Documentation of Completion of Final Remedial Activities at Del Monte Plant 35

Emeryville, California

Prepared for

Del Monte Foods

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CH2M HILL
1111 Broadway
Oakland, CA 94608

Contents

Tables

Figures

Appendices

1.0 Introduction

This report documents the completion of the final remediation activities at Del Monte Plant 35 in Emeryville, California. The remediation activities occurred between February and April 1997 and were performed in accordance with the *Sitewide Risk Management Plan* (CH2M HILL, 1996) and the January 24, 1997 letter to Mr. Sum Arigala of the California Regional Water Quality Control Board (RWQCB) concerning *Additional Sampling Results Collected in Late 1996 and Subsurface Soil Samples Collected in 1989* (CH2M HILL, 1997). The Sitewide Risk Management Plan and the soil screening and sampling plan outlined in the January 24, 1997 letter were approved by the RWQCB on February 7, 1997 (RWQCB, 1997a and 1997b).

1.1 Purpose

The purpose of this report is to document the final remediation activities conducted at the Del Monte Plant 35 property and to obtain a *Remedial Action Completion Letter* for the property. Del Monte is requesting that the *Remedial Action Completion Letter* be provided by the RWQCB by April 18, 1997.

1.2 Background

Del Monte Plant 35, located in an industrial area of Emeryville, was operated as a fruit and vegetable processing facility 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.

Plant 35 is underlain by approximately 5 to 8 feet of fill, 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 (bgs). Discontinuous lenses of sand 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 bgs and flows in a southwesterly direction.

Since 1989, Del Monte has conducted extensive soil and groundwater investigations and completed remedial activities to address known and potential releases of petroleum and chlorinated hydrocarbons at Plant 35. The activities were conducted with the oversight of the Alameda County Department of Environmental Health (ACDEH) and the RWQCB. Chlorinated hydrocarbon compounds were found in soil and groundwater beneath the West Parcel in 1989. The source on the West Parcel was identified as four 50-gallon fuel oil storage tanks used by former Del Monte tenants. Chlorinated hydrocarbon and petroleum hydrocarbons were also found in soil and groundwater on the East Parcel. The source of chlorinated hydrocarbons on the East Parcel was identified as an area of soil to the east of the main cannery building and an underground fuel oil storage tank adjacent to the boiler house.

Del Monte conducted groundwater and soil remediation activities at the property from 1993 to 1996. Results of the activities are summarized in the Sitewide Risk Management Plan. Section 5 of the Sitewide Risk Management Plan describes the final remediation activities to

be conducted: 1) soil screening, sampling, and excavation (as needed) following demolition of the property structures and pavement, 2) abandonment of monitoring wells and piezometers, 3) dismantlement of the groundwater extraction and treatment system, and 4) use of stockpiled soil from previous excavations as backfill on the property. The completion of these final activities is discussed in this report.

1.3 Agency Notification

The remediation activities described in this report were proposed in the plans described above and approved by the RWQCB and ACDEH in advance of the work being started. Prior to conducting the work, representatives of both agencies were notified of the schedule for the activities. Throughout the duration of the remediation activities, the agency representatives were kept informed of the project schedule. Brian Oliva of the ACDEH visited the property on a regular basis to observe the screening, sampling, and remediation activities. In particular, he witnessed the removal of the former transformer room pad, removal of former cooling tower base, and soil sampling from these two locations.

1.4 Target Cleanup Levels

Target cleanup levels for property soil established in the Sitewide Risk Management Plan were:

- Total Petroleum Hydrocarbons (TPH)-gasoline - 100 milligrams per kilogram (mg/kg)
- TPH-diesel - 200 mg/kg
- TPH-motor oil - 500 mg/kg

Although the Sitewide Risk Management Plan did not specify target cleanup levels for volatile organic compounds (VOCs) or metals in soil, the following levels were used:

- VOCs (total) - 1 mg/kg as approved by the RWQCB for use as the target cleanup level during the 1994 and 1995 soil remediation activities at the property

- Metals - US EPA Region 9 Preliminary Remedial Goals (PRGs) for soil at industrial properties (provided in Appendix A)

Target cleanup levels were used to determine the need for soil removal after building demolition and pavement removal. If target cleanup levels were exceeded in the soil samples collected, soil excavation was conducted to remove the affected soil.

2.0 Remediation Activities

This section describes the remediation activities that were conducted at the Plant 35 property between February and April 1997. The activities included were:

- Screening and sampling soil beneath designated former structures and pavement and excavating soil that exceeded target cleanup levels

- Using onsite stockpiled soil generated during 1994 and 1995 excavations for backfill operations

- Dismantling the groundwater extraction and treatment system
- Abandoning monitoring wells and piezometers

Details of each of these activities are provided below.

2.1 Soil Beneath Existing Structures and Pavement

After structures and pavement were removed, soil was screened in the following areas (refer to Figure 1 for locations):

- North end of the West Parcel
- Proposed Haven Street area
- Main cannery building
- Transformer room
- Cooling tower

Where the screening results were above background levels, soil samples were collected. The screening and sampling locations are shown in Figure 1. The screening locations were identified by a combination of taping and visually sighting off previous locations. Therefore, the grid in Figure 1 is approximate. Screening and sampling activities were conducted in accordance with the plan outlined in the January 24, 1997 letter to Mr. Sum Arigala of the RWQCB (CH2M HILL, 1997).

Demolition and excavation work was performed by ICONCO of Oakland, California. Laboratory testing was performed by ChromaLab, Inc. in Pleasanton, California.

2.1.1 Soil Screening and Sampling

Soil screening consisted of walking each area on a 20 foot by 20 foot grid to note any soil discolorations, odors, or other evidence that a release had occurred. An Organic Vapor Meter (OVM) equipped with a photoionization detector was used to screen soil samples for organic vapors using a pre-determined grid and targeting locations where evidence of contamination was observed. The soil screening procedure used was as follows:

- Approximately two inches of soil were scraped from the surface with a clean stainless steel trowel.
- A stainless steel trowel was used to obtain a soil sample which was placed into a plastic baggie.
- The baggie was closed and shaken.
- After two to five minutes had elapsed, the organic vapors in the headspace were measured using the OVM.
- The results were recorded in the field log.

Background readings were established each day that screening activities were conducted and were recorded in the field notebook . Copies of the soil screening field notes are provided in Appendix B. Soil samples were collected at screening locations where the OVM readings exceeded the daily background level and at locations where evidence of

contamination had been observed. The soil samples were collected by scraping away approximately two inches of soil from the surface with a clean stainless steel scoop or trowel and driving a 6-inch brass or stainless steel sleeve into the top six inches of soil, where possible. At some locations, it was not possible to drive the sleeves 6 inches into the soil due to the presence of rocks and other debris. At these locations, 6 inch holes were dug by hand and the sleeves were manually filled. The sleeves were then sealed with Teflon tape and plastic end caps, labeled with an identifying sample name for each location, and placed in the cooler. The samples were either picked up by Chromalab's courier or delivered to Chromalab's facilities by CH2M HILL. The sample locations are shown in Figure 1.

The samples were analyzed for: TPH as gasoline; benzene, toluene, ethyl benzene, and xylenes (BTEX); total extractable petroleum hydrocarbons (kerosene, diesel, and motor oil) (TEPH); and halogenated volatile organic compounds (HVOCs). Laboratory analytical reports are provided in Appendix C. Analytical results were compared to the target cleanup levels to determine if soil excavation was required. Screening and sampling activities and analytical results are described below by area.

2.1.1.1 North End of West Parcel The north end of the west parcel was screened on February 27 and March 6, 1997 after the pavement had been removed. The area was screened visually and with the OVM. The soil in the area was screened with the OVM at 20-foot centers. No readings above background were detected in the north end of the West Parcel. The OVM readings are shown in Appendix B. No discolored soil or odors were noted.

Based on previous soil investigation results, one location, SB-2, was designated for sample collection (CH2M HILL, 1997). The location of SB-2 had been previously surveyed and was marked by the surveyors after pavement removal. The sample location is shown in Figure 1. The sample was analyzed for TPH as gasoline, BTEX, TEPH, and HVOCs. The analytical results are summarized in Table 1. The analytical results indicate that no compounds are present above the target cleanup levels for the property.

2.1.1.2 Proposed Haven Street Area The proposed Haven Street extension was screened on February 25, February 27, March 18, and April 2, 1997 after the pavement had been removed. Soil in the area was screened, visually and with the OVM at 20-foot centers. Seven locations had OVM readings above background. The OVM readings are shown in Appendix B.

Based on the OVM readings, four soil samples (SSHS-6, SSHS-27, SSHS-30, and SSHS-78) were collected. The other three areas with OVM readings above background (HS-23, HS-35, and HS-36) were re-screened; no OVM readings above background were detected, therefore no soil samples were collected. In addition, these three locations were all close to designated sampling points (S5 and X-3). A sample was also collected at SSHS-81 based on the color of the soil (green) even though the OVM did not detect any readings above background. Based on previous soil investigation results, four additional locations were designated for sample collection (CH2M HILL, 1989 and 1997). The locations of previous borings S4, S5, S6, and SB-7 were located by surveying after pavement removal. Soil samples were collected from these four locations. In addition, five additional soil samples (X-1 through X-5) were collected from the general area around the previous soil boring locations. Two other areas, outside the limits of the proposed Haven Street extension screening area, were identified during removal of the western foundation of the main cannery building. The first area was

screened at three locations with the OVM and a soil sample (SSHS-103) was collected due to the color of the material (green) even though there were no OVM readings above background. Two soil samples (SSHS-110 and SSHS-111) were collected at the second area due to noticeable odors. This second area was not screened with the OVM because the odors indicated the need to collect samples. The sample locations are shown in Figure 1.

The samples were analyzed for TPH as gasoline, BTEX, TEPH, and HVOCs. The analytical results are summarized in Tables 1 and 2. The analytical results indicate that petroleum hydrocarbons were present in two samples (SSHS-6 and X-1) above the target cleanup levels for diesel and in three samples (SSHS-78, S5, and S6) above the target cleanup level for motor oil. Sample SSHS-111 exceeded the target cleanup levels for both diesel and motor oil. SSHS-6 also contained xylene above the target cleanup level for VOCs. One sample (S4) contained diesel at the target cleanup level of 200 mg/kg.

2.1.1.3 Main Cannery Building Soil beneath the main cannery building was screened on March 6, March 18, March 27, April 2, and April 4, 1997 after the slab had been removed. The area was screened visually and with the OVM at 40-foot centers. Nine locations had OVM readings above background. Since soil beneath the main cannery building was screened on 40 foot intervals, four additional locations were screened with the OVM surrounding each location with OVM readings above background. These four additional locations were screened at a distance of 20 feet (north, south, east, and west) from the original screening location. Four of these additional screening locations had OVM readings above background. The OVM readings are shown in Appendix B.

Based on the OVM readings, 13 soil samples (SSCS-48, SSCS-56, SSCS-56b, SSCS-75, SSCS-76, SSCS-76a, SSCS-85, SSCS-93, SSCS-93a, SSCS-93b, SSCS-98, SSCS-99, and SSCS-100) were collected. Soil samples were collected from two additional areas identified during the screening process: at SSCS-300 because greenish colored clay was observed and at SSCS-600b and SSCS-600w on the eastern side of the main cannery building where odors were noted when a foundation footing was removed. The analytical results indicate that one sample (SSCS-56) contained petroleum hydrocarbons at a level that exceeded the target cleanup level for motor oil and one sample (SSCS-85) contained petroleum hydrocarbons at a level that exceeded the target cleanup levels for both diesel and motor oil. One sample (SSCS-48) contained diesel at the target cleanup level.

In addition, two composite samples of crushed red brick (rbrick1 and rbrick2) were collected from the areas indicated in Figure 1 because crushed brick was located throughout this area. The samples were composites of four discrete samples collected from the area with crushed red brick. The samples were analyzed for Title 22 metals. The levels of metals detected are typical of background levels and do not exceed PRGs for residential or industrial soil. The results are summarized in Table 3.

Previous soil sampling conducted beneath the main cannery building indicate that soil at one location exceeded the target cleanup levels (CH2M HILL, 1992). This location (G-6) was in a gutter just south of the transformer room. Four samples were collected in the vicinity of G-6 after slab removal. The sample locations are shown in Figure 1. The samples were analyzed for TPH as gasoline, BTEX, TEPH, and HVOCs. The analytical results are summarized in Tables 1 and 2. The analytical results indicate that two of the samples (G-6b and G-6c) contained petroleum hydrocarbons at levels that exceeded the target cleanup levels for motor oil.

2.1.1.4 Former Transformer Room Polychlorinated biphenyls (PCBs) and oil had previously been detected on a concrete chip sample from the floor of the transformer room, indicating that a release had occurred in this area (CH2M HILL, 1997). Also, low levels of PCBs had been detected in a soil sample collected from beneath the transformer room floor.

During demolition, the concrete from the floor of the transformer room and a small area north of the transformer room where the floor was stained were segregated, placed on plastic, and covered with plastic pending offproperty disposal. The concrete (approximately 20 cubic yard) will be transported to Chemical Waste Management's facility in Kettleman Hills for disposal.

After the concrete floor was removed, the soil beneath this area was visually screened for evidence of contamination. Four stained areas were observed and sampled (T-1 through T-4). The sample locations are shown in Figure 1. The samples were analyzed for PCBs and TEPH. The analytical results are summarized in Table 4. No PCBs were detected above the method reporting limit. In sample T-1, diesel and motor oil were detected above the target action levels.

2.1.1.5 Former Cooling Tower To address concerns that chromium from the cooling tower operation may be present in soil beneath the former cooling tower, this area was visually screened and soil samples were collected. After demolition, soil beneath the former cooling tower was observed for discoloration or other evidence of contamination. Greenish sand was noticed on the northern side and in an area in the middle of the former cooling tower area. Four samples (CT-1 through CT-4) were collected and analyzed for total chromium. Three samples were collected of the greenish material and one sample of black clayey material. The sample locations are shown in Figure 1. The analytical results are summarized in Table 5. The levels of chromium detected are typical of background levels and do not exceed residential or industrial PRGs for soil.

2.1.2 Soil Excavation and Disposal

Based on the soil sampling results, 12 areas were identified for soil excavation:

- Proposed Haven Street Area - Soil in the vicinity of samples HS-78, S-5, and S-6 exceeded the target cleanup level for motor oil, SSHS-6 and X-1 exceeded the target cleanup level for diesel, SSHS-111 exceeded the target cleanup levels for both diesel and motor oil, and S-4 was at the target cleanup level for diesel. In addition SSHS-6 exceeded the target level for total VOCs.

- Main Cannery Building - Soil in the vicinity of samples SSCS-56, G-6b, and G-6c exceeded the target cleanup level for motor oil, SSCS-85 exceeded the target cleanup levels for both diesel and motor oil, and SSCS-48 was at the target cleanup level for diesel. Due to their close proximity, G-6b and G-6c were considered to be one area for excavation purposes.

- Former Transformer Room - Soil in the vicinity of sample T-1 exceeded the target cleanup levels for both diesel and motor oil.

For location SSHS-6, it was assumed that removal of soil for TEPH would also result in removal of elevated levels of BTEX because the BTEX concentration was only slightly above the target cleanup level of 1 mg/kg total VOCs.

All but one area were initially excavated approximately two to three feet deep and approximately 5 feet in diameter (approximately 5 cubic yards each). At SSH S-110, the excavation was approximately 39 feet long (at the surface) by 6 feet wide by 8 feet deep (approximately 50 cubic yards). The excavated soil was stockpiled adjacent to each hole and covered with plastic. After each area was excavated, five soil samples (one from the bottom and one from each sidewall) were collected using the same procedures used during the initial screening. Based on the OVM readings, the area was either further excavated (minor additional excavation at four locations) or confirmation samples were collected. Based on the analytical results of the initial sampling, the samples were only analyzed for TEPH. To confirm that soil exceeding the target cleanup levels had been removed, three samples (bottom and two sidewalls - typically the two longer sidewalls) were collected from each area in which petroleum hydrocarbons concentrations exceeded the target action levels. Only one bottom sample was collected from the two areas where petroleum hydrocarbon concentrations were at the target cleanup levels. Based on the analytical results, only two areas (T-1nw and SSHS-110bc) needed further excavation. The samples labeled SSHS-110 were actually collected from the SSHS-111 area. SSHS-111 exceeded the target cleanup level; SSHS-110 did not. (See Table 2).

T-1nw was excavated (approximately another 5 cubic yards) and resampled. No concentrations of diesel or motor were present above the target cleanup level in the confirmation sample collected from the overexcavated area.

SSHS-110bc was collected at a depth of approximately 10 feet below ground surface, just below the groundwater table. Motor oil was detected in the sample at 660 mg/kg. Concentrations of motor oil in the other two bottom samples from excavation, SSHS-110bn and SSHS-110bs, were below target cleanup levels. Approximately 2 cubic yards of additional soil were removed from the bottom center of the excavation on April 11, 1997. A confirmation sample was collected and analyzed for TEPH. No petroleum hydrocarbons were detected. To address the concern that groundwater may be affected by the motor oil, one groundwater grab sample was collected on April 11, 1997 from a depth of 10 to 20 feet below ground surface in a boring located 10 feet downgradient of the excavation. The sample was analyzed for TEPH. No petroleum hydrocarbons were detected.

The analytical results of the confirmation samples are summarized in Table 6. Laboratory analytical reports are provided in Appendix C.

At the completion of excavations, the areas were surveyed. They will be backfilled by grading with the surrounding soil. The largest excavation (SSHS-110) will require additional backfill material from other portions of the property. Excavation locations are shown in Figure 2. The stockpiled soil (approximately 90 cubic yards) will be disposed of at BFI's Vasco Road land in Livermore, California.

2.2 Stockpiled Soil From Earlier Excavations

The RWQCB approved use of the soil that remained on property from the 1994 and 1995 East Parcel remediation activities for backfill of excavations. The following criteria, as proposed in the Sitewide Risk Management Plan, were used to identify where soil could be used for backfill operations:

- Category 1: Soil with less than 100 mg/kg of TPH-gasoline, TPH-diesel, or TPH-motor oil, combined, may be returned to the excavation for backfill.

- Category 2: Soil with TPH-diesel between 100 and 200 mg/kg and/or TPH-motor oil between 100 and 500 mg/kg may be used as backfill between the ground surface and two feet above the groundwater table.

- Excess soil that cannot fit into the excavations will be graded into the ground surface and compacted after the pavement at the property has been removed.

One sample from soil in one of the stockpiles contained diesel at 230 mg/kg and the target level for TPH as diesel is 200 mg/kg. This was one sample out of 15. The next highest diesel value from soil in that stockpile was 36 mg/kg and 8 of the 15 samples were non-detect (<1 mg/kg) for diesel. Additionally, since the sample was collected almost two years ago, the former diesel concentrations have likely been reduced by natural attenuation processes. The specific location within the stockpile of the soil represented by the sample containing 230 mg/kg TPH-diesel was lost during soil movement activities conducted at the property to control runoff and dust. Based on these facts, the subject stockpile was considered Category 2 soil that must be placed at least 2 feet above the groundwater level.

During the weeks of March 31 and April 7, 1997, the stockpiled soil from the 1994 and 1995 excavations was used as backfill in the former basement area adjacent to 45th Street and in the former groundwater extraction pit on the East Parcel. (See Figure 1 for locations.) All of the stockpiled material used in the former basement area was placed more than two feet above the groundwater table. In the former groundwater extraction pit on the East Parcel, gravel was placed to a level of approximately one foot above the groundwater level, filter fabric was placed on top of the gravel, and one foot of stockpiled soil containing less than 100 mg/kg of petroleum hydrocarbons was laid down. The remainder of the pit was filled with stockpiled soil from both Categories 1 and 2 described above. Stockpiled soil that was left after filling the excavations (approximately 20 cubic yards) will be graded into the ground surface.

2.3 Groundwater Extraction System

Extraction of groundwater from the East Parcel extraction pit ceased on January 31, 1997. The treatment unit was dismantled during the week beginning March 17, 1997.

Water remaining in the Baker Tank was discharged through the carbon canisters to the sanitary sewer under an extended permit from the East Bay Municipal Utility District. Sediments in the bottom of the Baker Tank were collected in six 55-gallon drums. A sample of the sediments was tested for chlorinated hydrocarbons and BTEX. None were detected. The analytical results are provided in Appendix D. Based on the results, the drummed materials will be emptied onto the ground and graded into the ground surface.

The carbon in the two carbon canisters was tested by the supplier, West States Carbon, and determined to be non-hazardous waste. The analytical results are provided in Appendix D. The two carbon canisters (with the carbon) will be picked up by the supplier, West States Carbon, by April 25, 1997.

The re-useable components of the treatment system, including the flow meter, pump, and surge tank, will be transported to Del Monte's Walnut Creek facility. Other components were disposed of as solid waste.

The extraction trench on the West Parcel will be abandoned by pulling the three PVC extraction sumps and filling them with grout. The West Parcel extraction pit was backfilled using excess soil located on the West Parcel.

2.4 Well Abandonment

The following monitoring wells and piezometers were abandoned on February 5 and 6, 1997:

MW-1	MW-4	MW-9	P-1
MW-2	MW-6	MW-10	P-2
MW-3	MW-7	MW-13	P-3

The well locations are shown in Figures E1 and E2 in Appendix E.

In addition, well MW-12 was mistakenly abandoned. Well MW-12 was to be left in place for annual groundwater monitoring. On February 6, 1997, a well was installed about 10 feet south of MW-12 on Hollis Street to replace MW-12. The new well, designated MW-12A, is screened from 10 to 20 feet below the ground surface.

Monitoring well MW-5 could not be located. The well was installed in December 1988 to a depth of 24 feet below ground surface on the eastern portion of the Del Monte property in an area that was later leased to the New Century Beverage Company. The location was surveyed after the well was installed. CH2M HILL could not find MW-5 during a monitoring event in 1993. To find the top of the well, CH2M HILL surveyed and marked the location where the well had been installed, used a metal detector, and dug by hand to a depth of 2 to 3 feet. The well was not found. In February 1997, CH2M HILL again had the location where the well was installed marked by surveyors, used a metal detector, and had a driller drill several borings to about 5 feet below the ground surface in the area where the well had been installed. Again, the well was not found. It appears that the well was removed or cut off when New Century Beverage Company prepared the area for use as an employee parking lot. If well MW-5 is encountered during future grading or construction activities, Del Monte will abandon the well in accordance with Zone 7 Water Agency requirements.

Well abandonment was conducted in accordance with the conditions of Permit Number 97071, issued by Zone 7 Water Agency. A copy of the permit is included in Appendix E. The wells were abandoned using pressure grouting. The well abandonment was documented in a letter to Zone 7 Water Agency, a copy of which is provided in Appendix E.

3.0 Summary and Recommendations

Based on the results of the remediation and confirmation sampling activities presented in this report, Section 5 of the Sitewide Risk Management Plan has been fully implemented. Del Monte requests that the RWQCB provide a Remedial Action Completion Letter by April 18, 1997.

4.0 References

CH2M HILL, 1989. Soil Investigation Report, Haven Street Property, 1250 Park Avenue, Del Monte Plant No. 35. Prepared by CH2M HILL for Del Monte Foods. December 1989.

CH2M HILL, 1992. Quarterly Report for Del Monte Plant 35-West Parcel. Prepared by CH2M HILL for Del Monte Foods. November 1992.

CH2M HILL, 1996. Sitewide Risk Management Plan, Del Monte Plant 35, Emeryville, California. Prepared by CH2M HILL for Del Monte Foods. October 1996.

CH2M HILL, 1997. Letter from M. Wall/CH2M HILL to S. Arigala/RWQCB Re: Additional Soil Sampling Results Collected in late 1996 and Subsurface Soil Samples Collected in 1989. January 24, 1997.

RWQCB, 1997a. Letter from S. Morse/RWQCB to S. Ronzone/Del Monte Re: Sitewide Risk Management Plan. February 7, 1997.

RWQCB, 1997b. Letter from S. Morse/RWQCB to S. Ronzone/Del Monte Re: concurrence with CH2M HILL letter of January 24, 1997. February 7, 1997.

Table 1
Designated Soil Sample Analytical Results
Del Monte Plant #35

Sample	Sample Date	TPH[2] - gas (mg/Kg)[3]	benzene (mg/Kg)	toluene (mg/Kg)	ethyl benzene (mg/Kg)	xylenes (mg/Kg)	TEPH[1] kerosene (mg/Kg)	TEPH[1] diesel (mg/Kg)	TEPH[1] motor oil (mg/Kg)	HVOCs[4] (mg/Kg)
Haven Street										
S4	2/27/97	ND[5]	ND	ND	ND	ND	ND	**200**	ND	ND
S5	2/27/97	ND	ND	ND	ND	ND	ND	140	**1400**	ND
S6	2/27/97	ND	ND	ND	ND	ND	ND	180	**2000**	ND
SB-7	2/27/97	ND	ND	ND	ND	ND	ND	9.5	120	ND
X-1	2/27/97	ND	ND	ND	ND	ND	ND	**470**	ND	ND
X-2	2/27/97	ND	ND	ND	ND	ND	ND	13	ND	ND
X-3	2/27/97	ND	ND	ND	ND	ND	ND	82	ND	ND
X-4	2/27/97	ND	ND	ND	ND	ND	ND	6.8	50	ND
X-5	2/27/97	ND	ND	ND	ND	ND	ND	ND	ND	ND
West Parcel										
SB-2	2/27/97	ND	ND	ND	ND	ND	ND	7.0	ND	ND
Cannery										
G-6	4/2/97	ND	ND	ND	ND	0.016	ND	ND	ND	ND
G-6a	4/2/97	ND	ND	ND	ND	ND	ND	2.1	ND	ND
G-6b	4/2/97	ND	ND	ND	ND	0.012	ND	100	**1100**	ND
G-6c	4/2/97	ND	ND	ND	ND	ND	ND	160	**910**	ND

Results in **bold** are at or above the target cleanup levels
[1] TEPH = Total Extractable Petroleum Hydrocarbons
[2] TPH = Total Petroleum Hydrocarbons
[3] mg/Kg = milligrams per kilogram
[4] HVOCs = Halogenated Volatile Organic Compounds
[5] ND = not detected above the method reporting limit

Table 2
Suspect Soil Sample Analytical Results
Del Monte Plant #35

Sample	Sample Date	TPH[2] - gas (mg/Kg)[3]	benzene (mg/Kg)	toluene (mg/Kg)	ethyl benzene (mg/Kg)	xylenes (mg/Kg)	TEPH[1] kerosene (mg/Kg)	TEPH[1] diesel (mg/Kg)	TEPH[1] motor oil (mg/Kg)	HVOCs[4] (mg/Kg)
SSHS-6	2/27/97	ND[5]	ND	**0.010**	**0.15**	**1.2**	ND	**900**	ND	ND
SSHS-27	2/27/97	ND	ND	ND	ND	ND	ND	87	ND	ND
SSHS-30	2/27/97	ND	ND	ND	ND	ND	ND	46	ND	ND
SSHS-78	4/2/97	ND	ND	ND	ND	ND	ND	93	**1600**	ND
SSHS-81	4/2/97	ND	ND	ND	ND	ND	ND	9.0	ND	ND
SSHS-110	3/18/97	ND	ND	ND	ND	ND	ND	ND	ND	ND
SSHS-111	3/18/97	ND	ND	ND	ND	ND	ND	**390**	**990**	ND
SSHS-103[6]	2/27/97	ND	ND	ND	ND	ND	ND	13	68	ND
SSCS-48	3/6/97	ND	ND	ND	0.011	0.058	ND	**200**	410	ND
SSCS-56	3/6/97	ND	ND	ND	ND	0.016	ND	160	**620**	ND
SSCS-56b	3/18/97	NA[7]	NA	NA	NA	NA	ND	90	290	NA
SSCS-75	3/20/97	ND	ND	ND	ND	0.014	ND	24	110	ND
SSCS-76	3/20/97	ND	ND	ND	ND	ND	ND	ND	ND	ND
SSCS-76a	3/20/97	ND	ND	ND	0.013	0.070	ND	ND	ND	ND
SSCS-85	3/27/97	ND	ND	ND	ND	0.022	ND	**240**	**1100**	ND
SSCS-93	3/27/97	ND	ND	ND	0.013	0.074	ND	130	320	ND
SSCS-93a	3/27/97	ND	ND	ND	ND	0.014	ND	29	230	ND
SSCS-93b	3/27/97	ND	ND	ND	ND	ND	ND	44	ND	ND
SSCS-98	3/18/97	ND	ND	ND	0.0050	0.017	ND	59	110	ND
SSCS-99	3/20/97	ND	ND	ND	ND	0.0072	24	ND	170	ND
SSCS-100	3/20/97	ND	ND	ND	ND	ND	ND	1.2	ND	ND
SSCS-300	3/20/97	ND	ND	ND	ND	ND	ND	ND	ND	NA
SSCS-600b[8]	4/4/97	1.6	ND	ND	ND	ND	ND	79	120	ND
SSCS-600w[8]	4/4/97	ND	ND	ND	0.0060	0.062	ND	45	75	ND

Results in **bold** are at or above the target cleanup levels
[1] TEPH = Total Extractable Petroleum Hydrocarbons
[2] TPH = Total Petroleum Hydrocarbons
[3] mg/Kg = milligrams per kilogram
[4] HVOCs = Halogenated Volatile Organic Compounds
[5] ND = not detected above the method reporting limit
[6] This sample was also analyzed for Chromium (18 mg/Kg) and lead (3.6 mg/Kg)
[7] Not Analyzed
[8] These samples were also analyzed for lead (14 mg/Kg for SSCS-600b and 67 mg/Kg for SSCS-600w)

Table 3
Crushed Red Brick Analytical Results
Del Monte Plant #35

Parameter	RBRICK1 (mg/Kg)[1]	RBRICK2 (mg/Kg)
Antimony	ND[2]	ND
Arsenic	4.3	3.9
Barium	82	32
Beryllium	ND	ND
Cadmium	ND	ND
Chromium	14	3.3
Cobalt	4.5	ND
Copper	44	10
Lead	13	8.3
Mercury	0.057	ND
Molybdenum	ND	ND
Nickel	20	5.9
Selenium	ND	ND
Silver	ND	ND
Thallium	ND	ND
Vanadium	20	8.8
Zinc	44	11

Each sample was a four-point composite collected on 3/18/97

[1] mg/Kg = milligrams per kilogram

[2] Not detected above the method reporting limit

Table 4
Transformer Room Analytical Results
Del Monte Plant #35

Sample	TEPH[1]			PCBs[3] (mg/Kg)
	kerosene (mg/Kg)[2]	diesel (mg/Kg)	motor oil (mg/Kg)	
T-1	ND[4]	**580**	230	ND
T-2	ND	ND	ND	ND
T-3	ND	1.7	ND	ND
T-4	ND	14	ND	ND

Results in **bold** are above target cleanup levels
All four samples were collected on 4/2/97
[1] TEPH = Total Extractable Petroleum Hydrocarbons
[2] mg/Kg = milligrams per kilogram
[3] PCBs = polychlorinated biphenyls
[4] Not detected above the method reporting limit

Table 5
Cooling Tower Analytical Results
Del Monte Plant #35

Sample	Total Chromium (mg/Kg)[1]
CT-1	25
CT-2	16
CT-3	12
CT-4	28

All four samples were collected on 4/4/97
[1] milligrams per kilogram

Table 6
Confirmation Soil Sample Analytical Results
Del Monte Plant #35

Sample	Sample Date	TEPH[1] Kerosene (mg/Kg)[2]	TEPH[1] Diesel (mg/Kg)	TEPH[1] Motor Oil (mg/Kg)
Haven Street				
CFX-1b	4/8/97	ND[3]	ND	ND
CFX-1sw	4/8/97	ND	ND	ND
CFX-1ew	4/8/97	ND	ND	ND
CFS-4b	4/8/97	ND	ND	ND
CFS-5b	4/4/97	ND	1.1	ND
CFS-5ww	4/4/97	ND	1.0	ND
CFS-5ew	4/4/97	ND	ND	ND
CFS-6b	4/4/97	ND	26	130
CFS-6ew	4/4/97	ND	ND	ND
CFS-6nw	4/4/97	ND	2.0	ND
CFHS-6b	4/4/97	ND	ND	ND
CFHS-6nw	4/4/97	ND	11	170
CFHS-6sw	4/4/97	ND	ND	ND
CFHS-78b	4/4/97	ND	6.9	ND
CFHS-78ew	4/4/97	ND	ND	ND
CFHS-78ww	4/4/97	ND	1.2	ND
CFHS-110bc[4]	4/8/97	ND	48	**660**
CHFS-110bc[4,5]	4/11/97	ND	ND	ND
CFHS-110bn[4]	4/8/97	ND	ND	ND
CFHS-110bs[4]	4/8/97	ND	9.4	62
CFHS-110ew[4]	4/8/97	ND	4.2	ND
CFHS-110ww[4]	4/8/97	ND	10	92
CFHS-110nw[4]	4/8/97	ND	ND	ND
HS-110gw[4,6]	4/11/97	ND	ND	ND
Cannery				
CFT-1b	4/4/97	ND	55	ND
CFT-1b[5]	4/8/97	ND	50	ND
CFT-1nw	4/4/97	ND	**1600**	ND
CFT-1nw[5]	4/8/97	ND	7.2	ND
CFT-1sw	4/4/97	ND	ND	ND
CFT-1ew[5]	4/8/97	ND	28	ND
CFG-6bcbb	4/4/97	ND	180	ND
CFG-6bcbc	4/4/97	ND	ND	ND
CFG-6bcsw	4/4/97	ND	ND	ND
CFG-6bcnw	4/4/97	ND	ND	ND
CFCS-48b	4/8/97	ND	3.8	ND
CFCS-56b	4/4/97	ND	8.2	100
CFCS-56nw	4/4/97	ND	7.5	ND
CFCS-56sw	4/4/97	ND	3.2	ND
CFCS-85b	4/4/97	ND	ND	ND
CFCS-85nw	4/4/97	ND	4.9	ND
CFCS-85sw	4/4/97	ND	11	100

Results in **bold** are above target cleanup levels
1 TEPH = Total Extractable Petroleum Hydrocarbons
2 mg/Kg =milligrams per kilogram
3 ND = Not detected above the method reporting limit
4 This confirmation sample is actually for SSHS-111 (which was above the target cleanup level; SSHS-110 did not exceed the target cleanup level)
5 Based on the analytical results of the initial excavation, these areas were further excavated and resampled
6 This is a groundwater grab sample collected approximately 10 feet downgradient of the HS-111 excavation. Results are in micrograms per liter

Appendix A
US EPA Region 9
Preliminary Remediation Goals

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

August 1, 1996

Subject: Region 9 Preliminary Remediation Goals (PRGs) 1996

From: Stanford J. Smucker, Ph.D.
Regional Toxicologist (H-9-3)
Technical Support Team

To: PRG Table Mailing List

Please find the annual update to the Region 9 PRG table. The table has been revised to reflect the most current EPA toxicological and risk assessment information. Updates to EPA toxicity values were obtained from IRIS through July 1996, HEAST through May 1995, and EPA's National Center for Environmental Assessment (NCEA, formerly ECAO).

Region 9 PRGs are "evergreen" and have evolved as new methodologies and parameters have been developed. In several cases the models, equations, and assumptions presented in RAGS HHEM, *Part B, Development of Risk-Based Preliminary Remediation Goals* (1991) have been replaced with new information that is consistent with the document, *Soil Screening Guidance*, recently issued by the Office of Solid Waste and Emergency Response (OSWER), dated April 1996.

The updated PRG table also contains soil screening levels (SSLs) for protection of groundwater. The SSLs were obtained directly from EPA/OSWER's *Soil Screening Guidance* document which is available from NTIS as EPA/540/R-96/018 and EPA/540/R-95/128. Please note that because R 9 PRGs currently evaluate intermedia transfer of volatile organic chemicals (VOCs) and heavy metals from soil to air, the PRG table does not include a separate list of SSLs for the air pathway.

To help users rapidly identify substances with new PRGs, these contaminants are printed in boldface type. Changes in PRG values are either due to new toxicity constants or new physico-chemical information. This version of the table contains revised toxicity values for acetaldehyde, chlorine cyanide, 1,3-dichlorobenzene, 2-dichloroethane, endosulfan, manganese, phosphoric acid, and 1,1,1-trichloroethane. Also, 23 additional VOCs have been identified and evaluated for inhalation exposures resulting from intermedia transfer from soil and water to air.

EPA Region 9 has established a homepage on the World Wide Web which you can find at http://www.epa.gov/region 9/. Our homepage will soon include the PRG table in downloadable form. The electronic table contains additional information not presented in the printed table (e.g. physico-chemical constants, non-cancer PRGs for carcinogens, pathway-specific PRGs, and volatilization factors for VOCs). Meanwhile, we still provide the electronic PRG table (PRG96.zip) on California Regional Water Board's BBS (510.286.0404) for those of you who have a modem.

Before relying on any number in the table, it is recommended that the user verify the numbers with an agency toxicologist or risk assessor because the toxicity / exposure information in the table may contain errors or default assumptions that need to be refined based on further evaluation. If you find an error please send me a note via email at Smucker.Stan@epamail.epa.gov or fax at 415.744.1916.

DISCLAIMER

Preliminary remediation goals (PRGs) focus on common exposure pathways and may not consider all exposure pathways encountered at CERCLA / RCRA sites (Exhibit 1-1). PRGs do not consider impact to groundwater or address ecological concerns. PRGs are specifically not intended as a (1) stand-alone decision-making tool, (2) as a substitute for EPA guidance for preparing baseline risk assessments, or (3) a rule to determine if a waste is hazardous under RCRA.

The guidance set out in this document is not final Agency action. It is not intended, nor can it be relied upon to create any rights enforceable by any party in litigation with the United States. EPA officials may decide to follow the guidance provided herein, or act at variance with the guidance, based on an analysis of specific circumstances. The Agency also reserves the right to change this guidance at any time without public notice.

1.0 INTRODUCTION

The Region 9 PRG table combines current EPA toxicity values with "standard" exposure factors to estimate contaminant concentrations in environmental media (soil, air, and water) that are protective of humans, including sensitive groups, over a lifetime. Chemical concentrations above these levels would not automatically designate a site as "dirty" or trigger a response action. However, exceeding a PRG suggests that further evaluation of the potential risks that may be posed by site contaminants is appropriate. Further evaluation may include additional sampling, consideration of ambient levels in the environment, or a reassessment of the assumptions contained in these screening-level estimates (e.g. appropriateness of route-to-route extrapolations).

The PRG concentrations presented in the table can be used to screen pollutants in environmental media, trigger further investigation, and provide an initial cleanup goal if applicable. When considering PRGs as preliminary goals, residential concentrations should be used for maximum beneficial uses of a property. Industrial concentrations are included in the table as an alternative cleanup goal for soils, but it is not recommended that industrial concentrations be used for screening sites.

Before applying PRGs as screening tools or initial goals, the user of the table should consider whether the exposure pathways and exposure scenarios at the site are fully accounted for in the PRG calculation. Region 9 PRG concentrations are based on exposure pathways for which generally accepted methods, models, and assumptions have been developed (i.e. ingestion, dermal contact, and inhalation) for specific land-use conditions and do not consider impact to groundwater or ecological receptors (see Developing a Conceptual Site Model below).

EXHIBIT 1-1
TYPICAL EXPOSURE PATHWAYS BY MEDIUM
FOR RESIDENTIAL AND INDUSTRIAL LAND USES*

EXPOSURE PATHWAYS, ASSUMING:		
MEDIUM	RESIDENTIAL LAND USE	INDUSTRIAL LAND USE
Ground Water	***Ingestion from drinking***	Ingestion from drinking
	Inhalation of volatiles	Inhalation of volatiles
	Dermal absorption from bathing	Dermal absorption
Surface Water	***Ingestion from drinking***	Ingestion from drinking
	Inhalation of volatiles	Inhalation of volatiles
	Dermal absorption from bathing	Dermal absorption
	Ingestion during swimming	
	Ingestion of contaminated fish	
Soil	***Ingestion***	***Ingestion***
	Inhalation of particulates	***Inhalation of particulates***
	Inhalation of volatiles	***Inhalation of volatiles***
	Exposure to indoor air from soil gas	Exposure to indoor air from soil gas
	Exposure to ground water contaminated by soil leachate	Exposure to ground water contaminated by soil leachate
	Ingestion via plant, meat, or dairy products	Inhalation of particulates from trucks and heavy equipment
	Dermal absorption	***Dermal absorption***

Footnote:
*Exposure pathways considered in the PRG calculations are indicated in boldface italics.

2.0 READING THE PRG TABLE

2.1 General Considerations

With the exceptions described below, PRGs are chemical concentrations that correspond to fixed levels of risk (i.e.either a one-in-one million [10^{-6}] cancer risk or a noncarcinogenic hazard quotient of one, whichever occurs at a lower concentration) in soil, air, and water. In most cases, where a substance causes both cancer and noncancer or systemic effects, the 10^{-6} cancer risk will result in a more stringent criteria and consequently this value is presented in the table. PRG concentrations based on cancer risk are indicated by "ca". PRG concentrations based on noncarcinogenic health threats are indicated by "nc".

If the risk-based concentrations are to be used to screen sites, it is recommended that both cancer and noncancer-based PRGs be obtained even though the printed list contains only the more restrictive of the two values. To obtain additional values (e.g. noncancer PRGs for a carcinogenic substance), the user has the following options:

- download an electronic copy of the PRG table from EPA Region 9's homepage at http://www.epa.gov/region 9/
- download the file (PRG96.zip) from California Regional Water Board's BBS at 510.286.0404
- use the equations presented in Section 4.0 to calculate additional PRG values

It has come to my attention that some users have been multiplying the cancer PRG concentrations by 10 or 100 to set "action levels" for triggering remediation or to set less stringent cleanup levels for a specific site after considering non-risk-based factors such as (ambient levels, detection limits, or technological feasibility). This practice recognizes that there may be a range of values that may be "acceptable" for carcinogenic risk (EPA's cancer risk range is from 10^{-6} to 10^{-4}). However, this practice could lead one to overlook serious noncancer health threats and it is strongly recommended that the user consult with a toxicologist or Regional risk assessor before doing this. For carcinogens, I have indicated by asterisk ("ca*") in the PRG table where the noncancer PRGs would be exceeded if the cancer value that is listed is multiplied by 100. Two stars ("ca**") indicate that the noncancer values would be exceeded if the cancer PRG were multiplied by 10. There is no range of "acceptable" noncarcinogenic "risk" so that under no circumstances should noncancer PRGs be multiplied by 10 or 100, when setting final cleanup criteria.

In general, PRG concentrations in the table are risk-based but for soil there are two important exceptions: (1) for several volatile chemicals, PRGs are based on the soil saturation equation ("sat") and (2) for relatively less toxic inorganic and semivolatile contaminants, a non-risk based "ceiling limit" concentration is given as 10^{+5} mg/kg ("max"). PRG concentrations that are not risk-based (i.e. either "sat" or "max") should be segregated before screening multiple

pollutant risks.

In addition to Region 9 PRGs, the PRG table also includes California EPA PRGs ("CAL-Modified PRGs") for specific chemicals where CAL-EPA values may be more restrictive than the federal values; and, soil screening levels (SSLs) for protection of groundwater (see Section 2.3 below).

2.2 Toxicity Values

EPA toxicity values, known as noncarcinogenic reference doses (RfD) and carcinogenic slope factors (SF) were obtained from IRIS through July 1996, HEAST through May 1995, and EPA's National Center for Environmental Assessment (NCEA, formerly ECAO). The priority among sources of toxicological constants used are as follows: (1) IRIS (indicated by "i"), (2) HEAST ("h"), (3) NCEA ("n"), and (4) withdrawn from IRIS or HEAST and under review ("x").

Route-to-route extrapolations ("r") were frequently used when there were no toxicity values available for a given route of exposure. Oral cancer slope factors ("SFo") and reference doses ("RfDo") were used for both oral and inhaled exposures for organic compounds lacking inhalation values. Inhalation slope factors ("SFi") and inhalation reference doses ("RfDi") were used for both inhaled and oral exposures for organic compounds lacking oral values. An additional route extrapolation is the use of oral toxicity values for evaluating dermal exposures. **Although route-to-route methods are a useful screening procedure, the appropriateness of these default assumptions for specific contaminants should be verified by a toxicologist.**

To help users rapidly identify substances with new PRGs, these contaminants are printed in boldface type. This version of the table contains revised toxicity values for acetaldehyde, chlorine cyanide, 1,3-dichlorobenzene, 2-dichloroethane, endosulfan, manganese, phosphoric acid, and 1,1,1-trichloroethane.

2.3 Soil Screening Levels

Generic soil screening levels (SSLs) for the protection of groundwater have been included in the PRG table for 100 of the most common contaminants at Superfund sites. Generic SSLs are derived using default values in standardized equations presented in *Soil Screening Guidance* (available from NTIS as document numbers PB96-963502 and PB96-963505 or EPA/540/R-95/128 and EPA/540/R-96/018).

The SSLs were developed using a default dilution-attenuation factor (DAF) of 20 to account for natural processes that reduce contaminant concentrations in the subsurface. Also included are generic SSLs that assume no dilution or attenuation between the source and the receptor well (i.e., a DAF of 1). These values can be used at sites where little or no dilution or attenuation of soil leachate concentrations is expected at a site (e.g., sites with shallow water

tables, fractured media, karst topography, or source size greater than 30 acres).

Generally, if an SSL is not exceeded for the migration to groundwater pathway, the user may eliminate this pathway from further investigation.

2.4 Miscellaneous

Volatile organic chemicals (VOCs) are indicated by "1" in the VOC column of the table and are defined as those chemicals having a Henry's Law constant greater than 10^{-5} (atm-m^3/mol) and a molecular weight less than 200 g/mole). These contaminants are evaluated for potential volatilization from soil / water to air using volatilization factors (see Section 4.1). Since the 1995 PRG table, 23 additional VOCs have been identified and evaluated for inhalation exposures resulting from intermedia transfer from soil and water to air. These are indicated in boldface type.

Chemical-specific dermal absorption values for contaminants in soil and dust are presented for arsenic, cadmium, pentachlorophenol, PCBs, and dioxin as recommended by EPA's Office of Research and Development (USEPA 1992a). Otherwise, default skin absorption fractions are assumed to be 0.01 and 0.10, for inorganics and organics, respectively.

3.0 USING THE PRG TABLE

The decision to use PRGs at a site will be driven by the potential benefits of having generic risk-based concentrations in the absence of site-specific risk assessments. The original intended use of PRGs was to provide initial cleanup goals for individual chemicals given specific medium and land-use combinations (see RAGS Part B, 1991), however risk-based PRGs actually have several uses in addition to providing initial goals. These include:

- Screening sites to determine further evaluation
- Prioritizing areas of concern at megasites (e.g. federal facilities)
- Calculating risks associated with multiple contaminants

A few basic procedures are recommended for using PRGs properly. These are briefly described below. Potential problems with the use of PRGs are also identified.

3.1 Developing a Conceptual Site Model

The primary condition for use of PRGs is that exposure pathways of concern and conditions at the site match those taken into account by the PRG framework. Thus, it is always necessary to develop a conceptual site model (CSM) to identify likely contaminant source areas, exposure pathways, and potential receptors. This information can be used to determine the applicability of PRGs at the site and the need for additional information. For those pathways not covered by PRGs, a risk assessment specific to these additional pathways may be necessary. Nonetheless, the PRG lookup values will still be useful in such situations for focusing further investigative efforts on the exposure pathways not addressed.

To develop a site-specific CSM, perform an extensive records search and compile existing data (e.g. available site sampling data, historical records, aerial photographs, and hydrogeologic information). Once this information is obtained, CSM worksheets such as those provided in ASTM's *Standard Guide for Risk-Based Corrective Action Applied at Petroleum Release Sites* (1995) can be used to tailor the generic worksheet model to a site-specific CSM. The final CSM diagram represents linkages among contaminant sources, release mechanisms, exposure pathways and routes and receptors. It summarizes our understanding of the contamination problem.

As a final check, the CSM should answer the following questions:

- Are there potential ecological concerns?
- Is there potential for land use other than those covered by the PRGs (that is, residential and industrial)?
- Are there other likely human exposure pathways that were not considered in development of the PRGs (e.g. impact to groundwater, local fish consumption; raising beef, dairy, or other livestock)?
- Are there unusual site conditions (e.g. large areas of contamination, high fugitive dust levels, potential for indoor air contamination)?

If any of these four conditions exist, the PRG may need to be adjusted to reflect this new information. Suggested references for evaluating pathways not currently evaluated by Region 9 PRG's are presented in Exhibit 3-1.

EXHIBIT 3-1
SUGGESTED READINGS FOR EVALUATING SOIL CONTAMINANT PATHWAYS NOT CURRENTLY ADDRESSED BY REGION 9 PRGs

EXPOSURE PATHWAY	REFERENCE
Migration of contaminants to an underlying potable aquifer	*Soil Screening Guidance: User's Guide and Technical Background Document* (USEPA 1996a,b)
Ingestion via plant uptake	*Technical Support Document for Land Application of Sewage Sludge (USEPA 1992a)*
Ingestion via meat or dairy products	*Estimating Exposure to Dioxin-Like Compounds - Review Draft* (1994a)
Inhalation of volatiles that have migrated into basements	*Soil Screening Guidance: User's Guide and Technical Background Document* (USEPA 1996a,b)
Terrestrial environmental pathways	*Role of the Ecological Risk Assessment in the Baseline Risk Assessment* (USEPA 1994b)

3.2 Background Levels Evaluation

A necessary step in determining the usefulness of Region 9 PRGs is the consideration of background contaminant concentrations. EPA may be concerned with two types of background at sites: naturally occurring and anthropogenic. Natural background is usually limited to metals whereas anthropogenic (i.e. human-made) background includes both organic and inorganic contaminants. Before embarking on an extensive sampling and analysis program to determine local background concentrations in the area, one should first compile existing data on the subject. Far too often there is pertinent information in the literature that gets ignored, resulting in needless expenditures of time and money.

Generally EPA does not clean up below natural background. If natural background concentrations are higher than the PRGs, the generic PRGs may not be the best tool for site decisionmaking. Or, an adjustment of the PRG may be needed. For example, naturally occurring arsenic frequently is higher than the soil PRG set equal to a one-in-one-million cancer risk (the point of departure), thus an alternative PRG for arsenic is provided in the lookup tables based on non-cancer endpoints that is still protective of cancer risks as well (i.e. falls within EPA's "acceptable" risk range). Because of the problems associated with adjusting PRGs to an alternate risk level, this procedure is not recommended without first

consulting a staff toxicologist at state and / or federal regulatory agencies.

Where anthropogenic background levels exceed PRGs and EPA has determined that a response action is necessary and feasible, EPA's goal will be to develop a comprehensive response to the widespread contamination. This will often require coordination with different authorities that have jurisdiction over the sources of contamination in the area.

3.3 Risk Screening

A suggested stepwise approach for screening sites with PRGs is as follows:

- Perform an extensive records search and compile existing data.

- Identify site contaminants in the PRG Table. Record the PRG concentrations for various media and note whether PRG is based on cancer risk (indicated by "ca") or noncancer hazard (indicated by "nc"). Segregate cancer PRGs from non-cancer PRGs and exclude (but don't eliminate) non-risk based PRGs ("sat" or "max").

- For cancer risk estimates, take the site-specific concentration (maximum or 95 UCL) and divide by the PRG concentrations that are designated for cancer evaluation ("ca"). Multiply this ratio by 10^{-6} to estimate chemical-specific risk. For multiple pollutants, simply add the risk for each chemical :

$$Risk = \left[\left(\frac{conc_x}{PRG_x}\right) + \left(\frac{conc_y}{PRG_y}\right) + \left(\frac{conc_z}{PRG_z}\right)\right] \times 10^{-6}$$

- For non-cancer hazard estimates. Divide concentration term by its respective non-cancer PRG designated as "nc" and sum the ratios for multiple contaminants. [Note that carcinogens may also have an associated non-cancer PRG that is not listed in the printed copy of the table and these will also need to be obtained in order to complete the non-cancer evaluation.] The non-cancer ratio represents a hazard index (HI). A hazard index of 1 or less is generally considered safe . A ratio greater than 1 suggests further evaluation:

$$Hazard\ Index = \left[\left(\frac{conc_x}{PRG_x}\right) + \left(\frac{conc_y}{PRG_y}\right) + \left(\frac{conc_z}{PRG_z}\right)\right]$$

For more information on screening site risks, the reader should contact EPA Region 9's Technical Support Team.

