wells on ONE property, as well as two wells on California Linen property and two wells on Dunne Paints property. Results from both sampling events did not indicate detectable levels of VOCs in any wells at ONE. The September sample analysis was the only one to quantify levels of TPH as mineral spirits, indicating concentrations of 290,000 µg/L in MW-B2, 43,000 µg/L in MW-B1, and between 700 and 2,400 µg/L in the remaining wells at ONE.

A stormwater drainage system at ONE included two steel-lined concrete sumps located adjacent to the former truck loading area. Rockridge utilized a trough in this area to strip furniture using a solvent mixture containing methylene chloride. Sludge found in the bottom of the smaller sump was sampled by ESC in May 1993. ESC reported Total Petroleum Hydrocarbons (TPH) concentrations as a non-gasoline mix at 130,000 µg/L, toluene concentration at 1,100 µg/L, ethylbenzene at 1,400µg/L, xylene at 14,000 µg/L, trichloroethylene (TCE) at 460 µg/L and methylene chloride at 17,000 µg/L in the sludge found at the bottom of the sump (ESC, August, 1993). The larger sump contained about 110 gallons of liquid, which was removed from the sump on August 10, 1993. The liquid was manifested and sent for recycling by Rockridge. ONE sampled and analyzed the liquid waste in the sump using EPA Method 624. The liquid contained 79,000 µg/L methylene chloride, 12,000 µg/L TCE, and trace amounts of 1,2-dichloroethylene (DCE).

BES conducted a field investigation in 1994 to determine whether methylene chloride or TCE had contaminated soil or groundwater adjacent to the sumps. This involved drilling a boring adjacent and downgradient to the sumps, collecting soil samples at 3 and 8 feet below ground surface (bgs), and installing a monitoring well (BES-1). No halogenated VOCs (including methylene chloride and TCE) were found in the groundwater above the method detection limit. However, TCE was found in the three-foot soil sample at 9.5 µg/kg and in the eight-foot soil sample at 13 µg/kg. TPH as diesel and as mineral spirits were found in the groundwater; and TPH as mineral spirits was found in the eight-foot soil sample. Based on the data from this investigation, it was concluded that the sumps held their integrity since methylene chloride was not detected in soil or groundwater (BES, 1994). The two sumps were cleaned and filled with concrete in October 1995. A closure report for the sumps was submitted to ADEH in November 1995 (BES, 1995).

Methylene chloride was detected in the groundwater in only one well at one sampling event in May 1990. No other sampling events have detected methylene chloride or any other halogenated organic compounds in any groundwater wells at the site.

3.1.2. California Linen

Three former USTs located at California Linen were removed in February 1989 by Miller Environmental Company. These included a 2,500 gallon tank that contained #5 fuel oil, a 10,000 gallon tank that contained regular gasoline, and a 550 gallon tank that contained unleaded gasoline (Figure 4). Analytical results from soil samples collected from under the tanks after their removal indicated hydrocarbon contamination above RWQCB action levels in each excavation pit.

The soil sample collected from the western end of the 2,500 gallon tank pit contained 900 mg/kg TPH-d and 650 mg/kg oil and grease, while the sample from its eastern end was non-detect for both contaminants. A water sample taken from the excavation pit contained 520,000 µg/L TPH-d (Robert J. Miller Co., 1989). An undated, handwritten letter from Robert J. Miller Co. attached to a letter from California Linen to the ADEH dated March 23, 1989 indicates that contaminated soil was removed from this excavation pit and hauled to a disposal site (California Linen, 1989). No details are given as to the extent of over-excavation and no other soil sample data has been located. MW-3 was subsequently installed adjacent and downgradient to the former location of the 2,500 gallon tank. The well did not contain detectable levels of TPH as gasoline, diesel, or oil for four quarterly sampling events over a one-year period. Therefore, the ADEH approved the destruction of MW-3, which occurred in July 1991.

The soil sample from the southern end of the 10,000 gallon tank excavation pit contained 38 mg/kg TPH-g, and concentrations of benzene, toluene, ethylbenzene, and xylenes (BTEX) of 0.23, non-detect, 0.56, and 1.8 mg/kg, respectively. The sample from the northern end of the 10,000 gallon tank was non-detect for each of these compounds, however a water sample collected from the excavation pit contained 1,200 µg/L TPH-g, and concentrations of BTEX at 240, 76, 40, and 200 µg/L, respectively (Robert J. Miller Co., 1989). According to Robert J. Miller Co., the ADEH granted approval to backfill the excavation pit on February 27, 1989 (California Linen, 1989). MW-2 was subsequently installed adjacent and downgradient to the former location of the 10,000 gallon gasoline tank. The well contained a detectable concentration of TPH (50 µg/L TPH-d in August 1991) in only one of eleven sampling events between October, 1989 and June 1993. Of the BTEX compounds, only toluene and total xylenes have been detected, and only in the March 1992 sampling event (1.1 and 3.3 µg/L respectively).

Initial soil samples from the southern end of the 550 gallon tank excavation pit contained 310 mg/kg TPH-g, and levels of BTEX of 5.3, 24, 7.6, and 45 mg/kg, respectively. A sample from the northern end also contained appreciable, though smaller, concentrations of each of these compounds. After over-excavation of the pit, two soil samples were collected, both of which proved to be non-detect for each of the compounds tested. MW-1 was installed adjacent and downgradient to the former location of the 550-gallon gasoline tank. This well consistently contained appreciable concentrations of TPH and BTEX compounds in each of the eleven sampling events mentioned above. The concentrations determined in each of these sampling events is shown in Table A (attached).

3.1.3. Dunne Paints

Dunne Paints owned six USTs for storing mineral spirits. The tanks were located under the sidewalk on the south side of 41st Street (Figure 3). Four connected tanks of 6,000, 3,000 (2), and 2,000 gallons buried under the western half of the sidewalk were in use for approximately 20 years up to the time of their removal. Two 4,000 gallon tanks located near the eastern end had not been used for over 35 years prior to their removal (Dunne, 1988).

Environmental Services, Inc. conducted a preliminary soil investigation in January 1988. An analysis of 12 soil borings adjacent to the tanks indicated high concentrations of TPH as mineral spirits in the vicinity of all six tanks. The tanks were removed on July 18 and 19, 1988 by SEMCO Construction Company. The 6,000 gallon tank (farthest to the west) had a small leak evident during removal, and both 4,000 gallon tanks (farthest to the east) were "badly damaged" with water streaming out of several small holes during removal. Approximately 60 cubic yards of petroleum hydrocarbon saturated soil and an unknown quantity of liquid was removed from the tank pits. Groundwater infiltrated the excavations at a depth of approximately 7 feet bgs, which prohibited sampling soil immediately below the former tanks (Hunter/Gregg, 1988).

Two monitoring wells, designated MW-D1 and MW-D2, were installed, one in each excavation pit, prior to backfilling. The wells were constructed in an unorthodox manner in order to facilitate groundwater sampling and in-situ treatment without the use of a drilling rig. The construction method consisted of suspending four-inch slotted PVC pipe to a depth of four feet below the tank bottom elevation in each pit while backfilling and compacting each pit with pea gravel to sub-grade. The top of each casing was sealed with concrete and fitted with a stovepipe, cover, and well box. Although the wells are shallow, they are screened sufficiently to intercept free floating product and to accommodate water table fluctuations.

Grab samples were collected from each well in August 1988, although the exact sampling procedure and purging method, if any, were not specified. The samples were analyzed only for TPH as mineral spirits, indicating concentrations of 1,000 µg/L in MW-D1 and 1,600 µg/L in MW-D2. All subsequent sampling of MW-D1 has been non-detect for TPH as mineral spirits.[1] As shown in Table A, TPH concentrations in MW-D2 from January, 1989 to September, 1993 decreased incrementally from a concentration of 1,600 µg/L in August, 1988 to 220 µg/L in September, 1993. Therefore, by September 1993 concentrations of TPH as mineral spirits decreased by at least 86 percent in both wells.

Traces of ethylbenzene and toluene were detected in some groundwater samples collected up to April 1989, however in all subsequent sampling events these chemicals were non-detect. Levels of toluene and ethylbenzene in wells MW-D1 and MW-D2 were well below California State Water Resources Control Board (SWRCB) underground tank regulation action levels. Total xylenes were detected in both wells on three occasions, the last in February 1990. The highest

[1] Note: The January 18 and March 24, 1989 analyses reported non-detect for both MW-D1 and MW-D2, however the detection level was 1,000 µg/L, implying a lack of precision in the result.

concentration of total xylenes measured was well below the SWRCB action level for xylene. In each of three subsequent sampling events since February 1990, none of these BTEX compounds have been detected. No halogenated or volatile organic compounds were detected in either well in the June 10, 1993 and September 29, 1993 sampling events.

3.2. Hydrogeology

3.2.1. Geologic Setting

The site soils consist of Quaternary Alluvium overlying Franciscan bedrock. Bedrock is likely to occur at a depth of 50 feet or greater beneath the site, creating an impermeable aquitard, or perch, for groundwater. On this portion of the low-lying Bay Plain in close proximity to San Francisco Bay, the site soils can be expected to consist primarily of fine grain silts and clays, termed "Bay Mud". Bay Mud is predominantly composed of unconsolidated, olive gray, blue gray, or black silty clay, created by the deposition of sediments carried by San Joaquin and Sacramento River. Permeability is generally low except where lenses of sand occur (Miller, 1989; Hageman-Aguiar, 1992).

3.2.2. Site Hydrogeology

Lithologic logs for borings drilled throughout the site indicate that the soil consist primarily of fine-grained sediments which fall into the category of Bay Mud. In a temporary well drilled to 20 feet bgs adjacent to the 8,000 gallon tank at ONE, soils were brown and gray clay for the entire depth, with increasing silt content beginning at 16 feet (OHM, 1988). Logs for MW-B2, MW-B3, and MW-B4 identify layers containing varying levels of gravel and silt as their primary constituents down to 14 feet bgs (ESC, 1993). Grading to finer particles, but still mostly sand, occurred to depths between 21 and 22 feet. Below this depth, clayey silt was observed in each well to final boring depths of 25 feet. The lithologic log for MW BES1 indicates silty sand to 7 feet, sandy silt to 24 feet, and clayey silt to 30 feet bgs (BES, 1994). Twelve soil borings drilled adjacent to each of the six Dunne USTs along 41st Street indicated predominantly clay soils to 6 to 10 feet and clayey sand and gravel from 10 to 17 feet bgs (Environmental Services, 1988). Six soil borings drilled throughout the Dunne property determined that soils are predominantly clay, though some borings encountered silt layers, and two indicated inter-bedded layers of sand and gravel from 10 to 12 feet bgs (Hageman-Aguiar, 1992. The lithologic logs for the three monitoring wells installed on the California Linen property (MW-1, MW-2, and MW-3), indicate a homogenous clayey lithology in all three borings, except for a sand lens between 3.5 and 4.0 feet in MW-3 (Miller, 1989).

3.2.3. *Hydraulic Gradient*

Table B (attached) summarizes all comprehensive groundwater elevation data for the site.

Groundwater elevation measurements taken by Miller Environmental Company at California Linen between November 13, 1989 and October 23, 1990 from wells MW-1, MW-2, and MW-3 are summarized in Table 1 (Miller, 1990).

Table 1: Groundwater Elevation and Gradient Determination at California Linen, 1989-1990

Date	Elevation (feet msl)			Gradient (ft/ft)	Direction (degrees)
	MW1	MW2	MW3		
11/13/89	45.85	44.91	45.96	0.025	286
12/14/89	45.86	44.97	45.96	0.023	286
2/20/90	46.53	45.35	46.37	0.027	293
3/22/90	46.55	45.17	46.09	0.029	300
4/23/90	45.81	44.99	46.01	0.023	283
7/25/90	45.68	44.88	45.92	0.023	282
8/22/90	46.34	44.51	45.68	0.038	301
9/25/90	46.2	44.53	45.68	0.036	300
10/23/90	45.68	44.64	45.57	0.025	292
Average	46.056	44.883	45.916	0.028	291

As shown in the gradient ranged from 0.025 to 0.038 ft/ft, with an average of 0.028. The gradient direction was consistently west-northwest, varying between 282 and 301 degrees. The magnitude of the gradient was greatest during August and September, corresponding to the lowest elevations measured.

ESC recorded groundwater levels in each of nine wells throughout the site monthly between June and November, 1993 (ESC, 1994). These measurements are summarized in Table B (attached). In their analysis of the groundwater elevation data, measurements from MW-D1, MW-D2, and MW-LD4 were discarded due to the unconventional construction of these wells in non-native fill. The significant variation in hydraulic conductivity between this fill (reportedly pea gravel) and the native soil, along with the size of the excavation pits in which the fill and wells were placed, indicate that groundwater elevations from these wells are not likely to be representative of the actual height of the groundwater table. BES-1 was constructed subsequent to the collection of this data.

Table 2 presents an analysis of the ESC data. Water table elevations decreased over the dry summer months and increased as rain events from mid-October through mid-November recharged the water table. The difference in the maximum and minimum average elevations was 1.05 feet over the period. The direction of groundwater flow appeared to vary from southwest to west over the six-month period. However, because the gradient is slight and the monitoring wells are located almost linearly and close to each other, a precise determination of the flow direction is not

possible. ESC reviewed Alameda County well inventory reports in August, 1993 in an attempt to locate other wells within a one-mile radius of the site that might provide further groundwater elevation data, but no other wells of any kind could be found within the radius.

Table 2: Analysis of 1993 Groundwater Elevation Data from Entire Site

Date	Direction	Average Elevation	Gradient Between Specified Wells (ft/ft)						
			B2-B3	B1-B3	B4-B3	B2-B4	MW1-MW2	MW1-B2	MW2-B2
6/10/93	SW	44.54	0.024	0.045	0.038	0.0074	0.031	0.0077	0.0029
7/8/93	W-SW	44.52	0.011	0.0086	0.015	0.0068	0.022	0.0073	0.0042
8/24/93	W	44.38	0.0095	0.012	0.014	0.0039	0.026	0.0083	0.0046
9/29/93	W-SW	43.49	0.0089	0.0050	0.012	0.0053	0.026	0.013	0.0099
10/20/93	W	44.34	0.0095	0.012	0.021	-0.0029	0.019	0.0075	0.0050
11/23/93	W	44.33	0.0086	0.012	0.013	0.0039	0.021	0.0077	0.0049
Average	-	44.27	0.012	0.016	0.019	0.0055[a]	0.024	0.0085	0.0053

a. 10/20/93 data point excluded from calculation of average.

In general, the magnitude of the hydraulic gradient varied too much over the entire site to provide an exact quantification. The gradient under 41st Street between ONE and Dunne Paints, exhibited by wells MW-B1, MW-B2, MW-B3, and MW-B4, ranged between approximately 0.045 and 0.004 ft/ft in the direction of groundwater flow, with an average of 0.013 ft/ft. The gradient between wells MW-1 and MW-2 at California Linen varied between 0.019 and 0.031 ft/ft, although the exact direction, and therefore the actual groundwater gradient, is uncertain.

