CH2M HILL
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April 28, 1995

BAE28830.P3

Mr. Brian Oliva
Hazardous Materials Specialist
Alameda County Department of Environmental Health
Division of Hazardous Materials
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

Subject: Quarterly Groundwater Monitoring and Groundwater Extraction and Treatment System Status Report for Del Monte Plant 35 - West Parcel, 4204 Hollis Street, Emeryville, California

Dear Mr. Oliva:

Enclosed is the Quarterly Groundwater Monitoring and Groundwater Extraction and Treatment System Status Report for Del Monte Plant 35 - West Parcel located at 4204 Hollis Street in Emeryville, California. If you have any questions or comments, please call me at (510) 251-2888 (ext. 2189).

Sincerely,

CH2M HILL

Madeline Wall

Madeline Wall
Environmental Engineer

cc: Mr. Sumadhu Arigala/RWQCB
Mr. Stan Archacki/EBMUD
Mr. Steve Ranzone/Del Monte
Mr. Thomas Bender/The Bender Partnership
Mr. Lee Bosche/Del Monte
Mr. Soon Kim/Del Monte
Mr. Mark Zemelman/Kaiser
Mr. David Harnish/ENVIRON
Mr. Bern Baumgartner/CH2M HILL

Quarterly Groundwater Monitoring and Groundwater Extraction and Treatment System Status Report
for
Del Monte Plant 35 - West Parcel
4204 Hollis Street, Emeryville, California

Prepared for

Del Monte Foods USA

Prepared by

CH2M HILL

April 28, 1995

INTRODUCTION

This report presents the quarterly groundwater monitoring analytical data and the status of the groundwater extraction and treatment (GET) system located at Del Monte Plant 35 - West Parcel, at 4204 Hollis Street in Emeryville, California. Quarterly groundwater monitoring and GET system sampling at Plant 35 were conducted on March 9, 1995.

BACKGROUND

Del Monte Plant 35 is located in an industrial area and was a food processing plant from the late 1920s through 1989. Plant 35 is located on approximately 13 acres; the West Parcel, located at 4204 Hollis Street, is approximately 2 acres in size and the East Parcel, located at 1250 Park Avenue, is approximately 11 acres in size (Figure 1).

Plant 35 is underlain by approximately 5 to 8 feet of fill which is composed primarily of clay containing gravel. Native silty clay extends from beneath the fill to a depth of approximately 15 to 20 feet below ground surface. Discontinuous lenses of sands and gravels have also been encountered within the native silty clay. This silty clay zone is underlain with silty sand. Shallow groundwater exists beneath the property at a depth of approximately 7 to 10 feet below ground surface and flows in a southwesterly direction (Figure 2).

Del Monte removed four 50-gallon underground tanks from the West Parcel in March 1989 as described in "Property Assessment and Tank Removal Report, Del Monte Plant No. 35, Southwest Corner" (CH2M HILL, September 1989). These tanks were located adjacent to a building that Del Monte had previously leased to medical research companies. The tanks were used to store fuel oil; however, prior to removal of the tanks, tank content sampling revealed the presence of chlorinated hydrocarbon compounds. Subsequent groundwater investigations revealed the presence of chlorinated hydrocarbon compounds in the shallow groundwater in the vicinity of the former fuel oil tank area. Del Monte has been monitoring the groundwater in the vicinity of the former fuel oil tank area since May 1989.

Del Monte demolished and removed the building located at the southwest corner of the West Parcel during December 1992. The removal of this building provided access to soil that could not be removed during the removal of the four fuel oil tanks in 1989.

GROUNDWATER MONITORING

Monitoring wells MW-7, MW-9, MW-10, and MW-12 were sampled and analyzed for chlorinated hydrocarbons as part of the quarterly monitoring program. The monitoring well locations are shown on Figure 1 and the analytical results for chlorinated hydrocarbons from this and previous monitoring events are summarized in Table 1. At the request of the ACDEH, groundwater samples from MW-7, MW-9, MW-10, and MW-12 were also analyzed for TPH-gas/BTEX and TPH-diesel. Table 2 summarizes the results of TPH-gas, -diesel, and BTEX analyses from this event and from a sample collected from MW-7 in June 1993. Laboratory analytical reports for the monitoring well samples are included in Attachment A. The field sampling report is provided in Attachment B.

Monitoring well MW-11 was removed in June 1994 during the construction of the new groundwater extraction trench (discussed below in the Groundwater Extraction and Treatment System section of this report). To replace MW-11 data, a water sample from the extraction trench (SP-E) was collected and analyzed during quarterly groundwater extraction and treatment (GET) system sampling. The sample from SP-E, however, represents the average water quality of a larger volume of water than the previous samples from MW-11.

Monitoring well MW-8 was removed in 1993 when the groundwater extraction pit was constructed. Water samples collected from the influent sample port (SP-D) of the GET system have been used to replace the samples previously collected from MW-8. When the new groundwater extraction trench became operational in August 1994 (see discussion below), SP-D represented water extracted from both the extraction pit and trench. Figure 3 shows trichloroethene (TCE) concentrations in groundwater samples collected from former monitoring well MW-8 and the influent sample port (SP-D) of the GET system.

Groundwater monitoring results from the first quarter 1995 event are summarized as follows:

Chlorinated Hydrocarbons

- Concentrations of chlorinated hydrocarbons in samples from SP-E (location of former MW-11) are generally consistent with the previous quarter. Concentrations from SP-D (location of former MW-8) are slightly higher than the previous quarter.

- Monitoring well MW-12 showed an increase in TCE and PCE, although levels are still well below levels measured before the extraction trench became operational in August 1994.

- Monitoring wells MW-7 and MW-9 showed concentrations of TCE and PCE consistent with last quarter's sampling.

- Monitoring well MW-10 showed a slight increase in TCE, PCE, and 1,2-DCE concentrations over the sample from last quarter.

TPH - Gasoline, -Diesel, and BTEX

- No TPH-gasoline, -diesel, or BTEX were detected in samples from MW-9, MW-10, and MW-12.

- TPH-gasoline was detected in MW-7 at 190 µg/l. This is less than the 250 µg/l detected in the last sample collected from MW-7 in June 1993. Trace amounts of toluene, ethylbenzene, and total xylenes were also detected in MW-7.

GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

System Description

Del Monte began construction of a GET system on January 11, 1993 and began operating the system on January 14, 1993. In June and July 1994, the extraction system was expanded as described below. The objective of the GET system is to extract and treat groundwater containing chlorinated hydrocarbons, thereby reducing levels of chlorinated hydrocarbons in the shallow groundwater beneath the West Parcel.

The original GET system extracts groundwater through one of two 16-inch diameter perforated pipes installed in the pea gravel at the bottom of the excavation pit. The extracted groundwater is pumped to a 20,000-gallon covered settling tank to settle out silt and fine sand. An automatic shutoff device does not allow for more than 7,000 gallons of water to be contained within the 20,000-gallon settling tank at any time. After the settling tank, the extracted groundwater gravity flows to a 100-gallon holding tank prior to treatment. Treatment consists of two activated carbon canisters in series. The treated groundwater is then discharged to the sanitary sewer; Del Monte obtained a Wastewater Discharge Permit from the East Bay Municipal Utility District (EBMUD).

The GET system was shut down on December 10, 1993 due to the expiration of the EBMUD Wastewater Discharge Permit. Del Monte received a renewed Wastewater Discharge Permit on January 14, 1994, but the restart of the GET system was delayed until March 8, 1994 because of a faulty transfer pump and the unavailability of an electrical power source on the Plant 35 property. The shutdown and restart dates are shown on Figure 3.

System Expansion

As described in the Draft Remediation Plan for Del Monte Plant 35 prepared by CH2M HILL in April 1994, Del Monte expanded the groundwater extraction system on the West Parcel by constructing an extraction trench adjacent and parallel to Hollis Street. Figure 4 shows a plan view of the expanded GET system. The trench was completed in early July 1994. Extraction of groundwater from the trench began on August 11, 1994 after piezometers were installed downgradient to monitor the zone of influence. The piezometer locations are shown on Figure 5.

Another modification made to the GET system in July 1994 was the change of the discharge point from the sanitary sewer line leading to Park Avenue to another on-site sanitary sewer line leading to Hollis Street. This change was made in early July at the request of the City of Emeryville.

A schematic of the GET system is shown on Figure 6. Five water sample ports (SP-A, SP-B, SP-C, SP-D, and SP-E) used to monitor the GET system are also shown on Figure 6.

Wastewater Discharge Permit Requirements

A renewed Wastewater Discharge permit was issued to Del Monte on January 14, 1994 by EBMUD for discharge of the treated groundwater to the sanitary sewer. The renewed Wastewater Discharge Permit contains the following modifications to the Self-Monitoring Reporting Requirements (SMRRs):

- Sampling from the GET system sample port SP-A is no longer required unless levels of chlorinated hydrocarbons from sample port SP-B increase
- Sampling from sample ports SP-B and SP-D is required only once a quarter
- Samples from sample ports SP-B and SP-D are required to be analyzed only for EPA Method 601. BTEX analyses are no longer required because BTEX has never been detected in any of the GET system samples.

Our letter of June 24, 1994 to EBMUD described the groundwater extraction system expansion and the change to the discharge point.

The wastewater discharge permit issued by EBMUD was again renewed on January 18, 1995 effective through January 17, 1998. The renewed permit requires the collection of self-monitoring samples from sample ports B and D on a quarterly basis and reporting on a semi-annual basis. The wastewater discharge limitation for VOC Total Toxic Organics remains unchanged at 0.035 mg/l.

GET System Results

As of March 9, 1995, the GET system has extracted and treated a total of 3,384,517 gallons of water. GET system inspection logs since the last quarterly monitoring event are contained in Attachment C.

In accordance with the requirements of the Wastewater Discharge Permit, Del Monte collected water samples from GET system sample ports SP-B and SP-D on March 9, 1995. Samples were also collected from sample ports SP-A and SP-E. The samples were analyzed for chlorinated hydrocarbons (EPA Method 601), and the results are summarized in Table 3. The laboratory reports for the samples collected during the first quarter of 1995 are included in Attachment A.

The monitoring results of the GET system indicate that the system is effectively removing chlorinated hydrocarbons prior to discharge.

Water Level Measurements

Water levels at the three piezometers have been measured once every one to two weeks since August 1994.

The expanded extraction system pumped at an average rate of 6.5 gallons per minute from August 11 to October 21, 1994. Based on water level fluctuations measured at P-1, P-2, and P-3 between August 11 and October 21, 1994, the pumping rate was adjusted downward on October 21, 1994 to reduce the influence on groundwater downgradient of the Del Monte property.

Between October 15 and December 15, 1994 the extraction system pumped at an average rate of 4.88 gallons per minute. Between January 13th and March 9th, the extraction system pumped at an average rate of 1.90 gallons per minute.

To further evaluate the zone of pumping influence and therefore the appropriate pumping rate, the standpipes in the extraction pit and trench were surveyed and MW-10 and MW-12 were added to the piezometers and pit/trench standpipes as points at which bi-weekly water elevation measurements are made. Based on the low flow noted during the first quarter, adjustments will be made to the extraction system to increase the quantity of groundwater extracted. Water levels will continue to be monitored after the flow rate is adjusted upward.

FUTURE ACTIVITIES

Del Monte will continue quarterly monitoring of MW-7, MW-9, MW-10, and MW-12 for chlorinated hydrocarbons. The next quarterly monitoring event is scheduled for the week of June 26, 1995. The next groundwater monitoring and GET system quarterly report is scheduled for completion July 31, 1995.

TABLE 1

DEL MONTE PLANT NO. 35, WEST PARCEL
4204 HOLLIS STREET, EMERYVILLE, CA
QUARTERLY GROUNDWATER MONITORING RESLUTS

Monitoring Well	Sampling Date	Concentration (ug/L) 1,2-DCE(a)	1,1-DCE(b)	1,2-DCA(c)	TCE(d)	PCE(e)	VC(f)	1,2-DP(g)
MW7	17-Apr-91	85.0	<0.5	<0.5	23.0	14.0	5.1	<0.5
MW7	31-Jul-91	100.0	<0.5	<0.5	29.0	19.0	5.1	<0.5
MW7	22-Oct-91	130.0	<1.0	<1.0	30.0	20.0	3.0	<1.0
MW7	23-Jan-92	100.0	<0.5	<0.5	29.0	17.0	3.1	<0.5
MW7	23-Apr-92	92.0	<0.5	<0.5	46.0	28.0	<0.5	<0.5
MW7	17-Jul-92	93.0	<0.5	<0.5	51.0	30.0	1.8	<0.5
MW7	12-Oct-92	71.0	<0.5	<0.5	39.0	28.0	2.8	<0.5
MW7	13-Jan-93	54.0	<0.5	<0.5	25.0	16.0	2.1	<0.5
MW7	30-Mar-93	65.0	<0.5	<0.5	31.0	22.0	2.5	<0.5
MW7	16-Jun-93	45.0	<2.0	<2.0	25.0	19.0	2.7	<2.0
MW7	17-Sep-93	1.6 (t)	<1.0	<1.0	17.0	12.0	<1.0	<1.0
MW7	21-Dec-93	20.3	<0.5	<0.5	17.0	20.0	1.9	<0.5
MW7	14-Feb-94	18.0	<0.5	<0.5	13.0	11.0	0.7	<0.5
MW7	11-Apr-94	13.0	<0.5	<0.5	12.0	10.0	<1.0	<0.5
MW7	15-Jul-94	18.8	<0.5	<0.5	13.0	11.0	<0.50	<0.5
MW7	17-Oct-94	18.2	<0.5	<0.5	11.0	10.0	<0.50	<0.5
MW7	29-Dec-94	<1.0 (t)	<1.0	<1.0	4.4	3.8	<1.0	<1.0
MW7	09-Mar-95	<1.0 (t)	<1.0	<1.0	8.4	6.8	<1.0	<1.0
MW8	12-May-89	290.0	<10.0	<10.0	1400.0	20.0	78.0	<10.0
MW8	10-Jul-89	140.0	<2.5	<2.5	330.0	14.0	17.0	<2.5
MW8-dup	10-Jul-89	130.0	<2.5	<2.5	310.0	12.0	16.0	<2.5
MW8	24-Oct-89	100.0	<2.0	<2.0	330.0	24.0	4.0	<2.0
MW8	07-Feb-90	100.0	<2.0	<2.0	520.0	18.0	12.0	<2.0
MW8	10-Jul-90	5.0	<0.2	<0.5	91.0	36.0	3.0	<0.5
MW8	17-Oct-90	59.0	<1.0	<1.0	160.0	21.0	2.0	<1.0
MW8	24-Jan-91	160.0	<2.0	<5.0	450.0	13.0	9.0	27.0
MW8	17-Apr-91	210.0	<5.0	<5.0	830.0	16.0	<5.0	<5.0
MW8	31-Jul-91	85.0	<2.0	<2.0	350.0	30.0	<2.0	<2.0
MW8	22-Oct-91	40.0	<5.0	<5.0	630.0	20.0	<5.0	<5.0
MW8	23-Jan-92	160.0	<5.0	<5.0	690.0	29.0	<5.0	<5.0
MW8	23-Apr-92	130.0	<10.0	<10.0	1600.0	30.0	<10.0	<10.0
MW8	17-Jul-92	35.0	<2.0	<2.0	490.0	11.0	<2.0	<2.0
MW8	12-Oct-92	22.0	<1.0	<1.0	110.0	24.0	1.3	<1.0
MW8 (SP-D)	19-Jan-93	37.0	<0.5	<0.5	620.0	4.9	3.0	<0.5
MW8 (SP-D)	26-Feb-93	50.0	<0.5	<0.5	350.0	14.0	<0.5	<0.5
MW8 (SP-D)	11-Mar-93	44.9	<0.5	<0.5	130.0	25.0	<0.5	<0.5
MW8 (SP-D)	06-Apr-93	48.0	<1.0	<1.0	160.0	21.0	<1.0	<1.0
MW8 (SP-D)	04-May-93	29.0	<0.5	<0.5	89.0	14.0	<0.5	<0.5
MW8 (SP-D)	02-Jun-93	1.2 (t)	<1.0	<1.0	120.0	8.5	<1.0	<1.0
MW8 (Extr. Well)	16-Jun-93	66.8	<2.0	<2.0	86.0	31.0	1.4	<2.0
MW8 (SP-D)	16-Jun-93	62.0	<2.0	<2.0	102.0	24.0	<2.0	<2.0
MW8 (SP-D)	02-Sep-93	<1.0 (t)	<1.0	<1.0	83.0	11.0	<1.0	<1.0
MW8 (SP-D)	01-Oct-93	<1.0 (t)	<1.0	<1.0	41.0	10.0	<1.0	<1.0
MW8 (SP-D)	05-Nov-93	<1.0 (t)	<1.0	<1.0	56.0	11.0	<1.0	<1.0
MW8 (SP-D)	02-Dec-93	<1.0 (t)	<1.0	<1.0	68.0	11.0	<1.0	<1.0
MW8 (SP-D)	09-Mar-94	<1.0 (t)	<1.0	<1.0	130.0	4.4	<1.0	<1.0
MW8 (SP-D)	16-Jun-94	<1.0 (t)	<1.0	<1.0	37.0	13.0	<1.0	<1.0
MW8 (SP-D)	17-Oct-94	<1.0 (t)	<1.0	<1.0	2.5	2.5	<1.0	<1.0
MW8 (SP-D)	06-Dec-94	<1.0 (t)	<1.0	<1.0	5.5	1.4	<1.0	<1.0
MW8 (SP-D)	09-Mar-95	<1.0 (t)	<1.0	<1.0	16.0	3.4	<1.0	<1.0
MW9	10-Jul-89	63.0	<0.5	<0.5	13.0	38.0	16.0	<0.5
MW9	24-Oct-89	6.4	<0.5	<0.5	29.0	48.0	23.0	<0.5
MW9	07-Feb-90	55.0	<0.5	<0.5	15.0	30.0	7.1	<0.5

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4204 HOLLIS STREET, EMERYVILLE, CA
QUARTERLY GROUNDWATER MONITORING RESLUTS