3. 4 Potential Problems

As with any risk-based tool, the potential exists for misapplication. In most cases the root cause will be a lack of understanding of the intended use of Region 9 PRGs. In order to prevent misuse of PRGs, the following should be avoided:

- Applying PRGs to a site without adequately developing a conceptual site model that identifies relevant exposure pathways and exposure scenarios,
- Not considering background concentrations when choosing PRGs as cleanup goals,
- Use of PRGs as cleanup levels without the nine-criteria analysis specified in the National Contingency Plan (or, comparable analysis for programs outside of Superfund),
- Use of PRGs as cleanup levels without verifying numbers with a toxicologist,
- Use of antiquated PRG tables that have been superseded by more recent publications,
- Not considering the effects of additivity when screening multiple chemicals, and
- Adjusting PRGs upward by factors of 10 or 100 without consulting a toxicologist.

4.0 TECHNICAL SUPPORT DOCUMENTATION

Region 9 PRGs consider human exposure hazards to chemicals from contact with contaminated soils, air, and water. The emphasis of the PRG equations and technical discussion are aimed at developing initial goals for soils, since this is an area where few standards exist. For air and water, additional reference concentrations or standards are available for many chemicals (e.g. non-zero MCLGs, AWQC, and NAAQS) and consequently the discussion of these media are brief.

4.1 Inhalation of Volatiles and Fugitive Dusts

Agency toxicity criteria indicate that risks from exposure to some chemicals via inhalation far outweigh the risk via ingestion; therefore soil PRGs have been designed to address this pathway as well. The models used to calculate PRGs for inhalation of volatiles / particulates are updates of risk assessment methods presented in RAGS Part B (USEPA 1991a) and are consistent with the *Soil Screening Guidance: User's Guide and Technical Background*

Document (USEPA 1996a,b).

To address the soil-to-air pathways the PRG calculations incorporate volatilization factors (VF_s) for volatile contaminants and particulate emission factors (PEF) for nonvolatile contaminants. These factors relate soil contaminant concentrations to air contaminant concentrations that may be inhaled on-site. The VF_s and PEF equations can be broken into two separate models: an emission model to estimate emissions of the contaminant from the soil and a dispersion model to simulate the dispersion of the contaminant in the atmosphere.

It should be noted that the box model in RAGS Part B has been replaced with a dispersion term (Q/C) derived from a modeling exercise using meteorological data from 29 locations across the United States because the box model may not be applicable to a broad range of site types and meteorology and does not utilize state-of-the-art techniques developed for regulatory dispersion modeling. The dispersion model for both volatiles and particulates is the AREA-ST, an updated version of the Office of Air Quality Planning and Standards, Industrial Source Complex Model, ISC2. However, different Q/C terms are used in the VF and PEF equations. Los Angeles was selected as the 90th percentile data set for volatiles and Minneapolis was selected as the 90th percentile data set for fugitive dusts (USEPA 1996 a,b). A default source size of 0.5 acres was chosen for the PRG calculations. This is consistent with the default exposure area over which Region 9 typically averages contaminant concentrations in soils. If unusual site conditions exist such that the area source is substantially larger than the default source size assumed here, an alternative Q/C could be applied (see USEPA 1996a,b).

Volatilization Factor for Soils

Volatile chemicals, defined as those chemicals having a Henry's Law constant greater than 10^{-5} (atm-m^3/mol) and a molecular weight less than 200 g/mole, were screened for inhalation exposures using a volatilization factor for soils (VF_s). Please note that VF_s's are available in the electronic version of the PRG table.

The emission terms used in the VF_s are chemical-specific and were calculated from physical-chemical information obtained from a number of sources including *Superfund Exposure Assessment Manual* (SEAM, EPA 1988), *Subsurface Contamination Reference Guide* (EPA 1990a), *Fate and Exposure Data* (Howard 1991), and *Superfund Chemical Data Matrix* (USEPA 1994c). In those cases where Diffusivity Coefficients (Di) were not provided in existing literature, Di's were calculated using Fuller's Method described in SEAM. A surrogate term was required for some chemicals that lacked physico-chemical information. In these cases, a proxy chemical of similar structure was used that may over- or under-estimate the PRG for soils. Physico-chemical information is available in the electronic version of the PRG table. To access this information, the user should display the hidden columns in the table.

Equation 4-9 forms the basis for deriving generic soil PRGs for the inhalation pathway. The following parameters in the standardized equation can be replaced with specific site data to

develop a simple site-specific PRG

- Source area
- Average soil moisture content
- Average fraction organic carbon content
- Dry soil bulk density

The basic principle of the VF_s model is applicable only if the soil contaminant concentration is at or below soil saturation. Above this level, the model cannot predict an accurate VF_s. If the PRG calculated using VF_s was greater than the calculated "sat" (Equation 4-10), the PRG was set equal to "sat" in accordance with *Soil Screening Guidance* (USEPA 1996 a,b).

Volatilization Factor for Tap Water

For tap water, an upperbound volatilization constant (VF_w) is used that is based on all uses of household water (e.g showering, laundering, and dish washing). Certain assumptions were made. For example, it is assumed that the volume of water used in a residence for a family of four is 720 L/day, the volume of the dwelling is 150,000 L and the air exchange rate is 0.25 air changes/hour (Andelman in RAGS Part B). Furthermore, it is assumed that the average transfer efficiency weighted by water use is 50 percent (i.e. half of the concentration of each chemical in water will be transferred into air by all water uses). Note: the range of transfer efficiencies extends from 30% for toilets to 90% for dishwashers.

Particulate Emission Factor for Soils

Inhalation of chemicals adsorbed to respirable particles (PM_{10}) were assessed using a default PEF equal to 1. 316 x 10^9 m^3/kg that relates the contaminant concentration in soil with the concentration of respirable particles in the air due to fugitive dust emissions from contaminated soils. The generic PEF was derived using default values in Equation 4-11, which corresponds to a receptor point concentration of approximately 0.76 ug/m^3. The relationship is derived by Cowherd (1985) for a rapid assessment procedure applicable to a typical hazardous waste site where the surface contamination provides a relatively continuous and constant potential for emission over an extended period of time (e.g. years). This represents an annual average emission rate based on wind erosion that should be compared with chronic health criteria; it is not appropriate for evaluating the potential for more acute exposures.

The impact of the PEF on the resultant PRG concentration (that combines soil exposure pathways for ingestion, skin contact, and inhalation) can be assessed by downloading the PRG tables and displaying the hidden columns. With the exception of specific heavy metals, the PEF does not appear to significantly affect most soil PRGs. Equation 4-11 forms the basis for deriving a generic PEF for the inhalation pathway. For more details regarding specific parameters used in the PEF model, the reader is referred to *Soil Screening Guidance: Technical Background Document* (USEPA 1996a).

Note: the generic PEF evaluates windborne emissions and does not consider dust emissions from traffic or other forms of mechanical disturbance that could lead to greater emissions than assumed here.

4.2 Dermal Contact with Contaminants in Soil

Much uncertainty surrounds the determination of hazards associated with skin contact with soils. One important data gap is the lack of EPA verified toxicity values for the dermal route. For screening purposes it is assumed that dermal toxicity values can be route-to-route extrapolated from oral values but this may not always be an appropriate assumption and should be checked.

Thus far, chemical-specific absorption values for skin have been recommended for only five chemicals (arsenic, cadmium, pentachlorophenol, PCBs, and dioxin) by EPA's Office of Research and Development. For all other chemicals, default absorption values for inorganics and organics are assumed to be 1 and 10 percent, respectively. At 10 % skin absorption, the dermal dose is estimated to equal an ingestion dose for adults, using the best estimate default values in *Dermal Exposure Assessment: Principles and Applications* (EPA 1992). At 1 % absorption, the dermal dose is estimated to be 10% of the oral dose (i.e. based on an adult ingestion rate of 100 mg per day). Note: worker and children intake rates (50 and 200 mg per day, respectively) yield somewhat different results.

dermal dose = ingestion dose

$$C_{SOIL} \times ABS \times AF \times SA = C_{SOIL} \times IR$$

$$ABS = \frac{(100 mg/day)}{[(0.2 mg/cm^2\text{-}day)\,(5000 cm^2)]} = 0.10$$

4.3 SSLs for the Migration to Groundwater Pathway

The methodology for calculating SSLs for the migration to groundwater was developed to identify chemical concentrations in soil that have the potential to contaminate groundwater. Migration of contaminants from soil to groundwater can be envisioned as a two-stage process: (1) release of contaminant in soil leachate and (2) transport of the contaminant through the underlying soil and aquifer to a receptor well. The SSL methodology considers both of these fate and transport mechanisms.

SSLs are backcalculated from acceptable ground water concentrations (i.e. nonzero MCLGs, MCLs, or risk-based PRGs). First, the acceptable groundwater concentration is multiplied by a dilution factor to obtain a target leachate concentration. For example, if the dilution factor

is 10 and the acceptable ground water concentration is 0.05 mg/L, the target soil leachate concentration would be 0.5 mg/L. The partition equation (presented in the *Soil Screening Guidance* document) is then used to calculate the total soil concentration (i.e. SSL) corresponding to this soil leachate concentration.

The SSL methodology was designed for use during the early stages of a site evaluation when information about subsurface conditions may be limited. Because of this constraint, the methodology is based on conservative, simplifying assumptions about the release and transport of contaminants in the subsurface. For more on SSLs, and how to calculate site-specific SSLs versus generic SSLs presented in the PRG table, the reader is referred to the *Soil Screening Guidance* document (USEPA 1996a,b).

4.4 Exposure Factors

Default exposure factors were obtained primarily from RAGS Supplemental Guidance Standard Default *Exposure Factors* (OSWER Directive, 9285.6-03) dated March 25, 1991 and more recent information from U.S. EPA's Office of Solid Waste and Emergency Response, U.S. EPA's Office of Research and Development, and California EPA's Department of Toxic Substances Control (see Exhibit 4-1).

Because contact rates may be different for children and adults, carcinogenic risks during the first 30 years of life were calculated using age-adjusted factors ("adj"). Use of age-adjusted factors are especially important for soil ingestion exposures, which are higher during childhood and decrease with age. However, for purposes of combining exposures across pathways, additional age-adjusted factors are used for inhalation and dermal exposures. These factors approximate the integrated exposure from birth until age 30 combining contact rates, body weights, and exposure durations for two age groups - small children and adults. Age-adjusted factors were obtained from RAGS PART B or developed by analogy (see derivations next page).

For soils only, noncarcinogenic contaminants are evaluated in children separately from adults. No age-adjustment factor is used in this case. The focus on children is considered protective of the higher daily intake rates of soil by children and their lower body weight. For maintaining consistency when evaluating soils, dermal and inhalation exposures are also based on childhood contact rates.

(1) ingestion([mg•yr]/[kg•d]:

$$IFS_{adj} = \frac{ED_c \times IRS_c}{BW_c} + \frac{(ED_t - ED_c) \times IRS_a}{BW_a}$$

(2) skin contact([mg•yr]/[kg•d]:

$$SFS_{adj} = \frac{ED_c \times AF \times SA_c}{BW_c} + \frac{(ED_r - ED_c) \times AF \times SA_a}{BW_a}$$

(3) inhalation ([m^3•yr]/[kg•d]):

$$InhF_{adj} = \frac{ED_c \times IRA_c}{BW_c} + \frac{(ED_r - ED_c) \times IRA_a}{BW_a}$$

4.5 PRG Equations

The equations used to calculate the PRGs for carcinogenic and noncarcinogenic contaminants are presented in Equations 4-1 through 4-8. The PRG equations update RAGS Part B equations. Briefly, PRGs are risk assessments run in reverse. The methodology backcalculates a soil, air, or water concentration level from a target risk (for carcinogens) or hazard quotient (for noncarcinogens). For completeness, the soil equations combine risks from ingestion, skin contact, and inhalation simultaneously. Note: the electronic version of the table also includes pathway-specific PRGs, should the user decide against combining specific exposure pathways; or, the user wants to identify the relative contribution of each pathway to exposure.

To calculate PRGs for volatile chemicals in soil, a chemical-specific volatilization factor is calculated per Equation 4-9. Because of its reliance on Henry's law, the VF_s model is applicable only when the contaminant concentration in soil is at or below saturation (i.e. there is no free-phase contaminant present). Soil saturation ("sat") corresponds to the contaminant concentration in soil at which the adsorptive limits of the soil particles and the solubility limits of the available soil moisture have been reached. Above this point, pure liquid-phase contaminant is expected in the soil. If the PRG calculated using VF_s was greater than the calculated sat, the PRG was set equal to sat, in accordance with *Soil Screening Guidance* (USEPA 1996 a,b). The updated equation for deriving sat is presented in Equation 4-10.

EXHIBIT 4-1
STANDARD DEFAULT FACTORS

Symbol	Definition (units)	Default	Reference
CSFo	Cancer slope factor oral (mg/kg-d)-1	–	IRIS, HEAST, or NCEA
CSFi	Cancer slope factor inhaled (mg/kg-d)-1	–	IRIS, HEAST, or NCEA
RfDo	Reference dose oral (mg/kg-d)	–	IRIS, HEAST, or NCEA
RfDi	Reference dose inhaled (mg/kg-d)	–	IRIS, HEAST, or NCEA
TR	Target cancer risk	10^{-6}	–
THQ	Target hazard quotient	1	–
BWa	Body weight, adult (kg)	70	RAGS (Part A), EPA 1989 (EPA/540/1-89/002)
BWc	Body weight, child (kg)	15	Exposure Factors , EPA 1991 (OSWER No. 9285.6-03)
ATc	Averaging time - carcinogens (days)	25550	RAGS(Part A), EPA 1989 (EPA/540/1-89/002)
ATn	Averaging time - noncarcinogens (days)	ED*365	
SAa	25% Surface area, adult (cm^2/day)	5000	Dermal Assessment, EPA 1992 (EPA/600/8-91/011B)
SAc	25% Surface area, child (cm^2/day)	2000	Dermal Assessment, EPA 1992 (EPA/ 600/8-9/011B)
AF	Adherence factor (mg/cm^2)	0.2	Dermal Assessment, EPA 1992 (EPA/ 600/8-9/011B)
ABS	Skin absorption (unitless):		
	– organics	0.1	PEA, Cal-EPA (DTSC, 1994)
	–Inorganics	0.01	PEA, Cal-EPA (DTSC, 1994)
IRAa	Inhalation rate - adult (m^3/day)	20	Exposure Factors , EPA 1991 (OSWER No. 9285.6-03)
IRAc	Inhalation rate - child (m^3/day)	10	RAGS (Part A), EPA 1989 (EPA/540/1-89/002)
IRWa	Drinking water ingestion - adult (L/day	2	RAGS(Part A), EPA 1989 (EPA/540/1-89/002)
IRWc	Drinking water ingestion - child (L/day)	1	PEA, Cal-EPA (DTSC, 1994)
IRSa	Soil ingestion - adult (mg/day)	100	Exposure Factors , EPA 1991 (OSWER No. 9285.6-03)
IRSc	Soil ingestion - child (mg/day),	200	Exposure Factors , EPA 1991 (OSWER No. 9285.6-03)
IRSo	Soil ingestion - occupational (mg/day)	50	Exposure Factors , EPA 1991 (OSWER No. 9285.6-03)
EFr	Exposure frequency - residential (d/y)	350	Exposure Factors , EPA 1991 (OSWER No. 9285.6-03)
EFo	Exposure frequency - occupational (d/y)	250	Exposure Factors , EPA 1991 (OSWER No. 9285.6-03)
EDr	Exposure duration - residential (years)	30*	Exposure Factors , EPA 1991 (OSWER No. 9285.6-03)
EDc	Exposure duration - child (years)	6	Exposure Factors , EPA 1991 (OSWER No. 9285.6-03)
EDo	Exposure duration - occupational (years)	25	Exposure Factors , EPA 1991 (OSWER No. 9285.6-03)
	Age-adjusted factors for carcinogens:		
IFSadj	Ingestion factor, soils ([mg•yr]/[kg•d])	114	RAGS(Part B) , EPA 1991 (OSWER No. 9285.7-01B)
SFSadj	Skin contact factor, soils ([mg•yr]/[kg•d])	503	By analogy to RAGS (Part B)
InhFadj	Inhalation factor ([m^3•yr]/[kg•d])	11	By analogy to RAGS (Part B)
IFWadj	Ingestion factor, water ([l•yr]/[kg•d])	1.1	By analogy to RAGS (Part B)
VFw	Volatilization factor for water (L/m^3)	0.5	RAGS(Part B) , EPA 1991 (OSWER No. 9285.7-01B)
PEF	Particulate emission factor (m^3/kg)	See below	Soil Screening Guidance (EPA 1996a,b)
VFs	Volatilization factor for soil (m^3/kg)	See below	Soil Screening Guidance (EPA 1996a,b)
sat	Soil saturation concentration (mg/kg)	See below	Soil Screening Guidance (EPA 1996a,b)

Footnote:
*Exposure duration for lifetime residents is assumed to be 30 years total. For carcinogens, exposures are combined for children (6 years) and adults (24 years) .

PRG EQUATIONS

Soil Equations: For soils, equations were based on three exposure routes (ingestion, skin contact, and inhalation).

Equation 4-1: Combined Exposures to Carcinogenic Contaminants in Residential Soil

$$C(mg/kg) = \frac{TR \times AT_c}{EF_r \left[\left(\frac{IFS_{adj} \times CSF_o}{10^6 mg/kg} \right) + \left(\frac{SFS_{adj} \times ABS \times CSF_o}{10^6 mg/kg} \right) + \left(\frac{InhF_{adj} \times CSF_i}{VF_s^a} \right) \right]}$$

Equation 4-2: Combined Exposures to Noncarcinogenic Contaminants in Residential Soil

$$C(mg/kg) = \frac{THQ \times BW_c \times AT_n}{EF_r \times ED_c \left[\left(\frac{1}{RfD_o} \times \frac{IRS_c}{10^6 mg/kg} \right) + \left(\frac{1}{RfD_o} \times \frac{SA_c \times AF \times ABS}{10^6 mg/kg} \right) + \left(\frac{1}{RfD_i} \times \frac{IRA_c}{VF_s^a} \right) \right]}$$

Equation 4-3: Combined Exposures to Carcinogenic Contaminants in Industrial Soil

$$C(mg/kg) = \frac{TR \times BW_a \times AT_c}{EF_o \times ED_o \left[\left(\frac{IRS_o \times CSF_o}{10^6 mg/kg} \right) + \left(\frac{SA_a \times AF \times ABS \times CSF_o}{10^6 mg/kg} \right) + \left(\frac{IRA_a \times CSF_i}{VF_s^a} \right) \right]}$$

Equation 4-4: Combined Exposures to Noncarcinogenic Contaminants in Industrial Soil

$$C(mg/kg) = \frac{THQ \times BW_a \times AT_n}{EF_o \times ED_o \left[\left(\frac{1}{RfD_o} \times \frac{IRS_o}{10^6 mg/kg} \right) + \left(\frac{1}{RfD_o} \times \frac{SA_a \times AF \times ABS}{10^6 mg/kg} \right) + \left(\frac{1}{RfD_i} \times \frac{IRA_a}{VF_s^a} \right) \right]}$$

Footnote:

*Use VF_s for volatile chemicals (defined as having a Henry's Law Constant [atm-m^3/mol] greater than 10^{-5} and a molecular weight less than 200 grams/mol) or PEF for non-volatile chemicals.

Tap Water Equations:

Equation 4-5: Ingestion and Inhalation Exposures to Carcinogenic Contaminants in Water

$$C(ug/L) = \frac{TR \times AT_c \times 1000ug/mg}{EF_r \left[(IFW_{adj} \times CSF_o) + (VF_w \times InhF_{adj} \times CSF_i)\right]}$$

Equation 4-6: Ingestion and Inhalation Exposures to Noncarcinogenic Contaminants in Water

$$C(ug/L) = \frac{THQ \times BW_a \times AT_n \times 1000ug/mg}{EF_r \times ED_r \left[\left(\frac{IRW_a}{RfD_o}\right) + \left(\frac{VF_w \times IRA_a}{RfD_i}\right)\right]}$$

Air Equations:

Equation 4-7: Inhalation Exposures to Carcinogenic Contaminants in Air

$$C(ug/m^3) = \frac{TR \times AT_c \times 1000ug/mg}{EF_r \times InhF_{adj} \times CSF_i}$$

Equation 4-8: Inhalation Exposures to Noncarcinogenic Contaminants in Air

$$C(ug/m^3) = \frac{THQ \times RfD_i \times BW_a \times AT_n \times 1000ug/mg}{EF_r \times ED_r \times IRA_a}$$

EPA Region 9 Preliminary Remediation Goals: S.J. Smucker (08/01/96)

Key : I=IRIS h=HEAST n=NCEA x=WITHDRAWN r=ROUTE EXTRAPOLATION ca=CANCER PRG nc=NONCANCER PRG sat=SOIL SATURATION max=CEILING LIMIT *(where: nc < 100X ca) **(where: nc < 10X ca)

FOR PLANNING PURPOSES

TOXICITY INFORMATION							CONTAMINANT	PRELIMINARY REMEDIAL GOALS (PRGs)				SOIL SCREENING LEVELS	
SFo 1/(mg/kg-d)	RfDo (mg/kg-d)	SFi 1/(mg/kg-d)	RfDi (mg/kg-d)	V O C	skin abs. soils	CAS No.		Residential Soil (mg/kg)	Industrial Soil (mg/kg)	Ambient Air (ug/m^3)	Tap Water (ug/l)	Migration to Ground Water DAF 20 (mg/kg)	Migration to Ground Water DAF 1 (mg/kg)
							Acephate	5.1E+01 ca**	2.2E+02 ca*	7.7E-01 ca*	7.7E+00 ca*		
8.7E-03 I	4.0E-03 I	8.7E-03 r	4.0E-03 r	0	0.10	30560-19-1	Acetaldehyde	9.2E+00 ca**	2.1E+01 ca**	8.7E-01 ca*	1.5E+00 ca*		
7.7E-03 r	2.6E-03 r	7.7E-03 I	2.6E-03 I	1	0.10	75-07-0	Acetochlor	1.3E+03 nc	1.4E+04 nc	7.3E+01 nc	7.3E+02 nc		
	2.0E-02 I		2.0E-02 r	0	0.10	34256-82-1	Acetone	2.1E+03 nc	8.8E+03 nc	3.7E+02 nc	6.1E+02 nc	1.6E+01	8.0E-01
	1.0E-01 I		1.0E-01 r	1	0.10	67-64-1	Acetone cyanohydrin	5.2E+01 nc	5.5E+02 nc	1.0E+01 nc	2.9E+01 nc		
	8.0E-04 h		2.9E-03 x	0	0.10	75-86-5	Acetonitrile	2.2E+02 nc	1.2E+03 nc	5.2E+01 nc	7.1E+01 nc		
	6.0E-03 I		1.4E-02 h	1	0.10	75-05-8	Acetophenone	4.9E-01 nc	1.6E+00 nc	2.1E-02 nc	4.2E-02 nc		
	1.0E-01 I		5.7E-06 x	1	0.10	98-86-2	Acifluorfen	8.5E+02 nc	8.9E+03 nc	4.7E+01 nc	4.7E+02 nc		
	1.3E-02 I		1.3E-02 r	0	0.10	50594-66-6	Acrolein	1.0E-01 nc	3.4E-01 nc	2.1E-02 nc	4.2E-02 nc		
	2.0E-02 h		5.7E-06 I	1	0.10	107-02-8	Acrylamide	9.8E-02 ca*	4.2E-01 ca	1.5E-03 ca	1.5E-02 ca		
4.6E+00 I	2.0E-04 I	4.6E+00 I	2.0E-04 r	0	0.10	79-06-1	Acrylic acid	3.1E+04 nc	2.9E+05 nc	1.0E+00 nc	1.8E+04 nc		
	5.0E-01 I		2.9E-04 I	0	0.10	79-10-7	Acrylonitrile	1.9E-01 ca*	4.7E-01 ca*	2.8E-02 ca*	3.7E+00 ca*		
5.4E-01 I	1.0E-03 h	2.4E-01 I	5.7E-04 I	1	0.10	107-13-1	Alachlor	5.5E+00 ca*	2.4E+01 ca	8.4E-02 ca	8.4E-01 ca		
8.1E-02 h	1.0E-02 I	8.0E-02 r	1.0E-02 r	0	0.10	15972-60-8	Alar	9.8E+03 nc	1.0E+05 nc	5.5E+02 nc	5.5E+03 nc		
	1.5E-01 I		1.5E-01 r	0	0.10	1596-84-5	Aldicarb	6.5E+01 nc	6.8E+02 nc	3.7E+00 nc	3.7E+01 nc		
	1.0E-03 I		1.0E-03 r	0	0.10	116-06-3	Aldicarb sulfone	6.5E+01 nc	6.8E+02 nc	3.7E+00 nc	3.7E+01 nc		
	1.0E-03 I		1.0E-03 r	0	0.10	1646-88-4	Aldrin	2.6E-02 ca*	1.1E-01 ca	3.9E-04 ca	4.0E-03 ca	1.2E+04	5.9E+02
1.7E+01 I	3.0E-05 I	1.7E+01 I	3.0E-05 r	0	0.10	309-00-2	Ally	1.6E+04 nc	1.0E+05 max	9.1E+02 nc	9.1E+03 nc		
	2.5E-01 I		2.5E-01 r	0	0.10	5585-64-6	Allyl alcohol	3.3E+02 nc	3.4E+03 nc	1.8E+01 nc	1.8E+02 nc		
	5.0E-03 x		5.0E-03 r	0	0.10	107-18-6	Allyl chloride	3.2E+03 nc	3.3E+04 nc	1.0E+00 nc	1.8E+03 nc		
	5.0E-02 h		2.9E-04 I	0	0.10	107-05-1	Aluminum	7.7E+04 nc	1.0E+05 max		3.7E+04 nc		
	1.0E+00 n			0	0.01	7429-90-5	Aluminum phosphide	3.1E+01 nc	6.8E+02 nc		1.5E+01 nc		
	4.0E-04 I			0	0.01	20859-73-8	Amdro	2.0E+01 nc	2.0E+02 nc	1.1E+00 nc	1.1E+01 nc		
	3.0E-04 I		3.0E-04 r	0	0.10	67485-29-4	Ametryn	5.9E+02 nc	6.1E+03 nc	3.3E+01 nc	3.3E+02 nc		
	9.0E-03 I		9.0E-03 r	0	0.10	834-12-8	m-Aminophenol	4.6E+03 nc	4.8E+04 nc	2.6E+02 nc	2.6E+03 nc		
	7.0E-02 h		7.0E-02 r	0	0.10	591-27-5	4-Aminopyridine	1.3E+00 nc	1.4E+01 nc	7.3E-02 nc	7.3E-01 nc		
	2.0E-05 h		2.0E-05 r	0	0.10	504-24-5	Amitraz	1.6E+02 nc	1.7E+03 nc	9.1E+00 nc	9.1E+01 nc		
	2.5E-03 I		2.5E-03 r	0	0.10	33089-61-1	Ammonia			1.0E+02 nc			
			2.9E-02 I	n/a	n/a	7664-41-7	Ammonium sulfamate	1.3E+04 nc	1.0E+05 max		7.3E+03 nc		
	2.0E-01 I			0	0.10	7773-06-0	Aniline	1.9E+01 nc	2.0E+02 nc	1.0E+00 nc	1.1E+01 nc		
5.7E-03 I	2.9E-04 r	5.7E-03 r	2.9E-04 I	0	0.10	62-53-3	Antimony and compounds	3.1E+01 nc	6.8E+02 nc		1.5E+01 nc	5.0E+00	3.0E-01
	4.0E-04 I			0	0.01	7440-36-0	Antimony pentoxide	3.8E+01 nc	8.5E+02 nc		1.8E+01 nc		
	8.0E-04 h			0	0.01	1314-60-9	Antimony potassium tartrate	6.9E+01 nc	1.5E+03 nc		3.3E+01 nc		
	9.0E-04 h			0	0.01	28300-74-5	Antimony tetroxide	3.1E+01 nc	6.8E+02 nc		1.5E+01 nc		
	4.0E-04 h			0	0.01	1332-81-6	Antimony trioxide	3.1E+01 nc	6.8E+02 nc		1.5E+01 nc		
	4.0E-04 h			0	0.01	1309-64-4	Apollo	8.5E+02 nc	8.9E+03 nc	4.7E+01 nc	4.7E+02 nc		
	1.3E-02 I		1.3E-02 r	0	0.10	74115-24-5	Aramite	1.8E+01 ca*	7.6E+01 ca	2.7E-01 ca	2.7E+00 ca		
2.5E-02 I	5.0E-02 h	2.5E-02 I	5.0E-02 r	0	0.10	140-57-8	Arsenic (noncancer endpoint)	2.2E+01 nc					
	3.0E-04 I			0	0.03	7440-38-2	Arsenic (cancer endpoint)	3.8E-01 ca*	2.4E+00 ca	4.5E-04 ca	4.5E-02 ca	2.9E+01	1.0E+00
1.5E+00 I	3.0E-04 I	1.5E+01 I		0	0.03	7440-38-2	Arsine			5.2E-02 nc			
			1.4E-05 I	n/a	n/a	7784-42-1	Assure	5.9E+02 nc	6.1E+03 nc	3.3E+01 nc	3.3E+02 nc		
	9.0E-03 I		9.0E-03 r	0	0.10	76578-12-6	Asulam	3.3E+03 nc	3.4E+04 nc	1.8E+02 nc	1.8E+03 nc		
	5.0E-02 I		5.0E-02 r	0	0.10	3337-71-1	Atrazine	2.0E+00 ca	8.6E+00 ca	3.1E-02 ca	3.0E-01 ca		
2.2E-01 h	3.5E-02 h	2.2E-01 r	3.5E-02 h	0	0.10	1912-24-9	Avermectin B1	2.6E+01 nc	2.7E+02 nc	1.5E+00 nc	1.5E+01 nc		
	4.0E-04 I		4.0E-04 r	0	0.10	71751-41-2	Azobenzene	4.0E+00 ca	1.7E+01 ca	6.2E-02 ca	6.1E-01 ca		
1.1E-01 I		1.1E-01 I		0	0.10	103-33-3	Barium and compounds	5.3E+03 nc	1.0E+05 max	5.2E-01 nc	2.6E+03 nc	1.6E+03	8.2E+01
	7.0E-02 I		1.4E-04 h	0	0.01	7440-39-3	Baygon	2.6E+02 nc	2.7E+03 nc	1.5E+01 nc	1.5E+02 nc		
	4.0E-03 I		4.0E-03 r	0	0.10	114-26-1							

Key : i=IRIS h=HEAST n=NCEA x=WITHDRAWN r=ROUTE EXTRAPOLATION ca=CANCER PRG nc=NONCANCER PRG sat=SOIL SATURATION max=CEILING LIMIT *(where: nc < 100X ca) **(where: nc < 10X ca)

FOR PLANNING PURPOSES

TOXICITY INFORMATION							CONTAMINANT	PRELIMINARY REMEDIAL GOALS (PRGs)				SOIL SCREENING LEVELS	
SFo 1/(mg/kg-d)	RfDo (mg/kg-d)	SFi 1/(mg/kg-d)	RfDi (mg/kg-d)	V O C	skin abs. soils	CAS No.		Residential Soil (mg/kg)	Industrial Soil (mg/kg)	Ambient Air (ug/m^3)	Tap Water (ug/l)	Migration to Ground Water DAF 20 (mg/kg)	Migration to Ground Water DAF 1 (mg/kg)
	3.0E-02 i		3.0E-02 r	0	0.10	43121-43-3	Bayleton	2.0E+03 nc	2.0E+04 nc	1.1E+02 nc	1.1E+03 nc		
	2.5E-02 i		2.5E-02 r	0	0.10	66359-37-5	Baythroid	1.6E+03 nc	1.7E+04 nc	9.1E+01 nc	9.1E+02 nc		
	3.0E-01 i		3.0E-01 r	0	0.10	1861-40-1	Benefin	2.0E+04 nc	1.0E+05 max	1.1E+03 nc	1.1E+04 nc		
	5.0E-02 i		5.0E-02 r	0	0.10	17804-35-2	Benomyl	3.3E+03 nc	3.4E+04 nc	1.8E+02 nc	1.8E+03 nc		
	2.5E-03 i		2.5E-03 r	0	0.10	25057-89-0	Bentazon	1.6E+02 nc	1.7E+03 nc	9.1E+00 nc	9.1E+01 nc		
	1.0E-01 i		1.0E-01 r	0	0.10	100-52-7	Benzaldehyde	6.5E+03 nc	6.8E+04 nc	3.7E+02 nc	3.7E+03 nc		
2.9E-02 i	1.7E-03 r	2.9E-02 i	1.7E-03 n	1	0.10	71-43-2	Benzene	6.3E-01 ca*	1.4E+00 ca*	2.3E-01 ca*	3.9E-01 ca*	3.0E-02	2.0E-03
2.3E+02 i	3.0E-03 i	2.3E+02 i	3.0E-03 r	0	0.10	92-87-5	Benzidine	1.9E-03 ca	8.3E-03 ca	2.9E-05 ca	2.9E-04 ca		
	4.0E+00 i		4.0E+00 i	0	0.10	65-85-0	Benzoic acid	1.0E+05 max	1.0E+05 max	1.5E+04 nc	1.5E+05 nc	4.0E+02	2.0E+01
1.3E+01 i		1.3E+01 r		0	0.10	98-07-7	Benzotrichloride	3.4E-02 ca	1.5E-01 ca	5.2E-04 ca	5.2E-03 ca		
	3.0E-01 h		3.0E-01 r	0	0.10	100-51-6	Benzyl alcohol	2.0E+04 nc	1.0E+05 max	1.1E+03 nc	1.1E+04 nc		
1.7E-01 i		1.7E-01 r		1	0.10	100-44-7	Benzyl chloride	8.1E-01 ca	2.0E+00 ca	4.0E-02 ca	6.6E-02 ca		
4.3E+00 i	5.0E-03 i	8.4E+00 i		0	0.01	7440-41-7	Beryllium and compounds	1.4E-01 ca	1.1E+00 ca	8.0E-04 ca	1.6E-02 ca	6.3E+01	3.0E+00
	1.0E-04 i		1.0E-04 r	0	0.10	141-66-2	Bidrin	6.5E+00 nc	6.8E+01 nc	3.7E-01 nc	3.7E+00 nc		
	1.5E-02 i		1.5E-02 r	0	0.10	82657-04-3	Biphenthrin (Talstar)	9.8E+02 nc	1.0E+04 nc	5.5E+01 nc	5.5E+02 nc		
	5.0E-02 i		5.0E-02 r	1	0.10	92-52-4	1,1-Biphenyl	3.5E+02 sat	3.5E+02 sat	1.8E+02 nc	3.0E+02 nc		
1.1E+00 i		1.2E+00 i		1	0.10	111-44-4	Bis(2-chloroethyl)ether	4.3E-02 ca	9.7E-02 ca	5.8E-03 ca	9.8E-03 ca	4.0E-04	2.0E-05
7.0E-02 h	4.0E-02 i	3.5E-02 h	4.0E-02 r	1	0.10	39638-32-9	Bis(2-chloroisopropyl)ether	2.5E+00 ca	6.7E+00 ca	1.9E-01 ca	2.7E-01 ca		
2.2E+02 i		2.2E+02 i		1	0.10	542-88-1	Bis(chloromethyl)ether	1.9E-04 ca	4.2E-04 ca	3.1E-05 ca	5.2E-05 ca		
7.0E-02 x		7.0E-02 x		0	0.10	108-60-1	Bis(2-chloro-1-methylethyl)ether	6.3E+00 ca	2.7E+01 ca	9.6E-02 ca	9.6E-01 ca		
1.4E-02 i	2.0E-02 i	1.4E-02 r	2.2E-02 r	0	0.10	117-81-7	Bis(2-ethylhexyl)phthalate (DEHP)	3.2E+01 ca*	1.4E+02 ca	4.8E-01 ca	4.8E+00 ca		
	5.0E-02 i		5.0E-02 r	0	0.10	80-05-7	Bisphenol A	3.3E+03 nc	3.4E+04 nc	1.8E+02 nc	1.8E+03 nc		
	9.0E-02 i		5.7E-03 h	0	0.10	7440-42-8	Boron	5.9E+03 nc	6.1E+04 nc	2.1E+01 nc	3.3E+03 nc		
			2.0E-04 h	0	0.10	7637-07-2	Boron trifluoride			7.3E-01 nc			
6.2E-02 i	2.0E-02 i	6.2E-02 r	2.0E-02 r	1	0.10	75-27-4	Bromodichloromethane	6.3E-01 ca	1.4E+00 ca	1.1E-01 ca	1.8E-01 ca	6.0E-01	3.0E-02
7.9E-03 i	2.0E-02 i	3.9E-03 i	2.0E-02 r	0	0.10	75-25-2	Bromoform (tribromomethane)	5.6E+01 ca**	2.4E+02 ca*	1.7E+00 ca*	8.5E+00 ca*	8.0E-01	4.0E-02
	1.4E-03 i		1.4E-03 i	1	0.10	74-83-9	Bromomethane	6.8E+00 nc	2.3E+01 nc	5.2E+00 nc	8.7E+00 nc	2.0E-01	1.0E-02
				0	0.10	101-55-3	4-Bromophenyl phenyl ether						
	5.0E-03 h		5.0E-03 r	0	0.10	2104-96-3	Bromophos	3.3E+02 nc	3.4E+03 nc	1.8E+01 nc	1.8E+02 nc		
	2.0E-02 i		2.0E-02 r	0	0.10	1689-84-5	Bromoxynil	1.3E+03 nc	1.4E+04 nc	7.3E+01 nc	1.8E+02 nc		
	2.0E-02 i		2.0E-02 r	0	0.10	1689-99-2	Bromoxynil octanoate	1.3E+03 nc	1.4E+04 nc	7.3E+01 nc	7.3E+02 nc		
9.8E-01 r		9.8E-01 i		1	0.10	106-99-0	1,3-Butadiene	6.5E-03 ca	1.4E-02 ca	6.9E-03 ca	1.1E-02 ca		
	1.0E-01 i		1.0E-01 r	0	0.10	71-36-3	1-Butanol	6.5E+03 nc	6.8E+04 nc	3.7E+02 nc	3.7E+03 nc	1.7E+01	9.0E-01
	5.0E-02 i		5.0E-02 r	0	0.10	2008-41-5	Butylate	3.3E+03 nc	3.4E+04 nc	1.8E+02 nc	1.8E+03 nc		
	2.0E-01 i		2.0E-01 r	0	0.10	85-68-7	Butyl benzyl phthalate	9.3E+02 sat	9.3E+02 sat	7.3E+02 nc	7.3E+03 nc	9.3E+02	8.1E+02
	1.0E+00 i		1.0E+00 r	0	0.10	85-70-1	Butylphthalyl butylglycolate	6.5E+04 nc	1.0E+05 max	3.7E+03 nc	3.7E+04 nc		
	3.0E-03 h		3.0E-03 r	0	0.10	75-60-5	Cacodylic acid	2.0E+02 nc	2.0E+03 nc	1.1E+01 nc	1.1E+02 nc		
	5.0E-04 i	6.3E+00 i	5.7E-05 x	0	0.01	7440-43-9	Cadmium and compounds "CAL-Modified PRG" (PEA, 1994)	3.8E+01 nc 9.0E+00	8.5E+02 nc	1.1E-03 ca	1.8E+01 nc	8.0E+00	4.0E-01
	5.0E-01 i		5.0E-01 r	0	0.10	105-60-2	Caprolactam	3.3E+04 nc	1.0E+05 max	1.8E+03 nc	1.8E+04 nc		
8.6E-03 h	2.0E-03 i	8.6E-03 r	2.0E-03 r	0	0.10	2425-06-1	Captafol	5.2E+01 ca**	2.2E+02 ca*	7.8E-01 ca*	7.8E+00 ca*		
3.5E-03 h	1.3E-01 i	3.5E-03 r	1.3E-01 r	0	0.10	133-06-2	Captan	1.3E+02 ca*	5.5E+02 ca	1.9E+00 ca	1.9E+01 ca		
	1.0E-01 i		1.1E-01 r	0	0.10	63-25-2	Carbaryl	6.5E+03 nc	6.8E+04 nc	4.0E+02 nc	3.7E+03 nc		
2.0E-02 h		2.0E-02 r		0	0.10	86-74-8	Carbazole	2.2E+01 ca	9.5E+01 ca	3.4E-01 ca	3.4E+00 ca	6.0E-01	3.0E-02
	5.0E-03 i		5.0E-03 r	0	0.10	1563-66-2	Carbofuran	3.3E+02 nc	3.4E+03 nc	1.8E+01 nc	1.8E+02 nc		
	1.0E-01 i		2.9E-03 h	1	0.10	75-15-0	Carbon disulfide	7.5E+00 nc	2.4E+01 nc	1.0E+01 nc	2.1E+01 nc	3.2E+01	2.0E+00
1.3E-01 i	7.0E-04 i	5.3E-02 i	5.7E-04 n	1	0.10	56-23-5	Carbon tetrachloride	2.3E-01 ca*	5.0E-01 ca*	1.3E-01 ca*	1.7E-01 ca*	7.0E-02	3.0E-03

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FOR PLANNING PURPOSES

TOXICITY INFORMATION							CONTAMINANT	PRELIMINARY REMEDIAL GOALS (PRGs)				SOIL SCREENING LEVELS	
				V	skin							Migration to Ground Water	
SFo 1/(mg/kg-d)	RfDo (mg/kg-d)	SFI 1/(mg/kg-d)	RfDI (mg/kg-d)	O C	abs. soils	CAS No.		Residential Soil (mg/kg)	Industrial Soil (mg/kg)	Ambient Air (ug/m^3)	Tap Water (ug/l)	DAF 20 (mg/kg)	DAF 1 (mg/kg)
	1.0E-02 i		1.0E-02 r	0	0.10	55285-14-8	Carbosulfan	6.5E+02 nc	6.8E+03 nc	3.7E+01 nc	3.7E+02 nc		
	1.0E-01 i		1.0E-01 r	0	0.10	5234-68-4	Carboxin	6.5E+03 nc	6.8E+04 nc	3.7E+02 nc	3.7E+03 nc		
	2.0E-03 i		2.0E-03 r	0	0.10	302-17-0	Chloral	1.3E+02 nc	1.4E+03 nc	7.3E+00 nc	7.3E+01 nc		
	1.5E-02 i		1.5E-02 r	0	0.10	133-90-4	Chloramben	9.8E+02 nc	1.0E+04 nc	5.5E+01 nc	5.5E+02 nc		
		4.0E-01 r		0	0.10	118-75-2	Chloranil	1.1E+00 ca	4.7E+00 ca	1.7E-02 ca	1.7E-01 ca		
4.0E-01 h				0	0.10			3.4E-01 ca**	1.5E+00 ca*	5.2E-03 ca*	5.2E-02 ca*		
1.3E+00 i	6.0E-05 i	1.3E+00 i	6.0E-05 r	0	0.10	57-74-9	Chlordane					1.0E+01	5.0E-01
	2.0E-02 i		2.0E-02 r	0	0.10	90982-32-4	Chlorimuron-ethyl	1.3E+03 nc	1.4E+04 nc	7.3E+01 nc	7.3E+02 nc		
	1.0E-01 i			0	0.01	7782-50-5	Chlorine	7.7E+03 nc	1.7E+05 nc		3.7E+03 nc		
			5.7E-05 i	n/a	n/a	10049-04-4	Chlorine dioxide			2.1E-01 nc			
				1	0.10	107-20-0	Chloroacetaldehyde						
	2.0E-03 h		2.0E-03 r	0	0.10	79-11-8	Chloroacetic acid	1.3E+02 nc	1.4E+03 nc	7.3E+00 nc	7.3E+01 nc		
	8.6E-06 r		8.6E-06 i	1	0.10	532-27-4	2-Chloroacetophenone	3.2E-02 nc	1.1E-01 nc	3.1E-02 nc	5.2E-02 nc		
	4.0E-03 i		4.0E-03 r	0	0.10	106-47-8	4-Chloroaniline	2.6E+02 nc	2.7E+03 nc	1.5E+01 nc	1.5E+02 nc	7.0E-01	3.0E-02
	2.0E-02 i		5.7E-03 h	1	0.10	108-90-7	Chlorobenzene	6.5E+01 nc	2.2E+02 nc	2.1E+01 nc	3.9E+01 nc	1.0E+00	7.0E-02
2.7E-01 h	2.0E-02 i	2.7E-01 h	2.0E-02 r	0	0.10	510-15-6	Chlorobenzilate	1.6E+00 ca	7.1E+00 ca	2.5E-02 ca	2.5E-01 ca		
	2.0E-01 h		2.0E-01 r	0	0.10	74-11-3	p-Chlorobenzoic acid	1.3E+04 nc	1.0E+05 max	7.3E+02 nc	7.3E+03 nc		
	2.0E-02 h		2.0E-02 r	0	0.10	96-56-6	4-Chlorobenzotrifluoride	1.3E+03 nc	1.4E+04 nc	7.3E+01 nc	7.3E+02 nc		
	2.0E-02 h		2.0E-03 h	1	0.10	126-99-8	2-Chloro-1,3-butadiene	3.6E+00 nc	1.2E+01 nc	7.3E+00 nc	1.4E+01 nc		
	4.0E-01 h		4.0E-01 r	1	0.10	109-69-3	1-Chlorobutane	4.8E+02 sat	4.8E+02 sat	1.5E+03 nc	2.4E+03 nc		
	1.4E+01 r		1.4E+01 i	1	0.10	75-68-3	1-Chloro-1,1-difluoroethane (HCFC-142b)	3.4E+02 sat	3.4E+02 sat	5.2E+04 nc	8.7E+04 nc		
				1	0.10	110-75-8	2-Chloroethyl vinyl ether						
	1.4E+01 r		1.4E+01 i	1	0.10	75-45-6	Chlorodifluoromethane	3.4E+02 sat	3.4E+02 sat	5.1E+04 nc	8.5E+04 nc		
6.1E-03 i	1.0E-02 i	6.1E-02 i	1.0E-02 r	1	0.10	67-66-3	Chloroform	2.5E-01 ca	5.3E-01 ca	8.4E-02 ca	1.6E-01 ca	6.0E-01	3.0E-02
1.3E-02 h		6.3E-03 h		1	0.10	74-87-3	Chloromethane	1.2E+00 ca	2.6E+00 ca	1.1E+00 ca	1.5E+00 ca		
5.8E-01 h		5.8E-01 r		0	0.10	95-69-2	4-Chloro-2-methylaniline	7.7E-01 ca	3.3E+00 ca	1.2E-02 ca	1.2E-01 ca		
4.6E-01 h		4.6E-01 r		0	0.10	3165-93-3	4-Chloro-2-methylaniline hydrochloride	9.7E-01 ca	4.1E+00 ca	1.5E-02 ca	1.5E-01 ca		
	8.0E-02 i		8.0E-02 r	1	0.10	91-58-7	beta-Chloronaphthalene	1.1E+02 sat	1.1E+02 sat	2.9E+02 nc	4.9E+02 nc		
2.5E-02 h		2.5E-02 r	r	0	0.10	88-73-3	o-Chloronitrobenzene	1.6E+01 ca	7.6E+01 ca	2.7E-01 ca	2.7E+00 ca		
1.8E-02 h		1.8E-02 r	r	0	0.10	100-00-5	p-Chloronitrobenzene	2.5E+01 ca	1.1E+02 ca	3.7E-01 ca	3.7E+00 ca		
	5.0E-03 i		5.0E-03 r	1	0.10	95-57-8	2-Chlorophenol	9.1E+01 nc	3.7E+02 nc	1.8E+01 nc	3.8E+01 nc	4.0E+00	2.0E-01
	2.9E-02 r		2.9E-02 h	1	0.10	75-29-6	2-Chloropropane	1.7E+02 nc	5.8E+02 nc	1.0E+02 nc	1.7E+02 nc		
1.1E-02 h	1.5E-02 i	1.1E-02 r	1.5E-02 r	0	0.10	1897-45-6	Chlorothalonil	4.0E+01 ca**	1.7E+02 ca*	6.1E-01 ca*	6.1E+00 ca*		
	2.0E-02 i		2.0E-02 r	1	0.10	95-49-8	o-Chlorotoluene	1.6E+02 nc	5.5E+02 nc	7.3E+01 nc	1.2E+02 nc		
	2.0E-01 i		2.0E-01 r	0	0.10	101-21-3	Chlorpropham	1.3E+04 nc	1.0E+05 max	7.3E+02 nc	7.3E+03 nc		
	3.0E-03 i		3.0E-03 r	0	0.10	2921-88-2	Chlorpyrifos	2.0E+02 nc	2.0E+03 nc	1.1E+01 nc	1.1E+02 nc		
	1.0E-02 h		1.0E-02 r	0	0.10	5598-13-0	Chlorpyrifos-methyl	6.5E+02 nc	6.8E+03 nc	3.7E+01 nc	3.7E+02 nc		
	5.0E-02 i		5.0E-02 r	0	0.10	64902-72-3	Chlorsulfuron	3.3E+03 nc	3.4E+04 nc	1.8E+02 nc	1.8E+03 nc		
	8.0E-04 h		8.0E-04 r	0	0.10	802-36-56-4	Chlorthiophos	5.2E+01 nc	5.5E+02 nc	2.9E+00 nc	2.9E+01 nc		
		4.2E+01 i		0	0.01	n/a	Total Chromium (1/6 ratio Cr VI/Cr III)	2.1E+02 ca	4.5E+02 ca	1.6E-04 ca		3.8E+01	2.0E+00
	5.0E-03 i	2.9E+02 i		0	0.01	7440-47-3	Chromium VI	3.0E+01 ca	6.4E+01 ca	2.3E-05 ca	1.8E+02 nc	3.8E+01	2.0E+00
							"CAL-Modified PRG" (PEA, 1994)	2.0E-01			1.6E-01		
	6.0E-02 n		2.9E-04 n	0	0.01	7440-48-4	Cobalt	4.6E+03 nc	9.7E+04 nc	1.0E+00 nc	2.2E+03 nc		
		2.2E+00 i		0	0.01	8007-45-2	Coke Oven Emissions			3.1E-03 ca			
	3.7E-02 h			0	0.01	7440-50-8	Copper and compounds	2.8E+03 nc	6.3E+04 nc		1.4E+03 nc		
1.9E+00 h	1.0E-02 x	1.9E+00 x	1.0E-02 r	1	0.10	123-73-9	Crotonaldehyde	5.3E-03 ca	1.1E-02 ca	3.5E-03 ca	5.9E-03 ca		
	4.0E-02 i		2.6E-03 h	1	0.10	98-82-8	Cumene	1.9E+01 nc	6.2E+01 nc	9.4E+00 nc	1.9E+01 nc		
8.4E-01 h	2.0E-03 h	8.4E-01 r	2.0E-03 r	0	0.10	21725-46-2	Cyanazine	5.3E-01 ca*	2.3E+00 ca	8.0E-03 ca	8.0E-02 ca		