4. 1998 GROUNDWATER SAMPLING

As set forth in the BES workplan submitted to ADEH on December 10, 1998, BES took depth to groundwater measurements, purged, and collected groundwater samples from each of eight wells that remain on the site: MW-B2, MW-B3, MW-B4, BES1, MW-LD4, MW-D2, MW-1, and MW-2. Well MW-B1 no longer exists. BES assumes that it was destroyed as part of the closure activities for the UST closed in place by ESC, although BES could not locate a copy of a final closure report for this well, if one exists.

4.1. Groundwater Sampling Procedures

The depth to static water was measured in each well prior to purging using an electrically activated audible water level indicator accurate to 0.01 inches. These measurements were used to calculate the volume of water in each well casing. A centrifugal pump and hose was used to purge at least three casing volumes of water prior to sampling. Well purge water was placed in fifty-five gallon drums for storage and disposal, pending the receipt of analytical test results.

Samples were collected with a new teflon disposable bailer and a new length of nylon string for each well. Groundwater samples were retained in pre-cleaned containers supplied by the laboratory. Samples collected in acid-washed 40-milliliter glass VOC analysis vials were gently filled to capacity and checked for trapped air by inverting and tapping each vial. Samples were labeled and stored in ice-filled coolers until delivery to Chromalab, Inc, a state-certified analytical laboratory, under strict chain-of-custody protocols. Copies of the well sampling logs with depth to water measurements and purging information are included in Appendix A.

4.2. Groundwater Sampling Field Observations

In well MW-B2, ½-inch of floating product having a mineral spirits odor was observed in the bailer. Floating product was not observed in the bailers collected from any of the other wells. BES1 had a mineral spirits odor, as did MW-B4, although it was slight. MW-1 had a petroleum odor. No other well samples had a detectable odor.

4.3. Analytical Results of Groundwater Sampling

Groundwater samples were analyzed according to EPA Method 8240A which qualitatively and quantitatively determines the presence of volatile organic compounds, including halogenated organics, benzene, toluene, ethylbenzene and xylene (BTEX). Samples were also analyzed for TPH as mineral spirits, kerosene, diesel (TPH-d), and gasoline (TPH-g), according to EPA Method 8015M.

The Table 3 summarizes the analytical results from the December 10, 1998 sampling event. The laboratory data, QA/QC, and chain-of-custody documentation are included in Appendix B.

Table 3: Summary of Compounds Detected in December 10, 1998 Sampling Event

All Data in µg/L (ppb)

Well No.	TPH-d	TPH-g	Kerosene	Mineral Spirits	Benzene	Ethyl-benzene	Toluene	Total Xylenes
MW-B2	ND<1,000	ND (2,400)[c]	ND<1,000	150,000	ND<100	ND<100	ND<100	ND<100
MW-B3	ND	ND (830)[c]	ND	120	ND	ND	ND	ND
MW-B4	1,000[a]	ND (2,700)[c]	ND	7,500	ND<20	ND<20	ND<20	ND<20
BES-1	ND<1,000	-[b]	ND<1,000	78,000	ND<100	ND<100	ND<100	ND<100
MW-LD4	170[a]	ND (83)[c]	ND	130	ND	ND	ND	ND
MW-D2	ND	ND (95)[c]	ND	180	ND	ND	ND	ND
MW-1	ND	-[b]	ND	4,700	5,300	1,600	1,700	3,500
MW-2	ND	-[b]	ND	250	75	47	33	100
R.L.	50	50	50	50	2.0	2.0	2.0	2.0

"-" Not Tested ND - Non Detectable R.L. - Reporting Limit (exceptions indicated)

a. Hydrocarbon reported as diesel does not match the pattern of the Diesel Standard. This concentration was determined using the response factor for diesel.

b. Insufficient quantity of sample for analysis

c. TPH-g reported as non-detectable because the hydrocarbon detected in gasoline range is uncharacteristic of gasoline profile. Concentration in parenthesis was determined using the response factor for gasoline.

The analysis for TPH-d detected hydrocarbons in the diesel range in wells MW-B4 and MW-LD4, however the chromatogram for the hydrocarbon detected was not typical of the diesel profile. The laboratory did quantify the concentrations of hydrocarbons detected using the diesel response factor. These concentrations were 1,000 and 170 µg/L, respectively, for MW-B4 and MW-LD4.

The analysis for TPH-g was reported as non-detect for each of the samples analyzed (MW-1, MW-2, and BES1 were not analyzed for TPH-g due to insufficient sample volume). In each of the TPH-g analyses hydrocarbons were detected in the gasoline range, however these were uncharacteristic of the gasoline standard profile. Although TPH-g was reported as non-detectable in each sample analyzed, concentrations of the hydrocarbons detected were quantified using the gasoline response factor. These concentrations ranged from 83 to 2,700 µg/L TPH-g.

TPH as kerosene was not detected in any of the wells.

TPH as mineral spirits was detected in each of the wells. MW-B3, LD4, D2, and MW-2 had concentrations of 250 µg/L or lower. The highest concentration was 150,000 µg/L in MW-B2, followed by 78,000 µg/L in BES1, 7,500 µg/L in MW-B4, and 4,700 µg/L in MW-1.

BTEX compounds were only detected in MW-1 and MW-2. MW-1 had concentrations of benzene, ethylbenzene, toluene, and total xylenes at 5,300, 1,600, 1,700, and 3,500 µg/L, respectively. MW-2 had respective concentrations of 75, 47, 33, and 100 µg/L.

Aside from the BTEX compounds detected in MW-1 and MW-2, no other volatile organic compounds (VOCs) were detected in any of the wells.

No halogenated organic compounds were detected in any of the wells.

4.4. Groundwater Gradient Data and Analysis

Table 4: Groundwater Elevation Data, December 10, 1998

Elevations are given in feet above mean sea level (msl)

Well No.	Depth of Well	TOC Elevation	Depth to Water	Ground-water Elevation
MW-B2	23.35	50.77	6.43	44.34
MW-B3	20.88	49.02	4.94	44.08
MW-B4	21.50	49.74	6.20	43.54
MW-LD4	10.60	51.51	6.14	45.37
BES-1	30.00	-[a]	10.18	-[a]
MW-D2	12.55	50.56	5.68	44.88
MW-1	22.00	53.89	7.08	46.81
MW-2	22.60	54.06	9.54	44.52

a. Elevation of well casing has not been surveyed

Depth to groundwater measurements made prior to well sampling and the corresponding water table elevations are shown in Table 4. Water table elevations ranged between a maximum of 46.81 and a minimum 43.54 feet msl, corresponding to MW-1 and MW-B4. Table 5 summarizes groundwater gradient calculations made from the elevation data. As in the ESC investigation, data from MW-D2 and MW-LD4 was not included in the gradient analysis because of their construction in non-native fill.

Table 5: Groundwater Gradient Data for December 10, 1998

Direction	Average Elevation[a]	Gradient Between Specified Wells (ft/ft)					
		B2-B3	B4-B3	B2-B4	MW1-MW2	MW1-B2	MW2-B2
~W	44.83	0.0033	-0.013	0.0211	0.043	0.0077	0.00066

a. Does not include data from MW-D2, MW-LD4, or BES1.

With the exception of MW-B4, the data indicates that the flow direction can generally be described as west, just as ESC determined in 1993. A determination of the north-south component of the groundwater flow direction is difficult given the locations of the existing wells and that MW-B1 no longer exists. The fact that MW-B4 had the lowest elevation even though it is located almost linearly between MW-B3 and MW-B2 may indicate a localized condition brought about by the presence of a higher permeability layer (i.e. sand lens) within surrounding soils. This condition has not been recorded previously.

The average elevation in MW-B2, MW-B3, MW-B4, MW-1, and MW-2 was 44.83 feet msl. This is slightly higher than the highest average recorded by ESC of 44.54 feet msl on June 10, 1993. The gradient between MW-1 and MW-2 is greater than recorded previously, although the gradient between MW-1 and MW-B2 is nearly the same as determined in five of six monthly sampling events during 1993.

If a value is assumed for the hydraulic conductivity of the site's soils, the groundwater flow rate in an unconfined aquifer can be approximated using the Dupuit equation. The general range of hydraulic conductivity for clay is 10^{-9} to 10^{-6} cm/s, for silt, sandy silts and clayey sands it is 10^{-6} to 10^{-4} cm/s, and for silty sands and fine sands it is 10^{-5} to 10^{-3} cm/s (Fetter, 1994). Using 10^{-5} cm/s as a conservative value for the site's Bay Mud soils yields a groundwater flow rate of 0.43 ft/year.

4.5. Discussion

Gasoline and mineral spirits are both classified as light petroleum distillates (Uhler, 1998). Therefore the majority of each compound's carbon chains are in the same size range of C_1 to C_{15}. Diesel and kerosene are mid-range petroleum distillates, generally ranging from C_{10} to C_{22}. Although each class of compounds has a distinctive distribution and proportion of carbon chains, referred to as a profile, within its range, it not possible to distinguish quantitatively between TPH as mineral spirits and either as gasoline or diesel. None of the profiles in the EPA Method 8015M analysis from this sampling event matched the typical gasoline or diesel profile (note that the California Linen wells were not analyzed for TPH-g). Similar data was reported in the June 10,

1993 sampling event, the only other time that all of the wells were analyzed for TPH-g and TPH-d. This implies that gasoline and diesel contamination is not necessarily present in the groundwater under ONE and Dunne Paints property. Such a conclusion is supported by the fact that no BTEX compounds, which are associated with gasoline, were detected in the ONE and Dunne Paints wells and that there is no evidence that former USTs on either property were used to store gasoline or diesel.

For the same reason, it is possible that TPH quantified as mineral spirits in MW-1 and MW-2 may actually be the portion of gasoline hydrocarbons that fall within the same range as mineral spirits hydrocarbons. This is supported by the fact that California Linen used their former USTs to store gasoline and oil, there is no evidence that California Linen ever stored appreciable quantities of mineral spirits, and the property is situated upgradient from ONE and Dunne Paints.

It is also highly likely that the difficulty encountered in characterizing the TPH compounds present in site groundwater is due to weathering and degradation of the TPH compounds over time.

The concentration of TPH as mineral spirits in MW-B3, which is farthest to the west at the site, is 20 times lower than in 1993. In MW-4, it is half of the amount measured in 1993, although it is highest among the site's wells for this sampling event at 150,000 µg/L. MW-B2 exhibited more than a five-fold increase in TPH mineral spirits over 1993 to 7,500 µg/L, as did BES1 up to 78,000 µg/L. This suggests that mineral spirit contamination is remaining on-site (i.e. not migrating west).

This is the first sampling event in which low concentrations of all BTEX compounds were detected in MW-2. Concentrations of BTEX compounds in MW-1 have decreased since the June and September 1993 sampling events, although none of the compounds were at their lowest historical concentration.

In general, the hydraulic gradient was very slight, as expected with Bay Mud soils. The groundwater flow direction appeared to be west or southwest based on available information, although it is possible that flow may be slightly northwest, as determined at California Linen when three wells existed. A northwesterly flow could account for the increase in concentration of TPH as mineral spirits in well BES1 and the decrease in MW-B3.

Areas of localized deviation from a uniform gradient were present. These may be caused by layers of higher permeability within clay and silt layers, although this condition has not been recorded previously. The conservatively estimated groundwater flow rate of 0.43 ft/year is quite small, indicating that, in general, site contaminants have moved less than five feet in any direction in the past 10 years.

5. CONCLUSION

In the approximately 10 years since the underground storage tanks were removed from these three properties and investigations into site contamination commenced, little appears to have changed. The site's predominantly low-permeability Bay Mud and small groundwater gradient have kept contamination confined to the site.

Laboratory analyses are inconclusive regarding the exact type of petroleum hydrocarbons present in each property's wells, however the site history for each property supports the conclusion that contamination from California Linen's former USTs has not commingled with contamination from former USTs at Dunne Paints or ONE, nor has the opposite occurred.

The site appears to be suitable for classification as a non-contaminant area based on several factors:

- source material has been removed from the former underground storage tank areas;
- the type of contamination at the site;
- the limited potential for contaminant migration;
- further site remediation is economically infeasible;
- natural degradation of contaminants appears to be occurring; and
- site contamination does not pose an adverse risk to human health and the environment.

BES concludes that the most appropriate way to proceed in addressing closure at the site is by assessing the risk posed to human health and the environment by contamination remaining at the site. BES would like concurrence from both the Alameda DEH and RWQCB that this will be sufficient to proceed toward regulatory closure of the ONE, Duane Paints and California Linen properties. BES would welcome the opportunity to meet with Alameda DEH and the RWQCB to discuss these findings and the potential preparation of a risk assessment for the purposes of obtaining site closure.

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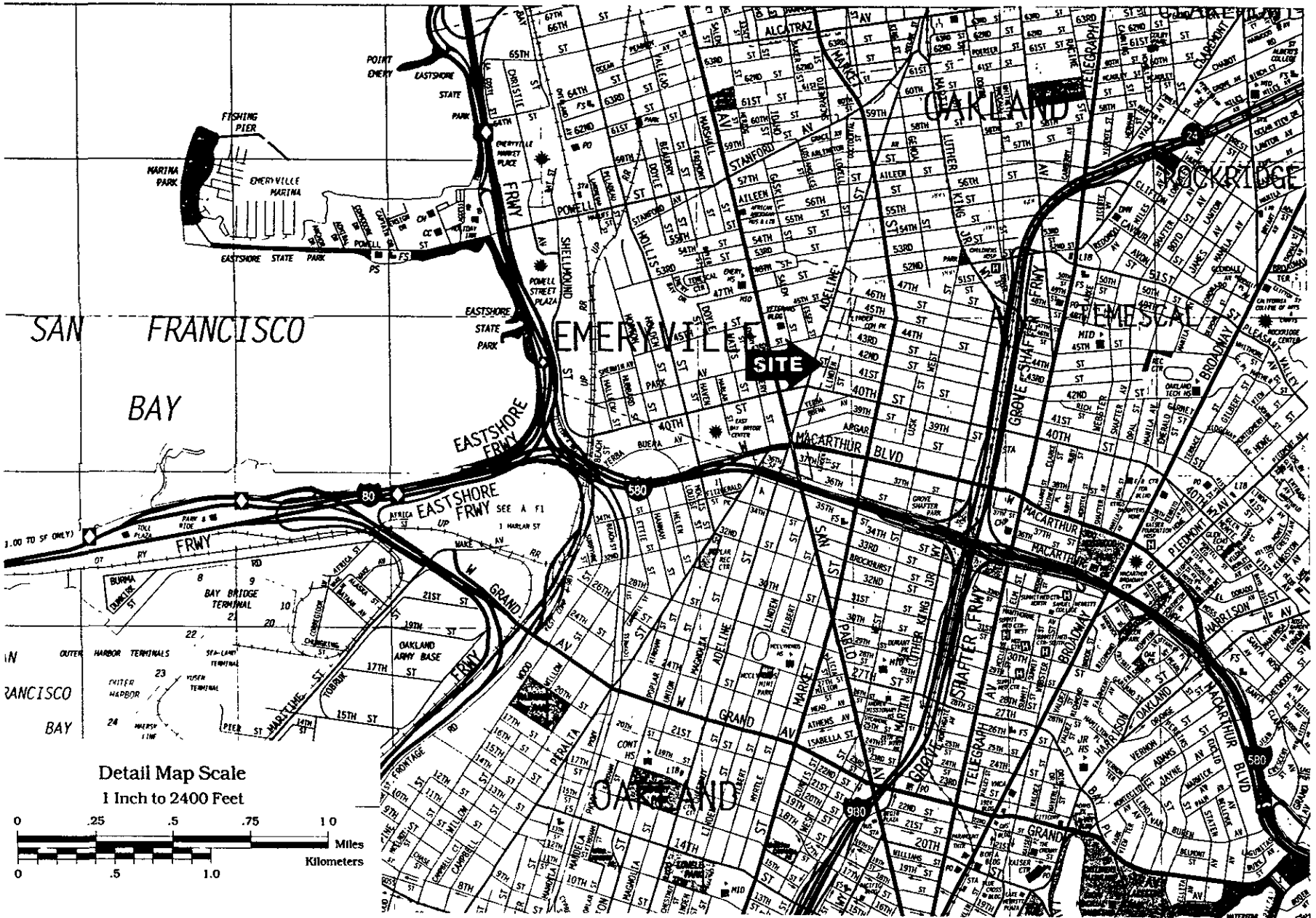