Monitoring Well	Sampling Date	Concentration (ug/L) 1,2-DCE(a)	1,1-DCE(b)	1,2-DCA(c)	TCE(d)	PCE(e)	VC(f)	1,2-DP(g)
MW9	10-Jul-90	3.0	<0.2	<0.5	9.0	43.0	10.0	<0.5
MW9	17-Oct-90	70.0	<0.5	<0.5	14.0	32.0	4.6	<0.5
MW9	24-Jan-91	70.0	<2.0	<2.0	220.0	23.0	<2.0	<2.0
MW9	17-Apr-91	44.0	<0.5	<0.5	12.0	26.0	<0.5	<0.5
MW9	31-Jul-91	55.0	<0.5	<0.5	14.0	32.0	2.3	<0.5
MW9	22-Oct-91	71.0	<0.5	<0.5	15.0	33.0	2.8	<0.5
MW9	23-Jan-92	64.0	<0.5	<0.5	10.0	27.0	2.1	<0.5
MW9	23-Apr-92	22.0	<0.5	<0.5	11.0	29.0	<0.5	<0.5
MW9	17-Jul-92	26.0	<0.5	<0.5	13.0	32.0	<0.5	<0.5
MW9	12-Oct-92	41.0	<0.5	<0.5	17.0	36.0	3.0	<0.5
MW9	13-Jan-93	22.0	<0.5	<0.5	7.9	17.0	1.4	<0.5
MW9	30-Mar-93	26.0	<0.5	<0.5	9.6	22.0	2.1	<0.5
MW9	16-Jun-93	41.5	<2.0	<2.0	12.0	27.0	6.8	<2.0
MW9	17-Sep-93	1.6 (t)	<1.0	<1.0	11.0	21.0	3.5	<1.0
MW9	21-Dec-93	34.5	<0.5	<0.5	16.0	34.0	5.9	<0.5
MW9	14-Feb-94	30.8	<0.5	<0.5	11.0	25.0	4.2	<0.5
MW9	11-Apr-94	18.0	<0.5	<0.5	9.0	18.0	1.6	<0.5
MW9	15-Jul-94	42.4	<0.5	<0.5	15.0	24.0	7.1	<0.5
MW9	17-Oct-94	35.6	<0.5	<0.5	14.0	24.0	2.2	<0.5
MW9	29-Dec-94	<1.0 (t)	<1.0	<1.0	3.5	8.5	<1.0	<1.0
MW9	09-Mar-95	<1.0 (t)	<1.0	<1.0	3.4	8.4	<1.0	<1.0
MW10	10-Jul-89	85.0	0.8	<0.5	27.0	42.0	28.0	<0.5
MW10	24-Oct-89	104.8	<0.5	<0.5	37.0	28.0	6.9	<0.5
MW10	07-Feb-90	50.0	<0.5	<0.5	11.0	8.0	5.3	<0.5
MW10	10-Jul-90	9.0	<0.2	<0.5	30.0	76.0	54.0	<0.5
MW10-dup	10-Jul-90	10.0	5.0	<0.5	28.0	69.0	17.0	<0.5
MW10	17-Oct-90	140.0	<0.5	<0.5	35.0	37.0	13.0	<0.5
MW10	24-Jan-91	65.0	<0.5	<0.5	14.0	31.0	3.3	<0.5
MW10	17-Apr-91	210.0	<2.0	<2.0	48.0	52.0	10.0	<2.0
MW10	31-Jul-91	280.0	<2.0	<2.0	66.0	14.0	2.0	<2.0
MW10	22-Oct-91	160.0	<1.0	<1.0	40.0	40.0	5.0	<1.0
MW10	23-Jan-92	240.0	<2.0	<2.0	46.0	54.0	10.0	<2.0
MW10	23-Apr-92	210.0	<2.0	<2.0	89.0	110.0	<2.0	<2.0
MW10	17-Jul-92	180.0	<1.0	<1.0	78.0	82.0	15.0	<1.0
MW10	12-Oct-92	110.0	<1.0	<1.0	45.0	46.0	11.0	<1.0
MW10	13-Jan-93	190.0	<1.0	<1.0	78.0	110.0	19.0	<1.0
MW10	30-Mar-93	26.0	<0.5	<0.5	15.0	18.0	0.7	<0.5
MW10	16-Jun-93	3.2	<2.0	<2.0	2.7	4.7	<2.0	<2.0
MW10	17-Sep-93	<1.0 (t)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW10	21-Dec-93	<0.5	<0.5	<0.5	<0.5	1.6	<0.5	<0.5
MW10	14-Feb-94	9.9	<0.5	<0.5	5.4	4.4	<0.5	<0.5
MW10	11-Apr-94	3.7	<0.5	<0.5	2.2	1.5	<1.0	<0.5
MW10	15-Jul-94	<0.5	<0.5	<0.5	1.0	1.0	<0.5	<0.5
MW10	17-Oct-94	20.6	<0.5	<0.5	37.0	19.0	<0.5	<0.5
MW10	29-Dec-94	<1.0 (t)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW10	09-Mar-95	1.7 (t)	<1.0	<1.0	13.0	9.8	<1.0	<1.0
MW11	10-Jul-89	73.0	<1.0	4.0	160.0	12.0	16.0	5.7
MW11	24-Oct-89	188.0	<2.0	10.0	410.0	15.0	22.0	20.0
MW11	07-Feb-90	105.0	<2.0	2.0	270.0	8.0	11.0	13.0
MW11	10-Jul-90	4.0	<2.0	23.0	46.0	18.0	15.0	<0.5
MW11	17-Oct-90	150.0	<2.0	11.0	300.0	8.0	<2.0	31.0
MW11	24-Jan-91	120.0	<1.0	<1.0	29.0	29.0	3.0	<1.0
MW11	17-Apr-91	100.0	<1.0	14.0	160.0	12.0	5.0	29.0

TABLE 1

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4204 HOLLIS STREET, EMERYVILLE, CA
QUARTERLY GROUNDWATER MONITORING RESLUTS

Monitoring Well	Sampling Date	Concentration (ug/L) 1,2-DCE(a)	1,1-DCE(b)	1,2-DCA(c)	TCE(d)	PCE(e)	VC(f)	1,2-DP(g)
MW11	31-Jul-91	250.0	<2.0	<2.0	61.0	65.0	12.0	2.0
MW11	22-Oct-91	180.0	<2.0	5.0	560.0	20.0	5.0	30.0
MW11	23-Jan-92	160.0	<2.0	13.0	290.0	19.0	<2.0	21.0
MW11	23-Apr-92	30.0	<1.0	9.0	120.0	13.0	<1.0	14.0
MW11	17-Jul-92	26.0	<0.5	1.4	81.0	<0.5	<0.5	3.5
MW11	12-Oct-92	63.0	<3.0	4.4	450.0	16.0	5.2	17.0
MW11	13-Jan-93	29.0	<1.0	2.2	140.0	13.0	3.2	6.4
MW11	30-Mar-93	17.0	<0.5	<0.5	55.0	10.0	1.6	5.1
MW11	16-Jun-93	41.5	<2.0	6.3	230.0	20.0	7.0	7.2
MW11	17-Sep-93	<5.0 (t)	<5.0	<5.0	230.0	<5.0	<5.0	<5.0
MW11	21-Dec-93	32.2	<0.5	2.8	220.0	14.0	6.1	<0.5
MW11	14-Feb-94	11.8	<0.5	2.0	52.0	5.6	1.5	2.6
MW11	11-Apr-94	10.0	<0.5	<0.5	57.0	4.9	<1.0	2.7
MW11	27-Jun-94	<0.5	<0.5	<0.5	110.0	12.0	<0.5	<0.5
MW-11 (SP-E)	30-Sep-94	<1.0 (t)	<1.0	<1.0	2.6	2.8	<1.0	<1.0
MW-11 (SP-E)	06-Dec-94	<1.0 (t)	<1.0	<1.0	4.2	1.8	<1.0	<1.0
MW-11 (SP-E)	09-Mar-95	<1.0 (t)	<1.0	<1.0	2.3	1.1	<1.0	<1.0
MW12	02-Mar-94	35.3	<0.5	<0.5	170.0	16.0	6.8	<0.5
MW12	11-Apr-94	25.0	<0.5	<0.5	100.0	13.0	<1.0	<0.5
MW12	15-Jul-94	31.9	<0.5	<0.5	82.0	19.0	4.2	<0.5
MW12	17-Oct-94	<0.5	<0.5	<0.5	1.1	0.9	<0.5	<0.5
MW12	29-Dec-94	<1.0 (t)	<1.0	<1.0	28.0	11.0	<1.0	<1.0
MW12	09-Mar-95	<1.0 (t)	<1.0	<1.0	64.0	16.0	<1.0	<1.0
	Primary MCL	---	6	0.5	5	5	0.5	5

(a) 1,2-Dichloroethene
(b) 1,1-Dichloroethene
(c) 1,2-Dichloroethane
(d) Trichloroethene
(e) Tetrachloroethene
(f) Vinyl chloride
(g) 1,2-Dichloropropane
(t) trans-1,2-Dichloroethene

TABLE 2

ADDITIONAL GROUNDWATER ANALYSIS SUMMARY
DEL MONTE PLANT 35
4204 HOLLIS STREET, EMERYVILLE CA

Well	Date	TPH-Diesel µg/l	TPH-Gasoline µg/l	Benzene µg/l	Toluene µg/l	Ethylbenzene µg/l	Total Xylenes µg/l
MW-7	3/9/95	120	190	<0.50	0.6	1.2	2.5
	6/16/93	NA	250	<2.0	<2.0	<2.0	<2.0
MW-9	3/9/95	<50	<50	<0.50	<0.50	<0.50	<0.50
MW-10	3/9/95	<50	<50	<0.50	<0.50	<0.50	<0.50
MW-12	3/9/95	<50	<50	<0.50	<0.50	<0.50	<0.50

NA = not analyzed

TABLE 3

GROUNDWATER TREATMENT SYSTEM MONITORING RESULTS
DEL MONTE PLANT 35
4204 HOLLIS STREET, EMERYVILLE CA

Sample Port	Date	Concentrations (ug/L) B	T	E	X	PCE	TCE	VC	1,2-DCE
SP-A	14-Jan-93	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
SP-A	19-Jan-93	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
SP-A*	19-Jan-93	< 0.5	< 1.0	< 1.0	< 1.0	< 1.0	< 0.6	< 1.0	< 0.6
SP-A	27-Jan-93	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
SP-A	26-Feb-93	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
SP-A*	22-Mar-93	< 0.5	< 1.0	< 1.0	< 1.0	< 1.0	< 0.6	< 1.0	< 0.6
SP-A	06-Apr-93	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.9
SP-A	04-May-93	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	5.1
SP-A	02-Jun-93	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	< 1.0	< 1.0 t
SP-A	29-Jul-93	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	< 1.0	< 1.0 t
SP-A	02-Sep-93	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	< 1.0	< 1.0 t
SP-A	01-Oct-93	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	< 1.0	< 1.0 t
SP-A	05-Nov-93	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	3.7	< 1.0	1.0 t
SP-A	02-Dec-93	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	13	< 1.0	< 1.0 t
SP-A	09-Mar-94	NA	NA	NA	NA	NA	NA	NA	NA
SP-A	16-Jun-94	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0 t
SP-A	30-Sep-94	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0 t
SP-A	06-Dec-94	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0 t
SP-A**	08-Dec-94	<0.5	<0.5	<0.5	<0.5	<1.0	2.1	<1.0	<1.0 t
SP-A	09-Mar-95	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0 t
SP-B	14-Jan-93	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
SP-B	19-Jan-93	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
SP-B	27-Jan-93	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
SP-B	26-Feb-93	< 0.5	< 0.5	< 0.5	< 0.5	5.9	< 0.5	< 0.5	< 0.5
SP-B	06-Apr-93	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	11	< 0.5	27
SP-B	04-May-93	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	16	<0.5	39
SP-B	02-Jun-93	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	5.5	< 1.0	<1.0 t
SP-B	29-Jul-93	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	12	< 1.0	<1.0 t
SP-B	02-Sep-93	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	42	< 1.0	<1.0 t
SP-B	01-Oct-93	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	36	< 1.0	<1.0 t
SP-B	05-Nov-93	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	67	< 1.0	<1.0 t
SP-B	02-Dec-93	< 0.5	< 0.5	< 0.5	< 0.5	1.1	61	< 1.0	<1.0 t
SP-B	09-Mar-94	NA	NA	NA	NA	<1.0	4.9	<1.0	<1.0 t
SP-B	16-Jun-94	NA	NA	NA	NA	<1.0	26	<1.0	<1.0 t
SP-B	30-Sep-94	NA	NA	NA	NA	<1.0	1.8	<1.0	<1.0 t
SP-B	06-Dec-94	NA	NA	NA	NA	4.0	4.8	<1.0	<1.0 t
SP-B**	08-Dec-94	<0.5	<0.5	<0.5	<0.5	6.2	8.6	<1.0	<1.0 t
SP-B	09-Mar-95	NA	NA	NA	NA	<1.0	11	<1.0	<1.0 t
SP-C	14-Jan-93	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.9	< 0.5	< 0.5
SP-C	19-Jan-93	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	3.4	< 0.5	< 0.5
SP-C	27-Jan-93	< 0.5	< 0.5	< 0.5	< 0.5	6.6	250	< 0.5	19
SP-C	26-Feb-93	< 0.5	< 0.5	< 0.5	< 0.5	12	220	< 0.5	36
SP-C	11-Mar-93	NA	NA	NA	NA	17	100	< 0.5	37
SP-C	06-Apr-93	< 0.5	< 0.5	< 0.5	< 0.5	13	130	< 1.0	34
SP-C	04-May-93	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 3

GROUNDWATER TREATMENT SYSTEM MONITORING RESULTS
DEL MONTE PLANT 35
4204 HOLLIS STREET, EMERYVILLE CA

Sample Port	Date	Concentrations (ug/L) B	T	E	X	PCE	TCE	VC	1,2-DCE
SP-C	02-Jun-93	NA	NA	NA	NA	NA	NA	NA	NA
SP-C	29-Jul-93	NA	NA	NA	NA	NA	NA	NA	NA
SP-C	02-Sep-93	NA	NA	NA	NA	NA	NA	NA	NA
SP-C	01-Oct-93	NA	NA	NA	NA	NA	NA	NA	NA
SP-C	05-Nov-93	NA	NA	NA	NA	NA	NA	NA	NA
SP-C	02-Dec-93	NA	NA	NA	NA	NA	NA	NA	NA
SP-C	09-Mar-94	NA	NA	NA	NA	NA	NA	NA	NA
SP-C	16-Jun-94	NA	NA	NA	NA	NA	NA	NA	NA
SP-C	30-Sep-94	NA	NA	NA	NA	NA	NA	NA	NA
SP-C	08-Dec-94	NA	NA	NA	NA	NA	NA	NA	NA
SP-C	09-Mar-95	NA	NA	NA	NA	NA	NA	NA	NA
SP-D	14-Jan-93	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
SP-D	19-Jan-93	< 0.5	< 0.5	< 0.5	< 0.5	4.9	620	3.0	37
SP-D	26-Feb-93	< 0.5	< 0.5	< 0.5	< 0.5	14	350	< 0.5	50
SP-D	11-Mar-93	NA	NA	NA	NA	25	130	< 0.5	44.9
SP-D	06-Apr-93	NA	NA	NA	NA	21	160	< 1.0	48
SP-D	04-May-93	< 0.5	< 0.5	< 0.5	< 0.5	14	89	< 0.5	29
SP-D	02-Jun-93	< 0.5	< 0.5	< 0.5	< 0.5	8.5	130	< 1.0	1.2 t
SP-D	16-Jun-93	< 2.0	< 2.0	< 2.0	< 2.0	24	102	< 2.0	62
SP-D	29-Jul-93	< 0.5	< 0.5	< 0.5	< 0.5	7.2	60	< 1.0	<1.0 t
SP-D	02-Sep-93	< 0.5	< 0.5	< 0.5	< 0.5	11	83	< 1.0	<1.0 t
SP-D	01-Oct-93	< 0.5	< 0.5	< 0.5	< 0.5	10	41	< 1.0	<1.0 t
SP-D	05-Nov-93	< 0.5	< 0.5	< 0.5	< 0.5	11	56	< 1.0	<1.0 t
SP-D	02-Dec-93	< 0.5	< 0.5	< 0.5	< 0.5	11	68	< 1.0	<1.0 t
SP-D	09-Mar-94	NA	NA	NA	NA	4.4	130	<1.0	<1.0 t
SP-D	16-Jun-94	NA	NA	NA	NA	13	37	<1.0	<1.0 t
SP-D	30-Sep-94	NA	NA	NA	NA	2.5	2.5	<1.0	<1.0 t
SP-D	06-Dec-94	NA	NA	NA	NA	1.4	5.5	4.0	<1.0 t
SP-D	09-Mar-95	NA	NA	NA	NA	3.4	16	<1.0	<1.0 t
SP-E	30-Sep-94	NA	NA	NA	NA	2.8	2.6	<1.0	<1.0 t
SP-E	06-Dec-94	NA	NA	NA	NA	1.8	4.2	<1.0	<1.0 t
SP-E	09-Mar-95	NA	NA	NA	NA	1.1	2.3	<1.0	<1.0 t

(NA) Not Analyzed
(*) Sample collected by East Bay Municipal Utility District
(**) Sampled collected to monitor the water from the East Parcel.
B - benzene, T - toluene, E - ethylbenzene, X - xylenes
(PCE) perchloroethylene
(TCE) trichloroethylene
(VC) vinyl chloride
(1,2-DCE) 1,2-Dichloroethene (Total)
t trans-1,2-Dichloroethene