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FOR PLANNING PURPOSES

TOXICITY INFORMATION							CONTAMINANT	PRELIMINARY REMEDIAL GOALS (PRGs)				SOIL SCREENING LEVELS	
SFo 1/(mg/kg-d)	RfDo (mg/kg-d)	SFi 1/(mg/kg-d)	RfDi (mg/kg-d)	V O C	skin abs. soils	CAS No.		Residential Soil (mg/kg)	Industrial Soil (mg/kg)	Ambient Air (ug/m^3)	Tap Water (ug/l)	Migration to Ground Water DAF 20 (mg/kg)	Migration to Ground Water DAF 1 (mg/kg)
					0.01	n/a	Cyanides						
	1.0E-01 h			0	0.01	542-62-1	Barium cyanide	7.7E+03 nc	1.0E+05 max		3.7E+03 nc		
	4.0E-02 i			0	0.01	592-01-8	Calcium cyanide	3.1E+03 nc	6.8E+04 nc		1.5E+03 nc		
	5.0E-02 i			0	0.01	506-77-4	Chlorine cyanide	3.8E+03 nc	8.5E+04 nc		1.8E+03 nc		
	5.0E-03 i			0	0.01	544-92-3	Copper cyanide	3.8E+02 nc	8.5E+03 nc		1.8E+02 nc		
	4.0E-02 i			0	0.10	460-19-5	Cyanogen	2.6E+03 nc	2.7E+04 nc		1.5E+03 nc		
	9.0E-02 i			0	0.10	506-68-3	Cyanogen bromide	5.9E+03 nc	1.0E+05 max		3.3E+03 nc		
	5.0E-02 i			0	0.10	506-77-4	Cyanogen chloride	3.3E+03 nc	3.4E+04 nc		1.8E+03 nc		
	2.0E-02 i			0	0.10	57-12-5	Free cyanide	1.3E+03 nc	1.4E+04 nc		7.3E+02 nc	4.0E+01	2.0E+00
	2.0E-02 i		8.6E-04 i	1	0.10	74-90-8	Hydrogen cyanide	1.1E+01 nc	3.5E+01 nc	3.1E+00 nc	6.2E+00 nc		
	5.0E-02 i			0	0.10	151-50-8	Potassium cyanide	3.3E+03 nc	3.4E+04 nc		1.8E+03 nc		
	2.0E-01 i			0	0.10	506-61-6	Potassium silver cyanide	1.3E+04 nc	1.0E+05 max		7.3E+03 nc		
	1.0E-01 i			0	0.10	506-64-9	Silver cyanide	6.5E+03 nc	1.0E+05 max		3.7E+03 nc		
	4.0E-02 i			0	0.10	143-33-9	Sodium cyanide	2.6E+03 nc	2.7E+04 nc		1.5E+03 nc		
	5.0E-02 i			0	0.10	557-21-1	Zinc cyanide	3.3E+03 nc	3.4E+04 nc		1.8E+03 nc		
	5.0E+00 i		5.0E+00 r	0	0.10	108-94-1	Cyclohexanone	1.0E+05 max	1.0E+05 max	1.8E+04 nc	1.8E+05 nc		
	2.0E-01 i		2.0E-01 r	0	0.10	108-91-8	Cyclohexylamine	1.3E+04 nc	1.0E+05 max	7.3E+02 nc	7.3E+03 nc		
	5.0E-03 i		5.0E-03 r	0	0.10	68085-85-8	Cyhalothrin/Karate	3.3E+02 nc	3.4E+03 nc	1.8E+01 nc	1.8E+02 nc		
	1.0E-02 i		1.0E-02 r	0	0.10	52315-07-8	Cypermethrin	6.5E+02 nc	6.8E+03 nc	3.7E+01 nc	3.7E+02 nc		
	7.5E-03 i		7.5E-03 r	0	0.10	66215-27-8	Cyromazine	4.9E+02 nc	5.1E+03 nc	2.7E+01 nc	2.7E+02 nc		
	1.0E-02 i		1.0E-02 r	0	0.10	1861-32-1	Dacthal	6.5E+02 nc	1.0E+05 max	3.7E+01 nc	3.7E+02 nc		
	3.0E-02 i		3.0E-02 r	0	0.10	75-99-0	Dalapon	2.0E+03 nc	2.0E+04 nc	1.1E+02 nc	1.1E+03 nc		
	2.5E-02 i		2.5E-02 r	0	0.10	39515-41-8	Danitol	1.6E+03 nc	1.7E+04 nc	9.1E+01 nc	9.1E+02 nc		
2.4E-01 i		2.4E-01 r		0	0.10	72-54-8	DDD	1.9E+00 ca	7.9E+00 ca	2.8E-02 ca	2.8E-01 ca	1.6E+01	8.0E-01
3.4E-01 i		3.4E-01 r		0	0.10	72-55-9	DDE	1.3E+00 ca	5.6E+00 ca	2.0E-02 ca	2.0E-01 ca	5.4E+01	3.0E+00
3.4E-01 i	5.0E-04 i	3.4E-01 i	5.0E-04 r	0	0.10	50-29-3	DDT	1.3E+00 ca*	5.6E+00 ca*	2.0E-02 ca*	2.0E-01 ca*	3.2E+01	2.0E+00
	1.0E-02 i		1.0E-02 r	0	0.10	1163-19-5	Decabromodiphenyl ether	6.5E+02 nc	6.8E+03 nc	3.7E+01 nc	3.7E+02 nc		
	4.0E-05 i		4.0E-05 r	0	0.10	8065-48-3	Demeton	2.6E+00 nc	2.7E+01 nc	1.5E-01 nc	1.5E+00 nc		
6.1E-02 h		6.1E-02 r		0	0.10	2303-16-4	Diallate	7.3E+00 ca	3.1E+01 ca	1.1E-01 ca	1.1E+00 ca		
	9.0E-04 h		9.0E-04 r	0	0.10	333-41-5	Diazinon	5.9E+01 nc	6.1E+02 nc	3.3E+00 nc	3.3E+01 nc		
	4.0E-03 n		4.0E-03 r	1	0.10	132-64-9	Dibenzofuran	1.4E+02 sat	1.4E+02 sat	1.5E+01 nc	2.4E+01 nc		
	1.0E-02 i		1.0E-02 r	0	0.10	106-37-6	1,4-Dibromobenzene	6.5E+02 nc	6.8E+03 nc	3.7E+01 nc	3.7E+02 nc		
8.4E-02 i	2.0E-02 i	8.4E-02 r	2.0E-02 r	0	0.10	124-48-1	Dibromochloromethane	5.3E+00 ca*	2.3E+01 ca	8.0E-02 ca	1.0E+00 ca	4.0E-01	2.0E-02
1.4E+00 h	5.7E-05 r	2.4E-03 h	5.7E-05 i	0	0.10	96-12-8	1,2-Dibromo-3-chloropropane	3.2E-01 ca**	1.4E+00 ca*	2.1E-01 nc	4.8E-02 ca*		
							"CAL-Modified PRG" (PEA, 1994)	6.0E-02		9.6E-04	4.7E-03		
8.5E+01 i	5.7E-05 r	7.7E-01 i	5.7E-05 h	1	0.10	106-93-4	1,2-Dibromoethane	4.9E-03 ca	2.0E-02 ca	8.7E-03 ca*	7.6E-04 ca		
	1.0E-01 i		1.0E-01 r	0	0.10	84-74-2	Dibutyl phthalate	6.5E+03 nc	6.8E+04 nc	3.7E+02 nc	3.7E+03 nc	2.3E+03	2.7E+02
	3.0E-02 i		3.0E-02 r	0	0.10	1918-00-9	Dicamba	2.0E+03 nc	2.0E+04 nc	1.1E+02 nc	1.1E+03 nc		
	9.0E-02 i		6.7E-02 h	1	0.10	95-50-1	1,2-Dichlorobenzene	7.0E+02 sat	7.0E+02 sat	2.1E+02 nc	3.7E+02 nc	1.7E+01	9.0E-01
	3.0E-02 a		3.0E-02 r	1	0.10	541-73-1	1,3-Dichlorobenzene	5.0E+02 nc	6.6E+02 sat	1.1E+02 nc	1.8E+02 nc		
2.4E-02 h	2.3E-01 r	2.4E-02 r	2.3E-01 i	1	0.10	106-46-7	1,4-Dichlorobenzene	3.6E+00 ca	8.5E+00 ca	2.8E-01 ca	4.7E-01 ca	2.0E+00	1.0E-01
4.5E-01 i		4.5E-01 r		0	0.10	91-94-1	3,3-Dichlorobenzidine	9.9E-01 ca	4.2E+00 ca	1.5E-02 ca	1.5E-01 ca	7.0E-03	3.0E-04
9.3E+00 r		9.3E+00 h		1	0.10	764-41-0	1,4-Dichloro-2-butene	7.5E-03 ca	1.7E-02 ca	7.2E-04 ca	1.2E-03 ca		
	2.0E-01 i		5.7E-02 h	1	0.10	75-71-8	Dichlorodifluoromethane	9.4E+01 nc	3.1E+02 nc	2.1E+02 nc	3.9E+02 nc		
	1.0E-01 h		1.4E-01 h	1	0.10	75-34-3	1,1-Dichloroethane	5.0E+02 nc	1.7E+03 nc	5.2E+02 nc	8.1E+02 nc	2.3E+01	1.0E+00
9.1E-02 i	2.9E-03 r	9.1E-02 i	2.9E-03 n	1	0.10	107-06-2	1,2-Dichloroethane (EDC)	2.5E-01 ca*	5.5E-01 ca*	7.4E-02 ca	1.2E-01 ca	2.0E-02	1.0E-03
6.0E-01 i	9.0E-03 i	1.8E-01 i	9.0E-03 r	1	0.10	75-35-4	1,1-Dichloroethylene	3.7E-02 ca	8.0E-02 ca	3.8E-02 ca	4.6E-02 ca	6.0E-02	3.0E-03

Key : I=IRIS h=HEAST n=NCEA w=WITHDRAWN r=ROUTE EXTRAPOLATION ca=CANCER PRG nc=NONCANCER PRG sat=SOIL SATURATION max=CEILING LIMIT *(where: nc < 100X ca) **(where: nc < 10X ca)

FOR PLANNING PURPOSES

TOXICITY INFORMATION							CONTAMINANT	PRELIMINARY REMEDIAL GOALS (PRGs)				SOIL SCREENING LEVELS	
SFo 1/(mg/kg-d)	RfDo (mg/kg-d)	SFi 1/(mg/kg-d)	RfDi (mg/kg-d)	V O C	skin abs. soils	CAS No.		Residential Soil (mg/kg)	Industrial Soil (mg/kg)	Ambient Air (ug/m^3)	Tap Water (ug/l)	Migration to Ground Water DAF 20 (mg/kg)	Migration to Ground Water DAF 1 (mg/kg)
	1.0E-02 h		1.0E-02 r	1	0.10	156-59-2	1,2-Dichloroethylene (cis)	3.1E+01 nc	1.0E+02 nc	3.7E+01 nc	6.1E+01 nc	4.0E-01	2.0E-02
	2.0E-02 I		2.0E-02 r	1	0.10	156-60-5	1,2-Dichloroethylene (trans)	7.8E+01 nc	2.7E+02 nc	7.3E+01 nc	1.2E+02 nc	7.0E-01	3.0E-02
	9.0E-03 h		9.0E-03 r	1	0.10	540-59-0	1,2-Dichloroethylene (mixture)	3.5E+01 nc	1.2E+02 nc	3.3E+01 nc	5.5E+01 nc		
	3.0E-03 I		3.0E-03 r	0	0.10	120-83-2	2,4-Dichlorophenol	2.0E+02 nc	2.0E+03 nc	1.1E+01 nc	1.1E+02 nc	1.0E+00	5.0E-02
	8.0E-03 I		8.0E-03 r	0	0.10	94-82-6	4-(2,4-Dichlorophenoxy)butyric Acid (2,4-DB)	5.2E+02 nc	5.5E+03 nc	2.9E+01 nc	2.9E+02 nc		
	1.0E-02 I		1.0E-02 r	0	0.10	94-75-7	2,4-Dichlorophenoxyacetic Acid (2,4-D)	6.5E+02 nc	6.8E+03 nc	3.7E+01 nc	3.7E+02 nc		
6.8E-02 h	1.1E-03 r	6.8E-02 r	1.1E-03 I	1	0.10	78-87-5	1,2-Dichloropropane	3.1E-01 ca*	6.8E-01 ca*	9.9E-02 ca*	1.6E-01 ca*	3.0E-02	1.0E-03
1.8E-01 h	3.0E-04 I	1.3E-01 h	5.7E-03 I	1	0.10	542-75-6	1,3-Dichloropropene	2.5E-01 ca*	5.5E-01 ca	5.2E-02 ca	8.1E-02 ca	4.0E-03	2.0E-04
	3.0E-03 I		3.0E-03 r	0	0.10	616-23-9	2,3-Dichloropropanol	2.0E+02 nc	2.0E+03 nc	1.1E+01 nc	1.1E+02 nc		
2.9E-01 I	5.0E-04 I	2.9E-01 r	1.4E-04 I	0	0.10	62-73-7	Dichlorvos	1.5E+00 ca**	6.6E+00 ca*	2.3E-02 ca*	2.3E-01 ca*		
4.4E-01 x		4.4E-01 r		0	0.10	115-32-2	Dicofol	1.0E+00 ca	4.3E+00 ca	1.5E-02 ca	1.5E-01 ca		
	3.0E-02 h		5.7E-05 h	1	0.10	77-73-6	Dicyclopentadiene			2.1E-01 nc	4.2E-01 nc		
1.6E+01 I	5.0E-05 I	1.6E+01 I	5.0E-05 r	0	0.10	60-57-1	Dieldrin	2.8E-02 ca*	1.2E-01 ca	4.2E-04 ca	4.2E-03 ca	4.0E-03	2.0E-04
	5.7E-03 h		5.7E-03 x	0	0.10	112-34-5	Diethylene glycol, monobutyl ether	3.7E+02 nc	3.9E+03 nc	2.1E+01 nc	2.1E+02 nc		
	2.0E+00 h		2.0E+00 r	0	0.10	111-90-0	Diethylene glycol, monoethyl ether	1.0E+05 max	1.0E+05 max	7.3E+03 nc	7.3E+04 nc		
	1.1E-02 h		1.1E-02 r	0	0.10	617-84-5	Diethylformamide	7.2E+02 nc	7.5E+03 nc	4.0E+01 nc	4.0E+02 nc		
1.2E-03 I	6.0E-01 I	1.2E-03 r	6.0E-01 r	0	0.10	103-23-1	Di(2-ethylhexyl)adipate	3.7E+02 nc	1.6E+03 nc	5.6E+00 nc	5.6E+01 nc		
	8.0E-01 I		8.0E-01 r	0	0.10	84-66-2	Diethyl phthalate	5.2E+04 nc	1.0E+05 max	2.9E+03 nc	2.9E+04 nc		
4.7E+03 h		4.7E+03 r		0	0.10	56-53-1	Diethylstilbestrol	9.5E-05 ca	4.1E-04 ca	1.4E-06 ca	1.4E-05 ca		
	8.0E-02 I		8.0E-02 r	0	0.10	43222-48-6	Difenzoquat (Avenge)	5.2E+03 nc	5.5E+04 nc	2.9E+02 nc	2.9E+03 nc		
	2.0E-02 I		2.0E-02 r	0	0.10	35367-38-5	Diflubenzuron	1.3E+03 nc	1.4E+04 nc	7.3E+01 nc	7.3E+02 nc		
	1.1E+01 r		1.1E+01 I	1	0.10	75-37-6	1,1-Difluoroethane			4.2E+04 nc	6.9E+04 nc		
	8.0E-02 I		8.0E-02 r	0	0.10	1445-75-6	Diisopropyl methylphosphonate	5.2E+03 nc	5.5E+04 nc	2.9E+02 nc	2.9E+03 nc		
	2.0E-02 I		2.0E-02 r	0	0.10	55290-64-7	Dimethipin	1.3E+03 nc	1.4E+04 nc	7.3E+01 nc	7.3E+02 nc		
	2.0E-04 I		2.0E-04 r	0	0.10	60-51-5	Dimethoate	1.3E+01 nc	1.4E+02 nc	7.3E-01 nc	7.3E+00 nc		
1.4E-02 h		1.4E-02 r		0	0.10	119-90-4	3,3'-Dimethoxybenzidine	3.2E+01 ca	1.4E+02 ca	4.8E-01 ca	4.8E+00 ca		
	5.7E-06 r		5.7E-06 x	1	0.10	124-40-3	Dimethylamine	6.5E-02 nc	2.4E-01 nc	2.1E-02 nc	3.5E-02 nc		
	2.0E-03 I		2.0E-03 r	0	0.10	121-69-7	N-N-Dimethylaniline	1.3E+02 nc	1.4E+03 nc	7.3E+00 nc	7.3E+01 nc		
		7.5E-01 r		0	0.10	95-68-1	2,4-Dimethylaniline	5.9E-01 ca	2.5E+00 ca	9.0E-03 ca	9.0E-02 ca		
7.5E-01 h							2,4-Dimethylaniline hydrochloride	7.7E-01 ca	3.3E+00 ca	1.2E-02 ca	1.2E-01 ca		
5.8E-01 h		5.8E-01 r		0	0.10	21436-96-4	3,3'-Dimethylbenzidine	4.8E-02 ca	2.1E-01 ca	7.3E-04 ca	7.3E-03 ca		
9.2E+00 h		9.2E+00 r		0	0.10	119-93-7	1,1-Dimethylhydrazine	1.7E-01 ca	7.3E-01 ca	1.9E-03 ca	2.6E-02 ca		
2.6E+00 x		3.5E+00 x		0	0.10	57-14-7	1,2-Dimethylhydrazine	1.2E-02 ca	5.2E-02 ca	1.8E-04 ca	1.8E-03 ca		
3.7E+01 x		3.7E+01 x		0	0.10	540-73-8	N,N-Dimethylformamide	6.5E+03 nc	6.8E+04 nc	3.1E+01 nc	3.7E+03 nc		
	1.0E-01 h		8.6E-03 I	0	0.10	68-12-2	2,4-Dimethylphenol	1.3E+03 nc	1.4E+04 nc	7.3E+01 nc	7.3E+02 nc	9.0E+00	4.0E-01
	2.0E-02 I		2.0E-02 r	0	0.10	105-67-9	2,6-Dimethylphenol	3.9E+01 nc	4.1E+02 nc	2.2E+00 nc	2.2E+01 nc		
	6.0E-04 I		6.0E-04 r	0	0.10	576-26-1	3,4-Dimethylphenol	6.5E+01 nc	6.8E+02 nc	3.7E+00 nc	3.7E+01 nc		
	1.0E-03 I		1.0E-03 r	0	0.10	95-65-8	Dimethyl phthalate	1.0E+05 max	1.0E+05 max	3.7E+04 nc	3.7E+05 nc		
	1.0E+01 h		1.0E+01 r	0	0.10	131-11-3	Dimethyl terephthalate	6.5E+03 nc	6.8E+04 nc	3.7E+02 nc	3.7E+03 nc		
	1.0E-01 I		1.0E-01 r	0	0.10	120-61-6	4,6-Dinitro-o-cyclohexyl phenol	1.3E+02 nc	1.4E+03 nc	7.3E+00 nc	7.3E+01 nc		
	2.0E-03 I		2.0E-03 r	0	0.10	131-89-5	1,3-Dinitrobenzene	6.5E+00 nc	6.8E+01 nc	3.7E-01 nc	3.7E+00 nc		
	1.0E-04 I		1.0E-04 r	0	0.10	99-65-0	1,2-Dinitrobenzene	2.6E+01 nc	2.7E+02 nc	1.5E+00 nc	1.5E+01 nc		
	4.0E-04 h		4.0E-04 r	0	0.10	528-29-0	1,4-Dinitrobenzene	2.6E+01 nc	2.7E+02 nc	1.5E+00 nc	1.5E+01 nc		
	4.0E-04 h		4.0E-04 r	0	0.10	100-25-4	2,4-Dinitrophenol	1.3E+02 nc	1.4E+03 nc	7.3E+00 nc	7.3E+01 nc	3.0E-01	1.0E-02
	2.0E-03 I		2.0E-03 r	0	0.10	51-28-5	Dinitrotoluene mixture	6.5E-01 ca	2.8E+00 ca	9.9E-03 ca	9.9E-02 ca	8.0E-04	4.0E-05
6.8E-01 I		6.8E-01 r		0	0.10	25321-14-6	2,4-Dinitrotoluene (also see Dinitrotoluene mixture)	1.3E+02 nc	1.4E+03 nc	7.3E+00 nc	7.3E+01 nc	8.0E-04	4.0E-05
	2.0E-03 I		2.0E-03 r	0	0.10	121-14-2	2,6-Dinitrotoluene (also see Dinitrotoluene mixture)	6.5E+01 nc	6.8E+02 nc	3.7E+00 nc	3.7E+01 nc	7.0E-04	3.0E-05
	1.0E-03 h		1.0E-03 r	0	0.10	606-20-2							

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FOR PLANNING PURPOSES

TOXICITY INFORMATION							CONTAMINANT	PRELIMINARY REMEDIAL GOALS (PRGs)				SOIL SCREENING LEVELS	
SFo 1/(mg/kg-d)	RfDo (mg/kg-d)	SFi 1/(mg/kg-d)	RfDi (mg/kg-d)	V O C	skin abs. soils	CAS No.		Residential Soil (mg/kg)	Industrial Soil (mg/kg)	Ambient Air (ug/m^3)	Tap Water (ug/l)	Migration to Ground Water DAF 20 (mg/kg)	Migration to Ground Water DAF 1 (mg/kg)
	1.0E-03 i		1.0E-03 r	0	0.10	88-85-7	Dinoseb	6.5E+01 nc	6.8E+02 nc	3.7E+00 nc	3.7E+01 nc		
	2.0E-02 h		2.0E-02 r	0	0.10	117-84-0	di-n-Octyl phthalate	1.3E+03 nc	1.0E+04 sat	7.3E+01 nc	7.3E+02 nc	1.0E+04	1.0E+04
1.1E-02 i		1.1E-02 r		0	0.10	123-91-1	1,4-Dioxane	4.0E+01 ca	1.7E+02 ca	6.1E-01 ca	6.1E+00 ca		
	3.0E-02 i		3.0E-02 r	0	0.10	957-51-7	Diphenamid	2.0E+03 nc	2.0E+04 nc	1.1E+02 nc	1.1E+03 nc		
	2.5E-02 i		2.5E-02 r	0	0.10	122-39-4	Diphenylamine	1.6E+03 nc	1.7E+04 nc	9.1E+01 nc	9.1E+02 nc		
8.0E-01 i		7.7E-01 i		0	0.10	122-66-7	1,2-Diphenylhydrazine	5.6E-01 ca	2.4E+00 ca	8.7E-03 ca	8.4E-02 ca		
	2.2E-03 i		2.2E-03 r	0	0.10	85-00-7	Diquat	1.4E+02 nc	1.5E+03 nc	8.0E+00 nc	8.0E+01 nc		
8.6E+00 h		8.6E+00 r		0	0.10	1937-37-7	Direct black 38	5.2E-02 ca	2.2E-01 ca	7.8E-04 ca	7.8E-03 ca		
8.1E+00 h		8.1E+00 r		0	0.10	2602-46-2	Direct blue 6	5.5E-02 ca	2.4E-01 ca	8.3E-04 ca	8.3E-03 ca		
9.3E+00 h		9.3E+00 r		0	0.10	16071-86-6	Direct brown 95	4.8E-02 ca	2.1E-01 ca	7.2E-04 ca	7.2E-03 ca		
	4.0E-05 i		4.0E-05 r	0	0.10	298-04-4	Disulfoton	2.6E+00 nc	2.7E+01 nc	1.5E-01 nc	1.5E+00 nc		
	1.0E-02 i		1.0E-02 r	0	0.10	505-29-3	1,4-Dithiane	6.5E+02 nc	6.8E+03 nc	3.7E+01 nc	3.7E+02 nc		
	2.0E-03 i		2.0E-03 r	0	0.10	330-54-1	Diuron	1.3E+02 nc	1.4E+03 nc	7.3E+00 nc	7.3E+01 nc		
	4.0E-03 i		4.0E-03 r	0	0.10	2439-10-3	Dodine	2.6E+02 nc	2.7E+03 nc	1.5E+01 nc	1.5E+02 nc		
	6.0E-03 i		6.0E-03 r	0	0.10	115-29-7	Endosulfan	3.9E+02 nc	4.1E+03 nc	2.2E+01 nc	2.2E+02 nc	1.8E+01	9.0E-01
	2.0E-02 i		2.0E-02 r	0	0.10	145-73-3	Endothall	1.3E+03 nc	1.4E+04 nc	7.3E+01 nc	7.3E+02 nc		
	3.0E-04 i		3.0E-04 r	0	0.10	72-20-8	Endrin	2.0E+01 nc	2.0E+02 nc	1.1E+00 nc	1.1E+01 nc	1.0E+00	5.0E-02
9.9E-03 i	2.0E-03 h	4.2E-03 i	2.9E-04 i	1	0.10	106-89-8	Epichlorohydrin	7.5E+00 nc	2.5E+01 nc	1.0E+00 nc	2.0E+00 nc		
	5.7E-03 r		5.7E-03 i	0	0.10	106-88-7	1,2-Epoxybutane	3.7E+02 nc	3.9E+03 nc	2.1E+01 nc	2.1E+02 nc		
	2.5E-02 i		2.5E-02 r	0	0.10	759-94-4	EPTC (S-Ethyl dipropylthiocarbamate)	1.6E+03 nc	1.7E+04 nc	9.1E+01 nc	9.1E+02 nc		
	5.0E-03 i		5.0E-03 r	0	0.10	16672-87-0	Ethephon (2-chloroethyl phosphonic acid)	3.3E+02 nc	3.4E+03 nc	1.8E+01 nc	1.8E+02 nc		
	5.0E-04 i		5.0E-04 r	0	0.10	563-12-2	Ethion	3.3E+01 nc	3.4E+02 nc	1.8E+00 nc	1.8E+01 nc		
	4.0E-01 h		5.7E-02 i	0	0.10	110-80-5	2-Ethoxyethanol	2.6E+04 nc	1.0E+05 max	2.1E+02 nc	1.5E+04 nc		
	3.0E-01 h		3.0E-01 r	0	0.10	111-15-9	2-Ethoxyethanol acetate	2.0E+04 nc	1.0E+05 max	1.1E+03 nc	1.1E+04 nc		
	9.0E-01 i		9.0E-01 r	1	0.10	141-78-6	Ethyl acetate	1.8E+04 nc	1.0E+05 max	3.3E+03 nc	5.5E+03 nc		
4.8E-02 h		4.8E-02 r		1	0.10	140-88-5	Ethyl acrylate	2.1E-01 ca	4.5E-01 ca	1.4E-01 ca	2.3E-01 ca		
	1.0E-01 i		2.9E-01 i	1	0.10	100-41-4	Ethylbenzene	2.3E+02 sat	2.3E+02 sat	1.1E+03 nc	1.3E+03 nc	1.3E+01	7.0E-01
	3.0E-01 h		3.0E-01 r	0	0.10	109-78-4	Ethylene cyanohydrin	2.0E+04 nc	1.0E+05 max	1.1E+03 nc	1.1E+04 nc		
	2.0E-02 h		2.0E-02 r	0	0.10	107-15-3	Ethylene diamine	1.3E+03 nc	1.4E+04 nc	7.3E+01 nc	7.3E+02 nc		
	2.0E+00 i		2.0E+00 r	0	0.10	107-21-1	Ethylene glycol	1.3E+05 nc	1.0E+05 max	7.3E+03 nc	7.3E+04 nc		
	5.7E-03 r		5.7E-03 h	0	0.10	111-76-2	Ethylene glycol, monobutyl ether	3.7E+02 nc	3.9E+03 nc	2.1E+01 nc	2.1E+02 nc		
1.0E+00 h		3.5E-01 h		1	0.10	75-21-8	Ethylene oxide	1.3E-01 ca	3.2E-01 ca	1.9E-02 ca	2.4E-02 ca		
1.1E-01 h	6.0E-05 i	1.1E-01 r	8.0E-05 r	0	0.10	96-45-7	Ethylene thiourea (ETU)	4.0E+00 ca**	1.7E+01 ca*	6.1E-02 ca*	6.1E-01 ca*		
	2.0E-02 n		2.9E+00 i	1	0.10	75-00-3	Ethyl chloride	1.1E+03 nc	1.6E+03 sat	1.0E+04 nc	7.1E+02 nc		
	2.0E-01 i		2.0E-01 r	1	0.10	60-29-7	Ethyl ether	1.8E+03 sat	1.8E+03 sat	7.3E+02 nc	1.2E+03 nc		
	9.0E-02 h		9.0E-02 r	1	0.10	97-63-2	Ethyl methacrylate	1.4E+02 sat	1.4E+02 sat	3.3E+02 nc	5.5E+02 nc		
	1.0E-05 i		1.0E-05 r	0	0.10	2104-64-5	Ethyl p-nitrophenyl phenylphosphorothioate	6.5E-01 nc	6.8E+00 nc	3.7E-02 nc	3.7E-01 nc		
	3.0E+00 i		3.0E+00 r	0	0.10	84-72-0	Ethylphthalyl ethyl glycolate	1.0E+05 max	1.0E+05 max	1.1E+04 nc	1.1E+05 nc		
	8.0E-03 i		8.0E-03 r	0	0.10	101200-48-0	Express	5.2E+02 nc	5.5E+03 nc	2.9E+01 nc	2.9E+02 nc		
	2.5E-04 i		2.5E-04 r	0	0.10	22224-92-6	Fenamiphos	1.6E+01 nc	1.7E+02 nc	9.1E-01 nc	9.1E+00 nc		
	1.3E-02 i		1.3E-02 r	0	0.10	2164-17-2	Fluometuron	8.5E+02 nc	8.9E+03 nc	4.7E+01 nc	4.7E+02 nc		
	6.0E-02 i		6.0E-02 r	0	0.10	7782-41-4	Fluorine (soluble fluoride)	3.9E+03 nc	4.1E+04 nc	2.2E+02 nc	2.2E+03 nc		
	6.0E-02 i		6.0E-02 r	0	0.10	59756-60-4	Fluoridone	5.2E+03 nc	5.5E+04 nc	2.9E+02 nc	2.9E+03 nc		
	2.0E-02 i		2.0E-02 r	0	0.10	56425-91-3	Flurprimidol	1.3E+03 nc	1.4E+04 nc	7.3E+01 nc	7.3E+02 nc		
	6.0E-02 i		6.0E-02 r	0	0.10	66332-96-5	Flutolanil	3.9E+03 nc	4.1E+04 nc	2.2E+02 nc	2.2E+03 nc		
	1.0E-02 i		1.0E-02 r	0	0.10	69409-94-5	Fluvalinate	6.5E+02 nc	6.8E+03 nc	3.7E+01 nc	3.7E+02 nc		
3.5E-03 i	1.0E-01 i	3.5E-03 r	1.0E-01 r	0	0.10	133-07-3	Folpet	1.3E+02 ca*	5.5E+02 ca	1.9E+00 ca	1.9E+01 ca		

Key : I=IRIS h=HEAST n=NCEA w=WITHDRAWN r=ROUTE EXTRAPOLATION ca=CANCER PRG nc=NONCANCER PRG sat=SOIL SATURATION max=CEILING LIMIT *(where: nc < 100X ca) **(where: nc < 10X ca)

FOR PLANNING PURPOSES

TOXICITY INFORMATION							CONTAMINANT	PRELIMINARY REMEDIAL GOALS (PRGs)				SOIL SCREENING LEVELS	
SFo 1/(mg/kg-d)	RfDo (mg/kg-d)	SFI 1/(mg/kg-d)	RfDI (mg/kg-d)	V O C	skin abs. soils	CAS No.		Residential Soil (mg/kg)	Industrial Soil (mg/kg)	Ambient Air (ug/m^3)	Tap Water (ug/l)	Migration to Ground Water DAF 20 (mg/kg)	Migration to Ground Water DAF 1 (mg/kg)
1.9E-01 I		1.9E-01 r		0	0.10	72178-02-0	Fomesafen	2.3E+00 ca	1.0E+01 ca	3.5E-02 ca	3.5E-01 ca		
	2.0E-03 I		2.0E-03 r	0	0.10	944-22-9	Fonofos	1.3E+02 nc	1.4E+03 nc	7.3E+00 nc	7.3E+01 nc		
	1.5E-01 I	4.6E-02 I		0	0.10	50-00-0	Formaldehyde	9.8E+03 nc	1.0E+05 nc	1.5E-01 ca	5.5E+03 nc		
	2.0E+00 h		2.0E+00 r	0	0.10	64-18-6	Formic Acid	1.0E+05 max	1.0E+05 max	7.3E+03 nc	7.3E+04 nc		
	3.0E+00 I		3.0E+00 r	0	0.10	39148-24-8	Fosetyl-al	1.0E+05 max	1.0E+05 max	1.1E+04 nc	1.1E+05 nc		
	1.0E-03 I		1.0E-03 r	1	0.10	110-00-9	Furan	2.5E+00 nc	8.5E+00 nc	3.7E+00 nc	6.1E+00 nc		
3.8E+00 h		3.8E+00 r		0	0.10	67-45-8	Furazolidone	1.2E-01 ca	5.0E-01 ca	1.8E-03 ca	1.8E-02 ca		
	3.0E-03 I		1.4E-02 h	0	0.10	98-01-1	Furfural	2.0E+02 nc	2.0E+03 nc	5.2E+01 nc	1.1E+02 nc		
5.0E+01 h		5.0E+01 r		0	0.10	531-82-8	Furium	8.9E-03 ca	3.8E-02 ca	1.3E-04 ca	1.3E-03 ca		
3.0E-02 I		3.0E-02 r		0	0.10	60568-05-0	Furmecyclox	1.5E+01 ca	6.4E+01 ca	2.2E-01 ca	2.2E+00 ca		
	4.0E-04 I		4.0E-04 r	0	0.10	77182-82-2	Glufosinate-ammonium	2.6E+01 nc	2.7E+02 nc	1.5E+00 nc	1.5E+01 nc		
	4.0E-04 I		2.9E-04 h	0	0.10	765-34-4	Glycidaldehyde	2.6E+01 nc	2.7E+02 nc	1.0E+00 nc	1.5E+01 nc		
	1.0E-01 I		1.0E-01 r	0	0.10	1071-83-6	Glyphosate	6.5E+03 nc	6.8E+04 nc	3.7E+02 nc	3.7E+03 nc		
	5.0E-05 I		5.0E-05 r	0	0.10	69806-40-2	Haloxyfop-methyl	3.3E+00 nc	3.4E+01 nc	1.8E-01 nc	1.8E+00 nc		
	1.3E-02 I		1.3E-02 r	0	0.10	79277-27-3	Harmony	8.5E+02 nc	8.9E+03 nc	4.7E+01 nc	4.7E+02 nc		
4.5E+00 I	5.0E-04 I	4.6E+00 I	5.0E-04 r	0	0.10	76-44-8	Heptachlor	9.9E-02 ca	4.2E-01 ca	1.5E-03 ca	1.5E-02 ca	2.3E+01	1.0E+00
9.1E+00 I	1.3E-05 I	9.1E+00 I	1.3E-05 r	0	0.10	1024-57-3	Heptachlor epoxide	4.9E-02 ca**	2.1E-01 ca*	7.4E-04 ca*	7.4E-03 ca*	7.0E-01	3.0E-02
	2.0E-03 I		2.0E-03 r	0	0.10	87-82-1	Hexabromobenzene	1.3E+02 nc	1.4E+03 nc	7.3E+00 nc	7.3E+01 nc		
1.6E+00 I	8.0E-04 I	1.6E+00 I	8.0E-04 r	0	0.10	118-74-1	Hexachlorobenzene	2.8E-01 ca*	1.2E+00 ca	4.2E-03 ca	4.2E-02 ca	2.0E+00	1.0E-01
7.8E-02 I	2.0E-04 h	7.7E-02 I	2.0E-04 r	0	0.10	87-68-3	Hexachlorobutadiene	5.7E+00 ca**	2.4E+01 ca*	8.7E-02 ca*	8.6E-01 ca*	2.0E+00	1.0E-01
6.3E+00 I		6.3E+00 I		0	0.10	319-84-6	HCH (alpha)	7.1E-02 ca	3.0E-01 ca	1.1E-03 ca	1.1E-02 ca	5.0E-04	3.0E-05
1.8E+00 I		1.8E+00 I		0	0.10	319-85-7	HCH (beta)	2.5E-01 ca	1.1E+00 ca	3.7E-03 ca	3.7E-02 ca	3.0E-03	1.0E-04
1.3E+00 h	3.0E-04 I	1.3E+00 r	3.0E-04 r	0	0.10	58-89-9	HCH (gamma) Lindane	3.4E-01 ca*	1.5E+00 ca	5.2E-03 ca	5.2E-02 ca	9.0E-03	5.0E-04
1.8E+00 I		1.8E+00 I		0	0.10	58-89-9	HCH-technical	2.5E-01 ca	1.1E+00 ca	3.8E-03 ca	3.7E-02 ca	3.0E-03	1.0E-04
	7.0E-03 I		2.0E-05 h	0	0.10	77-47-4	Hexachlorocyclopentadiene	4.5E+02 nc	4.6E+03 nc	7.3E-02 nc	2.6E+02 nc	4.0E+02	2.0E+01
8.2E+03 I		4.6E+03 I		0	0.10	19408-74-3	Hexachlorodibenzo-p-dioxin mixture (HxCDD)	7.2E-05 ca	3.1E-04 ca	1.5E-06 ca	1.1E-05 ca		
1.4E-02 I	1.0E-03 I	1.4E-02 I	1.0E-03 r	0	0.10	67-72-1	Hexachloroethane	3.2E+01 ca**	1.4E+02 ca**	4.8E-01 ca**	4.8E+00 ca**	5.0E-01	2.0E-02
	3.0E-04 I		3.0E-04 r	0	0.10	70-30-4	Hexachlorophene	2.0E+01 nc	2.0E+02 nc	1.1E+00 nc	1.1E+01 nc		
1.1E-01 I	3.0E-03 I	1.1E-01 r	3.0E-03 r	0	0.10	121-82-4	Hexahydro-1,3,5-trinitro-1,3,5-triazine	4.0E+00 ca*	1.7E+01 ca	6.1E-02 ca	6.1E-01 ca		
	2.9E-06 r		2.9E-06 I	0	0.10	822-06-0	1,6-Hexamethylene diisocyanate			1.0E-02 nc	1.0E-01 nc		
	6.0E-02 h		5.7E-02 I	1	0.10	110-54-3	n-Hexane	1.1E+02 sat	1.1E+02 sat	2.1E+02 nc	3.5E+02 nc		
	3.3E-02 I		3.3E-02 r	0	0.10	51235-04-2	Hexazinone	2.2E+03 nc	2.2E+04 nc	1.2E+02 nc	1.2E+03 nc		
3.0E+00 I		1.7E+01 I		0	0.10	302-01-2	Hydrazine, hydrazine sulfate	1.5E-01 ca	6.4E-01 ca	3.9E-04 ca	2.2E-02 ca		
			5.7E-03 I	0	0.10	7647-01-0	Hydrogen chloride			2.1E+01 nc			
	3.0E-03 I		2.9E-04 I	1	0.10	7783-06-4	Hydrogen sulfide			1.0E+00 nc	2.0E+00 nc		
	4.0E-02 h		4.0E-02 r	0	0.10	123-31-9	p-Hydroquinone	2.6E+03 nc	2.7E+04 nc	1.5E+02 nc	1.5E+03 nc		
	1.3E-02 I		1.3E-02 r	0	0.10	35554-44-0	Imazalil	8.5E+02 nc	8.9E+03 nc	4.7E+01 nc	4.7E+02 nc		
	2.5E-01 I		2.5E-01 r	0	0.10	81335-37-7	Imazaquin	1.6E+04 nc	1.0E+05 max	9.1E+02 nc	9.1E+03 nc		
	4.0E-02 I		4.0E-02 r	0	0.10	36734-19-7	Iprodione	2.6E+03 nc	2.7E+04 nc	1.5E+02 nc	1.5E+03 nc		
	3.0E-01 I		3.0E-01 r	1	0.10	78-83-1	Isobutanol	1.1E+04 nc	1.0E+05 max	1.1E+03 nc	1.8E+03 nc		
9.5E-04 I	2.0E-01 I	9.5E-04 r	2.0E-01 r	0	0.10	78-59-1	Isophorone	4.7E+02 ca*	2.0E+03 ca*	7.1E+00 ca	7.1E+01 ca	5.0E-01	3.0E-02
	1.5E-02 I		1.5E-02 r	0	0.10	33820-53-0	Isopropalin	9.8E+02 nc	1.0E+04 nc	5.5E+01 nc	5.5E+02 nc		
	1.0E-01 I		1.1E-01 r	0	0.10	1832-54-8	Isopropyl methyl phosphonic acid	6.5E+03 nc	6.8E+04 nc	4.0E+02 nc	3.7E+03 nc		
	5.0E-02 I		5.0E-02 r	0	0.10	82558-50-7	Isoxaben	3.3E+03 nc	3.4E+04 nc	1.8E+02 nc	1.8E+03 nc		
1.6E+01 n		1.6E+01 r		0	0.10	143-50-0	Kepone	2.5E-02 ca	1.1E-01 ca	3.7E-04 ca	3.7E-03 ca		
	2.0E-03 I		2.0E-03 r	0	0.10	77501-63-4	Lactofen	1.3E+02 nc	1.4E+03 nc	7.3E+00 nc	7.3E+01 nc		

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FOR PLANNING PURPOSES

TOXICITY INFORMATION							CONTAMINANT	PRELIMINARY REMEDIAL GOALS (PRGs)				SOIL SCREENING LEVELS	
												Migration to Ground Water	
SFo 1/(mg/kg-d)	RfDo (mg/kg-d)	SFi 1/(mg/kg-d)	RfDi (mg/kg-d)	V O C	skin abs. soils	CAS No.		Residential Soil (mg/kg)	Industrial Soil (mg/kg)	Ambient Air (ug/m^3)	Tap Water (ug/l)	DAF 20 (mg/kg)	DAF 1 (mg/kg)
Residential PRG Based on Uptake Biokinetic Model				0	n/a	7439-92-1	Lead	4.0E+02 nc	1.0E+03 nc		4.0E+00 nc		
							"CAL-Modified PRG" (PEA, 1994)	1.3E+02					
	1.0E-07 i			0	0.10	78-00-2	Lead (tetraethyl)	6.5E-03 nc	6.8E-02 nc		3.7E-03 nc		
	2.0E-03 i		2.0E-03 r	0	0.10	330-55-2	Linuron	1.3E+02 nc	1.4E+03 nc	7.3E+00 nc	7.3E+01 nc		
	2.0E-02 n			0	0.01	7439-93-2	Lithium	1.5E+03 nc	3.4E+04 nc		7.3E+02 nc		
	2.0E-01 i		2.0E-01 r	0	0.10	83055-99-6	Londax	1.3E+04 nc	1.0E+05 max	7.3E+02 nc	7.3E+03 nc		
	2.0E-02 i		2.0E-02 r	0	0.10	121-75-5	Malathion	1.3E+03 nc	1.4E+04 nc	7.3E+01 nc	7.3E+02 nc		
	1.0E-01 i		1.0E-01 r	0	0.10	108-31-6	Maleic anhydride	6.5E+03 nc	6.8E+04 nc	3.7E+02 nc	3.7E+03 nc		
	5.0E-01 i		5.0E-01 r	1	0.10	123-33-1	Maleic hydrazide	1.7E+03 nc	2.4E+03 sat	1.8E+03 nc	3.0E+03 nc		
	2.0E-05 h		2.0E-05 r	0	0.10	109-77-3	Malononitrile	1.3E+00 nc	1.4E+01 nc	7.3E-02 nc	7.3E-01 nc		
	3.0E-02 h		3.0E-02 r	0	0.10	8018-01-7	Mancozeb	2.0E+03 nc	2.0E+04 nc	1.1E+02 nc	1.1E+03 nc		
	5.0E-03 i		5.0E-03 r	0	0.10	12427-38-2	Maneb	3.3E+02 nc	3.4E+03 nc	1.8E+01 nc	1.8E+02 nc		
	4.7E-02 i		1.4E-05 i	0	0.01	7439-96-5	Manganese and compounds	3.2E+03 nc	4.3E+04 nc	5.1E-02 nc	1.7E+03 nc		
	9.0E-05 h		9.0E-05 r	0	0.10	950-10-7	Mephosfolan	5.9E+00 nc	6.1E+01 nc	3.3E-01 nc	3.3E+00 nc		
	3.0E-02 i		3.0E-02 r	0	0.10	24307-26-4	Mepiquat	2.0E+03 nc	2.0E+04 nc	1.1E+02 nc	1.1E+03 nc		
	3.0E-04 i			0	0.01	7439-97-6	Mercuric chloride	2.3E+01 nc	5.1E+02 nc		1.1E+01 nc		
			8.6E-05 i	n/a	n/a	7439-97-6	Mercury (elemental)			3.1E-01 nc			
	1.0E-04 i			0	0.10	22967-92-6	Mercury (methyl)	6.5E+00 nc	6.8E+01 nc		3.7E+00 nc		
	3.0E-05 i		3.0E-05 r	0	0.10	150-50-5	Merphos	2.0E+00 nc	2.0E+01 nc	1.1E-01 nc	1.1E+00 nc		
	3.0E-05 i		3.0E-05 r	0	0.10	78-48-8	Merphos oxide	2.0E+00 nc	2.0E+01 nc	1.1E-01 nc	1.1E+00 nc		
	6.0E-02 i		6.0E-02 r	0	0.10	57837-19-1	Metalaxyl	3.9E+03 nc	4.1E+04 nc	2.2E+02 nc	2.2E+03 nc		
	1.0E-04 i		2.0E-04 h	1	0.10	126-98-7	Methacrylonitrile	2.0E+00 nc	8.1E+00 nc	7.3E-01 nc	1.0E+00 nc		
	5.0E-05 i		5.0E-05 r	0	0.10	10265-92-6	Methamidophos	3.3E+00 nc	3.4E+01 nc	1.8E-01 nc	1.8E+00 nc		
	5.0E-01 i		5.0E-01 r	0	0.10	67-56-1	Methanol	3.3E+04 nc	1.0E+05 max	1.8E+03 nc	1.8E+04 nc		
	1.0E-03 i		1.0E-03 r	0	0.10	950-37-8	Methidathion	6.5E+01 nc	6.8E+02 nc	3.7E+00 nc	3.7E+01 nc		
	2.5E-02 i		2.5E-02 r	1	0.10	16752-77-5	Methomyl	4.4E+01 nc	1.5E+02 nc	9.1E+01 nc	1.5E+02 nc		
	5.0E-03 i		5.0E-03 r	0	0.10	72-43-5	Methoxychlor	3.3E+02 nc	3.4E+03 nc	1.8E+01 nc	1.8E+02 nc	1.6E+02	8.0E+00
	1.0E-03 h		5.7E-03 i	0	0.10	109-86-4	2-Methoxyethanol	6.5E+01 nc	6.8E+02 nc	2.1E+01 nc	3.7E+01 nc		
	2.0E-03 h		2.0E-03 r	0	0.10	110-49-6	2-Methoxyethanol acetate	1.3E+02 nc	1.4E+03 nc	7.3E+00 nc	7.3E+01 nc		
4.8E-02 h		4.6E-02 r		0	0.10	99-59-2	2-Methoxy-5-nitroaniline	9.7E+00 ca	4.1E+01 ca	1.5E-01 ca	1.5E+00 ca		
	1.0E+00 h		1.0E+00 r	1	0.10	79-20-9	Methyl acetate	2.1E+04 nc	8.8E+04 nc	3.7E+03 nc	6.1E+03 nc		
	3.0E-02 h		3.0E-02 r	1	0.10	96-33-3	Methyl acrylate	6.9E+01 nc	2.3E+02 nc	1.1E+02 nc	1.8E+02 nc		
2.4E-01 h		2.4E-01 r		0	0.10	100-61-8	2-Methylaniline (o-toluidine)	1.9E+00 ca	7.9E+00 ca	2.8E-02 ca	2.8E-01 ca		
1.8E-01 h		1.8E-01 r		0	0.10	636-21-5	2-Methylaniline hydrochloride	2.5E+00 ca	1.1E+01 ca	3.7E-02 ca	3.7E-01 ca		
	1.0E+00 x		1.0E+00 r	0	0.10	79-22-1	Methyl chlorocarbonate	6.5E+04 nc	1.0E+05 max	3.7E+03 nc	3.7E+04 nc		
	5.0E-04 i		5.0E-04 r	0	0.10	94-74-6	2-Methyl-4-chlorophenoxyacetic acid	3.3E+01 nc	3.4E+02 nc	1.8E+00 nc	1.8E+01 nc		
	1.0E-02 i		1.0E-02 r	0	0.10	94-81-5	4-(2-Methyl-4-chlorophenoxy) butyric acid	6.5E+02 nc	6.8E+03 nc	3.7E+01 nc	3.7E+02 nc		
	1.0E-03 i		1.0E-03 r	0	0.10	93-65-2	2-(2-Methyl-4-chlorophenoxy) propionic acid	6.5E+01 nc	6.8E+02 nc	3.7E+00 nc	3.7E+01 nc		
	1.0E-03 i		1.0E-03 r	0	0.10	16484-77-8	2-(2-Methyl-1,4-chlorophenoxy) propionic acid	6.5E+01 nc	6.8E+02 nc	3.7E+00 nc	3.7E+01 nc		
	8.6E-01 r		8.6E-01 h	0	0.10	108-87-2	Methylcyclohexane	5.6E+04 nc	1.0E+05 max	3.1E+03 nc	3.1E+04 nc		
							4,4'-Methylenebisbenzeneamine	1.8E+00 ca	7.6E+00 ca	2.7E-02 ca	2.7E-01 ca		
2.5E-01 h		2.5E-01 r		0	0.10	101-77-9	4,4'-Methylene bis(2-chloroaniline)	3.4E+00 ca*	1.5E+01 ca*	5.2E-02 ca*	5.2E-01 ca*		
1.3E-01 h	7.0E-04 h	1.3E-01 h	7.0E-04 r	0	0.10	101-14-4	4,4'-Methylene bis(N,N'-dimethyl)aniline	9.7E+00 ca	4.1E+01 ca	1.5E-01 ca	1.5E+00 ca		
4.6E-02 i	-	4.6E-02 r		0	0.10	101-61-1	Methylene bromide	6.5E+02 nc	6.8E+03 nc	3.7E+01 nc	3.7E+02 nc		
	1.0E-02 h		1.0E-02 r	0	0.10	74-95-3	Methylene chloride	7.8E+00 ca	1.8E+01 ca	4.1E+00 ca	4.3E+00 ca	2.0E-02	1.0E-03
7.5E-03 i	6.0E-02 i	1.8E-03 i	8.6E-01 h	1	0.10	75-09-2	4,4'-Methylenediphenyl isocyanate			2.1E-02 nc			
			5.7E-06 i	0	n/a	101-68-8	Methyl ethyl ketone	7.1E+03 nc	2.7E+04 nc	1.0E+03 nc	1.9E+03 nc		
	6.0E-01 i		2.9E-01 i	1	0.10	78-93-3							

Key: i=IRIS h=HEAST n=NCEA w=WITHDRAWN r=ROUTE EXTRAPOLATION ca=CANCER PRG nc=NONCANCER PRG sat=SOIL SATURATION max=CEILING LIMIT *(where: nc < 100X ca) **(where: nc < 10X ca)