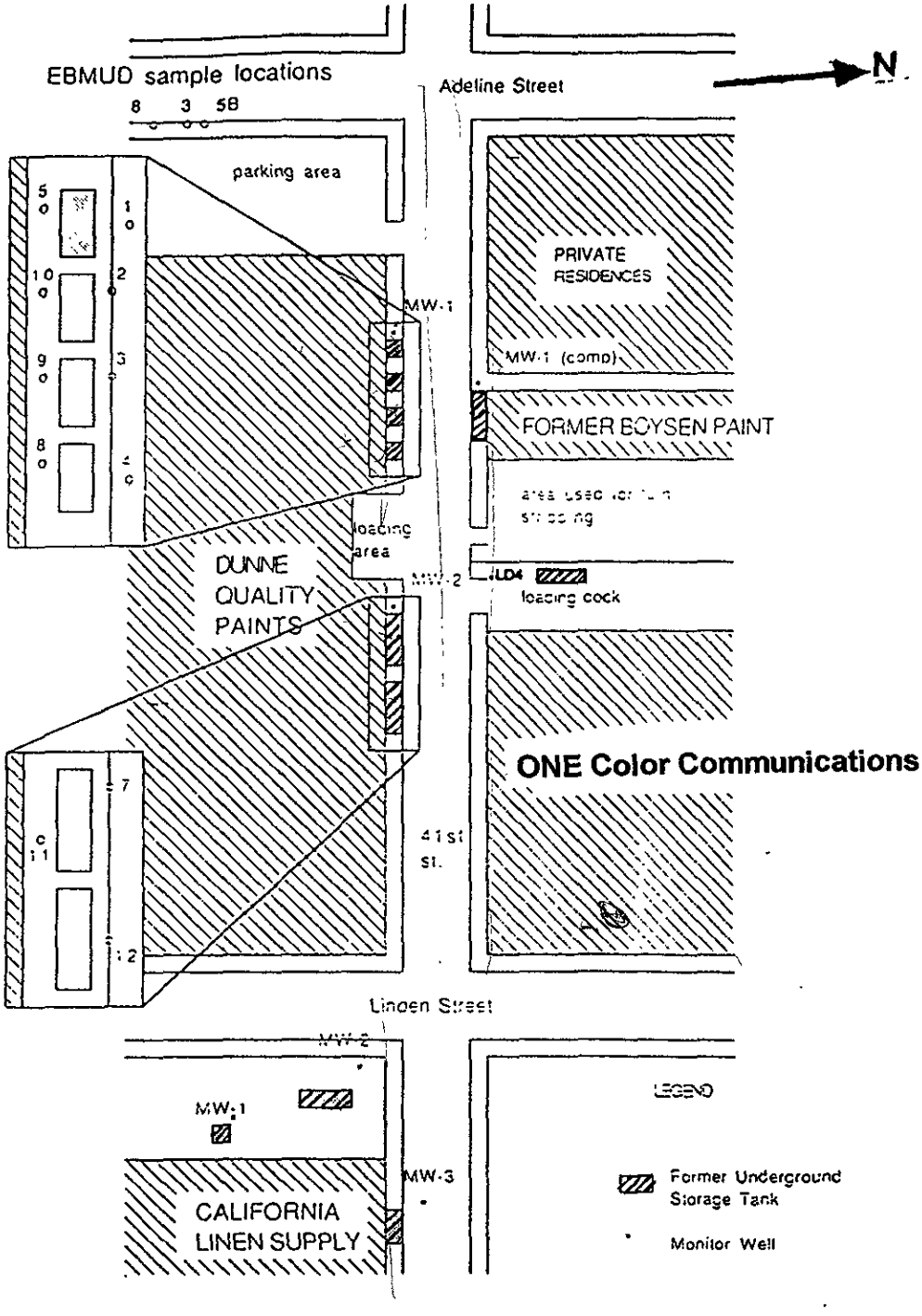
Source: Thomas Brothers Guide, 1998

BES
BLOCK ENVIRONMENTAL SERVICES, INC.
2451 Estand Way
Pleasant Hill, CA 94523
(925) 682-7200 FAX 686-0399

Figure 1: Site Vicinity

ONE, Dunne Paints, California Linen
41st Street at Adeline and Linden
Oakland/Emeryville, California

Project No. 9813 | January, 1999



Source: OHM Remedial Services Corp., 1991.

Not to Scale

BES
Block Environmental Services, Inc.
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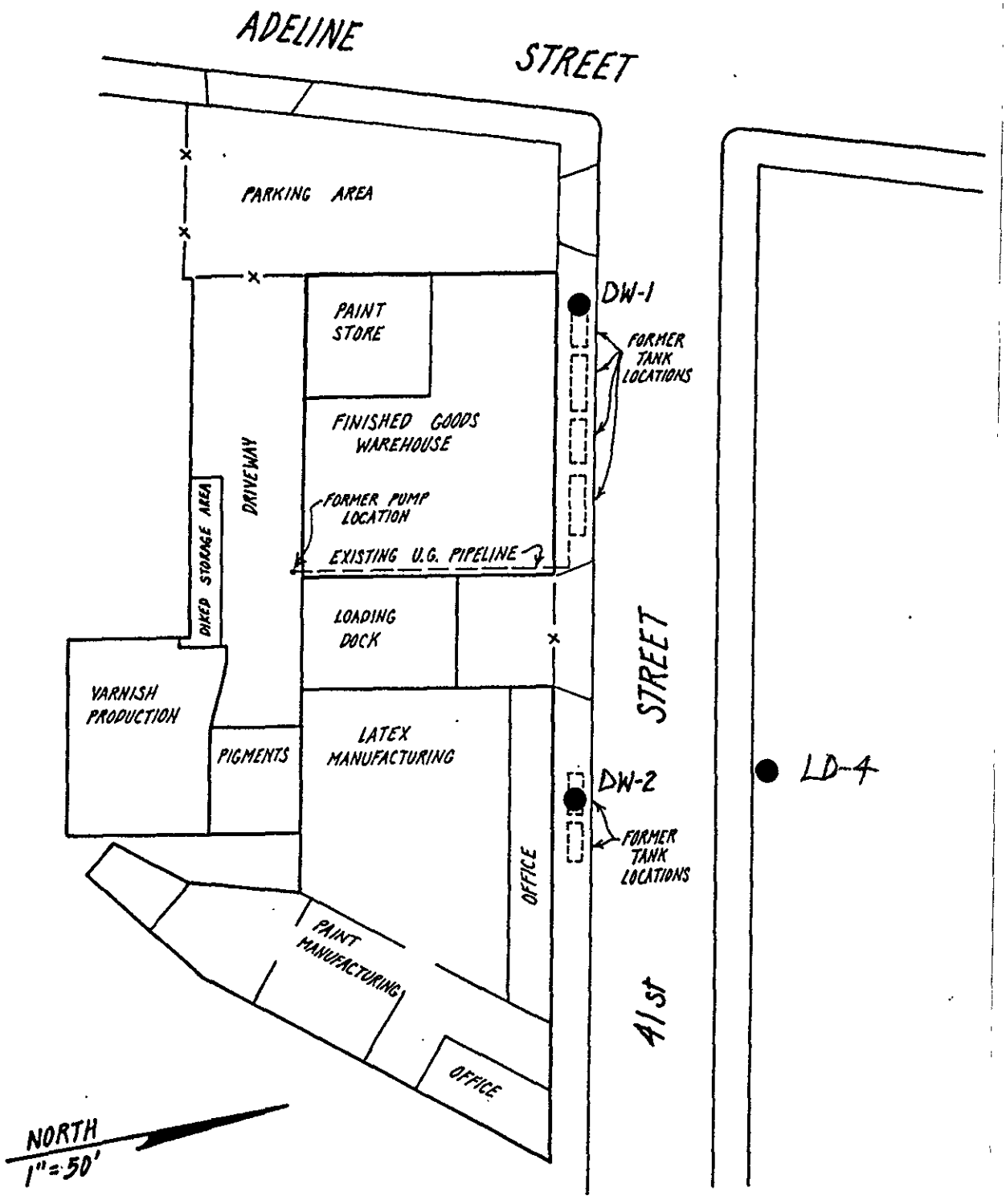
Figure 2: Site Map

ONE, Dunne Paints, California Linen
41st Street at Adeline and Linden
Oakland/Emeryville, California

Project No. 9813 | January, 1999



Source: Hageman-Aguiar, Inc., 1992

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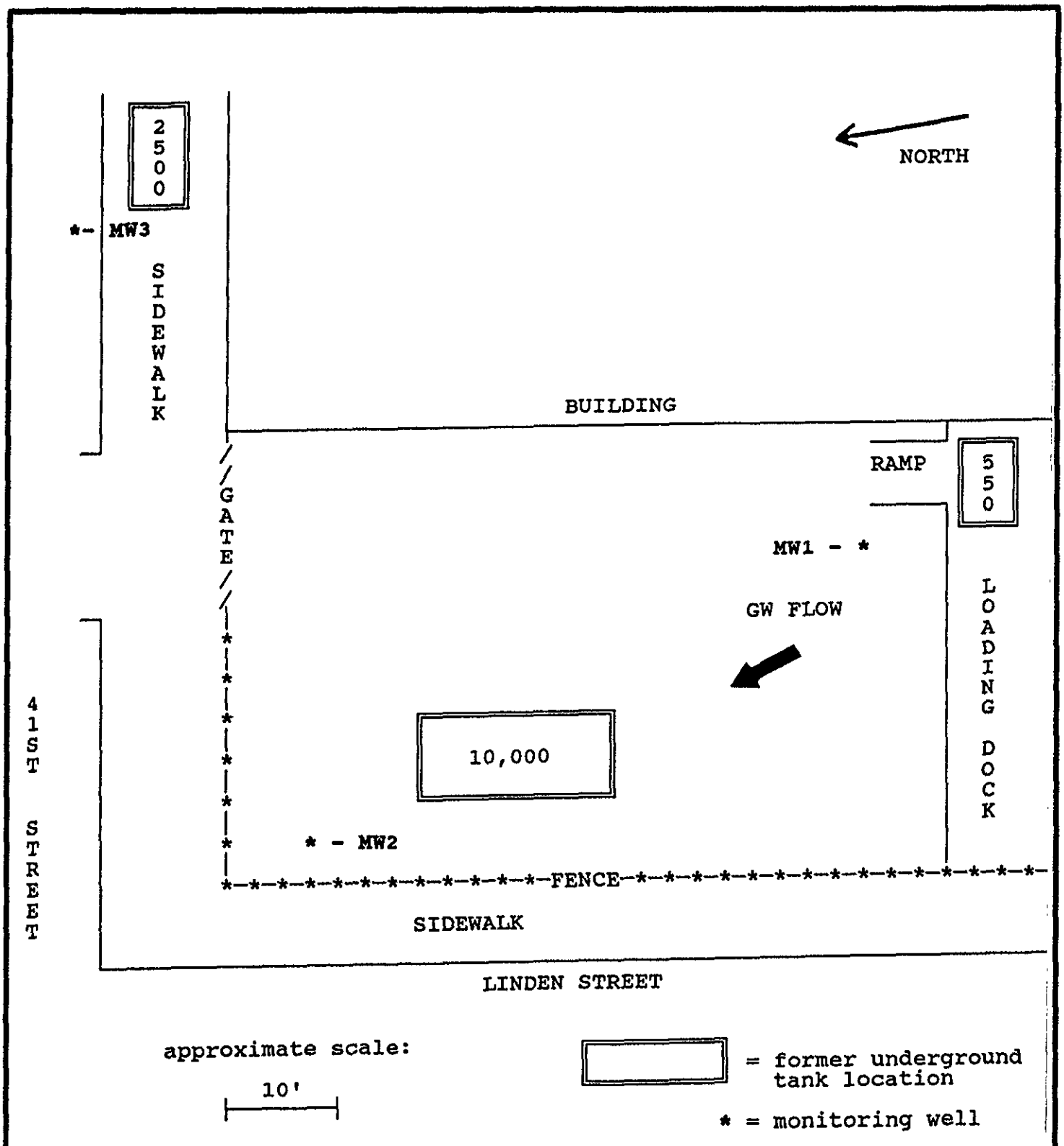
Figure 3: Dunne Paints Site Map

