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1257*

00 DEC -- 8 PM 4: 07  
ENVIRONMENTAL  
PROTECTION

December 6, 2000

Eva Chu  
Alameda County Health Care Services  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

Clayton Project No. 70-01369.01

Subject: Soil and Groundwater Sampling at the Shamrock Ford Property  
7499 Dublin Boulevard, Dublin, California

Dear Ms. Chu:

On behalf of Shamrock Ford and Safeway, Inc., Clayton is pleased to present you with the attached copy of Clayton's Soil and Groundwater Sampling report for the above referenced property. As discussed on the telephone last week, the property is a remediated leaking underground tank site that received case closure by your office (LOP Case No.: 2127). On behalf of the concerned parties (Shamrock Ford - current property owner, and Safeway, Inc. - prospective purchaser), Clayton wishes to know what recommendations or requirements you may have after you have had a chance to review the attached report.

It was a pleasure to speak with you regarding this site. If you have any questions, please contact me at (925) 426-2679.

Sincerely,

Donald A. Ashton, RG, REA  
Senior Geologist  
Environmental Services  
DAA

- get utility trench construction
- at least 2 sources for GW concern:
  - 1) former UST / oil storage room
  - 2) Haz Mat. storage area
  - 3) East shop - sump
- compare [GW] against RAS/CS RBS/Ls see if ceiling levels are exceeded - YES
- what is proposed at site:
  - can do soil exc near former USTs and by bring B-5 where stained soil was noted.
  - soil cleanup for disposal if needed -
- Any potential impact to surface drainage or drinking waters?

*site is in fringe of Main Livermore GW Basin, but Zone 7 says quite a bit of Dublin Subbasin contributes to main Basin*

Ms. Eva Chu  
Alameda County Health Care Services  
December 6, 2000

Page 2  
Clayton Project No. 70-01369.01

**Enclosure**

**C: Brandon Farrell  
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925-467-2617**

**Carlette Gray  
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Soil and Groundwater Sampling

**Shamrock Ford  
7499 Dublin Boulevard  
Dublin, California**

Clayton Project No. 70-01369.01  
NOVEMBER 2, 2000

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*Prepared for:*

**SAFEWAY, INC.  
Pleasanton, California**

*Prepared by:*

**CLAYTON GROUP SERVICES, INC.  
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## TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
<b>1.0 INTRODUCTION</b> .....	<b>1</b>
1.1 LIMITATIONS .....	1
1.2 BACKGROUND .....	1
<b>2.0 SCOPE OF WORK</b> .....	<b>3</b>
2.1 PRE-FIELD ACTIVITIES .....	3
2.2 FIELD ACTIVITIES .....	3
<b>3.0 LABORATORY ANALYSIS</b> .....	<b>4</b>
<b>4.0 FINDINGS</b> .....	<b>5</b>
4.1 SOIL .....	5
4.2 GRAB GROUNDWATER .....	5
<b>5.0 CONCLUSIONS AND RECOMMENDATIONS</b> .....	<b>6</b>

### Table

- 1 Summary of Total Petroleum Hydrocarbons and VOCs in Soil Samples
- 2 Summary of LUFT Metals in Soil Samples
- 3 Summary of Total Petroleum Hydrocarbons and VOCs in Grab Groundwater Samples
- 4 Summary of Dissolved LUFT Metals in Grab Groundwater Samples

### Figures

- 1 Subject Property Location
- 2 Subject Property Plan with Boring Locations

### Appendixes

- A Resumes of Environmental Professionals
- B Boring Logs
- C Laboratory Analytical Data Sheets

## 1.0 INTRODUCTION

Safeway, Inc. (Safeway) retained Clayton Group Services, Inc. (Clayton) to conduct a Phase II Environmental Site Assessment (ESA) of the Shamrock Ford property located at 7499 Dublin Boulevard, Dublin, Alameda County, California (subject property). The subject property location and site plan are depicted in Figures 1 and 2, respectively. Resumes of environmental professionals involved in this assessment are included in Appendix A.

## 1.1 LIMITATIONS

The information and opinions rendered in this report are exclusively for use by Safeway. Clayton will not distribute or publish this report without the consent of Safeway except as required by law or court order. The information and opinions expressed in this report are given in response to a limited assignment by Safeway and should be considered and implemented only in light of that assignment. The services provided by Clayton in completing this project have been provided in a manner consistent with normal standards of the profession. No other warranty, expressed or implied, is made.

## 1.2 BACKGROUND

Clayton was requested to conduct a Phase I Environmental Site Assessment (ESA) by Safeway for the subject property. The Phase I is concurrently being prepared. During site visits on August 25 and 28, 2000, Clayton observed the subject property and current operations for vehicle repair, maintenance, and parts storage.

The subject property was observed to consist of a main structure that consisted of the former sales showroom, offices, parts department, and west shop area. The facilities were reportedly constructed in 1974. The west shop area consisted of four existing in-ground hydraulic vehicle lifts, and four patched areas were observed where reportedly three former lifts and an alignment pit/rack had been removed. The west shop contained the following systems:

- an oil-storage room,
- several solvent parts washing stations,
- two floor drains that reportedly drain to an in-ground interceptor sump located just east of the main structure by the parts department, *by BT*
- a water-based parts cleaner located outside the north roll-up door,
- a hazardous waste storage area, and
- a patched asphalt area along the west wall of the shop where two former underground storage tanks (USTs) were reportedly located.

Asphalt in the exterior parts wash area and hazardous materials storage area was stained from various releases of substances that appeared to extend to a storm drain located about 50 feet north of the building. The former USTs (one 2,000-gallon gasoline tank, and one 1,000-gallon waste oil tank) were removed in 1993. The waste oil tank reportedly leaked and was removed as part of the remediation activities. The Alameda County Health Services Agency (ACHSA) closed the site investigation in 1995.

Clayton obtained an appointment to review the ACHSA site file on September 29, 2000. The file documents indicated that three groundwater-monitoring wells were installed to characterize the site and confirm the groundwater quality in the vicinity of the former USTs. Maps show the three monitoring wells located on the west side of the USTs. Quarterly groundwater monitoring and gradient determinations continually showed the gradient to the east. Based on the confirmation soil samples collected at the time the USTs were removed and the groundwater sample results from the three-upgradient wells, the ACHSA chose to close the LUST case.

Clayton reviewed City of Dublin Building Department files on August 25, 2000. Building department files indicated that the facilities were constructed in 1974 and that various modifications were made to the main structures over the years. Site plans show the existence of a third sump that had not been reported in a 1999 Phase I investigation report by ESI. Mr. Exavier, the Service Manager for the facility, was not previously aware of the existence of the sump and the sump had not been serviced or cleaned out for an unknown period of time. Drawings indicate that the sump collects water from the main facility floor drains and discharges to the sewer main to the south in Dublin Boulevard.

The east shop facility consisted of a set of clustered structures that included the east shop area that formerly contained a spray booth. The shop had several above ground hoists, two solvent parts washing stations, several drums of petroleum products, and two floor drains that reportedly drained to an interceptor sump located at the southwest outside corner of the building. Concrete patches in the northeast corner of the shop were reportedly from a former spray-paint booth. The north portion of the building was being used for parts storage; however, the floor had a "T" shaped patch in the concrete floor that was reportedly part of a former spray booth down-draught air-filter system. The east side of the building was developed as a car detail/wash area with a floor sump used to collect wash water and separate out solids prior to discharge to the sewer system. An adjacent garage area was reportedly used for parts storage. Waste oil and filters were stored along the outside south wall.

Based on the past use of the subject property, Clayton's site observations, and agency file reviews, Clayton recommended that a preliminary sampling be conducted to adequately evaluate the soil and groundwater quality at the subject property to determine if any impacts to the subsurface have occurred.

## 2.0 SCOPE OF WORK

Clayton proposed a Soil and Groundwater Sampling program (Clayton Proposal No. 00SFOESD263, dated September 8, 2000 for 10 soil borings. Safeway approved the sampling program on October 6, 2000. Through the sampling program, Clayton investigated several environmental concerns as detailed in Section 1.2 of this report. The investigation focused on evaluating soil and groundwater conditions in the targeted areas. The methodology used during this investigation is described in the following subsections.

### 2.1 PRE-FIELD ACTIVITIES

A specific scope of work was prepared for the sampling program. Prior to conducting the field activities, a health and safety plan specific to the subject property was developed. Clayton also subcontracted a private utility locator, California Underground Surveys, to ensure that underground utilities were not present beneath the boring locations.

### 2.2 FIELD ACTIVITIES

On October 12, 2000, Jesse Edmands, Staff Environmental Consultant, Michael Krzeminski, Staff Environmental Consultant, and Donald A. Ashton, Senior Geologist of Clayton, conducted a subsurface investigation at the subject property using direct push Geoprobe drilling equipment operated by Environmental Control Associates of Santa Cruz, California. A total of 11 borings (B-1 through B-11) were advanced on the property at locations depicted on Figure 2 to total depths ranging from 16 to 20 feet below ground surface (bgs).

Borings B-1 through B-4 were advanced within the west shop in order to investigate potential impacts from in-ground hydraulic hoists, a former maintenance pit, and degreaser stations located within the building. In addition, boring B-2 was located in the general downgradient direction relative to the former waste-oil underground storage tank (UST) and the oil-storage room. Boring B-11, drilled in the driveway area, was advanced in the general downgradient direction relative to the former gasoline UST. Boring B-5 was advanced in the hazardous waste storage and parts washing area located on the north side of the west shop building. Boring B-6 was drilled near a storm drain inlet located about 50 feet north of the hazardous materials storage area. Borings B-7 and B-8 were advanced adjacent to sumps located to the east of the parts department and to the west of the east shop building, respectively. Boring B-9 was advanced adjacent to a sump located in the detail shop. Boring B-10 was advanced outside the eastern end of the east shop building and near the western property boundary.

Initially, two soil samples were collected from each of the borings at depths of approximately 1.0 and 5.0 feet bgs. Additional soil samples were collected from borings B-1 and B-9 at 14 and 16 feet bgs, respectively, because no groundwater was found in these borings. However, B-1 at 14 feet bgs was not analyzed as there were no field indications of contamination in the soil sample. Also, an additional soil sample was collected at approximately 7.0 feet bgs in boring B-2 due to physical indications of contamination. The soil from each boring was examined for lithology and inspected for

indications of contamination (e.g., unusual odors, discoloration, chemical sheen). Boring logs are provided in Appendix B. An organic vapor monitor (OVM) was used to screen headspace samples from select soil samples for ionizable substances at approximately 4-foot intervals within the borings. The soil samples from each boring were collected in acetate liners from the Geoprobe casing and cut into 6-inch sections. The collected soil samples were sealed with Teflon tape and plastic end caps. Each sample was properly labeled and placed in a pre-chilled cooler for transport under formal chain of custody documentation to a state-certified laboratory for analysis.

In order to collect grab-groundwater samples, each boring was completed into a temporary well point. Each boring was advanced into the first encountered groundwater zone, which was generally found to be below about 12 feet bgs. Grab-groundwater samples were then collected using a plastic disposable bailer and decanted into appropriate laboratory prepared containers. Each sample was labeled and placed in a pre-chilled cooler for transport to a state-certified laboratory under formal chain-of-custody documentation.

All drilling and downhole sampling equipment were washed and triple rinsed with tap water before use at each boring location. All drilling equipment was decontaminated before it left the subject property. The soil cuttings generated from the drilling activities were collected in 5-gallon buckets and stored onsite pending proper disposal. All exterior boreholes were filled to the surface with neat cement grout after the completion of field activities. The interior borings were filled to approximately 0.5 feet bgs with neat cement grout and filled to the surface with fast-setting concrete.

### 3.0 LABORATORY ANALYSIS

A total 12 soil and 9 grab groundwater samples were submitted for laboratory analysis to McCampbell Analytical in Pacheco, California; a State of California-certified laboratory. The samples were analyzed by one or more of the following United States Environmental Protection Agency (USEPA) approved methods:

- USEPA Method 8260 for VOCs, including benzene, toluene, ethylbenzene, xylenes (BTEX, collectively), and methyl tertiary butyl ether (MTBE)
- USEPA Method 8015M/8020 for total petroleum hydrocarbons (TPH) as gasoline (TPH-g), diesel (TPH-d), motor oil (TPH-mo); and for BTEX and MTBE. Diesel and motor oil extractions included silica-gel cleanup.
- California LUFT (Leaking Underground Fuel Tank) Metals including cadmium, chromium, lead, nickel, and zinc

The analytical results are summarized in Tables 1 through 4. Copies of the certified analytical data sheets and chain-of-custody documentation are included in Appendix C.



## 4.0 FINDINGS

Clayton has evaluated the analytical results generated during this limited soil and groundwater investigation. Our findings are summarized in the attached Tables 1-4 and in the following subsections:

### 4.1 SOIL

During the drilling activities, the soil from the borings (B-1 through B-11) generally consisted of black to olive brown silty clays from the surface to the total depths drilled, which ranged from 16 to 20 feet bgs. No physical evidence of contamination was noted during the drilling activities, except for greenish discolorations and petroleum odors in boring B-2 from 7 to 12 feet bgs. Boring B-2 was drilled approximately 30 feet downgradient of the former waste-oil tank and about 15 feet from the oil-storage room. A soil sample was collected where indications of contamination were noted.

All of the soil samples were analyzed for TPH, BTEX, and MTBE. Only samples B-2 at 4.0 and 7.0 feet bgs and B-6 at 5.0 feet bgs were analyzed for TPH-g. Analytical results indicated that a concentration of TPH-g was detected in B-2 at 7 feet at 25 parts per million (ppm). Concentrations of TPH-d were detected in B-1 through B-3, B-5, and B-7 through B-9 ranging from 1.7 to 2,500 ppm. TPH-mo was detected in samples B-2 at 7 feet, and B-3, B-5, B-7, and B-8 at 5 feet that ranged from 7.5 to 3,700 ppm. No concentrations of BTEX compounds were detected, with the exception of 0.023 ppm of xylenes in B-2 at 7.0 feet. In addition, MTBE was detected in B-4 and B-5 at concentrations ranging from 0.0071 to 0.013 ppm. No other concentrations of VOCs were detected in the soil samples analyzed.

Soil samples collected from borings B-2, and B-7 through B-9, adjacent to or downgradient of the former waste-oil UST and the two sumps, respectively, were analyzed for LUFT metals. Normal background concentrations of metals were detected in the six soil samples analyzed (B-2 at 4.0 and 7.0 feet, B-7 at 6.0 feet, B-8 at 5 feet, and B-9 at 6.0 and 16 feet). Metals detected in these soil samples include chromium (26 to 34 ppm), lead (3.5 to 8.8 ppm), nickel (31 to 44 ppm), and zinc (47 to 57 ppm).

### 4.2 GRAB GROUNDWATER

Grab-groundwater samples were collected from nine of the eleven borings (B-2 through B-8, B-10, and B-11) and analyzed for TPH, BTEX, and MTBE. No groundwater was encountered in borings B-1 and B-9. Samples B-2, B-6, and B-11 were analyzed for TPH-g; however, only B-11 was found to contain TPH-g at 53 parts per billion (ppb). Concentrations of TPH-d, ranging from 59 to 4,200 ppb, were detected in all grab-groundwater samples analyzed, except for B-7. In addition, concentrations of TPH-mo were detected in B-2, B-5, B-8, B-10, and B-11 ranging from 350 to 53,000 ppb. No BTEX concentrations were detected in the grab-groundwater samples analyzed, except for sample B-11 that contained ethylbenzene at 0.53 ppb and xylenes at 5.2 ppb. Concentrations of MTBE were detected in samples B-3, B-5, and B-8 ranging from 4.1 to 21 ppb. No other concentrations of VOCs were detected in grab-groundwater samples.