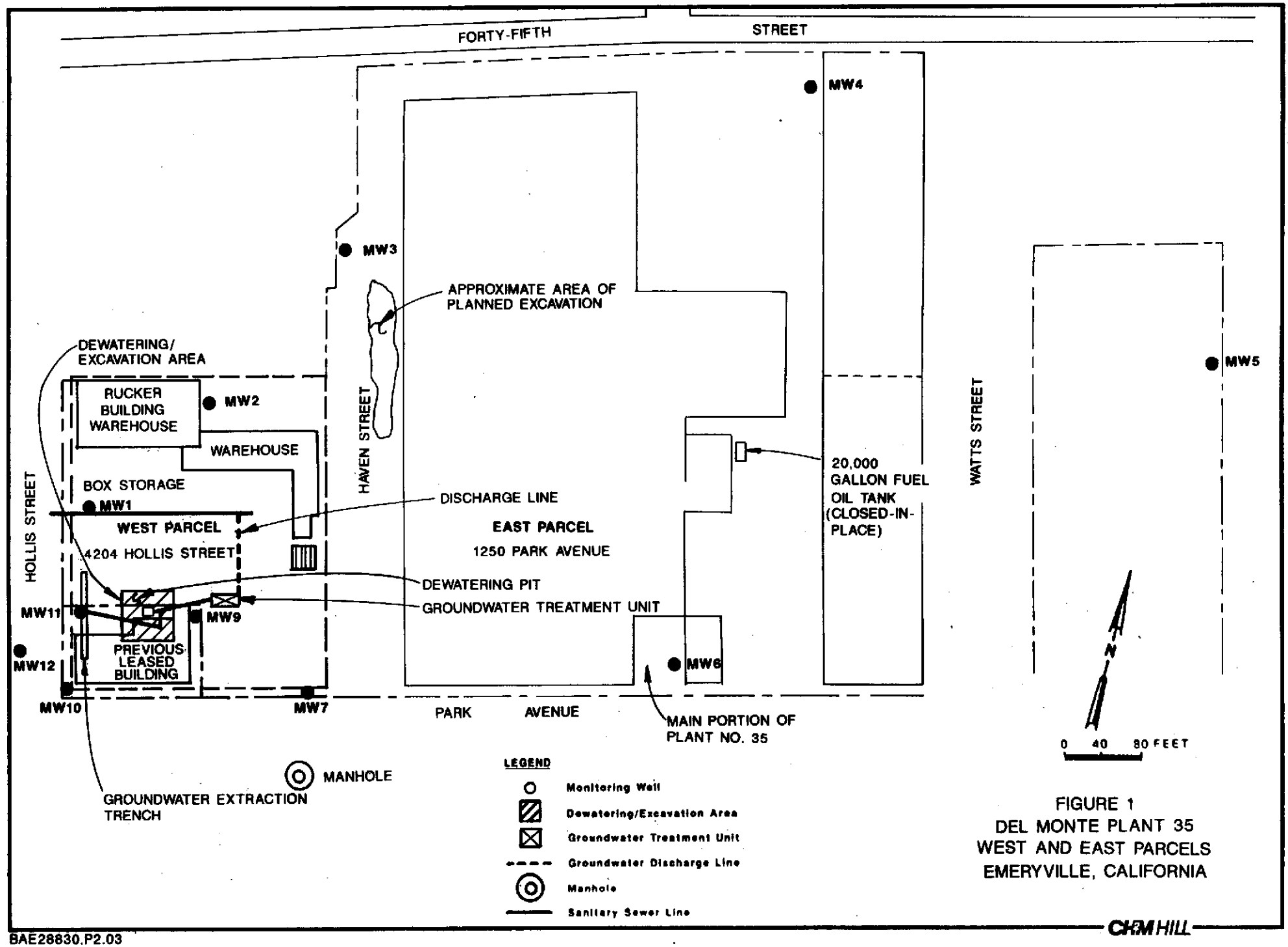


FIGURE 1
DEL MONTE PLANT 35
WEST AND EAST PARCELS
EMERYVILLE, CALIFORNIA

CH2M HILL

BAE28830.P2.03

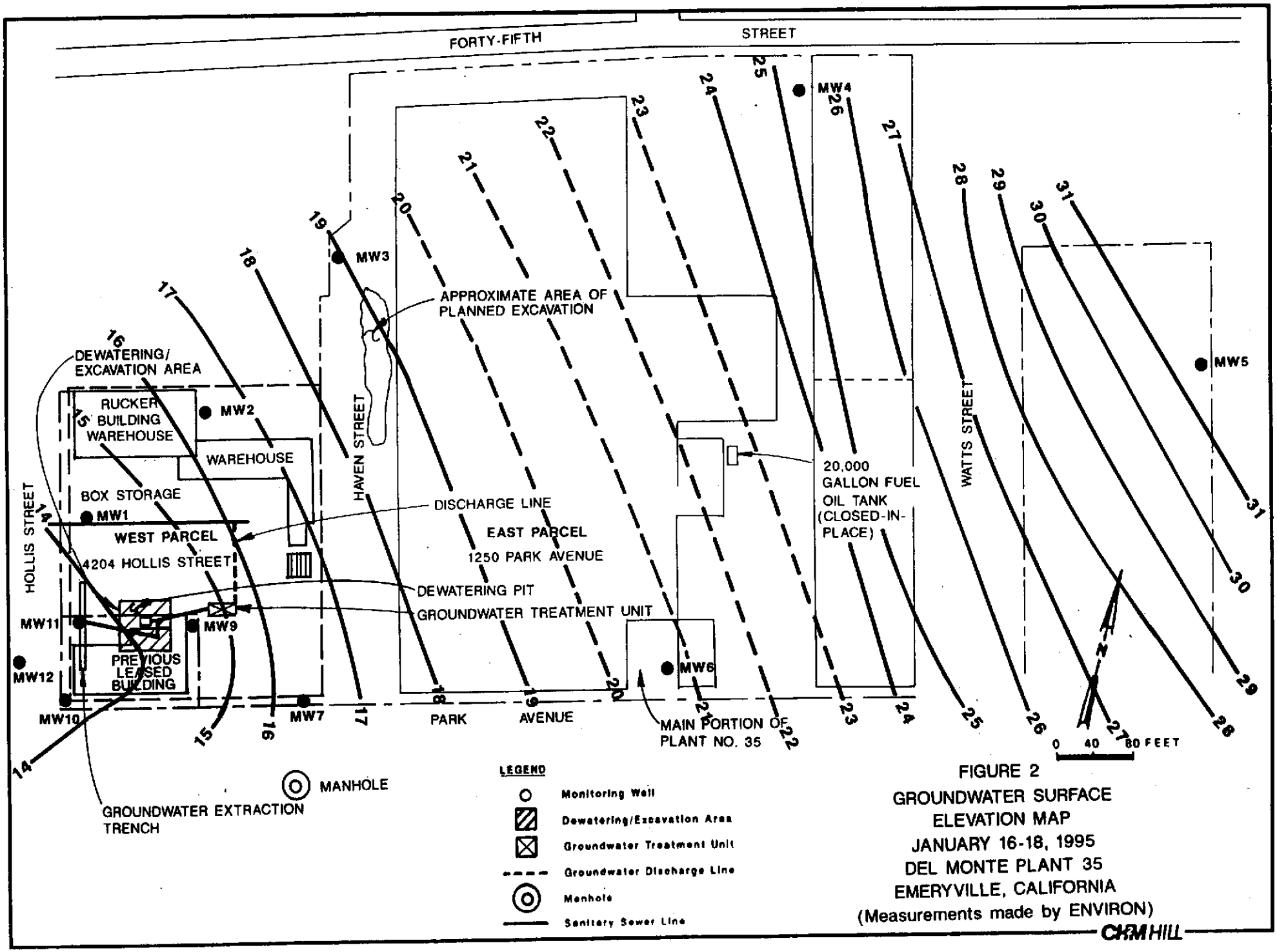
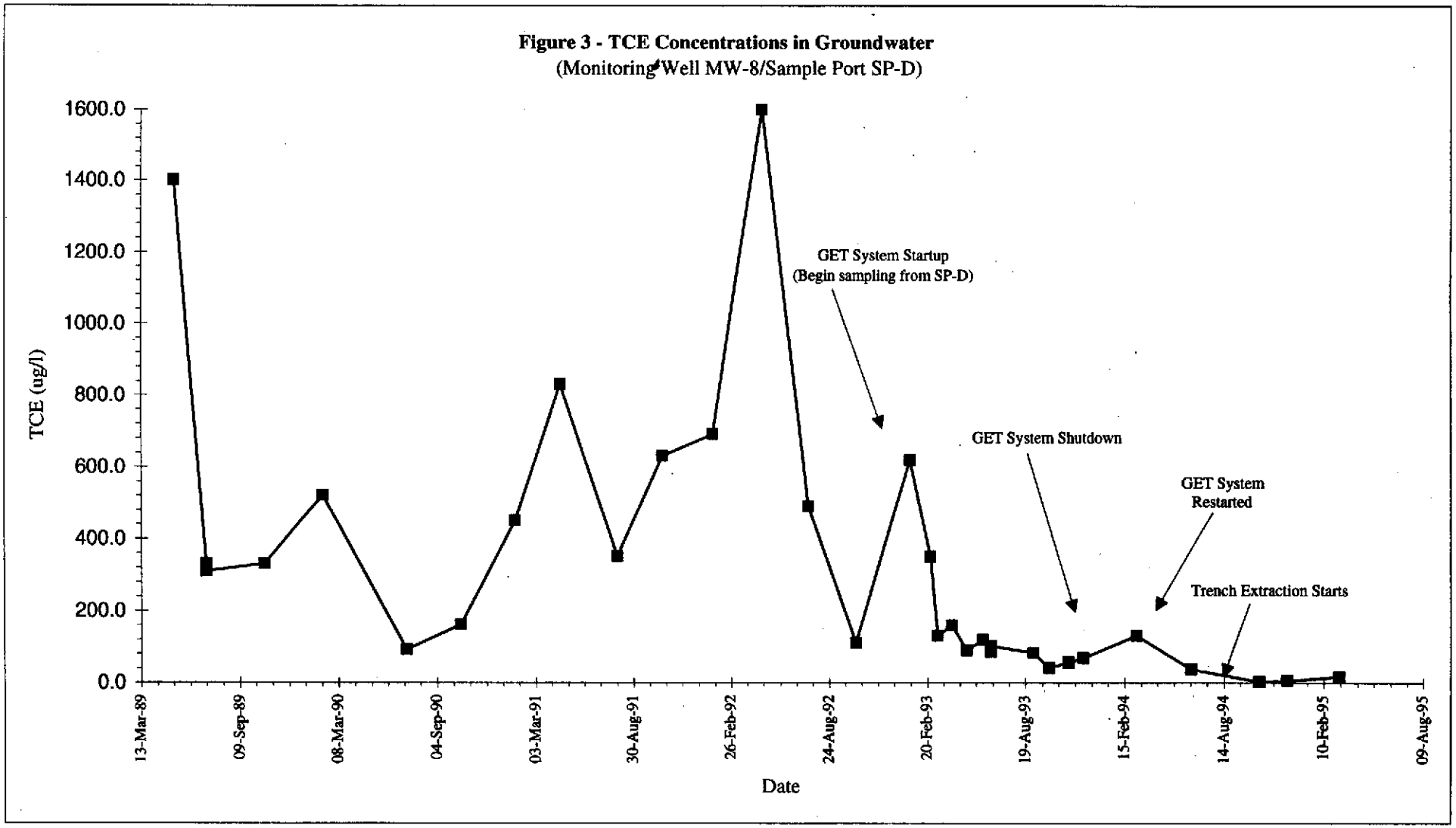


FIGURE 2
GROUNDWATER SURFACE ELEVATION MAP
JANUARY 16-18, 1995
DEL MONTE PLANT 35
EMERYVILLE, CALIFORNIA
(Measurements made by ENVIRON)

CH2M HILL

Figure 3 - TCE Concentrations in Groundwater
(Monitoring Well MW-8/Sample Port SP-D)



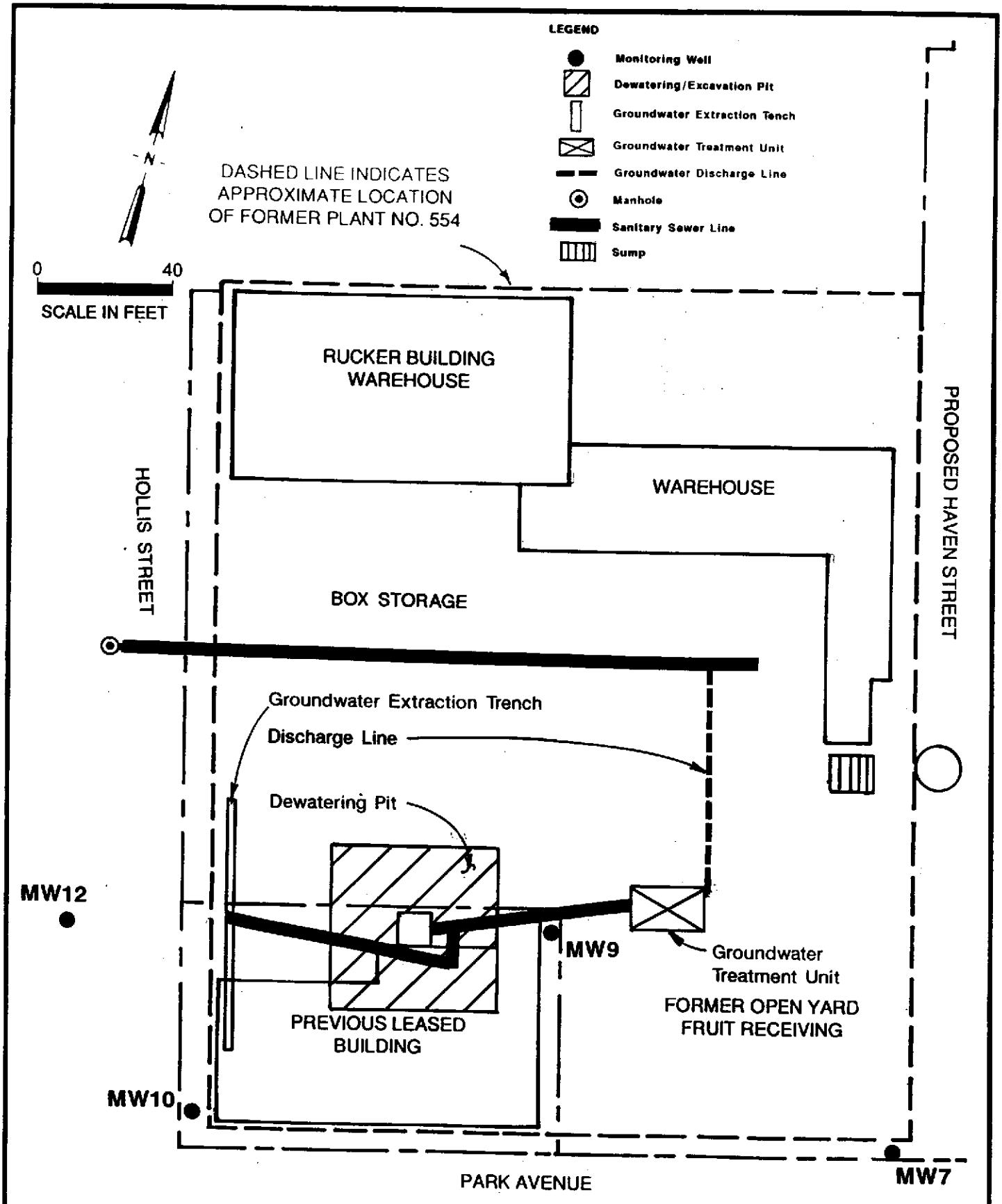
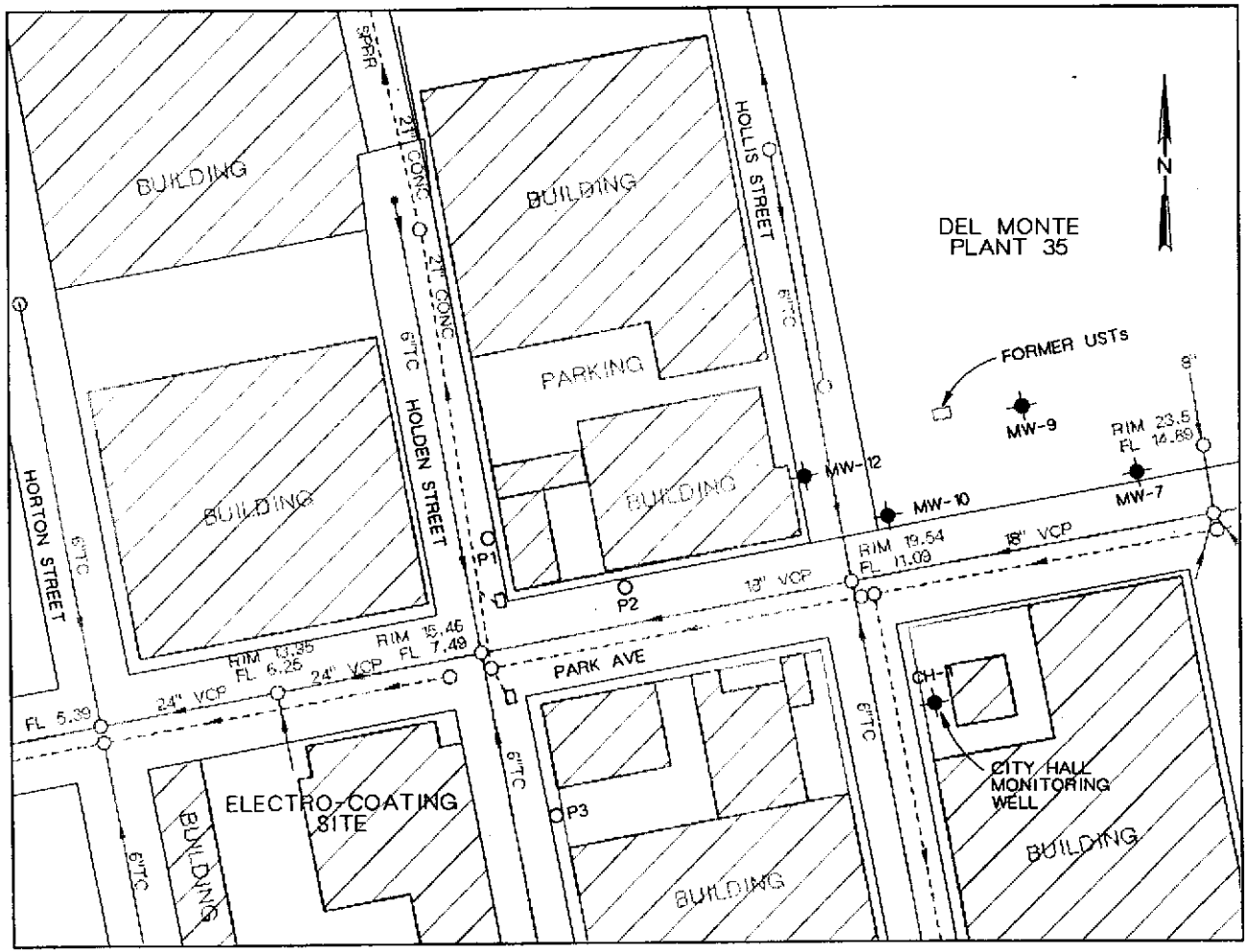


FIGURE 4
DEL MONTE PLANT 35
GROUNDWATER EXTRACTION SYSTEM
Emeryville, California



LEGEND:

- APPROXIMATE BUILDING LOCATION
- MW-11 — EXISTING MONITORING WELL
- P-1 — PIEZOMETER

0 100' 200' 300'

SCALE: 1" = 100'

FIGURE 5
PIEZOMETER LOCATIONS
DEL MONTE PLANT 35
EMERYVILLE, CALIFORNIA

CH2MHILL

H:*SFO28830*28830F05.DGN

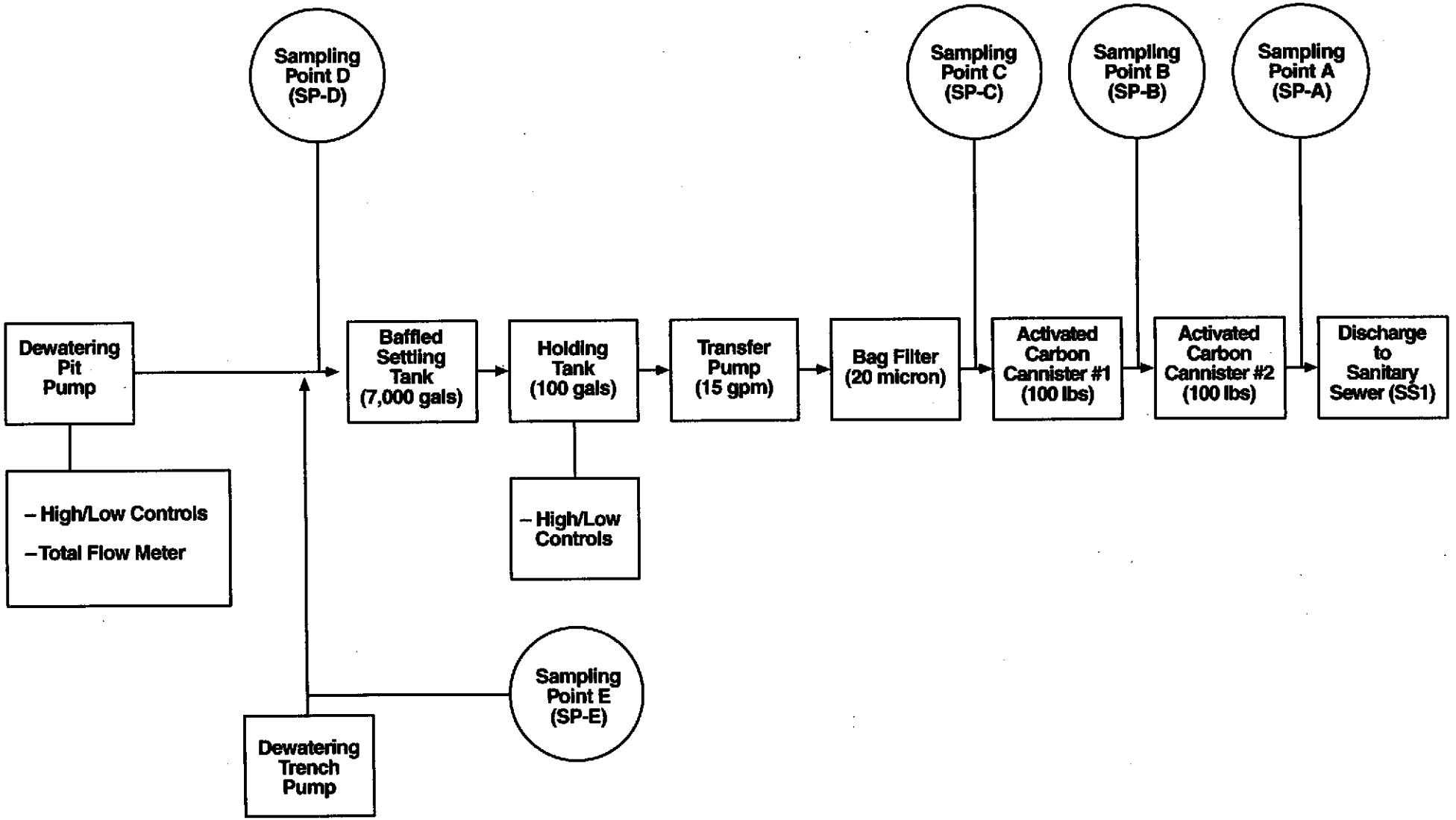


Figure 6
DEL MONTE PLANT 35
GROUNDWATER TREATMENT UNIT

ATTACHMENT A

Analytical Laboratory Reports

QAL
QUALITY ANALYTICAL
LABORATORIES, INC.

March 24, 1995

Ms. Madeline Wall
CH2M Hill/SFO
1111 Broadway, Suite 1200
PO Box 12681
Oakland, CA 94607-4046

RE: Analytical Data for: **Del Monte Plant #35**
Laboratory Reference Number: **R9623**

Dear Ms. Wall:

On **March 13, 1995**, QAL, Inc. received samples with a request for analysis. The analytical results and associated quality control data are enclosed.

It is our policy to store your samples for 30 days from the date of this letter. If extended storage is required, special arrangements can be accommodated upon early notification. The disposition of samples identified as hazardous will require special handling and you will be contacted if necessary.

QAL, Inc. appreciates your business and looks forward to serving you again. If you have any questions concerning your report or need any additional information, please call me at **(916) 244-5227.**

Sincerely,

Bryan Jones

Bryan Jones
Project Manager/Client Services

Enclosures

xc: Mr. Don Weltz

Quality Analytical
Laboratories Inc.

5090 Caterpillar Road,
Redding, CA 96003-1412

916 244-5227
Fax No. 916 244-4109

TABLE OF CONTENTS

QAL Reference No. R9623

Quality Analytical Laboratories Inc.

5090 Caterpillar Road, Redding, CA 96003-1412

916 244-5227
Fax No. 916 244-4109

Organic Data Qualifiers

U -- Indicates the compound was analyzed for but not detected. The number adjacent to the "U" qualifier indicates the reporting limit for that compound. The reporting limit can vary from sample to sample depending on dilution factors or percent moisture adjustments when indicated.