FOR PLANNING PURPOSES

TOXICITY INFORMATION							CONTAMINANT	PRELIMINARY REMEDIAL GOALS (PRGs)				SOIL SCREENING LEVELS	
SFo 1/(mg/kg-d)	RfDo (mg/kg-d)	SFi 1/(mg/kg-d)	RfDi (mg/kg-d)	V O C	skin abs. soils	CAS No.		Residential Soil (mg/kg)	Industrial Soil (mg/kg)	Ambient Air (ug/m^3)	Tap Water (ug/l)	Migration to Ground Water DAF 20 (mg/kg)	Migration to Ground Water DAF 1 (mg/kg)
1.1E+00 h		1.1E+00 r		0	0.10	60-34-4	Methyl hydrazine	4.0E-01 ca	1.7E+00 ca	6.1E-03 ca	6.1E-02 ca		
	8.0E-02 h		2.3E-02 h	1	0.10	108-10-1	Methyl isobutyl ketone	7.7E+02 nc	2.8E+03 nc	8.3E+01 nc	1.6E+02 nc		
	8.0E-02 h		8.0E-02 r	1	0.10	80-62-6	Methyl methacrylate	7.6E+02 nc	2.8E+03 nc	2.9E+02 nc	4.9E+02 nc		
				0	0.10	99-55-8	2-Methyl-5-nitroaniline	1.3E+01 ca	5.8E+01 ca	2.0E-01 ca	2.0E+00 ca		
3.3E-02 h		3.3E-02 r		0	0.10	298-00-0	Methyl parathion	1.6E+01 nc	1.7E+02 nc	9.1E-01 nc	9.1E+00 nc		
	2.5E-04 i		2.5E-04 r	0	0.10	95-48-7	2-Methylphenol	3.3E+03 nc	3.4E+04 nc	1.8E+02 nc	1.8E+03 nc	1.5E+01	8.0E-01
	5.0E-02 x		5.0E-02 r	0	0.10	108-39-4	3-Methylphenol	3.3E+03 nc	3.4E+04 nc	1.8E+02 nc	1.8E+03 nc		
	5.0E-02 x		5.0E-02 r	0	0.10	106-44-5	4-Methylphenol	3.3E+02 nc	3.4E+03 nc	1.8E+01 nc	1.8E+02 nc		
	5.0E-03 h		5.0E-03 r	0	0.10	25013-15-4	Methyl styrene (mixture)	1.2E+02 nc	5.2E+02 nc	4.2E+01 nc	6.0E+01 nc		
	6.0E-03 h		1.1E-02 h	1	0.10	98-83-9	Methyl styrene (alpha)	6.8E+02 sat	6.8E+02 sat	2.6E+02 nc	4.3E+02 nc		
	7.0E-02 h		7.0E-02 r	1	0.10	1634-04-4	Methyl tertbutyl ether (MTBE)			3.1E+03 nc	1.8E+02 nc		
	5.0E-03 n		8.6E-01 i	1	0.10	51218-45-2	Metolachor (Dual)	9.8E+03 nc	1.0E+05 max	5.5E+02 nc	5.5E+03 nc		
	1.5E-01 i		1.5E-01 r	0	0.10	21087-64-9	Metribuzin	1.6E+03 nc	1.7E+04 nc	9.1E+01 nc	9.1E+02 nc		
	2.5E-02 i		2.5E-02 r	0	0.10	2385-85-5	Mirex	2.5E-01 ca*	1.1E+00 ca	3.7E-03 ca	3.7E-02 ca		
1.8E+00 h	2.0E-04 i	1.8E+00 r	2.0E-04 r	0	0.10	2212-67-1	Molinate	1.3E+02 nc	1.4E+03 nc	7.3E+00 nc	7.3E+01 nc		
	2.0E-03 i		2.0E-03 r	0	0.01	7439-98-7	Molybdenum	3.8E+02 nc	8.5E+03 nc		1.8E+02 nc		
	5.0E-03 h			0	0.10	10599-90-3	Monochloramine	6.5E+03 nc	6.8E+04 nc	3.7E+02 nc	3.7E+03 nc		
	1.0E-01 h		1.0E-01 h	0	0.10	300-76-5	Naled	1.3E+02 nc	1.4E+03 nc	7.3E+00 nc	7.3E+01 nc		
	2.0E-03 i		2.0E-03 r	0	0.10	15299-99-7	Napropamide	6.5E+03 nc	6.8E+04 nc	3.7E+02 nc	3.7E+03 nc		
	1.0E-01 i		1.0E-01 r	0	0.10	7440-02-0	Nickel (soluble salts)	1.5E+03 nc	3.4E+04 nc		7.3E+02 nc	1.3E+02	7.0E+00
	2.0E-02 i			0	0.01		"CAL-Modified PRG" (PEA, 1994)	1.5E+02					
		8.4E-01 i		0	0.01	n/a	Nickel refinery dust			8.0E-03 ca			
		1.7E+00 i		0	0.01	12035-72-2	Nickel subsulfide		1.1E+04 ca	4.0E-03 ca			
	1.5E-03 x		1.5E-03 r	0	0.10	1929-82-4	Nitrapyrin	9.8E+01 nc	1.0E+03 nc	5.5E+00 nc	5.5E+01 nc		
	1.6E+00 i			0	0.10	14797-55-8	Nitrate				5.8E+04 nc		
	1.0E-01 x			0	0.10	10102-43-9	Nitric Oxide	6.5E+03 nc	1.0E+05 max		3.7E+03 nc		
	1.0E-01 i			0	0.10	14797-65-0	Nitrite	6.5E+03 nc	1.0E+05 max		3.7E+03 nc		
	6.0E-05 r		5.7E-05 h	0	0.10	88-74-4	2-Nitroaniline	3.9E+00 nc	4.1E+01 nc	2.1E-01 nc	2.2E+00 nc		
				0	0.10	99-09-2	3-Nitroaniline						
				0	0.10	100-01-6	4-Nitroaniline						
	5.0E-04 i		5.7E-04 h	1	0.10	98-95-3	Nitrobenzene	1.8E+01 nc	9.4E+01 nc	2.1E+00 nc	3.4E+00 nc	1.0E-01	7.0E-03
	7.0E-02 h		7.0E-02 r	0	0.10	67-20-9	Nitrofurantoin	4.6E+03 nc	4.8E+04 nc	2.6E+02 nc	2.6E+03 nc		
1.5E+00 h		9.4E+00 h		0	0.10	59-87-0	Nitrofurazone	3.0E-01 ca	1.3E+00 ca	7.2E-04 ca	4.5E-02 ca		
	1.0E+00 x			0	0.10	101102-44-0	Nitrogen dioxide	6.5E+03 nc	6.8E+04 nc	3.7E+02 nc	3.7E+03 nc		
	1.0E-01 i		1.0E-01 r	0	0.10	556-88-7	Nitroguanidine						
				0	0.10	100-02-7	4-Nitrophenol			7.2E-04 ca	3.5E+01 ca		
9.4E+00 r	5.7E-03 r	9.4E+00 h	5.7E-03 i	1	0.10	79-46-9	2-Nitropropane	2.2E-02 ca	5.5E-02 ca	1.2E-03 ca	2.0E-03 ca		
5.4E+00 i		5.6E+00 i		1	0.10	924-16-3	N-Nitrosodi-n-butylamine	1.6E-01 ca	6.8E-01 ca	2.4E-03 ca	2.4E-02 ca		
2.8E+00 i		2.8E+00 r		0	0.10	1116-54-7	N-Nitrosodiethanolamine	3.0E-03 ca	1.3E-02 ca	4.5E-05 ca	4.5E-04 ca		
1.5E+02 i		1.5E+02 i		0	0.10	55-18-5	N-Nitrosodiethylamine	8.7E-03 ca	3.7E-02 ca	1.4E-04 ca	1.3E-03 ca		
5.1E+01 i		4.9E+01 i		0	0.10	62-75-9	N-Nitrosodimethylamine	9.1E+01 ca	3.9E+02 ca	1.4E+00 ca	1.4E+01 ca	1.0E+00	6.0E-02
4.9E-03 i		4.9E-03 r		0	0.10	86-30-6	N-Nitrosodiphenylamine	6.3E-02 ca	2.7E-01 ca	9.6E-04 ca	9.6E-03 ca	5.0E-05	2.0E-06
7.0E+00 i		7.0E+00 r		0	0.10	621-64-7	N-Nitroso di-n-propylamine	2.0E-02 ca	8.7E-02 ca	3.1E-04 ca	3.1E-03 ca		
2.2E+01 i		2.2E+01 r		0	0.10	10595-95-6	N-Nitroso-N-methylethylamine	2.1E-01 ca	9.1E-01 ca	3.1E-03 ca	3.2E-02 ca		
2.1E+00 i		2.1E+00 i		0	0.10	930-55-2	N-Nitrosopyrrolidine	6.5E+02 nc	6.8E+03 nc	3.7E+01 nc	3.7E+02 nc		
	1.0E-02 h		1.0E-02 r	0	0.10	99-08-1	m-Nitrotoluene	6.5E+02 nc	6.8E+03 nc	3.7E+01 nc	3.7E+02 nc		
	1.0E-02 h		1.0E-02 r	0	0.10	99-99-0	p-Nitrotoluene						

EPA Region 9 Preliminary Remediation Goals: S.J. Smucker (06/01/96)

Key: i=IRIS h=HEAST n=NCEA x=WITHDRAWN r=ROUTE EXTRAPOLATION ca=CANCER PRG nc=NONCANCER PRG sat=SOIL SATURATION max=CEILING LIMIT *(where: nc < 100X ca) **(where: nc < 10X ca)

FOR PLANNING PURPOSES

TOXICITY INFORMATION							CONTAMINANT	PRELIMINARY REMEDIAL GOALS (PRGs)				SOIL SCREENING LEVELS	
SFo 1/(mg/kg-d)	RfDo (mg/kg-d)	SFi 1/(mg/kg-d)	RfDi (mg/kg-d)	V O C	skin abs. soils	CAS No.		Residential Soil (mg/kg)	Industrial Soil (mg/kg)	Ambient Air (ug/m^3)	Tap Water (ug/l)	Migration to Ground Water DAF 20 (mg/kg)	Migration to Ground Water DAF 1 (mg/kg)
	4.0E-02 i		4.0E-02 r	0	0.10	27314-13-2	Norflurazon	4.6E+01 nc	4.8E+02 nc	2.6E+00 nc	2.6E+01 nc		
	7.0E-04 i		7.0E-04 r	0	0.10	85509-19-9	NuStar	2.0E+02 nc	2.0E+03 nc	1.1E+01 nc	1.1E+02 nc		
	3.0E-03 i		3.0E-03 r	0	0.10	32536-52-0	Octabromodiphenyl ether	3.3E+03 nc	3.4E+04 nc	1.8E+02 nc	1.8E+03 nc		
	5.0E-02 i		5.0E-02 r	0	0.10	2691-41-0	Octahydro-1357-tetranitro-1357- tetrazocine (HMX)	1.3E+02 nc	1.4E+03 nc	7.3E+00 nc	7.3E+01 nc		
	2.0E-03 h		2.0E-03 r	0	0.10	152-16-9	Octamethylpyrophosphoramide	3.3E+03 nc	3.4E+04 nc	1.8E+02 nc	1.8E+03 nc		
	5.0E-02 i		5.0E-02 r	0	0.10	19044-88-3	Oryzalin	3.3E+02 nc	3.4E+03 nc	1.8E+01 nc	1.8E+02 nc		
	5.0E-03 i		5.0E-03 r	0	0.10	19666-30-9	Oxadiazon	1.6E+03 nc	1.7E+04 nc	9.1E+01 nc	9.1E+02 nc		
	2.5E-02 i		2.5E-02 r	0	0.10	23135-22-0	Oxamyl	2.0E+02 nc	2.0E+03 nc	1.1E+01 nc	1.1E+02 nc		
	3.0E-03 i		3.0E-03 r	0	0.10	42874-03-3	Oxyfluorfen	8.5E+02 nc	8.9E+03 nc	4.7E+01 nc	4.7E+02 nc		
	1.3E-02 i		1.3E-02 r	0	0.10	76738-62-0	Paclobutrazol	2.9E+02 nc	3.1E+03 nc	1.6E+01 nc	1.6E+02 nc		
	4.5E-03 i		4.5E-03 r	0	0.10	4685-14-7	Paraquat	3.9E+02 nc	4.1E+03 nc	2.2E+01 nc	2.2E+02 nc		
	6.0E-03 h		6.0E-03 r	0	0.10	56-38-2	Parathion	3.3E+03 nc	3.4E+04 nc	1.8E+02 nc	1.8E+03 nc		
	5.0E-02 h		5.0E-02 r	0	0.10	1114-71-2	Pebulate	2.6E+03 nc	2.7E+04 nc	1.5E+02 nc	1.5E+03 nc		
	4.0E-02 i		4.0E-02 r	0	0.10	40487-42-1	Pendimethalin	1.9E+01 ca	8.3E+01 ca	2.9E-01 ca	2.9E+00 ca		
2.3E-02 h		2.3E-02 r		0	0.10	87-84-3	Pentabromo-6-chloro cyclohexane	1.3E+02 nc	1.4E+03 nc	7.3E+00 nc	7.3E+01 nc		
	2.0E-03 i		2.0E-03 r	0	0.10	32534-81-9	Pentabromodiphenyl ether	5.2E+01 nc	5.5E+02 nc	2.9E+00 nc	2.9E+01 nc		
	8.0E-04 i		8.0E-04 r	0	0.10	608-93-5	Pentachlorobenzene	1.7E+00 ca*	7.3E+00 ca	2.6E-02 ca	2.6E-01 ca		
2.6E-01 h	3.0E-03 i	2.6E-01 r	3.0E-03 r	0	0.10	82-68-8	Pentachloronitrobenzene	2.5E+00 ca	7.9E+00 ca	5.6E-02 ca	5.6E-01 ca	3.0E-02	1.0E-03
1.2E-01 i	3.0E-02 i	1.2E-01 r	3.0E-02 r	0	0.25	87-86-5	Pentachlorophenol	3.3E+03 nc	3.4E+04 nc	1.8E+02 nc	1.8E+03 nc		
	5.0E-02 i		5.0E-02 r	0	0.10	52645-53-1	Permethrin	1.6E+04 nc	1.0E+05 max	9.1E+02 nc	9.1E+03 nc		
	2.5E-01 i		2.5E-01 r	0	0.10	13684-63-4	Phenmedipham	3.9E+04 nc	1.0E+05 max	2.2E+03 nc	2.2E+04 nc	1.0E+02	5.0E+00
	6.0E-01 i		6.0E-01 r	0	0.10	108-95-2	Phenol	3.9E+02 nc	4.1E+03 nc	2.2E+01 nc	2.2E+02 nc		
	6.0E-03 i		6.0E-03 r	0	0.10	108-45-2	m-Phenylenediamine	1.2E+04 nc	1.0E+05 max	6.9E+02 nc	6.9E+03 nc		
	1.9E-01 h		1.9E-01 r	0	0.10	106-50-3	p-Phenylenediamine	5.2E+00 nc	5.5E+01 nc	2.9E-01 nc	2.9E+00 nc		
	8.0E-05 i		8.0E-05 r	0	0.10	62-38-4	Phenylmercuric acetate	2.3E+02 ca	9.8E+02 ca	3.5E+00 ca	3.5E+01 ca		
1.9E-03 h		1.9E-03 r		0	0.10	90-43-7	2-Phenylphenol	1.3E+01 nc	1.4E+02 nc	7.3E-01 nc	7.3E+00 nc		
	2.0E-04 h		2.0E-04 r	0	0.10	298-02-2	Phorate	1.3E+03 nc	1.4E+04 nc	7.3E+01 nc	7.3E+02 nc		
	2.0E-02 i		2.0E-02 r	0	0.10	732-11-6	Phosmet	2.0E+01 nc	2.0E+02 nc	3.1E-01 nc	1.1E+01 nc		
	3.0E-04 h		8.6E-05 i	0	0.10	7803-51-2	Phosphine			1.0E+01 nc			
			2.9E-03 i	n/a	n/a	7664-38-2	Phosphoric acid			7.3E-02 nc			
	2.0E-05 i		2.0E-05 r	0	0.10	7723-14-0	Phosphorus (white)			3.7E+03 nc			
	1.0E+00 h		1.0E+00 r	0	0.10	100-21-0	p-Phthalic acid			1.2E+02 nc			
	2.0E+00 i		3.4E-02 h	0	0.10	85-44-9	Phthalic anhydride	4.6E+03 nc	4.8E+04 nc	2.6E+02 nc	2.6E+03 nc		
	7.0E-02 i		7.0E-02 r	0	0.10	1918-02-1	Picloram	6.5E+02 nc	6.8E+03 nc	3.7E+01 nc	3.7E+02 nc		
	1.0E-02 i		1.0E-02 r	0	0.10	23505-41-1	Pirimiphos-methyl	5.0E-02 ca**	2.1E-01 ca*	7.6E-04 ca*	7.6E-03 ca*		
8.9E+00 h	7.0E-06 h	8.9E+00 r	7.0E-06 r	0	0.10		Polybrominated biphenyls	6.6E-02 ca*	3.4E-01 ca*	8.7E-04 ca*	8.7E-03 ca*		
7.7E+00 i		7.7E+00 r		0	0.06	1336-36-3	Polychlorinated biphenyls (PCBs)	4.9E+00 nc	6.5E+01 nc	2.6E-01 nc	2.6E+00 nc		
	7.0E-05 i		7.0E-05 r	0	0.06	12674-11-2	Aroclor 1016 (see PCBs for cancer endpoint)	1.4E+00 nc	1.9E+01 nc	7.3E-02 nc	7.3E-01 nc		
	2.0E-05 i		2.0E-05 r	0	0.06	11097-69-1	Aroclor 1254 (see PCBs for cancer endpoint)						
					0.10		Polynuclear aromatic hydrocarbons (PAHs)						
	6.0E-02 i		6.0E-02 r	1	0.10	83-32-9	Acenaphthene	1.1E+02 sat	1.1E+02 sat	2.2E+02 nc	3.7E+02 nc	5.7E+02	2.9E+01
	3.0E-01 i		3.0E-01 r	1	0.10	120-12-7	Anthracene	5.7E+00 sat	5.7E+00 sat	1.1E+03 nc	1.8E+03 nc	1.2E+04	5.9E+02
7.3E-01 n		7.3E-01 r		0	0.10	56-55-3	Benz[a]anthracene	6.1E-01 ca	2.6E+00 ca	9.2E-03 ca	9.2E-02 ca	2.0E+00	8.0E-02
7.3E-01 n		7.3E-01 r		0	0.10	205-99-2	Benzo[b]fluoranthene	6.1E-01 ca	2.6E+00 ca	9.2E-03 ca	9.2E-02 ca	5.0E+00	2.0E-01
7.3E-02 n		7.3E-02 r		0	0.10	207-08-9	Benzo[k]fluoranthene	6.1E+00 ca	2.6E+01 ca	9.2E-02 ca	9.2E-01 ca	4.9E+01	2.0E+00
							"CAL-Modified PRG" (PEA, 1994)	6.1E-01					

Key: i=IRIS h=HEAST n=NCEA x=WITHDRAWN r=ROUTE EXTRAPOLATION ca=CANCER PRG nc=NONCANCER PRG sat=SOIL SATURATION max=CEILING LIMIT *(where: nc < 100X ca) **(where: nc < 10X ca)

FOR PLANNING PURPOSES

TOXICITY INFORMATION							CONTAMINANT	PRELIMINARY REMEDIAL GOALS (PRGs)				SOIL SCREENING LEVELS	
												Migration to Ground Water	
SFo 1/(mg/kg-d)	RfDo (mg/kg-d)	SFi 1/(mg/kg-d)	RfDi (mg/kg-d)	V O C	skin abs. soils	CAS No.		Residential Soil (mg/kg)	Industrial Soil (mg/kg)	Ambient Air (ug/m^3)	Tap Water (ug/l)	DAF 20 (mg/kg)	DAF 1 (mg/kg)
7.3E+00 i		7.3E+00 r		0	0.10	50-32-8	PAHs continued Benzo[a]pyrene "CAL-Modified PRG" (PEA, 1994)	6.1E-02 ca	2.6E-01 ca	9.2E-04 ca	9.2E-03 ca 1.5E-03	8.0E+00	4.0E-01
7.3E-03 n		7.3E-03 r		0	0.10	218-01-9	Chrysene "CAL-Modified PRG" (PEA, 1994)	7.2E+00 sat 6.1E+00	7.2E+00 sat	9.2E-01 ca	9.2E+00 ca	1.6E+02	8.0E+00
7.3E+00 n		7.3E+00 r		0	0.10	53-70-3	Dibenz[ah]anthracene	6.1E-02 ca	2.6E-01 ca	9.2E-04 ca	9.2E-03 ca	2.0E+00	8.0E-02
	4.0E-02 i		4.0E-02 r	0	0.10	206-44-0	Fluoranthene	2.6E+03 nc	2.7E+04 nc	1.5E+02 nc	1.5E+03 nc	4.3E+03	2.1E+02
	4.0E-02 i		4.0E-02 r	1	0.10	86-73-7	Fluorene	9.0E+01 sat	9.0E+01 sat	1.5E+02 nc	2.4E+02 nc	5.6E+02	2.8E+01
7.3E-01 n		7.3E-01 r		0	0.10	193-39-5	Indeno[1,2,3-cd]pyrene	6.1E-01 ca	2.6E+00 ca	9.2E-03 ca	9.2E-02 ca	1.4E+01	7.0E-01
	4.0E-02 n		4.0E-02 r	1	0.10	91-20-3	Naphthalene	2.4E+02 sat	2.4E+02 sat	1.5E+02 nc	2.4E+02 nc	8.4E+01	4.0E+00
	3.0E-02 i		3.0E-02 r	1	0.10	129-00-0	Pyrene	1.0E+02 sat	1.0E+02 sat	1.1E+02 nc	1.8E+02 nc	4.2E+03	2.1E+02
1.5E-01 i	9.0E-03 i	1.5E-01 r	9.0E-03 r	0	0.10	67747-09-5	Prochloraz	3.0E+00 ca	1.3E+01 ca	4.5E-02 ca	3.3E+02 ca		
	6.0E-03 h		6.0E-03 r	0	0.10	26399-36-0	Profluralin	3.9E+02 nc	4.1E+03 nc	2.2E+01 nc	2.2E+02 nc		
	1.5E-02 i		1.5E-02 r	0	0.10	1610-18-0	Prometon	9.8E+02 nc	1.0E+04 nc	5.5E+01 nc	5.5E+02 nc		
	4.0E-03 i		4.0E-03 r	0	0.10	7287-19-6	Prometryn	2.6E+02 nc	2.7E+03 nc	1.5E+01 nc	1.5E+02 nc		
	7.5E-02 i		7.5E-02 r	0	0.10	23950-58-5	Pronamide	4.9E+03 nc	5.1E+04 nc	2.7E+02 nc	2.7E+03 nc		
	1.3E-02 i		1.3E-02 r	0	0.10	1918-16-7	Propachlor	8.5E+02 nc	8.9E+03 nc	4.7E+01 nc	4.7E+02 nc		
	5.0E-03 i		5.0E-03 r	0	0.10	709-98-8	Propanil	3.3E+02 nc	3.4E+03 nc	1.8E+01 nc	1.8E+02 nc		
	2.0E-02 i		2.0E-02 r	0	0.10	2312-35-8	Propargite	1.3E+03 nc	1.4E+04 nc	7.3E+01 nc	7.3E+02 nc		
	2.0E-03 i		2.0E-03 r	0	0.10	107-19-7	Propargyl alcohol	1.3E+02 nc	1.4E+03 nc	7.3E+00 nc	7.3E+01 nc		
	2.0E-02 i		2.0E-02 r	0	0.10	139-40-2	Propazine	1.3E+03 nc	1.4E+04 nc	7.3E+01 nc	7.3E+02 nc		
	2.0E-02 i		2.0E-02 r	0	0.10	122-42-9	Propham	1.3E+03 nc	1.4E+04 nc	7.3E+01 nc	7.3E+02 nc		
	1.3E-02 i		1.3E-02 r	0	0.10	60207-90-1	Propiconazole	8.5E+02 nc	8.9E+03 nc	4.7E+01 nc	4.7E+02 nc		
	2.0E+01 h		2.0E+01 r	0	0.10	57-55-6	Propylene glycol	1.0E+05 max	1.0E+05 max	7.3E+04 nc	7.3E+05 nc		
	7.0E-01 h		7.0E-01 r	0	0.10	111-35-3	Propylene glycol, monoethyl ether	4.6E+04 nc	1.0E+05 max	2.6E+03 nc	2.6E+04 nc		
	7.0E-01 h		5.7E-01 i	0	0.10	107-98-2	Propylene glycol, monomethyl ether	4.6E+04 nc	1.0E+05 max	2.1E+03 nc	2.6E+04 nc		
2.4E-01 i	8.6E-03 r	1.3E-02 i	8.6E-03 i	1	0.10	75-56-9	Propylene oxide			5.2E-01 ca	2.2E-01 ca		
	2.5E-01 i		2.5E-01 r	0	0.10	81335-77-5	Pursuit	1.6E+04 nc	1.0E+05 max	9.1E+02 nc	9.1E+03 nc		
	2.5E-02 i		2.5E-02 r	0	0.10	51630-58-1	Pydrin	1.6E+03 nc	1.7E+04 nc	9.1E+01 nc	9.1E+02 nc		
	1.0E-03 i		1.0E-03 r	0	0.10	110-86-1	Pyridine	6.5E+01 nc	6.8E+02 nc	3.7E+00 nc	3.7E+01 nc		
	5.0E-04 i		5.0E-04 r	0	0.10	13593-03-8	Quinalphos	3.3E+01 nc	3.4E+02 nc	1.8E+00 nc	1.8E+01 nc		
1.2E+01 h		1.2E+01 r		0	0.10	91-22-5	Quinoline	3.7E-02 ca	1.6E-01 ca	5.6E-04 ca	5.6E-03 ca		
1.1E-01 i	3.0E-03 i	1.1E-01 r	3.0E-03 r	0	0.10	121-82-4	RDX (Cyclonite)	4.0E+00 ca*	1.7E+01 ca	6.1E-02 ca	6.1E-01 ca		
	3.0E-02 i		3.0E-02 r	0	0.10	10453-86-8	Resmethrin	2.0E+03 nc	2.0E+04 nc	1.1E+02 nc	1.1E+03 nc		
	5.0E-02 h		5.0E-02 r	0	0.10	299-84-3	Ronnel	3.3E+03 nc	3.4E+04 nc	1.8E+02 nc	1.8E+03 nc		
	4.0E-03 i		4.0E-03 r	0	0.10	83-79-4	Rotenone	2.6E+02 nc	2.7E+03 nc	1.5E+01 nc	1.5E+02 nc		
	2.5E-02 i		2.5E-02 r	0	0.10	78587-05-0	Savey	1.6E+03 nc	1.7E+04 nc	9.1E+01 nc	9.1E+02 nc		
	5.0E-03 i			0	0.10	7783-00-8	Selenious Acid	3.3E+02 nc	3.4E+03 nc		1.8E+02 nc		
	5.0E-03 i			0	0.01	7782-49-2	Selenium	3.8E+02 nc	8.5E+03 nc		1.8E+02 nc	5.0E+00	3.0E-01
	5.0E-03 h			0	0.10	630-10-4	Selenourea	3.3E+02 nc	3.4E+03 nc		1.8E+02 nc		
	9.0E-02 i		9.0E-02 r	0	0.10	74051-80-2	Sethoxydim	5.9E+03 nc	6.1E+04 nc	3.3E+02 nc	3.3E+03 nc		
	5.0E-03 i			0	0.01	7440-22-4	Silver and compounds	3.8E+02 nc	8.5E+03 nc		1.8E+02 nc	3.4E+01	2.0E+00
1.2E-01 h	5.0E-03 i	1.2E-01 r	2.0E-03 r	0	0.10	122-34-9	Simazine	3.7E+00 ca*	1.6E+01 ca*	5.6E-02 ca	5.6E-01 ca		
	4.0E-03 i		4.0E-03 r	0	0.10	26628-22-8	Sodium azide	2.6E+02 nc	2.7E+03 nc	1.5E+01 nc	1.5E+02 nc		
2.7E-01 h	3.0E-02 i	2.7E-01 r	3.0E-02 r	0	0.10	148-18-5	Sodium diethyldithiocarbamate	1.6E+00 ca	7.1E+00 ca	2.5E-02 ca	2.5E-01 ca		
	2.0E-05 i		2.0E-05 r	0	0.10	62-74-8	Sodium fluoroacetate	1.3E+00 nc	1.4E+01 nc	7.3E-02 nc	7.3E-01 nc		
	1.0E-03 h		1.0E-03 r	0	0.10	13718-26-8	Sodium metavanadate	6.5E+01 nc	6.8E+02 nc	3.7E+00 nc	3.7E+01 nc		

EPA Region 9 Preliminary Remediation Goals: S.J. Smucker (08/01/96)

Key: i=IRIS h=HEAST n=NCEA w=WITHDRAWN r=ROUTE EXTRAPOLATION ca=CANCER PRG nc=NONCANCER PRG sat=SOIL SATURATION max=CEILING LIMIT *(where: nc < 100X ca) **(where: nc < 10X ca)

FOR PLANNING PURPOSES

TOXICITY INFORMATION							CONTAMINANT	PRELIMINARY REMEDIAL GOALS (PRGs)				SOIL SCREENING LEVELS	
SFo 1/(mg/kg-d)	RfDo (mg/kg-d)	SFI 1/(mg/kg-d)	RfDI (mg/kg-d)	V O C	skin abs. soils	CAS No.		Residential Soil (mg/kg)	Industrial Soil (mg/kg)	Ambient Air (ug/m^3)	Tap Water (ug/l)	Migration to Ground Water DAF 20 (mg/kg)	Migration to Ground Water DAF 1 (mg/kg)
	6.0E-01 i			0	0.01	7440-24-6	Strontium, stable	4.6E+04 nc	1.0E+05 max		2.2E+04 nc		
	3.0E-04 i		3.0E-04 r	0	0.10	57-24-9	Strychnine	2.0E+01 nc	2.0E+02 nc	1.1E+00 nc	1.1E+01 nc	4.0E+00	2.0E-01
	2.0E-01 i		2.9E-01 i	1	0.10	100-42-5	Styrene	6.8E+02 sat	6.8E+02 sat	1.1E+03 nc	1.6E+03 nc		
	2.5E-02 i		2.5E-02 r	0	0.10	88671-89-0	Systhane	1.6E+03 nc	1.7E+04 nc	9.1E+01 nc	9.1E+02 nc		
1.5E+05 h		1.5E+05 h		0	0.03	1746-01-6	2,3,7,8-TCDD (dioxin)	3.8E-06 ca	2.4E-05 ca	4.5E-08 ca	4.5E-07 ca		
	7.0E-02 i		7.0E-02 r	0	0.10	34014-18-1	Tebuthiuron	4.6E+03 nc	4.8E+04 nc	2.6E+02 nc	2.6E+03 nc		
	2.0E-02 h		2.0E-02 r	0	0.10	3383-96-8	Temephos	1.3E+03 nc	1.4E+04 nc	7.3E+01 nc	7.3E+02 nc		
	1.3E-02 i		1.3E-02 r	0	0.10	5902-51-2	Terbacil	8.5E+02 nc	8.9E+03 nc	4.7E+01 nc	4.7E+02 nc		
	2.5E-05 h		2.5E-05 r	0	0.10	13071-79-9	Terbufos	1.6E+00 nc	1.7E+01 nc	9.1E-02 nc	9.1E-01 nc		
	1.0E-03 i		1.0E-03 r	0	0.10	886-50-0	Terbutryn	6.5E+01 nc	6.8E+02 nc	3.7E+00 nc	3.7E+01 nc		
	3.0E-04 i		3.0E-04 r	0	0.10	95-94-3	1,2,4,5-Tetrachlorobenzene	2.0E+01 nc	2.0E+02 nc	1.1E+00 nc	1.1E+01 nc		
2.6E-02 i	3.0E-02 i	2.6E-02 i	3.0E-02 r	1	0.10	630-20-6	1,1,1,2-Tetrachloroethane	2.4E+00 ca	5.4E+00 ca	2.6E-01 ca	4.3E-01 ca		
2.0E-01 i		2.0E-01 i		1	0.10	79-34-5	1,1,2,2-Tetrachloroethane	4.5E-01 ca	1.1E+00 ca	3.3E-02 ca	5.5E-02 ca	3.0E-03	2.0E-04
5.2E-02 n	1.0E-02 i	2.0E-03 n	1.0E-02 r	1	0.10	127-18-4	Tetrachloroethylene (PCE)	5.4E+00 ca	1.7E+01 ca	3.3E+00 ca	1.1E+00 ca	6.0E-02	3.0E-03
							"CAL-Modified PRG" (PEA, 1994)			3.2E-01			
	3.0E-02 i		3.0E-02 r	0	0.10	58-90-2	2,3,4,6-Tetrachlorophenol	2.0E+03 nc	2.0E+04 nc	1.1E+02 nc	1.1E+03 nc		
				0	0.10	5216-25-1	p,a,a,a-Tetrachlorotoluene	2.2E-02 ca	9.5E-02 ca	3.4E-04 ca	3.4E-03 ca		
2.0E+01 h		2.0E+01 r		0	0.10	961-11-5	Tetrachlorovinphos	1.9E+01 ca	7.9E+01 ca	2.8E-01 ca	2.8E+00 ca		
2.4E-02 h	3.0E-02 i	2.4E-02 r	3.0E-02 r	0	0.10	3689-24-5	Tetraethyldithiopyrophosphate	3.3E+01 nc	3.4E+02 nc	1.8E+00 nc	1.8E+01 nc		
	5.0E-04 i		5.0E-04 r	0	0.10	1314-32-5	Thallic oxide	5.4E+00 nc	1.2E+02 nc		2.6E+00 nc		
	7.0E-05 h			0	0.01	563-68-8	Thallium acetate	6.9E+00 nc	1.5E+02 nc		3.3E+00 nc	7.0E-01	4.0E-01
	9.0E-05 i			0	0.01	6533-73-9	Thallium carbonate	6.1E+00 nc	1.4E+02 nc		2.9E+00 nc	7.0E-01	4.0E-01
	8.0E-05 i			0	0.01	7791-12-0	Thallium chloride	6.1E+00 nc	1.4E+02 nc		2.9E+00 nc	7.0E-01	4.0E-01
	8.0E-05 i			0	0.01	10102-45-1	Thallium nitrate	6.9E+00 nc	1.5E+02 nc		3.3E+00 nc	7.0E-01	4.0E-01
	9.0E-05 i			0	0.01	12039-52-0	Thallium selenite	6.9E+00 nc	1.5E+02 nc		3.3E+00 nc	7.0E-01	4.0E-01
	8.0E-05 x			0	0.01	7446-18-6	Thallium sulfate	6.1E+00 nc	1.4E+02 nc		2.9E+00 nc	7.0E-01	4.0E-01
	6.0E-05 i			0	0.01	28249-77-6	Thiobencarb	6.5E+02 nc	6.8E+03 nc	3.7E+01 nc	3.7E+02 nc		
	1.0E-02 i		1.0E-02 r	0	0.10	3689-24-5	2-(Thiocyanomethylthio)- benzothiazole (TCMTB)	2.0E+03 nc	2.0E+04 nc	1.1E+02 nc	1.1E+03 nc		
	3.0E-02 x		3.0E-02 r	0	0.10	39196-18-4	Thiofanox	2.0E+01 nc	2.0E+02 nc	1.1E+00 nc	1.1E+01 nc		
	3.0E-04 h		3.0E-04 r	0	0.10	23564-05-8	Thiophanate-methyl	5.2E+03 nc	5.5E+04 nc	2.9E+02 nc	2.9E+03 nc		
	8.0E-02 i		8.0E-02 r	0	0.10	137-26-8	Thiram	3.3E+02 nc	3.4E+03 nc	1.8E+01 nc	1.8E+02 nc		
	5.0E-03 i		5.0E-03 r	0	0.10	n/a	Tin (inorganic, see tributyltin oxide for organic tin)	4.6E+04 nc	1.0E+05 max		2.2E+04 nc		
	6.0E-01 h			0	0.01	108-88-3	Toluene	7.9E+02 nc	8.8E+02 sat	4.0E+02 nc	7.2E+02 nc	1.2E+01	6.0E-01
	2.0E-01 i		1.1E-01 h	1	0.10	95-80-7	Toluene-2,4-diamine	1.4E-01 ca	6.0E-01 ca	2.1E-03 ca	2.1E-02 ca		
3.2E+00 h		3.2E+00 r		0	0.10	95-70-5	Toluene-2,5-diamine	3.9E+04 nc	1.0E+05 max	2.2E+03 nc	2.2E+04 nc		
	8.0E-01 h		8.0E-01 r	0	0.10	823-40-5	Toluene-2,6-diamine	1.3E+04 nc	1.0E+05 max	7.3E+02 nc	7.3E+03 nc		
	2.0E-01 h		2.0E-01 r	0	0.10	106-49-0	p-Toluidine	2.3E+00 ca	1.0E+01 ca	3.5E-02 ca	3.5E-01 ca		
1.9E-01 i		1.9E-01 r		0	0.10	8001-35-2	Toxaphene	4.0E-01 ca	1.7E+00 ca	6.0E-03 ca	6.1E-02 ca	3.1E+01	2.0E+00
1.1E+00 i		1.1E+00 i		0	0.10	66841-25-6	Tralomethrin	4.9E+02 nc	5.1E+03 nc	2.7E+01 nc	2.7E+02 nc		
	7.5E-03 i		7.5E-03 r	0	0.10	2303-17-5	Triallate	8.5E+02 nc	8.9E+03 nc	4.7E+01 nc	4.7E+02 nc		
	1.3E-02 i		1.3E-02 r	0	0.10	82097-50-5	Triasulfuron	6.5E+02 nc	6.8E+03 nc	3.7E+01 nc	3.7E+02 nc		
	1.0E-02 i		1.0E-02 r	0	0.10	615-54-3	1,2,4-Tribromobenzene	3.3E+02 nc	3.4E+03 nc	1.8E+01 nc	1.8E+02 nc		
	5.0E-03 i		5.0E-03 r	0	0.10	56-35-9	Tributyltin oxide (TBTO)	2.0E+00 nc	2.0E+01 nc	1.1E-01 nc	1.1E+00 nc		
	3.0E-05 i		3.0E-05 r	0	0.10	634-93-5	2,4,6-Trichloroaniline	1.3E+01 ca	5.6E+01 ca	2.0E-01 ca	2.0E+00 ca		
3.4E-02 h		3.4E-02 r		0	0.10	33663-50-2	2,4,6-Trichloroaniline hydrochloride	1.5E+01 ca	6.6E+01 ca	2.3E-01 ca	2.3E+00 ca		
2.9E-02 h		2.9E-02 r		0	0.10	120-82-1	1,2,4-Trichlorobenzene	5.7E+02 nc	5.5E+03 sat	2.1E+02 nc	1.9E+02 nc	5.0E+00	3.0E-01
	1.0E-02 i		5.7E-02 h	1	0.10	71-55-6	1,1,1-Trichloroethane	1.2E+03 nc	3.0E+03 sat	1.0E+03 nc	7.9E+02 nc	2.0E+00	1.0E-01
	3.9E-02 n		2.9E-01 x	1	0.10								

EPA Region 9 Preliminary Remediation Goals: S.J. Smucker (08/01/96)

Key : i=IRIS h=HEAST n=NCEA x=WITHDRAWN r=ROUTE EXTRAPOLATION ca=CANCER PRG nc=NONCANCER PRG sat=SOIL SATURATION max=CEILING LIMIT *(where: nc < 100X ca) **(where: nc < 10X ca)

FOR PLANNING PURPOSES

TOXICITY INFORMATION							CONTAMINANT	PRELIMINARY REMEDIAL GOALS (PRGs)				SOIL SCREENING LEVELS	
SFo 1/(mg/kg-d)	RfDo (mg/kg-d)	SFi 1/(mg/kg-d)	RfDi (mg/kg-d)	V O C	skin abs. soils	CAS No.		Residential Soil (mg/kg)	Industrial Soil (mg/kg)	Ambient Air (ug/m^3)	Tap Water (ug/l)	Migration to Ground Water DAF 20 (mg/kg)	Migration to Ground Water DAF 1 (mg/kg)
5.7E-02 i	4.0E-03 i	5.6E-02 i	4.0E-03 r	1	0.10	79-00-5	1,1,2-Trichloroethane	6.5E-01 ca	1.5E+00 ca	1.2E-01 ca	2.0E-01 ca	2.0E-02	9.0E-04
1.1E-02 n	6.0E-03 n	6.0E-03 n	6.0E-03 r	1	0.10	79-01-6	Trichloroethylene (TCE)	3.2E+00 ca*	7.0E+00 ca*	1.1E+00 ca*	1.6E+00 ca*	6.0E-02	3.0E-03
	3.0E-01 i		2.0E-01 h	1	0.10	75-69-4	Trichlorofluoromethane	3.8E+02 nc	1.3E+03 nc	7.3E+02 nc	1.3E+03 nc		
	1.0E-01 i		1.0E-01 r	0	0.10	95-95-4	2,4,5-Trichlorophenol	6.5E+03 nc	6.8E+04 nc	3.7E+02 nc	3.7E+03 nc	2.7E+02	1.4E+01
1.1E-02 i		1.1E-02 i		0	0.10	88-06-2	2,4,6-Trichlorophenol	4.0E+01 ca	1.7E+02 ca	6.2E-01 ca	6.1E+00 ca	2.0E-01	8.0E-03
	1.0E-02 i		1.0E-02 r	0	0.10	93-76-5	2,4,5-Trichlorophenoxyacetic Acid	6.5E+02 nc	6.8E+03 nc	3.7E+01 nc	3.7E+02 nc		
	6.0E-03 i		6.0E-03 r	0	0.10	93-72-1	2-(2,4,5-Trichlorophenoxy) propionic acid	5.2E+02 nc	5.5E+03 nc	2.9E+01 nc	2.9E+02 nc		
	5.0E-03 i		5.0E-03 r	1	0.10	598-77-6	1,1,2-Trichloropropane	1.5E+01 nc	5.0E+01 nc	1.8E+01 nc	3.0E+01 nc		
7.0E+00 h	6.0E-03 i	7.0E+00 r	5.0E-03 r	1	0.10	96-18-4	1,2,3-Trichloropropane	1.4E-03 ca	3.1E-03 ca	9.6E-04 ca	1.6E-03 ca		
	5.0E-03 h		5.0E-03 r	1	0.10	96-19-5	1,2,3-Trichloropropene	1.1E+01 nc	3.8E+01 nc	1.8E+01 nc	3.0E+01 nc		
	3.0E+01 i		8.6E+00 h	1	0.10	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.6E+03 sat	5.6E+03 sat	3.1E+04 nc	5.9E+04 nc		
	3.0E-03 i		3.0E-03 r	0	0.10	58138-08-2	Tridiphane	2.0E+02 nc	2.0E+03 nc	1.1E+01 nc	1.1E+02 nc		
	2.0E-03 r		2.0E-03 i	1	0.10	121-44-8	Triethylamine	2.3E+01 nc	8.4E+01 nc	7.3E+00 nc	1.2E+01 nc		
7.7E-03 i	7.5E-03 i	7.7E-03 r	7.5E-03 r	0	0.10	1582-09-8	Trifluralin	5.8E+01 ca**	2.5E+02 ca*	8.7E-01 ca*	8.7E+00 ca*		
3.7E-02 h		3.7E-02 r		0	0.10	512-56-1	Trimethyl phosphate	1.2E+01 ca	5.2E+01 ca	1.8E-01 ca	1.8E+00 ca		
	5.0E-05 i		5.0E-05 r	0	0.10	99-35-4	1,3,5-Trinitrobenzene	3.3E+00 nc	3.4E+01 nc	1.8E-01 nc	1.8E+00 nc		
	1.0E-02 h		1.0E-02 r	0	0.10	479-45-8	Trinitrophenylmethylnitramine	6.5E+02 nc	6.8E+03 nc	3.7E+01 nc	3.7E+02 nc		
3.0E-02 i	5.0E-04 i	3.0E-02 r	5.0E-04 r	0	0.10	118-96-7	2,4,6-Trinitrotoluene	1.5E+01 ca**	6.4E+01 ca**	2.2E-01 ca**	2.2E+00 ca**		
	3.0E-03 i			0	0.01	7440-61-1	Uranium (soluble salts)				2.6E+02 nc	6.0E+03	3.0E+02
	7.0E-03 h			0	0.01	7440-62-2	Vanadium	5.4E+02 nc	1.2E+04 nc		3.3E+02 nc	6.0E+03	3.0E+02
	9.0E-03 i			0	0.01	1314-62-1	Vanadium pentoxide	6.9E+02 nc	1.5E+04 nc				
	2.0E-02 h			0	0.01	13701-70-7	Vanadium sulfate	1.5E+03 nc	3.4E+04 nc		7.3E+02 nc	6.0E+03	3.0E+02
	1.0E-03 i		1.0E-03 r	0	0.10	1929-77-7	Vernam	6.5E+01 nc	6.8E+02 nc	3.7E+00 nc	3.7E+01 nc		
	2.5E-02 i		2.5E-02 r	0	0.10	50471-44-8	Vinclozolin	1.6E+03 nc	1.7E+04 nc	9.1E+01 nc	9.1E+02 nc		
	1.0E+00 h		5.7E-02 i	1	0.10	108-05-4	Vinyl acetate	7.8E+02 nc	2.6E+03 nc	2.1E+02 nc	4.1E+02 nc	1.7E+02	8.0E+00
1.1E-01 r	8.6E-04 r	1.1E-01 h	8.6E-04 i	1	0.10	593-60-2	Vinyl bromide (bromoethene)	1.9E-01 ca*	4.1E-01 ca*	6.1E-02 ca*	1.0E-01 ca*		
1.9E+00 h		3.0E-01 h		1	0.10	75-01-4	Vinyl chloride	1.6E-02 ca	3.5E-02 ca	2.2E-02 ca	2.0E-02 ca	1.0E-02	7.0E-04
	3.0E-04 i		3.0E-04 r	0	0.10	81-81-2	Warfarin	2.0E+01 nc	2.0E+02 nc	1.1E+00 nc	1.1E+01 nc		
	2.0E+00 i		2.0E-01 x	1	0.10	108-38-3	m-Xylene	3.2E+02 sat	3.2E+02 sat	7.3E+02 nc	1.4E+03 nc	2.1E+02	1.0E+01
	2.0E+00 i		2.0E-01 x	1	0.10	95-47-6	o-Xylene	3.2E+02 sat	3.2E+02 sat	7.3E+02 nc	1.4E+03 nc	1.9E+02	9.0E+00
				1	0.10	106-42-3	p-Xylene	3.2E+02 sat	3.2E+02 sat			2.0E+02	1.0E+01
	2.0E+00 i		2.0E-01 x	1	0.10	1330-20-7	Xylene (mixed)	3.2E+02 sat	3.2E+02 sat	7.3E+02 nc	1.4E+03 nc	2.0E+02	1.0E+01
	3.0E-01 i			0	0.01	7440-66-6	Zinc	2.3E+04 nc	1.0E+05 max		1.1E+04 nc	1.2E+04	6.2E+02
	3.0E-04 i			0	0.01	1314-84-7	Zinc phosphide	2.3E+01 nc	5.1E+02 nc		1.1E+01 nc		
	5.0E-02 i		5.0E-02 r	0	0.10	12122-67-7	Zineb	3.3E+03 nc	3.4E+04 nc	1.8E+02 nc	1.8E+03 nc		

SOIL-TO-AIR VOLATILIZATION FACTOR (VF_s)

Equation 4-9: Derivation of the Volatilization Factor

$$VF_s\,(m^3/kg) = (Q/C) \times \frac{(3.14 \times D_A \times T)^{1/2}}{(2 \times \rho_b \times D_A)} \times 10^{-4}\,(m^2/cm^2)$$

where:

$$D_A = \frac{[(\Theta_a^{10/3} D_i H' + \Theta_w^{10/3} D_w)/n^2]}{\rho_B K_d + \Theta_w + \Theta_a H'}$$

Parameter	Definition (units)	Default
VF_s	Volatilization factor (m^3/kg)	–
D_A	Apparent diffusivity (cm^2/s)	–
Q/C	Inverse of the mean conc. at the center of a 0.5-acre square source (g/m^2-s per kg/m^3)	68.81
T	Exposure interval (s)	9.5×10^8
ρ_b	Dry soil bulk density (g/cm^3)	1.5
Θ_a	Air filled soil porosity (L_{air}/L_{soil})	0.28 or n-Θ_w
n	Total soil porosity (L_{pore}/L_{soil})	0.43 or 1 - (ρ_b/ρ_s)
Θ_w	Water-filled soil porosity (L_{water}/L_{soil})	0.15
ρ_s	Soil particle density (g/cm^3)	2.65
Di	Diffusivity in air (cm^2/s)	Chemical-specific
H	Henry's Law constant (atm-m^3/mol)	Chemical-specific
H'	Dimensionless Henry's Law constant	Calculated from H by multiplying by 41 (USEPA 1991a)
D_w	Diffusivity in water (cm^2/s)	Chemical-specific
K_d	Soil-water partition coefficient (cm^3/g) = $K_{oc} f_{oc}$	Chemical-specific
K_{oc}	Soil organic carbon-water partition coefficient (cm^3/g)	Chemical-specific
f_{oc}	Fraction organic carbon in soil (g/g)	0.006 (0.6%)

SOIL SATURATION CONCENTRATION (sat)

Equation 4-10: Derivation of the Soil Saturation Limit

$$sat = \frac{S}{\rho_b} (K_d \rho_b + \Theta_w + H' \Theta_a)$$

Parameter	Definition (units)	Default
sat	Soil saturation concentration (mg/kg)	–
S	Solubility in water (mg/L-water)	Chemical-specific
ρ_b	Dry soil bulk density (kg/L)	1.5
n	Total soil porosity (L_{pore}/L_{soil})	0.43 or 1 - (ρ_b/ρ_s)
ρ_s	Soil particle density (kg/L)	2.65
K_d	Soil-water partition coefficient (L/kg)	K_{oc} x f_{oc} (chemical-specific)
k_{oc}	Soil organic carbon/water partition coefficient (L/kg)	Chemical-specific
f_{oc}	Fraction organic carbon content of soil (g/g)	0.006 or site-specific
Θ_w	Water-filled soil porosity (L_{water}/L_{soil})	0.15
Θ_a	Air filled soil porosity (L_{air}/L_{soil})	0.28 or n-Θ_w
w	Average soil moisture content (kg_{water}/kg_{soil} or L_{water}/kg_{soil})	0.1
H	Henry's Law constant (atm-m^3/mol)	Chemical-specific
H'	Dimensionless Henry's Law constant	H x 41, where 41 is a units conversion factor

SOIL-TO-AIR PARTICULATE EMISSION FACTOR (PEF)

Equation 4-11: Derivation of the Particulate Emission Factor

$$PEF(m^3/kg) = Q/C \times \frac{3600 s/h}{0.036 \times (1-V) \times (U_m/U_t)^3 \times F(x)}$$

Parameter	Definition (units)	Default
PEF	Particulate emission factor (m^3/kg)	1.316×10^9
Q/C	Inverse of the mean concentration at the center of a 0.5-acre-square source (g/m^2-s per kg/m^3)	90.80
V	Fraction of vegetative cover (unitless)	0.5
U_m	Mean annual windspeed (m/s)	4.69
U_t	Equivalent threshold value of windspeed at 7 m (m/s)	11.32
F(x)	Function dependent on U_m/U_t derived using Cowherd (1985) (unitless)	0.194

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Appendix B
Soil Screening Field Notes

CH2M HILL SOIL SCREENING RECORD

Project No.: 139769.01.01

Date	Report No.	Time	Screen No.	Background OVM reading	OVM reading	Soil sample required?	Staining or odors?	Other comments
2/25/97	2	11:19	HS-1	0.0	0.0	no	no	none
		11:19	HS-2		0.0	no	no	none
		11:20	HS-3		0.0	no	yes ~~no~~ ←	some asphalt odors
		11:21	HS-4		0.0	no	yes ~~no~~ ←	(newly removed pavement)
		11:26	HS-5		0.0	no	no	(not from the samples)
		11:27	~~HS~~-6	6.2	~~0.0~~	~~no~~ yes	no	none
		11:28	HS-7		0.0	no	no	none
		11:29	~~11:00~~ HS-8		0.0	no	no	none
		11:37	HS-9		0.0	no	no	none
		11:38	HS-10		0.0	no	no	none
		11:39	HS-11		0.0	no	no	none
		11:39	HS-12		0.0	no	no	none
		11:45	HS-13		0.0	no	no	none
		11:46	HS-14		0.0	no	no	none
		11:47	HS-15		0.0	no	no	none
		11:49	HS-16		0.0	no	no	none
		11:55	HS-17		0.0	no	no	none
		11:56	HS-18		0.0	no	no	none
		11:56	HS-19		0.0	no	no	none
		11:57	HS-20		0.0	no	no	none
		12:03	HS-21		0.0	no	no	none
		12:04	HS-22	[illegible] 0.0	0.0	no	no	none
		12:04	HS-23	[illegible] 1.9	0.0	no	no	none
		12:05	HS-24	[illegible]	0.0	no	no	none
		12:27	HS-25		0.0	no	no	none
		12:28	HS-26	[illegible]	0.0	no	no	none
		12:29	HS-27	[illegible] 4.8	0.0	no	no	none
		12:29	HS-28	[illegible]	0.0	no	no	none

* Reference location diagram if applicable.

CH2M HILL SOIL SCREENING RECORD

Project No.: 139769.01.01

Date	Report No.	Time	Screen No.	Background OVM reading	OVM reading	Soil sample required?	Staining or odors?	Other comments
2/25/97	2	12:42	HS-29	11:05 2/27 0.0	0.0	no	no	none
		12:43	HS-30	11:06 2/27 0.0 4.9	0.0	no	no	none
		12:50	HS-31	11:07 2/27 0.0	0.0	no	no	none
		12:51	HS-32		0.0	no	no	none
		12:43	HS-33		0.0	no	no	none
		12:44	HS-34	11:12 2/27 0.0	0.0	no	no	none
		12:52	HS-35	11:13 2/27 0.0 2.9	0.0	no	no	none
		2:33	HS-36	11:14 2/27 0.0	2.9		no	none
		12:58	HS-37		0.0	no	no	none
		12:58	HS-38		0.0	no	no	none
		12:59	HS-39		0.0	no	no	none
	2:34	12:59	HS-40	→	0.0	no	no	none
		1:10	HS-41		0.0	no	no	none
		1:10	HS-42		0.0	no	no	none
		1:11	HS-43		0.0	no	no	none
		1:12	HS-44		0.0	no	no	none
		1:13	HS-45		0.0	no	no	none
		1:20	HS-46		0.0	no	no	none
		1:21	HS-47		0.0	no	no	none
		1:21	HS-48		0.0	no	no	none
		2:38	HS-49		0.0	no	no	none
		2:38:37	HS-50		0.0	no	no	none
		2:30	HS-51		0.0	no	no	none
		2:35	HS-52		0.0	no	no	none
		2:43	HS-53		0.0	no	no	none
		2:44	HS-54		0.0	no	no	none
		2:45	HS-55		0.0	no	no	none
↓	↓	2:46	HS-56		0.0	no	no	none

0.0 = 0.0→0.9 flickers/waivers

* Reference location diagram if applicable.