In addition, samples B-7 and B-8 were analyzed for LUFT metals. No concentrations of metals were detected in the groundwater samples.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

Clayton's soil and groundwater sampling investigated historical chemical use and storage areas as well as areas downgradient of the former onsite USTs identified during a Phase I environmental site assessment. The samples were collected in a rough area approximately 100 feet wide by 400 feet long that crosses the subject property from near the west property boundary to the east boundary. The analytical results indicate that concentrations of petroleum hydrocarbons are present in most soil and groundwater samples collected in this area. The finding of elevated petroleum products in the soil in boring B-2 indicates that releases occurred from the waste-oil UST and possibly the oil storage room. The finding of petroleum products in soil samples from 4 to 5 feet bgs within the service area building, appears to indicate that routine spills and releases to shop floors and in hazardous waste storage areas have impacted the shallow soils in areas where maintenance and product storage occurred. The highest concentrations of petroleum products detected in the groundwater were immediately downgradient from the former waste-oil UST, in the hazardous materials storage area along the north side of the west shop, and at the east side of the east shop building.

The sampling program focused on sampling suspect source areas. The waste-oil release from the former UST appears to have created a plume that extends downgradient to the east. Although boring logs indicate clays in the shallow groundwater zone, which would tend to limit the migration of longer chained hydrocarbons, preferential flow pathways could exist across the property. The property has been continuously used as an automotive repair facility since it was first built in 1974, which may account for the fairly wide spread finding of petroleum hydrocarbons. Additional investigation is required to better evaluate the total extent of contamination at the subject property.

Although the subject property has been found to have petroleum hydrocarbon impacts across a wide area, there are very few findings of volatile substances in the soil and groundwater. MTBE was found in three groundwater samples ranging from 4.1 to 21 ppb (Borings B-3, B-5, and B-8). These relatively low concentrations of MTBE and the other detected VOCs, do not indicate that an extensive remediation of the property is required. It appears that future planned development of the property will likely require the removal of "hot spots" of petroleum contamination in the upper 5 feet of soil, and possibly some additional excavation of contaminated soil in the area of the former waste-oil UST and oil storage room. Clayton recommends that planned future redevelopment activities include a soil-screening program to segregate petroleum impacted soil for proper handling and disposal.

Clayton recommends forwarding the findings from this investigation to the owners of the property, Shamrock Ford, with a request that they properly close all hazardous storage activities, product storage areas, the above ground storage tank system, the three in-ground interceptor sumps, and the in-ground hydraulic hoists. This report should also be forwarded to the Alameda County Health Care Services Agency (ACHCSA), the lead regulatory agency for hazardous materials oversight, for review and comment. Clayton anticipates that the ACHCSA may require a monitoring program and possible additional characterization; however, the agency will need to determine if any remedial actions will be required.

Report prepared by:

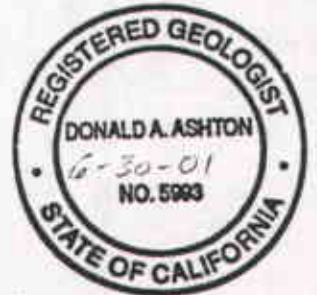


Jesse Edmands  
Staff Environmental Consultant  
Environmental Services

Report reviewed by:



Donald A. Ashton, RG, REA  
Senior Geologist  
Environmental Services



Report reviewed by:



Jon A. Rosso, P.E.  
Director  
Environmental Services

November 2, 2000

**TABLE 1**  
**Summary of Total Petroleum Hydrocarbons and VOCs in Soil Samples**  
**Shamrock Ford**  
**7499 Dublin Boulevard**  
**Dublin, California**

Sample Location	Sample Depth (feet)	Date Sampled	Total Petroleum Hydrocarbons in Gasoline Range (C6 to C12)	Total Petroleum Hydrocarbons in Diesel Range (C10 to C23)*	Total Petroleum Hydrocarbons in Motor Oil Range (C18 to C36)*	MTBE (mg/kg)	Benzene (mg/kg)	Ethylbenzene (mg/kg)	Toluene (mg/kg)	Xylenes (mg/kg)	All Other VOCs (mg/kg)
B-1	5	10/12/00	---	3.1, b	<5.0	<0.005	<0.005	<0.005	<0.005	<0.005	<5.0
B-2	4	10/12/00	<1.0	3.5, c	<5.0	<0.005	<0.005	<0.005	<0.005	<0.005	<5.0
B-3	7	10/12/00	25, a	2,500, d	3,700	<0.005	<0.005	<0.005	<0.005	0.023	<5.0
B-3	5	10/12/00	---	1.7, e	7.5	<0.005	<0.005	<0.005	<0.005	<0.005	<5.0
B-4	4	10/12/00	---	<1.0	<5.0	0.0071	<0.005	<0.005	<0.005	<0.005	<5.0
B-5	5	10/12/00	---	2.3, e	26	0.013	<0.005	<0.005	<0.005	<0.005	<5.0
B-6	5	10/12/00	<1.0	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	<0.005	<5.0
B-7	5	10/12/00	---	1.9, e	17	<0.005	<0.005	<0.005	<0.005	<0.005	<5.0
B-8	5	10/12/00	---	6.2, e	42	<0.005	<0.005	<0.005	<0.005	<0.005	<5.0
B-9	6	10/12/00	---	2.8, c	<5.0	<0.005	<0.005	<0.005	<0.005	<0.005	<5.0
B-9	16	10/12/00	---	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	<0.005	<5.0
B-10	5	10/12/00	---	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	<0.005	<5.0

**Notes:**  
All units presented as milligrams per kilogram (mg/kg) or parts per million (ppm), except for VOCs which are reported in micrograms per kilogram (µg/kg) or ppb  
VOCs= Volatile Organic Compounds  
VOC detection limits are variable (see laboratory data sheets for a specific compound's detection limit)  
MTBE = Methyl tert-Butyl Ether  
\* = Sample preparation by laboratory included silica gel cleanup  
--- = Analyte not tested  
a = strongly aged gasoline or diesel range compounds are significant  
b = may be aged diesel range  
c = diesel range compounds are significant, no recognizable pattern  
d = medium boiling point pattern does not match diesel standard  
e = oil range compounds are significant

**TABLE 2**  
**Summary of Heavy Metals in Soil Samples**  
**Shamrock Ford**  
**7499 Dublin Boulevard**  
**Dublin, California**

Sample Location	Sample Depth (feet)	Date Sampled	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Zinc (mg/kg)
B-1	5	10/12/00	---	---	---	---	---
B-2	4	10/12/00	<0.5	28	5.4	31	49
B-2	7	10/12/00	<0.5	31	6.9	35	54
B-3	5	10/12/00	---	---	---	---	---
B-4	4	10/12/00	---	---	---	---	---
B-5	5	10/12/00	---	---	---	---	---
B-6	5	10/12/00	---	---	---	---	---
B-7	5	10/12/00	<0.5	26	5.8	35	47
B-8	5	10/12/00	<0.5	28	8.8	31	50
B-9	6	10/12/00	<0.5	32	3.5	41	53
B-9	16	10/12/00	<0.5	34	7.1	44	57
B-10	5	10/12/00	---	---	---	---	---

**Notes:**

All units presented as milligrams per kilogram (mg/kg) or parts per million (ppm)  
 --- = Analyte not tested

**TABLE 3**  
**Summary of Total Petroleum Hydrocarbons and VOCs in Grab Groundwater Samples**  
**Shamrock Ford**  
**7499 Dublin Boulevard**  
**Dublin, California**

Sample Location	Date Sampled	Total Petroleum Hydrocarbons in Gasoline Range (C6 to C12)	Total Petroleum Hydrocarbons in Diesel Range (C10 to C23)	Total Petroleum Hydrocarbons in Motor Oil Range (C18 to C36)	MTBE (µg/L)	Benzene (µg/L)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylenes (µg/L)	All Other VOCs (µg/L)
B-1	10/12/00	---	---	---	---	---	---	---	---	---
B-2	10/12/00	<1.0	740 d	770	<1.0	<0.5	<0.5	<0.5	<0.5	<1.0
B-3	10/12/00	---	59 c	<250	4.1	<0.5	<0.5	<0.5	<0.5	<1.0
B-4	10/12/00	---	72 c	<250	<1.0	<0.5	<0.5	<0.5	<0.5	<1.0
<del>B-5</del>	10/12/00	---	4,200 d,e,b	<del>30,000</del>	21	<0.5	<0.5	<0.5	<0.5	<1.0
B-6	10/12/00	<1.0 b	---	---	<1.0	<0.5	<0.5	<0.5	<0.5	<1.0
B-7	10/12/00	---	<50	<250	<1.0	<0.5	<0.5	<0.5	<0.5	<1.0
B-8	10/12/00	---	150 d	350	14	<0.5	<0.5	<0.5	<0.5	<1.0
B-9	10/12/00	---	---	---	---	---	---	---	---	---
B-10	10/12/00	---	110 d	1,200	<1.0	<0.5	<0.5	<0.5	<0.5	<1.0
<del>B-11</del>	10/12/00	53 a,b	4,200 d,b	53,000	<1.0	<0.5	0.53	<0.5	5.2	<1.0

**Notes:**

All units presented as micrograms per liter (µg/L) or parts per billion (ppb) \*

VOCs = Volatile Organic Compounds

VOC detection limits are variable (see laboratory data sheets for a specific compound's detection limit)

MTBE = Methyl tert-Butyl Ether

--- = Analyte not tested (Please note that groundwater was not encountered in borings B-1 or B-9)

a = heavier gasoline range compounds are significant

b = liquid samples contains more than 5% sediment by volume

c = diesel range compounds are significant, no recognizable pattern

d = oil range compounds are significant

e = medium boiling point pattern does not match diesel standard

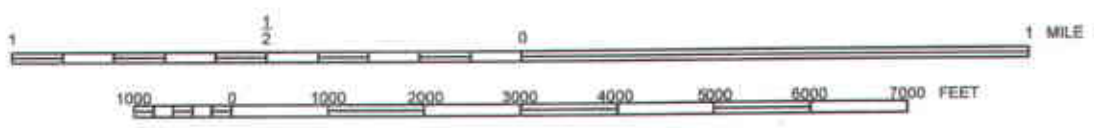
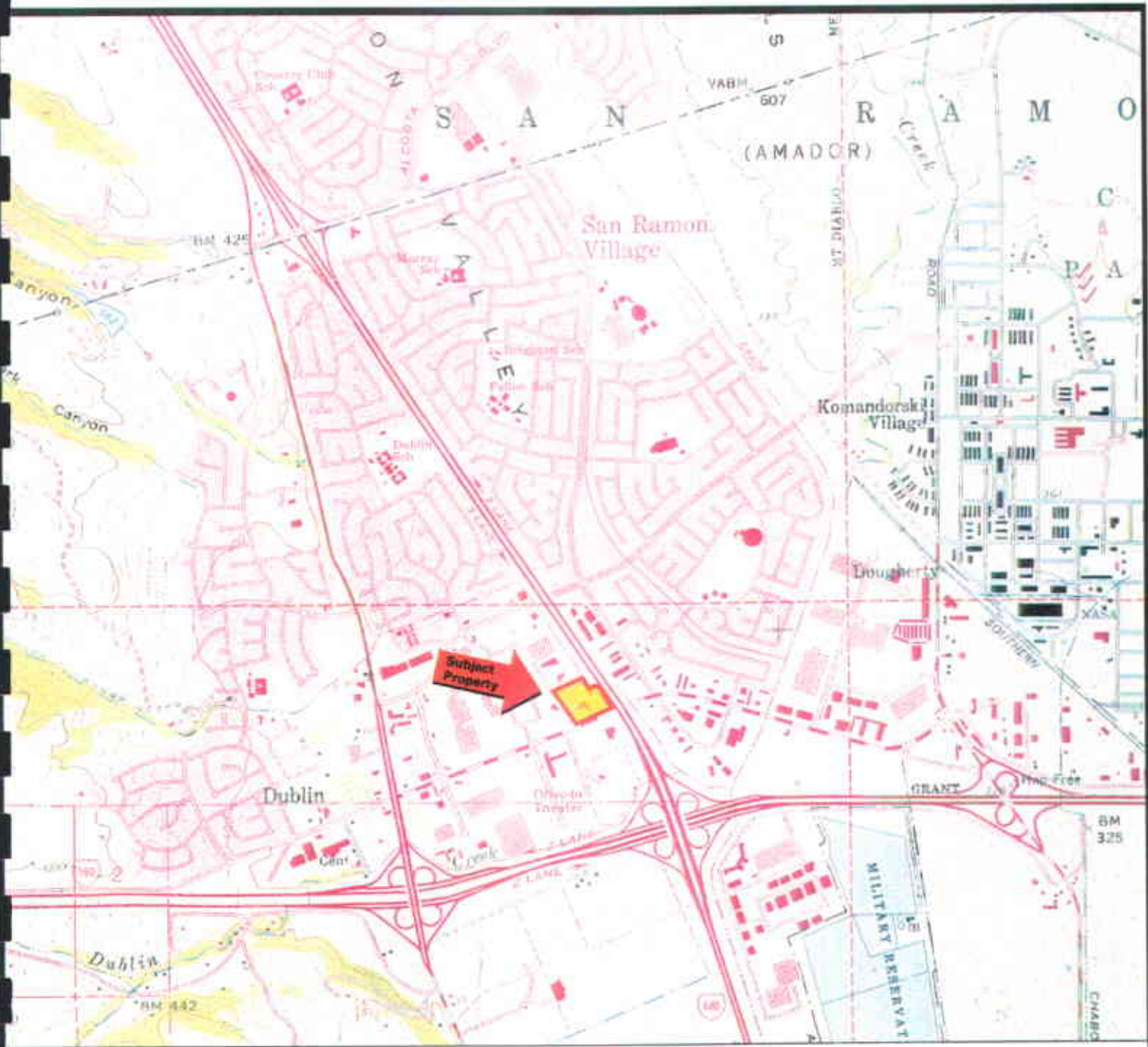
**TABLE 4**  
**Summary of Dissolved LUFT Metals in Grab Groundwater Samples**  
**Shamrock Ford**  
**7499 Dublin Boulevard**  
**Dublin, California**

Sample Location	Date Sampled	Cadmium (mg/L)	Chromium (mg/L)	Lead (mg/L)	Nickel (mg/L)	Zinc (mg/L)
B-1	10/12/00	---	---	---	---	---
B-2	10/12/00	---	---	---	---	---
B-3	10/12/00	---	---	---	---	---
B-4	10/12/00	---	---	---	---	---
B-5	10/12/00	---	---	---	---	---
B-6	10/12/00	---	---	---	---	---
B-7	10/12/00	<0.005	<0.02	<0.005	<0.05	<0.05
B-8	10/12/00	<0.005	<0.02	<0.005	<0.05	<0.05
B-9	10/12/00	---	---	---	---	---
B-10	10/12/00	---	---	---	---	---

**Notes:**

All units presented as milligrams per liter (mg/L) or parts per million (ppm)

--- = Analyte not tested (Please note that groundwater was not encountered in borings B-1 or B-9)



Portion of the 7.5-Minute Dublin, California  
 Quadrangle Topographic Map  
 United States Department of the Interior  
 Geological Survey  
 1961 Photorevised 1980