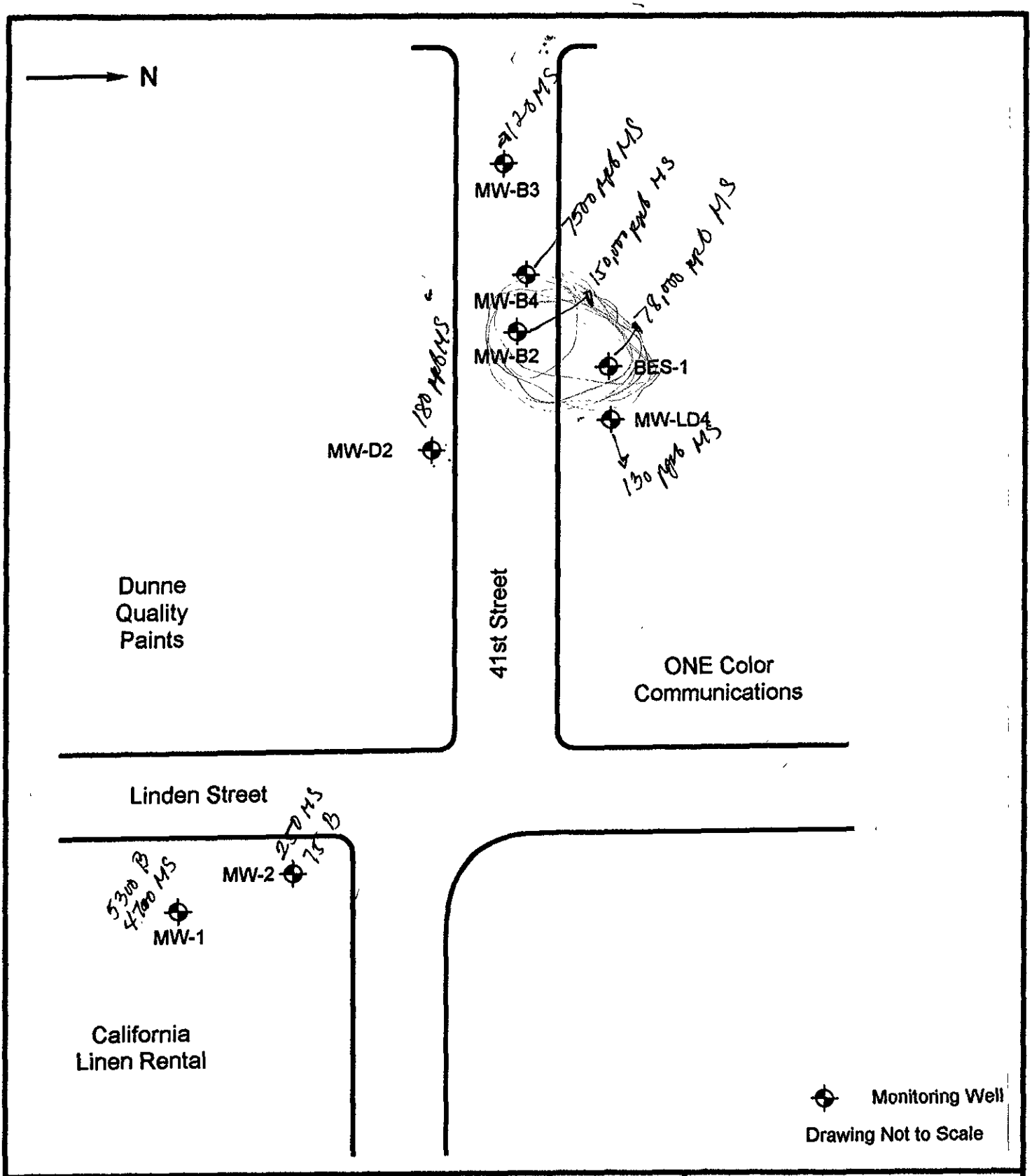
Dunne Paints
1007 41st Street
Emeryville, California

Project No. 9813 | January, 1999



Source: Miller Environmental Company, 1989

BES Block Environmental Services, Inc. 2451 Estand Way Pleasant Hill, CA 94523 (925) 682-7200 Fax: 686-0399	**Figure 4: California Linen Site Map**	California Linen 989 41st Street Oakland, California Project No. 9813 | January, 1999



BES Block Environmental Services, Inc. 2451 Estand Way Pleasant Hill, CA 94523 (925) 682-7200 Fax: 686-0399	**Figure 5: Monitoring Wells Sampled December 10, 1998**	ONE, Dunne Paints, California Linen 41st Street at Adeline and Linden Oakland/Emeryville, California Project No. 9813 | January, 1999

Figures

Tables

TABLE A: Summary of Groundwater Sampling Analyses
ONE, California Linen, and Dunne Quality Paints, Oakland/Emeryville, California
All Concentrations in ug/L

BES

Well No.	Date	TPH-d	TEPH (non-diesel)*	TPH-g	TPPH (non-gasoline)**	Kerosene	Mineral Spirits	Benzene	Ethyl-benzene	Toluene	Total Xylenes	Tetrachloro-ethylene (PCE)	Trichloro-ethylene (TCE)	1,1-Dichloro-ethylene (DCE)	Methylene Chloride
MW-B1	9/30/91	ND < 50	-	18,000	-	29,000	-	5	250	6	980	ND	ND	ND	ND
	6/10/93	-	27,000	-	57,000	-	-	ND	ND	ND	ND	ND	ND	ND	ND
	9/29/93	-	-	-	-	-	43,000	ND	ND	ND	ND	ND	ND	ND	ND
MW-B2	6/10/93	-	3,800	-	1,400	-	-	ND	ND	ND	ND	ND	ND	ND	ND
	9/29/93	-	-	-	-	-	290,000	ND	ND	ND	ND	ND	ND	ND	ND
	12/10/98	ND < 1,000	-	ND	2,400	ND<1,000	150,000	ND	ND	ND	ND	ND	ND	ND	ND
MW-B3	6/10/93	-	1,700	-	510	-	-	ND	ND	ND	ND	ND	ND	ND	ND
	9/29/93	-	-	-	-	-	2,400	ND	ND	ND	ND	ND	ND	ND	ND
	12/10/98	ND	-	ND	830	ND	120	ND	ND	ND	ND	ND	ND	ND	ND
MW-B4	6/10/93	-	36,000	-	36,000	-	-	ND	ND	ND	ND	ND	ND	ND	ND
	9/29/93	-	-	-	-	-	1,400	ND	ND	ND	ND	ND	ND	ND	ND
	12/10/98	1,000	-	ND	2,700	ND	7,500	ND	ND	ND	ND	ND	ND	ND	ND
			-		-										
BES-1	4/21/94	18,000	-	-	-	-	12,000	ND	ND	ND	ND	ND	ND	ND	ND
	12/10/98	ND < 1,000	-	***	-	ND < 1,000	78,000	ND	ND	ND	ND	ND	ND	ND	ND
MW-LD4	9/30/91	-	-	-	-	-	-	2.0	9.0	3 1	24	-	-	-	-
	6/10/93	-	21,000	-	1,100	-	-	ND	ND	ND	ND	ND	ND	ND	ND
	9/29/93	-	-	-	-	-	700	ND	ND	ND	ND	ND	ND	ND	ND
	12/10/98	170	-	ND	83	ND	130	ND	ND	ND	ND	ND	ND	ND	ND
MW-D1	8/26/88	-	-	-	-	-	1,000	-	-	-	-	-	-	-	-
	1/18/89	-	-	-	-	-	ND < 1,000	ND	ND	2.0	1.8	-	-	-	-
	4/24/89	-	-	-	-	-	ND < 1,000	ND	ND	ND	1.1	-	-	-	-
	2/21/90	ND	-	ND	-	ND	ND <100	ND	0.4	ND	1.3	-	-	-	-
	6/10/92	ND	-	ND	-	ND	ND <50	ND	ND	ND	ND	-	-	-	-
	6/10/93	-	220	-	230	-	-	ND	ND	ND	ND	ND	ND	ND	ND
	9/24/93	ND	-	ND	-	-	ND < 50	ND	ND	ND	ND	-	-	-	-
	9/29/93	-	-	-	-	-	110	ND	ND	ND	ND	ND	ND	ND	ND
MW-D2	8/26/88	-	-	-	-	-	1,600	-	-	-	-	-	-	-	-
	1/18/89	-	-	-	-	-	ND < 1,000	ND	ND	6.3	12	-	-	-	-
	4/24/89	-	-	-	-	-	ND < 1,000	ND	ND	ND	7.7	-	-	-	-
	2/21/90	-	-	-	-	-	300	ND	0 3	ND	1.5	-	-	-	-
	6/10/92	ND	-	ND	-	-	76	ND	ND	ND	ND	-	-	-	-
	6/10/93	-	9,100	-	6,200	-	-	ND	ND	ND	ND	ND	ND	ND	ND
	9/24/93	ND	-	ND	-	-	ND < 50	ND	ND	ND	ND	-	-	-	-
	9/29/93	-	-	-	-	-	220	ND	ND	ND	ND	ND	ND	ND	ND
	12/10/98	ND	-	ND	95	ND	180	ND	ND	ND	ND	ND	ND	ND	ND

TABLE A: Summary of Groundwater Sampling Analyses
ONE, California Linen, and Dunne Quality Paints, Oakland/Emeryville, California
All Concentrations in ug/L

BES

Well No.	Date	TPH-d	TEPH (non-diesel)*	TPH-g	TPPH (non-gasoline)**	Kerosene	Mineral Spirits	Benzene	Ethyl-benzene	Toluene	Total Xylenes	Tetrachloro-ethylene (PCE)	Trichloro-ethylene (TCE)	1,1-Dichloro-ethylene (DCE)	Methylene Chloride
MW-1	10/2/89	610	-	70,000	-	-	-	2,800	2,300	2,400	4,800	-	-	-	-
	2/20/90	2,200	-	73,000	-	-	-	7,500	680	5,900	5,300	-	-	-	-
	7/25/90	ND	-	34,000	-	-	-	2,000	120	670	1,500	-	-	-	-
	10/23/90	1,100	-	50,000	-	-	-	3,300	4,200	4,000	4,700	-	-	-	-
	1/28/91	1,700	-	99,000	-	-	-	4,400	1,800	7,400	8,600	-	-	-	-
	6/5/91	560	-	23,000	-	-	-	2,000	640	1,200	2,500	-	-	-	-
	8/15/91	3,500	-	59,000	-	-	-	3,800	1,100	5,500	4,800	-	-	-	-
	11/21/91	9,800	-	47,000	-	-	-	6,000	2,200	7,200	1,000	-	-	-	-
	3/18/92	14,000	-	77,000	-	-	-	17,000	2,300	18,000	1,300	-	-	-	-
	10/17/92	ND	-	83,000	-	-	-	11,000	13,000	18,000	2,800	-	-	-	-
	6/10/93	-	11,000	38,000	-	-	-	6,700	1,600	3,700	6,500	ND	ND	ND	ND
	9/29/93	-	-	-	-	-	59,000	7,100	1,800	5,700	7,900	ND	ND	ND	ND
	12/10/98	ND	-	***	-	ND	4,700	5,300	1,600	1,700	3,500	ND	ND	ND	ND
MW-2	10/2/89	ND	-	ND	-	-	-	ND	ND	ND	ND	-	-	-	-
	2/20/90	ND	-	ND	-	-	-	ND	ND	ND	ND	-	-	-	-
	7/25/90	ND	-	ND	-	-	-	ND	ND	ND	ND	-	-	-	-
	10/23/90	ND	-	ND	-	-	-	ND	ND	ND	ND	-	-	-	-
	1/28/91	ND	-	ND	-	-	-	ND	ND	ND	ND	-	-	-	-
	6/5/91	ND	-	ND	-	-	-	ND	ND	ND	ND	-	-	-	-
	8/15/91	50	-	ND	-	-	-	ND	ND	ND	ND	-	-	-	-
	11/21/91	ND	-	ND	-	-	-	ND	ND	ND	ND	-	-	-	-
	3/18/92	ND	-	ND	-	-	-	ND	ND	1.1	3 3	-	-	-	-
	10/17/92	ND	-	ND	-	-	-	ND	ND	ND	ND	-	-	-	-
	6/10/93	ND	-	ND	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND
	9/29/93	-	-	-	-	-	ND < 50	ND	ND	ND	ND	ND	ND	ND	ND
	12/10/98	ND	-	***	-	ND	250	75	47	33	100	ND	ND	ND	ND

"-" Not Tested
ND - Non Detectable

* TPH chromatogram pattern indicated a mix of TPH carbon chains not typical of the diesel range
** TPH chromatogram pattern indicated a mix of TPH carbon chains not typical of the gasoline range
*** Insufficient quantity of sample for analysis
**** Discrepancy in elevation surveys

TABLE B: Summary of Comprehensive Site Depth to Groundwater Measurements
ONE, California Linen, Dunne Paints, Oakland/Emeryville, California

All measurements in feet.

BES

Well No.	Date	Depth of Well (bgs)	TOC Elevation (msl)	Depth to Water (bgs)	Ground-water Elevation (msl)
MW-B1	6/10/93	19.88	49.92	6.14	43.78
MW-B2	6/10/93	23.35	50.77	6.75	44.02
MW-B3	6/10/93	20.88	49.02	6.85	42.17
MW-B4	6/10/93	21.50	49.74	6.00	43.74
MW-LD4	6/10/93	10.60	51.51	6.98	44.53
MW-D1	6/10/93	12.50	50.56	5.29	45.27
MW-D2	6/10/93	12.55	50.56	6.25	44.31
MW-1	6/10/93	22.00	53.89	7.41	46.48
MW-2	6/10/93	22.60	54.06	9.24	44.82
MW-B1	7/8/93	19.88	49.92	6.64	43.28
MW-B2	7/8/93	23.35	50.77	6.91	43.86
MW-B3	7/8/93	20.88	49.02	6.05	42.97
MW-B4	7/8/93	21.50	49.74	6.14	43.60
MW-LD4	7/8/93	10.60	51.51	7.18	44.33
MW-D1	7/8/93	12.50	50.56	5.67	44.89
MW-D2	7/8/93	12.55	50.56	6.37	44.19
MW-1	7/8/93	22.00	53.89	7.70	46.19
MW-2	7/8/93	22.60	54.06	9.04	45.02
MW-B1	8/24/93	19.88	49.92	6.69	43.23
MW-B2	8/24/93	23.35	50.77	7.22	43.55
MW-B3	8/24/93	20.88	49.02	6.21	42.81
MW-B4	8/24/93	21.50	49.74	6.34	43.40
MW-LD4	8/24/93	10.60	51.51	7.31	44.20
MW-D1	8/24/93	12.50	50.56	6.01	44.55
MW-D2	8/24/93	12.55	50.56	6.47	44.09
MW-1	8/24/93	22.00	53.89	7.70	46.19
MW-2	8/24/93	22.60	54.06	9.24	44.82
MW-B1	9/29/93	19.88	49.92	8.46	41.46
MW-B2	9/29/93	23.35	50.77	8.80	41.97
MW-B3	9/29/93	20.88	49.02	7.74	41.28
MW-B4	9/29/93	21.50	49.74	7.97	41.77
MW-LD4	9/29/93	10.60	51.51	7.43	44.08
MW-D1	9/29/93	12.50	50.56	7.69	42.87
MW-D2	9/29/93	12.55	50.56	7.96	42.60
MW-1	9/29/93	22.00	53.89	7.84	46.05
MW-2	9/29/93	22.60	54.06	9.39	44.67
MW-B1	10/20/93	19.88	49.92	6.69	43.23
MW-B2	10/20/93	23.35	50.77	7.25	43.52
MW-B3	10/20/93	20.88	49.02	6.24	42.78
MW-B4	10/20/93	21.50	49.74	6.11	43.63
MW-LD4	10/20/93	10.60	51.51	7.37	44.14
MW-D1	10/20/93	12.50	50.56	6.20	44.36
MW-D2	10/20/93	12.55	50.56	6.48	44.08
MW-1	10/20/93	22.00	53.89	7.98	45.91
MW-2	10/20/93	22.60	54.06	9.18	44.88
MW-B1	11/23/93	19.88	49.92	6.65	43.27
MW-B2	11/23/93	23.35	50.77	7.26	43.51
MW-B3	11/23/93	20.88	49.02	6.18	42.84
MW-B4	11/23/93	21.50	49.74	6.38	43.36
MW-LD4	11/23/93	10.60	51.51	7.32	44.19
MW-D1	11/23/93	12.50	50.56	6.08	44.48
MW-D2	11/23/93	12.55	50.56	6.44	44.12
MW-1	11/23/93	22.00	53.89	7.92	45.97
MW-2	11/23/93	22.60	54.06	9.21	44.85
MW-B2	12/10/98	23.35	50.77	6.43	44.34
MW-B3	12/10/98	20.88	49.02	4.94	44.08
MW-B4	12/10/98	21.50	49.74	6.20	43.54
MW-LD4	12/10/98	10.60	51.51	6.14	45.37
BES-1	12/10/98	30.00	-	10.18	-
MW-D2	12/10/98	12.55	50.56	5.68	44.88
MW-1	12/10/98	22.00	53.89	7.08	46.81
MW-2	12/10/98	22.60	54.06	9.54	44.52

BES

Attachment A

Groundwater Sampling Field Logs

Block Environmental Services

WATER QUALITY SAMPLING INFORMATION

Project Name ONE

Well No. MWB-2

Date 12/10/98

Sample No. MWB2-1,2,3,4,5

Samplers Name J. Kane

Sampling Location ONE - 41st St.