J -- Indicates an estimated value. It is used when the data indicates the presence of a compound below the reporting limit.

C -- The "C" flag indicates the presence of this compound has been confirmed by GC/MS analysis.

B -- This flag is used when the analyte is found in the associated blank as well as the sample. This notation indicates possible blank contamination and suggests that the data user evaluate these compounds and their amounts carefully.

E -- This flag indicates that the value reported exceeds the linear calibration range for that compound. Therefore, the sample should be re-analyzed at an appropriate dilution. The "E" qualified amount is an estimated concentration, and the results of the dilution will be reported on a separate Form I.

D -- This qualifier indicates compounds which have been identified during a diluted reanalysis. "D" qualifiers are used for samples that have been analyzed initially at a lesser dilution than required for accurate quantitation.

P -- This qualifier is used for Pesticide/Aroclor target analytes when there is a greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form I and flagged with a "P.

N -- This qualifier indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds(TIC), where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as Chlorinated Hydrocarbon, the "N" qualifier is not used.

A -- This qualifier indicates that a TIC is a suspected aldol-condensation product.

Quality Analytical Laboratories Inc.
5090 Caterpillar Road, Redding, CA 96003-1412
916 244-5227 Fax No. 916 244-4109

Organic Sample ID Qualifiers

The qualifiers that may be appended to the Lab Sample ID and/or the Client Sample ID for organic analyses are defined below:

DL -- Diluted reanalysis. Indicates that the results of the original analysis of the sample contained compounds exceeding the calibration range. The sample was diluted and re-analyzed. May be followed by a digit to indicate multiple dilutions of the sample. The results of more than one diluted re-analysis may be reported.

R -- Reanalysis. The extract was re-analyzed without re-extraction. The "R" is not used if the sample was also re-extracted. May be followed by a digit to indicate multiple reanalyses of the sample at the same dilution.

RE -- Re-extraction analysis. The sample was re-extracted and re-analyzed. May be followed by a digit to indicate multiple re-extracted analyses of the sample at the same dilution.

MS -- Matrix spike (may be followed by a digit to indicate multiple matrix spikes within a sample set).

MSD -- Matrix spike duplicate (may be followed by a digit to indicate multiple matrix spikes within a sample set.)

Quality Analytical Laboratories Inc.
5090 Caterpillar Road, Redding, CA 96003-1412
916 244-5227
Fax No. 916 244-4109

ORGANIC ANALYTICAL METHODS

Sample Preparation

SW-846, 3rd Edition, Update I, July 1992

3510A . . . Separatory funnel liquid-liquid extraction
3520A . . . Continuous liquid-liquid extraction
3540 . . . . Soxhlet extraction
3550 . . . . Ultrasonic extraction
3580A . . . Waste dilution
3610A . . . Alumina column cleanup
3620A . . . Florisil column cleanup
3630 . . . . Silica gel cleanup
3640 . . . . GPC cleanup
3650A . . . Acid-base partition cleanup
3660A . . . Sulfur cleanup
5030A . . . Purge-and-trap
1311 . . . . TCLP extraction

EPA Contract Laboratory Program

Florisil cleanup for Pesticide/PCBs, SOW, OLM01.9
GPC cleanup, SOW, OLM01.9

Non-EPA and Internal Methods

Tissumizer extraction - Internal Method

Analysis by HPLC

SW-846, 3rd Edition, Update I, July 1992

8310 . . . . Polynuclear aromatic hydrocarbons
8315 . . . . Formaldehyde

Analysis by GC

40CFR Part 136

601 . . . . . Purgeable halocarbons
602 . . . . . Purgeable aromatics
604 . . . . . Phenolic acids
608 . . . . . Organochlorine Pesticide/PCBs
610 . . . . . Polynuclear aromatic hydrocarbons
614/622 . . Organophosphorus pesticides

SW-846, 3rd Edition, Update I, July 1992

8010A . . . Halogenated volatile organics
8020 . . . . Aromatic volatile organics
8021 . . . . Halogenated aromatic volatiles
8011A . . . EDB/DBCP by microextraction
8015MOD 1,4-Dioxane by GC/FID
8040A . . . Phenolic acids
8080 . . . . Organochlorine Pesticide/PCBs
8100 . . . . Polynuclear aromatic hydrocarbons
8140 . . . . Organophosphorus pesticides
8150A . . . Herbicides

EPA-600/4-88-039, 10/93

501.1 . . . . THMs by purge-and-trap
504 . . . . . EDB/DBCP by microextraction

EPA-600/4-88-039, 12/88

502.2 . . . . SDWA Volatiles by purge-and-trap

EPA Contract Laboratory Program

Analysis of Pesticide/PCBs, SOW, OLM01.9
LL Analysis of Pesticide/PCBs, Low Conc. Water-10/92

Analysis by GC (continued)

Non-EPA and Internal Methods

465d . . . . Purge-and-trap volatile compounds in water State of MN
CPAR . . . Chlorinated phenols. CPAR Project Report 825-1, Canadian Pulp and Paper Research Institute, 3/79
THF/Gas . Total Fuel Hydrocarbons/Gasoline, CA LUFT, 5/88
GRO(AK) . Gasoline Range Organics, AK DEC, AK 101, 2/93
GRO(WI) . Gasoline Range Organics, WI DNR, SW-140, 7/93
TFH/Diesel Total Fuel Hydrocarbons/Diesel, CA LUFT, 5/88
DRO(AK) . Diesel Range Organics, AK DEC, AK 101, 2/93
DRO(WI) . Diesel Range Organics, WI DNR, SW-140, 7/93
HMPA . . . Hexamethylphosphoramide - Internal Method
FC143 . . . Perfluorooctanoic acid - Internal Method
Glycols . . Selected glycols - Internal Method
PCP . . . . Pentachlorophenol - Internal Method

Analysis by GC/MS

40CFR Part 136

624 . . . . . Purge-and-trap volatile compounds
625 . . . . . Extractable semivolatile compounds

SW-846, 3rd Edition, Update I, July 1992

8240A . . . Purge-and-trap volatile compounds
8260 . . . . Purge-and-trap volatile compounds
8270A . . . Extractable semivolatile compounds

EPA-600/4-88-039, 10/93

524.2 . . . . Purge-and-trap volatile compounds

EPA Contract Laboratory Program

VOAs . . . Purge-and-trap volatile compounds, SOW, OLM01.9
LL VOAs . Purge-and-trap volatile compounds, Low Concentration Water for Organics, 10/92
SVOAs . . Extractable semivolatile compounds, SOW, OLM01.9
LL SVOAs Extractable semivolatile compounds, Low Concentration Water for Organics, 10/92

Non-EPA and Internal Methods

LL PNAs . Selected parts-per-trillion PNAs in water, Internal Method
LL Acids . Selected phenolic acids - Internal Method
PNAs . . . Selected parts-per billion PNAs in water or soil - Internal Method
LL SIM . . Selected compounds by Selected Ion Monitoring - Internal Method

Sample ID Cross-reference Table

QAL, Inc. Lab Sample ID		Client Sample ID	Collect Date	Sample Matrix	Additional Description
FS = Field Sample; TB = Trip Blank					
R9623001	FS	MW7	03/09/95	Water	
R9623002	FS	MW9	03/09/95	Water	
R9623003	FS	MW10	03/09/95	Water	
R9623004	FS	MW12	03/09/95	Water	
R9623005	TB	TRIP	03/09/95	Water	

The above lab sample ID's and cross reference information apply to samples as received by the laboratory. Modifiers to the lab sample ID may be added for internal tracking purposes. Any modified sample ID will be reflected in the appropriate case narrative only.

Quality Analytical Laboratories Inc.
5090 Caterpillar Road, Redding, CA 96003-1412
916 244-5227 Fax No. 916 244-4109

CASE NARRATIVE
GC PURGEABLE HALOCARBONS

QAL Lab Reference No./SDG.: R9623

Project: DEL MONTE #35

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody included with this data package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHOD

Preparation: N/A
Cleanup: N/A
Analysis: EPA 601

IV. PREPARATION

Sample preparation proceeded normally.

V. ANALYSIS

A. Calibration : All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Surrogates: All acceptance criteria were met.

D. Spikes: All acceptance criteria were met.

E. Samples: Sample analyses proceeded normally.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and QAL, Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

SIGNED: Mark Stan (for Brian Geers) DATE: 3/16/95

Brian Geers
Manager, Organics Department

CASE NARRATIVE
Addendum

Sample Information

LAB SAMPLE ID	CLIENT SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	SAMPLE pH[1]
R9623001	MW7	WATER	03/09/95	N/A	03/14/95	< 2
R9623002	MW9	WATER	03/09/95	N/A	03/14/95	< 2
R9623003	MW10	WATER	03/09/95	N/A	03/14/95	< 2
R9623004	MW12	WATER	03/09/95	N/A	03/14/95	< 2
R9623005	TRIP	WATER	03/09/95	N/A	03/14/95	< 2
VWB10314	VWB10314	WATER	N/A	N/A	03/14/95	N/A

[1] Applies to samples designated for purgeable VOA analysis only.

Report of Analytical Data - Purgeable Halocarbons

Client:	CH2M Hill/SFO	Laboratory:	QAL	Date Sampled:	03/09/95
Project:	Del Monte #35	Lab Sample ID:	R9623001	Date Received:	03/13/95
Proj No:	N/A	% Moisture:	N/A	Date Extracted:	N/A
Method:	EPA 601(MOD)	Dilution Factor:	1.0	Date Analyzed:	03/14/95
Matrix:	Water	Instrument ID:	VARIAN-3600	Analyst:	C.D.
Sampler:	N/A			Date Reported:	03/16/95

Client Sample ID/Description: MW7

CAS Number	Compound	Reporting Limit	Sample Result	Reporting Units
74-87-3	Chloromethane	1.0	U	ug/L
74-83-9	Bromomethane	1.0	U	ug/L
75-71-8	Dichlorodifluoromethane	1.0	U	ug/L
75-01-4	Vinyl chloride	1.0	U	ug/L
75-00-3	Chloroethane	1.0	U	ug/L
75-09-2	Dichloromethane	5.0	U	ug/L
75-69-4	Trichlorofluoromethane	1.0	U	ug/L
75-35-4	1,1-Dichloroethene	1.0	U	ug/L
75-34-3	1,1-Dichloroethane	1.0	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1.0	U	ug/L
67-66-3	Chloroform	1.0	U	ug/L
107-06-2	1,2-Dichloroethane	1.0	U	ug/L
71-55-6	1,1,1-Trichloroethane	1.0	U	ug/L
56-23-5	Carbon tetrachloride	1.0	U	ug/L
75-27-4	Bromodichloromethane	1.0	U	ug/L
78-87-5	1,2-Dichloropropane	1.0	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1.0	U	ug/L
79-01-6	Trichloroethene	1.0	8.4	ug/L
124-48-1	Dibromochloromethane	1.0	U	ug/L
79-00-5	1,1,2-Trichloroethane	1.0	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1.0	U	ug/L
75-25-2	Bromoform	1.0	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	ug/L
127-18-4	Tetrachloroethene	1.0	6.8	ug/L
108-90-7	Chlorobenzene	1.0	U	ug/L
541-73-1	1,3-Dichlorobenzene	1.0	U	ug/L
95-50-1	1,2-Dichlorobenzene	1.0	U	ug/L
106-46-7	1,4-Dichlorobenzene	1.0	U	ug/L
110-56-5	1,4-Dichlorobutane-SS		91	% rec.

U = Compound analyzed for but not detected above reporting limit.
SS = Surrogate Standard reported as percent recovery.

Comments:

Approved by:

FORM 1

kdh.023

Report of Analytical Data - Purgeable Halocarbons

Client:	CH2M Hill/SFO	Laboratory:	QAL	Date Sampled:	03/09/95
Project:	Del Monte #35	Lab Sample ID:	R9623002	Date Received:	03/13/95
Proj No:	N/A	% Moisture:	N/A	Date Extracted:	N/A
Method:	EPA 601(MOD)	Dilution Factor:	1.0	Date Analyzed:	03/14/95
Matrix:	Water	Instrument ID:	VARIAN-3600	Analyst:	C.D.
Sampler:	N/A			Date Reported:	03/16/95

Client Sample ID/Description: MW9

CAS Number	Compound	Reporting Limit	Sample Result	Reporting Units
74-87-3	Chloromethane	1.0	U	ug/L
74-83-9	Bromomethane	1.0	U	ug/L
75-71-8	Dichlorodifluoromethane	1.0	U	ug/L
75-01-4	Vinyl chloride	1.0	U	ug/L
75-00-3	Chloroethane	1.0	U	ug/L
75-09-2	Dichloromethane	5.0	U	ug/L
75-69-4	Trichlorofluoromethane	1.0	U	ug/L
75-35-4	1,1-Dichloroethene	1.0	U	ug/L
75-34-3	1,1-Dichloroethane	1.0	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1.0	U	ug/L
67-66-3	Chloroform	1.0	U	ug/L
107-06-2	1,2-Dichloroethane	1.0	U	ug/L
71-55-6	1,1,1-Trichloroethane	1.0	U	ug/L
56-23-5	Carbon tetrachloride	1.0	U	ug/L
75-27-4	Bromodichloromethane	1.0	U	ug/L
78-87-5	1,2-Dichloropropane	1.0	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1.0	U	ug/L
79-01-6	Trichloroethene	1.0	3.4	ug/L
124-48-1	Dibromochloromethane	1.0	U	ug/L
79-00-5	1,1,2-Trichloroethane	1.0	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1.0	U	ug/L
75-25-2	Bromoform	1.0	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	ug/L
127-18-4	Tetrachloroethene	1.0	8.4	ug/L
108-90-7	Chlorobenzene	1.0	U	ug/L
541-73-1	1,3-Dichlorobenzene	1.0	U	ug/L
95-50-1	1,2-Dichlorobenzene	1.0	U	ug/L
106-46-7	1,4-Dichlorobenzene	1.0	U	ug/L
110-56-5	1,4-Dichlorobutane-SS		103	% rec.

U = Compound analyzed for but not detected above reporting limit.
SS = Surrogate Standard reported as percent recovery.

Comments:

Approved by:

FORM I

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Report of Analytical Data - Purgeable Halocarbons

Client:	CH2M Hill/SFO	Laboratory:	QAL	Date Sampled:	03/09/95
Project:	Del Monte #35	Lab Sample ID:	R9623003	Date Received:	03/13/95
Proj No:	N/A	% Moisture:	N/A	Date Extracted:	N/A
Method:	EPA 601(MOD)	Dilution Factor:	1.0	Date Analyzed:	03/14/95
Matrix:	Water	Instrument ID:	VARIAN-3600	Analyst:	C.D.
Sampler:	N/A			Date Reported:	03/16/95

Client Sample ID/Description: MW10

CAS Number	Compound	Reporting Limit	Sample Result	Reporting Units
74-87-3	Chloromethane	1.0	U	ug/L
74-83-9	Bromomethane	1.0	U	ug/L
75-71-8	Dichlorodifluoromethane	1.0	U	ug/L
75-01-4	Vinyl chloride	1.0	U	ug/L
75-00-3	Chloroethane	1.0	U	ug/L
75-09-2	Dichloromethane	5.0	U	ug/L
75-69-4	Trichlorofluoromethane	1.0	U	ug/L
75-35-4	1,1-Dichloroethene	1.0	U	ug/L
75-34-3	1,1-Dichloroethane	1.0	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1.0	1.7	ug/L
67-66-3	Chloroform	1.0	U	ug/L
107-06-2	1,2-Dichloroethane	1.0	U	ug/L
71-55-6	1,1,1-Trichloroethane	1.0	U	ug/L
56-23-5	Carbon tetrachloride	1.0	U	ug/L
75-27-4	Bromodichloromethane	1.0	U	ug/L
78-87-5	1,2-Dichloropropane	1.0	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1.0	U	ug/L
79-01-6	Trichloroethene	1.0	13	ug/L
124-48-1	Dibromochloromethane	1.0	U	ug/L
79-00-5	1,1,2-Trichloroethane	1.0	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1.0	U	ug/L
75-25-2	Bromoform	1.0	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	ug/L
127-18-4	Tetrachloroethene	1.0	9.8	ug/L
108-90-7	Chlorobenzene	1.0	U	ug/L
541-73-1	1,3-Dichlorobenzene	1.0	U	ug/L
95-50-1	1,2-Dichlorobenzene	1.0	U	ug/L
106-46-7	1,4-Dichlorobenzene	1.0	U	ug/L
110-56-5	1,4-Dichlorobutane-SS		109	% rec.

U = Compound analyzed for but not detected above reporting limit.
SS = Surrogate Standard reported as percent recovery.

Comments:

Approved by:

FORM I

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Report of Analytical Data - Purgeable Halocarbons

Client:	CH2M Hill/SFO	Laboratory:	QAL	Date Sampled:	03/09/95
Project:	Del Monte #35	Lab Sample ID:	R9623004	Date Received:	03/13/95
Proj No:	N/A	% Moisture:	N/A	Date Extracted:	N/A
Method:	EPA 601(MOD)	Dilution Factor:	1.0	Date Analyzed:	03/14/95
Matrix:	Water	Instrument ID:	VARIAN-3600	Analyst:	C.D.
Sampler:	N/A			Date Reported:	03/16/95

Client Sample ID/Description: MW12

CAS Number	Compound	Reporting Limit	Sample Result	Reporting Units
74-87-3	Chloromethane	1.0	U	ug/L
74-83-9	Bromomethane	1.0	U	ug/L
75-71-8	Dichlorodifluoromethane	1.0	U	ug/L
75-01-4	Vinyl chloride	1.0	U	ug/L
75-00-3	Chloroethane	1.0	U	ug/L
75-09-2	Dichloromethane	5.0	U	ug/L
75-69-4	Trichlorofluoromethane	1.0	U	ug/L
75-35-4	1,1-Dichloroethene	1.0	U	ug/L
75-34-3	1,1-Dichloroethane	1.0	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1.0	U	ug/L
67-66-3	Chloroform	1.0	U	ug/L
107-06-2	1,2-Dichloroethane	1.0	U	ug/L
71-55-6	1,1,1-Trichloroethane	1.0	U	ug/L
56-23-5	Carbon tetrachloride	1.0	U	ug/L
75-27-4	Bromodichloromethane	1.0	U	ug/L
78-87-5	1,2-Dichloropropane	1.0	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1.0	U	ug/L
79-01-6	Trichloroethene	1.0	64	ug/L
124-48-1	Dibromochloromethane	1.0	U	ug/L
79-00-5	1,1,2-Trichloroethane	1.0	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1.0	U	ug/L
75-25-2	Bromoform	1.0	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	ug/L
127-18-4	Tetrachloroethene	1.0	16	ug/L
108-90-7	Chlorobenzene	1.0	U	ug/L
541-73-1	1,3-Dichlorobenzene	1.0	U	ug/L
95-50-1	1,2-Dichlorobenzene	1.0	U	ug/L
106-46-7	1,4-Dichlorobenzene	1.0	U	ug/L
110-56-5	1,4-Dichlorobutane-SS		109	% rec.

U = Compound analyzed for but not detected above reporting limit.
SS = Surrogate Standard reported as percent recovery.