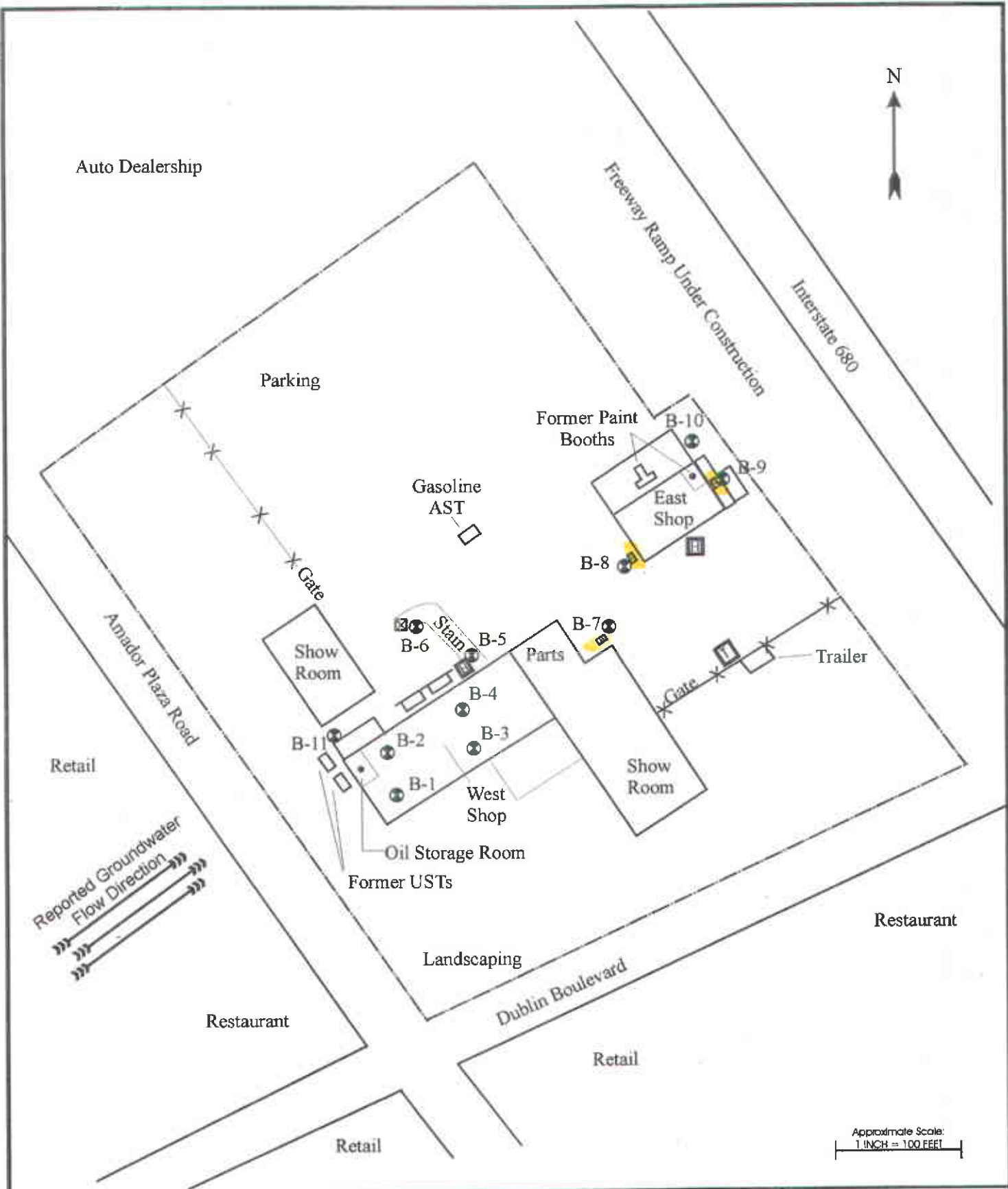


**SUBJECT PROPERTY MAP**  
 Shamrock Ford  
 7499 Dublin Boulevard  
 Dublin, California  
 Clayton Project No. 70-01369.01

Figure  
**1**







**LEGEND**

- Soil Boring 10-12-2000
- Ⓜ Transformer
- Ⓢ Sump
- ⓧ Storm Drain
- Ⓜ Hazardous Materials Storage

**SUBJECT PROPERTY MAP**

Shamrock Ford  
 7499 Dublin Boulevard  
 Dublin, California  
 Clayton Project No 70-01369.01

**FIGURE**

2



**APPENDIX A**

**RESUMES OF ENVIRONMENTAL PROFESSIONALS**

**Donald A. Ashton, R.G., REA**  
Senior Geologist, Environmental Services

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### **Summary of Professional Experience**

Mr. Ashton has 13 years of experience conducting environmental assessments. He is experienced in managing Phase I and II site assessments for commercial and industrial sites, including soil and groundwater contamination investigations and remediation, facility closure overviews, and conducting annual tenant audits. Mr. Ashton has extensive experience conducting and managing assessments of industrial sites, commercial shopping centers and strip malls, high-rise buildings, large apartment complexes, undeveloped properties, and multi-site acquisitions. Assessments of commercial/ industrial facilities have included agricultural pesticide formulation facilities, semiconductor/circuit board manufacturers, coal-fired power plants, metal plating facilities, foundries, food processing plants, automotive repair, truck terminals, and dry-cleaning facilities. He has successfully managed numerous projects for financial institutions, fund management firms, property developers, attorney firms, and public agencies. Mr. Ashton also managed numerous environmental assessments for FCC permit compliance for antenna installations at new PCS (digital personnel communications system) sites for a major communications company.

### **Project Experience**

San Francisco Unified School District - Mr. Ashton assessed and/or managed approximately 70 school sites for historical use of underground storage tanks (USTs), conducted historical records/plan reviews, evaluated suspect sites visually, and conducted geophysical surveys, including ground-penetrating radar, writing tank removal specifications for confirmed USTs, monitoring UST removals, and conducting environmental testing for agency site closures.

Property Management Company - Mr. Ashton conducted a Phase I/II investigation at one Silicon Valley multi-tenant site which resulted in a portion of the property being subdivided and the Super Fund site portion being sold to the responsible party for the release. Another portion of the property was found to have a third-party release of 1,1,1-TCA and PCE to the groundwater. Mr. Ashton conducted preliminary characterization investigations and agency records research that connected historical use of the property by the tenant to the release of regulated substances to the groundwater. He then became involved in owner/attorney/tenant negotiations, overseeing characterization investigations by the responsible party (tenant) for the property owner, and also worked with the Regional Water Quality Control Board (RWQCB) seeking closure of the site on behalf of the property owner.

Pesticide Formulation Site - Mr. Ashton managed a multi-phased characterization of soil and groundwater impact at an agricultural spray service facility where pesticides were previously formulated in Watsonville, California. The site characterization identified commingled plumes of gasoline, DDT and other pesticides, and carrier oil.

Pharmaceutical Firm - Mr. Ashton managed a project for the rapid move and expansion of a pharmaceutical solution manufacturing firm that also manufactured testing equipment. The project included the closure of a hazardous materials business plan in one city and the establishment of a new hazardous materials business plan with a waste minimization program involving regulated substances in the new city.

### **Employment History**

Clayton Group Services, Inc., Pleasanton, California  
Senior Geologist, Environmental Services  
1997 to Present

ATC Associates Inc., California  
Senior Geologist  
1993 to 1997

EMCON Associates, San Jose, California  
Project Geologist  
1991 to 1993

Diagnostic Engineering, Inc., Arcadia, California  
Evaluator/Geologist  
1988 to 1991

Pelagos Corporation, San Diego, California  
Geologist  
1984 to 1988

### **Education**

M.S., Geological Sciences, 1987  
San Diego State University, California

B.S., Geological Sciences, 1980  
San Diego State University, California

### **Professional Registrations/Certifications**

Registered Geologist, California, No. 5993  
Registered Environmental Assessor in California, No. 05624  
OSHA 40-hour Hazardous Materials Safety Certification  
OSHA 8-hour Refresher, Hazardous Materials Safety Certification  
AHERA - Asbestos Building Inspector  
AHERA - Asbestos Management Planner

**Professional Affiliations**

Northern California Geological Society

**Publications/Presentations (Co-Authored)**

Goss, F., ed., 1989. Environmental Evaluations for Real-Estate Transactions. Published by Government Institutes, Inc., Rockville Maryland, 250 p.

Speaker Environmental Site Assessments, Environmental Data Resources Seminar, November 1995, San Francisco, California.

## JESSE D. EDMANDS

Staff Environmental Consultant, Environmental Services

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### Summary of Professional Experience

Mr. Edmands has experience conducting Phase I and Phase II Environmental Site Assessments (ESAs) throughout the Bay Area for various financial, industrial and commercial clients. Site assessments have included industrial sites, agriculturally related facilities, residential properties, commercial buildings, and undeveloped land. He has conducted numerous Phase I ESAs throughout the San Francisco Bay Area using ASTM Designation E 1597 -97, *Standard Practices for Environmental Site Assessments: Phase I Environmental Site Assessment Process* as a guideline. He has performed limited asbestos surveys, groundwater sampling, well development, historical research, interviews with owner and occupants as well as local government officials, and report generation. Through subsurface investigations including geophysical surveys, active and passive soil gas techniques, and Geoprobe soil sampling, he has identified the presence of many recognized environmental conditions, such as underground storage tanks (USTs), volatile organic compounds (VOCs), petroleum hydrocarbons, MTBE, metals, and pesticides/arsenic in soil and groundwater.

### Project Experience

#### Phase I and Phase II ESAs

##### *Electrical Power Generation Industry*

Through initial subsurface soil and groundwater sampling, Mr. Edmands has identified the presence of several industrially-related VOCs, including tetrachloroethylene (PCE), trichloroethylene (TCE), and 1,1 dichloroethene (DCE). In order to further assess the vertical and horizontal extent of the detected contamination, Mr. Edmands has supervised cone penetrometer testing (CPT) at the property involving the collection of lithological data and water samples at discrete depths in specific aquifer zones. In addition, Mr. Edmands has conducted a 54-point active soil gas survey at the property. Finally, with the installation and sampling of four permanent monitoring wells, a comprehensive site characterization was completed and presented to the client.

#### Phase I and Phase II ESAs

##### *Sheetmetal Fabrication Facility*

Through the completion of a Phase I ESA at the subject property, several recognized environmental concerns were noted which included former plating and painting operations which utilized solvent tanks, sumps, and clarifiers. Although closure was granted from the local oversight authority, further site assessment was conducted through a Phase II ESA which included a series of soil and grab groundwater sampling. Mr. Edmands detected the presence of several VOCs in groundwater at elevated concentrations, which include PCE and TCE. Due to the presence of these compounds, Mr. Edmands supervised additional borings throughout the subject building to depths of approximately 40 feet below ground

surface in order to delineate the extent of the contamination. Several hot spots were defined, and Mr. Edmands installed a series of passive soil gas modules throughout the building in order to identify the sources of the contamination.

### **Employment History**

Clayton Group Services, Inc. – Pleasanton, CA  
Staff Environmental Consultant  
1999 to Present

### **Education**

B.A., Environmental Science with Distinction, Minor in Geology, 1999  
Boston University, Boston, MA

### **Professional Registrations and Certifications**

EPA/AHERA California Accredited Asbestos Building Inspector, No. 9682 I, 1999  
OSHA 40-Hour Hazardous Waste Operations and Emergency Response Training, 1999

### **Publications and Presentations**

Edmands, Jesse 1999. The Uptake and Mobility of Uranium by Black Oak Trees: Implications for Biomonitoring Depleted Uranium Contaminated Groundwater. *Geological Society of America Publication with Abstracts*

**Jon A. Rosso, P.E.**  
Director, Environmental Services

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### **Summary of Professional Experience**

Mr. Rosso has more than 17 years of experience in the environmental consulting field. He has served in senior technical, project management, litigation support, and construction management capacities on a variety of multidisciplinary projects in the areas of waste management, groundwater hydrology, risk assessment, bedrock investigations, and civil engineering. He has managed various large-scale projects valued at up to \$40 million.

Mr. Rosso has planned and executed hundreds of investigations related to soil and groundwater contamination issues and has worked extensively with regulatory agencies throughout the United States. Mr. Rosso's strong understanding of state and federal environmental regulations and practical solutions provides particular expertise in client/agency negotiations leading to favorable client results. Contaminants of concern on these projects have included volatile organic compounds (VOCs) as dissolved and as dense nonaqueous-phase liquids (DNAPLs); heavy metals; dioxins, pesticides; petroleum hydrocarbons; polychlorinated biphenyls (PCBs); asbestos; and polynuclear aromatic hydrocarbons (PAHs).

Mr. Rosso has significant experience with numerous cleanup technologies and understands the feasibility, practicality, and effectiveness of the common options. Remedial systems with which he has extensive experience include large-scale removal, groundwater extraction, encapsulation, groundwater treatment, vapor treatment, dual phase extraction, soil vapor extraction, air sparge systems, biodegradation, oxidation, chemical fixation, barrier systems, hydraulic control, and waste stabilization. Mr. Rosso is currently responsible for overseeing the environmental risk management and remediation practice for Clayton in the Northern California Region, where he is responsible for the quality and budgets of complex environmental scenarios from inception to completion.

### **Project Experience**

#### **Trichloroethane (TCA) Investigation and Remediation**

##### *Manufacturing Industry*

Mr. Rosso was the project manager, construction manager, and engineer of record for the investigation and remediation of a historical release of more than 1 million pounds of TCA into overburden and bedrock groundwater at a major manufacturing facility in Rhode Island. The groundwater contamination threatened one of the primary drinking water aquifers for Rhode Island. The vertical and lateral extent of the plume was defined using a network of surface water monitoring points and various well types including microwells, overburden monitoring wells, bedrock wells, multiple stage completion wells, and private domestic wells.



***Trichloroethane (TCA) Investigation and Remediation (continued)***

Sampling data indicated that the dissolved plume encompassed an area of about 200 acres and extended more than a mile from the site. The TCA product, a DNAPL, was found over a quarter mile away from the original source at a depth of 400 feet below the ground surface.

The remediation plan included installing a half-mile-long interceptor subdrain system to hydraulically control and extract the overburden and bedrock groundwater for treatment. The majority of the interceptor subdrain was to be constructed on property that had originally been a land grant from the King of England and is a registered historic property. Archeological investigations on this property, as part of the remediation permitting and planning, uncovered a prehistoric feature approximately 4,000 to 7,000 years old, requiring complete removal and preservation. The archeological investigation, permitting, and removal was performed efficiently and did not impact the project schedule. The remedial design and permit process involved approvals from six divisions of the Rhode Island Department of Environmental Management (RIDEM); United States Army Corps of Engineers (USACE), United States Environmental Protection Agency (USEPA), the U.S. Department of Interior, and various historic preservation commissions.

Mr. Rosso assisted legal counsel with property access, easements, and well closure agreements. To allow construction and operation of the interceptor subdrain to proceed, a revised and amended consent agreement with RIDEM was successfully negotiated. This agreement consolidated key permitting authority among the various divisions and created a freshwater wetland delineation and mitigation plan. As the project manager, construction manager, and engineer of record, Mr. Rosso was responsible for hiring and managing the consultants and contractors, developing the plans and specifications, evaluating bids, awarding the contracts, and approving all payments. Project activities ultimately led to site containment using a system that was essentially passive, with very reasonable annual operating costs.