CH2M HILL SOIL SCREENING RECORD

Project No.: 139769.01.01

Date	Report No.	Time	Screen No.	Background OVM reading	OVM reading	Soil sample required?	Staining or odors?	Other comments
3/27/97	3	9:02	HS-57	0.0-0.5	0.0	no	no	none
		9:03	HS-58		0.0	no	no	none
		9:04	HS-59		0.0	no	no	none
		9:05	HS-60		0.0	no	no	none
		9:17	HS-61		0.0	no	no	none
		9:18	HS-62		0.0	no	no	none
		9:19	HS-63		0.0	no	no	none
3/10/97	5	11:24	HS-64	0.0-0.4	0.0	no	no	none still paved
3/10/97	5	9:19	HS-65	0.0-0.5	0.0	no	no	none
3/10/97	5	11:24	HS-66	0.0-0.4	0.0	no	no	none asphalt
3/27/97	3	9:20	HS-67	0.0-0.5	0.0	no	no	none
3/10/97	5	11:15	HS-68	0.0-0.4	0.0	no	no	none still pav
4/2/97	10	1:56	HS-69	0.0-0.5	0.0	no	no	none gravel
4/2/97	10	1:57	HS-70	0.0-0.5	0.0	no	no	none dark brown
4/2/97	10	1:58	HS-71	0.0-0.5	0.0	no	no	none
3/10/97	5	11:11	HS-72	0.0-0.4	0.0	no	no	none
4/2/97	10	1:50	HS-73	0.0-0.5	0.0	no	no	bluish no light brown
4/2/97	10	1:51	HS-74	0.0-0.5	0.0	no	no	none
4/2/97	10	1:52	HS-75	0.0-0.5	0.0	no	no	none
3/10/97	5	11:10	HS-76	0.0-0.4	0.0	no	no	none & lot
4/2/97	10	1:36	HS-77	0.0-0.5	0.0	no	no	none
4/2/97	10	1:38	HS-78	0.0-0.5	14/29	yes	no	dark ballast &
4/2/97	10	1:41	HS-79	0.0-0.5	0.0	no	no	sand
3/10/97	5	11:09	HS-80	0.0-0.4	0.0	no	no	none
4/2/97	10	1:27	HS-81	0.0-0.5	0.0	no	no	greenish soil under sand
4/2/97	10	1:28	HS-82	0.0-0.5	0.0	no	no	sand
4/2/97	10	1:29	HS-83	0.0-0.5	0.0	no	no	sand
3/10/97	5	11:08	HS-84	0.0-0.4	0.0	no	no	none

* Reference location diagram if applicable.

CH2M HILL SOIL SCREENING RECORD

Project No.: 139769.01.01

Date	Report No.	Time	Screen No.	Background OVM reading	OVM reading	Soil sample required?	Staining or odors?	Other comments
3/6/97	4	8:43	MPS-1	[illegible]	0.0	no	no	none
3/6/97	4	8:50	MPS-2	0.0-0.4	0.0	no	no	none
3/6/97	4	9:03	MPS-3	0.0-0.4	0.0	no	no	none
3/6/97	4	9:11	MPS-4	0.0-0.4	0.0	no	no	none
3/6/97	4	9:20	MPS-5	0.0-0.4	0.0	no	no	none
3/6/97	4	9:29	MPS-6	0.0-0.4	0.0	no	no	none
3/27/97	3	12:04	MPS-7	0.0-0.5	0.0	no	no	none
3/27/97	3	12:05	MPS-8	0.0-0.5	0.0	no	no	none
3/27/97	3	12:06	MPS-9	0.0-0.5	0.0	no	no	none
3/27/97	3	12:07	MPS-10	0.0-0.5	0.0	no	no	none
3/27/97	3	12:21	MPS-11	0.0-0.5	0.0	no	no	none
3/27/97	3	12:22	MPS-12	0.0-0.5	0.0	no	no	none
3/6/97	4	8:43	MPS-13	0.0-0.4	0.0	no	no	none
3/6/97	4	8:51	MPS-14	0.0-0.4	0.0	no	no	none
3/6/97	4	9:04	MPS-15	0.0-0.4	0.0	no	no	none
3/6/97	4	9:17	MPS-16	0.0-0.4	0.0	no	no	none
3/6/97	4	9:21	MPS-17	0.0-0.4	0.0	no	no	none
3/6/97	4	9:30	MPS-18	0.0-0.4	0.0	no	no	none
3/27/97	3	12:12	MPS-19	0.0-0.5	0.0	no	no	none
3/27/97	3	12:13	MPS-20	0.0-0.5	0.0	no	no	none
3/27/97	3	12:14	MPS-21	0.0-0.5	0.0	no	no	none
3/27/97	3	12:15	MPS-22	0.0-0.5	0.0	no	no	none
3/27/97	3	12:23	MPS-23	0.0-0.5	0.0	no	no	none
3/27/97	3	12:24	MPS-24	0.0-0.5	0.0	no	no	none
3/6/97	4	9:44	MPS-25	0.0-0.4	0.0	no	no	none
3/6/97	4	8:52	MPS-26	0.0-0.4	0.0	no	no	none
3/6/97	4	9:04	MPS-27	0.0-0.4	0.0	no	no	none
3/6/97	4	9:13	MPS-28	0.0-0.4	0.0	no	no	none

* Reference location diagram if applicable.

CH2M HILL SOIL SCREENING RECORD

Project No.: B9769-01-01

Date	Report No.	Time	Screen No.	Background OVM reading	OVM reading	Soil sample required?	Staining or odors?	Other comments
3/6/97	4	9:22	WPS-29	0.0-0.4	0.0	no	no	none
3/6/97	4	9:30	WPS-30	0.0-0.4	0.0	no	no	none
3/6/97	4	9:39	WPS-31	0.0-0.4	0.0	no	no	none
3/6/97	4	9:39	WPS-32	0.0-0.4	0.0	no	no	none
3/6/97	4	9:40	WPS-33	0.0-0.4	0.0	no	no	none
3/6/97	4	9:41	WPS-34	0.0-0.4	0.0	no	no	none
3/6/97	4	9:55	WPS-35	0.0-0.4	0.0	no	no	none
3/6/97	4	9:54	WPS-36	0.0-0.4	0.0	no	no	none
3/6/97	4	8:45	WPS-37	0.0-0.4	0.0	no	no	none
3/6/97	4	8:53	WPS-38	0.0-0.4	0.0	no	no	none
3/6/97	4	9:05	WPS-39	0.0-0.4	0.0	no	no	none
3/6/97	4	9:13	WPS-40	0.0-0.4	0.0	no	no	none
3/6/97	4	9:23	WPS-41	0.0-0.4	0.0	no	no	none
3/6/97	4	9:31	WPS-42	0.0-0.4	0.0	no	no	none
3/6/97	4	9:46	WPS-43	0.0-0.4	0.0	no	no	none
3/6/97	4	9:47	WPS-44	0.0-0.4	0.0	no	no	none
3/6/97	4	9:48	WPS-45	0.0-0.4	0.0	no	no	none
3/6/97	4	9:49	WPS-46	0.0-0.4	0.0	no	no	none
3/6/97	4	9:54	WPS-47	0.0-0.4	0.0	no	no	none
3/6/97	4	9:55	WPS-48	0.0-0.4	0.0	no	no	none
3/6/97	4	10:22	WPS-49	0.0-0.4	0.0	no	no	none
3/6/97	4	10:23	WPS-50	0.0-0.4	0.0	no	no	none
3/6/97	4	10:24	WPS-51	0.0-0.4	0.0	no	no	none
3/6/97	4	10:25	WPS-52	0.0-0.4	0.0	no	no	none
3/6/97	4	10:26	WPS-53	0.0-0.4	0.0	no	no	none
3/6/97	4	10:35	WPS-54	0.0-0.4	0.0	no	no	none
3/6/97	4	10:36	WPS-55	0.0-0.4	0.0	no	no	none
3/6/97	4	10:37	WPS-56	0.0-0.4	0.0	no	no	none
3/6/97	4	10:38	WPS-57	0.0-0.4	0.0	no	no	none
3/6/97	4		WPS-58	0.0-0.4				no longer a point when we moved the grid down

* Reference location diagram if applicable.

CH2M HILL SOIL SCREENING RECORD

Project No.: 139769.01.01

Date	Report No.	Time	Screen No.	Background OVM reading	OVM reading	Soil sample required?	Staining or odors?	Other comments
3/27/97 3/6/97	8	8:~~48~~54	CS-1	0.0-0.5	0.0	no	no	basement muddy
3/27/97	8	8:~~47~~54	CS-2	0.0-0.5	0.0	no	no	basement
3/27/97	8	8:55	CS-3	0.0-0.5	0.0	no	no	basement
3/27/97	8	8:50	CS-4	0.0-0.5	0.0	no	no	basement
~~3/27/97~~	~~8~~	10:43	CS-5	0.0-0.5	0.0	no	no	none brownish lots of metal scrap
~~3/27/97~~	~~8~~	10:19	CS-6	0.0-0.5	0.0	no	no	none
3/27/97	8	8:51	CS-7	0.0-0.5	0.0	no	no	basement muddy
3/27/97	8	8:52	CS-8	0.0-0.5	0.0	no	no	basement
3/27/97	8	8:52	CS-9	0.0-0.5	0.0	no	no	basement
3/27/97	8	8:53	CS-10	0.0-0.5	0.0	no	no	basement
3/27/97	8	10:43	CS-11	0.0-0.5	0.0	no	no	none
3/27/97	8	10:24	CS-12	0.0-0.5	0.0	no	no	none brownish
3/6/97	4	11:32	CS-13	0.0-0.4	0.0	no	no	none
3/6/97	4	11:33	CS-14	0.0-0.4	0.0	no	no	none
3/6/97	4	11:34	CS-15	0.0-0.4	0.0	no	no	none
3/6/97	4	11:35	CS-16	0.0-0.4	0.0	no	no	none
3/27/97	8	10:35	CS-17	0.0-0.5	0.0	no	no	none
3/27/97	8	10:34	CS-18	0.0-0.5	0.0	no	no	none greyish clay
3/6/97	4	11:41	CS-19	0.0-0.4	0.0	no	no	none
3/6/97	4	11:42	CS-20	0.0-0.4	0.0	no	no	none
3/6/97	4	11:43	CS-21	0.0-0.4	0.0	no	no	none
3/6/97	4	11:44	CS-22	0.0-0.4	0.0	no	no	none
4/2/97	10	11:49	CS-23	0.0-0.5	0.0	no	no	none
4/2/97	10	11:50	CS-24	0.0-0.5	0.0	no	no	none greyish
3/6/97	4	11:49	CS-25	0.0-0.4	0.0	no	no	none
3/6/97	4	11:50	CS-26	0.0-0.4	0.0	no	no	none
3/6/97	4	11:51	CS-27	0.0-0.4	0.0	no	no	none
3/6/97	4	11:52	CS-28	0.0-0.4	0.0	no	no	none

* Reference location diagram if applicable.

CH2M HILL SOIL SCREENING RECORD

Project No.: 139769.01.01

Date	Report No.	Time	Screen No.	Background OVM reading	OVM reading	Soil sample required?	Staining or odors?	Other comments
4/2/97	10	11:55	CS-29	0.0-0.5	0.0	no	no	none
4/2/97	10	11:54	CS-30	0.0-0.5	0.0	no	no	none
3/6/97	4	12:03	CS-31	0.0-0.4	0.0	no	none	crushed brick (re
3/6/97	4	12:04	CS-32	0.0-0.4	0.0	no	none	none
3/6/97	4	12:04	CS-33	0.0-0.4	0.0	no	none	none
3/6/97	4	12:05	CS-34	0.0-0.4	0.0	no	none	none
4/2/97	10	12:21	CS-35	0.0-0.5	0.0	no	no	none
4/2/97	10	12:22	CS-36	0.0-0.5	0.0	no	no	none
3/6/97	4	12:12	CS-39	0.0-0.4	0.0	no	no	crushed brick (r
3/6/97	4	12:13	CS-~~38~~40	0.0-0.4	0.0	no	no	none
3/6/97	4	12:15	CS-~~39~~41	0.0-0.4	0.0	no	no	none
3/6/97	4	12:16	CS-~~40~~42	0.0-0.4	0.0	no	no	none
4/4/97	11	9:44	CS-~~41~~37	0.0-1.5	0.0	no	no	none
4/4/97	4 11	9:45	CS-~~42~~38	0.0-1.5	0.0	no	no	none
3/27/97	8 4	~~9:35 10:00 9:58~~	CS-43	0.0-0.5	0.0	no	no	none
3/27/97	8 4	9:59	CS-44	0.0-0.5	0.0	no	no	none
4/4/97	4 11	9:46	CS-45	0.0-1.5	0.0	no	no	none
4/4/97	~~3/6/97~~ 11 4 12	~~12:26~~ 5:39	CS-46	0.0-0.5	~~0.0~~ 0.0	~~no~~ no	~~no~~ no	~~none~~ none
3/6/97	4	12:40	CS-47	0.0-0.4	0.0	no	no	none
3/6/97	4	12:41	CS-48	0.0-0.4	~~no~~ 3.6	~~no~~ yes	no	none *
3/6/97	4	12:42	CS-49	0.0-0.4	0.0	no	no	none
3/6/97	4	12:43	CS-50	0.0-0.4	0.0	no	no	some crushed red brick
3/27/97	8	9:57	CS-51	0.0-0.5	0.0	no	no	none
3/27/97	8	9:56	CS-52	0.0-0.5	0.0	no	no	none
4/4/97	11	10:00	CS-53	0.0-1.5	0.0	no	no	none
4/4/97	~~4/4/97~~ 11	~~12:14~~ 5:40	CS-54	~~0.0-0.5~~	0.0	no	no	none
3/6/97	4	12:33	CS-55	0.0-0.4	0.0	no	no	none
3/6/97	4	12:34	CS-56	0.0-0.4	~~no~~ 1.2	~~no~~ yes	no	none *

* Reference location diagram if applicable.

CH2M HILL SOIL SCREENING RECORD

Project No.: 139769.01.01

Date	Report No.	Time	Screen No.	Background OVM reading	OVM reading	Soil sample required?	Staining or odors?	Other comments
3/6/97	4	12:35	CS-57	0.0-0.4	0.0	no	no	some crushed red brick in area
3/18/97	5	12:02	CS-58	0.0-0.4	0.0	no	no	none
3/27/97	8	9:49	CS-59	0.0-0.5	0.0	no	no	none
3/27/97	8	9:50	CS-60	0.0-0.5	0.0	no	no	none
3/27/97	8	11:56	CS-61	0.0-0.5	0.0	no	no	none
4/4/97	11	10:01	CS-62	0.0-1.5	0.0	no	no	none
3/6/97	4	1:20	CS-63	0.0-0.4	0.0	no	no	none
3/6/97	4	1:21	CS-64	0.0-0.4	0.0	no	no	none
3/18/97	5	12:00	CS-65	0.0-0.4	0.0	no	no	none
3/18/97	5	12:01	CS-66	0.0-0.4	0.0	no	no	none
3/27/97	8	9:48	CS-67	0.0-0.5	0.0	no	no	none
—	—	—	CS-68	—	—	—	—	under transformer room
3/27/97	8	11:55	CS-69	0.0-0.5	0.0	no	no	none
4/4/97	11	10:12	CS-70	0.0-1.5	0.0	no	no	none
3/6/97	4	1:23	CS-71	0.0-0.4	0.0	no	no	none
3/18/97	5	1:18	CS-72	0.0-0.4	0.0	no	no	none
3/18/97	5	1:12	CS-73	0.0-0.4	0.0	no	no	none
3/18/97	5	1:13	CS-74	0.0-0.4	0.0	no	no	none
3/18/97	5	4:32	CS-75	0.0-0.4	4.4	yes	no	none
3/18/97	5	4:35	CS-76	0.0-0.4	3.4	yes	no	none
~~3/18/97~~ 3/27/97	~~5~~ 8	~~11:54~~	CS-77	~~0.0-0.4~~	~~0.0~~	~~no~~	~~no~~	~~none~~
~~3/18/97~~ 4/4/97	~~5~~	~~11:~~	CS-78	~~0.0-0.4~~	~~0.0~~	~~no~~	~~no~~	~~none~~
3/18/97	5	1:26	CS-79	0.0-0.4	0.0	no	no	none
3/18/97	5	1:26	CS-80	0.0-0.4	0.0	no	no	none
3/18/97	5	1:26	CS-81	0.0-0.4	0.0	no	no	none
3/18/97	5	1:26	CS-82	0.0-0.4	0.0	no	no	none
3/18/97	5	4:30	CS-83	0.0-0.4	0.0	no	no	none
3/18/97	5	4:31	CS-84	0.0-0.4	0.0	no	no	none

* Reference location diagram if applicable.

CH2M HILL SOIL SCREENING RECORD

Project No.: 139769.01.01

Date	Report No.	Time	Screen No.	Background OVM reading	OVM reading	Soil sample required?	Staining or odors?	Other comments
3/27/97	8	11:49	CS-85	0.0-0.5	2.5	yes	no	none
4/4/97	11	10:10	CS-86	0.0-1.5	0.0	no	no	none
3/18/97	5	1:41	CS-87	0.0-0.4	0.0	no	no	none
3/18/97	5	1:42	CS-88	0.0-0.4	0.0	no	no	none
3/18/97	5	1:43	CS-89	0.0-0.4	0.0	no	no	none
3/18/97	5	1:44	CS-90	0.0-0.4	0.0	no	no	none
3/18/97 3/20/97	5 6	4:18 11:34	CS-91	~~0.0-0.5~~ 0.0-0.4	~~[illegible]~~ 0.0	no	no	none
3/18/97	5	4:19	CS-92	0.0-0.4	0.0	no	no	none
3/27/97	8	11:05	CS-93	0.0-0.5	2.5	yes	no	asphalt-like pieces
3/27/97	8	11:04	CS-94	0.0-0.5	0.0	no	no	none
3/18/97	5	2:01	CS-95	0.0-0.4	0.0	no	no	none
3/18/97	5	2:02	CS-96	0.0-0.4	0.0	no	no	none
3/18/97	5	2:04	CS-97	0.0-0.4	0.0	no	no	none
3/18/97	5	2:05	CS-98	0.0-0.4	2.4	yes	no	none *
3/18/97 3/20/97	5 6	4:16 11:29	CS-99	0.0-0.4 0.0-0.5	2.4 1.5	yes	no	none *
3/18/97 3/20/97	5 6	4:17 11:30	CS-100	0.0-0.4 0.0-0.5	3.4 0.0	yes	no	none
3/27/97	8	11:03	CS-101	0.0-0.5	0.0	no	no	none
3/27/97	8	11:02	CS-102	0.0-0.5	0.0	no	no	none — wet, brown-red
3/18/97	5	2:14	CS-103	0.0-0.4	0.0	no	no	none
3/18/97	5	2:15	CS-104	0.0-0.4	0.0	no	no	none — light brown ("vein") in area and brick pieces
3/20/97	**6**	**11:46**	CS-105	**0.0-0.5**	**0.0**	**no**	**no**	**none** — some sand
3/18/97	5	2:16	CS-106	0.0-0.4	0.0	no	no	small wood fibers in area
3/18/97	5	4:24	CS-107	0.0-0.4	0.0	no	no	small wood fibers in area
3/18/97	5	4:25	CS-108	0.0-0.4	0.0	no	no	small wood fibers in area
4/4/97	11	9:05	CS-109	0.0-1.5	0.0	no	no	none
4/4/97	11	9:07	CS-110	0.0-1.5	0.0	no	no	none
3/18/97	5	1:29	CS-111	0.0-0.4	0.0	no	no	none — some light grey Bay Mud & [illegible] in area
3/18/97	5	2:30	CS-112	0.0-0.4	0.0	no	no	none
3/20/97	**6**	**11:45**	CS-113	**0.0-0.5**	**0.0**	**no**	**no**	**none** — dark black Bay Mud
3/18/97	5	2:31	CS-114	0.0-0.4	0.0	no	no	small wood fibers in area and brick pieces
3/18/97	5	4:25	CS-115	0.0-0.4	0.0	no	no	small wood fibers in area
3/18/97	5	4:26	CS-116	0.0-0.4	0.0	no	no	small wood fibers in area

* Reference location diagram if applicable.

Del Monte Plant #35

CH2M HILL SOIL SCREENING RECORD

Project No.: 139769.01.01

Date	Report No.	Time	Screen No.	Background OVM reading	OVM reading	Soil sample required?	Staining or odors?	Other comments
2/27/97	3	10:17	HS-100	0.0-0.5	0.0	no	no	Suspect "green" soil
2/27/97	3	10:15	HS-101	0.0-0.5	0.0	no	no	
2/20/97	3	10:16	HS-102	0.0-0.5	0.0	no	no	
2/20/97	3	10:17	HS-103	0.0-0.5	0.0	yes	no	
3/6/97	4	12:59	SSCS-48a	0.0-0.4	0.0	no	no	none
3/6/97	4	1:01	SSCS-48b	0.0-0.4	0.0	no	no	none probe brok at fitter
3/6/97	4	1:03	SSCS-48c	0.0-0.4	0.0	no	no	none
3/6/97	4	1.04	SSCS-48d6	0.0-0.4	0.0	no	no	none
3/6/97	4	1:08	SSCS-56a	0.0-0.4	0.0	no	no	none
3/6/97	4	1:09	SSCS-56b	0.0-0.4	0.0-1.0 one flicker	no	no	none
3/6/97	4	1.10	SSCS-56c	0.0-0.4	0.0	no	no	none
3/18/97	5	1:44 1:42	SSCS-200	0.0-0.4	0.0	no	no	none dark soil
3/19/97	5	1:44	SSCS-201	0.0-0.4	0.0	no	no	none dark soil
3/18/97	5	1:46 1:46	SSCS-202	0.0-0.4	0.0	no	no	none dark soil
3/20/97	6	10:24	SSCS-75a	0.0-0.5	0.0	no	no	none
3/20/97	6	10:25	SSCS-75b	0.0-0.5	0.0	no	no	none
3/20/97	6	10:24	SSCS-75c	0.0-0.5	0.0	no	no	none
3/20/97	6	10:34	SSCS-76a/76	0.0-0.5	0.0	no	no	none
3/20/97	6	10:36	SSCS-76a	0.0-0.5	2.5	yes	no	none
3/20/97 3/20/97	6 8	11.56	SSCS-76b	0.0-0.5	0.0	no	no	couldn't get on 3/20/97 still paved none
3/20/97	6	10:36	SSCS-76c	0.0-0.5	0.0	no	no	none
3/20/97	6	11:24	SSCS-99a	0.0-0.5	0.0	no	no	none
3/20/97	6	11:25	SSCS-99b	0.0-0.5	0.0	no	no	none
3/20/97	6	11:26	SSCS-99c	0.0-0.5	0.0	no	no	none
3/20/97	6	11:25	SSCS-99/100	0.0-0.5	0.0	no	no	none
3/20/97	6	11:40	SSCS-100a	0.0-0.5	0.0	no	no	none
3/20/97	6	11:41	SSCS-100b	0.0-0.5	0.0	no	no	none
3/20/97	6	11:39	SSCS-100c	0.0-0.5	0.0	no	no	none

* Reference location diagram if applicable.

CH2M HILL SOIL SCREENING RECORD

Project No.: 139763.01.01.

Date	Report No.	Time	Screen No.	Background OVM reading	OVM reading	Soil sample required?	Staining or odors?	Other comments
3/27/97	8	11:22	SSCS-93a	0.0-0.5	1.5	yes	no	none
3/27/97	8	11:23	SSCS-93b	0.0-0.5	1.5	yes	no	none
3/27/97	8	11:23	SSCS-93c	0.0-0.5	0.0	no	no	darker clay
3/27/97	8	11:24	SSCS-93d	0.0-0.5	0.0	no	no	none
4/2/97	10	12:43	SSCS-400	0.0-0.5	0.0	no	no	none
4/2/97	10	12:44	SSCS-401	0.0-0.5	0.0	no	no	none
4/2/97	10	12:45	SSCS-402	0.0-0.5	0.0	no	no	none
4/2/97	10	1:03	SSCS-85a	0.0-0.5	0.0	no	no	none
4/2/97	10	1.04	SSCS-85b	0.0-0.5	0.0	no	no	none
4/2/97	10	1:05	SSCS-85c	0.0-0.5	0.0	no	no	none
4/4/97	11	9:48	SSCS-85d	0.0-1.5	0.0	no	no	none clay
4/4/97	11	10:31	CT-1	0.0-1.5	0.0	no	no	CT-1
4/4/97	11	10:32	CT-2	0.0-1.5	0.0	no	no	CT-2
4/4/97	11	10:36	CT-3	0.0-1.5	0.0	no	no	CT-3
4/4/97	11	10:37	CT-4	0.0-1.5	0.0	no	no	CT-4

*. Reference location diagram if applicable.

Appendix C
Laboratory Analytical Reports

CHROMALAB, INC.

Environmental Services (SDB)

April 14, 1997 *Submission #:* 9704198

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: April 11, 1997

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Sampled: April 11, 1997 *Matrix:* SOIL *Run#:* 6258 *Extracted:* April 12, 1997 *Analyzed:* April 12, 1997

Spl# CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
125815 SSHS-1100BC	N.D.	N.D.	N.D.
Reporting Limits	1.0	1.0	50
Blank Result		N.D.	N.D.
Blank Spike Result (%)	--	106	--

Bruce Havlik
Chemist

Alex Tam
Semivolatiles Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

April 14, 1997 *Submission #:* 9704198

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: April 11, 1997

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Sampled: April 11, 1997 *Matrix:* WATER *Run#:* 6269 *Extracted:* April 14, 1997 *Analyzed:* April 14, 1997

Spl# CLIENT SPL ID	Kerosene (ug/L)	Diesel (ug/L)	Motor Oil (ug/L)
125817 HS110GW	N.D.	N.D.	N.D.
Reporting Limits	50	50	500
Blank Result	N.D.	N.D.	N.D.
Blank Spike Result (%)	--	90.0	--

Bruce Havlik
Chemist

Alex Tam
Semivolatiles Supervisor

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

QAL [...]ITY ANALYTICAL [...]RATORIES, INC.

CHAIN OF CUSTODY RECORD AND AGREEMENT TO PERFORM SERVICES

Project # 139769.01.01
Purchase Order #

Project Name Del Monte Plant #35

Company Name CH2M HILL

Project Manager or Contact & Phone # Madeline Wall (510) 251-2888 ext. 2189
Report Copy to: Madeline Wall

Requested Completion Date: 24 hr TAT
Site ID
Sample Disposal: Dispose [X] 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, (334) 271-2440 FAX (334) 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	ANALYSES REQUESTED: TEPH	CAM 17	SAMPLE REMARKS	LAB 1 ID	LAB 2 ID
4/11/97	2:00		X		X	SSAS110DC		1	X				
4/11/97	3:05	X			X	SPILE		1		X	please analyze a core sample of this composite		
4/11/97	3:30			X		HS1106W		2	X				

Sampled By & Title (Please sign and print name)	Date/Time	Relinquished By (Please sign and print name)	Date/Time
Catherine A. Swain Cathy Swain	4/11/97	Catherine A. Swain Cathy Swain	4/11/97 1800
Received By (Please sign and print name) [signature] F. Mawette	4/11/97 18:00	**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 ______	**Shipping #**

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
REV 5/95 LAB FORM 340

CHROMALAB, INC.

Environmental Services (SDB)

April 10, 1997 *Submission #:* 9704128

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: April 8, 1997

re: 10 samples for TEPH analysis.
Method: *EPA 8015M*

Sampled: April 8, 1997 *Matrix:* SOIL *Extracted:* April 8, 1997
Run#: 6190 *Analyzed:* April 9, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
125220	CFX-1SW	N.D.	N.D.	N.D.
125221	CFX-1EW	N.D.	N.D.	N.D.
125222	CFX-1B	N.D.	N.D.	N.D.
125223	CFS-4B	N.D.	N.D.	N.D.
125227	CFT-1EW	N.D.	28	N.D.
	Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.			
125228	CFHS110-EW	N.D.	4.2	N.D.
	Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.			
125229	CFHS-110WW	N.D.	10	92
	Note: Estimated concentration due to overlapping fuel patterns.			

Sampled: April 8, 1997 *Matrix:* SOIL *Extracted:* April 8, 1997
Run#: 6190 *Analyzed:* April 10, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
125224	CFCS-48B	N.D.	3.8	N.D.
	Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.			
125225	CFT-1NW	N.D.	7.2	N.D.
	Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.			
125226	CFT-1B	N.D.	50	N.D.
	Note: Hydrocarbon reported does not match the pattern of our Diesel Standard.			
Reporting Limits		1.0	1.0	50
Blank Result		N.D.	N.D.	N.D.
Blank Spike Result (%)		--	82.9	--

Analyst

Michael R. Hearn for
Eric Tam
Laboratory Director

510-893-8205 tel 04/09

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

April 10, 1997 *Submission #:* 9704128

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: April 8, 1997

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Sampled: April 8, 1997 *Matrix:* SOIL *Run#:* 6190 *Extracted:* April 8, 1997 *Analyzed:* April 10, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
125230	CFHS-110BC	N.D.	48	660

Note: Hydrocarbon reported as Diesel, is in the late Diesel Range and does not match our Diesel Standard.

Reporting Limits	10	10	200
Blank Result	N.D.	N.D.	N.D.
Blank Spike Result (%)	--	82.9	--

Analyst

Michael R. Kerr for
Eric Tam
Laboratory Director

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

April 10, 1997 *Submission #:* 9704128

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: April 8, 1997

re: 3 samples for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* April 8, 1997
Sampled: April 8, 1997 *Run#:* 6190 *Analyzed:* April 10, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
125231	CFHS-110BN	N.D.	N.D.	N.D.
125232	CFHS-110BS	N.D.	9.4	62
	Note: Hydrocarbon reported as Diesel, is in the late Diesel Range and does not match our Diesel Standard.			
125233	CFHS-110NW	N.D.	N.D.	N.D.
	Reporting Limits	1.0	1.0	50
	Blank Result	N.D.	N.D.	N.D.
	Blank Spike Result (%)	--	82.9	--

Analyst

Eric Tam
Laboratory Director

3305

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

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

Chain of Custody

DATE April 8, 1997 PAGE 1 OF 2

PROJ. MGR Madeline Wall
COMPANY CH2M HILL
ADDRESS 1111 Broadway, Suite 1200
Oakland, CA 94607

SAMPLERS (SIGNATURE) Catherine A. Swain
(PHONE NO.) (510) 251-2426
(FAX NO.) (510) 893-8205

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel, (TEPH) (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)		LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)				NUMBER OF CONTAINERS
CFX-1SW	4/8/97	3:31	Soil	none			X																	1
CFX-1EW		3:29					X																	1
CFX-1B		3:26					X																	1
CFS-4B		3:33					X																	1
CFCS-48B		3:37					X																	1
~~CFS-4B~~ CFT-1NW		3:59					X																	1
CFT-1b		3:57					X																	1
CFT-1EW		3:58					X																	1
CFHS110-EW		3:42					X																	1

RUSH

PROJECT INFORMATION

PROJECT NAME: Del Monte Plant #35
PROJECT NUMBER: 139769.01.01
P.O. #

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	9
HEAD SPACE	
REC'D GOOD CONDITION/COLD	
CONFORMS TO RECORD	

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

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY 1.	RELINQUISHED BY 2.	RELINQUISHED BY 3.
(SIGNATURE) Catherine A. Swain	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
(PRINTED NAME) Cathy Swain (TIME) 4/8/97	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
(COMPANY) CH2M HILL (DATE) 1012	(COMPANY)	(COMPANY)
RECEIVED BY 1.	**RECEIVED BY 2.**	**RECEIVED BY (LABORATORY) 3**
(SIGNATURE) (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) 1010 (TIME)
(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) MIKE NARANJO 4-8-97 (DATE)
(COMPANY)	(COMPANY)	(LAB)

5361S

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

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

Chain of Custody

DATE April 8, 1997 PAGE 2 OF 2

PROJ. MGR Madeline Wall
COMPANY CH2M Hill
ADDRESS 1111 Broadway, Suite 1200
Oakland, CA 94607

SAMPLERS (SIGNATURE) Catherine A. Swain (PHONE NO.) (510) 251-2426 (FAX NO.) (510) 893-8205

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (TEPH) (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)		LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)				NUMBER OF CONTAINERS
CFHS-110 NW	4/8/97	3:50	Soil	None			X																		1
CFHS-110 DC		3:46					X																		1
CFHS-110 BN		3:45					X																		1
CFHS-110 BS		3:53					X																		1
CFHS-110 NW		3:52					X																		1

RUSH

PROJECT INFORMATION

PROJECT NAME: Del Monte Plant #35
PROJECT NUMBER: 139769.01.01
P.O. #

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	5
HEAD SPACE	
REC'D GOOD CONDITION/COLD	
CONFORMS TO RECORD	

TAT	STANDARD 5-DAY			24	48	72	OTHER

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY 1.	RELINQUISHED BY 2.	RELINQUISHED BY 3.
(SIGNATURE) Catherine A. Swain (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
(PRINTED NAME) Cathy Swain (DATE) 4/8/97	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
(COMPANY) CH2M Hill 1812	(COMPANY)	(COMPANY)
RECEIVED BY 1.	**RECEIVED BY 2.**	**RECEIVED BY (LABORATORY) 3** 4-8-97
(SIGNATURE) (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) Mike Morayo (TIME) 1812
(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
(COMPANY)	(COMPANY)	(LAB)

CHROMALAB, INC.

Environmental Services (SDB)

April 7, 1997 *Submission #:* 9704066

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: April 4, 1997

re: 2 samples for Lead analysis.
Method: *EPA 3050A/7420A*

Matrix: SOIL *Extracted:* April 7, 1997
Sampled: April 4, 1997 *Run#:* 6136 *Analyzed:* April 7, 1997

Spl#	CLIENT SPL ID	LEAD (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
124454	SSCS-600b	14	5.0	N.D.	88.4	1
124489	SSCS-600w	67	5.0	N.D.	88.4	1

Christopher Arndt
Chemist

John S. Lapash
Inorganics Supervisor

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

CHROMALAB, INC.

Environmental Services (SDB)

April 7, 1997 *Submission #:* 9704066

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: April 4, 1997

re: One sample for Miscellaneous Metals analysis.
Method: *EPA 3050A/6010A Nov 1990*

Client Sample ID: CT-1
Spl#: 124450 *Matrix:* SOIL *Extracted:* April 7, 1997
Sampled: April 4, 1997 *Run#:* 6129 *Analyzed:* April 7, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
CHROMIUM	25	1.0	N.D.	96.7	1

Charles Woolley
Chemist

John S. Labash
Inorganic Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

April 7, 1997 *Submission #:* 9704066

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: April 4, 1997

re: One sample for Miscellaneous Metals analysis.
Method: *EPA 3050A/6010A Nov 1990*

Client Sample ID: **CT-2**
Spl#: 124451 *Matrix:* SOIL *Extracted:* April 7, 1997
Sampled: April 4, 1997 *Run#:* 6129 *Analyzed:* April 7, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
CHROMIUM	16	1.0	N.D.	96.7	1

Charles Woolley
Chemist

John S. Labash
Inorganic Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

April 7, 1997 *Submission #:* 9704066

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: April 4, 1997

re: One sample for Miscellaneous Metals analysis.
Method: *EPA 3050A/6010A Nov 1990*

Client Sample ID: **CT-3**
Spl#: 124452 *Matrix:* SOIL *Extracted:* April 7, 1997
Sampled: April 4, 1997 *Run#:* 6129 *Analyzed:* April 7, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
CHROMIUM	12	1.0	N.D.	96.7	1

Charles Woolley
Chemist

John S. Labash
Inorganic Supervisor

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

April 7, 1997 *Submission #:* 9704066

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: April 4, 1997

re: One sample for Miscellaneous Metals analysis.
Method: *EPA 3050A/6010A Nov 1990*

Client Sample ID: CT-4
Spl#: 124453 *Matrix:* SOIL *Extracted:* April 7, 1997
Sampled: April 4, 1997 *Run#:* 6129 *Analyzed:* April 7, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
CHROMIUM	28	1.0	N.D.	96.7	1

Charles Woolley
Chemist

John S. Labash
Inorganic Supervisor

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

April 8, 1997 *Submission #:* 9704066

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: April 4, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: SSCS-600b
Spl#: 124454 *Matrix:* SOIL
Sampled: April 4, 1997 *Run#:* 6140 *Analyzed:* April 5, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	1.6	1.0	N.D.	95	1
BENZENE	N.D.	0.0050	N.D.	75	1
TOLUENE	N.D.	0.0050	N.D.	76	1
ETHYL BENZENE	N.D.	0.0050	N.D.	76	1
XYLENES	N.D.	0.0050	N.D.	76	1

Note: Estimated concentration due to overlapping fuel patterns.

Marianne Alexander
Gas/BTEX Supervisor

Chip Poalinelli
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

April 8, 1997 *Submission #:* 9704066

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: April 4, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: SSCS-600w
Spl#: 124489 *Matrix:* SOIL
Sampled: April 4, 1997 *Run#:* 6140 *Analyzed:* April 5, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	95	1
BENZENE	N.D.	0.0050	N.D.	75	1
TOLUENE	N.D.	0.0050	N.D.	76	1
ETHYL BENZENE	0.0060	0.0050	N.D.	76	1
XYLENES	0.062	0.0050	N.D.	76	1

Marianne Alexander
Gas/BTEX Supervisor

Chip Poalinelli
Operations Manager

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

CHROMALAB, INC.

Environmental Services (SDB)

April 7, 1997

Submission #: 9704066

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: April 4, 1997
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 Method 8260A Sept 1994*

Client Sample ID: **SSCS-600w**
Spl#: 124489 *Matrix:* SOIL
Sampled: April 4, 1997 *Run#:* 6137 *Analyzed:* April 7, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	96.3	1
CHLOROETHANE	N.D.	10	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	50	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	122	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	96.9	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1

Note: Surrogate recovery was outside QA/QC limits due to matrix interference. See Surrogate Summary page.

June Zhao
Chemist

Chip Poalinelli
Operations Manager

510-893-8205 GC 04/07

V057 0:0C0405 JWWS 14:02

CHROMALAB, INC.

Environmental Services (SDB)

April 7, 1997 *Submission #:* 9704066

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: April 4, 1997
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 Method 8260A Sept 1994*

Client Sample ID: **SSCS-600b**
Spl#: 124454 *Matrix:* SOIL
Sampled: April 4, 1997 *Run#:* 6137 *Analyzed:* April 7, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	96.3	1
CHLOROETHANE	N.D.	10	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	50	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	122	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	96.9	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1

June Zhao
Chemist

Chip Pallinelli
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

April 7, 1997 *Submission #:* 9704066

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: April 4, 1997

re: **Surrogate** report for 2 samples for Volatile Organics by GC/MS
Method: SW846 Method 8260A Sept 1994
Lab Run#: 6137
Matrix: SOIL

Sample#	Client Sample ID	Surrogate	% Recovered	Recovery Limits
124454-1	SSCS-600b	4-BROMOFLUOROBENZENE	77.4	74-121
124454-1	SSCS-600b	D4-1,2-DICHLOROETHANE	90.4	70-121
124454-1	SSCS-600b	D8-TOLUENE	84.2	81-117
124489-1	SSCS-600w	4-BROMOFLUOROBENZENE	63.6	74-121
124489-1	SSCS-600w	D4-1,2-DICHLOROETHANE	76.4	70-121
124489-1	SSCS-600w	D8-TOLUENE	72.5	81-117

Sample#	QC Sample Type	Surrogate	% Recovered	Recovery Limits
124796-1	*Reagent blank (MDB)*	4-BROMOFLUOROBENZENE	87.7	74-121
124796-1	*Reagent blank (MDB)*	D4-1,2-DICHLOROETHANE	103	70-121
124796-1	*Reagent blank (MDB)*	D8-TOLUENE	98.2	81-117
124797-1	*Spiked blank (BSP)*	4-BROMOFLUOROBENZENE	83.6	74-121
124797-1	*Spiked blank (BSP)*	D4-1,2-DICHLOROETHANE	93.8	70-121
124797-1	*Spiked blank (BSP)*	D8-TOLUENE	88.2	81-117
124798-1	*Spiked blank duplicate (BSD)*	4-BROMOFLUOROBENZENE	90.4	74-121
124798-1	*Spiked blank duplicate (BSD)*	D4-1,2-DICHLOROETHANE	96.9	70-121
124798-1	*Spiked blank duplicate (BSD)*	D8-TOLUENE	101	81-117

V057
QCSURR1229 JIEWEI 07-Apr-97 14:0

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(510) 484-1919 • Facsimile (510) 484-1096

CHROMALAB, INC.

Environmental Services (SDB)

April 7, 1997 *Submission #:* 9704066

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: April 4, 1997

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Sampled: April 4, 1997 *Matrix:* SOIL *Extracted:* April 4, 1997
Run#: 6103 *Analyzed:* April 6, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
124454	SSCS-600b	N.D.	79	120

Note: Reported concentration estimated due to overlapping fuel patterns.

Reporting Limits	2.0	2.0	50
Blank Result	N.D.	N.D.	N.D.
Blank Spike Result (%)	--	92.4	--

Bruce Havlik
Chemist

Alex Tam
Semivolatiles Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

April 7, 1997 *Submission #:* 9704066

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: April 4, 1997

re: 5 samples for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* April 4, 1997
Sampled: April 4, 1997 *Run#:* 6103 *Analyzed:* April 5, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
124455	CFCS98b	N.D.	N.D.	N.D.
124456	CFCS98nw	N.D.	N.D.	N.D.
124457	CFCS98sw	N.D.	N.D.	N.D.

Matrix: SOIL *Extracted:* April 4, 1997
Sampled: April 4, 1997 *Run#:* 6103 *Analyzed:* April 6, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
124458	CFCS85b	N.D.	N.D.	N.D.
124459	CFCS85nw	N.D.	4.9	N.D.

Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.

	Kerosene	Diesel	Motor Oil
Reporting Limits	1.0	1.0	50
Blank Result	N.D.	N.D.	N.D.
Blank Spike Result (%)	--	92.4	--

Bruce Havlik
Chemist

Alex Tam *for*
Semivolatiles Supervisor

510-893-8205

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

April 7, 1997 *Submission #:* 9704066

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: April 4, 1997

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* April 4, 1997
Sampled: April 4, 1997 *Run#:* 6103 *Analyzed:* April 6, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
124460	CFCS85sw	N.D.	11	100

Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.

	Kerosene	Diesel	Motor Oil
Reporting Limits	2.0	2.0	50
Blank Result	N.D.	N.D.	N.D.
Blank Spike Result (%)	--	92.4	--

Bruce Havlik
Chemist

Alex Tam
Semivolatiles Supervisor

510-893-8205 04/07

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

April 7, 1997 *Submission #:* 9704066

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: April 4, 1997

re: 5 samples for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* April 4, 1997
Sampled: April 4, 1997 *Run#:* 6103 *Analyzed:* April 6, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
124461	CFG-6bcbb	N.D.	180	N.D.
	Note: Reported concentration due to overlapping fuel patterns.			
124462	CFG-6bcbc	N.D.	N.D.	N.D.
124463	CFG-6bcsw	N.D.	N.D.	N.D.
124464	CFG-6bcnw	N.D.	N.D.	N.D.
124465	CFT-1b	N.D.	55	N.D.
	Note: Hydrocarbon reported has characteristics of weathered/aged Diesel.			
Reporting Limits		1.0	1.0	50
Blank Result		N.D.	N.D.	N.D.
Blank Spike Result (%)		--	92.4	--

Bruce Havlik
Chemist

Alex Tam FM
Semivolatiles Supervisor

510-893-8205 GC 04/07

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
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CHROMALAB, INC.

Environmental Services (SDB)

April 7, 1997 *Submission #:* 9704066

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: April 4, 1997

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* April 4, 1997
Sampled: April 4, 1997 *Run#:* 6103 *Analyzed:* April 6, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
124466	CFT-1nw	N.D.	1600	N.D.

Note: Hydrocarbon reported does not match the pattern of our Diesel Standard.

Reporting Limits	20	20	400
Blank Result	N.D.	N.D.	N.D.
Blank Spike Result (%)	--	92.4	--

Bruce Havlik
Chemist

Alex Tam
Semivolatiles Supervisor

1220 Quarry Lane • Pleasanton, California 94566-4756
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CHROMALAB, INC.

Environmental Services (SDB)

April 7, 1997 *Submission #:* 9704066

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: April 4, 1997

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* April 4, 1997
Sampled: April 4, 1997 *Run#:* 6103 *Analyzed:* April 6, 1997

Spl# CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
124467 CFT-1sw	N.D.	N.D.	N.D.
Reporting Limits	1.0	1.0	50
Blank Result	N.D.	N.D.	N.D.
Blank Spike Result (%)	--	92.4	--

Bruce Havlik
Chemist

Alex Tam
Semivolatiles Supervisor

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

April 7, 1997 *Submission #:* 9704066

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: April 4, 1997

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* April 4, 1997
Sampled: April 4, 1997 *Run#:* 6103 *Analyzed:* April 6, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
124468	CFCS56b	N.D.	8.2	100
	Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.			
Reporting Limits		2.0	2.0	50
Blank Result		N.D.	N.D.	N.D.
Blank Spike Result (%)		--	92.4	--

Bruce Havlik
Chemist

Alex Tam
Semivolatiles Supervisor

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

April 7, 1997 *Submission #:* 9704066

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: April 4, 1997

re: 5 samples for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* April 4, 1997
Sampled: April 4, 1997 *Run#:* 6103 *Analyzed:* April 6, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
124469	CFCS56nw	N.D.	7.5	N.D.
	Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.			
124470	CFCS56sw	N.D.	3.2	N.D.
124471	CFHS-6b	N.D.	N.D.	N.D.
124473	CFHS-6nw	N.D.	11	170
	Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.			

Matrix: SOIL *Extracted:* April 4, 1997
Sampled: April 4, 1997 *Run#:* 6103 *Analyzed:* April 7, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
124472	CFHS-6sw	N.D.	N.D.	N.D.
	Reporting Limits	1.0	1.0	50
	Blank Result	N.D.	N.D.	N.D.
	Blank Spike Result (%)	--	92.4	--

Bruce Havlik
Chemist

Alex Tam
Semivolatiles Supervisor

510-893-8205 BC 04/07

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

April 7, 1997 *Submission #:* 9704066

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: April 4, 1997

re: 16 samples for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* April 4, 1997
Sampled: April 4, 1997 *Run#:* 6113 *Analyzed:* April 6, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
124474	CFHS-7b	N.D.	1.6	N.D.
	Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.			
124475	CFHS-7ew	N.D.	4.7	N.D.
	Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.			
124476	CFHS-7ww	N.D.	N.D.	N.D.
124477	CFHS-78b	N.D.	6.9	N.D.
	Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.			
124478	CFHS-78ew	N.D.	N.D.	N.D.
124479	CFHS-78ww	N.D.	1.2	N.D.
	Note: Compounds reported are in the Diesel range. They do not have a pattern characteristic of petroleum hydrocarbons.			
124480	CFS-5b	N.D.	1.1	N.D.
	Note: Compounds reported are in the Diesel range. They do not have a pattern characteristic of petroleum hydrocarbon.			
124481	CFS-5ww	N.D.	1.0	N.D.
	Note: Compounds reported are in the Diesel range. They do not have a pattern characteristic of petroleum hydrocarbons.			
124482	CFS-5ew	N.D.	N.D.	N.D.
124483	CFS-6b	N.D.	26	130
	Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.			
124485	CFS-6ew	N.D.	N.D.	N.D.
124486	CFHS-12b	N.D.	N.D.	N.D.
124487	CFHS-12ww	N.D.	N.D.	N.D.
124488	CFHS-12ew	N.D.	N.D.	N.D.
124489	SSCS-600w	N.D.	45	75
	Note: Concentration reported is estimated due to overlapping fuel patterns.			

Matrix: SOIL *Extracted:* April 4, 1997
Sampled: April 4, 1997 *Run#:* 6113 *Analyzed:* April 7, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
124484	CFS-6nw	N.D.	2.0	N.D.
	Note: Compounds reported are in the Diesel range. They do not have a pattern			

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

Sub 9704066 4/2 32755

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

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

Chain of Custody

DATE April 4, 1997 PAGE 1 OF 5

PROJ. MGR Madeline Wall
COMPANY CH2M HILL
ADDRESS 1111 Broadway, Suite 1200 Oakland, CA 94607

SAMPLERS (SIGNATURE) Catherine A. Swain
(PHONE NO.) (510) 251-2426
(FAX NO.) (510) 893-8205

RUSH

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPH) (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	total chrome	LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)	HWCS			NUMBER OF CONTAINERS
CT-1	4/4/97	10:23	Soil	none												X									1
CT-2	4/4/97	10:25	Soil	none												X									1
CT-3	4/4/97	10:28	Soil	none												X									1
CT-4	4/4/97	10:30	Soil	none												X									1
SSCS-600b	4/4/97	5:45	Soil	none		X	X														X		X		1
CFBS98 b	4/4/97	2:06	Soil	none			X																		1
CFBS98 nw	4/4/97	2:18	Soil	none			X																		1
CFBS98 sw	4/4/97	2:20	Soil	none			X																		1
CFBS85 b	4/4/97	2:24	Soil	none			X																		1

PROJECT INFORMATION

PROJECT NAME: Del Monte Plant #35
PROJECT NUMBER 139769.01.01
P.O. #

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	9
HEAD SPACE	
REC'D GOOD CONDITION/COLD	
CONFORMS TO RECORD	

TAT	STANDARD 5-DAY			(24)	48	72	OTHER

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY 1.	RELINQUISHED BY 2.	RELINQUISHED BY 3.
Catherine A. Swain		
(SIGNATURE) (TIME) Cathy Swain 4/4/97	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
(PRINTED NAME) (DATE) CH2M HILL 19:34	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
(COMPANY)	(COMPANY)	(COMPANY)
RECEIVED BY 1.	**RECEIVED BY 2.**	**RECEIVED BY (LABORATORY) 3**
		Gary Cook 19:34
(SIGNATURE) (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) (TIME) Gary Cook 4/4/97
(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE) Chromalab
(COMPANY)	(COMPANY)	(LAB)

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

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

Chain of Custody

DATE April 4, 1997 PAGE 2 OF 5

PROJ. MGR Madeline Wall
COMPANY CH2M Hill
ADDRESS 1111 Broadway, Suite 2200 Oakland, CA 94607

SAMPLERS (SIGNATURE) Catherine A. Swain
(PHONE NO.) (510) 251-2426
(FAX NO.) (510) 893-8205

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (TEPH) (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)		LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)				NUMBER OF CONTAINERS
CFA85nw	4/4/97	2:25	Soil	None			X																	1
CFA85sw	4/4/97	2:27					X																	1
CFB G-6 bcbb	4/4/97	3:45					X																	1
CF G-6 bcbC	4/4/97	3:50					X																	1
CF G-6 bcbSW	4/4/97	4:10					X																	1
CF G-6 bcnw	4/4/97	4:05					X																	1
CFT-1b	4/4/97	3:55					X																	1
CFT-1nw	4/4/97	3:57					X																	1
CFT-1sw	4/4/97	3:59					X			-														1

PROJECT INFORMATION

PROJECT NAME: Del Monte Plant #35
PROJECT NUMBER 139769.01.01
P.O. #

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

SPECIAL INSTRUCTIONS/COMMENTS:

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	9
HEAD SPACE	
REC'D GOOD CONDITION/COLD	
CONFORMS TO RECORD	

RELINQUISHED BY 1.	RELINQUISHED BY 2.	RELINQUISHED BY 3.
Catherine A Swain (SIGNATURE) (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
Cathy Swain 4/4/97 (PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
CH2M Hill 19:34 (COMPANY)	(COMPANY)	(COMPANY)
RECEIVED BY 1.	**RECEIVED BY 2.**	**RECEIVED BY (LABORATORY) 3**
(SIGNATURE) (TIME)	(SIGNATURE) (TIME)	Gary Cook 19:34 (SIGNATURE) (TIME)
(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	Gary Cook 4/4/97 (PRINTED NAME) (DATE)
(COMPANY)	(COMPANY)	Chromalab (LAB)

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

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

Chain of Custody

DATE April 4, 1997 PAGE 3 OF 5

PROJ. MGR. Madeline Wall
COMPANY CH2M Hill
ADDRESS 1111 Broadway, Suite 1200 Oakland, CA 94607

SAMPLERS (SIGNATURE) Catherine A. Swain
(PHONE NO.) (510) 251-2426
(FAX NO.) (510) 893-8265

ANALYSIS REPORT

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (TEPH) (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)		LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)				NUMBER OF CONTAINERS
CF56b	4/4/97	4:15	Soil	none			X																		1
CF56nw		4:18					X																		1
CF56sw		4:19					X																		1
CFHS-6b		2:28					X																		1
CFHS-6sw		2:31					X																		1
CFHS-6nw		2:30					X																		1
CFHS-7b		4:37					X																		1
CFHS-7ew		4:42					X																		1
CFHS-7nw		4:40					X																		1

PROJECT INFORMATION

PROJECT NAME: Del Monte Plant #35
PROJECT NUMBER: 139769.01.01
P.O. #

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	9
HEAD SPACE	
REC'D GOOD CONDITION/COLD	
CONFORMS TO RECORD	

TAT	STANDARD 5-DAY			24	48	72	OTHER

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY 1.	RELINQUISHED BY 2.	RELINQUISHED BY 3.
(SIGNATURE) Catherine A. Swain (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
(PRINTED NAME) Cathy Swain (DATE) 4/4/97	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
(COMPANY) CH2M Hill 19:34	(COMPANY)	(COMPANY)
RECEIVED BY 1.	**RECEIVED BY 2.**	**RECEIVED BY (LABORATORY) 3**
(SIGNATURE) (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) Gary Cook 19:34 (TIME)
(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) Gary Cook 4/4/97 (DATE)
(COMPANY)	(COMPANY)	(LAB) ChromaLab

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

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

Chain of Custody

DATE April 4, 1997 PAGE 4 OF 5

PROJ. MGR Madeline Wall
COMPANY CH2M HILL
ADDRESS 1111 Broadway, Suite 1200
Oakland, CA 94607

SAMPLERS (SIGNATURE) Catherine A. Swain
(PHONE NO.) (510) 251-7486
(FAX NO.) (510) 893-8205

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (TEPH) (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)		LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)				NUMBER OF CONTAINERS
CFHS-78b	4/4/97	5:30	Soil	None			X																	1
CFHS-78ew		5:27					X																	1
CFHS-78ww		5:31					X																	1
CFS-5b		5:20					X																	1
CFS-5ww		5:21					X																	1
CFS-5ew		5:22					X																	1
CFS-6b		5:14					X																	1
CFS-6nw		5:16					X																	1
CFS-6ew		5:15					X																	1

PROJECT INFORMATION

PROJECT NAME: Del Monte Plant #35
PROJECT NUMBER 139769.01.01
P.O. #

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	9
HEAD SPACE	
REC'D GOOD CONDITION/COLD	
CONFORMS TO RECORD	

TAT	STANDARD 5-DAY			24	48	72	OTHER

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY 1.	RELINQUISHED BY 2.	RELINQUISHED BY 3.
(SIGNATURE) Catherine A. Swain (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
(PRINTED NAME) Cathy Swain (DATE) 4/4/97	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
(COMPANY) CH2M Hill 19:34	(COMPANY)	(COMPANY)
RECEIVED BY 1.	**RECEIVED BY 2.**	**RECEIVED BY (LABORATORY) 3**
(SIGNATURE) (TIME)	(SIGNATURE) (TIME)	Gary Cook 19:34
(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	(SIGNATURE) (TIME)
(COMPANY)	(COMPANY)	Gary Cook 4/4/97
		(PRINTED NAME) (DATE)
		ChromaLab
		(LAB)

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

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

Chain of Custody

DATE April 4, 1997 PAGE 5 OF 5

PROJ. MGR Madeline Wall
COMPANY CH2M HILL
ADDRESS 1111 Broadway, Suite 1200
Oakland, CA 94607

SAMPLERS (SIGNATURE) Catherine A. Swain (PHONE NO.) (510) 251-2426 (FAX NO.) (510) 893-8205

ANALYSIS REPORT

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (TEPH) (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	HVOCs	LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)				NUMBER OF CONTAINERS
CFHS-12 b	4/4/97	4:41	Soil	none			X																		1
CFHS-12 NW	4/4/97	4:43	Soil	none			X																		1
CFHS-12 EW	4/4/97	4:45	Soil	none			X																		1
SSCS-600 W	4/4/97	5:50	Soil	none		X	X									X					X				1

PROJECT INFORMATION

PROJECT NAME: Del Monte Plant #35
PROJECT NUMBER: 139769.01.01
P.O. #

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	4
HEAD SPACE	
REC'D GOOD CONDITION/COLD	
CONFORMS TO RECORD	

TAT	STANDARD 5-DAY			24	48	72	OTHER

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY 1.
Catherine A. Swain (SIGNATURE) (TIME)
Cathy Swain (PRINTED NAME) (DATE) 19:34
CH2M HILL (COMPANY)

RELINQUISHED BY 2.
(SIGNATURE) (TIME)
(PRINTED NAME) (DATE)
(COMPANY)

RELINQUISHED BY 3.
(SIGNATURE) (TIME)
(PRINTED NAME) (DATE)
(COMPANY)

RECEIVED BY 1.
(SIGNATURE) (TIME)
(PRINTED NAME) (DATE)
(COMPANY)

RECEIVED BY 2.
(SIGNATURE) (TIME)
(PRINTED NAME) (DATE)
(COMPANY)

RECEIVED BY (LABORATORY) 3
Gary Cook 19:34 (SIGNATURE) (TIME)
Gary Cook 4/4/97 (PRINTED NAME) (DATE)
Chromalab (LAB)

The laboratory report on the previous page includes results for samples that are not included in this report because they were collected from areas that did not require remediation. The samples not included in the report are:

CFHS-7b

CFHS-7ew

CFHS-7ww

CFHS-12b

CFHS-12ww

CFHS-12ew

CFHS-98b

CFHS-98nw

CFHS-98sw

CHROMALAB, INC.