Comments:

Approved by:

FORM I

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Report of Analytical Data - Purgeable Halocarbons

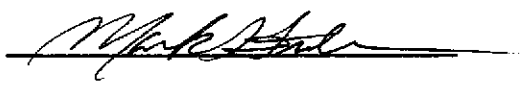
Client:	CH2M Hill/SFO	Laboratory:	QAL	Date Sampled:	03/09/95
Project:	Del Monte #35	Lab Sample ID:	R9623005	Date Received:	03/13/95
Proj No:	N/A	% Moisture:	N/A	Date Extracted:	N/A
Method:	EPA 601(MOD)	Dilution Factor:	1.0	Date Analyzed:	03/14/95
Matrix:	Water	Instrument ID:	VARIAN-3600	Analyst:	C.D.
Sampler:	N/A			Date Reported:	03/16/95

Client Sample ID/Description: TRIP

CAS Number	Compound	Reporting Limit	Sample Result		Reporting Units
74-87-3	Chloromethane	1.0	U		ug/L
74-83-9	Bromomethane	1.0	U		ug/L
75-71-8	Dichlorodifluoromethane	1.0	U		ug/L
75-01-4	Vinyl chloride	1.0	U		ug/L
75-00-3	Chloroethane	1.0	U		ug/L
75-09-2	Dichloromethane	5.0	U		ug/L
75-69-4	Trichlorofluoromethane	1.0	U		ug/L
75-35-4	1,1-Dichloroethene	1.0	U		ug/L
75-34-3	1,1-Dichloroethane	1.0	U		ug/L
156-60-5	trans-1,2-Dichloroethene	1.0	U		ug/L
67-66-3	Chloroform	1.0	U		ug/L
107-06-2	1,2-Dichloroethane	1.0	U		ug/L
71-55-6	1,1,1-Trichloroethane	1.0	U		ug/L
56-23-5	Carbon tetrachloride	1.0	U		ug/L
75-27-4	Bromodichloromethane	1.0	U		ug/L
78-87-5	1,2-Dichloropropane	1.0	U		ug/L
10061-01-5	cis-1,3-Dichloropropene	1.0	U		ug/L
79-01-6	Trichloroethene	1.0	U		ug/L
124-48-1	Dibromochloromethane	1.0	U		ug/L
79-00-5	1,1,2-Trichloroethane	1.0	U		ug/L
10061-02-6	trans-1,3-Dichloropropene	1.0	U		ug/L
75-25-2	Bromoform	1.0	U		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U		ug/L
127-18-4	Tetrachloroethene	1.0	U		ug/L
108-90-7	Chlorobenzene	1.0	U		ug/L
541-73-1	1,3-Dichlorobenzene	1.0	U		ug/L
95-50-1	1,2-Dichlorobenzene	1.0	U		ug/L
106-46-7	1,4-Dichlorobenzene	1.0	U		ug/L
110-56-5	1,4-Dichlorobutane-SS		102		% rec.

U = Compound analyzed for but not detected above reporting limit.
SS = Surrogate Standard reported as percent recovery.

Comments:

Approved by: 

FORM 1

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Report of Analytical Data - Purgeable Halocarbons

Client:	N/A	Laboratory:	QAL	Date Sampled:	N/A
Project:	N/A	Lab Sample ID:	VWB10314	Date Received:	N/A
Proj No:	N/A	% Moisture:	N/A	Date Extracted:	N/A
Method:	EPA 601(MOD)	Dilution Factor:	1.0	Date Analyzed:	03/14/95
Matrix:	Water	Instrument ID:	VARIAN-3600	Analyst:	C.D.
Sampler:	N/A			Date Reported:	03/16/95

Client Sample ID/Description: VWB10314

CAS Number	Compound	Reporting Limit	Method Blank Result		Reporting Units
74-87-3	Chloromethane	1.0	U		ug/L
74-83-9	Bromomethane	1.0	U		ug/L
75-71-8	Dichlorodifluoromethane	1.0	U		ug/L
75-01-4	Vinyl chloride	1.0	U		ug/L
75-00-3	Chloroethane	1.0	U		ug/L
75-09-2	Dichloromethane	5.0	U		ug/L
75-69-4	Trichlorofluoromethane	1.0	U		ug/L
75-35-4	1,1-Dichloroethene	1.0	U		ug/L
75-34-3	1,1-Dichloroethane	1.0	U		ug/L
156-60-5	trans-1,2-Dichloroethene	1.0	U		ug/L
67-66-3	Chloroform	1.0	U		ug/L
107-06-2	1,2-Dichloroethane	1.0	U		ug/L
71-55-6	1,1,1-Trichloroethane	1.0	U		ug/L
56-23-5	Carbon tetrachloride	1.0	U		ug/L
75-27-4	Bromodichloromethane	1.0	U		ug/L
78-87-5	1,2-Dichloropropane	1.0	U		ug/L
10061-01-5	cis-1,3-Dichloropropene	1.0	U		ug/L
79-01-6	Trichloroethene	1.0	U		ug/L
124-48-1	Dibromochloromethane	1.0	U		ug/L
79-00-5	1,1,2-Trichloroethane	1.0	U		ug/L
10061-02-6	trans-1,3-Dichloropropene	1.0	U		ug/L
75-25-2	Bromoform	1.0	U		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U		ug/L
127-18-4	Tetrachloroethene	1.0	U		ug/L
108-90-7	Chlorobenzene	1.0	U		ug/L
541-73-1	1,3-Dichlorobenzene	1.0	U		ug/L
95-50-1	1,2-Dichlorobenzene	1.0	U		ug/L
106-46-7	1,4-Dichlorobenzene	1.0	U		ug/L
110-56-5	1,4-Dichlorobutane-SS		105		% rec.

U = Compound analyzed for but not detected above reporting limit.
SS = Surrogate Standard reported as percent recovery.

Comments:

Approved by:

FORM I

kdh.023

CASE NARRATIVE
GC PURGEABLE AROMATICS/TFH GASOLINE

QAL Lab Reference No./SDG.: R9623

Project: Del Monte Plant #35

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody included with this data package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHOD

Preparation: California LUFT Gasoline, 5/88 / 5030A
Cleanup: N/A
Analysis: California LUFT Gasoline, 5/88 / 8020

IV. PREPARATION

Sample preparation proceeded normally.

V. ANALYSIS

A. Calibration : All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Surrogates: All acceptance criteria were met.

D. Spikes: All acceptance criteria were met.

E. Samples: TFH Gas results are quantitated by summing the area of all compounds detected in the sample against the sum of the areas for the gas standard during the same elution time period. There is no attempt to compare the individual hydrocarbons contained in gas against any individual hydrocarbons contained in the sample. Compounds were detected in sample R9623001 (MW7) at the same elution time as gasoline; however, the pattern of peaks did not match those expected from gasoline.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and QAL, Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

SIGNED: Mark Gruber (for Brian Geers) DATE: 3/24/95

Brian Geers
Manager, Organics Department

CASE NARRATIVE
Addendum

Sample Information

LAB SAMPLE ID	CLIENT SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	SAMPLE pH[1]
R9623001	MW7	WATER	03/09/95	N/A	03/15/95	< 2
R9623002	MW9	WATER	03/09/95	N/A	03/15/95	< 2
R9623003	MW10	WATER	03/09/95	N/A	03/15/95	< 2
R9623004	MW12	WATER	03/09/95	N/A	03/15/95	< 2
R9623005	TRIP	WATER	03/09/95	N/A	03/15/95	< 2
GWB10315	GWB10315	WATER	N/A	N/A	03/15/95	N/A

[1] Applies to samples designated for purgeable VOA analysis only.

METHOD: 8020/8015(MOD)
PURGEABLE AROMATICS/TFH GAS

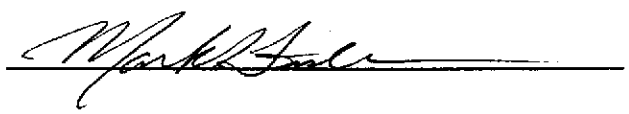
Client: CH2M Hill/SFO
Project: Del Monte Plant #35
Client Sample ID: MW7
Sample Matrix: Water
Dilution Factor: 1.0

Lab Sample ID: R9623001
Date Sampled: 03/09/95
Date Received: 03/13/95
Date Extracted: N/A
Date Analyzed: 03/15/95

Compound	Reporting Limit	Sample Result	Units
tert-Butyl methyl ether	0.50	4.5	ug/L
Benzene	0.50	U	ug/L
Toluene	0.50	0.60	ug/L
Ethylbenzene	0.50	1.2	ug/L
Xylenes (total)	0.50	2.5	ug/L
TFH Gas	50	190	ug/L
Fluorobenzene-SS		101	% rec.

U = Compound analyzed for but not detected above reporting limit.
SS = Surrogate Standard reported as percent recovery.

Comments:

Approved by: 

FORM I

kdh.024

METHOD: 8020/8015(MOD)
PURGEABLE AROMATICS/TFH GAS

Client: CH2M Hill/SFO
Project: Del Monte Plant #35
Client Sample ID: MW9
Sample Matrix: Water
Dilution Factor: 1.0

Lab Sample ID: R9623002
Date Sampled: 03/09/95
Date Received: 03/13/95
Date Extracted: N/A
Date Analyzed: 03/15/95

Compound	Reporting Limit	Sample Result	Units
tert-Butyl methyl ether	0.50	1.6	ug/L
Benzene	0.50	U	ug/L
Toluene	0.50	U	ug/L
Ethylbenzene	0.50	U	ug/L
Xylenes (total)	0.50	U	ug/L
TFH Gas	50	U	ug/L
Fluorobenzene-SS		101	% rec.

U = Compound analyzed for but not detected above reporting limit.
SS = Surrogate Standard reported as percent recovery.

Comments:

Approved by: _____

FORM I

kdh.024

Quality Analytical Laboratories Inc.
5090 Caterpillar Road, Redding, CA 96003-1412
916 244-5227
Fax No. 916 244-4109

METHOD: 8020/8015(MOD)
PURGEABLE AROMATICS/TFH GAS

Client: CH2M Hill/SFO
Project: Del Monte Plant #35
Client Sample ID: MW10
Sample Matrix: Water
Dilution Factor: 1.0

Lab Sample ID: R9623003
Date Sampled: 03/09/95
Date Received: 03/13/95
Date Extracted: N/A
Date Analyzed: 03/15/95

Compound	Reporting Limit	Sample Result	Units
tert-Butyl methyl ether	0.50	7.1	ug/L
Benzene	0.50	U	ug/L
Toluene	0.50	U	ug/L
Ethylbenzene	0.50	U	ug/L
Xylenes (total)	0.50	U	ug/L
TFH Gas	50	U	ug/L
Fluorobenzene-SS		102	% rec.

U = Compound analyzed for but not detected above reporting limit.
SS = Surrogate Standard reported as percent recovery.

Comments:

Approved by: 

FORM I

kdh.024

METHOD: 8020/8015(MOD)
PURGEABLE AROMATICS/TFH GAS

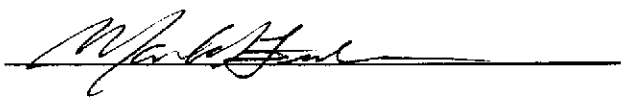
Client: CH2M Hill/SFO
Project: Del Monte Plant #35
Client Sample ID: MW12
Sample Matrix: Water
Dilution Factor: 1.0

Lab Sample ID: R9623004
Date Sampled: 03/09/95
Date Received: 03/13/95
Date Extracted: N/A
Date Analyzed: 03/15/95

Compound	Reporting Limit	Sample Result	Units
tert-Butyl methyl ether	0.50	3.6	ug/L
Benzene	0.50	U	ug/L
Toluene	0.50	U	ug/L
Ethylbenzene	0.50	U	ug/L
Xylenes (total)	0.50	U	ug/L
TFH Gas	50	U	ug/L
Fluorobenzene-SS		100	% rec.

U = Compound analyzed for but not detected above reporting limit.
SS = Surrogate Standard reported as percent recovery.

Comments:

Approved by: 

FORM I

kdh.024

METHOD: 8020/8015(MOD)
PURGEABLE AROMATICS/TFH GAS

Client:	CH2M Hill/SFO	Lab Sample ID:	R9623005
Project:	Del Monte Plant #35	Date Sampled:	03/09/95
Client Sample ID:	TRIP	Date Received:	03/13/95
Sample Matrix:	Water	Date Extracted:	N/A
Dilution Factor:	1.0	Date Analyzed:	03/15/95

Compound	Reporting Limit	Sample Result	Units
tert-Butyl methyl ether	0.50	U	ug/L
Benzene	0.50	U	ug/L
Toluene	0.50	U	ug/L
Ethylbenzene	0.50	U	ug/L
Xylenes (total)	0.50	U	ug/L
TFH Gas	50	U	ug/L
Fluorobenzene-SS		101	% rec.

U = Compound analyzed for but not detected above reporting limit.
SS = Surrogate Standard reported as percent recovery.

Comments:

Approved by: _____

FORM I

kdh.024

Quality Analytical Laboratories Inc.
5090 Caterpillar Road, Redding, CA 96003-1412
916 244-5227
Fax No. 916 244-4109

METHOD: 8020/8015(MOD)
PURGEABLE AROMATICS/TFH GAS

Client Sample ID: GWB10315
Sample Matrix: Water
Dilution Factor: 1.0

Lab Sample ID: GWB10315
Date Extracted: N/A
Date Analyzed: 03/15/95

Compound	Reporting Limit	Method Blank Result	Units
tert-Butyl methyl ether	0.50	U	ug/L
Benzene	0.50	U	ug/L
Toluene	0.50	U	ug/L
Ethylbenzene	0.50	U	ug/L
Xylenes (total)	0.50	U	ug/L
TFH Gas	50	U	ug/L
Fluorobenzene-SS		101	% rec.

U = Compound analyzed for but not detected above reporting limit.
SS = Surrogate Standard reported as percent recovery.

Comments:

Approved by: _____

FORM I

kdh.024

Quality Analytical Laboratories Inc.
5090 Caterpillar Road, Redding, CA 96003-1412
916 244-5227
Fax No. 916 244-4109

CASE NARRATIVE
GC TFH DIESEL

QAL Lab Reference No./SDG.: R9623

Project: DEL MONTE PLANT #35

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody included with this data package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHOD

Preparation: California LUFT Diesel, 5/88
Cleanup: N/A
Analysis: California LUFT Diesel, 5/88

IV. PREPARATION

Sample preparation proceeded normally.

V. ANALYSIS

A. Calibration : All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Surrogates: All acceptance criteria were met.

D. Spikes: All acceptance criteria were met.

E. Samples: Diesel fuel consists primarily of straight-chain hydrocarbons ranging in length from C10 to C23. Carbon chain lengths of C16 to C17 predominate in the mixture. When analyzed on a gas chromatograph, the chromatogram approximates a bell-shaped curve with C16 and C17 as the mean and progressively smaller concentrations of the lighter and heavier hydrocarbons. TFH Diesel results are quantitated by summing the area of all compounds detected in the sample against the sum of the areas for the diesel standard during the same elution time period. There is no attempt to compare the individual hydrocarbons contained in diesel against any individual hydrocarbons contained in the sample. Compounds were detected in samples R9623001 (MW7) and R9623002 (MW9) at the same elution time as diesel; however, the pattern of peaks did not match those expected from diesel fuel.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and QAL, Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

SIGNED: Mark Hanlon (For Brian Geers) DATE: 3/07/95

Brian Geers
Manager, Organics Department

CASE NARRATIVE
Addendum

Sample Information

LAB SAMPLE ID	CLIENT SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	SAMPLE pH[1]
R9623001	MW7	WATER	03/09/95	03/14/95	03/20/95	N/A
R9623002	MW9	WATER	03/09/95	03/14/95	03/20/95	N/A
R9623003	MW10	WATER	03/09/95	03/14/95	03/20/95	N/A
R9623004	MW12	WATER	03/09/95	03/14/95	03/20/95	N/A
DWB10314	DWB10314	WATER	N/A	03/14/95	03/20/95	N/A

[1] Applies to samples designated for purgeable VOA analysis only.

METHOD: 8015(MOD)
TFH DIESEL

Client: CH2M Hill/SFO
Project: Del Monte Plant #35
Client Sample ID: MW7
Sample Matrix: Water
Dilution Factor: 1.0

Lab Sample ID: R9623001
Date Sampled: 03/09/95
Date Received: 03/13/95
Date Extracted: 03/14/95
Date Analyzed: 03/20/95

Compound	Reporting Limit	Sample Result	Units
TFH Diesel	0.050	0.12	mg/L
Docosane-SS		95	% rec.

U = Compound analyzed for but not detected above reporting limit.
SS = Surrogate Standard reported as percent recovery.

Comments:

Approved by: _____

FORM I

kdh.024

METHOD: 8015(MOD)
TFH DIESEL

Client: CH2M Hill/SFO
Project: Del Monte Plant #35
Client Sample ID: MW9
Sample Matrix: Water
Dilution Factor: 1.0

Lab Sample ID: R9623002
Date Sampled: 03/09/95
Date Received: 03/13/95
Date Extracted: 03/14/95
Date Analyzed: 03/20/95

Compound	Reporting Limit	Sample Result	Units
TFH Diesel	0.050	0.082	mg/L
Docosane-SS		87	% rec.

U = Compound analyzed for but not detected above reporting limit.
SS = Surrogate Standard reported as percent recovery.

Comments:

Approved by: _____

FORM I

kdh.024

Quality Analytical Laboratories Inc.
5090 Caterpillar Road, Redding, CA 96003-1412
916 244-5227
Fax No. 916 244-4109

METHOD: 8015(MOD)
TFH DIESEL

Client: CH2M Hill/SFO
Project: Del Monte Plant #35
Client Sample ID: MW10
Sample Matrix: Water
Dilution Factor: 1.0

Lab Sample ID: R9623003
Date Sampled: 03/09/95
Date Received: 03/13/95
Date Extracted: 03/14/95
Date Analyzed: 03/20/95

Compound	Reporting Limit	Sample Result	Units
TFH Diesel	0.050	U	mg/L
Docosane-SS		100	% rec.

U = Compound analyzed for but not detected above reporting limit.
SS = Surrogate Standard reported as percent recovery.

Comments:

Approved by: _____

FORM I

kdh.024

METHOD: 8015(MOD)
TFH DIESEL

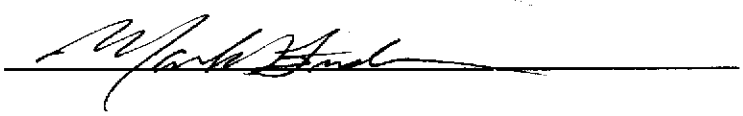
Client: CH2M Hill/SFO
Project: Del Monte Plant #35
Client Sample ID: MW12
Sample Matrix: Water
Dilution Factor: 1.0

Lab Sample ID: R9623004
Date Sampled: 03/09/95
Date Received: 03/13/95
Date Extracted: 03/14/95
Date Analyzed: 03/20/95

Compound	Reporting Limit	Sample Result	Units
TFH Diesel	0.050	U	mg/L
Docosane-SS		93	% rec.

U = Compound analyzed for but not detected above reporting limit.
SS = Surrogate Standard reported as percent recovery.

Comments:

Approved by: 

FORM I

kdh.024

METHOD: 8015(MOD)
TFH DIESEL

Client Sample ID: DWB10314
Sample Matrix: Water
Dilution Factor: 1.0

Lab Sample ID: DWB10314
Date Extracted: 03/14/95
Date Analyzed: 03/20/95

Compound	Reporting Limit	Method Blank Result	Units
TFH Diesel	0.050	U	mg/L
Docosane-SS		99	% rec.

U = Compound analyzed for but not detected above reporting limit.
SS = Surrogate Standard reported as percent recovery.

Comments:

Approved by: _____

FORM I

kdh.024

Quality Analytical Laboratories Inc.
5090 Caterpillar Road, Redding, CA 96003-1412
916 244-5227
Fax No. 916 244-4109

QAL

QUALITY ANALYTICAL ABORATORIES, INC.

CHAIN OF CUSTODY RECORD AND AGREEMENT TO PERFORM SERVICES

Project # 6AE28830.P3

Purchase Order #

Project Name: Del Monte Plant #35

Company Name: CH2M Hill

Project Manager or Contact & Phone #: Madeline Wall CH2M Hill OAK

Report Copy to:

Requested Completion Date: 1 week TAT

Site ID

Sample Disposal: Dispose ☐ Return ☐

☐ LGN
One Innovation Drive, Suite C
Alachua, FL 32615-9586
(904) 462-3050 FAX (904) 462-1670

☒ LRD
5090 Caterpillar Road
Redding, CA 96003-1412
(916) 244-5227 FAX (916) 244-4109

☐ LMG
2567 Fairlane Drive
Montgomery, AL 36116-1622
(205) 271-2440 FAX (205) 271-3428

☐ LKW
Canviro Analytical Laboratories, Inc.
50 Bathurst, Unit 12
Waterloo, Ontario, Canada N2V 2C5
(519) 747-2575 FAX (519) 747-3806

THIS AREA FOR LAB USE ONLY

Lab # R9623 | Page | of

Client Service | Price Source A P Q S

Acct Code | Test Group

Project Code | Ack. Gen.

LIMS Ver | Login | Mult.