**Superfund Site Remediation*****Superfund Site – Former Petroleum Recycling Facility***

Mr. Rosso served as program manager for implementation of removal activities at a former petroleum recycling facility in Patterson, California. The abandoned waste oil recycling facility contained about 5.5 million gallons of hazardous waste and hazardous waste water, tank-bottoms sludge, and waste oil. In addition, the site contained 1,200 drums of used oil filters and miscellaneous chemicals. Waste water and sludge were found to be RCRA hazardous waste and to contain dioxin compounds. The project was initiated under an order issued by the USEPA, and work is funded through a Steering Committee representing 21 potentially responsible parties (PRPs) who are cooperating to fund the remediation. The project is two-thirds completed, and the final stage of sludge removal began in November 1999. Working for the PRPs, Mr. Rosso managed the investigation of waste materials,

***Superfund Site Remediation (continued)***

regulatory interaction, community relations, cost recovery, treatability analysis, value engineering, waste disposal, and site decontamination. USEPA Region IX officials have publicly praised the cleanup project, calling it a "model effort for Superfund removal projects."

**Litigation Support*****Steel Industry***

Mr. Rosso provided litigation support to defend this steel company from a claim that the historic operations of the steel plant contaminated an adjacent property that recycled steel barrels. At issue was a claim that heavy residual petroleum fuel known as Bunker fuel spilled on the client's property and migrated cross-gradient to the adjacent property. Working with an expert witness in chemistry, Mr. Rosso evaluated previous investigations by others, historical aerial photographs and records, regulatory files, depositions, cost estimates, and various remedial investigations and feasibility studies.

Based on the analysis of the available data and computer modeling techniques, Mr. Rosso and Dr. James Bruya (a chemical expert) developed a theory that numerous chemical products were spilled as part of the barrel recycling process and were subsequently affected by caustic cleaning solutions. The theory speculated that modified chemical compounds observed in soil and groundwater samples were then incorrectly interpreted to be residual petroleum fuel hydrocarbons by analytical laboratories that used qualitative analytical techniques. To defend the client, a comprehensive subsurface investigation and laboratory testing program was implemented on both properties to explore the plaintiff's theory of migration and Clayton's theory as source of the contamination. The investigation and specialized laboratory-testing program demonstrated that the source of contamination was the barrel cleaning facility.

**Tetrachloroethene (PCE) Investigation and Remediation*****Manufacturing Industry***

A release of more than 60,000 pounds of PCE into groundwater occurred at a major manufacturing facility in Security, Colorado. The groundwater contamination affected the main aquifer for the area, which supplied 35,000 people with drinking water. Mr. Rosso served as a senior technical advisor for the investigation and remediation of the site. The project team used a network of more than 100 monitoring wells, municipal wells, and domestic wells to define the vertical and lateral extent of the plume, which was more than six miles long. Mr. Rosso developed various alternative remedial plans configured to fit on various offsite properties, evaluated the effectiveness of the scenarios, and developed detailed cost estimates for each conceptual plan including long-term operation costs. The remedial alternatives included groundwater extraction and treatment for hydraulic control, chemical

***Tetrachloroethene (PCE) Investigation and Remediation (continued)***

reaction walls, soil bentonite walls, air sparging, chemical injection and reaction, and natural attenuation. Based on extensive aquifer testing, subsurface investigation, and computer modeling, a hydraulic control system was designed and presented to the Colorado Department of Public Health, which approved the plan. The system was implemented and appears to be effective.

**Site Assessment and Subsurface Investigation*****Municipal Redevelopment Agency***

As a senior environmental consultant to the San Francisco Redevelopment Agency, Mr. Rosso conducted a site assessment and subsurface investigation for the proposed parking facility at the San Francisco Giants' new baseball park. The environmental site assessment (ESA) identified several issues. First, the property had been part of a major fuel-oil handling facility operating between 1920 and 1930. Aerial photographs from 1930 showed three 40-foot-diameter aboveground oil tanks (ASTs) and a pump station onsite. The adjacent properties contained 19 ASTs with one tank measuring 150 feet in diameter. Second, the ESA identified that the site was underlain with 20 to 30 feet of rubble debris from the 1906 earthquake and fire. The subsurface investigation was designed to characterize the subsurface and quantify the remedial issues for the construction of the parking structure. The subsurface investigation confirmed that earthquake debris were present and contaminated with lead, hydrocarbons, and PAHs. Third, the ESA identified significant quantities of heavy hydrocarbons underlying the property. Fuel characterization analyses indicated that the hydrocarbons were residual fuel oil and crude oil. Mr. Rosso reviewed various remedial options with the San Francisco Department of Public Health and reached agreement that the most cost effective and practical remedial plan was to encapsulate the material onsite. These activities were completed in a timely manner, allowing the project to proceed as scheduled on a sound environmental and fiscal basis.

**Site Investigations, Evaluations, and Remediation*****State Superfund Sites – Landfills***

Mr. Rosso investigated, evaluated, and remediated two California State Superfund landfills that contained chromium-contaminated furnace bricks. In the past, a local winery's glass bottle furnaces had been remodeled and the brick linings were placed in uncontrolled landfills. The bricks subsequently released hexavalent and trivalent chromium to groundwater. The assessment involved the installation of monitoring well networks at each landfill to define the vertical and lateral extent of groundwater contamination. Based on review of historical aerial photographs, extensive exploratory trenching programs were developed to locate the bricks within each landfill. The most cost-effective remedial alternative included the complete removal of the contaminated bricks (approximately 5,000 cubic yards) and the extraction and treatment of shallow groundwater. The remedial actions resulted in site closure and removal from the state Superfund list.

**Mediation and Litigation Support***Transportation Industry*

Mr. Rosso provided mediation and litigation support for a major overnight courier corporation against the San Francisco International Airport regarding cost recovery for hazardous waste remediation encountered during the construction of Taxiway C. The project involved developing defense arguments through extensive historical research, evaluation of investigations by multiple parties, identification of various types of fuel hydrocarbons, analysis of airport cost claims and construction schedule impacts. The work by Mr. Rosso provided a strong basis for the client to negotiate with the airport.

**Landfill Investigations***Real Estate Development Industry*

A 1,000-acre development was planned for Orinda, California. As part of the environmental assessment of the property, Mr. Rosso investigated four major onsite landfills, which contained construction debris. The landfills were delineated using historic aerial photographs and topographic mapping. The four landfills contained more than 100,000 cubic yards of construction debris. A subsurface investigation was designed to investigate and characterize the landfills, some of which extend to depths of 60 feet below ground surface. The laboratory-testing program demonstrated that three of the landfills did not contain hazardous compounds and could be used as general fill in the development. One of the landfills, which was located in a former quarry, contained high concentrations of lead, hydrocarbons, and PCBs. The contaminated fill material was primarily soil mixed with metal debris, tires, and asphalt. Interviews with former ranch personnel identified the material as Caltrans shoulder scrapping. As part of remedial feasibility study, Mr. Rosso developed surface-water and bedrock groundwater investigations. Based on the results of the investigations, a remedial action plan was developed. Due to toxicity and solubility issues with the fill, the most practical remedial solution was excavation and offsite disposal, which was implemented, allowing the development project to move forward.

**Emergency Response and Remediation***Transportation Industry*

Mr. Rosso was the onsite technical advisor and project manager for the emergency response and remediation of a massive toxic chemical spill due to a 23-car train derailment north of Houston, Texas. The remedial action included the rapid restoration of the railroad line and the protection of a nearby river. Working with the contractor, Mr. Rosso identified the lateral and vertical extent of soil contamination and developed a remedial program, which involved removing 700,000 gallons of hazardous liquids, excavating 14,000 cubic yards of soil, and restoring the remediated area with a low permeability cap. Working with the Texas regulatory agencies, Mr. Rosso implemented a followup groundwater investigation, which concluded that only minor residual contamination existed following the remediation.

**Site Remediation Plans***Real Estate Redevelopment*

As project manager, Mr. Rosso prepared site remediation plans for a mixed-use, master-planned, water-oriented development to be built on 50 acres along the shore of San Francisco Bay. Historically, the site was part of a highly industrialized area, which included major steel production and fabrication facilities. Mr. Rosso studied past manufacturing operations and existing site conditions and evaluated various previous investigations conducted by others. As part of this study and studies by others, more than 275 soil samples were collected and chemically analyzed. Statistical evaluation of the data indicated that hydrocarbons and heavy metals were present in near-surface soil in localized areas of the site and did not substantially affect the groundwater. The remediation plan, developed in association with regulatory agencies, consisted of excavating and removing 40,000 cubic yards of contaminated soil from various areas of the site followed by chemical fixation, compaction, and encapsulation of the excavated soil beneath a 5-acre concrete parking structure on the property. The plan was approved and implemented, allowing the development to proceed as planned and in compliance with environmental regulations.

**Site Assessments and Remediation***Chemical Industry*

Mr. Rosso was project manager for the site assessment and remediation of two inactive evaporation ponds containing 9,000 cubic yards of residual sludge materials from aluminum anodizing processes at a California chemical manufacturing facility. Interacting with the California Regional Water Quality Control Board (RWQCB) on behalf of the client and one of its subsidiaries, Mr. Rosso developed a site characterization program, which focused on defining the subsurface conditions, soil quality, and extent of groundwater contamination. These assessment activities involved drilling and continuously sampling soil borings, installing monitoring and extraction wells, logging geophysical subsurface conditions, and chemically testing soil and groundwater samples. Evaluation studies included investigating the effects of high pH on groundwater geochemistry, treatability studies for nonhazardous disposal of sludge, aquifer testing, and computer modeling for groundwater extraction systems. The remediation consisted of excavating the sludge material, disposing of the material as nonhazardous waste, controlled backfilling and surface grading of the former pond areas, and monitoring geochemical transformations in the groundwater. These activities brought the site into compliance with state environmental regulations.

**Site Characterization and Remedial Plans***Food Processing and Distribution Plant*

As a senior technical consultant, Mr. Rosso directed site characterization activities and developed remedial plans for a 70-acre food processing and distribution facility in California. Mr. Rosso conducted an ESA of the property and identified several areas of concern including multiple fuel and solvent handling facilities and the former presence of 18 underground storage tanks (USTs), primarily in a fuel tank farm area. Investigations of the

***Site Characterization and Remedial Plans (continued)***

UST areas indicated significant releases to the subsurface. Free-floating fuel product was found on the groundwater surface. Fuel characterization techniques identified the floating fuel product as a mixture of gasoline and diesel. Various remedial options reviewed in detail included horizontal extraction wells, bioremediation, injection of hydrogen peroxide, product extraction, soil vapor extraction, groundwater sparging, and excavation.

Evaluations indicated that the most cost-effective and practical remedial plan was to remove the free product and monitor the natural attenuation of the plume. In addition to onsite issues, chlorinated organic solvents were found in groundwater entering the property from an upgradient source. Mr. Rosso identified potential offsite sources of chlorinated solvents through the use regulatory record and historic aerial photography. This information was used by the client to determine the remedial course of action and allowed the major rehabilitation of the facility to proceed on schedule.

**Subsurface Evaluation*****Transportation Industry***

As project manager, Mr. Rosso evaluated the subsurface conditions for the expansion of a private waste water treatment plant and major access road at the San Francisco International Airport. These renovation projects were located adjacent to major jet fuel distribution facilities not owned by the Airport. The investigation focused on identifying, delineating, and quantifying fuel products in the subsurface. The laboratory testing program included fuel fingerprinting and fuel characterization techniques. The investigation identified jet fuel products floating on the groundwater in several areas. The objective of remedial activities was to protect foundation and pipeline construction workers within the jet fuel contaminated areas. These activities delineated the areas of concern and minimized the uncertainty for the expansion project bidding contractor. This resulted in a more accurate bid and minimized change orders.

**Trichloroethene (TCE) Investigations*****Manufacturing Facility***

As a senior technical advisor, Mr. Rosso investigated the presence of TCE in groundwater beneath two adjacent manufacturing facilities in central California. He assisted the downgradient property owner and its environmental counsel to evaluate the work of opposing consultants, assess and delineate the extent of contamination, and develop a variety of possible remedial actions. The work also included assessing groundwater flow and using numerical simulation models to estimate the fate and transport of chemicals and the extraction systems' zone of capture. These investigations demonstrated the upgradient facility as the major source of contamination. Mr. Rosso provided litigation support to the environmental counsel for the downgradient property owner, evaluated remedial alternatives, and prepared community relations plans. The most cost-effective measures proved to be groundwater extraction and treatment and soil vapor extraction from the vadose zone. As a result of these activities, the client received a favorable settlement.

**Contamination Source Investigation***Real Estate Redevelopment*

As part of the redevelopment of downtown Hartford, Connecticut, a major bank was foreclosing on several contiguous properties. The ESAs and subsurface investigations by others identified chlorinated solvents in the groundwater on the properties. The main issue for the bank involved the source of the contamination, which the previous consultant believed was onsite. Based on the evaluation of the data, subsurface conditions, and hydrogeologic regime, it appeared that an offsite source was responsible for the chlorinated solvents in the groundwater. The review of regulatory records identified a nearby property that was previously used by a barrel cooperage, which had recycled steel barrels. The former cooperage had been replaced with an office building for the Connecticut Department of Public Works. Regulatory records indicated that the barrel cooperage had recycled chlorinated solvents and apparently had buried a large number of drums, which were uncovered during the construction of the office building. Computer analysis and models demonstrated that the source of contamination was most likely the former barrel cooperage. These findings allowed the bank fund the redevelopment project.

**Employment History**

Clayton Group Services, Inc. – Pleasanton, California  
Director, Environmental Services  
1998–Present

A. F. Evans Company, Inc. – San Ramon, California  
Manager of Acquisitions and Project Manager  
1997–1998

Treadwell & Rollo, Inc. – San Francisco, California  
Founding Shareholder, Officer, and Senior Associate Engineer  
1988–1997

Geomatrix Consultants, Inc. – San Francisco, California  
Senior Staff Engineer  
1984–1988

Woodward-Clyde Consultants – Oakland, California  
Staff Engineer  
1982–1984

**Education**

M.S., Civil Engineering (Construction Management), 1988  
University of California, Berkeley, California

B.S., Civil Engineering, 1984  
University of California, Berkeley, California

**Professional Registrations and Certifications**

Environmental Assessor: California (inactive)  
Licensed Civil Engineer, State of California, No. 45310, 1990  
Licensed Civil Engineer, State of Connecticut, No. 7818, 1993  
Licensed Civil Engineer, State of Massachusetts, No. 37347, 1993  
Licensed Civil Engineer, State of New Jersey, No. 38988, 1995  
Licensed Civil Engineer, State of Rhode Island, No. 6057, 1993

**Professional Affiliations**

American Chemical Society (ACS)  
American Society of Civil Engineers, (ASCE)  
Chi Epsilon, National Civil Engineering Honor Society  
National Ground Water Association (NGWA)



**APPENDIX B**  
**BORING LOGS**



# LOG OF BORING B-1

(Page 1 of 1)

Shamrock Ford  
7499 Dublin Boulevard  
Dublin, California

Clayton Project No. 70-01369.01

Date Started : 10/12/00  
Hole Diameter : 4 inch  
Drilling Method : Geoprobe Direct Push  
Driller : Environmental Control Associates  
Logged by : Jesse Edmands

Depth in FEET	Depth in FEET	Surf. Elev.	OVM (ppm)	USCS	GRAPHIC	Soil Sample	Water Levels	Elev.:
							<input type="checkbox"/> After Completion <input type="checkbox"/> During Drilling	
							DESCRIPTION	
0	0	0					Concrete and Base Gravel/Sand	
						X	SILTY CLAY, Black, Dry, Stiff, No odor	
4	4	-4	0.9			X		
							at 6 feet SILTY CLAY to CLAY, Olive Brown, Dry, Stiff, No odor	
8	8	-8	1.5	CL				
12	12	-12	0.9					
						X		
16	16						TOTAL DEPTH OF BORING = 16 FEET *NOTE: GROUNDWATER NOT ENCOUNTERED	

10-31-2000 170-01369.01b-1 bor.