Sampling Method Grab-bailer

Analyses Requested 8015 - M.S., 8240

Number and Types of Sample Bottles Used 2 x 1L, 3 x 40mL w/HCl

Method of Shipment Hand delivered - courier

B-2 - 23.5' deep
6.43 to H_2O
17.07 X .16
= 8.2 gal

GROUND WATER		SURFACE WATER	
Well Diameter (in.)	2"	Stream Width	
Well Depth (ft)	23.5	Stream Depth	
Depth to Water, Static (ft)	6.43	Stream Velocity	
Height of Water Column in Well	17.07	Rained recently?	
Water Volume in Well	2.7		

Water Volume Multipliers:
2-inch casing = 0.16 gal/ft
4-inch casing = 0.65 gal/ft
5-inch casing = 1.02 gal/ft
6-inch casing = 1.47 gal/ft

Time	Depth to water (ft)	Volume Withdrawn (gallons)	Temp. (deg. C)	Salinity (ppt)	pH (S.U.)	COND (mhos/cm)	REMARKS
10:45	6.4	1/2					1/2" Floating product i.e. bailer, heavy M. Odo

Purging: 10 gals. 1st bailer purge - brackish black, sample clearer

1/2"

Block Environmental Services

WATER QUALITY SAMPLING INFORMATION

Project Name: ONE

Well No.: MWB-4

Date: 12/10/98

Sample No.: MWB4-1,2,3,4,5

Samplers Name: J. Kane

Sampling Location: 41st Street

Sampling Method: Grab - bailer

Analyses Requested: 8015 - M.S., 8240

Number and Types of Sample Bottles Used: 2 x 1L, 3 x 40mL w/HCl

Method of Shipment: Courier

7.34 - purge vol

GROUND WATER		SURFACE WATER	
Well Diameter (in.)	2"	Stream Width	
Well Depth (ft)	21.5	Stream Depth	
Depth to Water, Static (ft)	6.2	Stream Velocity	
Height of Water Column in Well	15.3	Rained recently?	
Water Volume in Well	2.5 gal		

Water Volume Multipliers:
2-inch casing = 0.16 gal/ft
4-inch casing = 0.65 gal/ft
5-inch casing = 1.02 gal/ft
6-inch casing = 1.47 gal/ft

Time	Depth to water (ft)	Volume Withdrawn (gallons)	Temp. (deg. C)	Salinity (ppt)	pH (S.U.)	COND (mhos/cm)	REMARKS
11:30	6.4	1/2					Very slight odor

Purging: 8 gal, minute odor, almost clear

Block Environmental Services

WATER QUALITY SAMPLING INFORMATION

Project Name: ONE — Well No.: MWB-3

Date: 12/10/98 — Sample No.: MWB3-1, 2, 3, 4, 5

Samplers Name: J Kane

Sampling Location: 41st St.

Sampling Method: Grab - Bailer

Analyses Requested: 8015 - M.S. ; 8240

Number and Types of Sample Bottles Used: 2 x 1 L, 3 x 40 mL w/HCl

Method of Shipment: Courier

Purge Vol. = 7.65

GROUND WATER		SURFACE WATER	
Well Diameter (in.)	2"	Stream Width	
Well Depth (ft)	20.88	Stream Depth	
Depth to Water, Static (ft)	4.94	Stream Velocity	
Height of Water Column in Well	15.94	Rained recently?	
Water Volume in Well	2.55		

Water Volume Multipliers:
2-inch casing = 0.16 gal/ft
4-inch casing = 0.65 gal/ft
5-inch casing = 1.02 gal/ft
6-inch casing = 1.47 gal/ft

Time	Depth to water (ft)	Volume Withdrawn (gallons)	Temp. (deg. C)	Salinity (ppt)	pH (S.U.)	COND (mhos/cm)	REMARKS
12:00		1/2					No odor, Milky w/ Si

Purging: 8 gal, very silty, opaque, greenish gray brown

Block Environmental Services

WATER QUALITY SAMPLING INFORMATION

Project Name: ONE — Well No.: MWD-2

Date: 12/10/98 — Sample No.: MWD2-1,2,3,4,5

Samplers Name: J. Kane

Sampling Location: 41st St.

Sampling Method: Grab- bailor

Analyses Requested: 8015-M.S, 8240

Number and Types of Sample Bottles Used: 2 x 1L, 3 x 40mL w/HCl

Method of Shipment: Courier

Purge vol = 13.4

GROUND WATER		SURFACE WATER	
Well Diameter (in.)	4"	Stream Width	
Well Depth (ft)	12.55'	Stream Depth	
Depth to Water, Static (ft)	5.68'	Stream Velocity	
Height of Water Column in Well	6.87	Rained recently?	
Water Volume in Well	4.47		

Water Volume Multipliers:
2-inch casing = 0.16 gal/ft
4-inch casing = 0.65 gal/ft
5-inch casing = 1.02 gal/ft
6-inch casing = 1.47 gal/ft

Time	Depth to water (ft)	Volume Withdrawn (gallons)	Temp. (deg. C)	Salinity (ppt)	pH (S.U.)	COND (mhos/cm)	REMARKS
12:30	5.70	1/2					Clear, no odor

Purging: 14 gal. Clear, no odor

Block Environmental Services

WATER QUALITY SAMPLING INFORMATION

Project Name ONE

Well No MW-D-4

Date 12/10/98

Sample No. MWLD4-1,2,3,4,5

Samplers Name J. Kane

Sampling Location ONE

Sampling Method Grab - bailer

Analyses Requested 8015 - M.S., 8240

Number and Types of Sample Bottles Used 2 x 1L, 3 x 40 mL w/HCl

Method of Shipment Courier

Purge Vol. = 8.7

GROUND WATER		SURFACE WATER	
Well Diameter (in.)	4"	Stream Width	
Well Depth (ft)	10.60	Stream Depth	
Depth to Water, Static (ft)	6.14	Stream Velocity	
Height of Water Column in Well	4.46	Rained recently?	
Water Volume in Well	2.7		

Water Volume Multipliers:
2-inch casing = 0.16 gal/ft
4-inch casing = 0.65 gal/ft
5-inch casing = 1.02 gal/ft
6-inch casing = 1.47 gal/ft

Time	Depth to water (ft)	Volume Withdrawn (gallons)	Temp. (deg. C)	Salinity (ppt)	pH (S.U.)	COND (mhos/cm)	REMARKS
13:00	6.18	1/2					Clear, organic odor

Purging: 9 gal, clear, no odor

Block Environmental Services

WATER QUALITY SAMPLING INFORMATION

Project Name ONE — Well No. BES-1

Date ~~12/10/98~~ 12/10/98 — Sample No. BES1-1,2,3,4,5

Samplers Name J. Kane

Sampling Location ONE

Sampling Method Grab - bailer

Analyses Requested 8015 - M.S., 8240

Number and Types of Sample Bottles Used 2 x 1L, 3 x 40 mL w/HCl

Method of Shipment Courier

Purge Vol = 9.5

GROUND WATER		SURFACE WATER	
Well Diameter (in.)	2"	Stream Width	
Well Depth (ft)	30'	Stream Depth	
Depth to Water, Static (ft)	10.18	Stream Velocity	
Height of Water Column in Well	19.82	Rained recently?	
Water Volume in Well	3.2		

Water Volume Multipliers:
2-inch casing = 0.16 gal/ft
4-inch casing = 0.65 gal/ft
5-inch casing = 1.02 gal/ft
6-inch casing = 1.47 gal/ft

Time	Depth to water (ft)	Volume Withdrawn (gallons)	Temp. (deg. C)	Salinity (ppt)	pH (S.U.)	COND (mhos/cm)	REMARKS
13:45	14.40	1/2					M.S. Odor, opaque

Purging: 13 gal, opaque-whitish - purged extra bc didn't have well construction data at time

Block Environmental Services

WATER QUALITY SAMPLING INFORMATION

Project Name: ONE
Well No.: MW2
Date: 12/10/98
Sample No.: MW2-1,2,3,4,5
Samplers Name: J. Kane
Sampling Location: Cal. Linen
Sampling Method: Grab-bailer
Analyses Requested: 8015-M.S 8240
Number and Types of Sample Bottles Used: 2×1L, 3×40 mL w/HCl
Method of Shipment: Courier

Purge vol. 25.5

GROUND WATER		SURFACE WATER	
Well Diameter (in.)	4"	Stream Width	
Well Depth (ft)	22.60	Stream Depth	
Depth to Water, Static (ft)	9.54	Stream Velocity	
Height of Water Column in Well	13.06	Rained recently?	
Water Volume in Well	8.5		

Water Volume Multipliers:
2-inch casing = 0.16 gal/ft
4-inch casing = 0.65 gal/ft
5-inch casing = 1.02 gal/ft
6-inch casing = 1.47 gal/ft

Time	Depth to water (ft)	Volume Withdrawn (gallons)	Temp. (deg. C)	Salinity (ppt)	pH (S.U.)	COND (mhos/cm)	REMARKS
14:30	21.00	1/2					Clear, no odor

Purging: 25 gal Clear, ~~odorless~~ - slight petro odor, slightly cloudy

Block Environmental Services

WATER QUALITY SAMPLING INFORMATION

Project Name: ONE
Well No. MW-1
Date: 12/10/98
Sample No. MW1-1,3,4,5
Samplers Name: J. Kane
Sampling Location: Cal Linen
Sampling Method: Bailer
Analyses Requested: 8015-M.S., 8240
Number and Types of Sample Bottles Used: 2 X 1L, 3 x 40 mL w/ HCl
Method of Shipment: Courier

purge vol = 29.1

GROUND WATER		SURFACE WATER	
Well Diameter (in.)		Stream Width	
Well Depth (ft)	22.00	Stream Depth	
Depth to Water, Static (ft)	7.08	Stream Velocity	
Height of Water Column in Well	14.92	Rained recently?	
Water Volume in Well	9.7		

Water Volume Multipliers:
2-inch casing = 0.16 gal/ft
4-inch casing = 0.65 gal/ft
5-inch casing = 1.02 gal/ft
6-inch casing = 1.47 gal/ft

Time	Depth to water (ft)	Volume Withdrawn (gallons)	Temp. (deg. C)	Salinity (ppt)	pH (S.U.)	COND (mhos/cm)	REMARKS
15:00	17.38	1/2					Clear, petro odor

Purging: 29 gal petro odor, slightly cloudy - gray, orange

BES

Attachment B

Laboratory Data, QA/QC, Chain-of-Custody Forms

CHROMALAB, INC.

Environmental Services (SDB)

December 23, 1998 *Submission #:* 9812207

BLOCK ENVIRONMENTAL

Atten: JEFF KANE

Project: ONE *Project#:* 9813
Received: December 11, 1998

re: One sample for TEPH analysis.
Method: *EPA 8015M*

Client Sample ID: **BES1-1,2**
Spl#: 220817 *Matrix:* WATER *Extracted:* December 16, 1998
Sampled: December 10, 1998 *Run#:*16519 *Analyzed:* December 22, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
DIESEL	N.D.	1000	N.D.	72.0	20
KEROSENE	N.D.	1000	N.D.	--	20
MINERAL SPIRITS	78000	1000	N.D.	--	20

Note: Quantitation for the above Analyte is based on the response factor of Diesel.

Carolyn House
Analyst

Bruce Havlik
Analyst

510-686-0399 GC 12/18

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(925) 484-1919 • Facsimile (925) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

December 23, 1998 *Submission #:* 9812207

BLOCK ENVIRONMENTAL

Atten: JEFF KANE

Project: ONE *Project#:* 9813
Received: December 11, 1998

re: One sample for TEPH analysis.
Method: *EPA 8015M*

Client Sample ID: **MW1-1,2**
Spl#: 220819 *Matrix:* WATER *Extracted:* December 16, 1998
Sampled: December 10, 1998 *Run#:*16519 *Analyzed:* December 22, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
DIESEL	N.D.	50	N.D.	72.0	1
KEROSENE	N.D.	50	N.D.	--	1
MINERAL SPIRITS	4700	50	N.D.	--	1

Note: Quantitation for the above Analyte is based on the response factor of Diesel.

Carolyn House
Analyst

Bruce Havlik
Analyst

510-686-0389 GC 12/18

1220 Quarry Lane • Pleasanton, California 94566-4756
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Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

December 23, 1998 *Submission #:* 9812207

BLOCK ENVIRONMENTAL

Atten: JEFF KANE

Project: ONE *Project#:* 9813
Received: December 11, 1998

re: One sample for TEPH analysis.
Method: *EPA 8015M*

Client Sample ID: **MWB3-1,2**
Spl#: 220814 *Matrix:* WATER *Extracted:* December 16, 1998
Sampled: December 10, 1998 *Run#:*16519 *Analyzed:* December 18, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
DIESEL	N.D.	50	N.D.	72.0	1
KEROSENE	N.D.	50	N.D.	--	1
MINERAL SPIRITS	120	50	N.D.	--	1

Note: Quantitation for the above Analyte is based on the response factor of Diesel.

Carolyn House
Analyst

Bruce Havlik
Analyst

CHROMALAB, INC.