COC Review

Sampling Date	Sampling Time	Type COMP	Type GRAB	Matrix WATER	Matrix SOIL	CLIENT SAMPLE ID (9 CHARACTERS)	QC ID (3 CHAR)	# OF CONTAINERS	ANALYSES REQUESTED: EPA 8010	TPH GAS/BTEX	TPH Diesel	SAMPLE REMARKS	LAB 1 ID	LAB 2 ID
3/9	MW7	1252		✓	✓	MW7			✓	✓	✓		1	
3/9	MW9	1328		✓	✓	MW9			✓	✓	✓		2	
3/9	MW10	1211		✓	✓	MW10			✓	✓	✓		3	
3/9	MW12	1453		✓	✓	MW12			✓	✓	✓		4	
3/9	Trip	0800		✓	✓	Trip			✓	✓			5	TB

Sampled By & Title (Please sign and print name): FA VANDENBROEK — Date/Time: 3-9-95 1430

Received By (Please sign and print name): Shawn F. Duffy — Date/Time: 3/10/95 1030

Received By (Please sign and print name) — Date/Time

Received By (Please sign and print name) — Date/Time

Relinquished By (Please sign and print name) — Date/Time: 3/10/95 1600

Relinquished By (Please sign and print name) — Date/Time

Relinquished By (Please sign and print name) — Date/Time

Shipped Via: UPS Fed-Ex Other Greyhound — Shipping # 120385653

HAZWRAP/NESSA: Y N

EDATA: Y N

QC LEVEL (1) 2 3 OTHER

pH | Ice Melted

Custody Seal N | Temp 6° / 12°C

Batch Remarks:

920000

Instructions and Agreement Provisions on Reverse Side

DISTRIBUTION: Original - LAB, Yellow - LAB, Pink - Client

LAB FORM 340

CH2M HILL SAMPLE RECEIPT EXCEPTION REPORT

Sample Batch Number R9623 Client/Project Del Monte Plant #35

		Comments:
	1. No custody seal as required by project.	5) Samples Received with a small cooler inside a larger cooler. - The Temp of the water inside the small cooler was 6°C. The Temp of the water in the larger cooler was 12°C.
	2. No chain-of-custody provided.	
	3. Analysis, description, date of collection not provided.	
	4. Samples broken or leaking on receipt.	
X	5. Temperature of samples inappropriate for analysis requested.	
	6. Container inappropriate for analysis requested.	
	7. Inadequate sample volume.	
	8. Preservation inappropriate for analysis requested.	
	9. Samples received out of holding time or analysis requested.	
	10. Discrepancies between COC form and container labels.	
	11. Other	

Corrective Actions Taken:

Analyze despite temp of diesel containers per Madeline Wall 3-13-95 (others were within limits).

Notified:
___ Client Regina Lowe
___ Division Mgr/Supervisor
___ LQAC
✓ Client Services

By Sample Custody Supervisor

QUALITY ANALYTICAL
LABORATORIES, INC.

March 15, 1995

Mr. Jason Gulbransen
Decon Environmental Services
23490 Connecticut Street
Hayward, CA 94545

RE: Analytical Data for: **Decon Environmental Services**
Laboratory Reference Number: **R9614**

Dear Mr. Gulbransen:

On **March 10, 1995**, QAL, Inc. received samples with a request for analysis. The analytical results and associated quality control data are enclosed.

It is our policy to store your samples for 30 days from the date of this letter. If extended storage is required, special arrangements can be accommodated upon early notification. The disposition of samples identified as hazardous will require special handling and you will be contacted if necessary.

QAL, Inc. appreciates your business and looks forward to serving you again. If you have any questions concerning your report or need any additional information, please call me at **(916) 244-5227**.

Sincerely,

Bryan Jones

Bryan Jones
Project Manager/Client Services

Enclosures

xc: Ms. Madeline Wall/SFO

TABLE OF CONTENTS

QAL Reference No. R9614

Quality Analytical Laboratories Inc.

5090 Caterpillar Road, Redding, CA 96003-1412

916 244-5227 Fax No. 916 244-4109

Organic Data Qualifiers

U -- Indicates the compound was analyzed for but not detected. The number adjacent to the "U" qualifier indicates the reporting limit for that compound. The reporting limit can vary from sample to sample depending on dilution factors or percent moisture adjustments when indicated.

J -- Indicates an estimated value. It is used when the data indicates the presence of a compound below the reporting limit.

C -- The "C" flag indicates the presence of this compound has been confirmed by GC/MS analysis.

B -- This flag is used when the analyte is found in the associated blank as well as the sample. This notation indicates possible blank contamination and suggests that the data user evaluate these compounds and their amounts carefully.

E -- This flag indicates that the value reported exceeds the linear calibration range for that compound. Therefore, the sample should be re-analyzed at an appropriate dilution. The "E" qualified amount is an estimated concentration, and the results of the dilution will be reported on a separate Form I.

D -- This qualifier indicates compounds which have been identified during a diluted reanalysis. "D" qualifiers are used for samples that have been analyzed initially at a lesser dilution than required for accurate quantitation.

P -- This qualifier is used for Pesticide/Aroclor target analytes when there is a greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form I and flagged with a "P.

N -- This qualifier indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds(TIC), where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as Chlorinated Hydrocarbon, the "N" qualifier is not used.

A -- This qualifier indicates that a TIC is a suspected aldol-condensation product.

Quality Analytical Laboratories Inc.
5090 Caterpillar Road, Redding, CA 96003-1412
916 244-5227
Fax No. 916 244-4109

Organic Sample ID Qualifiers

The qualifiers that may be appended to the Lab Sample ID and/or the Client Sample ID for organic analyses are defined below:

DL -- Diluted reanalysis. Indicates that the results of the original analysis of the sample contained compounds exceeding the calibration range. The sample was diluted and re-analyzed. May be followed by a digit to indicate multiple dilutions of the sample. The results of more than one diluted re-analysis may be reported.

R -- Reanalysis. The extract was re-analyzed without re-extraction. The "R" is not used if the sample was also re-extracted. May be followed by a digit to indicate multiple reanalyses of the sample at the same dilution.

RE -- Re-extraction analysis. The sample was re-extracted and re-analyzed. May be followed by a digit to indicate multiple re-extracted analyses of the sample at the same dilution.

MS -- Matrix spike (may be followed by a digit to indicate multiple matrix spikes within a sample set).

MSD -- Matrix spike duplicate (may be followed by a digit to indicate multiple matrix spikes within a sample set.)

Quality Analytical Laboratories Inc.
5090 Caterpillar Road, Redding, CA 96003-1412
916 244-5227
Fax No. 916 244-4109

ORGANIC ANALYTICAL METHODS

Sample Preparation

SW-846, 3rd Edition, Update I, July 1992

3510A	Separatory funnel liquid-liquid extraction
3520A	Continuous liquid-liquid extraction
3540	Soxhlet extraction
3550	Ultrasonic extraction
3580A	Waste dilution
3610A	Alumina column cleanup
3620A	Florisil column cleanup
3630	Silica gel cleanup
3630A	Silica gel cleanup
3630A	Silica gel cleanup
3640	GPC cleanup
3650A	Acid-base partition cleanup
3660A	Sulfur cleanup
5030A	Purge-and-trap
1311	TCLP extraction

EPA Contract Laboratory Program

Florisil cleanup for Pesticide/PCBs, SOW, OLM01.9

GPC cleanup, SOW, OLM01.9

Non-EPA and Internal Methods

Tissumizer extraction - Internal Method

Analysis by HPLC

SW-846, 3rd Edition, Update I, July 1992

8310	Polynuclear aromatic hydrocarbons
8315	Formaldehyde

Analysis by GC

40 CFR Part 136

601	Purgeable halocarbons
602	Purgeable aromatics
604	Phenolic acids
608	Organochlorine Pesticide/PCBs
610	Polynuclear aromatic hydrocarbons
614/622	Organophosphorus pesticides

SW-846, 3rd Edition, Update I, July 1992

8010A	Halogenated volatile organics
8020	Aromatic volatile organics
8021	Halogenated aromatic volatiles
8011A	EDB/DBCP by microextraction
8015MOD	1,4-Dioxane by GC/FID
8040A	Phenolic acids
8080	Organochlorine Pesticide/PCBs
8100	Polynuclear aromatic hydrocarbons
8140	Organophosphorus pesticides
8150A	Herbicides

EPA-600/4-88-039, 10/93

501.1	THMs by purge-and-trap
504	EDB/DBCP by microextraction

EPA-600/4-88-039, 12/88

502.2	SDWA Volatiles by purge-and-trap

Analysis by GC (continued)

EPA Contract Laboratory Program

Analysis of Pesticide/PCBs, SOW OLM01.9

LL Analysis of Pesticide/PCBs, Low Conc. Water-10/92

Non-EPA and Internal Methods

465d	Purge-and-trap volatile compounds in water State of MN
CPAR	Chlorinated phenols, CPAR Project Report 825-1, Canadian Pulp and Paper Research Institute, 3/79
TFH/Gas	Total Fuel Hydrocarbons/Gasoline, CA LUFT, 5/88
GRO(AK)	Gasoline Range Organics, AK DEC, AK 101, 2/93
GRO(WI)	Gasoline Range Organics, WI DNR, SW-140, 7/93
TFH/Diesel	Total Fuel Hydrocarbons/Diesel, CA LUFT, 5/88
DRO(AK)	Diesel Range Organics, AK DEC, AK 101, 2/93
DRO(WI)	Diesel Range Organics, WI DNR, SW-140, 7/93
HMPA	Hexamethylphosphoramide - Internal Method
FC143	Perfluorooctanoic acid - Internal Method
Glycols	Selected glycols - Internal Method
PCP	Pentachlorophenol - Internal Method

Analysis by GC/MS

40 CFR Part 136

624	Purge-and-trap volatile compounds
625	Extractable semivolatile compounds

SW-846, 3rd Edition, Update I, July 1992

8240A	Purge-and-trap volatile compounds
8260	Purge-and-trap volatile compounds
8270A	Extractable semivolatile compounds

EPA-600/4-88-039, 10/93

524.2	Purge-and-trap volatile compounds

EPA Contract Laboratory Program

VOAs	Purge-and-trap volatile compounds, SOW, OLM01.9
LL VOAs	Purge-and-trap volatile compounds, Low Concentration Water for Organics, 10/92
SVOAs	Extractable semivolatile compounds, SOW, OLM01.9
LL SVOAs	Extractable semivolatile compounds, Low Concentration Water for Organics, 10/92

Non-EPA and Internal Methods

LL PNAs	Selected parts-per-trillion PNAs in water, Internal Method
LL Acids	Selected phenolic acids - Internal Method
PNAs	Selected parts-per-billion PNAs in water or soil - Internal Method

Sample ID Cross-reference Table

QAL, Inc. Lab Sample ID		Client Sample ID	Collect Date	Sample Matrix	Additional Description
FS = Field Sample; TB = Trip Blank					
R9614001	TB	35-TB	03/09/95	Water	
R9614002	FS	35-A	03/09/95	Water	
R9614003	FS	35-B	03/09/95	Water	
R9614004	FS	35-D	03/09/95	Water	
R9614005	FS	35-E	03/09/95	Water	

The above lab sample ID's and cross reference information apply to samples as received by the laboratory. Modifiers to the lab sample ID may be added for internal tracking purposes. Any modified sample ID will be reflected in the appropriate case narrative only.

Quality Analytical Laboratories Inc.
5090 Caterpillar Road, Redding, CA 96003-1412
916 244-5227
Fax No. 916 244-4109

CASE NARRATIVE
GC PURGEABLE HALOCARBONS

QAL Lab Reference No./SDG.: R9614

Project: DECON/Jason Gulbranson

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody included with this data package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHOD

Preparation: N/A
Cleanup: N/A
Analysis: EPA 601

IV. PREPARATION

Sample preparation proceeded normally.

V. ANALYSIS

A. Calibration : All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Surrogates: All acceptance criteria were met.

D. N/A

E. Samples: Sample analyses proceeded normally.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and QAL, Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

SIGNED: Mark Fowler (for Brian Geers) DATE: 3/14/05
Brian Geers
Manager, Organics Department

CASE NARRATIVE
Addendum

Sample Information

LAB SAMPLE ID	CLIENT SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	SAMPLE pH[1]
R9614001	35-TB	WATER	03/09/95	N/A	03/13/95	< 2
R9614002	35-A	WATER	03/09/95	N/A	03/13/95	< 2
R9614003	35-B	WATER	03/09/95	N/A	03/13/95	< 2
R9614004	35-D	WATER	03/09/95	N/A	03/13/95	< 2
R9614005	35-E	WATER	03/09/95	N/A	03/13/95	< 2
VWB10313	VWB10313	WATER	N/A	N/A	03/13/95	N/A

[1] Applies to samples designated for purgeable VOA analysis only.

Report of Analytical Data - Purgeable Halocarbons

Client:	DECON ENVIRONMENTAL	Laboratory:	QAL	Date Sampled:	03/09/95
Project:	Jason Gulbranson	Lab Sample ID:	R9614001	Date Received:	03/10/95
Proj No:	N/A	% Moisture:	N/A	Date Extracted:	N/A
Method:	EPA 601(MOD)	Dilution Factor:	1.0	Date Analyzed:	03/13/95
Matrix:	Water	Instrument ID:	VARIAN-3600	Analyst:	C.D.
Sampler:	N/A			Date Reported:	03/14/95

Client Sample ID/Description: 35-TB

CAS Number	Compound	Reporting Limit	Sample Result		Reporting Units
74-87-3	Chloromethane	1.0	U		ug/L
74-83-9	Bromomethane	1.0	U		ug/L
75-71-8	Dichlorodifluoromethane	1.0	U		ug/L
75-01-4	Vinyl chloride	1.0	U		ug/L
75-00-3	Chloroethane	1.0	U		ug/L
75-09-2	Dichloromethane	5.0	U		ug/L
75-69-4	Trichlorofluoromethane	1.0	U		ug/L
75-35-4	1,1-Dichloroethene	1.0	U		ug/L
75-34-3	1,1-Dichloroethane	1.0	U		ug/L
156-60-5	trans-1,2-Dichloroethene	1.0	U		ug/L
67-66-3	Chloroform	1.0	U		ug/L
107-06-2	1,2-Dichloroethane	1.0	U		ug/L
71-55-6	1,1,1-Trichloroethane	1.0	U		ug/L
56-23-5	Carbon tetrachloride	1.0	U		ug/L
75-27-4	Bromodichloromethane	1.0	U		ug/L
78-87-5	1,2-Dichloropropane	1.0	U		ug/L
10061-01-5	cis-1,3-Dichloropropene	1.0	U		ug/L
79-01-6	Trichloroethene	1.0	U		ug/L
124-48-1	Dibromochloromethane	1.0	U		ug/L
79-00-5	1,1,2-Trichloroethane	1.0	U		ug/L
10061-02-6	trans-1,3-Dichloropropene	1.0	U		ug/L
75-25-2	Bromoform	1.0	U		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U		ug/L
127-18-4	Tetrachloroethene	1.0	U		ug/L
108-90-7	Chlorobenzene	1.0	U		ug/L
541-73-1	1,3-Dichlorobenzene	1.0	U		ug/L
95-50-1	1,2-Dichlorobenzene	1.0	U		ug/L
106-46-7	1,4-Dichlorobenzene	1.0	U		ug/L
110-56-5	1,4-Dichlorobutane-SS		103		% rec.

U = Compound analyzed for but not detected above reporting limit.
SS = Surrogate Standard reported as percent recovery.

Comments:

Approved by:

FORM I

kdh.023

Report of Analytical Data - Purgeable Halocarbons

Client:	DECON ENVIRONMENTAL	Laboratory:	QAL	Date Sampled:	03/09/95
Project:	Jason Gulbranson	Lab Sample ID:	R9614002	Date Received:	03/10/95
Proj No:	N/A	% Moisture:	N/A	Date Extracted:	N/A
Method:	EPA 601(MOD)	Dilution Factor:	1.0	Date Analyzed:	03/13/95
Matrix:	Water	Instrument ID:	VARIAN-3600	Analyst:	C.D.
Sampler:	N/A			Date Reported:	03/14/95

Client Sample ID/Description: 35-A

CAS Number	Compound	Reporting Limit	Sample Result		Reporting Units
74-87-3	Chloromethane	1.0	U		ug/L
74-83-9	Bromomethane	1.0	U		ug/L
75-71-8	Dichlorodifluoromethane	1.0	U		ug/L
75-01-4	Vinyl chloride	1.0	U		ug/L
75-00-3	Chloroethane	1.0	U		ug/L
75-09-2	Dichloromethane	5.0	U		ug/L
75-69-4	Trichlorofluoromethane	1.0	U		ug/L
75-35-4	1,1-Dichloroethene	1.0	U		ug/L
75-34-3	1,1-Dichloroethane	1.0	U		ug/L
156-60-5	trans-1,2-Dichloroethene	1.0	U		ug/L
67-66-3	Chloroform	1.0	U		ug/L
107-06-2	1,2-Dichloroethane	1.0	U		ug/L
71-55-6	1,1,1-Trichloroethane	1.0	U		ug/L
56-23-5	Carbon tetrachloride	1.0	U		ug/L
75-27-4	Bromodichloromethane	1.0	U		ug/L
78-87-5	1,2-Dichloropropane	1.0	U		ug/L
10061-01-5	cis-1,3-Dichloropropene	1.0	U		ug/L
79-01-6	Trichloroethene	1.0	U		ug/L
124-48-1	Dibromochloromethane	1.0	U		ug/L
79-00-5	1,1,2-Trichloroethane	1.0	U		ug/L
10061-02-6	trans-1,3-Dichloropropene	1.0	U		ug/L
75-25-2	Bromoform	1.0	U		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U		ug/L
127-18-4	Tetrachloroethene	1.0	U		ug/L
108-90-7	Chlorobenzene	1.0	U		ug/L
541-73-1	1,3-Dichlorobenzene	1.0	U		ug/L
95-50-1	1,2-Dichlorobenzene	1.0	U		ug/L
106-46-7	1,4-Dichlorobenzene	1.0	U		ug/L
110-56-5	1,4-Dichlorobutane-SS		99		% rec.

U = Compound analyzed for but not detected above reporting limit.
SS = Surrogate Standard reported as percent recovery.

Comments:

Approved by: 

FORM I

kdh.023

Report of Analytical Data - Purgeable Halocarbons

Client:	DECON ENVIRONMENTAL	Laboratory:	QAL	Date Sampled:	03/09/95
Project:	Jason Gulbranson	Lab Sample ID:	R9614003	Date Received:	03/10/95
Proj No:	N/A	% Moisture:	N/A	Date Extracted:	N/A
Method:	EPA 601(MOD)	Dilution Factor:	1.0	Date Analyzed:	03/13/95
Matrix:	Water	Instrument ID:	VARIAN-3600	Analyst:	C.D.
Sampler:	N/A			Date Reported:	03/14/95

Client Sample ID/Description: 35-B

CAS Number	Compound	Reporting Limit	Sample Result		Reporting Units
74-87-3	Chloromethane	1.0	U		ug/L
74-83-9	Bromomethane	1.0	U		ug/L
75-71-8	Dichlorodifluoromethane	1.0	U		ug/L
75-01-4	Vinyl chloride	1.0	U		ug/L
75-00-3	Chloroethane	1.0	U		ug/L
75-09-2	Dichloromethane	5.0	U		ug/L
75-69-4	Trichlorofluoromethane	1.0	U		ug/L
75-35-4	1,1-Dichloroethene	1.0	U		ug/L
75-34-3	1,1-Dichloroethane	1.0	U		ug/L
156-60-5	trans-1,2-Dichloroethene	1.0	U		ug/L
67-66-3	Chloroform	1.0	U		ug/L
107-06-2	1,2-Dichloroethane	1.0	U		ug/L
71-55-6	1,1,1-Trichloroethane	1.0	U		ug/L
56-23-5	Carbon tetrachloride	1.0	U		ug/L
75-27-4	Bromodichloromethane	1.0	U		ug/L
78-87-5	1,2-Dichloropropane	1.0	U		ug/L
10061-01-5	cis-1,3-Dichloropropene	1.0	U		ug/L
79-01-6	Trichloroethene	1.0	11		ug/L
124-48-1	Dibromochloromethane	1.0	U		ug/L
79-00-5	1,1,2-Trichloroethane	1.0	U		ug/L
10061-02-6	trans-1,3-Dichloropropene	1.0	U		ug/L
75-25-2	Bromoform	1.0	U		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U		ug/L
127-18-4	Tetrachloroethene	1.0	U		ug/L
108-90-7	Chlorobenzene	1.0	U		ug/L
541-73-1	1,3-Dichlorobenzene	1.0	U		ug/L
95-50-1	1,2-Dichlorobenzene	1.0	U		ug/L
106-46-7	1,4-Dichlorobenzene	1.0	U		ug/L
110-56-5	1,4-Dichlorobutane-SS		102		% rec.