# LOG OF BORING B-2

(Page 1 of 1)

Shamrock Ford  
7499 Dublin Boulevard  
Dublin, California

Clayton Project No. 70-01369.01

Date Started : 10/12/00  
Hole Diameter : 4 inch  
Drilling Method : Geoprobe Direct Push  
Driller : Environmental Control Associates  
Logged by : Jesse Edmands

Depth in FEET	Depth in FEET	Surf. Elev.	OVM (ppm)	USCS	GRAPHIC	Soil Sample	Water Levels	Elev.:
							▼ After Completion ▽ During Drilling	
DESCRIPTION								
0	0	0					Concrete and Base Gravel/Sand	
							SILTY CLAY, Black, Dry, Stiff, No odor	
						X		
4	4	4	1.5			X	at 5 feet SILTY CLAY to CLAY, Olive Brown, Dry, Stiff, No odor	
			17.1			X	at 6.5 feet SILTY CLAY, Brown with greenish discolorations, Dry, Petroleum odors to 10 feet	
8	8	8		CL				
						X	at 10 feet SILTY CLAY, Brown, Dry, No odors	
12	12	12	0.9			X	at 12 feet SILTY CLAY, Brown, Moist, Slight petroleum odor	
16	16						TOTAL DEPTH OF BORING = 16 FEET	

10-31-2000 70-01369.01B-2 bor



# LOG OF BORING B-3

(Page 1 of 1)

Shamrock Ford  
7499 Dublin Boulevard  
Dublin, California

Clayton Project No. 70-01369.01

Date Started : 10/12/00  
Hole Diameter : 4 inch  
Drilling Method : Geoprobe Direct Push  
Driller : Environmental Control Associates  
Logged by : Jesse Edmands

Depth in FEET	Depth in FEET	Surf. Elev.	OVM (ppm)	USCS	GRAPHIC	Soil Sample	Water Levels		Elev.:
							▼ After Completion	▼ During Drilling	
							DESCRIPTION		
0	0	0							
						X	Concrete and Base Gravel/Sand		
						X	SILTY CLAY, Black, Dry, Stiff, No odor		
4	4	-4	0.0						
						X			
8	8	-8	0.0	CL			at 8 feet SILTY CLAY, Olive Brown, Moist to Saturated, No odor		
12	12	-12						▼	
							TOTAL DEPTH OF BORING = 16 FEET		
16	16								



# LOG OF BORING B-4

(Page 1 of 1)

Shamrock Ford  
7499 Dublin Boulevard  
Dublin, California

Clayton Project No. 70-01369.01

Date Started : 10/12/00  
Hole Diameter : 4 inch  
Drilling Method : Geoprobe Direct Push  
Driller : Environmental Control Associates  
Logged by : Jesse Edmands

Depth in FEET	Depth in FEET	Surf. Elev.	OVM (ppm)	USCS	GRAPHIC	Soil Sample	Water Levels		Elev.:
							▼ After Completion	▼ During Drilling	
							DESCRIPTION		
0	0	0							
4	4	-4				X			
8	8	-8	0.0	CL		X			
12	12	-12	0.0						
16	16								

Concrete and Base Gravel/Sand  
SILTY CLAY, Black, Dry, Stiff, No odor

at 4 feet SILTY CLAY, Olive Brown, Moist to Saturated, No odor

TOTAL DEPTH OF BORING = 16 FEET

10-31-2000 170-01369.01B-4.bor



# LOG OF BORING B-5

(Page 1 of 1)

Shamrock Ford  
7499 Dublin Boulevard  
Dublin, California

Clayton Project No. 70-01369.01

Date Started : 10/12/00  
Hole Diameter : 4 inch  
Drilling Method : Geoprobe Direct Push  
Driller : Environmental Control Associates  
Logged by : Jesse Edmands

Water Levels  
 ▼ After Completion  
 ▼ During Drilling

Elev.:

Depth in FEET	Depth in FEET	Surf. Elev.	OVM (ppm)	USCS	GRAPHIC	Soil Sample	DESCRIPTION
0	0	0					Asphalt and Base Gravel
						X	SILTY CLAY, Black, Dry, Stiff, No odor
4	4	4	1.5			X	at 4.5 feet SILTY CLAY, Olive Brown, Moist, No odor
8	8	8	0.9	CL			
12	12	-12	0.0				
16	16						TOTAL DEPTH OF BORING = 16 FEET



# LOG OF BORING B-6

(Page 1 of 1)

Shamrock Ford  
7499 Dublin Boulevard  
Dublin, California

Clayton Project No. 70-01369.01

Date Started : 10/12/00  
Hole Diameter : 4 inch  
Drilling Method : Geoprobe Direct Push  
Driller : Environmental Control Associates  
Logged by : Jesse Edmands

Depth in FEET	Depth in FEET	Surf. Elev.	OVM (ppm)	USCS	GRAPHIC	Soil Sample	Water Levels		Elev.:
							▼ After Completion	▽ During Drilling	
							DESCRIPTION		
0	0	0							
							Asphalt and Base Gravel		
							SILTY CLAY, Olive Brown, Dry		
						X			
4	4	4	0.0						
						X			
8	8	8	0.0	CL					
12	12	-12	0.0						▽
							at 12 feet SILTY CLAY, Olive Brown, Moist, No odor		
							TOTAL DEPTH OF BORING = 16 FEET		
16	16								

10-31-2000 70-01369.01b-6.bor




# LOG OF BORING B-7

(Page 1 of 1)

Shamrock Ford  
7499 Dublin Boulevard  
Dublin, California

Clayton Project No. 70-01369.01

Date Started : 10/12/00  
Hole Diameter : 4 inch  
Drilling Method : Geoprobe Direct Push  
Driller : Environmental Control Associates  
Logged by : Jesse Edmands

Depth in FEET	Depth in FEET	Surf. Elev.	OVM (ppm)	USCS	GRAPHIC	Soil Sample	Water Levels	Elev.:
							<input type="checkbox"/> After Completion <input checked="" type="checkbox"/> During Drilling	
DESCRIPTION								
0	0	0					Asphalt and Base Gravel	
						X	SILTY CLAY, Black, Dry, Stiff, No odor	
4	4	-4	0.0			X	at 5 feet SILTY CLAY, Olive Brown, Moist, No odor	
8	8	-8	0.0	CL				
12	12	-12	0.0					
16	16						TOTAL DEPTH OF BORING = 16 FEET	<input checked="" type="checkbox"/>

10-31-2000 170-01369.01b-7.bor





# LOG OF BORING B-8

(Page 1 of 1)

Shamrock Ford  
7499 Dublin Boulevard  
Dublin, California

Clayton Project No. 70-01369.01

Date Started : 10/12/00  
Hole Diameter : 4 inch  
Drilling Method : Geoprobe Direct Push  
Driller : Environmental Control Associates  
Logged by : Jesse Edmands

Depth in FEET	Depth in FEET	Surf. Elev.	OVM (ppm)	USCS	GRAPHIC	Soil Sample	Water Levels	Elev.:
							<input type="checkbox"/> After Completion <input type="checkbox"/> During Drilling	
DESCRIPTION								
0	0	0						
						X	Asphalt and Base Gravel	
						X	SILTY CLAY, Black, Dry, Stiff, No odor	
4	4	-4	0.0			X	at 4 feet SILTY CLAY, Olive Brown, Dry, No odor	
8	8	-8	0.0	CL				
12	12	-12	0.0				at 11 feet SILTY CLAY, Olive Brown, Moist, No odor	
16	16						TOTAL DEPTH OF BORING = 16 FEET	

10-31-2000 170-01369.01b-B bor



# LOG OF BORING B-9

(Page 1 of 1)

Shamrock Ford  
7499 Dublin Boulevard  
Dublin, California

Clayton Project No. 70-01369.01

Date Started : 10/12/00  
Hole Diameter : 4 inch  
Drilling Method : Geoprobe Direct Push  
Driller : Environmental Control Associates  
Logged by : Jesse Edmonds

Depth in FEET	Depth in FEET	Surf. Elev.	OVM (ppm)	USCS	GRAPHIC	Soil Sample	Water Levels		Elev.:
							▼ After Completion	▼ During Drilling	
							DESCRIPTION		
0	0	0							
							Asphalt and Base Gravel		
							SILTY CLAY, Black, Dry, Stiff, No odor		
						X			
4	4	4	0.9				at 4 feet SILTY CLAY, Grayish Black, Dry, No odor		
						X			
8	8	8	0.3				at 12 feet SILTY CLAY, Grayish Brown, Dry, No odor		
12	12	-12	0.3		CL		at 12 feet SILTY CLAY, Grayish Brown, Dry, No odor		
						X			
16	16	-16					TOTAL DEPTH OF BORING = 20 FEET		
							*NOTE: GROUNDWATER NOT ENCOUNTERED		
20	20								

10-31-2000 170-01369.01B-9 bor



# LOG OF BORING B-10

(Page 1 of 1)

Shamrock Ford  
7499 Dublin Boulevard  
Dublin, California  
  
Clayton Project No. 70-01369.01

Date Started : 10/12/00  
Hole Diameter : 4 inch  
Drilling Method : Geoprobe Direct Push  
Driller : Environmental Control Associates  
Logged by : Jesse Edmonds

Depth in FEET	Depth in FEET	Surf. Elev.	OVM (ppm)	USCS	GRAPHIC	Soil Sample	Water Levels	Elev.:
							<input type="checkbox"/> After Completion <input type="checkbox"/> During Drilling	
							DESCRIPTION	
0	0	0					Asphalt and Base Gravel	
						X	SILTY CLAY, Black, Dry, Stiff, No odor	
4	4	-4	1.5			X	at 4 feet SILTY CLAY, Olive Brown, Dry, No odor	
8	8	-8	0.9					
				CL				
12	12	-12	0.3				at 11 feet SILTY CLAY, Grayish Brown, Dry, No odor	
16	16	-16						
20	20						TOTAL DEPTH OF BORING = 20 FEET	

10-31-2000 170-01369.01b-10 bor

▽



# LOG OF BORING B-11

(Page 1 of 1)

Shamrock Ford  
7499 Dublin Boulevard  
Dublin, California

Clayton Project No. 70-01369.01

Date Started : 10/12/00  
Hole Diameter : 4 inch  
Drilling Method : Geoprobe Direct Push  
Driller : Environmental Control Associates  
Logged by : Jesse Edmands

Depth in FEET	Depth in FEET	Surf. Elev.	OVM (ppm)	USCS	GRAPHIC	Soil Sample	Water Levels		Elev.:
							▼ After Completion	▼ During Drilling	
							DESCRIPTION		
0	0	0							
4	4	-4	1.5			X			
8	8	-8	0.3	CL		X			
12	12	-12	0.3						▼
16	16								

Asphalt and Base Gravel

SILTY CLAY, Brown, Dry, Stiff, No odor

at 4 feet SILTY CLAY, Grayish Brown, Dry, No odor

TOTAL DEPTH OF BORING = 16 FEET

10-31-2000 70-01369.01B-11 bor

**APPENDIX C**

**LABORATORY ANALYTICAL DATA SHEETS**

22448-clay280.doc

McCAMPBELL ANALYTICAL INC.

110 2<sup>ND</sup> AVENUE SOUTH, #D7  
PACHECO, CA 94553-5560

Telephone: (925) 798-1620

Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH  24 HR  48 HR  72 HR  5 DAY

Report To: Donald Ashton Bill To: SAME  
Company: Clayton Group Services  
6926 Coll Center Parkway Suite 216  
Pleasanton, CA 94566  
Tele: 925-426-2679 Fax: 925-426-0106  
Project #: 70-01369.01 Project Name: Shamrock Ford  
Project Location:  
Sampler Signature: *[Signature]*

Analysis Request

Other Comments

SAMPLE ID	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED								
		Date	Time			Water	Soil	Air	Sludge	Other	Ice	HCl	HNO <sub>3</sub>	Other					
B-1e1'		10-12		1		X	X												
B-1e5'				1		X	X												
B-1e14'				1		X	X												
B-2@1'				1		X	X												
B-2@4'				1		X	X												
B-2@7'				1		X	X												
B-2@10'				1		X	X												
B-2@12'				1		X	X												
B-2				3		X	X												
B-3@1'				1		X	X												
B-3e5'				1		X	X												
B-3				3		X	X												
B-4@1'				1		X	X												
B-4@4'				1		X	X												
B-4				3		X	X												

Analysis Request	Other	Comments
BTEX & TPH in Gas (602/8020 + 8015) MTBE		
TPH as Diesel (8015) + Motor Oil		
Total Petroleum Oil & Grease (5570 E&F/B&F)		
Total Petroleum Hydrocarbons (418.1)		
EPA 601 / 8010		
BTEX ONLY (EPA 602 / 8020)		
EPA 608 / 8080		
EPA 608 / 8080 PCB's ONLY		
EPA 624 / 8240 <b>(8260) + TPH-g</b>		
EPA 625 / 8270		
PAH's / PNA's by EPA 625 / 8270 / 8310		
CAM-17 Metals		
LUFT 5 Metals <b>Filter (2)</b>		
Lead (7240/7421/239.2/6010)		
RCI		
pH		
TSS		
TOC		
Specific Conductivity		

50196 H  
50197  
50198 H  
50199 H  
50200  
50201  
50202 H  
50203 H  
50204 H  
50205 H  
50206  
50207 H  
50208 H  
50209  
50210 H

Relinquished By: *[Signature]* Date: 10-12 Time: 4:30 Received By: *[Signature]*  
Relinquished By: Date: Time: Received By:  
Relinquished By: Date: Time: Received By:

Remarks: TPH w/ silica gel cleanup

ICEA  
PRODUCTION  
TR.W

**MCCAMPBELL ANALYTICAL INC.**

110 2<sup>ND</sup> AVENUE SOUTH, #D7  
 PACHECO, CA 94553-5560

Telephone: (925) 798-1620

Fax: (925) 798-1622

Report To: Donald Ashton Bill To: SAME

Company: Clayton Group Services  
6920 Koll Center Parkway # 216  
Pleasanton, CA 94566

Tele: (925) 426-2679 Fax: (925) 426-0106

Project #: 70-01369.01 Project Name: Shenocke Pond

Project Location:

Sampler Signature: *[Signature]*

**CHAIN OF CUSTODY RECORD**

TURN AROUND TIME

RUSH  24 HR  48 HR  72 HR  5 DAY

**Analysis Request**

**Other**

**Comments**

SAMPLE ID	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED					Specific Conductivity						
		Date	Time			Water	Soil	Air	Sludge	Other	Ice	HCl	HNO <sub>3</sub>	Other	RCI		pH	TSS	TOC			
B-5@1'		10-12		1		X	X															
B-5@5'				2		X	X															
B-5																						
B-6@1'				1		X	X															
B-6@5'				1		X	X															
B-6				3		X	X															
B-7@1'				1		X	X															
B-7@5'				1		X	X															
B-7				4		X	X															
B-8@1'				1		X	X															
B-8@5'				1		X	X															
B-8				4		X	X															
B-9@2'				1		X	X															
B-9@6'				1		X	X															
B-9@16'				1		X	X															

- 50211 \*
- 50212
- 50213 S\*
- 50214 \*
- 50215
- 50216 S\*
- 50217 \*
- 50218
- 50219 (f)
- 50220 \*
- 50221
- 50222 +
- 50223 \*
- 50224
- 50225

Remarks:

*TPH w/ silica gel cleanup*

Relinquished By: <i>[Signature]</i>	Date: <u>10-12</u>	Time: <u>4:30</u>	Received By: <i>[Signature]</i>
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

HEAD OFFICE RECEIVED CONTAINERS

*Altered, pros upon return*

**McCAMPBELL ANALYTICAL INC.**

110 2<sup>nd</sup> AVENUE SOUTH, #137  
PACHECO, CA 94553-5560

Telephone: (925) 798-1620

Fax: (925) 798-1622

**CHAIN OF CUSTODY RECORD**

TURN AROUND TIME

RUSH  24 HR  48 HR  72 HR  5 DAY

Report To: Donald Ashton Bill To:  
Company: Clayton Grip Services  
6900 Koll Center Parkway # 216  
Pleasanton, CA 94566  
Tele: (925) 426-2679 Fax: (925) 426-4060  
Project #: 70-01369,01 Project Name: Shonrock Ford

Project Location:  
Sampler Signature: [Signature]

SAMPLE ID	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED						
		Date	Time			Water	Soil	Air	Sludge	Other	Ice	HCl	HNO <sub>3</sub>	Other			
B-10@1'		10-12		1			X										
B-10@5'				1			X										
B-10				1		X											
B-11@1'				1		X											
B-11@4'				1		X											
B-11				4		X											

Analysis Request										Other		Comments							
BTEX & TPH as Gas (802/8020 - 8015) MTBE	TPH as Diesel (8015) + motor oil	Total Petroleum Oil & Grease (8520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010	BTEX ONLY (EPA 602 / 8020) + TPH-g	EPA 608 / 8080	EPA 608 / 8080 PCB's ONLY	EPA 624 / 8240 (260) MTAE	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals		LUFT 5 Metals	Lead (7240/7421/239-26010)	RCI	pH	TSS	TOC	Specific Conductivity

50226+  
50227  
50228 +  
50229  
50230  
50231

Relinquished By: [Signature] Date: 10-12 Time: 4:30p  
Received By: [Signature]  
Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
Received By: \_\_\_\_\_  
Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
Received By: \_\_\_\_\_

Remarks: TPH w/ silica gel cleanup

10/12/01  
HEAD OFFICE  
CONTAINER





McCAMPBELL ANALYTICAL INC.