Environmental Services (SDB)

April 4, 1997

Submission #: 9704033

CH2M HILL OAKLAND

Attn: Madeline Wall

Project: DEL MONTE PLANT 35
Received: April 2, 1997

Project#: 139769.01.01

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Sampled: April 2, 1997
Matrix: SOIL
Run#: 6079
Extracted: April 3, 1997
Analyzed: April 3, 1997

Spl# CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
124173 T-1	N.D.	580	230
Reporting Limits	5.0	5.0	100
Blank Result	N.D.	N.D.	N.D.
Blank Spike Result (%)	--	82.8	--

Bruce Havlik
Chemist

Alex Tam
Semivolatiles Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

April 4, 1997

Submission #: 9704033

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT 35
Received: April 2, 1997

Project#: 139769.01.01

re: 5 samples for TEPH analysis.
Method: *EPA 8015M*

Sampled: April 2, 1997
Matrix: SOIL
Run#: 6079
Extracted: April 3, 1997
Analyzed: April 3, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
124174	T-2	N.D.	N.D.	N.D.
124175	T-3	N.D.	1.7	N.D.
	Note: *Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.*			
124176	T-4	N.D.	14	N.D.
	Note: *Hydrocarbon reported has characteristics of weathered/aged Diesel.*			
124177	G-6	N.D.	N.D.	N.D.
124178	G-6A	N.D.	2.1	N.D.
	Note: *Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.*			
Reporting Limits		1.0	1.0	50
Blank Result		N.D.	N.D.	N.D.
Blank Spike Result (%)		--	82.8	--

Bruce Havlik
Chemist

Alex Tam
Semivolatiles Supervisor

510-893-8205 cc 0003

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

April 4, 1997

Submission #: 9704033

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT 35
Received: April 2, 1997

Project#: 139769.01.01

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Sampled: April 2, 1997
Matrix: SOIL
Run#: 6079
Extracted: April 3, 1997
Analyzed: April 3, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
124179	G-6B	N.D.	100	1100

Note: *Hydrocarbon reported as Diesel, is in the late Diesel Range and does not match our Diesel Standard.*

Reporting Limits	20	20	400
Blank Result	N.D.	N.D.	N.D.
Blank Spike Result (%)	--	82.8	--

Bruce Havlik
Chemist

Alex Tam
Semivolatiles Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

April 4, 1997

Submission #: 9704033

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT 35
Received: April 2, 1997

Project#: 139769.01.01

re: 1 sample for TEPH analysis.
Method: EPA 8015M

Sampled: April 2, 1997
Matrix: SOIL
Run#: 6079
Extracted: April 3, 1997
Analyzed: April 3, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
124180	G-6C	N.D.	160	910

Note: Estimated concentration due to overlapping fuel patterns.

	Kerosene	Diesel	Motor Oil
Reporting Limits	10	10	200
Blank Result	N.D.	N.D.	N.D.
Blank Spike Result (%)	--	82.8	--

Bruce Havlik
Chemist

Alex Tam
Semivolatiles Supervisor

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

April 4, 1997

Submission #: 9704033

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT 35
Received: April 2, 1997

Project#: 139769.01.01

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Sampled: April 2, 1997
Matrix: SOIL
Run#: 6079
Extracted: April 3, 1997
Analyzed: April 3, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
124181	SSHS-78	N.D.	93	1600

Note: *Hydrocarbon reported as Diesel, is in the late Diesel Range and does not match our Diesel Standard.*

Reporting Limits	40	40	800
Blank Result	N.D.	N.D.	N.D.
Blank Spike Result (%)	--	82.8	--

Bruce Havlik
Chemist

Alex Tam
Semivolatiles Supervisor

510-893-8205 tel 04/03

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

April 4, 1997

Submission #: 9704033

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT 35
Received: April 2, 1997

Project#: 139769.01.01

re: 1 sample for TEPH analysis.
Method: EPA 8015M

Sampled: April 2, 1997

Matrix: SOIL
Run#: 6079

Extracted: April 3, 1997
Analyzed: April 3, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
124182	SSHS-81	N.D.	9.0	N.D.

Note: Estimated concentration due to overlapping fuel patterns.

	Kerosene	Diesel	Motor Oil
Reporting Limits	1.0	1.0	50
Blank Result	N.D.	N.D.	N.D.
Blank Spike Result (%)	--	82.8	--

Bruce Havlik
Chemist

Alex Tam
Semivolatiles Supervisor

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

April 3, 1997

Submission #: 9704033

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT 35 *Project#:* 139769.01.01
Received: April 2, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: G-6
Spl#: 124177 *Matrix:* SOIL
Sampled: April 2, 1997 *Run#:* 6080 *Analyzed:* April 3, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	96	1
BENZENE	N.D.	0.0050	N.D.	99	1
TOLUENE	N.D.	0.0050	N.D.	97	1
ETHYL BENZENE	N.D.	0.0050	N.D.	93	1
XYLENES	0.016	0.0050	N.D.	93	1

Note: Surrogate recovery was outside QA/QC limits due to matrix interference. See Surrogate Summary page.

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

April 3, 1997

Submission #: 9704033

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT 35 *Project#:* 139769.01.01
Received: April 2, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: G-6A
Spl#: 124178 *Matrix:* SOIL
Sampled: April 2, 1997 *Run#:* 6080 *Analyzed:* April 3, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	96	1
BENZENE	N.D.	0.0050	N.D.	99	1
TOLUENE	N.D.	0.0050	N.D.	97	1
ETHYL BENZENE	N.D.	0.0050	N.D.	93	1
XYLENES	N.D.	0.0050	N.D.	93	1

Note: Surrogate recovery was outside QA/QC limits due to matrix interference. See Surrogate Summary page.

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

April 3, 1997

Submission #: 9704033

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT 35 *Project#:* 139769.01.01
Received: April 2, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: G-6B
Spl#: 124179 *Matrix:* SOIL
Sampled: April 2, 1997 *Run#:* 6080 *Analyzed:* April 3, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	96	1
BENZENE	N.D.	0.0050	N.D.	99	1
TOLUENE	N.D.	0.0050	N.D.	97	1
ETHYL BENZENE	N.D.	0.0050	N.D.	93	1
XYLENES	0.012	0.0050	N.D.	93	1

Note: Surrogate recovery was outside QA/QC limits due to matrix interference. See Surrogate Summary page.

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

510-484-4205

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

ALEXANDM 17:09

CHROMALAB, INC.

Environmental Services (SDB)

April 3, 1997 *Submission #:* 9704033

CH2M HILL OAKLAND

Attn: Madeline Wall

Project: DEL MONTE PLANT 35 *Project#:* 139769.01.01
Received: April 2, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: G-6C
Spl#: 124180 *Matrix:* SOIL
Sampled: April 3, 1997 *Run#:* 6080 *Analyzed:* April 3, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	96	1
BENZENE	N.D.	0.0050	N.D.	99	1
TOLUENE	N.D.	0.0050	N.D.	97	1
ETHYL BENZENE	N.D.	0.0050	N.D.	93	1
XYLENES	N.D.	0.0050	N.D.	93	1

Note: Surrogate recovery was outside QA/QC limits due to matrix interference. See Surrogate Summary page.

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

1220 Quarry Lane • Pleasanton, California [illegible]
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

April 3, 1997 *Submission #:* 9704033

CH2M HILL OAKLAND

Attn: Madeline Wall

Project: DEL MONTE PLANT 35 *Project#:* 139769.01.01
Received: April 2, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: SSHS-7B
Spl#: 124181 *Matrix:* SOIL
Sampled: April 2, 1997 *Run#:* 6080 *Analyzed:* April 3, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	96	1
BENZENE	N.D.	0.0050	N.D.	99	1
TOLUENE	N.D.	0.0050	N.D.	97	1
ETHYL BENZENE	N.D.	0.0050	N.D.	93	1
XYLENES	N.D.	0.0050	N.D.	93	1

Note: Surrogate recovery was outside QA/QC limits due to matrix interference. See Surrogate Summary page.

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

1220 Quarry Lane • Pleasanton, California [illegible]
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

April 3, 1997

Submission #: 9704033

CH2M HILL OAKLAND

Attn: Madeline Wall

Project: DEL MONTE PLANT 35 *Project#:* 139769.01.01
Received: April 2, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: SSHS-81
Spl#: 124182 *Matrix:* SOIL
Sampled: April 2, 1997 *Run#:* 6080 *Analyzed:* April 3, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	96	1
BENZENE	N.D.	0.0050	N.D.	99	1
TOLUENE	N.D.	0.0050	N.D.	97	1
ETHYL BENZENE	N.D.	0.0050	N.D.	93	1
XYLENES	N.D.	0.0050	N.D.	93	1

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

April 3, 1997 *Submission #:* 9704033

CH2M HILL OAKLAND

Attn: Madeline Wall

Project: DEL MONTE PLANT 35 *Project#:* 139769.01.01
Received: April 2, 1997

re: **Surrogate** report for 6 samples for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod
Lab Run#: 6080
Matrix: SOIL

Sample#	Client Sample ID	Surrogate	% Recovered	Recovery Limits
124177-1	G-6	TRIFLUOROTOLUENE	62.1	65-135
124177-1	G-6	4-BROMOFLUOROBENZENE	37.0	65-135
124178-1	G-6A	TRIFLUOROTOLUENE	39.2	65-135
124178-1	G-6A	4-BROMOFLUOROBENZENE	29.8	65-135
124179-1	G-6B	TRIFLUOROTOLUENE	51.9	65-135
124179-1	G-6B	4-BROMOFLUOROBENZENE	35.7	65-135
124179-2	G-6B	TRIFLUOROTOLUENE	60.8	65-135
124179-2	G-6B	4-BROMOFLUOROBENZENE	50.4	65-135
124180-1	G-6C	TRIFLUOROTOLUENE	40.8	65-135
124180-1	G-6C	4-BROMOFLUOROBENZENE	16.6	65-135
124180-2	G-6C	TRIFLUOROTOLUENE	65.2	65-135
124180-2	G-6C	4-BROMOFLUOROBENZENE	45.4	65-135
124181-1	SSHS-78	TRIFLUOROTOLUENE	45.8	65-135
124181-1	SSHS-78	4-BROMOFLUOROBENZENE	33.6	65-135
124181-2	SSHS-78	TRIFLUOROTOLUENE	74.9	65-135
124181-2	SSHS-78	4-BROMOFLUOROBENZENE	50.1	65-135
124182-1	SSHS-81	TRIFLUOROTOLUENE	84.9	65-135
124182-1	SSHS-81	4-BROMOFLUOROBENZENE	80.0	65-135
124182-2	SSHS-81	TRIFLUOROTOLUENE	75.5	65-135
124182-2	SSHS-81	4-BROMOFLUOROBENZENE	68.3	65-135

Sample#	QC Sample Type	Surrogate	% Recovered	Recovery Limits
124249-1	*Reagent blank (MDB)*	TRIFLUOROTOLUENE	96.6	65-135
124249-1	*Reagent blank (MDB)*	4-BROMOFLUOROBENZENE	85.2	65-135
124250-1	*Spiked blank (BSP)*	TRIFLUOROTOLUENE	100	65-135
124250-1	*Spiked blank (BSP)*	4-BROMOFLUOROBENZENE	130	65-135
124251-1	*Spiked blank duplicate (BSD)*	TRIFLUOROTOLUENE	86.3	65-135
124251-1	*Spiked blank duplicate (BSD)*	4-BROMOFLUOROBENZENE	112	65-135
124252-1	*Matrix spike (MS)*	TRIFLUOROTOLUENE	77.5	65-135
124252-1	*Matrix spike (MS)*	4-BROMOFLUOROBENZENE	124	65-135

CHROMALAB, INC.

Environmental Services (SDB)

April 3, 1997 *Submission #:* 9704033
page 2

CH2M HILL OAKLAND

Attn: Madeline Wall

Project: DEL MONTE PLANT 35 *Project#:* 139769.01.01
Received: April 2, 1997

re: **Surrogate** report for 6 samples for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod
Lab Run#: 6080

124253-1	*Matrix spike duplicate (MSD)*	TRIFLUOROTOLUENE	66.1	65-135
124253-1	*Matrix spike duplicate (MSD)*	4-BROMOFLUOROBENZENE	119	65-135

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

April 3, 1997

Submission #: 9704033

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT 35
Received: April 2, 1997

Project#: 139769.01.01

re: One sample for Polychlorinated Biphenyls (PCBs) analysis.
Method: *SW846 Method 8080A Nov 1990*

Client Sample ID: T-1
Spl#: 124173
Sampled: April 2, 1997

Matrix: SOIL
Run#: 6073

Extracted: April 2, 1997
Analyzed: April 3, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
AROCLOR 1016	N.D.	0.10	N.D.	--	1
AROCLOR 1221	N.D.	0.10	N.D.	--	1
AROCLOR 1232	N.D.	0.10	N.D.	--	1
AROCLOR 1242	N.D.	0.10	N.D.	--	1
AROCLOR 1248	N.D.	0.10	N.D.	--	1
AROCLOR 1254	N.D.	0.10	N.D.	--	1
AROCLOR 1260	N.D.	0.10	N.D.	90.2	1

Dennis Mayugba
Chemist

Alex Tam
Semivolatiles Supervisor

510-893-8205 cc 04/03

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

April 3, 1997

Submission #: 9704033

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT 35
Received: April 2, 1997

Project#: 139769.01.01

re: One sample for Polychlorinated Biphenyls (PCBs) analysis.
Method: *SW846 Method 8080A Nov 1990*

Client Sample ID: T-2
Spl#: 124174
Sampled: April 2, 1997

Matrix: SOIL
Run#: 6073

Extracted: April 2, 1997
Analyzed: April 3, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
AROCLOR 1016	N.D.	0.10	N.D.	--	1
AROCLOR 1221	N.D.	0.10	N.D.	--	1
AROCLOR 1232	N.D.	0.10	N.D.	--	1
AROCLOR 1242	N.D.	0.10	N.D.	--	1
AROCLOR 1248	N.D.	0.10	N.D.	--	1
AROCLOR 1254	N.D.	0.10	N.D.	--	1
AROCLOR 1260	N.D.	0.10	N.D.	90.2	1

Dennis Mayugba
Chemist

Alex Tam
Semivolatiles Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

April 3, 1997

Submission #: 9704033

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT 35 *Project#:* 139769.01.01
Received: April 2, 1997

re: One sample for Polychlorinated Biphenyls (PCBs) analysis.
Method: *SW846 Method 8080A Nov 1990*

Client Sample ID: T-3
Spl#: 124175 *Matrix:* SOIL *Extracted:* April 2, 1997
Sampled: April 2, 1997 *Run#:* 6073 *Analyzed:* April 3, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
AROCLOR 1016	N.D.	0.10	N.D.	--	1
AROCLOR 1221	N.D.	0.10	N.D.	--	1
AROCLOR 1232	N.D.	0.10	N.D.	--	1
AROCLOR 1242	N.D.	0.10	N.D.	--	1
AROCLOR 1248	N.D.	0.10	N.D.	--	1
AROCLOR 1254	N.D.	0.10	N.D.	--	1
AROCLOR 1260	N.D.	0.10	N.D.	90.2	1

Dennis Mayugba
Chemist

Alex Tam
Semivolatiles Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

April 3, 1997

Submission #: 9704033

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT 35
Received: April 2, 1997

Project#: 139769.01.01

re: One sample for Polychlorinated Biphenyls (PCBs) analysis.
Method: *SW846 Method 8080A Nov 1990*

Client Sample ID: T-4
Spl#: 124176
Sampled: April 2, 1997

Matrix: SOIL
Run#: 6073

Extracted: April 2, 1997
Analyzed: April 3, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
AROCLOR 1016	N.D.	0.10	N.D.	--	1
AROCLOR 1221	N.D.	0.10	N.D.	--	1
AROCLOR 1232	N.D.	0.10	N.D.	--	1
AROCLOR 1242	N.D.	0.10	N.D.	--	1
AROCLOR 1248	N.D.	0.10	N.D.	--	1
AROCLOR 1254	N.D.	0.10	N.D.	--	1
AROCLOR 1260	N.D.	0.10	N.D.	90.2	1

Dennis Mayugba
Chemist

Alex Tam
Semivolatiles Supervisor

9704033/124173-124182

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

SUBM #: 9704033 REP: GC
CLIENT: CH2
DUE: 04/03/97
REF #:32897

32897

Chain of Custody

DATE April 2, 1997 PAGE 1 OF 2

PROJ. MGR Madeline Wall
COMPANY CH2M Hill
ADDRESS 1111 Broadway, Suite 1200
Oakland, CA 94607

SAMPLERS (SIGNATURE)

(PHONE NO.) (510) 251-2426
(FAX NO.) (510) 893-6205

ANALYSIS REPORT

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (TEPH) (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	HVOCs	LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)			NUMBER OF CONTAINERS
T-1	4/2/97	12:04	Soil	none			X					X	X			X								1
T-2	4/2/97	12:06	Soil	none			X					X	X			X								1
T-3	4/2/97	12:09	Soil	none			X					X	X			X								1
T-4	4/2/97	12:12	Soil	none			X					X	X			X								1
G-6	4/2/97	12:32	Soil	none	X	X	X									X								1
G-6a	4/2/97	12:36	Soil	none	X	X	X									X								1
G-6b	4/2/97	12:40	Soil	none	X	X	X									X								1
G-6C	4/2/97	12:50	Soil	none	X	X	X									X								1
SSHS-78	4/2/97	1:40	Soil	none	X	X	X									X								1

RUSH

PROJECT INFORMATION

PROJECT NAME: Del Monte Plant 35
PROJECT NUMBER: 130769.01.01
P.O. #

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	9
HEAD SPACE	
RECD GOOD CONDITION/COLD	
CONFORMS TO RECORD	

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

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY 1	RELINQUISHED BY 2.	RELINQUISHED BY 3.
(SIGNATURE) Catherine A. Swain (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) 1640 (TIME)
(PRINTED NAME) Cathy Swain (DATE) 4/2/97	(PRINTED NAME) (DATE)	(PRINTED NAME) L. Mercado 4-2-97 (DATE)
(COMPANY) CH2M Hill	(COMPANY)	(COMPANY) Chromalab
RECEIVED BY 1	**RECEIVED BY 2**	**RECEIVED BY (LABORATORY) 3**
(SIGNATURE) (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) 1645 (TIME)
(PRINTED NAME) L. Mercado 4-2-97 (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) Chris Rowley 4/2/97 (DATE)
(COMPANY) Chromalab	(COMPANY)	(LAB) Chromalab

APR. -04' 97 (FRI) 10:54 CHROMALAB, INC. TEL:510 484 1096 P. 018

9704033

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

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

32891

Chain of Custody

DATE April 2, 1997 PAGE 2 OF 2

PROJ. MGR Madeline Wall
COMPANY CH2M Hill
ADDRESS 111 Broadway Suite 1700
Oakland, CA 94607

SAMPLERS (SIGNATURE)

(PHONE NO.) (510) 251-2426
(FAX NO.) (510) 893-8205

ANALYSIS REPORT

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 5242)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)			NUMBER OF CONTAINERS
SSHS-81	4/1/97	2:11	Soil	none		X	X								X	HVOCs							1

RUSH

PROJECT INFORMATION

PROJECT NAME: Del Monte Plant 35
PROJECT NUMBER 139769.01.01
P.O. #

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	1
HEAD SPACE	
REC'D GOOD CONDITION/COLD	
CONFORMS TO RECORD	

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

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY 1.	RELINQUISHED BY 2.	RELINQUISHED BY 3.
Catherine A. Swain (SIGNATURE) (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) 1840 (TIME)
Cathy Swain 4/2/97 (PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	G. Moran 4-2-97 (PRINTED NAME) (DATE)
CH2M Hill 1600 (COMPANY)	(COMPANY)	Chromalab (COMPANY)
RECEIVED BY 1.	**RECEIVED BY 2.**	**RECEIVED BY (LABORATORY) 3.**
(SIGNATURE) 1600 (TIME)	(SIGNATURE) (TIME)	Chris Rankin 1825 (SIGNATURE) (TIME)
G. Moran 4-2-97 (PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	Chris Rankin 4/2/97 (PRINTED NAME) (DATE)
Chromalab (COMPANY)	(COMPANY)	Chromalab (COMPANY)

CHROMALAB, INC.

Environmental Services (SDB)

April 10, 1997

Submission #: 9704033

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE PLANT 35 *Project#:* 139769.01.01
Received: April 2, 1997
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 Method 8260A Sept 1994*

Client Sample ID: SSES-81
Spl#: 124182 *Matrix:* SOIL
Sampled: April 2, 1997 *Run#:* 6086 *Analyzed:* April 4, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	102	1
CHLOROETHANE	N.D.	10	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	50	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	109	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	104	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1
BROMOCHLOROMETHANE	N.D.	20	N.D.	--	1

Note: *Internal standard was outside of QA/QC limits due to matrix interference. Results bias high.*

Chip Poalinelli
Operations Manager

Eric Tam
Laboratory Director

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

April 10, 1997

Submission #: 9704033

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE PLANT 35 *Project#:* 139769.01.01
Received: April 2, 1997
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 Method 8260A Sept 1994*

Client Sample ID: G-6
Spl#: 124177 *Matrix:* SOIL
Sampled: April 2, 1997 *Run#:* 6086 *Analyzed:* April 3, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	102	1
CHLOROETHANE	N.D.	10	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	50	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	109	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	104	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1
BROMOCHLOROMETHANE	N.D.	20	N.D.	--	1

Note: Internal standard and surrogate was outside of QA/QC limits due to matrix interference. Results bias high. See surrogate summary report.

Chip Poalinelli
Operations Manager

Eric Tam
Laboratory Director

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

April 10, 1997

Submission #: 9704033

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE PLANT 35 *Project#:* 139769.01.01
Received: April 2, 1997
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 Method 8260A Sept 1994*

Client Sample ID: G-6B
Spl#: 124179 *Matrix:* SOIL
Sampled: April 2, 1997 *Run#:* 6086 *Analyzed:* April 4, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	102	1
CHLOROETHANE	N.D.	10	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	50	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	109	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	104	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1
BROMOCHLOROMETHANE	N.D.	20	N.D.	--	1

Note: Internal standard and surrogates was outside of QA/QC limits due to matrix interference. Results bias high. See surrogate summary page.

Chip Poalinelli
Operations Manager

Eric Tam
Laboratory Director

510-893-8205 cc 04/03

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

V067 0:CC0405 CHP 16:10

CHROMALAB, INC.

Environmental Services (SDB)

April 10, 1997

Submission #: 9704033

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE PLANT 35 *Project#:* 139769.01.01
Received: April 2, 1997
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 Method 8260A Sept 1994*

Client Sample ID: G-6C
Spl#: 124180 *Matrix:* SOIL
Sampled: April 2, 1997 *Run#:* 6086 *Analyzed:* April 4, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	102	1
CHLOROETHANE	N.D.	10	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	50	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	109	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	104	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1
BROMOCHLOROMETHANE	N.D.	20	N.D.	--	1

Note: *Internal standard and surrogates was outside of QA/QC limits due to matrix interference. Results bias high. See surrogate summary page.*

Chip Poalinelli
Operations Manager

Eric Tam
Laboratory Director

1220 Quarry Lane • Pleasanton, California 94566-4758
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

April 10, 1997

Submission #: 9704033

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE PLANT 35 *Project#:* 139769.01.01
Received: April 2, 1997
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 Method 8260A Sept 1994*

Client Sample ID: SSES-78
Spl#: 124181 *Matrix:* SOIL
Sampled: April 2, 1997 *Run#:* 6086 *Analyzed:* April 4, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	102	1
CHLOROETHANE	N.D.	10	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	50	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	109	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	104	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1
BROMOCHLOROMETHANE	N.D.	20	N.D.	--	1

Chip Poalinelli
Operations Manager

Eric Tam
Laboratory Director

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

April 10, 1997

Submission #: 9704033

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE PLANT 35 *Project#:* 139769.01.01
Received: April 2, 1997
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 Method 8260A Sept 1994*

Client Sample ID: G-6A
Spl#: 124178
Sampled: April 2, 1997
Matrix: SOIL
Run#: 6117
Analyzed: April 4, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	104	1
CHLOROETHANE	N.D.	10	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	50	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	110	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	106	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1
BROMOCHLOROMETHANE	N.D.	20	N.D.	--	1

Chip Poalinelli
Operations Manager

Eric Tam
Laboratory Director

510-893-8205 gc 04/03

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

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CHROMALAB, INC.

Environmental Services (SDB)

April 10, 1997

Submission #: 9704033

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT 35
Received: April 2, 1997

Project#: 139769.01.01

re: **Blank spike and duplicate** report for Volatile Organics by GC/MS analysi

Method: SW846 Method 8260A Sept 1994

Matrix: SOIL
Lab Run#: 6086

Analyzed: April 3, 1997

Analyte	Spike Amount BSP (ug/Kg)	Spike Amount Dup (ug/Kg)	Spike Found BSP (ug/Kg)	Spike Found Dup (ug/Kg)	Spike Recov BSP (%)	Spike Recov Dup (%)	Control Limits	% RPD	% RPD Lim
CHLOROBENZENE	100	96.9	102	92.5	102	95.4	61-121	6.69	20
1,1-DICHLOROETHENE	100	96.9	109	95.5	109	98.6	65-125	10.0	20
TRICHLOROETHENE	100	96.9	104	92.8	104	95.8	74-134	8.21	20

BS Smpl #: 124311
BSD Smpl #: 124312

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

April 10, 1997

Submission #: 9704033

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT 35
Received: April 2, 1997

Project#: 139769.01.01

re: **Blank spike and duplicate** report for Volatile Organics by GC/MS analysi

Method: SW846 Method 8260A Sept 1994

Matrix: SOIL
Lab Run#: 6117

Analyzed: April 4, 1997

Analyte	Spike Amount BSP (ug/Kg)	Spike Amount Dup (ug/Kg)	Found BSP (ug/Kg)	Found Dup (ug/Kg)	Spike Recov BSP (%)	Spike Recov Dup (%)	Control Limits	% RPD	% RPD Lim
CHLOROBENZENE	96.9	96.9	101	92.2	104	95.1	61-121	8.94	20
1,1-DICHLOROETHENE	96.9	96.9	107	99.0	110	102	65-125	7.55	20
TRICHLOROETHENE	96.9	96.9	103	92.4	106	95.4	74-134	10.5	20

BS Smpl #: 124726
BSD Smpl #: 124727

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

April 10, 1997

Submission #: 9704033

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT 35
Received: April 2, 1997

Project#: 139769.01.01

re: **Matrix spike** report for Volatile Organics by GC/MS analysis.

Method: SW846 Method 8260A Sept 1994

Matrix: SOIL
Lab Run#: 6086

Instrument: 5972-2

Analyzed: April 3, 1997

Analyte	Spiked Sample Amount (ug/Kg)	Spike Amt MS (ug/Kg)	Spike Amt MSD (ug/Kg)	Amt Found MS (ug/Kg)	Amt Found MSD (ug/Kg)	Spike Recov MS (%)	Spike Recov MSD (%)	Control Limits	% RPD	% RPD Lim
CHLOROBENZENE	ND	92.2	99.4	93.7	107	102	108	61-121	5.71	20
1,1-DICHLOROETHENE	ND	92.2	99.4	100	111	108	112	65-125	3.64	20
TRICHLOROETHENE	ND	92.2	99.4	92.8	108	101	109	74-134	7.62	20

Sample Spiked: 124055
Submission #: 9704016
Client Sample ID: PF 1-1

MS Smpl #: 124313
MSD Smpl #: 124314

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

April 10, 1997 *Submission #:* 9704033

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT 35 *Project#:* 139769.01.01
Received: April 2, 1997

re: **Matrix spike** report for Volatile Organics by GC/MS analysis.

Method: SW846 Method 8260A Sept 1994

Matrix: SOIL
Lab Run#: 6117 *Instrument:* 5972-2 *Analyzed:* April 5, 1997

Analyte	Spiked Sample Amount (ug/Kg)	Spike Amt MS (ug/Kg)	Spike Amt MSD (ug/Kg)	Amt Found MS (ug/Kg)	Amt Found MSD (ug/Kg)	Spike Recov MS (%)	Spike Recov MSD (%)	Control Limits	% RPD	% RPD Lim
CHLOROBENZENE	ND	95.6	97.6	83.8	88.4	87.6	90.6	61-121	3.37	20
1,1-DICHLOROETHENE	ND	95.6	97.6	89.1	91.9	93.2	94.2	65-125	1.07	20
TRICHLOROETHENE	ND	95.6	97.6	75.6	81.3	79.1	83.3	74-134	5.17	20

Sample Spiked: 124440
Submission #: 9704061
Client Sample ID: T WEST

MS Smpl #: 124728
MSD Smpl #: 124729

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 31, 1997 Submission #: 9703392

CH2M HILL OAKLAND
1111 Broadway, Suite 1200
Oakland, CA 94607-4046

Attn: Madeline Wall

RE: Analysis for project DEL MONTE PLANT #35, number 13976901.

REPORTING INFORMATION

Samples were received cold and in good condition on March 27, 1997. They were refrigerated upon receipt and analyzed as described in the attached report. ChromaLab followed EPA or equivalent methods for all testing reported.

No discrepancies were observed or difficulties encountered with the testing.

Reporting Limit for Methylene Chloride was raised due to possible Laboratory contamination.

June Zhao
Chemist

Chip Poalinelli
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

March 31, 1997 *Submission #:* 9703392

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE PLANT #35 *Project#:* 13976901
Received: March 27, 1997
re: One sample for 8010 Purgeable Halocarbons by GC/MS analysis.
Method: *SW846 Method 8260A Nov 1990*

Client Sample ID: **SSCS-93A**
Spl#: 123142 *Matrix:* SOIL
Sampled: March 27, 1997 *Run#:* 6018 *Analyzed:* March 31, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
CHLOROMETHANE	N.D.	10	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
BROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
CHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	10	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	101	1
METHYLENE CHLORIDE	N.D.	50	N.D.	--	1
TRANS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
CIS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	95.8	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
2-CHLOROETHYL VINYL ETHER	N.D.	10	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	96.5	1
BROMOFORM	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1

Note: Internal STD & surrogate recovery was outside QA/QC limits due to matrix interference. Results bias high.

June Zhao
Chemist

Chip Poalinelli
Operations Manager

CHROMALAB, INC.
Environmental Services (SDB)

March 31, 1997 *Submission #:* 9703392

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE PLANT #35 *Project#:* 13976901
Received: March 27, 1997
re: One sample for 8010 Purgeable Halocarbons by GC/MS analysis.
Method: *SW846 Method 8260A Nov 1990*

Client Sample ID: **SSCS-93**
Spl#: 123141 *Matrix:* SOIL
Sampled: March 27, 1997 *Run#:* 6018 *Analyzed:* March 31, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
CHLOROMETHANE	N.D.	10	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
BROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
CHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	10	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	101	1
METHYLENE CHLORIDE	N.D.	50	N.D.	--	1
TRANS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
CIS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	95.8	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
2-CHLOROETHYL VINYL ETHER	N.D.	10	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	96.5	1
BROMOFORM	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1

June Zhao
Chemist

Chip Poalinelli
Operations Manager

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 31, 1997 *Submission #:* 9703392

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE PLANT #35 *Project#:* 13976901
Received: March 27, 1997
re: One sample for 8010 Purgeable Halocarbons by GC/MS analysis.
Method: *SW846 Method 8260A Nov 1990*

Client Sample ID: **SSCS-85**
Spl#: 123144 *Matrix:* SOIL
Sampled: March 27, 1997 *Run#:* 6018 *Analyzed:* March 31, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
CHLOROMETHANE	N.D.	10	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
BROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
CHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	10	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	101	1
METHYLENE CHLORIDE	N.D.	50	N.D.	--	1
TRANS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
CIS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	95.8	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
2-CHLOROETHYL VINYL ETHER	N.D.	10	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	96.5	1
BROMOFORM	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1

Note: Internal STD recovery was outside QA/QC limits due to matrix interference. Results bias high.

June Zhao
Chemist

Chip Poalinelli
Operations Manager

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 31, 1997 *Submission #:* 9703392

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 13976901
Received: March 27, 1997

re: **Surrogate** report for 4 samples for 8010 Purgeable Halocarbons by
Method: SW846 Method 8260A Nov 1990
Lab Run#: 6018
Matrix: SOIL

Sample#	Client Sample ID	Surrogate	% Recovered	Recovery Limits
123141-1	SSCS-93	4-BROMOFLOUROBENZENE	83.6	74-121
123141-1	SSCS-93	D4-1,2-DICHLOROETHANE	106	70-121
123141-1	SSCS-93	D8-TOLUENE	97.2	81-117
123142-1	SSCS-93A	4-BROMOFLOUROBENZENE	86.0	74-121
123142-1	SSCS-93A	D4-1,2-DICHLOROETHANE	122	70-121
123142-1	SSCS-93A	D8-TOLUENE	109	81-117
123143-1	SSCS-93B	4-BROMOFLOUROBENZENE	43.0	74-121
123143-1	SSCS-93B	D4-1,2-DICHLOROETHANE	110	70-121
123143-1	SSCS-93B	D8-TOLUENE	90.4	81-117
123144-1	SSCS-85	4-BROMOFLOUROBENZENE	89.6	74-121
123144-1	SSCS-85	D4-1,2-DICHLOROETHANE	117	70-121
123144-1	SSCS-85	D8-TOLUENE	103	81-117

Sample#	QC Sample Type	Surrogate	% Recovered	Recovery Limits
123704-1	*Reagent blank (MDB)*	4-BROMOFLOUROBENZENE	90.6	74-121
123704-1	*Reagent blank (MDB)*	D4-1,2-DICHLOROETHANE	102	70-121
123704-1	*Reagent blank (MDB)*	D8-TOLUENE	99.8	81-117
123705-1	*Spiked blank (BSP)*	4-BROMOFLOUROBENZENE	87.5	74-121
123705-1	*Spiked blank (BSP)*	D4-1,2-DICHLOROETHANE	97.8	70-121
123705-1	*Spiked blank (BSP)*	D8-TOLUENE	96.7	81-117
123706-1	*Spiked blank duplicate (BSD)*	4-BROMOFLOUROBENZENE	95.0	74-121
123706-1	*Spiked blank duplicate (BSD)*	D4-1,2-DICHLOROETHANE	103	70-121
123706-1	*Spiked blank duplicate (BSD)*	D8-TOLUENE	104	81-117

V035
QCSURR1229 JIEWEI 31-Mar-97 17:1

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 31, 1997 *Submission #:* 9703392

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE PLANT #35 *Project#:* 13976901
Received: March 27, 1997
re: One sample for 8010 Purgeable Halocarbons by GC/MS analysis.
Method: *SW846 Method 8260A Nov 1990*

Client Sample ID: **SSCS-93B**
Spl#: 123143 *Matrix:* SOIL
Sampled: March 27, 1997 *Run#:* 6018 *Analyzed:* March 31, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
CHLOROMETHANE	N.D.	10	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
BROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
CHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	10	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	101	1
METHYLENE CHLORIDE	N.D.	50	N.D.	--	1
TRANS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
CIS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	95.8	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
2-CHLOROETHYL VINYL ETHER	N.D.	10	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	96.5	1
BROMOFORM	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1

Note: Internal STD & surrogate recovery was outside QA/QC limits due to matrix interference. Results bias high.

June Zhao
Chemist

Chip Poalinelli
Operations Manager

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 31, 1997 *Submission #:* 9703392

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 13976901
Received: March 27, 1997

re: 4 samples for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* March 31, 1997
Sampled: March 27, 1997 *Run#:* 6019 *Analyzed:* March 31, 1997

Spl# CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
123141 SSCS-93	N.D.	130	320
Note: Hydrocarbon reported does not match our Diesel standard.			
123142 SSCS-93A	N.D.	29	230
Note: Reported concentration estimated due to overlapping fuel pattern.			
123143 SSCS-93B	N.D.	44	N.D.
Note: Hydrocarbon reported is in the late Diesel range, and does not match our Diesel standard.			
123144 SSCS-85	N.D.	240	1100
Note: Hydrocarbon reported does not match our Diesel standard.			
Reporting Limits	10	10	200
Blank Result	N.D.	N.D.	N.D.
Blank Spike Result (%)	--	64.9	--

Dennis Mayugba
Chemist

Alex Tam
Semivolatiles Supervisor

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 31, 1997 *Submission #:* 9703392

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 13976901
Received: March 27, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **SSCS-93**
Spl#: 123141 *Matrix:* SOIL
Sampled: March 27, 1997 *Run#:* 6006 *Analyzed:* March 28, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	104	1
BENZENE	N.D.	0.0050	N.D.	102	1
TOLUENE	N.D.	0.0050	N.D.	98	1
ETHYL BENZENE	0.013	0.0050	N.D.	106	1
XYLENES	0.074	0.0050	N.D.	100	1

Marianne Alexander
Gas/BTEX Supervisor

Chip Poalinelli
Operations Manager

510-893-8206

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 31, 1997

Submission #: 9703392

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 13976901
Received: March 27, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **SSCS-93A**
Spl#: 123142 *Matrix:* SOIL
Sampled: March 27, 1997 *Run#:* 6006 *Analyzed:* March 28, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	104	1
BENZENE	N.D.	0.0050	N.D.	102	1
TOLUENE	N.D.	0.0050	N.D.	98	1
ETHYL BENZENE	N.D.	0.0050	N.D.	106	1
XYLENES	0.014	0.0050	N.D.	100	1

Note: Surrogate recovery was outside QA/QC limits due to matrix interference. See Surrogate Summary page.

Marianne Alexander
Gas/BTEX Supervisor

Chip Poalinelli
Operations Manager

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 31, 1997 *Submission #:* 9703392

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 13976901
Received: March 27, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **SSCS-93B**
Spl#: 123143 *Matrix:* SOIL
Sampled: March 27, 1997 *Run#:* 6006 *Analyzed:* March 28, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	104	1
BENZENE	N.D.	0.0050	N.D.	102	1
TOLUENE	N.D.	0.0050	N.D.	98	1
ETHYL BENZENE	N.D.	0.0050	N.D.	106	1
XYLENES	N.D.	0.0050	N.D.	100	1

Marianne Alexander
Gas/BTEX Supervisor

Chip Poalinelli
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

March 31, 1997 *Submission #:* 9703392

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 13976901
Received: March 27, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **SSCS-85**
Spl#: 123144 *Matrix:* SOIL
Sampled: March 27, 1997 *Run#:* 6006 *Analyzed:* March 28, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	104	1
BENZENE	N.D.	0.0050	N.D.	102	1
TOLUENE	N.D.	0.0050	N.D.	98	1
ETHYL BENZENE	N.D.	0.0050	N.D.	106	1
XYLENES	0.022	0.0050	N.D.	100	1

Marianne Alexander
Gas/BTEX Supervisor

Chip Poalinelli
Operations Manager

510-893-8205

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 31, 1997 *Submission #:* 9703392

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 13976901
Received: March 27, 1997

re: **Surrogate** report for 4 samples for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod
Lab Run#: 6006
Matrix: SOIL

Sample#	Client Sample ID	Surrogate	% Recovered	Recovery Limits
123141-1	SSCS-93	TRIFLUOROTOLUENE	70.5	65-135
123141-1	SSCS-93	4-BROMOFLUOROBENZENE	84.9	65-135
123142-1	SSCS-93A	TRIFLUOROTOLUENE	62.7	65-135
123142-1	SSCS-93A	4-BROMOFLUOROBENZENE	167	65-135
123142-2	SSCS-93A	TRIFLUOROTOLUENE	95.9	65-135
123142-2	SSCS-93A	4-BROMOFLUOROBENZENE	302	65-135
123143-1	SSCS-93B	TRIFLUOROTOLUENE	38.4	65-135
123143-1	SSCS-93B	4-BROMOFLUOROBENZENE	23.0	65-135
123143-2	SSCS-93B	TRIFLUOROTOLUENE	73.2	65-135
123143-2	SSCS-93B	4-BROMOFLUOROBENZENE	84.0	65-135
123144-1	SSCS-85	TRIFLUOROTOLUENE	57.1	65-135
123144-1	SSCS-85	4-BROMOFLUOROBENZENE	46.5	65-135
123144-2	SSCS-85	TRIFLUOROTOLUENE	93.0	65-135
123144-2	SSCS-85	4-BROMOFLUOROBENZENE	96.9	65-135

Sample#	QC Sample Type	Surrogate	% Recovered	Recovery Limits
123661-1	*Reagent blank (MDB)*	TRIFLUOROTOLUENE	106	65-135
123661-1	*Reagent blank (MDB)*	4-BROMOFLUOROBENZENE	107	65-135
123662-1	*Spiked blank (BSP)*	TRIFLUOROTOLUENE	101	65-135
123662-1	*Spiked blank (BSP)*	4-BROMOFLUOROBENZENE	125	65-135
123663-1	*Spiked blank duplicate (BSD)*	TRIFLUOROTOLUENE	87.4	65-135
123663-1	*Spiked blank duplicate (BSD)*	4-BROMOFLUOROBENZENE	104	65-135
123664-1	*Matrix spike (MS)*	TRIFLUOROTOLUENE	68.7	65-135
123664-1	*Matrix spike (MS)*	4-BROMOFLUOROBENZENE	58.4	65-135
123665-1	*Matrix spike duplicate (MSD)*	TRIFLUOROTOLUENE	66.3	65-135
123665-1	*Matrix spike duplicate (MSD)*	4-BROMOFLUOROBENZENE	56.0	65-135

V132
QCSURR1229 ALEXANDM 31-Mar-97

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

03512/12314/-1234-1

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

SUBM #: 9703392 REP: GC
CLIENT: CH2
DUE: 03/31/97
REP #: 32770

32770

Chain of Custody

DATE March 27, 1997 PAGE 1 OF 1

PROJ. MGR Madeline Wall
COMPANY CH2M Hill
ADDRESS 1111 Broadway, Suite 1200
Oakland, CA 94607

SAMPLERS (SIGNATURE) Catherine A. Swain
(PHONE NO.) (510) 251-2426
(FAX NO.) (510) 893-8205

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	HVOCs	LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)				NUMBER OF CONTAINERS
SSCS-93	3/27/97	11:18	Soil	none		X	X									X									1
SSCS-93a	3/27/97	11:35	Soil	none		X	X									X									1
SSCS-93b	3/27/97	11:30	Soil	none		X	X									X									1
SSCS-85	3/27/97	12:00	Soil	none		X	X									X									1

RUSH

PROJECT INFORMATION

PROJECT NAME: Del Monte Plant #35
PROJECT NUMBER 139769.01.01
P.O. #

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	4
HEAD SPACE	
REC'D GOOD CONDITION/COLD	
CONFORMS TO RECORD	

TAT	STANDARD 5-DAY			24	48	72	OTHER

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY 1.	RELINQUISHED BY 2.	RELINQUISHED BY 3.
(SIGNATURE) Catherine A. Swain 1330 (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) 13:03 (TIME)
(PRINTED NAME) Cathy Swain 3/27/97 (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) Marty Medina 3/27/97 (DATE)
(COMPANY) CH2M Hill	(COMPANY)	(COMPANY) CH2M Hill
RECEIVED BY 1.	**RECEIVED BY 2.**	**RECEIVED BY (LABORATORY) 3**
(SIGNATURE) S. Terentieff 1330 (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) 1340 (TIME)
(PRINTED NAME) Serge Terentieff 3/27/97 (DATE)	(PRINTED NAME) Marty Medina 13:00 (DATE)	(PRINTED NAME) B. Moreau 3-27-97 (DATE)
(COMPANY) CH2M Hill	(COMPANY) CH2M Hill 3/27/97	(LAB) Chromalab

Relinquished by: [illegible] Received by: [illegible] 3/27/97 1424

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

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

Chain of Custody

DATE March 27, 1997 PAGE 1 OF 1

PROJ. MGR Madeline Wall
COMPANY CH2M Hill
ADDRESS 1111 Broadway, Suite 1200
Oakland, CA 94607

SAMPLERS (SIGNATURE) Catherine A. Swain
(PHONE NO.) (510) 251-2426
(FAX NO.) (510) 893-8205

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	HVOCs	LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)				NUMBER OF CONTAINERS
SSCS-93	3/27/97	11:18	Soil	none		X	X									X									1
SSCS-93a	3/27/97	11:35	Soil	none		X	X									X									1
SSCS-93b	3/27/97	11:30	Soil	none		X	X									X									1
SSCS-85	3/27/97	12:00	Soil	none		X	X									X									1

PROJECT INFORMATION

PROJECT NAME: Del Monte Plant #35
PROJECT NUMBER: 139769.01.01
P.O. #

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	4
HEAD SPACE	
REC'D GOOD CONDITION/COLD	
CONFORMS TO RECORD	

TAT: STANDARD 5-DAY | | | 24 | (48) | 72 | OTHER

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY 1.	RELINQUISHED BY 2.	RELINQUISHED BY 3.
Catherine A. Swain 1330 (SIGNATURE) (TIME)	S. Terentieff 13:00 (SIGNATURE) (TIME)	(SIGNATURE) 13:05 (TIME)
Cathy Swain 3/27/97 (PRINTED NAME) (DATE)	Serge Terentieff 3/27/97 (PRINTED NAME) (DATE)	Marty Medina 3/27/97 (PRINTED NAME) (DATE)
CH2M Hill (COMPANY)	CH2M Hill (COMPANY)	CH2M Hill (COMPANY)
RECEIVED BY 1.	**RECEIVED BY 2.**	**RECEIVED BY (LABORATORY) 3**
S. Terentieff 1330 (SIGNATURE) (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) 1330 (TIME)
Serge Terentieff 3/27/97 (PRINTED NAME) (DATE)	Marty Medina 13:00 (PRINTED NAME) (DATE)	(PRINTED NAME) 3.27.97 (DATE)
CH2M Hill (COMPANY)	CH2M Hill 3/27/97 (COMPANY)	Chromalab (LAB)

CHROMALAB, INC.

Environmental Services (SDB)

Sample Receipt Checklist

Client Name: CH2M HILL Date/Time Received: 3/27/97 (Date) / 1308 (Time)

Reference/Subm #: 32770/9703392 Received by: BM

Checklist completed by: Chris Rowley 3/28/97 (Signature / Date) Reviewed By: SA 3/28/97 (Initial/Date)

Matrix: Soil Carrier name: Client - (C/E) - _____

Shipping container/cooler in good condition?	Yes ✓	No	Not Present
Custody seals intact on shipping container/cooler?	Yes	No	Not Present ✓
Custody seals intact on sample bottles?	Yes	No	Not Present ✓
Chain of custody present?	Yes ✓	No	
Chain of custody signed when relinquished and received?	Yes ✓	No	
Chain of custody agrees with sample labels?	Yes ✓	No	
Samples in proper container/bottle?	Yes ✓	No	
Sample containers intact?	Yes ✓	No	
Sufficient sample volume for indicated test?	Yes ✓	No	
All samples received within holding time?	Yes ✓	No	
Container/Temp Blank temperature in compliance?	Temp: 6.7 °C Yes ✓	No	
Water - VOA vials have zero headspace?	No VOA vials submitted ✓	Yes	No

Water - pH acceptable upon receipt? ____ adjusted? ____ Checked by _____/chemist for VOAs

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted: _____ Date contacted: _____ Person contacted: _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action: _____

CHROMALAB, INC.

Environmental Services (SDB)

March 27, 1997

Submission #: 9703340
Revised from March 25, 1997

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: March 24, 1997

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* March 25, 1997
Sampled: March 21, 1997 *Run#:* 5909 *Analyzed:* March 25, 1997

Spl# CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
122652 SSCS-300	N.D.	N.D.	N.D.
Reporting Limits	1.0	1.0	50
Blank Result	N.D.	N.D.	N.D.
Blank Spike Result (%)	--	77.9	--

Bruce Havlik
Chemist

Alex Tam
Semivolatiles Supervisor

510-893-8205 GC 03/25

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 25, 1997 *Submission #:* 9703340

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: March 24, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **SSCS-300**
Spl#: 122652 *Matrix:* SOIL
Sampled: March 21, 1997 *Run#:* 5916 *Analyzed:* March 25, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	103	1
BENZENE	N.D.	0.0050	N.D.	102	1
TOLUENE	N.D.	0.0050	N.D.	100	1
ETHYL BENZENE	N.D.	0.0050	N.D.	103	1
XYLENES	N.D.	0.0050	N.D.	103	1

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

510-893-8205

GC V132 Q:BTEXQC0220 KAYVAN 16:42

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(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

03349/122652

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510/484-1919 • Facsimile 510/484-1096

32706

Chain of Custody

DATE March 21, 1997 PAGE 1 OF 1

PROJ. MGR Madeline Wall
COMPANY CH2M HILL
ADDRESS 1111 Broadway, Suite 1200
Oakland, CA 94607

SAMPLERS (SIGNATURE) (PHONE NO.) (FAX NO.)