Environmental Services (SDB)

December 23, 1998 *Submission #:* 9812207

BLOCK ENVIRONMENTAL

Atten: JEFF KANE

Project: ONE *Project#:* 9813
Received: December 11, 1998

re: One sample for TEPH analysis.
Method: *EPA 8015M*

Client Sample ID: **MW2-1,2**
Spl#: 220818 *Matrix:* WATER *Extracted:* December 16, 1998
Sampled: December 10, 1998 *Run#:*16519 *Analyzed:* December 18, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
DIESEL	N.D.	50	N.D.	72.0	1
KEROSENE	N.D.	50	N.D.	--	1
MINERAL SPIRITS	250	50	N.D.	--	1

Note: *Quantitation for the above Analyte is based on the response factor of Diesel.*

Carolyn House
Analyst

Bruce Havlik
Analyst

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Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

December 23, 1998 *Submission #:* 9812207

BLOCK ENVIRONMENTAL

Atten: JEFF KANE

Project: ONE *Project#:* 9813
Received: December 11, 1998

re: One sample for TEPH analysis.
Method: *EPA 8015M*

Client Sample ID: **MWB2-1,2**
Spl#: 220812 *Matrix:* WATER *Extracted:* December 16, 1998
Sampled: December 10, 1998 *Run#:*16519 *Analyzed:* December 22, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
DIESEL	N.D.	1000	N.D.	72.0	20
KEROSENE	N.D.	1000	N.D.	--	20
MINERAL SPIRITS	150000	1000	N.D.	--	20

Note: Quantitation for the above Analyte is based on the response factor of Diesel.

Carolyn House
Analyst

Bruce Havlik
Analyst

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Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

December 23, 1998 *Submission #:* 9812207

BLOCK ENVIRONMENTAL

Atten: JEFF KANE

Project: ONE *Project#:* 9813
Received: December 11, 1998

re: One sample for TEPH analysis.
Method: *EPA 8015M*

Client Sample ID: **MWB4-1,2**
Spl#: 220813 *Matrix:* WATER *Extracted:* December 16, 1998
Sampled: December 10, 1998 *Run#:*16519 *Analyzed:* December 22, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
DIESEL	1000	50	N.D.	72.0	1
KEROSENE	N.D.	50	N.D.	--	1
MINERAL SPIRITS	7500	50	N.D.	--	1

Note: Quantitation for the above Analyte is based on the response factor of Diesel. Hydrocarbon reported as Diesel does not match the pattern of our Diesel Standard.

Carolyn House
Analyst

Bruce Havlik
Analyst

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Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

December 23, 1998 *Submission #:* 9812207

BLOCK ENVIRONMENTAL

Atten: JEFF KANE

Project: ONE *Project#:* 9813
Received: December 11, 1998

re: One sample for TEPH analysis.
Method: *EPA 8015M*

Client Sample ID: **MWD2-1,2**
Spl#: 220815 *Matrix:* WATER *Extracted:* December 16, 1998
Sampled: December 10, 1998 *Run#:*16519 *Analyzed:* December 22, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
DIESEL	N.D.	50	N.D.	72.0	1
KEROSENE	N.D.	50	N.D.	--	1
MINERAL SPIRITS	180	50	N.D.	--	1

Note: Quantitation for the above Analyte is based on the response factor of Diesel.

Carolyn House
Analyst

Bryce Havlik
Analyst

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Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

December 23, 1998 *Submission #:* 9812207

BLOCK ENVIRONMENTAL

Atten: JEFF KANE

Project: ONE *Project#:* 9813
Received: December 11, 1998

re: One sample for TEPH analysis.
Method: *EPA 8015M*

Client Sample ID: **MWLD-1,2**
Spl#: 220816 *Matrix:* WATER *Extracted:* December 16, 1998
Sampled: December 10, 1998 *Run#:*16519 *Analyzed:* December 22, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
DIESEL	170	50	N.D.	72.0	1
KEROSENE	N.D.	50	N.D.	--	1
MINERAL SPIRITS	130	50	N.D.	--	1

Note: Quantitation for the above Analyte is based on the response factor of Diesel. Hydrocarbon reported as Diesel does not match the pattern of our Diesel Standard.

Carolyn House
Analyst

Bruce Havlik
Analyst

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Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

December 21, 1998 *Submission #:* 9812207

BLOCK ENVIRONMENTAL
Atten: JEFF KANE
Project: ONE *Project#:* 9813
Received: December 11, 1998
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **MWB2-3,4,5**
Spl#: 220820 *Matrix:* WATER
Sampled: December 10, 1998 *Run#:* 16621 *Analyzed:* December 17, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
ACETONE	N.D.	2500	N.D.	--	1
BENZENE	N.D.	100	N.D.	85.2	1
BROMODICHLOROMETHANE	N.D.	100	N.D.	--	1
BROMOFORM	N.D.	100	N.D.	--	1
BROMOMETHANE	N.D.	250	N.D.	--	1
2-BUTANONE (MEK)	N.D.	5000	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	100	N.D.	--	1
CHLOROBENZENE	N.D.	100	N.D.	83.3	1
CHLOROETHANE	N.D.	100	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	500	N.D.	--	1
CHLOROFORM	N.D.	150	N.D.	--	1
CHLOROMETHANE	N.D.	250	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	100	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	100	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	100	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	100	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	100	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	100	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	100	N.D.	94.0	1
1,2-DICHLOROETHENE (CIS)	N.D.	100	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	100	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	100	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	100	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	100	N.D.	--	1
ETHYLBENZENE	N.D.	100	N.D.	--	1
2-HEXANONE	N.D.	2500	N.D.	--	1
METHYLENE CHLORIDE	N.D.	250	N.D.	--	1
4-METHYL-2-PENTANONE (MIBK)	N.D.	2500	N.D.	--	1
STYRENE	N.D.	100	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	100	N.D.	--	1
TETRACHLOROETHENE	N.D.	100	N.D.	--	1
TOLUENE	N.D.	100	N.D.	88.5	1
1,1,1-TRICHLOROETHANE	N.D.	100	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	100	N.D.	--	1
TRICHLOROETHENE	N.D.	100	N.D.	96.4	1
TRICHLOROFLUOROMETHANE	N.D.	100	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	100	N.D.	--	1
VINYL ACETATE	N.D.	1000	N.D.	--	1
VINYL CHLORIDE	N.D.	250	N.D.	--	1
TOTAL XYLENES	N.D.	100	N.D.	--	1

Note: *DETECTION LIMITS WERE RAISED DUE TO MATRIX INTERFERENCE*
SURROGATE RECOVERIES DEMONSTRATE MATRIX INTERFERENCE

510-686-0399 qc 12/18
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Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

December 21, 1998 *Submission #:* 9812207

BLOCK ENVIRONMENTAL
Atten: JEFF KANE
Project: ONE *Project#:* 9813
Received: December 11, 1998
re: One sample for Volatile Organics by GC/MS analysis, continued.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **MWB2-3,4,5**
Spl#: 220820 *Matrix:* WATER
Sampled: December 10, 1998 *Run#:* 16621 *Analyzed:* December 17, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR

Oleg Nemtsov
Analyst

Michael Verona
Operations Manager

510-686-0399 6C 12/18

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(925) 484-1919 • Facsimile (925) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

December 21, 1998 *Submission #:* 9812207

BLOCK ENVIRONMENTAL
Atten: JEFF KANE
Project: ONE *Project#:* 9813
Received: December 11, 1998
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **MW1-3,4,5**
Spl#: 220827 *Matrix:* WATER
Sampled: December 10, 1998 *Run#:* 16621 *Analyzed:* December 17, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
ACETONE	N.D.	2500	N.D.	--	1
BENZENE	5300	100	N.D.	85.2	1
BROMODICHLOROMETHANE	N.D.	100	N.D.	--	1
BROMOFORM	N.D.	100	N.D.	--	1
BROMOMETHANE	N.D.	250	N.D.	--	1
2-BUTANONE (MEK)	N.D.	5000	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	100	N.D.	--	1
CHLOROBENZENE	N.D.	100	N.D.	83.3	1
CHLOROETHANE	N.D.	100	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	500	N.D.	--	1
CHLOROFORM	N.D.	150	N.D.	--	1
CHLOROMETHANE	N.D.	250	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	100	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	100	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	100	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	100	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	100	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	100	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	100	N.D.	94.0	1
1,2-DICHLOROETHENE (CIS)	N.D.	100	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	100	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	100	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	100	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	100	N.D.	--	1
ETHYLBENZENE	1600	100	N.D.	--	1
2-HEXANONE	N.D.	2500	N.D.	--	1
METHYLENE CHLORIDE	N.D.	250	N.D.	--	1
4-METHYL-2-PENTANONE (MIBK)	N.D.	2500	N.D.	--	1
STYRENE	N.D.	100	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	100	N.D.	--	1
TETRACHLOROETHENE	N.D.	100	N.D.	--	1
TOLUENE	1700	100	N.D.	88.5	1
1,1,1-TRICHLOROETHANE	N.D.	100	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	100	N.D.	--	1
TRICHLOROETHENE	N.D.	100	N.D.	96.4	1
TRICHLOROFLUOROMETHANE	N.D.	100	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	100	N.D.	--	1
VINYL ACETATE	N.D.	1000	N.D.	--	1
VINYL CHLORIDE	N.D.	250	N.D.	--	1
TOTAL XYLENES	3500	100	N.D.	--	1

510-686-0399 GC 12/18
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(925) 484-1919 • Facsimile (925) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

December 21, 1998

BLOCK ENVIRONMENTAL
Atten: JEFF KANE
Project: ONE *Project#:* 9813
Received: December 11, 1998
re: One sample for Volatile Organics by GC/MS analysis, continued.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **MW1-3,4,5**
Spl#: 220827 *Matrix:* WATER
Sampled: December 10, 1998 *Run#:* 16621 *Analyzed:* December 17, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR

Oleg Nemtsov
Analyst

Michael Verona
Operations Manager

510-686-0399 6C 12/18

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Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

December 21, 1998 *Submission #:* 9812207

BLOCK ENVIRONMENTAL
Atten: JEFF KANE
Project: ONE *Project#:* 9813
Received: December 11, 1998
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **MWLD-3,4,5**
Spl#: 220824 *Matrix:* WATER
Sampled: December 10, 1998 *Run#:* 16621 *Analyzed:* December 17, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
ACETONE	N.D.	50	N.D.	--	1
BENZENE	N.D.	2.0	N.D.	85.2	1
BROMODICHLOROMETHANE	N.D.	2.0	N.D.	--	1
BROMOFORM	N.D.	2.0	N.D.	--	1
BROMOMETHANE	N.D.	5.0	N.D.	--	1
2-BUTANONE (MEK)	N.D.	100	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	2.0	N.D.	--	1
CHLOROBENZENE	N.D.	2.0	N.D.	83.3	1
CHLOROETHANE	N.D.	2.0	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	10	N.D.	--	1
CHLOROFORM	N.D.	3.0	N.D.	--	1
CHLOROMETHANE	N.D.	5.0	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	2.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	2.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	2.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	2.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	2.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	2.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	2.0	N.D.	94.0	1
1,2-DICHLOROETHENE (CIS)	N.D.	2.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	2.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	2.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	2.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	2.0	N.D.	--	1
ETHYLBENZENE	N.D.	2.0	N.D.	--	1
2-HEXANONE	N.D.	50	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
4-METHYL-2-PENTANONE (MIBK)	N.D.	50	N.D.	--	1
STYRENE	N.D.	2.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	2.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	2.0	N.D.	--	1
TOLUENE	N.D.	2.0	N.D.	88.5	1
1,1,1-TRICHLOROETHANE	N.D.	2.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	2.0	N.D.	--	1
TRICHLOROETHENE	N.D.	2.0	N.D.	96.4	1
TRICHLOROFLUOROMETHANE	N.D.	2.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	2.0	N.D.	--	1
VINYL ACETATE	N.D.	20	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
TOTAL XYLENES	N.D.	2.0	N.D.	--	1

CHROMALAB, INC.

Environmental Services (SDB)

December 21, 1998 *Submission #:* 9812207

BLOCK ENVIRONMENTAL
Atten: JEFF KANE
Project: ONE *Project#:* 9813
Received: December 11, 1998
re: One sample for Volatile Organics by GC/MS analysis, continued.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **MWLD-3,4,5**
Spl#: 220824 *Matrix:* WATER
Sampled: December 10, 1998 *Run#:* 16621 *Analyzed:* December 17, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR

Oleg Nemtsov
Analyst

Michael Verona
Operations Manager

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Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

December 21, 1998 *Submission #:* 9812207

BLOCK ENVIRONMENTAL
Atten: JEFF KANE
Project: ONE *Project#:* 9813
Received: December 11, 1998
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **MWB4-3,4,5**
Spl#: 220821 *Matrix:* WATER
Sampled: December 10, 1998 *Run#:* 16624 *Analyzed:* December 18, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
ACETONE	N.D.	500	N.D.	--	1
BENZENE	N.D.	20	N.D.	87.4	1
BROMODICHLOROMETHANE	N.D.	20	N.D.	--	1
BROMOFORM	N.D.	20	N.D.	--	1
BROMOMETHANE	N.D.	50	N.D.	--	1
2-BUTANONE (MEK)	N.D.	1000	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	20	N.D.	--	1
CHLOROBENZENE	N.D.	20	N.D.	88.6	1
CHLOROETHANE	N.D.	20	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	100	N.D.	--	1
CHLOROFORM	N.D.	30	N.D.	--	1
CHLOROMETHANE	N.D.	50	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	20	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	20	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	20	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	20	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	20	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	20	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	20	N.D.	92.0	1
1,2-DICHLOROETHENE (CIS)	N.D.	20	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	20	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	20	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	20	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	20	N.D.	--	1
ETHYLBENZENE	N.D.	20	N.D.	--	1
2-HEXANONE	N.D.	500	N.D.	--	1
METHYLENE CHLORIDE	N.D.	50	N.D.	--	1
4-METHYL-2-PENTANONE (MIBK)	N.D.	500	N.D.	--	1
STYRENE	N.D.	20	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	20	N.D.	--	1
TETRACHLOROETHENE	N.D.	20	N.D.	--	1
TOLUENE	N.D.	20	N.D.	92.6	1
1,1,1-TRICHLOROETHANE	N.D.	20	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	20	N.D.	--	1
TRICHLOROETHENE	N.D.	20	N.D.	101	1
TRICHLOROFLUOROMETHANE	N.D.	20	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	20	N.D.	--	1
VINYL ACETATE	N.D.	200	N.D.	--	1
VINYL CHLORIDE	N.D.	50	N.D.	--	1
TOTAL XYLENES	N.D.	20	N.D.	--	1

Note: *DETECTION LIMITS WERE RAISED DUE TO MATRIX INTERFERENCE*
SURROGATE RECOVERIES DEMONSTRATE MATRIX INTERFERENCE

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Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

December 21, 1998 *Submission #:* 9812207

BLOCK ENVIRONMENTAL
Atten: JEFF KANE
Project: ONE *Project#:* 9813
Received: December 11, 1998
re: One sample for Volatile Organics by GC/MS analysis, continued.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **MWB4-3,4,5**
Spl#: 220821 *Matrix:* WATER
Sampled: December 10, 1998 *Run#:* 16624 *Analyzed:* December 18, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR

Oleg Nemtsov
Analyst

Michael Verona
Operations Manager

510-686-0399 GC 12/18

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Environmental Services (SDB)

December 21, 1998 *Submission #:* 9812207

BLOCK ENVIRONMENTAL
Atten: JEFF KANE
Project: ONE *Project#:* 9813
Received: December 11, 1998
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **MWB3-3,4,5**
Spl#: 220822 *Matrix:* WATER
Sampled: December 10, 1998 *Run#:* 16624 *Analyzed:* December 18, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
ACETONE	N.D.	50	N.D.	--	1
BENZENE	N.D.	2.0	N.D.	87.4	1
BROMODICHLOROMETHANE	N.D.	2.0	N.D.	--	1
BROMOFORM	N.D.	2.0	N.D.	--	1
BROMOMETHANE	N.D.	5.0	N.D.	--	1
2-BUTANONE (MEK)	N.D.	100	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	2.0	N.D.	--	1
CHLOROBENZENE	N.D.	2.0	N.D.	88.6	1
CHLOROETHANE	N.D.	2.0	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	10	N.D.	--	1
CHLOROFORM	N.D.	3.0	N.D.	--	1
CHLOROMETHANE	N.D.	5.0	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	2.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	2.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	2.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	2.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	2.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	2.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	2.0	N.D.	92.0	1
1,2-DICHLOROETHENE (CIS)	N.D.	2.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	2.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	2.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	2.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	2.0	N.D.	--	1
ETHYLBENZENE	N.D.	2.0	N.D.	--	1
2-HEXANONE	N.D.	50	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
4-METHYL-2-PENTANONE (MIBK)	N.D.	50	N.D.	--	1
STYRENE	N.D.	2.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	2.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	2.0	N.D.	--	1
TOLUENE	N.D.	2.0	N.D.	92.6	1
1,1,1-TRICHLOROETHANE	N.D.	2.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	2.0	N.D.	--	1
TRICHLOROETHENE	N.D.	2.0	N.D.	101	1
TRICHLOROFLUOROMETHANE	N.D.	2.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	2.0	N.D.	--	1
VINYL ACETATE	N.D.	20	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
TOTAL XYLENES	N.D.	2.0	N.D.	--	1

CHROMALAB, INC.