 110 2nd Avenue South, #D7, Pacheco, CA 94553-5560  
 Telephone: 925-798-1620 Fax: 925-798-1622  
<http://www.mccampbell.com> E-mail: [main@mccampbell.com](mailto:main@mccampbell.com)

Clayton Group Services 6920 Koll Center Parkway, Suite 216 Pleasanton, CA 94566	Client Project ID: #70-01369.01; Shamrock Ford	Date Sampled: 10/12/00
	Client Contact: Donald Ashton	Date Received: 10/12/00
	Client P.O:	Date Analyzed: 10/12/00
		Date Extracted: 10/12/00

**Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline\*, with Methyl tert-Butyl Ether\* & BTEX\***

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	% Recovery Surrogate
50200	B-2@4'	S	ND	ND	ND	ND	ND	ND	111
50201	B-2@7'	S	25.g	ND	ND	ND	ND	0.023	119
50204	B-2	W	ND	ND	ND	ND	ND	ND	97
50215	B-6@5'	S	ND	ND	ND	ND	ND	ND	107
50216	B-6	W	ND,i	ND	ND	ND	ND	ND	95
50231	B-11	W	53,b,i	ND	ND	ND	0.53	5.2	99
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit	W	50 ug/L	5.0	0.5	0.5	0.5	0.5	0.5	
	S	1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	0.005	

\* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/L

\* cluttered chromatogram; sample peak coelutes with surrogate peak

\*The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant (aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH1 pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.



McCAMPBELL ANALYTICAL INC.

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Clayton Group Services 6920 Koll Center Parkway, Suite 216 Pleasanton, CA 94566	Client Project ID: #70-01369.01; Shamrock Ford	Date Sampled: 10/12/00
	Client Contact: Donald Ashton	Date Received: 10/12/00
	Client P.O:	Date Extracted: 10/12/00
		Date Analyzed: 10/12-10/17/00

**Diesel Range (C10-C23) and Oil-Range (C18+) Extractable Hydrocarbons as Diesel and Motor Oil with Silica Gel Clean-Up\***


EPA methods modified 8015, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

Lab ID	Client ID	Matrix	TPH(d) <sup>1</sup>	TPH(mo) <sup>2</sup>	% Recovery Surrogate
50197	B-1@5'	S	3.1,e	ND	102
50200	B-2@4'	S	3.5,b	ND	101
50201	B-2@7'	S	2500,c/k	3700	97
50204	B-2	W	740,g	770	102
50206	B-3@5'	S	1.7,g	7.5	101
50207	B-3	W	59,b	ND	99
50209	B-4@4'	S	ND	ND	99
50210	B-4	W	72,b	ND	101
50212	B-5@5'	S	2.3,g	26	97
50213	B-5	W	4200,g,j,i	30,000	102
50215	B-6@5'	S	ND	ND	95
50218	B-7@5'	S	1.9,g	17	97
50219	B-7	W	ND	ND	104
50221	B-8@5'	S	6.2,g	42	103
50222	B-8	W	150,g	350	103
50224	B-9@6'	S	2.8,b	ND	101
50225	B-9@16'	S	ND	ND	102
50227	B-10@5'	S	ND	ND	105
50228	B-10	W	110,g	1200	95
50231	B-11	W	4200,g,i	53,000	102
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit	W		50 ug/L	250 ug/L	
	S		1.0 mg/kg	5.0 mg/kg	

\*water samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP / STLC / SPLP extracts in ug/l.

\* cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant; d) gasoline range compounds are significant; e) medium boiling point pattern that does not match diesel (kerosene?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) medium boiling point pattern that does not match diesel (stoddard solvent?); k) medium boiling point pattern that does not match diesel (fuel oil?)

 <b>McCAMPBELL ANALYTICAL INC.</b>	110 2nd Avenue South, #D7, Pacheco, CA 94553-5560 Telephone : 925-798-1620 Fax : 925-798-1622 <a href="http://www.mccampbell.com">http://www.mccampbell.com</a> E-mail: main@mccampbell.com
---	---


Clayton Group Services 6920 Koll Center Parkway, Suite 216 Pleasanton, CA 94566	Client Project ID: #70-01369.01; Shamrock Ford	Date Sampled: 10/12/00
	Client Contact: Donald Ashton	Date Received: 10/12/00
	Client P.O.:	Date Extracted: 10/12/00
		Date Analyzed: 10/13/00

**LUFT Metals\***  
EPA analytical methods 6010/200.7, 239.2'

Lab ID	Client ID	Matrix	Extraction <sup>o</sup>	Cadmium	Chromium	Lead	Nickel	Zinc	% Recovery Surrogate
50200	B-2@4'	S	TTLIC	ND	28	5.4	31	49	108
50201	B-2@7'	S	TTLIC	ND	31	6.9	35	54	106
50218	B-7@5'	S	TTLIC	ND	26	5.8	35	47	107
50219	B-7	W	Dissolved	ND	ND	ND	ND	ND	N/A
50221	B-8@5'	S	TTLIC	ND	28	8.8	31	50	106
50222	B-8	W	Dissolved	ND	ND	ND	ND	ND	N/A
50224	B-9@6'	S	TTLIC	ND	32	3.5	41	53	103
50225	B-9@16'	S	TTLIC	ND	34	7.1	44	57	99

Reporting Limit unless otherwise stated: ND means not detected above the reporting limit	S	TTLIC	0.5 mg/kg	0.5	3.0	2.0	1.0
	W	Dissolved	0.005 mg/L	0.02	0.005	0.05	0.05
	—	STLC, TCLP	0.01 mg/l.	0.05	0.2	0.05	0.05

\* water samples are reported in mg/L, soil and sludge samples in mg/kg, wipes in ug/wipe and all TCLP / STLC / SPLP extracts in mg/L  
<sup>o</sup> Lead is analysed using EPA method 6010 (ICP)for soils, STLC & TCLP extracts and method 239.2 (AA Furnace) for water samples  
<sup>o</sup> EPA extraction methods 1311(TCLP), 3010/3020(water,TTLIC), 3040(organic matrices,TTLIC), 3050(solids,TTLIC); STLC - CA Title 22  
<sup>o</sup> DISTLC extractions are performed using STLC methodology except that deionized water is substituted for citric acid buffer as the extraction fluid. DISTLC results are not applicable to STLC regulatory limits.  
 \* surrogate diluted out of range; N/A means surrogate not applicable to this analysis  
<sup>o</sup> reporting limit raised due to matrix interference  
 i) liquid sample that contains greater than ~2 vol. % sediment; this sediment is extracted with the liquid, in accordance with EPA methodologies and can significantly effect reported metal concentrations.

 <b>McCAMPBELL ANALYTICAL INC.</b>	110 2nd Avenue South, #D7, Pacheco, CA 94553-5560 Telephone: 925-798-1620 Fax: 925-798-1622 http://www.mccampbell.com E-mail: main@mccampbell.com

<b>Clayton Group Services</b> 6920 Koll Center Parkway, Suite 216 Pleasanton, CA 94566	Client Project ID: #70-01369.01; Shamrock Ford	Date Sampled: 10/12/00
	Client Contact: Donald Ashton	Date Received: 10/12/00
	Client P.O.:	Date Extracted: 10/13-10/17/00
		Date Analyzed: 10/13-10/17/00

EPA method 8260							
Lab ID		50204					
Client ID		B-2					
Matrix		W					
Compound	Concentration*	Reporting Limit		Compound	Concentration*	Reporting Limit	
		W	S			W	S
Acetone <sup>(b)</sup>	ND	5.0	25	trans-1,3-Dichloropropene	ND	1.0	5.0
Benzene	ND	1.0	5.0	Ethylene dibromide	ND	1.0	5.0
Bromobenzene	ND	1.0	5.0	Ethylbenzene	ND	1.0	5.0
Bromochloromethane	ND	1.0	5.0	Hexachlorobutadiene	ND	5.0	25
Bromodichloromethane	ND	1.0	5.0	Iodomethane	ND	1.0	5.0
Bromoform	ND	1.0	5.0	isopropylbenzene	ND	1.0	5.0
Bromomethane	ND	1.0	5.0	p-Isopropyl toluene	ND	1.0	5.0
n-Butyl benzene	ND	1.0	5.0	Methyl butyl ketone <sup>(d)</sup>	ND	1.0	5.0
sec-Butyl benzene	ND	1.0	5.0	Methylene Chloride <sup>(e)</sup>	ND<5.0	1.0	5.0
tert-Butyl benzene	ND	1.0	5.0	Methyl ethyl ketone <sup>(f)</sup>	ND	2.0	10
Carbon Disulfide	ND	1.0	5.0	Methyl isobutyl ketone <sup>(g)</sup>	ND	1.0	5.0
Carbon Tetrachloride	ND	1.0	5.0	Methyl tert-Butyl Ether (MTBE)	ND	1.0	5.0
Chlorobenzene	ND	1.0	5.0	Naphthalene	ND	5.0	5.0
Chloroethane	ND	1.0	5.0	n-Propyl benzene	ND	1.0	5.0
2-Chloroethyl Vinyl Ether <sup>(h)</sup>	ND	1.0	5.0	Styrene <sup>(i)</sup>	ND	1.0	5.0
Chloroform	ND	1.0	5.0	1,1,1,2-Tetrachloroethane	ND	1.0	5.0
Chloromethane	ND	1.0	5.0	1,1,2,2-Tetrachloroethane	ND	1.0	5.0
2-Chlorotoluene	ND	1.0	5.0	Tetrachloroethene	ND	1.0	5.0
4-Chlorotoluene	ND	1.0	5.0	Toluene <sup>(j)</sup>	ND	1.0	5.0
Dibromochloromethane	ND	1.0	5.0	1,2,3-Trichlorobenzene	ND	5.0	25
1,2-Dibromo-3-chloropropane	ND	2.0	10	1,2,4-Trichlorobenzene	ND	5.0	25
Dibromomethane	ND	1.0	5.0	1,1,1-Trichloroethane	ND	1.0	5.0
1,2-Dichlorobenzene	ND	1.0	5.0	1,1,2-Trichloroethane	ND	1.0	5.0
1,3-Dichlorobenzene	ND	1.0	5.0	Trichloroethene	ND	1.0	5.0
1,4-Dichlorobenzene	ND	1.0	5.0	Trichlorofluoromethane	ND	1.0	5.0
Dichlorodifluoromethane	ND	1.0	5.0	1,2,3-Trichloropropane	ND	1.0	5.0
1,1-Dichloroethane	ND	1.0	5.0	1,2,4-Trimethylbenzene	ND	1.0	5.0
1,2-Dichloroethane	ND	1.0	5.0	1,3,5-Trimethylbenzene	ND	1.0	5.0
1,1-Dichloroethene	ND	1.0	5.0	Vinyl Acetate <sup>(k)</sup>	ND	5.0	25
cis-1,2-Dichloroethene	ND	1.0	5.0	Vinyl Chloride <sup>(l)</sup>	ND	1.0	5.0
trans-1,2-Dichloroethene	ND	1.0	5.0	Xylenes, total <sup>(m)</sup>	ND	1.0	5.0
1,2-Dichloropropane	ND	1.0	5.0	<b>Comments:</b>			
1,3-Dichloropropane	ND	1.0	5.0	<b>Surrogate Recoveries (%)</b>			
2,2-Dichloropropane	ND	1.0	5.0	Dibromofluoromethane		98	
1,1-Dichloropropane	ND	1.0	5.0	Toluene-d8		110	
cis-1,3-Dichloropropene	ND	1.0	5.0	4-Bromofluorobenzene		71	

\*water and vapor samples are reported in ug/l., soil and sludge samples in ug/kg, wipes in ug/wipe and all TCLP / SPLP extracts in ug/L

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

(b) 2-propanone or dimethyl ketone; (c) (2-chloroethoxy) ethene; (d) 2-hexanone; (e) dichloromethane; (f) 2-butanone; (g) 4-methyl-2-pentanone or isopropylacetone; (h) lighter than water immiscible sheen is present; (i) liquid sample that contains greater than ~5 vol. % sediment; (j) sample diluted due to high organic content; (k) ethenylbenzene; (l) methylbenzene; (m) acetic acid ethenyl ester; (n) chloroethene; (o) dimethylbenzenes.