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPH) (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	HVOCs	LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)			NUMBER OF CONTAINERS
SSCS-300	3/21/97		Soil	none		X	X									X								

ANALYSIS REPORT

SUBM #: 9703340 REP: GC
CLIENT: CH2
DUE: 03/25/97
REF #: 32706

PUSH

PROJECT INFORMATION

PROJECT NAME: Del Monte #35
PROJECT NUMBER: 139769.01.01
P.O. #

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	
HEAD SPACE	
REC'D GOOD CONDITION/COLD	
CONFORMS TO RECORD	

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

SPECIAL INSTRUCTIONS/COMMENTS:

DO NOT RUN HVOC'S

RELINQUISHED BY 1.	RELINQUISHED BY 2.	RELINQUISHED BY 3.
(SIGNATURE) 14:50 (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) 18:10 (TIME)
Margaret Medina 3/21/97 (PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	B. Marra 3.24.97 (PRINTED NAME) (DATE)
CH2M HILL (COMPANY)	(COMPANY)	Cascade (COMPANY)
RECEIVED BY 1.	**RECEIVED BY 2.**	**RECEIVED BY (LABORATORY) 3**
(SIGNATURE) 14:50 (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
B. Marra 3.24.97 (PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	C. Andreotta 18:10 (PRINTED NAME) (DATE)
Cascade (COMPANY)	(COMPANY)	(LAB)

CHROMALAB, INC.

Environmental Services (SDB)

Sample Receipt Checklist

Client Name: CH2MHILL Date/Time Received: 3/24/97 (Date) / 1450 (Time)

Reference/Subm #: 32704/970340 Received by: BM

Checklist completed by: Chris Rowley 3/25/97 (Signature / Date) Reviewed By: SA 8/25/97 (Initial/Date)

Matrix: Soil Carrier name: Client - C/L - _____

Shipping container/cooler in good condition?	Yes ✓	No ___	Not Present ___
Custody seals intact on shipping container/cooler?	Yes ___	No ___	Not Present ✓
Custody seals intact on sample bottles?	Yes ___	No ___	Not Present ✓
Chain of custody present?	Yes ✓	No ___	
Chain of custody signed when relinquished and received?	Yes ✓	No ___	
Chain of custody agrees with sample labels?	Yes ✓	No ___	
Samples in proper container/bottle?	Yes ✓	No ___	
Sample containers intact?	Yes ✓	No ___	
Sufficient sample volume for indicated test?	Yes ✓	No ___	
All samples received within holding time?	Yes ✓	No ___	
Container/Temp Blank temperature in compliance? Temp: 21.7 °C	Yes ___	No ✓	
Water - VOA vials have zero headspace? No VOA vials submitted ✓	Yes ___	No ___	

Water - pH acceptable upon receipt? ___ adjusted? ___ Checked by _____/chemist for VOAs

X

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted: _____ Date contacted: _____ Person contacted: _____

Contacted by: _____ Regarding: _____

Comments: Sample received out of acceptable temp range of 2-8° C

Corrective Action: _____

CHROMALAB, INC.

Environmental Services (SDB)

March 27, 1997

Submission #: 9703292
Revised from March 25, 1997

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 20, 1997

re: 5 samples for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* March 24, 1997
Sampled: March 20, 1997 *Run#:* 5900 *Analyzed:* March 24, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
122147	SSCS-75	N.D.	24	110
	Note: Hydrocarbon reported as Diesel, is in the late Diesel Range and does not match our Diesel Standard.			
122148	SSCS-76	N.D.	N.D.	N.D.
122149	SSCS-76A	N.D.	N.D.	N.D.

Matrix: SOIL *Extracted:* March 24, 1997
Sampled: March 20, 1997 *Run#:* 5900 *Analyzed:* March 25, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
122150	SSCS-99	24	N.D.	170
	Note: Hydrocarbon reported as Kerosene, does not match the pattern of our Kerosene Standard.			
122151	SSCS-100	N.D.	1.2	N.D.
	Note: Hydrocarbon reported as Diesel, does not match the pattern of our Diesel Standard.			
Reporting Limits		1.0	1.0	50
Blank Result		N.D.	N.D.	N.D.
Blank Spike Result (%)		--	70.7	--

Bruce Havlik For
Chemist

Alex Tam
Semivolatiles Supervisor

510-893-8205 GC 03/24

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(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 24, 1997 *Submission #:* 9703292

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 20, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **SSCS-75**
Spl#: 122147 *Matrix:* SOIL
Sampled: March 20, 1997 *Run#:* 5869 *Analyzed:* March 22, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	114	1
BENZENE	N.D.	0.0050	N.D.	96	1
TOLUENE	N.D.	0.0050	N.D.	92	1
ETHYL BENZENE	N.D.	0.0050	N.D.	92	1
XYLENES	0.014	0.0050	N.D.	90	1

Note: Surrogate recovery was outside QA/QC limits due to matrix interference. See Surrogate Summary page.

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

510-883-8205

GCV132O:BTEXQC0220 ALEXANDM 17:01

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Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 24, 1997 *Submission #:* 9703292

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 20, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **SSCS-76**
Spl#: 122148 *Matrix:* SOIL
Sampled: March 20, 1997 *Run#:* 5869 *Analyzed:* March 22, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	114	1
BENZENE	N.D.	0.0050	N.D.	96	1
TOLUENE	N.D.	0.0050	N.D.	92	1
ETHYL BENZENE	N.D.	0.0050	N.D.	92	1
XYLENES	N.D.	0.0050	N.D.	90	1

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

510-893-8205

GC V132 Q:BTEXQC0220 ALEXANDM 17:01

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Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 24, 1997 *Submission #:* 9703292

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 20, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **SSCS-76A**
Spl#: 122149 *Matrix:* SOIL
Sampled: March 20, 1997 *Run#:* 5869 *Analyzed:* March 22, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	114	1
BENZENE	N.D.	0.0050	N.D.	96	1
TOLUENE	N.D.	0.0050	N.D.	92	1
ETHYL BENZENE	0.013	0.0050	N.D.	92	1
XYLENES	0.070	0.0050	N.D.	90	1

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 24, 1997 *Submission #:* 9703292

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 20, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **SSCS-99**
Spl#: 122150 *Matrix:* SOIL
Sampled: March 20, 1997 *Run#:* 5869 *Analyzed:* March 21, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	114	1
BENZENE	N.D.	0.0050	N.D.	96	1
TOLUENE	N.D.	0.0050	N.D.	92	1
ETHYL BENZENE	N.D.	0.0050	N.D.	92	1
XYLENES	0.0072	0.0050	N.D.	90	1

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 24, 1997 *Submission #:* 9703292

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 20, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **SSCS-100**
Spl#: 122151 *Matrix:* SOIL
Sampled: March 20, 1997 *Run#:* 5869 *Analyzed:* March 22, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	114	1
BENZENE	N.D.	0.0050	N.D.	96	1
TOLUENE	N.D.	0.0050	N.D.	92	1
ETHYL BENZENE	N.D.	0.0050	N.D.	92	1
XYLENES	N.D.	0.0050	N.D.	90	1

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 24, 1997 *Submission #:* 9703292

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 20, 1997

re: **Surrogate** report for 5 samples for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod
Lab Run#: 5869
Matrix: SOIL

Sample#	Client Sample ID	Surrogate	% Recovered	Recovery Limits
122147-1	SSCS-75	TRIFLUOROTOLUENE	65.9	65-135
122147-1	SSCS-75	4-BROMOFLUOROBENZENE	246	65-135
122148-1	SSCS-76	TRIFLUOROTOLUENE	77.4	65-135
122148-1	SSCS-76	4-BROMOFLUOROBENZENE	61.2	65-135
122148-2	SSCS-76	TRIFLUOROTOLUENE	103	65-135
122148-2	SSCS-76	4-BROMOFLUOROBENZENE	96.1	65-135
122149-1	SSCS-76A	TRIFLUOROTOLUENE	67.3	65-135
122149-1	SSCS-76A	4-BROMOFLUOROBENZENE	71.3	65-135
122150-1	SSCS-99	TRIFLUOROTOLUENE	88.8	65-135
122150-1	SSCS-99	4-BROMOFLUOROBENZENE	66.3	65-135
122151-1	SSCS-100	TRIFLUOROTOLUENE	69.3	65-135
122151-1	SSCS-100	4-BROMOFLUOROBENZENE	67.0	65-135

Sample#	QC Sample Type	Surrogate	% Recovered	Recovery Limits
122439-1	*Reagent blank (MDB)*	TRIFLUOROTOLUENE	111	65-135
122439-1	*Reagent blank (MDB)*	4-BROMOFLUOROBENZENE	129	65-135
122440-1	*Spiked blank (BSP)*	TRIFLUOROTOLUENE	111	65-135
122440-1	*Spiked blank (BSP)*	4-BROMOFLUOROBENZENE	111	65-135
122441-1	*Spiked blank duplicate (BSD)*	TRIFLUOROTOLUENE	102	65-135
122441-1	*Spiked blank duplicate (BSD)*	4-BROMOFLUOROBENZENE	89.6	65-135
122442-1	*Matrix spike (MS)*	TRIFLUOROTOLUENE	39.6	65-135
122442-1	*Matrix spike (MS)*	4-BROMOFLUOROBENZENE	29.6	65-135
122443-1	*Matrix spike duplicate (MSD)*	TRIFLUOROTOLUENE	68.8	65-135
122443-1	*Matrix spike duplicate (MSD)*	4-BROMOFLUOROBENZENE	38.4	65-135

V132
QCSURR1229 ALEXANDM 24-Mar-97

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(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.
Environmental Services (SDB)

March 24, 1997 *Submission #:* 9703292

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 20, 1997
re: One sample for 8010 Purgeable Halocarbons by GC/MS analysis.
Method: *SW846 Method 8260A Nov 1990*

Client Sample ID: **SSCS-75**
Spl#: 122147 *Matrix:* SOIL
Sampled: March 20, 1997 *Run#:* 5886 *Analyzed:* March 22, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
CHLOROMETHANE	N.D.	10	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
BROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
CHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	10	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	117	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
TRANS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
CIS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	94.9	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
2-CHLOROETHYL VINYL ETHER	N.D.	10	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	98.4	1
BROMOFORM	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1

Note: Internal STD & surrogate recovery was outside QA/QC limits due to matrix interference. Results bias high.

June Zhao
Chemist

Chip Poalinelli
Operations Manager

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 24, 1997 *Submission #:* 9703292

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 20, 1997
re: One sample for 8010 Purgeable Halocarbons by GC/MS analysis.
Method: *SW846 Method 8260A Nov 1990*

Client Sample ID: **SSCS-76**
Spl#: 122148 *Matrix:* SOIL
Sampled: March 20, 1997 *Run#:* 5886 *Analyzed:* March 22, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
CHLOROMETHANE	N.D.	10	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
BROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
CHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	10	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	117	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
TRANS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
CIS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	94.9	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
2-CHLOROETHYL VINYL ETHER	N.D.	10	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	98.4	1
BROMOFORM	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1

Note: Surrogate recovery was outside QA/QC limits due to matrix interference. See Surrogate Summary page.

June Zhao
Chemist

Chip Poalinelli
Operations Manager

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(510) 484-1919 • Facsimile (510) 484-1096
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CHROMALAB, INC.

Environmental Services (SDB)

March 24, 1997 *Submission #:* 9703292

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 20, 1997
re: One sample for 8010 Purgeable Halocarbons by GC/MS analysis.
Method: *SW846 Method 8260A Nov 1990*

Client Sample ID: **SSCS-76A**
Spl#: 122149 *Matrix:* SOIL
Sampled: March 20, 1997 *Run#:* 5886 *Analyzed:* March 22, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
CHLOROMETHANE	N.D.	10	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
BROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
CHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	10	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	117	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
TRANS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
CIS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	94.9	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
2-CHLOROETHYL VINYL ETHER	N.D.	10	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	98.4	1
BROMOFORM	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1

Note: Surrogate recovery was outside QA/QC limits due to matrix interference. See Surrogate Summary page.

June Zhao
Chemist

Chip Poalinelli
Operations Manager

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Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 24, 1997 *Submission #:* 9703292

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 20, 1997
re: One sample for 8010 Purgeable Halocarbons by GC/MS analysis.
Method: *SW846 Method 8260A Nov 1990*

Client Sample ID: **SSCS-99**
Spl#: 122150 *Matrix:* SOIL
Sampled: March 20, 1997 *Run#:* 5886 *Analyzed:* March 22, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
CHLOROMETHANE	N.D.	10	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
BROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
CHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	10	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	117	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
TRANS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
CIS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	94.9	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
2-CHLOROETHYL VINYL ETHER	N.D.	10	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	98.4	1
BROMOFORM	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1

Note: Internal STD & surrogate recovery was outside QA/QC limits due to matrix interference. Results bias high.

June Zhao
Chemist

Chip Poalinelli
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

March 24, 1997 *Submission #:* 9703292

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 20, 1997
re: One sample for 8010 Purgeable Halocarbons by GC/MS analysis.
Method: *SW846 Method 8260A Nov 1990*

Client Sample ID: **SSCS-100**
Spl#: 122151 *Matrix:* SOIL
Sampled: March 20, 1997 *Run#:* 5886 *Analyzed:* March 22, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
CHLOROMETHANE	N.D.	10	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
BROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
CHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	10	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	117	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
TRANS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
CIS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	94.9	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
2-CHLOROETHYL VINYL ETHER	N.D.	10	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	98.4	1
BROMOFORM	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1

Note: Internal STD & surrogate recovery was outside QA/QC limits due to matrix interference. Results bias high.

June Zhao
Chemist

Chip Poalinelli
Operations Manager

CHROMALAB, INC.
Environmental Services (SDB)

March 24, 1997 *Submission #:* 9703292

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 20, 1997

re: **Surrogate** report for 5 samples for 8010 Purgeable Halocarbons by
Method: SW846 Method 8260A Nov 1990
Lab Run#: 5886
Matrix: SOIL

Sample#	Client Sample ID	Surrogate	% Recovered	Recovery Limits
122147-1	SSCS-75	4-BROMOFLOUROBENZENE	86.3	74-121
122147-1	SSCS-75	D4-1,2-DICHLOROETHANE	128	70-121
122147-1	SSCS-75	D8-TOLUENE	102	81-117
122148-1	SSCS-76	4-BROMOFLOUROBENZENE	80.9	74-121
122148-1	SSCS-76	D4-1,2-DICHLOROETHANE	122	70-121
122148-1	SSCS-76	D8-TOLUENE	96.1	81-117
122149-1	SSCS-76A	4-BROMOFLOUROBENZENE	79.5	74-121
122149-1	SSCS-76A	D4-1,2-DICHLOROETHANE	125	70-121
122149-1	SSCS-76A	D8-TOLUENE	84.5	81-117
122150-1	SSCS-99	4-BROMOFLOUROBENZENE	61.7	74-121
122150-1	SSCS-99	D4-1,2-DICHLOROETHANE	150	70-121
122150-1	SSCS-99	D8-TOLUENE	101	81-117
122151-1	SSCS-100	4-BROMOFLOUROBENZENE	80.6	74-121
122151-1	SSCS-100	D4-1,2-DICHLOROETHANE	156	70-121
122151-1	SSCS-100	D8-TOLUENE	111	81-117

Sample#	QC Sample Type	Surrogate	% Recovered	Recovery Limits
122584-1	*Reagent blank (MDB)*	4-BROMOFLOUROBENZENE	82.2	74-121
122584-1	*Reagent blank (MDB)*	D4-1,2-DICHLOROETHANE	118	70-121
122584-1	*Reagent blank (MDB)*	D8-TOLUENE	98.1	81-117
122585-1	*Spiked blank (BSP)*	4-BROMOFLOUROBENZENE	78.8	74-121
122585-1	*Spiked blank (BSP)*	D4-1,2-DICHLOROETHANE	102	70-121
122585-1	*Spiked blank (BSP)*	D8-TOLUENE	94.6	81-117
122586-1	*Spiked blank duplicate (BSD)*	4-BROMOFLOUROBENZENE	84.4	74-121
122586-1	*Spiked blank duplicate (BSD)*	D4-1,2-DICHLOROETHANE	114	70-121
122586-1	*Spiked blank duplicate (BSD)*	D8-TOLUENE	94.7	81-117
122587-1	*Matrix spike (MS)*	4-BROMOFLOUROBENZENE	55.4	74-121
122587-1	*Matrix spike (MS)*	D4-1,2-DICHLOROETHANE	154	70-121
122587-1	*Matrix spike (MS)*	D8-TOLUENE	107	81-117
122588-1	*Matrix spike duplicate (MSD)*	4-BROMOFLOUROBENZENE	50.0	74-121

V035
QCSURR1229 JIEWEI 24-Mar-97 14:0

CHROMALAB, INC.

Environmental Services (SDB)

March 24, 1997

Submission #: 9703292

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 20, 1997

re: **Surrogate** report for 5 samples for 8010 Purgeable Halocarbons by
Method: SW846 Method 8260A Nov 1990
Lab Run#: 5886

122588-1	*Matrix spike duplicate (MSD)* D4-1,2-DICHLOROETHANE	158	70-121
122588-1	*Matrix spike duplicate (MSD)* D8-TOLUENE	107	81-117

V035
QCSURR1229 JIEWEI 24-Mar-97 14:0

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

SUBM #: 9703292 REP: GC
CLIENT: CH2
DUE: 03/24/97
REF #: 32654

Chain of Custody

DATE March 20, 1997 PAGE 1 OF 1

PROJ. MGR Madeline Wall
COMPANY CH2M HILL
ADDRESS 1111 Broadway, Suite 1200
Oakland, CA 94607

SAMPLERS (SIGNATURE)

(PHONE NO.) (510) 251-2426
(FAX NO.) (510) 893-8205

ANALYSIS REPORT

SAMPLE ID	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (TEPH) (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	HVOCs	LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)			NUMBER OF CONTAINERS
SSCS-75	3/20/97	11:15	Soil	none		X	X									X								1
SSCS-76	3/20/97	11:10	Soil	none		X	X									X								1
SSCS-76a	3/20/97	11:05	Soil	none		X	X									X								1
SSCS-99	3/20/97	11:30	Soil	none		X	X									X								1
SSCS-100	3/20/97	11:35	Soil	none		X	X									X								1

RUSH

PROJECT INFORMATION

PROJECT NAME: Del Monte Plant #35
PROJECT NUMBER: 139769.01.01
P.O. #

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	5
HEAD SPACE	
REC'D GOOD CONDITION/COLD	
CONFORMS TO RECORD	

TAT: STANDARD 5-DAY | 24 | (48) | 72 | OTHER

SPECIAL INSTRUCTIONS/COMMENTS:
TAT changed from 72 hrs to 48 hrs.

RELINQUISHED BY 1.	RELINQUISHED BY 2.	RELINQUISHED BY 3.
(SIGNATURE) 16:40 (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) 6740 (TIME)
(PRINTED NAME) Marty Medina 3/20/97 (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) G Moore 3-20-97 (DATE)
(COMPANY) CH2M Hill	(COMPANY)	(COMPANY) Chromalab
RECEIVED BY 1.	**RECEIVED BY 2.**	**RECEIVED BY (LABORATORY) 3.**
(SIGNATURE) 1642 (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) 17:40 (TIME)
(PRINTED NAME) G Moore 3-20-97 (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) Rudo Nyachoto 3/20/97 (DATE)
(COMPANY) Chromalab	(COMPANY)	(LAB) Chroma Lab

CHROMALAB, INC.
Environmental Service (SDB)

Sample Receipt Checklist

Client Name: CH2M Hill Date/Time Received: 3-20-97 (Date) 17:40 (Time)

Reference/Subm #: 9703292 Received by: Rudo Nyachoto

Checklist completed by: Wendy Cardue (Signature) 3-21-97 (Date) Reviewed By: CDA 3/21/97 (Initial/Date)

Matrix: Soil Carrier name: Client - (C/L) - _____

Shipping container/cooler in good condition?	Yes___	No___	Not Present ✓
Custody seals intact on shipping container/cooler?	Yes___	No___	Not Present ✓
Custody seals intact on sample bottles?	Yes___	No___	Not Present ✓
Chain of custody present?	Yes ✓	No___	
Chain of custody signed when relinquished and received?	Yes ✓	No___	
Chain of custody agrees with sample labels?	Yes ✓	No___	
Samples in proper container/bottle?	Yes ✓	No___	
Sample containers intact?	Yes ✓	No___	
Sufficient sample volume for indicated test?	Yes ✓	No___	
All samples received within holding time?	Yes ✓	No___	
Container/Temp Blank temperature in compliance?	Temp: 8.0 °C Yes ✓	No___	
Water - VOA vials have zero headspace?	No VOA vials submitted___	Yes___	No___

Water - pH acceptable upon receipt?____adjusted?____Checked by_____/chemist for VOAs

Any No and/or NA (not applicable) response must be detailed in the comments section below.

==========

Client contacted: _____ Date contacted: _____ Person contacted: _____

Contacted by: _____ Regarding: _____

Comments: _____

_____

_____

Corrective Action: _____

_____

_____

CHROMALAB, INC.

Environmental Services (SDB)

March 27, 1997

Submission #: 9703250
Revised from March 25, 1997

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 19, 1997

re: 4 samples for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* March 20, 1997
Sampled: March 18, 1997 *Run#:* 5839 *Analyzed:* March 24, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
121838	SSCS-56 b	N.D.	90	290
	Note: Hydrocarbon reported as Diesel, is in the late Diesel Range and does not match our Diesel Standard.			
121839	SSCS-98	N.D.	59	110
	Note: Hydrocarbon reported as Diesel, is in the late Diesel Range and does not match our Diesel Standard.			
121840	SSHS-110	N.D.	N.D.	N.D.
121841	SSHS-111	N.D.	390	990
	Note: Hydrocarbon reported as Diesel, does not match the pattern of our Diesel Standard.			
Reporting Limits		10	10	200
Blank Result			N.D.	N.D.
Blank Spike Result (%)		--	64.5	--

Bruce Havlik For
Chemist

Alex Tam
Semivolatiles Supervisor

510-893-8205 GC 03/24

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 24, 1997 *Submission #:* 9703250

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 19, 1997
re: One sample for 8010 Purgeable Halocarbons by GC/MS analysis.
Method: *SW846 Method 8260A Nov 1990*

Client Sample ID: **SSCS-98**
Spl#: 121839 *Matrix:* SOIL
Sampled: March 18, 1997 *Run#:* 5886 *Analyzed:* March 22, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
CHLOROMETHANE	N.D.	10	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
BROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
CHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	10	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	117	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
TRANS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
CIS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	94.9	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
2-CHLOROETHYL VINYL ETHER	N.D.	10	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	98.4	1
BROMOFORM	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1

Note: Internal STD & surrogate recovery was outside QA/QC limits due to matrix interference. Results bias high.

June Zhao
Chemist

Chip Poalinelli
Operations Manager

CHROMALAB, INC.
Environmental Services (SDB)

March 24, 1997 *Submission #:* 9703250

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 19, 1997
re: One sample for 8010 Purgeable Halocarbons by GC/MS analysis.
Method: *SW846 Method 8260A Nov 1990*

Client Sample ID: **SSHS-110**
Spl#: 121840 *Matrix:* SOIL
Sampled: March 18, 1997 *Run#:* 5886 *Analyzed:* March 22, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
CHLOROMETHANE	N.D.	10	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
BROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
CHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	10	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	117	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
TRANS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
CIS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	94.9	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
2-CHLOROETHYL VINYL ETHER	N.D.	10	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	98.4	1
BROMOFORM	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1

Note: Internal STD & surrogate recovery was outside QA/QC limits due to matrix interference. Results bias high.

June Zhao
Chemist

Chip Poalinelli
Operations Manager

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 24, 1997 *Submission #:* 9703250

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 19, 1997
re: One sample for 8010 Purgeable Halocarbons by GC/MS analysis.
Method: *SW846 Method 8260A Nov 1990*

Client Sample ID: **SSHS-111**
Spl#: 121841 *Matrix:* SOIL
Sampled: March 18, 1997 *Run#:* 5886 *Analyzed:* March 22, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
CHLOROMETHANE	N.D.	10	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
BROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
CHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	10	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	117	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
TRANS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
CIS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	94.9	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
2-CHLOROETHYL VINYL ETHER	N.D.	10	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	98.4	1
BROMOFORM	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1

Note: Internal STD & surrogate recovery was outside QA/QC limits due to matrix interference. Results bias high.

June Zhao
Chemist

Chip Poalinelli
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

March 24, 1997 *Submission #:* 9703250

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 19, 1997

re: **Surrogate** report for 3 samples for 8010 Purgeable Halocarbons by
Method: SW846 Method 8260A Nov 1990
Lab Run#: 5886
Matrix: SOIL

Sample#	Client Sample ID	Surrogate	% Recovered	Recovery Limits
121839-1	SSCS-98	4-BROMOFLOUROBENZENE	58.1	74-121
121839-1	SSCS-98	D4-1,2-DICHLOROETHANE	152	70-121
121839-1	SSCS-98	D8-TOLUENE	108	81-117
121840-1	SSHS-110	4-BROMOFLOUROBENZENE	94.5	74-121
121840-1	SSHS-110	D4-1,2-DICHLOROETHANE	139	70-121
121840-1	SSHS-110	D8-TOLUENE	108	81-117
121841-1	SSHS-111	4-BROMOFLOUROBENZENE	85.2	74-121
121841-1	SSHS-111	D4-1,2-DICHLOROETHANE	146	70-121
121841-1	SSHS-111	D8-TOLUENE	96.5	81-117

Sample#	QC Sample Type	Surrogate	% Recovered	Recovery Limits
122584-1	*Reagent blank (MDB)*	4-BROMOFLOUROBENZENE	82.2	74-121
122584-1	*Reagent blank (MDB)*	D4-1,2-DICHLOROETHANE	118	70-121
122584-1	*Reagent blank (MDB)*	D8-TOLUENE	98.1	81-117
122585-1	*Spiked blank (BSP)*	4-BROMOFLOUROBENZENE	78.8	74-121
122585-1	*Spiked blank (BSP)*	D4-1,2-DICHLOROETHANE	102	70-121
122585-1	*Spiked blank (BSP)*	D8-TOLUENE	94.6	81-117
122586-1	*Spiked blank duplicate (BSD)*	4-BROMOFLOUROBENZENE	84.4	74-121
122586-1	*Spiked blank duplicate (BSD)*	D4-1,2-DICHLOROETHANE	114	70-121
122586-1	*Spiked blank duplicate (BSD)*	D8-TOLUENE	94.7	81-117
122587-1	*Matrix spike (MS)*	4-BROMOFLOUROBENZENE	55.4	74-121
122587-1	*Matrix spike (MS)*	D4-1,2-DICHLOROETHANE	154	70-121
122587-1	*Matrix spike (MS)*	D8-TOLUENE	107	81-117
122588-1	*Matrix spike duplicate (MSD)*	4-BROMOFLOUROBENZENE	50.0	74-121
122588-1	*Matrix spike duplicate (MSD)*	D4-1,2-DICHLOROETHANE	158	70-121
122588-1	*Matrix spike duplicate (MSD)*	D8-TOLUENE	107	81-117

V035
QCSURR1229 JIEWEI 24-Mar-97 14:0

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 24, 1997

Submission #: 9703250

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 19, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **SSCS-98**
Spl#: 121839 *Matrix:* SOIL
Sampled: March 18, 1997 *Run#:* 5869 *Analyzed:* March 21, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	114	1
BENZENE	N.D.	0.0050	N.D.	96	1
TOLUENE	N.D.	0.0050	N.D.	92	1
ETHYL BENZENE	0.0050	0.0050	N.D.	92	1
XYLENES	0.017	0.0050	N.D.	90	1

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

1220 Quarry Lane • Pleasanton, California 94566-4756
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CHROMALAB, INC.

Environmental Services (SDB)

March 24, 1997 *Submission #:* 9703250

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 19, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **SSHS-110**
Spl#: 121840 *Matrix:* SOIL
Sampled: March 18, 1997 *Run#:* 5869 *Analyzed:* March 21, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	114	1
BENZENE	N.D.	0.0050	N.D.	96	1
TOLUENE	N.D.	0.0050	N.D.	92	1
ETHYL BENZENE	N.D.	0.0050	N.D.	92	1
XYLENES	N.D.	0.0050	N.D.	90	1

Note: Surrogate recovery was outside QA/QC limits due to matrix interference. See Surrogate Summary page.

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 24, 1997 *Submission #:* 9703250

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 19, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **SSHS-111**
Spl#: 121841 *Matrix:* SOIL
Sampled: March 18, 1997 *Run#:* 5869 *Analyzed:* March 21, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	114	1
BENZENE	N.D.	0.0050	N.D.	96	1
TOLUENE	N.D.	0.0050	N.D.	92	1
ETHYL BENZENE	N.D.	0.0050	N.D.	92	1
XYLENES	N.D.	0.0050	N.D.	90	1

Note: Surrogate recovery was outside QA/QC limits due to matrix interference. See Surrogate Summary page.

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

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(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 24, 1997 *Submission #:* 9703250

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 19, 1997

re: **Surrogate** report for 3 samples for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod
Lab Run#: 5869
Matrix: SOIL

Sample#	Client Sample ID	Surrogate	% Recovered	Recovery Limits
121839-1	SSCS-98	TRIFLUOROTOLUENE	67.7	65-135
121839-1	SSCS-98	4-BROMOFLUOROBENZENE	72.8	65-135
121840-1	SSHS-110	TRIFLUOROTOLUENE	92.5	65-135
121840-1	SSHS-110	4-BROMOFLUOROBENZENE	155	65-135
121841-1	SSHS-111	TRIFLUOROTOLUENE	67.4	65-135
121841-1	SSHS-111	4-BROMOFLUOROBENZENE	397	65-135

Sample#	QC Sample Type	Surrogate	% Recovered	Recovery Limits
122439-1	*Reagent blank (MDB)*	TRIFLUOROTOLUENE	111	65-135
122439-1	*Reagent blank (MDB)*	4-BROMOFLUOROBENZENE	129	65-135
122440-1	*Spiked blank (BSP)*	TRIFLUOROTOLUENE	111	65-135
122440-1	*Spiked blank (BSP)*	4-BROMOFLUOROBENZENE	111	65-135
122441-1	*Spiked blank duplicate (BSD)*	TRIFLUOROTOLUENE	102	65-135
122441-1	*Spiked blank duplicate (BSD)*	4-BROMOFLUOROBENZENE	89.6	65-135
122442-1	*Matrix spike (MS)*	TRIFLUOROTOLUENE	39.6	65-135
122442-1	*Matrix spike (MS)*	4-BROMOFLUOROBENZENE	29.6	65-135
122443-1	*Matrix spike duplicate (MSD)*	TRIFLUOROTOLUENE	68.8	65-135
122443-1	*Matrix spike duplicate (MSD)*	4-BROMOFLUOROBENZENE	38.4	65-135

V132
QCSURR1229 ALEXANDM 24-Mar-97

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(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 24, 1997 *Submission #:* 9703250

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 19, 1997

re: One sample for CAM 17 METALS analysis.
Method: *EPA 3050A/6010A/7471A Nov 1990*

Client Sample ID: **RBRICK 1**
Spl#: 121842 *Matrix:* SOIL *Extracted:* March 24, 1997
Sampled: March 18, 1997 *Run#:* 5875 *Analyzed:* March 24, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
ANTIMONY	N.D.	2.0	N.D.	103	1
ARSENIC	4.3	1.0	N.D.	109	1
BARIUM	82	1.0	N.D.	105	1
BERYLLIUM	N.D.	0.50	N.D.	106	1
CADMIUM	N.D.	0.50	N.D.	105	1
CHROMIUM	14	1.0	N.D.	106	1
COBALT	4.5	1.0	N.D.	103	1
COPPER	44	1.0	N.D.	95.1	1
LEAD	13	1.0	N.D.	107	1
MOLYBDENUM	N.D.	1.0	N.D.	107	1
NICKEL	20	1.0	N.D.	105	1
SELENIUM	N.D.	2.0	N.D.	107	1
SILVER	N.D.	1.0	N.D.	94.1	1
THALLIUM	N.D.	1.0	N.D.	108	1
VANADIUM	20	1.0	N.D.	105	1
ZINC	44	1.0	N.D.	106	1
MERCURY	0.057	0.050	N.D.	94.8	1

Mercury extracted on March 24, 1997 and analyzed on March 24, 1997.

Charles Woolley
Chemist

John S. Labash
Inorganic Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

March 24, 1997 *Submission #:* 9703250

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 19, 1997

re: One sample for CAM 17 METALS analysis.
Method: *EPA 3050A/6010A/7471A Nov 1990*

Client Sample ID: **RBRICK 2**
Spl#: 121843 *Matrix:* SOIL *Extracted:* March 24, 1997
Sampled: March 18, 1997 *Run#:* 5875 *Analyzed:* March 24, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
ANTIMONY	N.D.	2.0	N.D.	103	1
ARSENIC	3.9	1.0	N.D.	109	1
BARIUM	32	1.0	N.D.	105	1
BERYLLIUM	N.D.	0.50	N.D.	106	1
CADMIUM	N.D.	0.50	N.D.	105	1
CHROMIUM	3.3	1.0	N.D.	106	1
COBALT	N.D.	1.0	N.D.	103	1
COPPER	10	1.0	N.D.	95.1	1
LEAD	8.3	1.0	N.D.	107	1
MOLYBDENUM	N.D.	1.0	N.D.	107	1
NICKEL	5.9	1.0	N.D.	105	1
SELENIUM	N.D.	2.0	N.D.	107	1
SILVER	N.D.	1.0	N.D.	94.1	1
THALLIUM	N.D.	1.0	N.D.	108	1
VANADIUM	8.8	1.0	N.D.	105	1
ZINC	11	1.0	N.D.	106	1
MERCURY	N.D.	0.050	N.D.	94.8	1

Mercury extracted on March 24, 1997 and analyzed on March 24, 1997.

Charles Woolley
Chemist

John S. Labash
Inorganic Supervisor

32611

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

SUBM #: 9703250 REP: GC
CLIENT: CH2
DUE: 03/24/97
REF #: 32611

Chain of Custody

DATE March 18, 1997 PAGE 1 OF 1

PROJ. MGR Madeline Wall
COMPANY CH2M HILL
ADDRESS 1111 Broadway, Suite 1200
Oakland, CA 94607

SAMPLERS (SIGNATURE) Catherine A. Swain (PHONE NO.) (510) 251-2426 (FAX NO.) (510) 893-0203

ANALYSIS REPORT

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (TEPH) (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	HVOCs	LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)				NUMBER OF CONTAINERS
SSCS-56b	3/18/97	3:42	soil	none			X																		1
SSCS-98	3/18/97	3:30	soil	none		X	X									X									1
SSHS-110	3/18/97	4:00	soil	none		X	X									X									1
SSHS-111	3/18/97	4:03	soil	none		X	X									X									1
rbrick 1	3/18/97	3:45	soil	none															X						12
rbrick 2	3/18/97	3:50	soil	none															X						1

RUSH

PROJECT INFORMATION

PROJECT NAME: Del Monte Plant 35
PROJECT NUMBER: 139769.01.01
P.O. #:

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	6
HEAD SPACE	
REC'D GOOD CONDITION/COLD	
CONFORMS TO RECORD	

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

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY 1	RELINQUISHED BY 2	RELINQUISHED BY 3
Catherine A. Swain 1200	Catherine A. Swain 1342	1630
(SIGNATURE) (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
Catherine A. Swain 3/18/97	Cathy Swain 3/19/97	E. Morrow 3/19/97
(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
CH2M HILL	CH2M HILL	Chromalab
(COMPANY)	(COMPANY)	(COMPANY)
RECEIVED BY 1	**RECEIVED BY 2**	**RECEIVED BY (LABORATORY) 3**
(SIGNATURE) (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
E. Morrow 1342		C. Andreotta 16:30
(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
E. Morrow 3-19-97		C. Andreotta 3/19/97
(COMPANY)	(COMPANY)	(LAB)
Chromalab		

CHROMALAB, INC.
Environmental Service (SDB)

Sample Receipt Checklist

Client Name: CH2M Hill Date/Time Received: 3-19-97 (Date) / 10:30 (Time)

Reference/Subm #: 9703250 Received by: C. Andreeta

Checklist completed by: Wendy Cardoe (Signature) / 3-21-97 (Date) Reviewed By: CDA 3/21/97 (Initial/Date)

Matrix: Soil Carrier name: Client (C/L) -

Shipping container/cooler in good condition?	Yes___	No___	Not Present ✓
Custody seals intact on shipping container/cooler?	Yes___	No___	Not Present ✓
Custody seals intact on sample bottles?	Yes___	No___	Not Present ✓
Chain of custody present?	Yes ✓	No___	
Chain of custody signed when relinquished and received?	Yes ✓	No___	
Chain of custody agrees with sample labels?	Yes ✓	No___	
Samples in proper container/bottle?	Yes ✓	No___	
Sample containers intact?	Yes ✓	No___	
Sufficient sample volume for indicated test?	Yes ✓	No___	
All samples received within holding time?	Yes ✓	No___	
Container/Temp Blank temperature in compliance?	Temp: 4.0 °C Yes ✓	No___	
Water - VOA vials have zero headspace?	No VOA vials submitted___	Yes___	No___

Water - pH acceptable upon receipt?___ adjusted?___ Checked by___/chemist for VOAs

Any No and/or NA (not applicable) response must be detailed in the comments section below.

==========

Client contacted: _____ Date contacted: _____ Person contacted: _____

Contacted by: _____ Regarding: _____

Comments: _____

_____

_____

Corrective Action: _____

_____

_____

CHROMALAB, INC.

Environmental Services (SDB)

March 7, 1997

Submission #: 9703060

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 6, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **SSCS-48**
Spl#: 120159 *Matrix:* SOIL
Sampled: March 6, 1997 *Run#:* 5617 *Analyzed:* March 6, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	95	1
BENZENE	N.D.	0.0050	N.D.	96	1
TOLUENE	N.D.	0.0050	N.D.	94	1
ETHYL BENZENE	0.011	0.0050	N.D.	99	1
XYLENES	0.058	0.0050	N.D.	99	1

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

510-893-8205

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 7, 1997 *Submission #:* 9703060

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 6, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **SSCS-56**
Spl#: 120160 *Matrix:* SOIL
Sampled: March 6, 1997 *Run#:* 5617 *Analyzed:* March 6, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	95	1
BENZENE	N.D.	0.0050	N.D.	96	1
TOLUENE	N.D.	0.0050	N.D.	94	1
ETHYL BENZENE	N.D.	0.0050	N.D.	99	1
XYLENES	0.016	0.0050	N.D.	99	1

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

510-893-8205

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 7, 1997 *Submission #:* 9703060

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 6, 1997

re: 2 samples for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* March 7, 1997
Sampled: March 6, 1997 *Run#:* 5619 *Analyzed:* March 7, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
120159	SSCS-48	N.D.	200	410
	Note: Hydrocarbon reported as Diesel, is in the late Diesel Range and does not match our Diesel Standard.			
120160	SSCS-56	N.D.	160	620
	Note: Hydrocarbon reported as Diesel, is in the late Diesel Range and does not match our Diesel Standard.			
Reporting Limits		20	20	400
Blank Result		N.D.	N.D.	N.D.
Blank Spike Result (%)		--	84.5	--

Bruce Havlik
Chemist

Alex Tam
Semivolatiles Supervisor

510-893-8205 GC 03/07

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 7, 1997 *Submission #:* 9703060

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 6, 1997

re: One sample for 8010 Purgeable Halocarbons by GC/MS analysis.
Method: *SW846 Method 8240A Nov 1990*

Client Sample ID: **SSCS-48**
Spl#: 120159 *Matrix:* SOIL
Sampled: March 6, 1997 *Run#:* 5623 *Analyzed:* March 6, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
CHLOROMETHANE	N.D.	10	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
BROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
CHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	10	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	118	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
TRANS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
CIS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	117	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
2-CHLOROETHYL VINYL ETHER	N.D.	10	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	114	1
BROMOFORM	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1

Note: Internal STD & surrogate recovery was outside QA/QC limits due to matrix interference. Results bias high.

June Zhao
Chemist

Chip Poalinelli
Operations Manager

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 7, 1997 *Submission #:* 9703060

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 6, 1997

re: One sample for 8010 Purgeable Halocarbons by GC/MS analysis.
Method: *SW846 Method 8240A Nov 1990*

Client Sample ID: **SSCS-56**
Spl#: 120160 *Matrix:* SOIL
Sampled: March 6, 1997 *Run#:* 5623 *Analyzed:* March 6, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
CHLOROMETHANE	N.D.	10	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
BROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
CHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	10	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	118	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
TRANS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
CIS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	117	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
2-CHLOROETHYL VINYL ETHER	N.D.	10	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	114	1
BROMOFORM	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1

Note: Surrogate recovery was outside QA/QC limits due to matrix interference. See Surrogate Summary page.

June Zhao
Chemist

Chip Poalinelli
Operations Manager for

510-893-8205 GC 03/07

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 7, 1997 *Submission #:* 9703060

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE PLANT #35 *Project#:* 139769.01.01
Received: March 6, 1997

re: **Surrogate** report for 2 samples for 8010 Purgeable Halocarbons by
Method: SW846 Method 8240A Nov 1990
Lab Run#: 5623
Matrix: SOIL

Sample#	Client Sample ID	Surrogate	% Recovered	Recovery Limits
120159-1	SSCS-48	4-BROMOFLOUROBENZENE	118	74-121
120159-1	SSCS-48	D4-1,2-DICHLOROETHANE	110	70-121
120159-1	SSCS-48	D8-TOLUENE	128	81-117
120160-1	SSCS-56	4-BROMOFLOUROBENZENE	109	74-121
120160-1	SSCS-56	D4-1,2-DICHLOROETHANE	112	70-121
120160-1	SSCS-56	D8-TOLUENE	126	81-117
120312-1	*Reagent blank (MDB)*	4-BROMOFLOUROBENZENE	111	74-121
120312-1	*Reagent blank (MDB)*	D4-1,2-DICHLOROETHANE	113	70-121
120312-1	*Reagent blank (MDB)*	D8-TOLUENE	116	81-117
120316-1	*Spiked blank (BSP)*	4-BROMOFLOUROBENZENE	105	74-121
120316-1	*Spiked blank (BSP)*	D4-1,2-DICHLOROETHANE	105	70-121
120316-1	*Spiked blank (BSP)*	D8-TOLUENE	103	81-117
120317-1	*Spiked blank duplicate (BSD)*	4-BROMOFLOUROBENZENE	105	74-121
120317-1	*Spiked blank duplicate (BSD)*	D4-1,2-DICHLOROETHANE	113	70-121
120317-1	*Spiked blank duplicate (BSD)*	D8-TOLUENE	112	81-117
120318-1	*Matrix spike (MS)*	4-BROMOFLOUROBENZENE	104	74-121
120318-1	*Matrix spike (MS)*	D4-1,2-DICHLOROETHANE	119	70-121
120318-1	*Matrix spike (MS)*	D8-TOLUENE	108	81-117
120319-1	*Matrix spike duplicate (MSD)*	4-BROMOFLOUROBENZENE	102	74-121
120319-1	*Matrix spike duplicate (MSD)*	D4-1,2-DICHLOROETHANE	119	70-121
120319-1	*Matrix spike duplicate (MSD)*	D8-TOLUENE	112	81-117

V035
QCSURR1229 JIEWEI 07-Mar-97 16:5

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

060 | 120159 - 120160

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

SUBN #: 9703060 REP: GC
CLIENT: CH2
DUE: 03/07/97
REP #: 32387

32387

Chain of Custody

DATE March 6, 1997 PAGE 1 OF 1

PROJ. MGR Madeline Wall
COMPANY CH2M HILL
ADDRESS 1111 Broadway, Suite 1200
Oakland, CA 94607

SAMPLERS (SIGNATURE) Catherine A. Swain
(PHONE NO.) (510) 251-2426
(FAX NO.) (510) 893-8205

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPH) (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	HVOCs	LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)				NUMBER OF CONTAINERS
SSCS-48	3/6/97	1:45	Soil	none		X	X									X									1
SSCS-56	3/6/97	1:40	Soil	none		X	X									X									1

RUSH

PROJECT INFORMATION

PROJECT NAME: Del Monte Plant #35
PROJECT NUMBER: 139769.01.01
P.O. #

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	2
HEAD SPACE	
REC'D GOOD CONDITION/COLD	
CONFORMS TO RECORD	

TAT	STANDARD 5-DAY			24	48	72	OTHER

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY 1.	RELINQUISHED BY 2.	RELINQUISHED BY 3.
(SIGNATURE) Catherine A. Swain (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
(PRINTED NAME) Cathy Swain (DATE) 3/6/97	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
(COMPANY) CH2M HILL 1445	(COMPANY)	(COMPANY)
RECEIVED BY 1	**RECEIVED BY 2**	**RECEIVED BY (LABORATORY) 3**
(SIGNATURE) (TIME)	(SIGNATURE) (TIME)	Mimi Pak 1445
(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	(SIGNATURE) Mimi Pak (TIME) 3/6/97
(COMPANY)	(COMPANY)	(PRINTED NAME) Chromalab (DATE)
		(LAB)

CHROMALAB, INC.

Environmental Services (SDB)

March 4, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **SSHS-103**
Spl#: 119249 *Matrix:* SOIL
Sampled: February 27, 1997 *Run#:* 5579 *Analyzed:* March 4, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	110	1
BENZENE	N.D.	0.0050	N.D.	102	1
TOLUENE	N.D.	0.0050	N.D.	96	1
ETHYL BENZENE	N.D.	0.0050	N.D.	102	1
XYLENES	N.D.	0.0050	N.D.	96	1

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

510-893-8205

1220 Quarry Lane • Pleasanton, California 94566-4756 0220
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

VINCE 15:18

CHROMALAB, INC.

Environmental Services (SDB)

March 4, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* February 27, 1997
Sampled: February 27, 1997 *Run#:* 5532 *Analyzed:* February 28, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
119249	SSHS-103	N.D.	13	68

Note: Hydrocarbon reported as Diesel, is in the late Diesel range and does not match our Diesel standard.

Reporting Limits	1.0	1.0	50
Blank Result	N.D.	N.D.	N.D.
Blank Spike Result (%)	--	74.1	--

Bruce Havlik
Chemist

Alex Tam
Semivolatiles Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

March 4, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **SSHS-103**
Spl#: 119249 *Matrix:* SOIL
Sampled: February 27, 1997 *Run#:* 5578 *Analyzed:* March 3, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	109	1
CHLOROETHANE	N.D.	5.0	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	10	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	111	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	103	1
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1

June Zhao
Chemist

Chip Poalinelli
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

February 28, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: One sample for Miscellaneous Metals analysis.
Method: *EPA 3050A/6010A Nov 1990*

Client Sample ID: **SSHS-103**
Spl#: 119249 *Matrix:* SOIL *Extracted:* February 28, 1997
Sampled: February 27, 1997 *Run#:* 5508 *Analyzed:* February 28, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
CHROMIUM	18	1.0	N.D.	99.0	1
LEAD	3.6	1.0	N.D.	99.3	1

Charles Woolley
Chemist

John S. Labash
Inorganic Supervisor

510-893-8205 GC 03/03

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **X-1**
Spl#: 119236 *Matrix:* SOIL
Sampled: February 27, 1997 *Run#:* 5546 *Analyzed:* March 1, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	102	1
BENZENE	N.D.	0.0050	N.D.	100	1
TOLUENE	N.D.	0.0050	N.D.	96	1
ETHYL BENZENE	N.D.	0.0050	N.D.	102	1
XYLENES	N.D.	0.0050	N.D.	96	1

Note: Surrogate recovery was outside QA/QC limits due to matrix interference. See Surrogate Summary page.

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

510-893-8205

1220 Quarry Lane • Pleasanton, California 94566-4756 C0220
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

KAYVAN 20:09

CHROMALAB, INC.

Environmental Services (SDB)

March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **X-2**
Spl#: 119237 *Matrix:* SOIL
Sampled: February 27, 1997 *Run#:* 5546 *Analyzed:* March 1, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	102	1
BENZENE	N.D.	0.0050	N.D.	100	1
TOLUENE	N.D.	0.0050	N.D.	96	1
ETHYL BENZENE	N.D.	0.0050	N.D.	102	1
XYLENES	N.D.	0.0050	N.D.	96	1

Note: Surrogate recovery was outside QA/QC limits due to matrix interference. See Surrogate Summary page.

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **X-3**
Spl#: 119238 *Matrix:* SOIL
Sampled: February 27, 1997 *Run#:* 5546 *Analyzed:* March 1, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	102	1
BENZENE	N.D.	0.0050	N.D.	100	1
TOLUENE	N.D.	0.0050	N.D.	96	1
ETHYL BENZENE	N.D.	0.0050	N.D.	102	1
XYLENES	N.D.	0.0050	N.D.	96	1

Note: Surrogate recovery was outside QA/QC limits due to matrix interference. See Surrogate Summary page.

Kayvan Kimyai
Chemist

for
Marianne Alexander
Gas/BTEX Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **X-4**
Spl#: 119239 *Matrix:* SOIL
Sampled: February 27, 1997 *Run#:* 5546 *Analyzed:* March 1, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	102	1
BENZENE	N.D.	0.0050	N.D.	100	1
TOLUENE	N.D.	0.0050	N.D.	96	1
ETHYL BENZENE	N.D.	0.0050	N.D.	102	1
XYLENES	N.D.	0.0050	N.D.	96	1

Note: Surrogate recovery was outside QA/QC limits due to matrix interference. See Surrogate Summary page.

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

510-883-8205

1220 Quarry Lane • Pleasanton, California 94566-4756 CA0220
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

KAYVAN 20:09

CHROMALAB, INC.

Environmental Services (SDB)

March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **X-5**
Spl#: 119240 *Matrix:* SOIL
Sampled: February 27, 1997 *Run#:* 5542 *Analyzed:* February 28, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	--	1
BENZENE	N.D.	0.0050	N.D.	100	1
TOLUENE	N.D.	0.0050	N.D.	100	1
ETHYL BENZENE	N.D.	0.0050	N.D.	104	1
XYLENES	N.D.	0.0050	N.D.	105	1

Note: Surrogate recovery was outside QA/QC limits due to matrix interference. See Surrogate Summary page.

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

510-893-8205

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **S4**
Spl#: 119241 *Matrix:* SOIL
Sampled: February 27, 1997 *Run#:* 5541 *Analyzed:* February 27, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	93	1
BENZENE	N.D.	0.0050	N.D.	96	1
TOLUENE	N.D.	0.0050	N.D.	94	1
ETHYL BENZENE	N.D.	0.0050	N.D.	99	1
XYLENES	N.D.	0.0050	N.D.	91	1

Note: Surrogate recovery was outside QA/QC limits due to matrix interference. See Surrogate Summary page.

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

510-893-8205

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **S5**
Spl#: 119242 *Matrix:* SOIL
Sampled: February 27, 1997 *Run#:* 5541 *Analyzed:* February 28, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	93	1
BENZENE	N.D.	0.0050	N.D.	96	1
TOLUENE	N.D.	0.0050	N.D.	94	1
ETHYL BENZENE	N.D.	0.0050	N.D.	99	1
XYLENES	N.D.	0.0050	N.D.	91	1

Note: Surrogate recovery was outside QA/QC limits due to matrix interference. See Surrogate Summary page.

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

510-893-8205

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **S6**
Spl#: 119243 *Matrix:* SOIL
Sampled: February 27, 1997 *Run#:* 5541 *Analyzed:* February 28, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	93	1
BENZENE	N.D.	0.0050	N.D.	96	1
TOLUENE	N.D.	0.0050	N.D.	94	1
ETHYL BENZENE	N.D.	0.0050	N.D.	99	1
XYLENES	N.D.	0.0050	N.D.	91	1

Note: Surrogate recovery was outside QA/QC limits due to matrix interference. See Surrogate Summary page.

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

510-893-8205

1220 Quarry Lane • Pleasanton, California 94566-4756C0220
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

KAYVAN 20:09

CHROMALAB, INC.

Environmental Services (SDB)

March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **SB-7**
Spl#: 119244 *Matrix:* SOIL
Sampled: February 27, 1997 *Run#:* 5541 *Analyzed:* February 28, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	93	1
BENZENE	N.D.	0.0050	N.D.	96	1
TOLUENE	N.D.	0.0050	N.D.	94	1
ETHYL BENZENE	N.D.	0.0050	N.D.	99	1
XYLENES	N.D.	0.0050	N.D.	91	1

Note: Surrogate recovery was outside QA/QC limits due to matrix interference. See Surrogate Summary page.