Environmental Services (SDB)

December 21, 1998 *Submission #:* 9812207

BLOCK ENVIRONMENTAL
Atten: JEFF KANE
Project: ONE *Project#:* 9813
Received: December 11, 1998
re: One sample for Volatile Organics by GC/MS analysis, continued.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **MWB3-3,4,5**
Spl#: 220822 *Matrix:* WATER
Sampled: December 10, 1998 *Run#:* 16624 *Analyzed:* December 18, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR

Oleg Nemtsov
Analyst

Michael Verona
Operations Manager

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CHROMALAB, INC.

Environmental Services (SDB)

December 21, 1998 *Submission #:* 9812207

BLOCK ENVIRONMENTAL
Atten: JEFF KANE
Project: ONE *Project#:* 9813
Received: December 11, 1998
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **MWD2-3,4,5**
Spl#: 220823 *Matrix:* WATER
Sampled: December 10, 1998 *Run#:* 16621 *Analyzed:* December 17, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
ACETONE	N.D.	50	N.D.	--	1
BENZENE	N.D.	2.0	N.D.	85.2	1
BROMODICHLOROMETHANE	N.D.	2.0	N.D.	--	1
BROMOFORM	N.D.	2.0	N.D.	--	1
BROMOMETHANE	N.D.	5.0	N.D.	--	1
2-BUTANONE (MEK)	N.D.	100	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	2.0	N.D.	--	1
CHLOROBENZENE	N.D.	2.0	N.D.	83.3	1
CHLOROETHANE	N.D.	2.0	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	10	N.D.	--	1
CHLOROFORM	N.D.	3.0	N.D.	--	1
CHLOROMETHANE	N.D.	5.0	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	2.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	2.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	2.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	2.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	2.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	2.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	2.0	N.D.	94.0	1
1,2-DICHLOROETHENE (CIS)	N.D.	2.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	2.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	2.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	2.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	2.0	N.D.	--	1
ETHYLBENZENE	N.D.	2.0	N.D.	--	1
2-HEXANONE	N.D.	50	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
4-METHYL-2-PENTANONE (MIBK)	N.D.	50	N.D.	--	1
STYRENE	N.D.	2.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	2.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	2.0	N.D.	--	1
TOLUENE	N.D.	2.0	N.D.	88.5	1
1,1,1-TRICHLOROETHANE	N.D.	2.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	2.0	N.D.	--	1
TRICHLOROETHENE	N.D.	2.0	N.D.	96.4	1
TRICHLOROFLUOROMETHANE	N.D.	2.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	2.0	N.D.	--	1
VINYL ACETATE	N.D.	20	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
TOTAL XYLENES	N.D.	2.0	N.D.	--	1

CHROMALAB, INC.

Environmental Services (SDB)

December 21, 1998 *Submission #:* 9812207

BLOCK ENVIRONMENTAL
Atten: JEFF KANE
Project: ONE *Project#:* 9813
Received: December 11, 1998
re: One sample for Volatile Organics by GC/MS analysis, continued.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **MWD2-3,4,5**
Spl#: 220823 *Matrix:* WATER
Sampled: December 10, 1998 *Run#:* 16621 *Analyzed:* December 17, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR

Oleg Nemtsov
Analyst

Michael Verona
Operations Manager

510-686-0399 GC 12/18

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CHROMALAB, INC.

Environmental Services (SDB)

December 21, 1998 *Submission #:* 9812207

BLOCK ENVIRONMENTAL
Atten: JEFF KANE
Project: ONE *Project#:* 9813
Received: December 11, 1998
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **MW2-3,4,5**
Spl#: 220826 *Matrix:* WATER
Sampled: December 10, 1998 *Run#:* 16621 *Analyzed:* December 17, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
ACETONE	N.D.	50	N.D.	--	1
BENZENE	75	2.0	N.D.	85.2	1
BROMODICHLOROMETHANE	N.D.	2.0	N.D.	--	1
BROMOFORM	N.D.	2.0	N.D.	--	1
BROMOMETHANE	N.D.	5.0	N.D.	--	1
2-BUTANONE (MEK)	N.D.	100	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	2.0	N.D.	--	1
CHLOROBENZENE	N.D.	2.0	N.D.	83.3	1
CHLOROETHANE	N.D.	2.0	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	10	N.D.	--	1
CHLOROFORM	N.D.	3.0	N.D.	--	1
CHLOROMETHANE	N.D.	5.0	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	2.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	2.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	2.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	2.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	2.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	2.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	2.0	N.D.	94.0	1
1,2-DICHLOROETHENE (CIS)	N.D.	2.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	2.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	2.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	2.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	2.0	N.D.	--	1
ETHYLBENZENE	47	2.0	N.D.	--	1
2-HEXANONE	N.D.	50	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
4-METHYL-2-PENTANONE (MIBK)	N.D.	50	N.D.	--	1
STYRENE	N.D.	2.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	2.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	2.0	N.D.	--	1
TOLUENE	33	2.0	N.D.	88.5	1
1,1,1-TRICHLOROETHANE	N.D.	2.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	2.0	N.D.	--	1
TRICHLOROETHENE	N.D.	2.0	N.D.	96.4	1
TRICHLOROFLUOROMETHANE	N.D.	2.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	2.0	N.D.	--	1
VINYL ACETATE	N.D.	20	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
TOTAL XYLENES	100	2.0	N.D.	--	1

Note: SURROGATE RECOVERIES DEMONSTRATE MATRIX INTERFERENCE

510-686-0399 GC 12/18 1220 Quarry Lane • Pleasanton, California 94566-4756
(925) 484-1919 • Facsimile (925) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.
Environmental Services (SDB)

December 21, 1998 — *Submission #:* 9812207
page 2

BLOCK ENVIRONMENTAL
Atten: JEFF KANE
Project: ONE — *Project#:* 9813
Received: December 11, 1998
re: One sample for Volatile Organics by GC/MS analysis, continued.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **MW2-3,4,5**
Spl#: 220826 — *Matrix:* WATER
Sampled: December 10, 1998 — *Run#:* 16621 — *Analyzed:* December 17, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR

Oleg Nemtsov
Analyst

Michael Verona
Operations Manager

510-686-0399 GC 12/18
1220 Quarry Lane • Pleasanton, California 94566-4756
(925) 484-1919 • Facsimile (925) 484-1096
Federal ID #68-0140157

V051 0:0C0405 OLEG 15:32

CHROMALAB, INC.

Environmental Services (SDB)

December 21, 1998 *Submission #:* 9812207

BLOCK ENVIRONMENTAL
Atten: JEFF KANE
Project: ONE *Project#:* 9813
Received: December 11, 1998
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **BES1-3,4,5**
Spl#: 220825 *Matrix:* WATER
Sampled: December 10, 1998 *Run#:* 16621 *Analyzed:* December 17, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
ACETONE	N.D.	2500	N.D.	--	1
BENZENE	N.D.	100	N.D.	85.2	1
BROMODICHLOROMETHANE	N.D.	100	N.D.	--	1
BROMOFORM	N.D.	100	N.D.	--	1
BROMOMETHANE	N.D.	250	N.D.	--	1
2-BUTANONE (MEK)	N.D.	5000	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	100	N.D.	--	1
CHLOROBENZENE	N.D.	100	N.D.	83.3	1
CHLOROETHANE	N.D.	100	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	500	N.D.	--	1
CHLOROFORM	N.D.	150	N.D.	--	1
CHLOROMETHANE	N.D.	250	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	100	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	100	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	100	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	100	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	100	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	100	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	100	N.D.	94.0	1
1,2-DICHLOROETHENE (CIS)	N.D.	100	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	100	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	100	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	100	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	100	N.D.	--	1
ETHYLBENZENE	N.D.	100	N.D.	--	1
2-HEXANONE	N.D.	2500	N.D.	--	1
METHYLENE CHLORIDE	N.D.	250	N.D.	--	1
4-METHYL-2-PENTANONE (MIBK)	N.D.	2500	N.D.	--	1
STYRENE	N.D.	100	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	100	N.D.	--	1
TETRACHLOROETHENE	N.D.	100	N.D.	--	1
TOLUENE	N.D.	100	N.D.	88.5	1
1,1,1-TRICHLOROETHANE	N.D.	100	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	100	N.D.	--	1
TRICHLOROETHENE	N.D.	100	N.D.	96.4	1
TRICHLOROFLUOROMETHANE	N.D.	100	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	100	N.D.	--	1
VINYL ACETATE	N.D.	1000	N.D.	--	1
VINYL CHLORIDE	N.D.	250	N.D.	--	1
TOTAL XYLENES	N.D.	100	N.D.	--	1

Note: DETECTION LIMITS WERE RAISED DUE TO MATRIX INTERFERENCE
SURROGATE RECOVERIES DEMONSTRATE MATRIX INTERFERENCE

510-686-0399 GC 12/18 1220 Quarry Lane • Pleasanton, California 94566-4756
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Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

December 21, 1998 *Submission #:* 9812207

BLOCK ENVIRONMENTAL
Atten: JEFF KANE
Project: ONE *Project#:* 9813
Received: December 11, 1998
re: One sample for Volatile Organics by GC/MS analysis, continued.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **BES1-3,4,5**
Spl#: 220825 *Matrix:* WATER
Sampled: December 10, 1998 *Run#:* 16621 *Analyzed:* December 17, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR

Oleg Nemtsov
Analyst

Michael Verona
Operations Manager

510-686-0399 OC 12/18

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(925) 484-1919 • Facsimile (925) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

SUBM #: 9812287 REP: GC
CLIENT: BLOCK
DUE: 12/18/98
REF #:43618

Reference #: 43618

Chain of Custody

DATE 12/10/98 PAGE 1 OF 2

PROJ MGR Jeff Kane
COMPANY Block Environmental
ADDRESS 2451 Estand Way
Pleasant Hill 94523
SAMPLERS (SIGNATURE) Jeff Kane
(PHONE NO) 925 682-7200
686-0399 (FAX NO.)

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH-IEPA 8015,8020) ☐ Gas w/ ☐ BTEX ☐MTBE	PURGEABLE AROMATICS BTEX (EPA 8020)	TPH-Diesel (EPA 8015M)	TEPH (EPA 8015M) ☐Kerosene, ☐Diesel, ☐M.O.	PURGEABLE HALOCARBONS (HVOCs) (EPA8010 or 8260)	VOLATILE ORGANICS (VOCs) (EPA 8260)	SEMIVOLATILES (EPA 8270)	TOTAL OIL AND GREASE (SM 5520 B - F, E - F)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	☐ PESTICIDES(EPA 8080) ☐ PCB'S (EPA 8080)	PNA's by ☐ 8270 ☐ 8310	☐ pH ☐ Spec. Cond. ☐ TSS ☐ TDS	LUFT METALS: Cd, Cr, Pb, Ni, Zn	CAM 17 METALS (EPA 6010/7470/7471)	TOTAL LEAD	☐ W.E.T. ☐ TCLP	EPA 8240			NUMBER OF CONTAINERS
MWB2-1,2	12/10/98	10:45	H_2O	—				X																	2
MWB2-3,4,5	"	10:45	"	HCl																		X			3
MWB4-1,2	"	11:30	"	—				X																	2
MWB4-3,4,5	"	11:30	"	HCl																		X			3
MWB3-1,2	"	12:00	"	—				X																	2
MWB3-3,4,5	"	12:00	"	HCl																		X			3
MWD2-1,2	"	12:30	"	—				X																	2
MWD2-3,4,5	"	12:30	"	HCl																		X			3

PROJECT INFORMATION

PROJECT NAME ONE
PROJECT NUMBER 9813
P.O. #

SAMPLE RECEIPT

TOTAL NO OF CONTAINERS
HEAD SPACE
TEMPERATURE
CONFORMS TO RECORD

TAT: STANDARD 5 DAY | 24 | 48 | 72 | OTHER

Report: ☐ Routine ☐ Level 2 ☐ Level 3 ☐ Level 4

SPECIAL INSTRUCTIONS/COMMENTS: 5.9
16 Amber
24 VOAs

RELINQUISHED BY 1	RELINQUISHED BY 2	RELINQUISHED BY 3
(SIGNATURE) (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) 1720 (TIME)
(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) 12/11/98 (DATE)
(COMPANY)	(COMPANY)	(COMPANY)
RECEIVED BY 1	**RECEIVED BY 2**	**RECEIVED BY (LABORATORY) 3**
(SIGNATURE) 15:00 (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) 1730 (TIME)
(PRINTED NAME) 12/11/98 (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) 12/14/98 (DATE)

Reference #: 43618

CHROMALAB, INC.

Environmental Services (SUB) (DOHS 1094)

1220 Quarry Lane • Pleasanton, California 94566-4756
510/484-1919 • Facsimile 510/484-1096

Chain of Custody

DATE 12/10/96 PAGE 2 OF 2

PROJ MGR Jeff Kane
COMPANY BES
ADDRESS
SAMPLERS (SIGNATURE) (PHONE NO.)
(FAX NO.)