DIIS Certification No. 1644

 Edward Hamilton, Lab Director



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Clayton Group Services 6920 Koll Center Parkway, Suite 216 Pleasanton, CA 94566	Client Project ID: #70-01369.01; Shamrock Ford	Date Sampled: 10/12/00
	Client Contact: Donald Ashton	Date Received: 10/12/00
	Client P.O.:	Date Extracted: 10/13-10/17/00
		Date Analyzed: 10/13-10/17/00

## Volatile Organics By GC/MS

EPA method 8260

Lab ID		50207					
Client ID		B-3					
Matrix		W					
Compound	Concentration*	Reporting Limit		Compound	Concentration*	Reporting Limit	
		W	S			W	S
Acetone <sup>(b)</sup>	ND	5.0	25	trans-1,3-Dichloropropene	ND	1.0	5.0
Benzene	ND	1.0	5.0	Ethylene dibromide	ND	1.0	5.0
Bromobenzene	ND	1.0	5.0	Ethylbenzene	ND	1.0	5.0
Bromochloromethane	ND	1.0	5.0	Hexachlorobutadiene	ND	5.0	25
Bromodichloromethane	ND	1.0	5.0	Iodomethane	ND	1.0	5.0
Bromoform	ND	1.0	5.0	Isopropylbenzene	ND	1.0	5.0
Bromomethane	ND	1.0	5.0	p-Isopropyl toluene	ND	1.0	5.0
n-Butyl benzene	ND	1.0	5.0	Methyl butyl ketone <sup>(d)</sup>	ND	1.0	5.0
sec-Butyl benzene	ND	1.0	5.0	Methylene Chloride <sup>(e)</sup>	ND<5.0	1.0	5.0
tert-Butyl benzene	ND	1.0	5.0	Methyl ethyl ketone <sup>(f)</sup>	ND	2.0	10
Carbon Disulfide	ND	1.0	5.0	Methyl isobutyl ketone <sup>(g)</sup>	ND	1.0	5.0
Carbon Tetrachloride	ND	1.0	5.0	Methyl tert-Butyl Ether (MTBE)	4.1	1.0	5.0
Chlorobenzene	ND	1.0	5.0	Naphthalene	ND	5.0	5.0
Chloroethane	ND	1.0	5.0	n-Propyl benzene	ND	1.0	5.0
2-Chloroethyl Vinyl Ether <sup>(h)</sup>	ND	1.0	5.0	Styrene <sup>(i)</sup>	ND	1.0	5.0
Chloroform	ND	1.0	5.0	1,1,1,2-Tetrachloroethane	ND	1.0	5.0
Chloromethane	ND	1.0	5.0	1,1,2,2-Tetrachloroethane	ND	1.0	5.0
2-Chlorotoluene	ND	1.0	5.0	Tetrachloroethene	ND	1.0	5.0
4-Chlorotoluene	ND	1.0	5.0	Toluene <sup>(j)</sup>	ND	1.0	5.0
Dibromochloromethane	ND	1.0	5.0	1,2,3-Trichlorobenzene	ND	5.0	25
1,2-Dibromo-3-chloropropane	ND	2.0	10	1,2,4-Trichlorobenzene	ND	5.0	25
Dibromomethane	ND	1.0	5.0	1,1,1-Trichloroethane	ND	1.0	5.0
1,2-Dichlorobenzene	ND	1.0	5.0	1,1,2-Trichloroethane	ND	1.0	5.0
1,3-Dichlorobenzene	ND	1.0	5.0	Trichloroethene	ND	1.0	5.0
1,4-Dichlorobenzene	ND	1.0	5.0	Trichlorofluoromethane	ND	1.0	5.0
Dichlorodifluoromethane	ND	1.0	5.0	1,2,3-Trichloropropane	ND	1.0	5.0
1,1-Dichloroethane	ND	1.0	5.0	1,2,4-Trimethylbenzene	ND	1.0	5.0
1,2-Dichloroethane	ND	1.0	5.0	1,3,5-Trimethylbenzene	ND	1.0	5.0
1,1-Dichloroethene	ND	1.0	5.0	Vinyl Acetate <sup>(m)</sup>	ND	5.0	25
cis-1,2-Dichloroethene	ND	1.0	5.0	Vinyl Chloride <sup>(n)</sup>	ND	1.0	5.0
trans-1,2-Dichloroethene	ND	1.0	5.0	Xylenes, total <sup>(o)</sup>	ND	1.0	5.0
1,2-Dichloropropane	ND	1.0	5.0	Comments:			
1,3-Dichloropropane	ND	1.0	5.0	Surrogate Recoveries (%)			
2,2-Dichloropropane	ND	1.0	5.0	Dibromofluoromethane			96
1,1-Dichloropropene	ND	1.0	5.0	Toluene-d8			111
cis-1,3-Dichloropropene	ND	1.0	5.0	4-Bromofluorobenzene			71

\*water and vapor samples are reported in ug/L, soil and sludge samples in ug/kg, wipes in ug/wipe and all TCLP / SPLP extracts in ug/L.

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

(b) 2-propanone or dimethyl ketone; (c) (2-chloroethoxy) ethene; (d) 2-hexanone; (e) dichloromethane; (f) 2-butanone; (g) 4-methyl-2-pentanone or isopropylacetone; (h) lighter than water immiscible sheen is present; (i) liquid sample that contains greater than ~5 vol. % sediment; (j) sample diluted due to high organic content; (k) ethylbenzene; (l) methylbenzene; (m) acetic acid ethenyl ester; (n) chloroethene; (o) dimethylbenzenes.

DHS Certification No. 1644

Edward Hamilton, Lab Director



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Clayton Group Services 6920 Koll Center Parkway, Suite 216 Pleasanton, CA 94566	Client Project ID: #70-01369.01; Shamrock Ford	Date Sampled: 10/12/00
	Client Contact: Donald Ashton	Date Received: 10/12/00
	Client P.O.:	Date Extracted: 10/13-10/17/00
		Date Analyzed: 10/13-10/17/00

## Volatile Organics By GC/MS

EPA method 8260							
Lab ID		50210					
Client ID		B-4					
Matrix		W					
Compound	Concentration*	Reporting Limit		Compound	Concentration*	Reporting Limit	
		W	S			W	S
Acetone <sup>(b)</sup>	ND	5.0	25	trans-1,3-Dichloropropene	ND	1.0	5.0
Benzene	ND	1.0	5.0	Ethylene dibromide	ND	1.0	5.0
Bromobenzene	ND	1.0	5.0	Ethylbenzene	ND	1.0	5.0
Bromochloromethane	ND	1.0	5.0	Hexachlorobutadiene	ND	5.0	25
Bromodichloromethane	ND	1.0	5.0	Iodomethane	ND	1.0	5.0
Bromoform	ND	1.0	5.0	Isopropylbenzene	ND	1.0	5.0
Bromomethane	ND	1.0	5.0	p-Isopropyl toluene	ND	1.0	5.0
n-Butyl benzene	ND	1.0	5.0	Methyl butyl ketone <sup>(d)</sup>	ND	1.0	5.0
sec-Butyl benzene	ND	1.0	5.0	Methylene Chloride <sup>(e)</sup>	ND<5.0	1.0	5.0
tert-Butyl benzene	ND	1.0	5.0	Methyl ethyl ketone <sup>(f)</sup>	ND	2.0	10
Carbon Disulfide	ND	1.0	5.0	Methyl isobutyl ketone <sup>(g)</sup>	ND	1.0	5.0
Carbon Tetrachloride	ND	1.0	5.0	Methyl tert-Butyl Ether (MTBE)	ND	1.0	5.0
Chlorobenzene	ND	1.0	5.0	Naphthalene	ND	5.0	5.0
Chloroethane	ND	1.0	5.0	n-Propyl benzene	ND	1.0	5.0
2-Chloroethyl Vinyl Ether <sup>(h)</sup>	ND	1.0	5.0	Styrene <sup>(i)</sup>	ND	1.0	5.0
Chloroform	ND	1.0	5.0	1,1,1,2-Tetrachloroethane	ND	1.0	5.0
Chloromethane	ND	1.0	5.0	1,1,2,2-Tetrachloroethane	ND	1.0	5.0
2-Chlorotoluene	ND	1.0	5.0	Tetrachloroethene	ND	1.0	5.0
4-Chlorotoluene	ND	1.0	5.0	Toluene <sup>(j)</sup>	ND	1.0	5.0
Dibromochloromethane	ND	1.0	5.0	1,2,3-Trichlorobenzene	ND	5.0	25
1,2-Dibromo-3-chloropropane	ND	2.0	10	1,2,4-Trichlorobenzene	ND	5.0	25
Dibromomethane	ND	1.0	5.0	1,1,1-Trichloroethane	ND	1.0	5.0
1,2-Dichlorobenzene	ND	1.0	5.0	1,1,2-Trichloroethane	ND	1.0	5.0
1,3-Dichlorobenzene	ND	1.0	5.0	Trichloroethene	ND	1.0	5.0
1,4-Dichlorobenzene	ND	1.0	5.0	Trichlorofluoromethane	ND	1.0	5.0
Dichlorodifluoromethane	ND	1.0	5.0	1,2,3-Trichloropropane	ND	1.0	5.0
1,1-Dichloroethane	ND	1.0	5.0	1,2,4-Trimethylbenzene	ND	1.0	5.0
1,2-Dichloroethane	ND	1.0	5.0	1,3,5-Trimethylbenzene	ND	1.0	5.0
1,1-Dichloroethene	ND	1.0	5.0	Vinyl Acetate <sup>(k)</sup>	ND	5.0	25
cis-1,2-Dichloroethene	ND	1.0	5.0	Vinyl Chloride <sup>(l)</sup>	ND	1.0	5.0
trans-1,2-Dichloroethene	ND	1.0	5.0	Xylenes, total <sup>(m)</sup>	ND	1.0	5.0
1,2-Dichloropropane	ND	1.0	5.0	Comments:			
1,3-Dichloropropane	ND	1.0	5.0	Surrogate Recoveries (%)			
2,2-Dichloropropane	ND	1.0	5.0	Dibromofluoromethane			94
1,1-Dichloropropene	ND	1.0	5.0	Toluene-d8			109
cis-1,3-Dichloropropene	ND	1.0	5.0	4-Bromofluorobenzene			71

\*water and vapor samples are reported in ug/L, soil and sludge samples in ug/kg, wipes in ug/wipe and all TCLP / SPLP extracts in ug/L

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

(b) 2-propanone or dimethyl ketone; (c) (2-chloroethoxy) ethene; (d) 2-hexanone; (e) dichloromethane; (f) 2-butanone; (g) 4-methyl-2-pentanone or isopropylacetone; (h) lighter than water immiscible shown is present; (i) liquid sample that contains greater than ~5 vol. % sediment; (j) sample diluted due to high organic content; (k) ethenylbenzene; (l) methylbenzene; (m) acetic acid ethenyl ester; (n) chloroethene; (o) dimethylbenzenes.

DHS Certification No. 1644

Edward Hamilton, Lab Director



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Clayton Group Services 6920 Koll Center Parkway, Suite 216 Pleasanton, CA 94566	Client Project ID: #70-01369.01; Shamrock Ford	Date Sampled: 10/12/00
	Client Contact: Donald Ashton	Date Received: 10/12/00
	Client P.O:	Date Extracted: 10/13-10/17/00
		Date Analyzed: 10/13-10/17/00

## Volatile Organics By GC/MS

EPA method 8260

Compound	Concentration*	Reporting Limit		Compound	Concentration*	Reporting Limit	
		W	S			W	S
Acetone <sup>(b)</sup>	ND	5.0	25	trans-1,3-Dichloropropene	ND	1.0	5.0
Benzene	ND	1.0	5.0	Ethylene dibromide	ND	1.0	5.0
Bromobenzene	ND	1.0	5.0	Ethylbenzene	ND	1.0	5.0
Bromochloromethane	ND	1.0	5.0	Hexachlorobutadiene	ND	5.0	25
Bromodichloromethane	ND	1.0	5.0	Iodomethane	ND	1.0	5.0
Bromoform	ND	1.0	5.0	Isopropylbenzene	ND	1.0	5.0
Bromomethane	ND	1.0	5.0	p-Isopropyl toluene	ND	1.0	5.0
n-Butyl benzene	ND	1.0	5.0	Methyl butyl ketone <sup>(d)</sup>	ND	1.0	5.0
sec-Butyl benzene	ND	1.0	5.0	Methylene Chloride <sup>(e)</sup>	ND<5.0	1.0	5.0
tert-Butyl benzene	ND	1.0	5.0	Methyl ethyl ketone <sup>(f)</sup>	ND	2.0	10
Carbon Disulfide	ND	1.0	5.0	Methyl isobutyl ketone <sup>(g)</sup>	ND	1.0	5.0
Carbon Tetrachloride	ND	1.0	5.0	Methyl tert-Butyl Ether (MTBE)	21	1.0	5.0
Chlorobenzene	ND	1.0	5.0	Naphthalene	ND	5.0	5.0
Chloroethane	ND	1.0	5.0	n-Propyl benzene	ND	1.0	5.0
2-Chloroethyl Vinyl Ether <sup>(h)</sup>	ND	1.0	5.0	Styrene <sup>(i)</sup>	ND	1.0	5.0
Chloroform	ND	1.0	5.0	1,1,1,2-Tetrachloroethane	ND	1.0	5.0
Chloromethane	ND	1.0	5.0	1,1,2,2-Tetrachloroethane	ND	1.0	5.0
2-Chlorotoluene	ND	1.0	5.0	Tetrachloroethene	ND	1.0	5.0
4-Chlorotoluene	ND	1.0	5.0	Toluene <sup>(j)</sup>	ND	1.0	5.0
Dibromochloromethane	ND	1.0	5.0	1,2,3-Trichlorobenzene	ND	5.0	25
1,2-Dibromo-3-chloropropane	ND	2.0	10	1,2,4-Trichlorobenzene	ND	5.0	25
Dibromomethane	ND	1.0	5.0	1,1,1-Trichloroethane	ND	1.0	5.0
1,2-Dichlorobenzene	ND	1.0	5.0	1,1,2-Trichloroethane	ND	1.0	5.0
1,3-Dichlorobenzene	ND	1.0	5.0	Trichloroethene	ND	1.0	5.0
1,4-Dichlorobenzene	ND	1.0	5.0	Trichlorofluoromethane	ND	1.0	5.0
Dichlorodifluoromethane	ND	1.0	5.0	1,2,3-Trichloropropane	ND	1.0	5.0
1,1-Dichloroethane	ND	1.0	5.0	1,2,4-Trimethylbenzene	ND	1.0	5.0
1,2-Dichloroethane	ND	1.0	5.0	1,3,5-Trimethylbenzene	ND	1.0	5.0
1,1-Dichloroethene	ND	1.0	5.0	Vinyl Acetate <sup>(k)</sup>	ND	5.0	25
cis-1,2-Dichloroethene	ND	1.0	5.0	Vinyl Chloride <sup>(l)</sup>	ND	1.0	5.0
trans-1,2-Dichloroethene	ND	1.0	5.0	Xylenes, total <sup>(m)</sup>	ND	1.0	5.0
1,2-Dichloropropane	ND	1.0	5.0	Comments:			
1,3-Dichloropropane	ND	1.0	5.0	Surrogate Recoveries (%)			
2,2-Dichloropropane	ND	1.0	5.0	Dibromofluoromethane		94	
1,1-Dichloropropene	ND	1.0	5.0	Toluene-d8		108	
cis-1,3-Dichloropropene	ND	1.0	5.0	4-Bromofluorobenzene		68	

\* water and vapor samples are reported in ug/L, soil and sludge samples in ug/kg, wipes in ug/wipe and all TCLP / SPLP extracts in ug/L

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

(b) 2-propanone or dimethyl ketone; (c) (2-chloroethoxy) ethene; (d) 2-hexanone; (e) dichloromethane; (f) 2-butanone; (g) 4-methyl-2-pentanone or isopropylacetone; (h) lighter than water immiscible liquid is present; (i) liquid sample that contains greater than ~5 vol. % sediment; (j) sample diluted due to high organic content; (k) ethenylbenzene; (l) methylbenzene; (m) acetic acid ethenyl ester; (n) chloroethene; (o) dimethylbenzenes.