U = Compound analyzed for but not detected above reporting limit.
SS = Surrogate Standard reported as percent recovery.

Comments:

Approved by:

FORM I

kdh.023

Report of Analytical Data - Purgeable Halocarbons

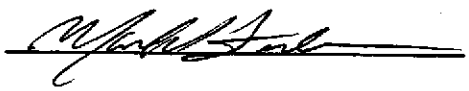
Client:	DECON ENVIRONMENTAL	Laboratory:	QAL	Date Sampled:	03/09/95
Project:	Jason Gulbranson	Lab Sample ID:	R9614004	Date Received:	03/10/95
Proj No:	N/A	% Moisture:	N/A	Date Extracted:	N/A
Method:	EPA 601(MOD)	Dilution Factor:	1.0	Date Analyzed:	03/13/95
Matrix:	Water	Instrument ID:	VARIAN-3600	Analyst:	C.D.
Sampler:	N/A			Date Reported:	03/14/95

Client Sample ID/Description: 35-D

CAS Number	Compound	Reporting Limit	Sample Result		Reporting Units
74-87-3	Chloromethane	1.0	U		ug/L
74-83-9	Bromomethane	1.0	U		ug/L
75-71-8	Dichlorodifluoromethane	1.0	U		ug/L
75-01-4	Vinyl chloride	1.0	U		ug/L
75-00-3	Chloroethane	1.0	U		ug/L
75-09-2	Dichloromethane	5.0	U		ug/L
75-69-4	Trichlorofluoromethane	1.0	U		ug/L
75-35-4	1,1-Dichloroethene	1.0	U		ug/L
75-34-3	1,1-Dichloroethane	1.0	U		ug/L
156-60-5	trans-1,2-Dichloroethene	1.0	U		ug/L
67-66-3	Chloroform	1.0	U		ug/L
107-06-2	1,2-Dichloroethane	1.0	U		ug/L
71-55-6	1,1,1-Trichloroethane	1.0	U		ug/L
56-23-5	Carbon tetrachloride	1.0	U		ug/L
75-27-4	Bromodichloromethane	1.0	U		ug/L
78-87-5	1,2-Dichloropropane	1.0	U		ug/L
10061-01-5	cis-1,3-Dichloropropene	1.0	U		ug/L
79-01-6	Trichloroethene	1.0	16		ug/L
124-48-1	Dibromochloromethane	1.0	U		ug/L
79-00-5	1,1,2-Trichloroethane	1.0	U		ug/L
10061-02-6	trans-1,3-Dichloropropene	1.0	U		ug/L
75-25-2	Bromoform	1.0	U		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U		ug/L
127-18-4	Tetrachloroethene	1.0	3.4		ug/L
108-90-7	Chlorobenzene	1.0	U		ug/L
541-73-1	1,3-Dichlorobenzene	1.0	U		ug/L
95-50-1	1,2-Dichlorobenzene	1.0	U		ug/L
106-46-7	1,4-Dichlorobenzene	1.0	U		ug/L
110-56-5	1,4-Dichlorobutane-SS		98		% rec.

U = Compound analyzed for but not detected above reporting limit.
SS = Surrogate Standard reported as percent recovery.

Comments:

Approved by: 

FORM I

kdh.023

Quality Analytical Laboratories Inc.
5090 Caterpillar Road, Redding, CA 96003-1412
916 244-5227 Fax No. 916 244-4109

Report of Analytical Data - Purgeable Halocarbons

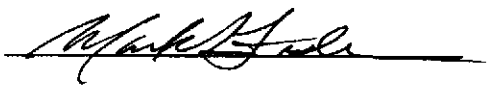
Client:	DECON ENVIRONMENTAL	Laboratory:	QAL	Date Sampled:	03/09/95
Project:	Jason Gulbranson	Lab Sample ID:	R9614005	Date Received:	03/10/95
Proj No:	N/A	% Moisture:	N/A	Date Extracted:	N/A
Method:	EPA 601(MOD)	Dilution Factor:	1.0	Date Analyzed:	03/13/95
Matrix:	Water	Instrument ID:	VARIAN-3600	Analyst:	C.D.
Sampler:	N/A			Date Reported:	03/14/95

Client Sample ID/Description: 35-E

CAS Number	Compound	Reporting Limit	Sample Result	Reporting Units
74-87-3	Chloromethane	1.0	U	ug/L
74-83-9	Bromomethane	1.0	U	ug/L
75-71-8	Dichlorodifluoromethane	1.0	U	ug/L
75-01-4	Vinyl chloride	1.0	U	ug/L
75-00-3	Chloroethane	1.0	U	ug/L
75-09-2	Dichloromethane	5.0	U	ug/L
75-69-4	Trichlorofluoromethane	1.0	U	ug/L
75-35-4	1,1-Dichloroethene	1.0	U	ug/L
75-34-3	1,1-Dichloroethane	1.0	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1.0	U	ug/L
67-66-3	Chloroform	1.0	U	ug/L
107-06-2	1,2-Dichloroethane	1.0	U	ug/L
71-55-6	1,1,1-Trichloroethane	1.0	U	ug/L
56-23-5	Carbon tetrachloride	1.0	U	ug/L
75-27-4	Bromodichloromethane	1.0	U	ug/L
78-87-5	1,2-Dichloropropane	1.0	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1.0	U	ug/L
79-01-6	Trichloroethene	1.0	2.3	ug/L
124-48-1	Dibromochloromethane	1.0	U	ug/L
79-00-5	1,1,2-Trichloroethane	1.0	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1.0	U	ug/L
75-25-2	Bromoform	1.0	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	ug/L
127-18-4	Tetrachloroethene	1.0	1.1	ug/L
108-90-7	Chlorobenzene	1.0	U	ug/L
541-73-1	1,3-Dichlorobenzene	1.0	U	ug/L
95-50-1	1,2-Dichlorobenzene	1.0	U	ug/L
106-46-7	1,4-Dichlorobenzene	1.0	U	ug/L
110-56-5	1,4-Dichlorobutane-SS		98	% rec.

U = Compound analyzed for but not detected above reporting limit.
SS = Surrogate Standard reported as percent recovery.

Comments:

Approved by: 

FORM I

kdh.023

Quality Analytical Laboratories Inc.
5090 Caterpillar Road, Redding, CA 96003-1412
916 244-5227 Fax No. 916 244-4109

Report of Analytical Data - Purgeable Halocarbons

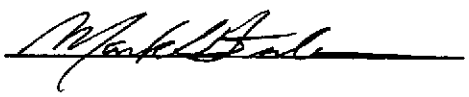
Client:	N/A	Laboratory:	QAL	Date Sampled:	N/A
Project:	N/A	Lab Sample ID:	VWB10313	Date Received:	N/A
Proj No:	N/A	% Moisture:	N/A	Date Extracted:	N/A
Method:	EPA 601(MOD)	Dilution Factor:	1.0	Date Analyzed:	03/13/95
Matrix:	Water	Instrument ID:	VARIAN-3600	Analyst:	C.D.
Sampler:	N/A			Date Reported:	03/14/95

Client Sample ID/Description: VWB10313

CAS Number	Compound	Reporting Limit	Method Blank Result		Reporting Units
74-87-3	Chloromethane	1.0	U		ug/L
74-83-9	Bromomethane	1.0	U		ug/L
75-71-8	Dichlorodifluoromethane	1.0	U		ug/L
75-01-4	Vinyl chloride	1.0	U		ug/L
75-00-3	Chloroethane	1.0	U		ug/L
75-09-2	Dichloromethane	5.0	U		ug/L
75-69-4	Trichlorofluoromethane	1.0	U		ug/L
75-35-4	1,1-Dichloroethene	1.0	U		ug/L
75-34-3	1,1-Dichloroethane	1.0	U		ug/L
156-60-5	trans-1,2-Dichloroethene	1.0	U		ug/L
67-66-3	Chloroform	1.0	U		ug/L
107-06-2	1,2-Dichloroethane	1.0	U		ug/L
71-55-6	1,1,1-Trichloroethane	1.0	U		ug/L
56-23-5	Carbon tetrachloride	1.0	U		ug/L
75-27-4	Bromodichloromethane	1.0	U		ug/L
78-87-5	1,2-Dichloropropane	1.0	U		ug/L
10061-01-5	cis-1,3-Dichloropropene	1.0	U		ug/L
79-01-6	Trichloroethene	1.0	U		ug/L
124-48-1	Dibromochloromethane	1.0	U		ug/L
79-00-5	1,1,2-Trichloroethane	1.0	U		ug/L
10061-02-6	trans-1,3-Dichloropropene	1.0	U		ug/L
75-25-2	Bromoform	1.0	U		ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U		ug/L
127-18-4	Tetrachloroethene	1.0	U		ug/L
108-90-7	Chlorobenzene	1.0	U		ug/L
541-73-1	1,3-Dichlorobenzene	1.0	U		ug/L
95-50-1	1,2-Dichlorobenzene	1.0	U		ug/L
106-46-7	1,4-Dichlorobenzene	1.0	U		ug/L
110-56-5	1,4-Dichlorobutane-SS		91		% rec.

U = Compound analyzed for but not detected above reporting limit.
SS = Surrogate Standard reported as percent recovery.

Comments:

Approved by: 

FORM I

kdh.023

QUALITY ANALYTICAL LABORATORIES, INC.

CHAIN OF CUSTODY RECORD AND AGREEMENT TO PERFORM SERVICES

RUSH

Project # Plant #35 | Purchase Order # 943

Project Name: Del Monte Foods

Company Name: DECON Environmental Services, Inc

Project Manager or Contact & Phone #: J. Gulbransens 510 732 6484

Report Copy to: J. Gulbransen DECON; M. Wahl CH2MHill

Requested Completion Date: RUSH 3-17-95 5-DAY

Site ID:

Sample Disposal: NON HAZ — Dispose ☒ Return ☐

☐ LGN — One Innovation Drive, Suite C, Alachua, FL 32615-9586, (904) 462-3050 FAX (904) 462-1670

☒ LRD — 5090 Caterpillar Road, Redding, CA 96003-1412, (916) 244-5227 FAX (916) 244-4109

☐ LMG — 2567 Fairlane Drive, Montgomery, AL 36116-1622, (205) 271-2440 FAX (205) 271-3428

☐ LKW — Canviro Analytical Laboratories, Inc., 50 Bathurst, Unit 12, Waterloo, Ontario, Canada N2V 2C5, (519) 747-2575 FAX (519) 747-3806

THIS AREA FOR LAB USE ONLY

Lab # R9614 | Page | of

Client Service | Price Source A P Q S

Acct Code | Test Group

Project Code | Ack. Gen.

LIMS Ver | Login | Mult.

COC Review

1 Sampling 95 Date	Time	Type COMP	Type GRAB	Matrix WATER	Matrix SOIL	CLIENT SAMPLE ID (9 CHARACTERS)	QC ID (3 CHAR)	# OF CONTAINERS	ANALYSES REQUESTED: EPA 601	SAMPLE REMARKS	LAB 1 ID	LAB 2 ID
3-9	1100		X	X		35-TB		4	X	Trip Blank	1	
3-9	1100		X	X		35-A		4	X		2	
3-9	1110		X	X		35-B		4	X		3	
3-9	1120		X	X		35-D		4	X		4	
3-9	1130		X	X		35-E		4	X		5	

Sampled By & Title (Please sign and print name): J. Gulbransen Jason Gulbransen — Date/Time: 3-9-95 1130

Received By (Please sign and print name): Bob Kelly — Date/Time: 3/10/95 0915

Received By (Please sign and print name) — Date/Time

Received By (Please sign and print name) — Date/Time

Relinquished By (Please sign and print name): J. Gulbransen & Gulbransen — Date/Time: 3-9-95 1430

Relinquished By (Please sign and print name) — Date/Time

Relinquished By (Please sign and print name) — Date/Time

Shipped Via: UPS (Fed-Ex) Other — Shipping # 954 6049 962

HAZWRAP/NESSA: Y N

EDATA: Y N

QC LEVEL 1 2 3 OTHER

pH | Ice Blue

Custody Seal X (N) | Temp 8°C

Batch Remarks:

C00000

Instructions and Agreement Provisions on Reverse Side

DISTRIBUTION: Original - LAB, Yellow - LAB, Pink - Client

CH2M HILL SAMPLE RECEIPT EXCEPTION REPORT SFO

Sample Batch Number R9614 Client/Project DECON/Del monte

		Comments:
	1. No custody seal as required by project.	
	2. No chain-of-custody provided.	
	3. Analysis, description, date of collection not provided.	
	4. Samples broken or leaking on receipt.	
✓	5. Temperature of samples inappropriate for analysis requested.	Temp. upon receipt: 8°C
	6. Container inappropriate for analysis requested.	
	7. Inadequate sample volume.	
	8. Preservation inappropriate for analysis requested.	
	9. Samples received out of holding time or analysis requested.	
	10. Discrepancies between COC form and container labels.	
	11. Other	

Corrective Actions Taken:

Analyze despite temp per Madeline Wall 3-10-95

Signed: [signature] Division Mgr/Supervisor [signature]

000010

ATTACHMENT B

Field Sampling Report

BLAINE
TECH SERVICES INC.

985 TIMOTHY DRIVE
SAN JOSE, CA 95133
(408) 995-5535
FAX (408) 293-8773

March 15, 1995

CH_2M Hill
1111 Broadway, Suite 1200
Oakland, CA 94607-4046

Attn: Madeline Wall

SITE:
Del Monte
Plant 35
1250 Park Avenue
Emeryville, California

CH_2M HILL PROJECT NUMBER:
BAE 28830.P3.ZZ

DATE:
March 9, 1995

GROUNDWATER SAMPLING REPORT 950309-V-2

Blaine Tech Services, Inc. perform specialized environmental sampling and documentation as an independent third party. In order to avoid compromising the objectivity necessary for the proper and disinterested performance of this work, Blaine Tech Services, Inc. does not participate in the interpretation of analytical results or become involved with the marketing or installation of remedial systems.

This report deals with the groundwater well sampling performed by our firm in response to your request. Data collected in the course of our work at the site are presented in the TABLE OF WELL MONITORING DATA. This information was collected during our inspection, well evacuation, and sample collection. Measurements include the total depth of the well and depth to water. Water surfaces were further inspected for the presence of immiscibles. A series of electrical conductivity, pH, and temperature readings were obtained during well evacuation and at the time of sample collection.

TABLE OF WELL MONITORING DATA

Well I.D.	MW-7			MW-9			MW-10			MW-12	
Date Sampled	03/09/95			03/09/95			03/09/95			03/09/95	
Well Diameter (in.)	2			2			2			2	
Total Well Depth (ft.)	25.08			20.15			18.0			20.05	
	BEFORE	AFTER		BEFORE	AFTER		BEFORE	AFTER		BEFORE	AFTER
Depth To Water (ft.)	6.58	6.83		8.43	6.55		7.10	7.25		6.82	6.87
Free Product (in.)	NONE			NONE			NONE			NONE	
Reason If Not Sampled	--			--			--			--	
1 Case Volume (gal.)	2.96			1.87			1.74			2.11	
Did Well Dewater?	NO			NO			NO			NO	
Gallons Actually Evacuated	9.0			6.0			6.0			6.5	
Purging Device	BAILER			BAILER			BAILER			BAILER	
Sampling Device	BAILER			BAILER			BAILER			BAILER	
Time	12:37	12:40	12:42	13:12	13:15	13:18	11:57	11:59	12:01	13:48	13:50	13:53
Temperature (Fahrenheit)	64.6	64.2	64.6	66.4	67.0	66.4	64.0	64.0	64.2	62.8	63.2	63.2
pH	7.2	7.0	7.0	7.2	7.2	7.2	7.4	7.0	7.0	7.0	7.0	7.0
Conductivity (micromhos/cm)	700	600	600	600	600	600	800	800	800	600	600	600
Nephelometric Turbidity Units	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200
BTS Chain of Custody	950309-V-2			950309-V-2			950309-V-2			950309-V-2	
BTS Sample I.D.	MW-7			MW-9			MW-10			MW-12	
DHS HMTL Laboratory	CH2M HILL			CH2M HILL			CH2M HILL			CH2M HILL	
Analysis	EPA 8010, TPH (GAS), BTEX & TPH (DIESEL)			EPA 8010, TPH (GAS), BTEX & TPH (DIESEL)			EPA 8010, TPH (GAS), BTEX & TPH (DIESEL)			EPA 8010, TPH (GAS), BTEX & TPH (DIESEL)	

STANDARD PRACTICES

Evacuation and Sampling Equipment

As shown in the TABLE OF MONITORING DATA the wells at this site were evacuated according to a protocol requirement for three case volumes. The wells were evacuated using bailers.

Samples were collected using a bailer.

Bailers: A bailer, in its simplest form, is a hollow tube which has been fitted with a check valve at the lower end. The device can be lowered into a well by means of a cord. When the bailer enters the water, the check valve opens and liquid flows into the interior of the bailer. The bottom check valve prevents water from escaping when the bailer is drawn up out of the well.

Two types of bailers are used in groundwater wells at sites where fuel hydrocarbons are of concern. The first type of bailer is made of a clear material such as acrylic plastic and is used to obtain a sample of the surface and the near surface liquids in order to detect the presence of visible or measurable fuel hydrocarbon floating on the surface. The second type of bailer is made of Teflon or stainless steel and is used as an evacuation and/or sampling device.

Bailers are inexpensive and relatively easy to clean. Because they are manually operated, variations in operator technique may have a greater influence than would be found with more automated sampling equipment. Also where fuel hydrocarbons are involved, the bailer may include near surface contaminants that are not representative of water deeper in the well.

Decontamination

All apparatus is brought to the site in clean and serviceable condition. The equipment is decontaminated after each use and before leaving the site. Decontamination procedures include complete disassembly of the device to a point where a jet of steam cleaner water can be directed onto all the internal surfaces (this applies to the *inside* of the Teflon bladders of USGS/Middleburg pumps). Teflon conductor tubing is connected to the steam cleaner water outlet and water is run through the interior of the tubing for several minutes. The devices are then reassembled and actuated for a period of time as an additional measure. Blaine Tech Services, Inc. frequently modifies apparatus to allow complete disassembly and proper cleaning.

Effluent Materials

The evacuation process creates a volume of effluent water which must be contained. Blaine Tech Service, Inc. will place this water in appropriate containers of the client's choice or bring new DOT 17 E drums to the site which are appropriate for the containment of the effluent materials. The determination of how to properly dispose of the effluent water must usually await the results of laboratory analyses of the sample collected from the groundwater well. If that sample does not establish whether or not the effluent water is contaminated, or if effluent from more than one source has been combined in the same container, it may be necessary to conduct additional analyses on the effluent material.

Sampling Methodology

Samples were obtained by standardized sampling procedures that follow an evacuation and sample collection protocol. The sampling methodology conforms both State and Regional Water Quality Control Board standards and specifically adheres to EPA requirements for apparatus, sample containers and sample handling as specified in publication SW 846 and T.E.G.D. which is published separately.

Sample Containers

Sample containers are supplied by the laboratory performing the analyses.

Sample Handling Procedures

Following collection, samples are promptly placed in an ice chest containing prefrozen blocks of an inert ice substitute such as Blue Ice or Super Ice. The samples are maintained in either an ice chest or a refrigerator until delivered into the custody of the laboratory.

Sample Designations

All sample containers are identified with both a sampling event number and a discrete sample identification number. Please note that the sampling event number is the number that appears on our chain of custody. It is roughly equivalent to a job number, but applies only to work done on a particular day of the year rather than spanning several days as jobs and projects often do.

Chain of Custody

Samples are continuously maintained in an appropriate cooled container while in our custody and until delivered to the laboratory under our standard chain of custody. If the samples are taken charge of by a different party (such as another person from our office, a courier, etc.) prior to being delivered to the laboratory, appropriate release and acceptance records are made on the chain of custody (time, date, and signature of person releasing the samples followed by the time, date and signature of the person accepting custody of the samples).

Hazardous Materials Testing Laboratory

The samples obtained at this site were delivered to the CH_2M Hill Quality Analytical Laboratories in Redding, California. The CH_2M Hill Quality Analytical Laboratories is a California Department of Health Services certified Hazardous Materials Testing Laboratory and is listed as DOHS HMTL #1364.