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

510-883-8205

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **SB-2**
Spl#: 119245 *Matrix:* SOIL
Sampled: February 27, 1997 *Run#:* 5546 *Analyzed:* February 28, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	102	1
BENZENE	N.D.	0.0050	N.D.	100	1
TOLUENE	N.D.	0.0050	N.D.	96	1
ETHYL BENZENE	N.D.	0.0050	N.D.	102	1
XYLENES	N.D.	0.0050	N.D.	96	1

Note: Surrogate recovery was outside QA/QC limits due to matrix interference. See Surrogate Summary page.

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **SSHS-6**
Spl#: 119246 *Matrix:* SOIL
Sampled: February 27, 1997 *Run#:* 5546 *Analyzed:* February 28, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	102	1
BENZENE	N.D.	0.0050	N.D.	100	1
TOLUENE	0.010	0.0050	N.D.	96	1
ETHYL BENZENE	0.15	0.0050	N.D.	102	1
XYLENES	1.2	0.0050	N.D.	96	1

Note: Surrogate recovery was outside QA/QC limits due to matrix interference. See Surrogate Summary page.

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

510-883-8205

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **SSHS-27**
Spl#: 119247 *Matrix:* SOIL
Sampled: February 27, 1997 *Run#:* 5546 *Analyzed:* February 28, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	102	1
BENZENE	N.D.	0.0050	N.D.	100	1
TOLUENE	N.D.	0.0050	N.D.	96	1
ETHYL BENZENE	N.D.	0.0050	N.D.	102	1
XYLENES	N.D.	0.0050	N.D.	96	1

Note: Surrogate recovery was outside QA/QC limits due to matrix interference. See Surrogate Summary page.

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **SSHS-30**
Spl#: 119248 *Matrix:* SOIL
Sampled: February 27, 1997 *Run#:* 5546 *Analyzed:* February 28, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	102	1
BENZENE	N.D.	0.0050	N.D.	100	1
TOLUENE	N.D.	0.0050	N.D.	96	1
ETHYL BENZENE	N.D.	0.0050	N.D.	102	1
XYLENES	N.D.	0.0050	N.D.	96	1

Note: Surrogate recovery was outside QA/QC limits due to matrix interference. See Surrogate Summary page.

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

510-893-8205

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: **Surrogate** report for 4 samples for Purgeable Volatile Aromatic
Method: SW846 8020A Nov 1990 / 8015Mod
Lab Run#: 5541
Matrix: SOIL

Sample#	Client Sample ID	Surrogate	% Recovered	Recovery Limits
119241-1	S4	TRIFLUOROTOLUENE	72.8	65-135
119241-1	S4	4-BROMOFLUOROBENZENE	49.1	65-135
119242-1	S5	TRIFLUOROTOLUENE	58.7	65-135
119242-1	S5	4-BROMOFLUOROBENZENE	27.4	65-135
119243-1	S6	TRIFLUOROTOLUENE	57.4	65-135
119243-1	S6	4-BROMOFLUOROBENZENE	30.8	65-135
119244-1	SB-7	TRIFLUOROTOLUENE	68.0	65-135
119244-1	SB-7	4-BROMOFLUOROBENZENE	27.6	65-135

Sample#	QC Sample Type	Surrogate	% Recovered	Recovery Limits
119528-1	*Reagent blank (MDB)*	TRIFLUOROTOLUENE	93.2	65-135
119528-1	*Reagent blank (MDB)*	4-BROMOFLUOROBENZENE	100	65-135
119529-1	*Spiked blank (BSP)*	TRIFLUOROTOLUENE	100	65-135
119529-1	*Spiked blank (BSP)*	4-BROMOFLUOROBENZENE	109	65-135
119530-1	*Spiked blank duplicate (BSD)*	TRIFLUOROTOLUENE	96.2	65-135
119530-1	*Spiked blank duplicate (BSD)*	4-BROMOFLUOROBENZENE	98.8	65-135
119531-1	*Matrix spike (MS)*	TRIFLUOROTOLUENE	59.7	65-135
119531-1	*Matrix spike (MS)*	4-BROMOFLUOROBENZENE	38.0	65-135
119532-1	*Matrix spike duplicate (MSD)*	TRIFLUOROTOLUENE	57.0	65-135
119532-1	*Matrix spike duplicate (MSD)*	4-BROMOFLUOROBENZENE	33.9	65-135

V128
QCSURR1229 KAYVAN 01-Mar-97 20

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: **Surrogate** report for 1 sample for Purgeable Volatile Aromatic
Method: SW846 8020A Nov 1990 / 8015Mod
Lab Run#: 5542
Matrix: SOIL

Sample#	Client Sample ID	Surrogate	% Recovered	Recovery Limits
119240-1	X-5	TRIFLUOROTOLUENE	62.7	65-135
119240-1	X-5	4-BROMOFLUOROBENZENE	197	65-135

Sample#	QC Sample Type	Surrogate	% Recovered	Recovery Limits
119533-1	*Reagent blank (MDB)*	TRIFLUOROTOLUENE	99.3	65-135
119533-1	*Reagent blank (MDB)*	4-BROMOFLUOROBENZENE	103	65-135
119536-1	*Spiked blank (BSP)*	TRIFLUOROTOLUENE	120	65-135
119536-1	*Spiked blank (BSP)*	4-BROMOFLUOROBENZENE	104	65-135
119537-1	*Spiked blank duplicate (BSD)*	TRIFLUOROTOLUENE	104	65-135
119537-1	*Spiked blank duplicate (BSD)*	4-BROMOFLUOROBENZENE	87.1	65-135

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1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: **Surrogate** report for 8 samples for Purgeable Volatile Aromatic
Method: SW846 8020A Nov 1990 / 8015Mod
Lab Run#: 5546
Matrix: SOIL

Sample#	Client Sample ID	Surrogate	% Recovered	Recovery Limits
119236-1	X-1	TRIFLUOROTOLUENE	52.4	65-135
119236-1	X-1	4-BROMOFLUOROBENZENE	29.7	65-135
119237-1	X-2	TRIFLUOROTOLUENE	61.2	65-135
119237-1	X-2	4-BROMOFLUOROBENZENE	36.1	65-135
119238-1	X-3	TRIFLUOROTOLUENE	63.2	65-135
119238-1	X-3	4-BROMOFLUOROBENZENE	30.3	65-135
119239-1	X-4	TRIFLUOROTOLUENE	59.3	65-135
119239-1	X-4	4-BROMOFLUOROBENZENE	30.9	65-135
119245-1	SB-2	TRIFLUOROTOLUENE	62.1	65-135
119245-1	SB-2	4-BROMOFLUOROBENZENE	33.8	65-135
119246-1	SSHS-6	TRIFLUOROTOLUENE	86.0	65-135
119246-1	SSHS-6	4-BROMOFLUOROBENZENE	8830	65-135
119247-1	SSHS-27	TRIFLUOROTOLUENE	59.8	65-135
119247-1	SSHS-27	4-BROMOFLUOROBENZENE	40.0	65-135
119248-1	SSHS-30	TRIFLUOROTOLUENE	50.2	65-135
119248-1	SSHS-30	4-BROMOFLUOROBENZENE	63.1	65-135

Sample#	QC Sample Type	Surrogate	% Recovered	Recovery Limits
119548-1	*Reagent blank (MDB)*	TRIFLUOROTOLUENE	100	65-135
119548-1	*Reagent blank (MDB)*	4-BROMOFLUOROBENZENE	105	65-135
119549-1	*Spiked blank (BSP)*	TRIFLUOROTOLUENE	102	65-135
119549-1	*Spiked blank (BSP)*	4-BROMOFLUOROBENZENE	96.0	65-135
119550-1	*Spiked blank duplicate (BSD)*	TRIFLUOROTOLUENE	103	65-135
119550-1	*Spiked blank duplicate (BSD)*	4-BROMOFLUOROBENZENE	96.2	65-135
119551-1	*Matrix spike (MS)*	TRIFLUOROTOLUENE	10.3	65-135
119551-1	*Matrix spike (MS)*	4-BROMOFLUOROBENZENE	4.50	65-135
119552-1	*Matrix spike duplicate (MSD)*	TRIFLUOROTOLUENE	55.2	65-135
119552-1	*Matrix spike duplicate (MSD)*	4-BROMOFLUOROBENZENE	31.9	65-135

V128
QCSURR1229 KAYVAN 01-Mar-97 20

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Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 1, 1997

Submission #: 9702331

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: **Surrogate** report for 8 samples for Purgeable Volatile Aromatic
Method: SW846 8020A Nov 1990 / 8015Mod
Lab Run#: 5546

V12B
QCSURR1229 KAYVAN 01-Mar-97 2(

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March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* February 27, 1997
Sampled: February 27, 1997 *Run#:* 5532 *Analyzed:* March 1, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
119236	X-1	N.D.	470	N.D.
	Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.			
	Reporting Limits	100	100	5000
	Blank Result	N.D.	N.D.	N.D.
	Blank Spike Result (%)	--	74.1	--

Bruce Havlik
Chemist

Alex Tam
Semivolatiles Supervisor

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
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March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* February 27, 1997
Sampled: February 27, 1997 *Run#:* 5532 *Analyzed:* February 28, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
119237	X-2	N.D.	13	N.D.
	Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.			
Reporting Limits		4.0	4.0	200
Blank Result		N.D.	N.D.	N.D.
Blank Spike Result (%)		--	74.1	--

Bruce Havlik FOR
Chemist

Alex Tam
Semivolatiles Supervisor

1220 Quarry Lane • Pleasanton, California 94566-4756
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Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* February 27, 1997
Sampled: February 27, 1997 *Run#:* 5532 *Analyzed:* February 28, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
119238	X-3	N.D.	82	N.D.

Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.

Reporting Limits	20	20	1000
Blank Result	N.D.	N.D.	N.D.
Blank Spike Result (%)	--	74.1	--

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Alex Tam
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Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* February 27, 1997
Sampled: February 27, 1997 *Run#:* 5532 *Analyzed:* February 28, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
119239	X-4	N.D.	6.8	50
	Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.			
Reporting Limits		1.0	1.0	50
Blank Result		N.D.	N.D.	N.D.
Blank Spike Result (%)		--	74.1	--

Bruce Havlik
Chemist

Alex Tam
Semivolatiles Supervisor

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Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* February 27, 1997
Sampled: February 27, 1997 *Run#:* 5532 *Analyzed:* February 28, 1997

Spl# CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
119240 X-5	N.D.	N.D.	N.D.
Reporting Limits	1.0	1.0	50
Blank Result	N.D.	N.D.	N.D.
Blank Spike Result (%)	--	74.1	--

Bruce Havlik FR
Chemist

Alex Tam
Semivolatiles Supervisor

510-893-8205 GC 03/03

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* February 27, 1997
Sampled: February 27, 1997 *Run#:* 5532 *Analyzed:* February 28, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
119241	S4	N.D.	200	N.D.
	Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.			
Reporting Limits		40	40	2000
Blank Result		N.D.	N.D.	N.D.
Blank Spike Result (%)		--	74.1	--

Bruce Havlik for
Chemist

Alex Tam
Semivolatiles Supervisor

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March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND

Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* February 27, 1997
Sampled: February 27, 1997 *Run#:* 5532 *Analyzed:* February 28, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
119242	S5	N.D.	140	1400
	Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.			
Reporting Limits		20	20	1000
Blank Result		N.D.	N.D.	N.D.
Blank Spike Result (%)		--	74.1	--

Bruce Havlik
Chemist

Alex Tam
Semivolatiles Supervisor

510-893-8205 GC 03/03

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March 1, 1997 *Submission #:* 9702331

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Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* February 27, 1997
Sampled: February 27, 1997 *Run#:* 5532 *Analyzed:* February 28, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
119243	S6	N.D.	180	2000
	Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.			
Reporting Limits		20	20	1000
Blank Result		N.D.	N.D.	N.D.
Blank Spike Result (%)		--	74.1	--

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Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* February 27, 1997
Sampled: February 27, 1997 *Run#:* 5532 *Analyzed:* February 28, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
119244	SB-7	N.D.	9.5	120
	Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.			
Reporting Limits		2.0	2.0	100
Blank Result		N.D.	N.D.	N.D.
Blank Spike Result (%)		--	74.1	--

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Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* February 27, 1997
Sampled: February 27, 1997 *Run#:* 5532 *Analyzed:* February 28, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
119245	SB-2	N.D.	7.0	N.D.
	Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.			
Reporting Limits		1.0	1.0	50
Blank Result		N.D.	N.D.	N.D.
Blank Spike Result (%)		--	74.1	--

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Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* February 27, 1997
Sampled: February 27, 1997 *Run#:* 5532 *Analyzed:* February 28, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
119246	SSHS-6	N.D.	900	N.D.

Note: Reported concentration estimated due to overlapping fuel patterns.

Reporting Limits	20	20	1000
Blank Result	N.D.	N.D.	N.D.
Blank Spike Result (%)	--	74.1	--

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Alex Tam
Semivolatiles Supervisor

510-893-8205 GC 03/03

1220 Quarry Lane • Pleasanton, California 94566-4756
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Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* February 27, 1997
Sampled: February 27, 1997 *Run#:* 5532 *Analyzed:* February 28, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
119247	SSHS-27	N.D.	87	N.D.

Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.

Reporting Limits	10	10	500
Blank Result	N.D.	N.D.	N.D.
Blank Spike Result (%)	--	74.1	--

Bruce Havlik for
Chemist

Alex Tam
Semivolatiles Supervisor

510-893-8205 GC 03/03

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
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Atten: Madeline Wall

Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* February 27, 1997
Sampled: February 27, 1997 *Run#:* 5532 *Analyzed:* February 28, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
119248	SSHS-30	N.D.	46	N.D.

Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.

Reporting Limits	10	10	500
Blank Result	N.D.	N.D.	N.D.
Blank Spike Result (%)	--	74.1	--

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March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **X-1**
Spl#: 119236 *Matrix:* SOIL
Sampled: February 27, 1997 *Run#:* 5539 *Analyzed:* February 28, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	102	1
CHLOROETHANE	N.D.	5.0	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	10	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	115	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	94.4	1
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1

June Zhao
Chemist

Chip Poalinelli
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **X-2**
Spl#: 119237 *Matrix:* SOIL
Sampled: February 27, 1997 *Run#:* 5539 *Analyzed:* February 28, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	102	1
CHLOROETHANE	N.D.	5.0	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	10	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	115	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	94.4	1
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1

June Zhao
Chemist

Chip Poalinelli
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **X-3**
Spl#: 119238 *Matrix:* SOIL
Sampled: February 27, 1997 *Run#:* 5539 *Analyzed:* February 28, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	102	1
CHLOROETHANE	N.D.	5.0	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	10	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	115	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	94.4	1
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1

June Zhao
Chemist

Chip Poalinelli
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **X-4**
Spl#: 119239 *Matrix:* SOIL
Sampled: February 27, 1997 *Run#:* 5539 *Analyzed:* February 28, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	102	1
CHLOROETHANE	N.D.	5.0	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	10	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	115	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	94.4	1
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1

Note: Internal STD & surrogate recovery was outside QA/QC limits due to matrix interference. Results bias high.

June Zhao
Chemist

Chip Poalinelli
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **X-5**
Spl#: 119240 *Matrix:* SOIL
Sampled: February 27, 1997 *Run#:* 5539 *Analyzed:* February 28, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	102	1
CHLOROETHANE	N.D.	5.0	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	10	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	115	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	94.4	1
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1

Note: Internal STD recovery was outside QA/QC limits due to matrix interference. Results bias high.

June Zhao
Chemist

Chip Poalinelli
Operations Manager

510-893-8205 GC 03/03

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **S4**
Spl#: 119241 *Matrix:* SOIL
Sampled: February 27, 1997 *Run#:* 5539 *Analyzed:* February 28, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	102	1
CHLOROETHANE	N.D.	5.0	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	10	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	115	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	94.4	1
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1

Note: Internal STD recovery was outside QA/QC limits due to matrix interference. Results bias high.

June Zhao
Chemist

Chip Poalinelli
Operations Manager

510-893-8205 GC 03/03

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **S5**
Spl#: 119242 *Matrix:* SOIL
Sampled: February 27, 1997 *Run#:* 5540 *Analyzed:* February 27, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	110	1
CHLOROETHANE	N.D.	5.0	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	10	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	114	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	97.9	1
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1

Note: Internal STD & surrogate recovery was outside QA/QC limits due to matrix interference. Results bias high.

June Zhao
Chemist

Chip Poalinelli
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **S6**
Spl#: 119243 *Matrix:* SOIL
Sampled: February 27, 1997 *Run#:* 5540 *Analyzed:* February 27, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	110	1
CHLOROETHANE	N.D.	5.0	N.D.	--	1
2-CHLOROETHYL VINYLETHER	N.D.	10	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	114	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	97.9	1
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1

Note: Internal STD & surrogate recovery was outside QA/QC limits due to matrix interference.Results bias high.

June Zhao
Chemist

Chip Poalinelli
Operations Manager

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **SB-7**
Spl#: 119244 *Matrix:* SOIL
Sampled: February 27, 1997 *Run#:* 5540 *Analyzed:* February 27, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	110	1
CHLOROETHANE	N.D.	5.0	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	10	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	114	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	97.9	1
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1

Note: Internal STD recovery was outside QA/QC limits due to matrix interference. Results bias high.

June Zhao
Chemist

Chip Poalinelli
Operations Manager

CHROMALAB, INC.
Environmental Services (SDB)

March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **SB-2**
Spl#: 119245 *Matrix:* SOIL
Sampled: February 27, 1997 *Run#:* 5540 *Analyzed:* February 27, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	110	1
CHLOROETHANE	N.D.	5.0	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	10	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	114	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	97.9	1
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1

Note: Internal STD & surrogate recovery was outside QA/QC limits due to matrix interference. Results bias high.

June Zhao
Chemist

Chip Poalinelli
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **SSHS-6**
Spl#: 119246 *Matrix:* SOIL
Sampled: February 27, 1997 *Run#:* 5540 *Analyzed:* February 28, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	110	1
CHLOROETHANE	N.D.	5.0	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	10	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	114	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	97.9	1
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1

Note: Internal STD recovery was outside QA/QC limits due to matrix interference. Results bias high.

June Zhao
Chemist

Chip Poalinelli
Operations Manager

510-893-8205 GC 03/03

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **SSHS-27**
Spl#: 119247 *Matrix:* SOIL
Sampled: February 27, 1997 *Run#:* 5540 *Analyzed:* February 28, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	110	1
CHLOROETHANE	N.D.	5.0	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	10	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	114	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	97.9	1
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1

Note: Internal STD recovery was outside QA/QC limits due to matrix interference. Results bias high.

June Zhao
Chemist

Chip Poalinelli
Operations Manager

510-893-8205 GC 03/03

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

March 1, 1997 *Submission #:* 9702331

CH2M HILL OAKLAND
Atten: Madeline Wall
Project: DEL MONTE #35 *Project#:* 139769.01.01
Received: February 27, 1997
re: One sample for Volatile Organics by GC/MS analysis.
Method: *SW846 METHOD 8240A Nov 1990*

Client Sample ID: **SSHS-30**
Spl#: 119248 *Matrix:* SOIL
Sampled: February 27, 1997 *Run#:* 5540 *Analyzed:* February 28, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	110	1
CHLOROETHANE	N.D.	5.0	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	10	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	114	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	97.9	1
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1

Note: Internal STD & surrogate recovery was outside QA/QC limits due to matrix interference. Results bias high.

June Zhao
Chemist

Chip Poalinelli
Operations Manager

510-893-8205 GC 03103

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

331/119236-119249

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

SUBM #: 9702331 REP: GC
CLIENT: CH2
DUE: 03/03/97
REF #:32256

32256

Chain of Custody

DATE February 27, 1997 PAGE 1 OF 2

PROJ. MGR Madeline Wall
COMPANY CH2M HILL
ADDRESS 1111 Broadway, Suite 1200
Oakland, CA ~~94612~~ 94607

SAMPLERS (SIGNATURE) [signature]
(PHONE NO.) (510)251-2426
(FAX NO.) (510)893-8205

ANALYSIS REPORT

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel, (TEPH) (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	HVOCs	LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)			NUMBER OF CONTAINERS
X-1	2/27/97	11:04	Soil	none		X	X									X								1
X-2	2/27/97	10:41	↓	↓		X	X									X								1
X-3	2/27/97	10:33				X	X									X								1
X-4	2/27/97	10:04				X	X									X								1
X-5	2/27/97	9:57				X	X									X								1
S4	2/27/97	10:54				X	X									X								1
S5	2/27/97	10:48				X	X									X								1
S6	2/27/97	10:11				X	X									X								1
SB-7	2/27/97	9:42	↓	↓		X	X									X								1

RUSH

PROJECT INFORMATION

PROJECT NAME: Del Monte #35
PROJECT NUMBER: 139769.01.01
P.O. #

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	9
HEAD SPACE	
REC'D GOOD CONDITION/COLD	
CONFORMS TO RECORD	

TAT	STANDARD 5-DAY			(24)	48	72	OTHER

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY 1.	RELINQUISHED BY 2.	RELINQUISHED BY 3.
(SIGNATURE) [signature] (TIME) 1:24	(SIGNATURE) Gary Cook (TIME) 14:05	(SIGNATURE) (TIME)
(PRINTED NAME) Cris Wiffenegger (DATE) 2/27/97	(PRINTED NAME) Gary Cook (DATE) 2/27/97	(PRINTED NAME) (DATE)
(COMPANY) CH2M HILL	(COMPANY) C Lab	(COMPANY)

RECEIVED BY 1.	RECEIVED BY 2.	RECEIVED BY (LABORATORY) 3.
(SIGNATURE) Gary Cook (TIME) 13:24	(SIGNATURE) (TIME)	(SIGNATURE) Mimie Pak (TIME) 1405
(PRINTED NAME) Gary Cook (DATE) 2/27/97	(PRINTED NAME) (DATE)	(PRINTED NAME) Mimie Pak (DATE) 2/27/97
(COMPANY) C Lab	(COMPANY)	(LAB) Chromalab

32256

9702331

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

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

Chain of Custody

DATE February 27, 1997 PAGE 2 OF 2

PROJ. MGR Madeline Wall
COMPANY CH2M HILL
ADDRESS 1111 Broadway, Suite 1200
Oakland, CA 94607

SAMPLERS (SIGNATURE)

(PHONE NO.) (510) 251-2426
(FAX NO.) (510) 893-9505

ANALYSIS REPORT

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (TEPH) (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	HVOCs	LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)			NUMBER OF CONTAINERS
SB-2	2/27/97	11:09	Soil	None		X	X									X				RUSH				1
SSHS-6	2/27/97	12:00				X	X									X								1
SSHS-27	2/27/97	11:17				X	X									X								1
SSHS-30	2/27/97	11:21				X	X									X								1
SSHS-103	2/27/97	11:00				X	X									X								1

PROJECT INFORMATION

PROJECT NAME: Del Monte #36
PROJECT NUMBER 139769.01.01
P.O. #

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	5
HEAD SPACE	
REC'D GOOD CONDITION/COLD	
CONFORMS TO RECORD	

TAT	STANDARD 5-DAY			(24)	48	72	OTHER

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY 1.
(SIGNATURE) 2/27/97 (TIME)
Kris Kjenegger 1:24 (PRINTED NAME) (DATE)
CH2M Hill (COMPANY)

RELINQUISHED BY 2.
Gary Cook 14:05 (SIGNATURE) (TIME)
Gary Cook 2/27/97 (PRINTED NAME) (DATE)
CLab (COMPANY)

RELINQUISHED BY 3.
(SIGNATURE) (TIME)
(PRINTED NAME) (DATE)
(COMPANY)

RECEIVED BY 1.
Gary Cook 13:24 (SIGNATURE) (TIME)
Gary Cook 2/27/97 (PRINTED NAME) (DATE)
Clab (COMPANY)

RECEIVED BY 2.
(SIGNATURE) (TIME)
(PRINTED NAME) (DATE)
(COMPANY)

RECEIVED BY (LABORATORY) 3
Mimie Pak 1405 (SIGNATURE) (TIME)
Mimie Pak 2/27/97 (PRINTED NAME) (DATE)
Chromalab (LAB)

CH2MHILL Engineers Planners Economists Scientists

FAX

Fax #: 484-1096
To: Criselda
Company: Chromalab, Inc.

Total Pages: 1
From: Cathy Swain
Fax #: 510-893-8205
Date: 3/3/97

Message:

Hi Criselda!

Oops! I goofed. Please run SSHS-103 for TPH-gas/BTEX, TPH-diesel, motor, and HVOCs (in addition to the lead and chromium from last Thursday).

Thanks!

Cathy Swain

RE: Submission # 9702331
24 hr TAT please

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

ADD ON/CHANGE ORDER

~~New~~ Submission No: 9702331

Order No: 32756

Original Submission Info

Client Name: CH2M HILL

Project Mgr: Madeline Wall

Project Name: Del Monte #35

Project No: 139769.01.01

PO#:

Date Received:

Submission No: 9702331

Name of Caller: Cathy Swain

Call Date: 3/3/97 Time:

Add on Due Date: 3/4/97 Date Sampled

Comments:

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel, (EPH) (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	HVOCs	LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)				NUMBER OF CONTAINERS
SSHS-103	2/27/97		Soil			X	X									X									

RUSH

9702331

CH2MHILL

2485 Natomas Park Drive, Suite 600
Sacramento, California 95833-2937

Phone: 916/920-0300
Fax: 916/920-8463

Fax: (510) 484-1096
To: Gary Cook
Company: Chromalab
Verification:

Total Pages: 1
From: Cathy Swain
Project #: 139769.01.01
Date: 2/28/97

Message:

Gary -

Here is a confirmation request from our telephone conversation yesterday:

Please change the analysis for Sample SSHS-103 from TPH-gas/BTEX, TPH-diesel, motor oil, and tHVOCs to lead and chromium (only).

Thanks! Cathy

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

ADD ON/CHANGE ORDER

~~New~~ Submission No: 9702331

Order No: _____

Original Submission Info

Client Name: CH2M

Project Mgr: Cathy Swain

Project Name: _____

Project No: _____

PO#: _____

Date Received: _____

Submission No: _____

Name of Caller: Cathy Swain

Call Date: _____ Time: _____

Add on Due Date: _____ Date Sampled _____

Comments: Delete G/B, TEPH, HVOC's

_____

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel, TEPH (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)		LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)	Cr, Pb			NUMBER OF CONTAINERS
SSHS 103	2/27		S	—																		X			

CHROMALAB, INC.

Environmental Service (SCB)

Sample Receipt Checklist

Client Name: CH2M Date/Time Received: 2/27/97 (Date) / 1324 (Time)

Reference/Subm #: 32256 | 9702331 Received by: G. Cook

Checklist completed by: Mimie Park (Signature) / 2/28/97 (Date) Reviewed By: CR 2/28/97 (Initial/Date)

Matrix: SOIL Carrier name: Client (C/L) _____

Shipping container/cooler in good condition?	Yes ✓	No ___	Not Present ___
Custody seals intact on shipping container/cooler?	Yes ___	No ___	Not Present ✓
Custody seals intact on sample bottles?	Yes ___	No ___	Not Present ✓
Chain of custody present?	Yes ✓	No ___	
Chain of custody signed when relinquished and received?	Yes ✓	No ___	
Chain of custody agrees with sample labels?	Yes ✓	No ___	
Samples in proper container/bottle?	Yes ✓	No ___	
Sample containers intact?	Yes ✓	No ___	
Sufficient sample volume for indicated test?	Yes ✓	No ___	
All samples received within holding time?	Yes ✓	No ___	
Container/Temp Blank temperature in compliance?	Temp: 4.8 °C Yes ✓	No ___	
Water - VOA vials have zero headspace?	No VOA vials submitted ✓	Yes ___	No ___

Water - pH acceptable upon receipt? ___ adjusted? ___ Checked by ___ /chemist for VOAs

Any No and/or NA (not applicable) response must be detailed in the comments section below.

==========

Client contacted: _____ Date contacted: _____ Person contacted: _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action: _____

Appendix D
Groundwater Extraction and Treatment System Dismantlement—Analytical Results

CHROMALAB, INC.

Environmental Services (SDB)

March 28, 1997 *Submission #:* 970332C

DECON ENV. SERVICES, INC.
Atten: Jason Gulbransen
Project: DELMONTE #35 *Project#:* 1774
Received: March 21, 1997
re: One sample for 8010 Purgeable Halocarbons by GC/MS analysis.
Method: SW846 Method 8260A Nov 1990

Client Sample ID: **TANK SEDIMENT**
Spl#: 122453 *Matrix:* SOLID
Sampled: March 21, 1997 *Run#:* 5986 *Analyzed:* March 28, 1997

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
CHLOROMETHANE	N.D.	10	N.D.	--	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
BROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
CHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	10	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	107	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
TRANS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
CIS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	105	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
2-CHLOROETHYL VINYL ETHER	N.D.	10	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	105	1
CHLOROBENZENE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1

June Zhao
Chemist

Chip Pontinelli
Operations Manager

CHROMALAB, INC.

Environmental Services (SCB)

March 28, 1997

Submission #: 9703320

DECON ENV. SERVICES, INC.

Atten: Jason Gulbransen

Project: DELMONTE #35
Received: March 21, 1997

Project#: 1774

re: One sample for BTEX analysis.
Method: SW846 8020A Nov 1990

Client Sample ID: TANK SEDIMENT
Spl#: 122453
Sampled: March 21, 1997

Matrix: SOLID
Run#: 5987

Analyzed: March 28, 1997

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BENZENE	N.D.	0.0050	N.D.	102	1
TOLUENE	N.D.	0.0050	N.D.	98	1
ETHYL BENZENE	N.D.	0.0050	N.D.	106	1
XYLENES	N.D.	0.0050	N.D.	100	1

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

U.S. FILTER/WESTATES
2130 IEO AVENUE
LOS ANGELES, CA 90040

TELEPHONE 213-722-7500
FACSIMILE 213-722-8207

ANALYTICAL REPORT

Customer: Del Monte	Lab I.D. #: 6780
Project#:	Date Reported: 03/28/97
Address: 4204 Hollis Street Emeryville, CA	Date Sampled: 03/21/97
	Date Received: 03/25/97
WES Contact: Keith Jones	Date Analyzed: 03/26/97
Sampler:	Date Extracted: 03/26/97

TCLP VOLATILES BY EPA 624
PURGEABLE ORGANICS

compound	cas #	concentration (mg/L)	limit of detection (mg/L)	TCLP limits (mg/L)
Vinyl Chloride	75-01-4	<0.03	0.03	0.2
1,1-Dichloroethene	75-35-4	<0.005	0.005	0.7
Chloroform	67-66-3	<0.005	0.005	6.0
1,2-Dichloroethane	107-06-2	<0.005	0.005	0.5
2-Butanone	78-93-3	<0.50	0.50	200
Carbon Tetrachloride	56-23-5	<0.01	0.010	0.5
Trichloroethene	79-01-6	<0.005	0.005	0.5
Benzene	71-43-2	<0.005	0.005	0.5
Tetrachloroethene	127-18-4	<0.005	0.005	0.7
Chlorobenzene	108-90-7	<0.005	0.005	100

The volatile organic analyses was extracted using a Zero Headspace Toxicity Characteristic Leaching Procedure (TCLP). The leachate was prepared according to the procedure as listed in the 49CFR March 29 and June 29 1990 Federal Registers.

A sample is considered to have failed the volatile TCLP test and is considered a hazardous waste if any of the volatile compounds exceed the maxima limits as listed in the last column. These limits have been taken from the March 29, Federal Register , pp 11845-6.

Respectfully submitted,

James R. Graham, M.D Technical Director

Appendix E
Monitoring Well Abandonment Permits and Correspondence

ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE, PLEASANTON, CALIFORNIA 94588-5127 PHONE (510) 484-2600 X23
FAX (510) 462-3914

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT DEL MONTE PLANT 35
HOLLIS & HOLDEN & PARK STREETS
EMERYVILLE

California Coordinates Source _____ ft. Accuracy ± _____ ft.
CCN _____ ft. CCE _____ ft.
APN SEE ATTACHED MAPS

CLIENT
Name DEL MONTE FOODS
Address P.O. BOX 193575 Phone _____
City SAN FRANCISCO Zip 94119-3595

APPLICANT
Name CH2M HILL
Fax 510-293-8205
Address 1111 BROADWAY - SUITE 1701 Phone 510-251-2426
City OAKLAND Zip 94607-4096

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	☐	General	☐
Water Supply	☐	Contamination	☐
Monitoring	☐	Well Destruction	☑

PRESSURE GROUT

PROPOSED WATER SUPPLY WELL USE

New Domestic	☐	Replacement Domestic	☐
Municipal	☐	Irrigation	☐
Industrial	☐	Other _____	☐

DRILLING METHOD:

Mud Rotary	☐	Air Rotary	☐	Auger	☐
Cable	☐	Other	☐		

DRILLER'S LICENSE NO. 485165

WELL PROJECTS SEE ATTACHED SHEET

Drill Hole Diameter	_____ in.	Maximum Depth	26 ft.
Casing Diameter	1 & 2 in.		
Surface Seal Depth	_____ ft.	Number	13

GEOTECHNICAL PROJECTS

Number of Borings	_____	Maximum Depth	_____ ft.
Hole Diameter	_____ in.		

ESTIMATED STARTING DATE 1/29/97 - 1/31/97
ESTIMATED COMPLETION DATE 1/30/97 - 2/2/97

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE _____ Date 1/24/97

FOR OFFICE USE

PERMIT NUMBER 97071
WELL NUMBER 1S/4W 22G80 to 22G92
APN _____

PERMIT CONDITIONS

Circled Permit Requirements Apply

(A.) GENERAL
1. A permit application should be submitted so as to ar Zone 7 office five days prior to proposed starting d
2. Submit to Zone 7 within 60 days after completion of work the original Department of Water Resources W Drillers Report or equivalent for well projects, or d and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days a date.

B. WATER SUPPLY WELLS
1. Minimum surface seal thickness is two inches of cem placed by tremie.
2. Minimum seal depth is 50 feet for municipal and walls or 20 feet for domestic and irrigation wells lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cem placed by tremie.
2. Minimum seal depth for monitoring wells is the depth practicable or 20 feet.

D. GEOTECHNICAL. Backfill bore hole with compacted c heavy bentonite and upper two feet with compacted ma areas of known or suspected contamination, tremie grout shall be used in place of compacted cuttings.

E. CATHODIC. Fill hole above anode zone with concrete tremie.

(F.) WELL DESTRUCTION. See attached.

G. SPECIAL CONDITIONS

Approved Wyman Hong Date 3 Feb
Wyman Hong

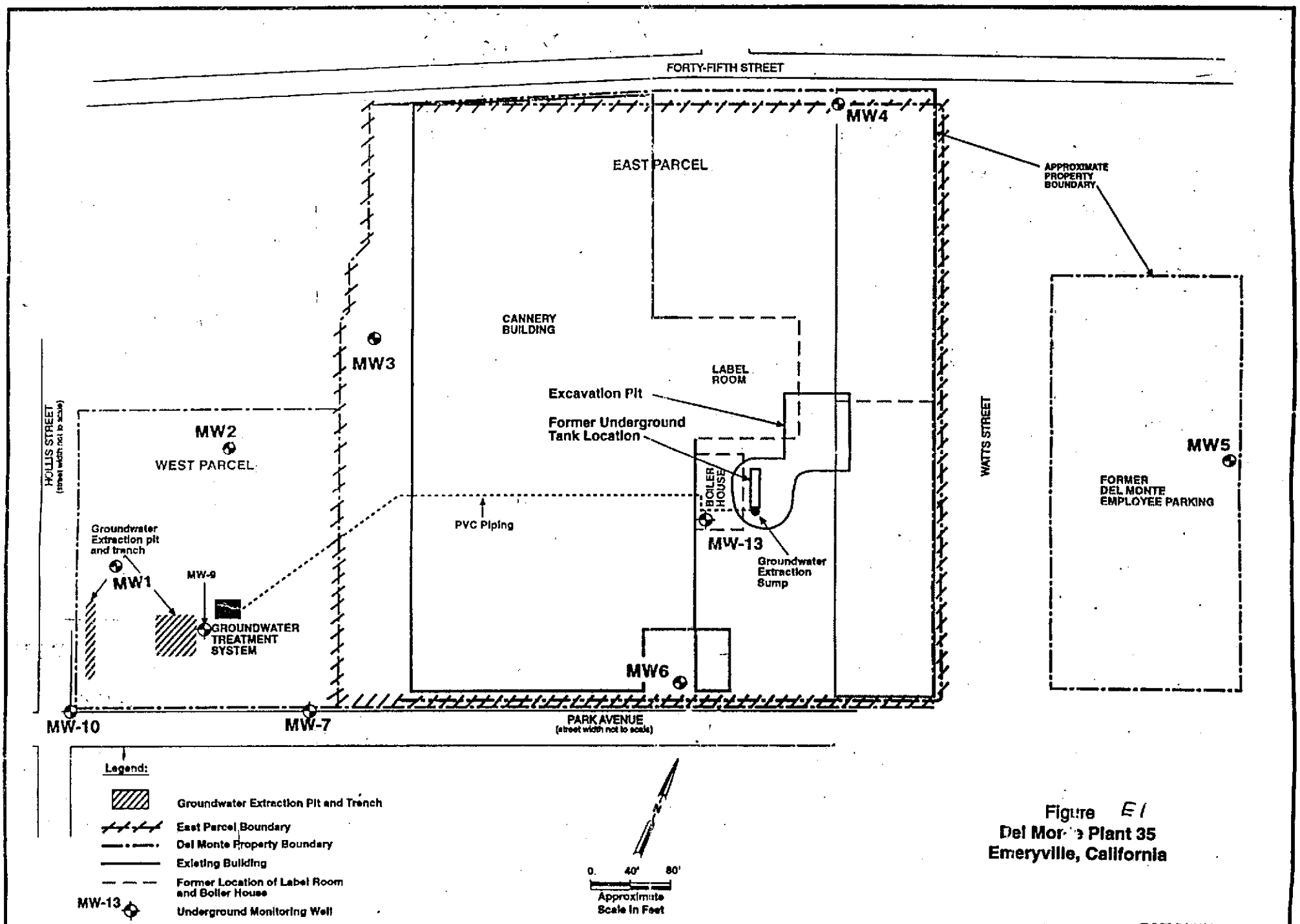


Figure E1
Del Monte Plant 35
Emeryville, California

CH2MHILL

117518.GM.01 UndergrdTank 1/25/96 lj

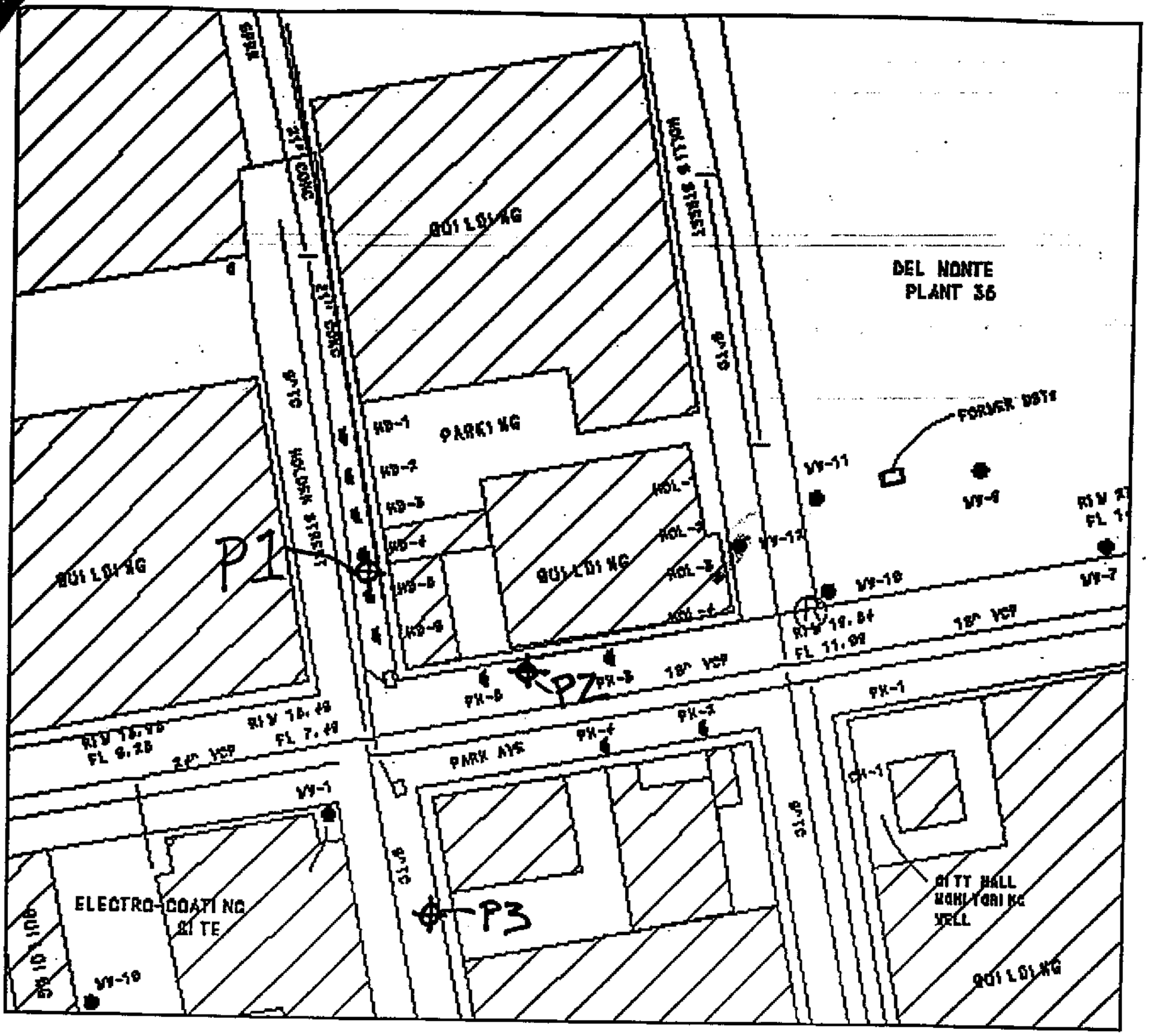

DEL MONTE
PLANT 36
FORMER USTs
BUILDING
PARKING
ELECTRO-COATING SITE
CITY HALL MONITORING WELL
PARK AVE
18" VCP
24" VCP
P1
P2
P3

FIGURE E2

CH2M HILL
1111 Broadway
P.O. Box 12681
Oakland, CA
94604-2681
Tel 510.251.2426
Fax 510.893.8205

CH2MHILL

April 14, 1997

139769.01.01

Mr. Wyman Hong
Zone 7 Water Resources Management
Alameda County Flood Control and Water Conservation District
5997 Parkside Drive

Pleasanton, CA 94588-5127

Subject: Monitoring Well Construction and Destruction Reports - Drilling Permits Numbers 97071 and 97198

Dear Mr. Hong:

Enclosed please find the required information concerning the destruction of 10 monitoring wells and three piezometers at Del Monte Plant 35, as well as the construction of Monitoring Well MW-12a.

Destruction of Wells and Piezometers (permit 97071)

Ten wells and three piezometers, as described in the attached Table 1, were abandoned on February 5 and 6, 1997 by Gregg Drilling and Testing of Martinez, California according to the guidelines of drilling permit 97071 issued by your office. The wells and piezometers were pressure grouted from the bottom of well (see Table 1) to the top of casing. The well boxes were jacked out, and the hole was then filled with concrete to the ground surface. The attached figures show the locations of the abandoned wells.

Monitoring Well MW-5 was originally scheduled for destruction. However, the well could not be located even after the well location was determined by survey. Some work has been performed in the area by the tenant leasing the property, and it is possible that the well may have already been destroyed. I believe that Marty Medina of our office has discussed this issue with you, and received your approval to leave the well in place, if it still exists.

Construction of Monitoring Well MW-12a (permit 97198)

Monitoring Well MW-12a was installed on February 6, 1997 by Gregg Drilling and Testing of Martinez, California according to the guidelines of drilling permit 97198 issued by your office. This monitoring well was installed as a replacement for MW-12 which was inadvertently abandoned with the other wells. Since this replacement well was installed

within 5 feet of MW-12, it was not logged (the soil boring log for MW-12 is attached). The DWR 188 form for the construction of MW-12a is also attached.

If you have any questions, or need additional information, please call me at (510) 251-2888, extension 2096.

Sincerely,

CH2M HILL

Ana C. Demorest
Project Engineer

SFO/pl35wells.doc
Enclosure
c: Madeline Wall/CH2M HILL

Table 1
Abandoned Wells and Piezometers
Del Monte Plant 35, Emeryville, California

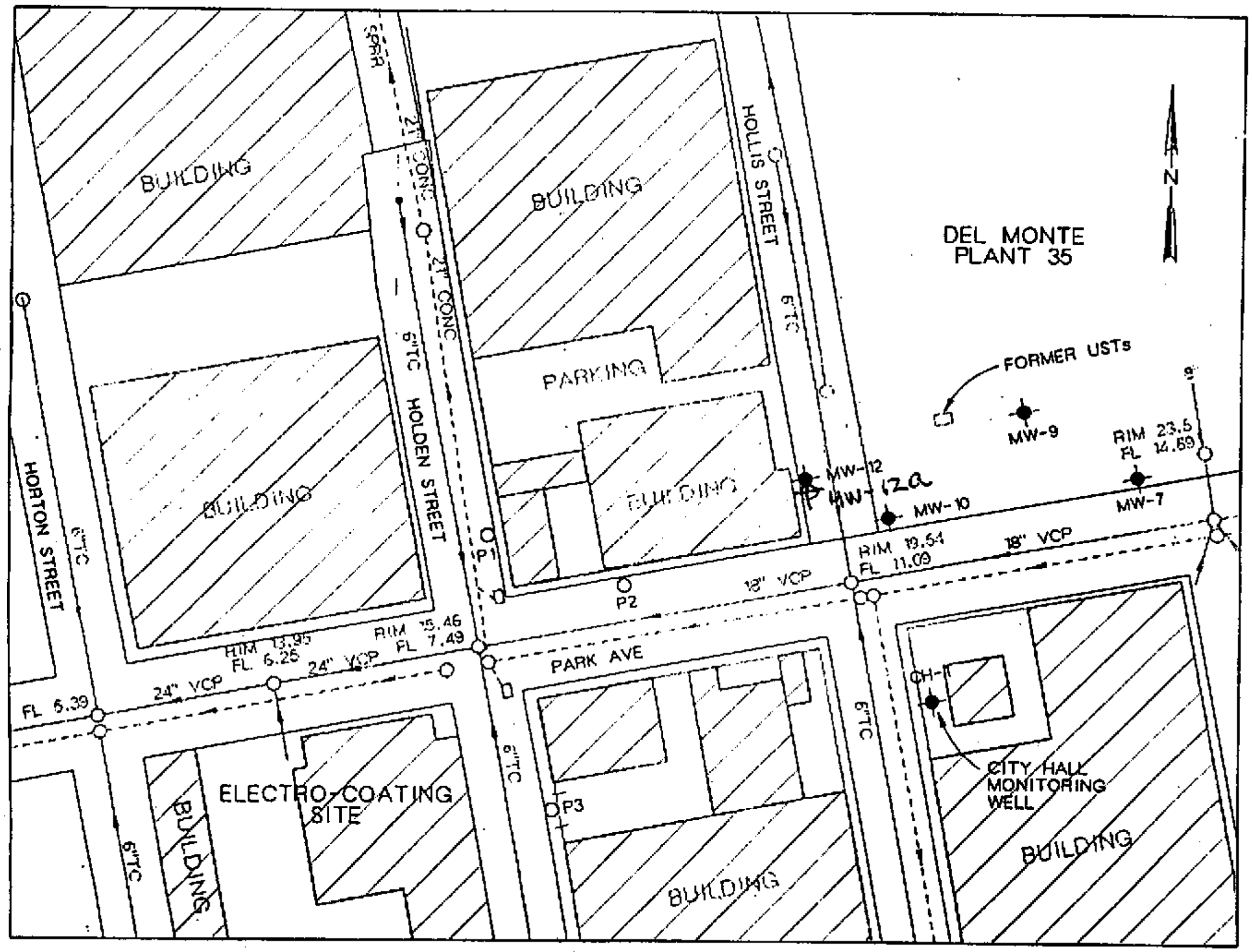
Well or Piezometer Number	Boring Diameter (in)	Casing Diameter (in)	Boring Depth (ft)	Well Screen Interval (ft)	Sand Filter Interval (ft)
P-1	5.5	1	20	5-20	4-20
P-2	5.5	1	20	5-20	4-20
P-3	5.5	1	20	5-20	4-20
MW-1	8	2	20	10-20	8-20
MW-2	8	2	24	14-24	12-24
MW-3	8	2	25.5	8-18	6-18
MW-4	8	2	20	10-20	8-20
MW-6	8	2	20-25	NK	NK
MW-7	6	2	25	4.7-24.7	3.5-25
MW-9	6	2	20	10.5-19	8-20
MW-10	6	2	20	8.5-17.5	6.5-19.5
MW-12	8	2	20	10-20	8-20
MW-13	8	2	25	5-25	4.3-25

NK = not known

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED



LEGEND:

APPROXIMATE BUILDING LOCATION

MW-11 EXISTING MONITORING WELL

P-1 PIEZOMETER

SCALE: 1" = 100' (0, 100', 200', 300')

FIGURE 5
PIEZOMETER LOCATIONS
DEL MONTE PLANT 35
EMERYVILLE, CALIFORNIA

CH2M HILL

H:\SFO28830\28830F05.DGN

CH2M HILL

PROJECT NUMBER	BORING NUMBER
BAE28830.P2.03	MW-12 SHEET 1 OF 2

SOIL BORING LOG

PROJECT Del Monte Plant #35 LOCATION Emeryville, CA

ELEVATION _____ DRILLING CONTRACTOR Gregg Drilling, Pacheco, CA

DRILLING METHOD AND EQUIPMENT Simco 2400, Hollow Stem Auger, 5-1/4 inch O.D.

WATER LEVELS 6.34 ft bgs 3/2/94 START 2/28/94 FINISH 2/28/94 LOGGER Keith Gally

DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS AND INSTRUMENTATION
	1.0					organics present
	2.5	S-1	1.3		LEAN CLAY with SAND, (CL), dark gray with brown mottling, moist, stiff, fine to medium grained sand, occasional gravel near base of sample	
	4.0	S-2	1.5		LEAN CLAY with SAND, (CL), similar to above	
5.0	5.5	S-3	1.4		LEAN CLAY with SAND, (CL), medium gray, moist, stiff, fine to medium grained sand, occasional gravel	increased sand and gravel content
	7.0	S-4	1.5		LEAN CLAY with SAND, (CL), similar to above, medium gray with light brown mottling, firm	slight odor from sample
	8.5	S-5	1.2		SANDY SILT with CLAY, (ML), olive with white mineral deposits and orange staining, moist, soft, fine to medium grained sand	
	10.0	S-6	1.4		Top 6 in.:GRAVELLY SANDY SILT, (ML), olive with orange staining, dry to moist, firm, fine to medium grained sand, fine gravel Bottom 11 in.:SILT with SAND and GRAVEL, (ML), olive with orange staining, dry to moist, firm, fine to medium grained sand, fine gravel	
10.0	11.5	S-7	1.5		Top 12 in.:CLAYEY SILT with SAND, (ML), olive with black streaks, moist, stiff, fine grained sand, trace gravel Bottom 6 in.:SANDY SILT/SILTY SAND, (ML/SM), medium brown to orange, moist, soft, fine to medium grained sand	groundwater encountered at approx 11.5 ft
	13.0	S-8	1.5		Top 6 in.:SANDY SILT/SILTY SAND, (ML/SM), similar to above Bottom 12 in.:SANDY SILT with CLAY, (ML), medium brown with black and orange, wet, stiff, fine to medium grained sand	
	14.5	S-9	1.4		SANDY SILT with CLAY, (ML), similar to above	

CH2M HILL

PROJECT NUMBER	BORING NUMBER
BAE28830.P2.03	MW-12 SHEET 2 OF 2

SOIL BORING LOG

PROJECT Del Monte Plant #35 LOCATION Emeryville, CA

ELEVATION _____ DRILLING CONTRACTOR Gregg Drilling, Pacheco, CA

DRILLING METHOD AND EQUIPMENT Simco 2400, Hollow Stem Auger, 5-1/4 inch O.D.

WATER LEVELS 6.34 ft bgs 3/2/94 START 2/28/94 FINISH 2/28/94 LOGGER Keith Gally

DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS AND INSTRUMENTATION
		S-10	1.1		SANDY SILT (ML), medium light brown; moist, soft, plastic, fine grained sand, some organics	organics present
	16.0					
		S-11	1.3		Top 12 in.: SANDY SILT (ML), similar to above Bottom 3 in.: SANDY SILT (ML), medium brown to gray, moist, very stiff, fine grained sand	
	17.5					
		S-12	1.4		SANDY SILT (ML), similar to above	
	19.0					
20.0		S-13	1.5		SANDY SILT (ML), similar to above	
	20.5					
					Total Depth = 20.5	
25.0						