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH-(EPA 8015,8020) ☐ Gas w/ ☐ BTEX ☐MTBE	PURGEABLE AROMATICS BTEX (EPA 8020)	TPH-Diesel (EPA 8015M)	TEPH (EPA 8015M) Mod. ☐Kerosene, ☐Diesel, ☐M.O.	PURGEABLE HALOCARBONS (HVOCs) (EPA8010 by 8260)	VOLATILE ORGANICS (VOCs) (EPA 8260)	SEMIVOLATILES (EPA 8270)	TOTAL OIL AND GREASE (SM 5520 B - F, E - F)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	☐ PESTICIDES(EPA 8080) ☐ PCB'S (EPA 8080)	PNA's by ☐ 8270 ☐ 8310	☐ pH ☐ Spec. Cond. ☐ TSS ☐ TDS	LUFT METALS: Cd, Cr, Pb, Ni, Zn	CAM 17 METALS (EPA 6010/7470/7471)	TOTAL LEAD	☐ W.E.T. ☐ TCLP	EPA 8240				NUMBER OF CONTAINERS
MWLD-1,2	12/10/96	13:00	H_2O	—				X																	2
MWLD-3,4,5	"	13:00	"	HCL																		X			3
BES1-1,2	"	13:45	H_2O	—				X																	2
BES1-3,4,5	"	13:45	"	HCL																		X			3
MW2-1,2	"	14:30	H_2O	—				X																	2
MW2-3,4,5	"	14:30	"	HCL																		X			3
MW1-1,2	"	15:00	H_2O	—				X																	2
MW1-3,4,5	"	15:00	"	HCL																		X			3

PROJECT INFORMATION

PROJECT NAME: ONE
PROJECT NUMBER: 9813
P.O. #

SAMPLE RECEIPT

TOTAL NO OF CONTAINERS
HEAD SPACE
TEMPERATURE
COND ORMS TO RECORD

TAT	STANDARD 5 DAY			24	48	72	OTHER

Report: ☐ Routine ☐ Level 2 ☐ Level 3 ☐ Level 4

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY 1	RELINQUISHED BY 2	RELINQUISHED BY 3
(SIGNATURE) (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) 1720 (TIME)
(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) 12/10/96 (DATE)
(COMPANY)	(COMPANY)	(COMPANY) Chromalab
RECEIVED BY 1	**RECEIVED BY 2**	**RECEIVED BY (LABORATORY) 3**
(SIGNATURE) 1500 (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) 1730 (TIME)
(PRINTED NAME) 12/11/96 (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) 12/11/96 (DATE)
Chromalab		

CHROMALAB, INC.

Environmental Services (SDB)

January 5, 1999 *Submission #:* 9812285

BLOCK ENVIRONMENTAL

Atten: Jeff Kane

Project: ONE *Project#:* 9813
Received: December 11, 1998

re: One sample for Gasoline analysis.
Method: 8015Mod

Client Sample ID: **MWD2-3,4,5**
Spl#: 221751 *Matrix:* WATER
Sampled: December 10, 1998 *Run#:*16679 *Analyzed:* December 23, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	50	N.D.	92	1

Note: Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile.If quantified using Gasoline's response factor, concentration would equal 95ug/L.

Vincent Vancil
Analyst

Michael Verona
Operations Manager

925-686-0399

1220 Quarry Lane • Pleasanton, California 94566-4756
(925) 484-1919 • Facsimile (925) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

January 5, 1999 *Submission #:* 9812285

BLOCK ENVIRONMENTAL

Atten: Jeff Kane

Project: ONE *Project#:* 9813
Received: December 11, 1998

re: One sample for Gasoline analysis.
Method: 8015Mod

Client Sample ID: **MWLD-3,4,5**
Spl#: 221752 *Matrix:* WATER
Sampled: December 10, 1998 *Run#:*16679 *Analyzed:* December 23, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	50	N.D.	92	1

Note: Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile.If quantified using Gasoline's response factor, concentration would equal 83ug/L.

Vincent Vancil
Analyst

Michael Verona
Operations Manager

925-686-0399

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Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

January 5, 1999 *Submission #:* 9812285

BLOCK ENVIRONMENTAL

Atten: Jeff Kane

Project: ONE *Project#:* 9813
Received: December 11, 1998

re: One sample for Gasoline analysis.
Method: 8015Mod

Client Sample ID: **MWB3-3,4,5**
Spl#: 221750 *Matrix:* WATER
Sampled: December 10, 1998 *Run#:*16680 *Analyzed:* December 23, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	50	N.D.	110	1

Note: Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile.If quantified using Gasoline's response factor, concentration would equal 830ug/L.

Vincent Vancil
Analyst

Michael Verona
Operations Manager

925-686-0399

1220 Quarry Lane • Pleasanton, California 94566-4756
(925) 484-1919 • Facsimile (925) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

January 5, 1999 *Submission #:* 9812285

BLOCK ENVIRONMENTAL

Atten: Jeff Kane

Project: ONE *Project#:* 9813
Received: December 11, 1998

re: One sample for Gasoline analysis.
Method: 8015Mod

Client Sample ID: **MWB2-3,4,5**
Spl#: 221748 *Matrix:* WATER
Sampled: December 10, 1998 *Run#:*16693 *Analyzed:* December 24, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	50	N.D.	91	1

Note: Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile.If quantified using Gasoline's response factor, concentration would equal 2400ug/L.

Vincent Vancil
Analyst

Michael Verona
Operations Manager

925-686-0399

1220 Quarry Lane • Pleasanton, California 94566-4756
(925) 484-1919 • Facsimile (925) 484-1096
Federal ID #68-0140157

GC V132 O:BTEXQC022
VINCE 13:57

CHROMALAB, INC.

Environmental Services (SDB)

January 5, 1999 *Submission #:* 9812285

BLOCK ENVIRONMENTAL

Atten: Jeff Kane

Project: ONE *Project#:* 9813
Received: December 11, 1998

re: One sample for Gasoline analysis.
Method: 8015Mod

Client Sample ID: **MWB4-3,4,5**
Spl#: 221749 *Matrix:* WATER
Sampled: December 10, 1998 *Run#:*16693 *Analyzed:* December 24, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	50	N.D.	91	1

Note: Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile.If quantified using Gasoline's response factor, concentration would equal 2700ug/L.

Vincent Vancil
Analyst

Michael Verona
Operations Manager

925-686-0399

1220 Quarry Lane • Pleasanton, California 94566-4756
(925) 484-1919 • Facsimile (925) 484-1096
Federal ID #68-0140157

GC V132 O:BTEXQC0220
VINCE 13:57

43702

BLOCK ENVIRONMENTAL SERVICES
2451 Estand Way, Pleasant Hill, CA 94523
Tel: (925) 682-7200 Fax: 686-0399

FAX TRANSMISSION

DATE: DECEMBER 16, 1998

PAGES: 3

TO: GARY COOK

COMPANY: CHROMALAB

FAX NUMBER: 484-1096

FROM: JEFFREY KANE

MEMO:

Please do an add-on for Gasoline. Use Voas not required on 981220 for 8240

We would like to have the samples on the following COC analyzed for TPH as gasoline as well as diesel if still possible. Thanks.

SUBM #: 9812285 REP: GC
CLIENT: BLOCK
DUE: 12/23/98
REF #:43702/9812207

9812285/122146-55

CHROMALAB

Change request received by:_____ Date Requested: 12/17/98

SAMPLE STATUS CHANGE FORM

Submission#	Client Samp.ID	Old Status Description	Description of Changes	Requested by (Client's name)
98/2285	all	MWXX-1,2 →	MWXX-3,4,5	Black

Changes were done in lims by(login): _____ On: 12/17/98

CC: ___ Lab.Director ___ Dept.manager X Analyst X Proj.Manager Client

CHROMALAB, INC.

Environmental Services (SDG) (DOHS 1094)

2320 Quarry Lane • Pleasanton, Ca... 510/484-1919 • Facsimile 510/...096

43102

981220?

DATE 12/16/98

PAGE 02

BLOCK ENVIRONMENTAL 925860399 12/16/1998 15:56

PRINT NAME: Jeff Kane

COMPANY: Block Environmental

ADDRESS: 2451 Estand Way

Pleasant Hill 94523

SAMPLER'S (SIGNATURE): Jeff Kane

PHONE NO.: 925 682-7200

FAX NO.: 686-0399

ANALYSIS REPORT

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH-(EPA 8015, 8020) ☒ Gas w/ ☐ BTEX ☐MTBE	PURGEABLE AROMATICS BTEX (EPA 8020)	TPH-Diesel (EPA 8015M)	TEPH (EPA 8015M) ☐Kerosene, ☐Diesel, ☐M.O.	PURGEABLE HALOCARBONS (HVOCs) (EPA8010 by 8260)	VOLATILE ORGANICS (VOCs) (EPA 8260)	SEMIVOLATILES (EPA 8270)	TOTAL OIL AND GREASE (SM 5520 B - F, E - F)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	☐ PESTICIDES(EPA 8080) ☐ PCB'S (EPA 8080)	PNA's by ☐ 8270 ☐ 8310	☐ pH ☐ Spec. Cond. ☐ T&S ☐ TDS	LUFT METALS: Cd, Cr, Pb, Ni, Zn	CAM 17 METALS (EPA 6010/7470/7471)	TOTAL LEAD	☐ W.E.T ☐ TCLP	EPA 8240				NUMBER OF CONTAINERS
MWB2-1,2	12/14/98	10:45	H_2O	—	X	—	X	X	—	—	—	—	—	—	—	—	—	—	—	—	X					2
MWB2-3,4,5	"	10:45	"	HCl	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—					3
MWB4-1,2	"	11:30	"	—	X	—	X	X	—	—	—	—	—	—	—	—	—	—	—	—	X					2
MWB4-3,4,5	"	11:30	"	HCl	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	X					3
MWB3-1,2	"	12:00	"	—	X	—	X	X	—	—	—	—	—	—	—	—	—	—	—	—	X					2
MWB3-3,4,5	"	12:00	"	HCl	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—					3
MWD2-1,2	"	12:30	"	—	X	—	X	X	—	—	—	—	—	—	—	—	—	—	—	—	X					2
MWD2-3,4,5	"	12:30	"	HCl	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—					3

PROJECT INFORMATION

PROJECT NAME: ONE

PROJECT NUMBER: 9813

P.O. #

TAT: STANDARD 5 DAY | 24 | 48 | 72 | OTHER

Report: ☐ Routine ☐ Level 2 ☐ Level 3 ☐ Level 4

SPECIAL INSTRUCTIONS/COMMENTS:

SAMPLE RECEIPT

TOTAL NO OF CONTAINERS

HEAD SPACE

TEMPERATURE

CONDITIONS TO RECORD

RELINQUISHED BY 1

(SIGNATURE) Sean Hoba (TIME)

(PRINTED NAME) (DATE)

(COMPANY)

RECEIVED BY 1

(SIGNATURE) 1500 (DATE)

(PRINTED NAME) (DATE)

(COMPANY)

RELINQUISHED BY 2

(SIGNATURE) (TIME)

(PRINTED NAME) (DATE)

(COMPANY)

RECEIVED BY 2

(SIGNATURE) (DATE)

(PRINTED NAME) (DATE)

RECEIVED BY (LABORATORY) 3

(SIGNATURE) (TIME)

(PRINTED NAME) (DATE)

CHROMALAB, INC.

Environmental Services (SUB) (DOHS 1094)

2220 Oakland Lane • Pleasanton, California 94566-1756
510/484-1919 • Facsimile 510/484-1096

DATE 12/10/98 PAGE 2 OF 2

COMPANY BES

ADDRESS

SAMPLER'S (SIGNATURE) (PHONE NO.)

(FAX NO.)

ANALYSIS REPORT

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH-(EPA 8015,8020) Gas w/ BTEX CMTBE	PURGEABLE AROMATICS BTEX (EPA 8020)	TPH-Diesel (EPA 8015M)	TEPH (EPA 8015M) Mod. Silica Gel Extraction, Diesel, C.M.O.	PURGEABLE HALOCARBONS (HVOCs) (EPA8010 by 8260)	VOLATILE ORGANICS (VOCs) (EPA 8260)	SEMIVOLATILES (EPA 8270)	TOTAL OIL AND GREASE (SM 5520 B+F, B-F)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	☐ PESTICIDES(EPA 8080) ☐ PCB'S (EPA 8080)	PNA's by ☐ 8270 ☐ 8310	☐ pH ☐ Spec. Cond. ☐ TSS ☐ TDS	LUFT METALS Cd, Cr, Pb, Ni, Zn	CAM 17 METALS (EPA 6010/7470/7471)	TOTAL LEAD	☐ W.E.T ☐ TCLP	EPA 8240				NUMBER OF CONTAINERS
MWLD-1,2	12/10/98	13:00	H_2O	—	X		X	X																	2
MWLD-3,4,5	"	13:00	"	HCL																		X			3
BES1-1,2	"	13:45	H_2O	—	X		X	X																	2
BES1-3,4,5	"	13:45	"	HCl																		X			3
MW2-1,2	"	14:30	H_2O	—	X		X	X																	2
MW2-3,4,5	"	14:30	"	HCl																		X			3
MW1-1,2	"	16:00	H_2O	—	X		X	X																	2
MW1-3,4,5	"	15:00	"	HCl																		X			3

PROJECT INFORMATION

PROJECT NAME: ONE

PROJECT NUMBER: 9813

P.O. #

SAMPLE RECEIPT

TOTAL NO OF CONTAINERS

HEAD SPACE

TEMPERATURE

CONDITIONS TO RECORD

TAT	STANDARD 5-DAY			24	48	72	OTHER

Report: ☐ Routine ☐ Level 2 ☐ Level 3 ☐ Level 4

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY 1

(SIGNATURE) (DATE)

(PRINTED NAME) (DATE)

(COMPANY)

RECEIVED BY 1

(SIGNATURE) (DATE) 1500

(PRINTED NAME) (DATE) 12/11/98

RELINQUISHED BY 2

(SIGNATURE) (DATE)

(PRINTED NAME) (DATE)

(COMPANY)

RECEIVED BY 2

(SIGNATURE) (DATE)

(PRINTED NAME) (DATE)

RELINQUISHED BY 3

(SIGNATURE) (DATE)

(PRINTED NAME) (DATE)

(COMPANY)

RECEIVED BY (LABORATORY) 3

(SIGNATURE) (DATE)

(PRINTED NAME) (DATE)

PAGE 03 BLOCK ENVIRONMENTAL 9256860399 12/16/1998 15:56

CHROMALAB, INC.

Environmental Service (SCS)

FAX COVER SHEET

To: Jeff Kane

Company Block

Fax Number 925-686-0399

From: Gary

Phone Number 925-484-1919 Fax Number 925-484-1096

Date: _____ Time: _____

Number of Pages: Cover + 5

Message:

We were able to do gasoline on 5 of the 8 samples for the ONE project. There was not enough sample to do the test on samples BES1, MW1, or MW2.

Thanks, Gary

1220 Quarry Lane o Pleasanton, California 94566-4756
(925) 484-1919 o Facsimile (925) 484-1096