Personnel

All Blaine Tech Services, Inc. personnel receive 29 CFR 1910.120(e)(2) training as soon after being hired as is practical. In addition, many of our personnel have additional certifications that include specialized training in level B supplied air apparatus and the supervision of employees working on hazardous materials sites. Employees are not sent to a site unless we are confident they can adhere to any site safety provisions in force at the site and unless we know that they can follow the written provisions of an SSP and the verbal directions of an SSO.

In general, employees sent to a site to perform groundwater well sampling will assume an OSHA level D (wet) environment exists unless otherwise informed. The use of gloves and double glove protocols protects both our employees and the integrity of the samples being collected. Additional protective gear and procedures for higher OSHA levels of protection are available.

Please call if we can be of any further assistance.

Richard C. Blaine

RCB/lp

attachments: chain of custody

QAL QUALITY ANALYTICAL LABORATORIES, INC.

CHAIN OF CUSTODY RECORD AND AGREEMENT TO PERFORM SERVICES

Project # BAE 28830.P3	Purchase Order #
Project Name DOI Marte Plant #35	
Company Name CH2M Hill	
Project Manager or Contact & Phone # Madeline Wall / CH2M Hill Okla.	Report Copy to:
Requested Completion Date: 1 week TAT	Site ID
Sample Disposal: Dispose ☐ Return ☐	

☐ LGN
One Innovation Drive, Suite C
Alachua, FL 32615-9586
(904) 462-3050 FAX (904) 462-1670

☒ LRD
5090 Caterpillar Road
Redding, CA 96003-1412
(916) 244-5227 FAX (916) 244-4109

☐ LMG
2567 Fairlane Drive
Montgomery, AL 36116-1622
(205) 271-2440 FAX (205) 271-3428

☐ LKW
Canviro Analytical Laboratories, Inc.
50 Bathurst, Unit 12
Waterloo, Ontario, Canada N2V 2C5
(519) 747-2575 FAX (519) 747-3806

THIS AREA FOR LAB USE ONLY		
Lab #	Page	of
Client Service	Price Source A P Q S	
Acct Code	Test Group	
Project Code	Ack. Gen.	
LIMS Ver	Login	Mult.
COC Review		

Sampling Date	Sampling Time	Type COMP	Type GRAB	Matrix WATER	Matrix SOIL	CLIENT SAMPLE ID (9 CHARACTERS)	QC ID (3 CHAR)	# OF CONTAINERS	EPA 8010	TPH GAS / BTEX	TPH Diesel		TPHg / BTEX + TPHd on Standard TAT EPA 8010 only on 1 week TAT.							SAMPLE REMARKS	LAB 1 ID	LAB 2 ID
3/9	MW7	1252		✓	✓	MW7			✓	✓	✓											
3/9	MW9	1328		✓	✓	MW9			✓	✓	✓											
3/9	MW10	1211		✓	✓	MW10			✓	✓	✓											
3/9	MW12	1403		✓	✓	MW12			✓	✓	✓											
3/9	TRIP	0900		✓	✓	TRIP			✓	✓												

Sampled By & Title (Please sign and print name) FA VANDENBERK	Date/Time 3/9 1430	Relinquished By (Please sign and print name)	Date/Time 3/10 1600
Received By (Please sign and print name)	Date/Time	Relinquished By (Please sign and print name)	Date/Time
Received By (Please sign and print name)	Date/Time	Relinquished By (Please sign and print name)	Date/Time
Received By (Please sign and print name)	Date/Time	Shipped Via UPS Fed-Ex Other Courier	Shipping # 120385365 3

HAZWRAP/NESSA:	Y N
EDATA:	Y N
QC LEVEL	1 2 3 OTHER
pH	Ice
Custody Seal	Temp

Batch Remarks:

Instructions and Agreement Provisions on Reverse Side

DISTRIBUTION: Original - LAB, Yellow - LAB, Pink - Client
LAB FORM 340

WELL GAUGING DATA

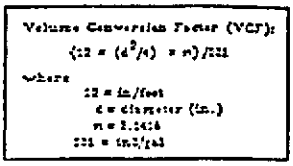
Project # 950309-C-2 Date 3-9-95 Client GH2M Hill

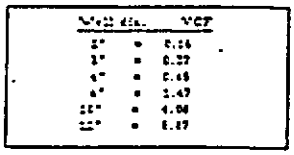
Site 1250 Park St Emeryville

Well I.D.	Well Size (in.)	Sheen/ Odor	Depth to Immiscible Liquid (feet)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to Water (feet)	Depth to Well Bottom (feet)	Survey Point: TOB or TOC
MW-7	2					6.58	25.08	TOC
MW-9	2					8.43	20.15	
MW-10	2					7.10	18.00	
MW-12						6.82	20.05	

WELL MONITORING DATA SHEET

Project #: 950309-V-2	Client: CH2M Hill
Sampler: Fred	Date Sampled: 3-9-95
Well I.D.: MW-7	Well Diameter: (circle one) (2) 3 4 6 ___
Total Well Depth: Before 25.08 After	Depth to Water: Before 6.58 After 6.83
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade Other --	





2.96	x	3	=	8.88
1 Case Volume		Specified Volumes		gallons

Purging: Bailer ☐ BTS Dedicated
Middleburg ☐
Electric Submersible ☐
Suction Pump ☐
Type of Installed Pump _____

Sampling: Bailer ☐
Middleburg ☐
Electric Submersible ☐
Suction Pump ☐
Installed Pump ☐

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1237	64.6	7.2	700	>200	3.0	
1240	64.2	7.0	600	>200	6.0	
1242	64.6	7.0	600	>200	9.0	

Did Well Dewater? no If yes, gals. Gallons Actually Evacuated: 9.0

Sampling Time: 1252

Sample I.D.: MW7 Laboratory: CH2M Hill

Analyzed for: TPH Gas, BTEX, Diesel 8010

Duplicate I.D.: Cleaning Blank I.D.:

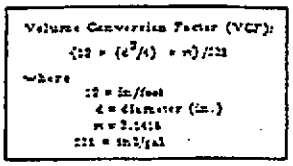
Analyzed for:

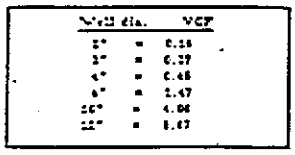
Shipping Notations:

Additional Notations:

WELL MONITORING DATA SHEET

Project #: 950309-V2	Client: CH2M Hill
Sampler: Fred	Date Sampled: 3-9-95
Well I.D.: MW-9	Well Diameter: (circle one) (2) 3 4 6 ___
Total Well Depth: Before 20.15 After	Depth to Water: Before 8.43 After 6.55
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade	Other --





1.87	x	3		5.62
1 Case Volume		Specified Volumes	=	gallons

Purging: Bailer ☑ BTS Dedicate
Middleburg ☐
Electric Submersible ☐
Suction Pump ☐
Type of Installed Pump _____

Sampling: Bailer ☑
Middleburg ☐
Electric Submersible ☐
Suction Pump ☐
Installed Pump ☐

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1312	66.4	7.2	600	>200	2.0	
1315	67.0	7.2	600	>200	4.0	
1318	66.4	7.2	600	>200	6.0	

Did Well Dewater? NO If yes, gals. Gallons Actually Evacuated: 6.0

Sampling Time: 1328

Sample I.D.: MW-9 Laboratory: CH2M Hill

Analyzed for: TPH GAS, BTEX, Diesel, 8010

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for:

Shipping Notations:

Additional Notations:

WELL MONITORING DATA SHEET

Project #: 950309-V-2	Client: CH2M Hill
Sampler: Ted	Date Sampled: 3-9-95
Well I.D.: MW-10	Well Diameter: (circle one) (2) 3 4 6 ___
Total Well Depth: Before 18.00 After 18.00	Depth to Water: Before 7.10 After 7.25
Reason not sampled:	If Free Product, thickness:

Volume Conversion Factor (VCF)

$(12 \times (d^2/4) \times \pi)/231$

Where
12 = in/foot
d = diameter (in.)
π = 3.1416
231 = in3/gal

Well dia		VCF
2"	=	0.16
3"	=	0.37
4"	=	0.66
6"	=	1.47
10"	=	4.08
12"	=	5.87

1.74 (1 Case Volume) x 3 (Specified Volumes) = 5.23 gallons

Purging: Bailer ☐ BTS Dedicated
Middleburg ☐
Electric Submersible ☐
Suction Pump ☐
Type of Installed Pump _____

Sampling: Bailer ☐
Middleburg ☐
Electric Submersible ☐
Suction Pump ☐
Installed Pump ☐

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	NOTATIONS:
1157	64.0	7.4	800	>200	2.0	
1159	64.0	7.0	600	>200	4.0	
1201	64.2	7.0	600	>200	6.0	

Did Well Dewater? NO If yes, gals. Gallons Actually Evacuated: 6.0

Sampling Time: 1211

Sample I.D.: MW-10	Laboratory: CH2M Hill
Analyzed for: TPH Gas, BTEX, Diesel 8010	
Duplicate I.D.:	Cleaning Blank I.D.:
Analyzed for:	
Shipping Notations:	
Additional Notations:	

WELL MONITORING DATA SHEET

Project #: 950309-U-2	Client: CH2M Hill
Sampler: Fred	Date Sampled: 3-9-95
Well I.D.: MW-12	Well Diameter: (circle one) (2) 3 4 6 ___
Total Well Depth: Before 20.05 After	Depth to Water: Before 6.82 After 6.87
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade	Other --

Volume Conversion Factor (VCF):

$(12 \times (d^2/4) \times \pi)/231$

Where
12 = in/foot
d = diameter (in.)
π = 3.1416
231 = in3/gal

Well dia.	VCF
2"	= 0.16
3"	= 0.37
4"	= 0.65
6"	= 1.47
10"	= 4.08
12"	= 5.87

2.11	x	3	=	6.35
1 Case Volume		Specified Volumes		gallons

Purging: Bailer ✓ BTS Dedicated
Middleburg ☐
Electric Submersible ☐
Suction Pump ☐
Type of Installed Pump _____

Sampling: Bailer ✓
Middleburg ☐
Electric Submersible ☐
Suction Pump ☐
Installed Pump ☐

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1348	62.8	7.0	600	>200	2.0	
1350	63.2	7.0	600	>200	4.0	
1353	63.2	7.0	600	>200	6.5	

Did Well Dewater? NO If yes, gals. Gallons Actually Evacuated: 6.5

Sampling Time: 1403

Sample I.D.: MW-12 Laboratory: CH2M Hill

Analyzed for: TPH GAS, BTEX, Diesel 8010

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for:

Shipping Notations:

Additional Notations:

ATTACHMENT C

GET System Inspection Logs

Del Monte Plant #35

Date: 1/13/95

DATA LOG & FIELD NOTES

JOB No.: 943
PROJECT: Del Monte Plant No. 35
ADDRESS: 4240 Hollis Street,
Emeryville, CA 95020

Well Depths:

Extraction Wells -

PW-1	1.92	ft.	0918	time
PW-2	1.00	ft.	0919	time
PW-3	7.02	ft.	0921	time

Monitoring Wells -

P-1	4.44	ft.	0932	time	
P-2	Covered	ft.	by car	time	
* P-3	Covered	ft.	by 3 cys	time	of gravel
MW-7	5.72	ft.	0952	time	
MW-9	6.62	ft.	1002	time	* appeared to be rising
MW-10	5.10	ft.	0947	time	
MW-12	4.82	ft.	0938	time	

Total GET Effluent _____ gal. _____ time

System not Running Time req'd: 1 hr

GET System:

Please record the pressure gauge reading at each of the following locations:

Before bag filter: 0 psi.

After bag filter: 0 psi.

If the pressure differential across the bag filter is greater than 15 psi., was the filter bag exchanged? N/A Yes ____ No ____

Were all valves opened after replacing the filter bag?

Yes ____ No ____ N/A

Were pumps turned ON after replacing the filter bag?

Yes ____ No ____ N/A

DECON

Del Monte Plant #35

Date: 1/13/95

Were any leaks (standing water or wet spots) seen that originated from GET System piping? Yes ____ No X

If wet spots are noted, briefly describe location. N/A

Was sampling performed? Yes ____ No X

If yes, please check from which sample port/s.

A_____ B_____ C_____ D_____

Time req'd: N/A

Was any maintenance performed on any of the equipment? If so, please describe in detail work performed and time required.

Pump installed 1/12/95, rewired 1/13/95
waiting for ok to turn back on.

Misc. Field Notes: Water levels very high, MW-9① level appeared to be rising ie level would not stabilize. P-3 is under a stockpile of gravel ~3 yds.

① depth started @ 7.00 within 2 minute was at 6.2

Name (printed): J. Bulbransen Signature: J. Bulbransen

Start Time: 0700 Finish Time: 1000

DECON

rev. 12/94

Del Monte Plant #35

Date: 1-27-95

DATA LOG & FIELD NOTES

JOB No.: 943
PROJECT: Del Monte Plant No. 35
ADDRESS: 4240 Hollis Street,
Emeryville, CA 95020

Well Depths:

Extraction Wells -

PW-1	2.74 ft.	0810	time
PW-2	1.84 ft.	0812	time
PW-3	7.58 ft.	0815	time

Monitoring Wells -

P-1	4.72 ft.	0830	time
P-2	- ft.	-	time Covered by car
P-3	- ft.	-	time Covered by gravel
MW-7	5.80 ft.	0852	time
MW-9	7.20 ft.	0859	time
MW-10	5.52 ft.	0846	time
MW-12	5.22 ft.	0840	time

Total GET Effluent 3330643 gal. 0901 time

Time req'd: 1 hr

GET System:

Please record the pressure gauge reading at each of the following locations:

Before bag filter: 14 psi.

After bag filter: 14 psi.

If the pressure differential across the bag filter is greater than 15 psi., was the filter bag exchanged? Yes ____ No ✓

Were all valves opened after replacing the filter bag?

Yes ____ No ____ N/A

Were pumps turned ON after replacing the filter bag?

Yes ____ No ____ N/A

DECON

Del Monte Plant #35 Date: _____

Were any leaks (standing water or wet spots) seen that originated from GET System piping? Yes ____ No X

If wet spots are noted, briefly describe location. None

Was sampling performed? Yes ____ No X

If yes, please check from which sample port/s.

A_____ B_____ C_____ D_____

Time req'd: _____

Was any maintenance performed on any of the equipment? If so, please describe in detail work performed and time required. Low level sensor sticking. Rinsed off, clean off. May need replacing.

Misc. Field Notes: _____

Name (printed): D. Lowbanion Signature: D. Lowbanion

Start Time: 0750 Finish Time: 0900

DECON

rev. 12/94

Del Monte Plant #35

Date: 2-10-95

DATA LOG & FIELD NOTES

JOB No.: 943
PROJECT: Del Monte Plant No. 35
ADDRESS: 4240 Hollis Street,
Emeryville, CA 95020

Well Depths:

Extraction Wells -

PW-1	4.88 ft.	0733 time	
PW-2	4.06 ft.	0734 time	
PW-3	9.18 ft.	0736 time	

Monitoring Wells -

P-1	5.30 ft.	0755 time	
P-2	5.72 ft.	0745 time	
P-3	Covered ft.	by gravel time	
MW-7	6.92 ft.	0810 time	
MW-9	7.00 ft.	0815 time	Depending water level
MW-10	7.12 ft.	0805 time	
MW-12	6.72 ft.	0802 time	

Total GET Effluent 333/728 gal. 0815 time

Time req'd: 45 min

GET System:

Please record the pressure gauge reading at each of the following locations:

Before bag filter: 14 psi.

After bag filter: 12 psi.

If the pressure differential across the bag filter is greater than 15 psi., was the filter bag exchanged? Yes ____ No ✓

Were all valves opened after replacing the filter bag?

Yes ____ No ____ N/A

Were pumps turned ON after replacing the filter bag?

Yes ____ No ____ N/A

DECON

Del Monte Plant #35 Date: 2-10-95

Were any leaks (standing water or wet spots) seen that originated from GET System piping? Yes X No ____

If wet spots are noted, briefly describe location. Below transfer pump. Shut down system briefly to tighten

Was sampling performed? Yes ____ No X

If yes, please check from which sample port/s.

A_____ B_____ C_____ D_____ N/A

Time req'd: _____

Was any maintenance performed on any of the equipment? If so, please describe in detail work performed and time required. Yes, low level sensor was stuck upon arrival, cleaned again and observed operation 4 times appears O.K. Will check again ___ week of 2-13-95. Also tightened fitting of transfer pumped, stopped leak.

Misc. Field Notes:

* Once again water level in mw-9 appeared to fluxuate while measuring. Level went down ~1 ft in 2 mins.

Name (printed): Jason Gilbransen Signature: J. Gilbransen

Start Time: 0730 Finish Time: 0900

DECON

rev. 12/94

Del Monte Plant #35

Date: 2-23-95

DATA LOG & FIELD NOTES

JOB No.: 943
PROJECT: Del Monte Plant No. 35
ADDRESS: 4240 Hollis Street,
Emeryville, CA 95020

Well Depths:

Extraction Wells -

PW-1	5.18	ft.	0830	time
PW-2	4.28	ft.	0832	time
PW-3	9.22	ft.	0835	time

Monitoring Wells -

P-1	5.64	ft.	0847	time
P-2	6.04	ft.	0841	time
P-3	-	ft.	-	time Covered by gravel
MW-7	7.04	ft.	0903	time
MW-9	9.04	ft.	0908	time
MW-10	6.94	ft.	0859	time
MW-12	6.84	ft.	0854	time

Total GET Effluent 3338514 gal. 0915 time

Time req'd: 40 min

GET System:

Please record the pressure gauge reading at each of the following locations:

Before bag filter: 15 psi.

After bag filter: 13 psi.

If the pressure differential across the bag filter is greater than 15 psi., was the filter bag exchanged? Yes ___ No +

Were all valves opened after replacing the filter bag?

Yes ___ No ___ N/A

Were pumps turned ON after replacing the filter bag?

Yes ___ No ___ N/A

DECON

Del Monte Plant #35

Date: _____

Were any leaks (standing water or wet spots) seen that originated from GET System piping? Yes ____ No X

If wet spots are noted, briefly describe location. _____

_____

Was sampling performed? Yes ____ No X

If yes, please check from which sample port/s.

A_____ B_____ C_____ D_____

Time req'd: _____

Was any maintenance performed on any of the equipment? If so, please describe in detail work performed and time required. YES, low level sensor still sticking. Cleaned throughly and observed operation 4 times. Appears ok. If this same problem continues may require replacement.

Misc. Field Notes: _____

_____

_____

_____

_____

_____

Name (printed): Jason Gulbransen Signature: J. Gulbransen

Start Time: 0800 Finish Time: 0930

DECON

rev. 12/94

Del Monte Plant #35

Date: 3-9-95

DATA LOG & FIELD NOTES

JOB No.: 943
PROJECT: Del Monte Plant No. 35
ADDRESS: 4240 Hollis Street,
Emeryville, CA 95020

Well Depths:

Extraction Wells -

PW-1	3.62	ft.	1005	time
PW-2	2.76	ft.	1007	time
PW-3	9.04	ft.	1111	time

Monitoring Wells -

P-1	5.24	ft.	1036	time
P-2	5.60	ft.	1030	time
P-3	Covered	ft.	w/ gravel	time
MW-7	6.34	ft.	1050	time
MW-9	6.40	ft.	1055	time
MW-10	6.6	ft.	1044	time
MW-12	Covered with water	ft.	1040	time

Total GET Effluent 3384517 gal. 1059 time

Time req'd: 50 min

GET System:

Please record the pressure gauge reading at each of the following locations:

Before bag filter: 25 psi.

After bag filter: 5 psi.

If the pressure differential across the bag filter is greater than 15 psi., was the filter bag exchanged? Yes + No ____

Were all valves opened after replacing the filter bag?

Yes + No ____

Were pumps turned ON after replacing the filter bag?

Yes + No ____

DECON

Date: 3-9-95

el Monte Plant #35

Were any leaks (standing water or wet spots) seen that originated from GET System piping? Yes ___ No ✓

If wet spots are noted, briefly describe location. ___

Was sampling performed? Yes ✓ No ___

If yes, please check from which sample port/s.

A ✓ B ✓ C ✓ D ___ E ✓

Time req'd: 35 min

Was any maintenance performed on any of the equipment? If so, please describe in detail work performed and time required. YES, micron filter bag changed out.

Misc. Field Notes: ___

Name (printed): Jason Gulbransen Signature: J Gulbransen

Start Time: ___ Finish Time: ___

DECON

rev. 12/94