DHIS Certification No. 1644

Edward Hamilton, Lab Director



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Clayton Group Services 6920 Koll Center Parkway, Suite 216 Pleasanton, CA 94566	Client Project ID: #70-01369.01; Shamrock Ford	Date Sampled: 10/12/00
	Client Contact: Donald Ashton	Date Received: 10/12/00
	Client P.O.:	Date Extracted: 10/13-10/17/00
		Date Analyzed: 10/13-10/17/00

## Volatile Organics By GC/MS

EPA method 8260

Lab ID	50219
Client ID	B-7
Matrix	W

Compound	Concentration*	Reporting Limit		Compound	Concentration*	Reporting Limit	
		W	S			W	S
Acetone <sup>(b)</sup>	ND	5.0	25	trans-1,3-Dichloropropene	ND	1.0	5.0
Benzene	ND	1.0	5.0	Ethylene dibromide	ND	1.0	5.0
Bromobenzene	ND	1.0	5.0	Ethylbenzene	ND	1.0	5.0
Bromochloromethane	ND	1.0	5.0	Hexachlorobutadiene	ND	5.0	25
Bromodichloromethane	ND	1.0	5.0	Iodomethane	ND	1.0	5.0
Bromoform	ND	1.0	5.0	Isopropylbenzene	ND	1.0	5.0
Bromomethane	ND	1.0	5.0	p-Isopropyl toluene	ND	1.0	5.0
n-Butyl benzene	ND	1.0	5.0	Methyl butyl ketone <sup>(d)</sup>	ND	1.0	5.0
sec-Butyl benzene	ND	1.0	5.0	Methylene Chloride <sup>(e)</sup>	ND<5.0	1.0	5.0
tert-Butyl benzene	ND	1.0	5.0	Methyl ethyl ketone <sup>(f)</sup>	ND	2.0	10
Carbon Disulfide	ND	1.0	5.0	Methyl isobutyl ketone <sup>(g)</sup>	ND	1.0	5.0
Carbon Tetrachloride	ND	1.0	5.0	Methyl tert-Butyl Ether (MTBE)	ND	1.0	5.0
Chlorobenzene	ND	1.0	5.0	Naphthalene	ND	5.0	5.0
Chloroethane	ND	1.0	5.0	n-Propyl benzene	ND	1.0	5.0
2-Chloroethyl Vinyl Ether <sup>(h)</sup>	ND	1.0	5.0	Styrene <sup>(i)</sup>	ND	1.0	5.0
Chloroform	ND	1.0	5.0	1,1,1,2-Tetrachloroethane	ND	1.0	5.0
Chloromethane	ND	1.0	5.0	1,1,2,2-Tetrachloroethane	ND	1.0	5.0
2-Chlorotoluene	ND	1.0	5.0	Tetrachloroethene	ND	1.0	5.0
4-Chlorotoluene	ND	1.0	5.0	Toluene <sup>(j)</sup>	ND	1.0	5.0
Dibromochloromethane	ND	1.0	5.0	1,2,3-Trichlorobenzene	ND	5.0	25
1,2-Dibromo-3-chloropropane	ND	2.0	10	1,2,4-Trichlorobenzene	ND	5.0	25
Dibromomethane	ND	1.0	5.0	1,1,1-Trichloroethane	ND	1.0	5.0
1,2-Dichlorobenzene	ND	1.0	5.0	1,1,2-Trichloroethane	ND	1.0	5.0
1,3-Dichlorobenzene	ND	1.0	5.0	Trichloroethene	ND	1.0	5.0
1,4-Dichlorobenzene	ND	1.0	5.0	Trichlorofluoromethane	ND	1.0	5.0
Dichlorodifluoromethane	ND	1.0	5.0	1,2,3-Trichloropropane	ND	1.0	5.0
1,1-Dichloroethane	ND	1.0	5.0	1,2,4-Trimethylbenzene	ND	1.0	5.0
1,2-Dichloroethane	ND	1.0	5.0	1,3,5-Trimethylbenzene	ND	1.0	5.0
1,1-Dichloroethene	ND	1.0	5.0	Vinyl Acetate <sup>(k)</sup>	ND	5.0	25
cis-1,2-Dichloroethene	ND	1.0	5.0	Vinyl Chloride <sup>(l)</sup>	ND	1.0	5.0
trans-1,2-Dichloroethene	ND	1.0	5.0	Xylenes, total <sup>(m)</sup>	ND	1.0	5.0
1,2-Dichloropropane	ND	1.0	5.0				
1,3-Dichloropropane	ND	1.0	5.0				
2,2-Dichloropropane	ND	1.0	5.0				
1,1-Dichloropropene	ND	1.0	5.0				
cis-1,3-Dichloropropene	ND	1.0	5.0				
Comments:							
Surrogate Recoveries (%)							
Dibromofluoromethane						97	
Toluene-d8						107	
4-Bromofluorobenzene						71	

\*water and vapor samples are reported in ug/L, soil and sludge samples in ug/kg, wipes in ug/wipe and all TCLP / SPLP extracts in ug/L

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

(b) 2-propanone or dimethyl ketone; (c) (2-chloromethoxy) ethene; (d) 2-hexanone; (e) dichloromethane; (f) 2-butanone; (g) 4-methyl-2-pentanone or isopropylacetone; (h) lighter than water immiscible sheen is present; (i) liquid sample that contains greater than ~5 vol. % sediment; (j) sample diluted due to high organic content; (k) ethylbenzene; (l) methylbenzene; (m) acetic acid ethenyl ester; (n) chloroethene; (o) dimethylbenzenes.

DHS Certification No. 1644

Edward Hamilton, Lab Director





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<http://www.mccampbell.com> E-mail: [main@mccampbell.com](mailto:main@mccampbell.com)

Clayton Group Services 6920 Koll Center Parkway, Suite 216 Pleasanton, CA 94566	Client Project ID: #70-01369.01; Shamrock Ford	Date Sampled: 10/12/00
	Client Contact: Donald Ashton	Date Received: 10/12/00
	Client P.O:	Date Extracted: 10/13-10/17/00
		Date Analyzed: 10/13-10/17/00

## Volatile Organics By GC/MS

EPA method 8260

Lab ID		50222					
Client ID		B-8					
Matrix		W					
Compound	Concentration*	Reporting Limit		Compound	Concentration*	Reporting Limit	
		W	S			W	S
Acetone <sup>(b)</sup>	ND	5.0	25	trans-1,3-Dichloropropene	ND	1.0	5.0
Benzene	ND	1.0	5.0	Ethylene dibromide	ND	1.0	5.0
Bromobenzene	ND	1.0	5.0	Ethylbenzene	ND	1.0	5.0
Bromochloromethane	ND	1.0	5.0	Hexachlorobutadiene	ND	5.0	25
Bromodichloromethane	ND	1.0	5.0	Iodomethane	ND	1.0	5.0
Bromoform	ND	1.0	5.0	Isopropylbenzene	ND	1.0	5.0
Bromomethane	ND	1.0	5.0	p-Isopropyl toluene	ND	1.0	5.0
n-Butyl benzene	ND	1.0	5.0	Methyl butyl ketone <sup>(d)</sup>	ND	1.0	5.0
sec-Butyl benzene	ND	1.0	5.0	Methylene Chloride <sup>(e)</sup>	ND<5.0	1.0	5.0
tert-Butyl benzene	ND	1.0	5.0	Methyl ethyl ketone <sup>(f)</sup>	ND	2.0	10
Carbon Disulfide	ND	1.0	5.0	Methyl isobutyl ketone <sup>(g)</sup>	ND	1.0	5.0
Carbon Tetrachloride	ND	1.0	5.0	Methyl tert-Butyl Ether (MTBE)	14	1.0	5.0
Chlorobenzene	ND	1.0	5.0	Naphthalene	ND	5.0	5.0
Chloroethane	ND	1.0	5.0	n-Propyl benzene	ND	1.0	5.0
2-Chloroethyl Vinyl Ether <sup>(h)</sup>	ND	1.0	5.0	Styrene <sup>(i)</sup>	ND	1.0	5.0
Chloroform	ND	1.0	5.0	1,1,1,2-Tetrachloroethane	ND	1.0	5.0
Chloromethane	ND	1.0	5.0	1,1,2,2-Tetrachloroethane	ND	1.0	5.0
2-Chlorotoluene	ND	1.0	5.0	Tetrachloroethene	ND	1.0	5.0
4-Chlorotoluene	ND	1.0	5.0	Toluene <sup>(j)</sup>	ND	1.0	5.0
Dibromochloromethane	ND	1.0	5.0	1,2,3-Trichlorobenzene	ND	5.0	25
1,2-Dibromo-3-chloropropane	ND	2.0	10	1,2,4-Trichlorobenzene	ND	5.0	25
Dibromomethane	ND	1.0	5.0	1,1,1-Trichloroethane	ND	1.0	5.0
1,2-Dichlorobenzene	ND	1.0	5.0	1,1,2-Trichloroethane	ND	1.0	5.0
1,3-Dichlorobenzene	ND	1.0	5.0	Trichloroethene	ND	1.0	5.0
1,4-Dichlorobenzene	ND	1.0	5.0	Trichlorofluoromethane	ND	1.0	5.0
Dichlorodifluoromethane	ND	1.0	5.0	1,2,3-Trichloropropane	ND	1.0	5.0
1,1-Dichloroethane	ND	1.0	5.0	1,2,4-Trimethylbenzene	ND	1.0	5.0
1,2-Dichloroethane	ND	1.0	5.0	1,3,5-Trimethylbenzene	ND	1.0	5.0
1,1-Dichloroethene	ND	1.0	5.0	Vinyl Acetate <sup>(k)</sup>	ND	5.0	25
cis-1,2-Dichloroethene	ND	1.0	5.0	Vinyl Chloride <sup>(l)</sup>	ND	1.0	5.0
trans-1,2-Dichloroethene	ND	1.0	5.0	Xylenes, total <sup>(m)</sup>	ND	1.0	5.0
1,2-Dichloropropane	ND	1.0	5.0	Comments:			
1,3-Dichloropropane	ND	1.0	5.0	Surrogate Recoveries (%)			
2,2-Dichloropropane	ND	1.0	5.0	Dibromofluoromethane			93
1,1-Dichloropropene	ND	1.0	5.0	Toluene-d8			108
cis-1,3-Dichloropropene	ND	1.0	5.0	4-Bromofluorobenzene			71


\* water and vapor samples are reported in ug/L, soil and sludge samples in ug/kg, wipes in ug/wipe and all TCLP / SPLP extracts in ug/L

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

(b) 2-propanone or dimethyl ketone; (c) (2-chloroethoxy) ethene; (d) 2-hexanone; (e) dichloromethane; (f) 2-butanone; (g) 4-methyl-2-pentanone or isopropylacetone; (h) lighter than water immiscible sheen is present; (i) liquid sample that contains greater than ~5 vol. % sediment; (j) sample diluted due to high organic content; (k) ethenylbenzene; (l) methylbenzene; (m) acetic acid ethenyl ester; (n) chloroethene; (o) dimethylbenzenes.

DHS Certification No. 1644

Edward Hamilton, Lab Director

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Clayton Group Services 6920 Koll Center Parkway, Suite 216 Pleasanton, CA 94566	Client Project ID: #70-01369.01; Shamrock Ford	Date Sampled: 10/12/00
	Client Contact: Donald Ashton	Date Received: 10/12/00
	Client P.O:	Date Extracted: 10/13-10/17/00
		Date Analyzed: 10/13-10/17/00

**Volatile Organics By GC/MS**

EPA method 8260							
Lab ID	50228						
Client ID	B-10						
Matrix	W						
Compound	Concentration*	Reporting Limit		Compound	Concentration*	Reporting Limit	
		W	S			W	S
Acetone <sup>(e)</sup>	ND	5.0	25	trans-1,3-Dichloropropene	ND	1.0	5.0
Benzene	ND	1.0	5.0	Ethylene dibromide	ND	1.0	5.0
Bromobenzene	ND	1.0	5.0	Ethylbenzene	ND	1.0	5.0
Bromochloromethane	ND	1.0	5.0	Hexachlorobutadiene	ND	5.0	25
Bromodichloromethane	ND	1.0	5.0	Iodomethane	ND	1.0	5.0
Bromoform	ND	1.0	5.0	Isopropylbenzene	ND	1.0	5.0
Bromomethane	ND	1.0	5.0	p-Isopropyl toluene	ND	1.0	5.0
n-Butyl benzene	ND	1.0	5.0	Methyl butyl ketone <sup>(d)</sup>	ND	1.0	5.0
sec-Butyl benzene	ND	1.0	5.0	Methylene Chloride <sup>(e)</sup>	ND<5.0	1.0	5.0
tert-Butyl benzene	ND	1.0	5.0	Methyl ethyl ketone <sup>(f)</sup>	ND	2.0	10
Carbon Disulfide	ND	1.0	5.0	Methyl isobutyl ketone <sup>(g)</sup>	ND	1.0	5.0
Carbon Tetrachloride	ND	1.0	5.0	Methyl tert-Butyl Ether (MTBE)	ND	1.0	5.0
Chlorobenzene	ND	1.0	5.0	Naphthalene	ND	5.0	5.0
Chloroethane	ND	1.0	5.0	n-Propyl benzene	ND	1.0	5.0
2-Chloroethyl Vinyl Ether <sup>(e)</sup>	ND	1.0	5.0	Styrene <sup>(h)</sup>	ND	1.0	5.0
Chloroform	ND	1.0	5.0	1,1,1,2-Tetrachloroethane	ND	1.0	5.0
Chloromethane	ND	1.0	5.0	1,1,2,2-Tetrachloroethane	ND	1.0	5.0
2-Chlorotoluene	ND	1.0	5.0	Tetrachloroethene	ND	1.0	5.0
4-Chlorotoluene	ND	1.0	5.0	Toluene <sup>(i)</sup>	ND	1.0	5.0
Dibromochloromethane	ND	1.0	5.0	1,2,3-Trichlorobenzene	ND	5.0	25
1,2-Dibromo-3-chloropropane	ND	2.0	10	1,2,4-Trichlorobenzene	ND	5.0	25
Dibromomethane	ND	1.0	5.0	1,1,1-Trichloroethane	ND	1.0	5.0
1,2-Dichlorobenzene	ND	1.0	5.0	1,1,2-Trichloroethane	ND	1.0	5.0
1,3-Dichlorobenzene	ND	1.0	5.0	Trichloroethene	ND	1.0	5.0
1,4-Dichlorobenzene	ND	1.0	5.0	Trichlorofluoromethane	ND	1.0	5.0
Dichlorodifluoromethane	ND	1.0	5.0	1,2,3-Trichloropropane	ND	1.0	5.0
1,1-Dichloroethane	ND	1.0	5.0	1,2,4-Trimethylbenzene	ND	1.0	5.0
1,2-Dichloroethane	ND	1.0	5.0	1,3,5-Trimethylbenzene	ND	1.0	5.0
1,1-Dichloroethene	ND	1.0	5.0	Vinyl Acetate <sup>(m)</sup>	ND	5.0	25
cis-1,2-Dichloroethene	ND	1.0	5.0	Vinyl Chloride <sup>(n)</sup>	ND	1.0	5.0
trans-1,2-Dichloroethene	ND	1.0	5.0	Xylenes, total <sup>(o)</sup>	ND	1.0	5.0
1,2-Dichloropropane	ND	1.0	5.0				
1,3-Dichloropropane	ND	1.0	5.0				
2,2-Dichloropropane	ND	1.0	5.0				
1,1-Dichloropropene	ND	1.0	5.0				
cis-1,3-Dichloropropene	ND	1.0	5.0				

\*water and vapor samples are reported in ug/l., soil and sludge samples in ug/kg. wipes in ug/wipe and all TCLP / SPLP extracts in ug/L

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

(b) 2-pentanone or dimethyl ketone; (c) (2-chloromethoxy) ethene; (d) 2-hexanone; (e) dichloromethane; (f) 2-butanone; (g) 4-methyl-2-pentanone or isopropylacetone; (h) lighter than water immiscible sludge is present; (i) liquid sample that contains greater than ~5 vol. % sediment; (j) sample diluted due to high organic content; (k) ethenylbenzene; (l) methylbenzene; (m) acetic acid ethenyl ester; (n) chloroethene; (o) dimethylbenzenes.

DHS Certification No. 1644

 Edward Hamilton, Lab Director



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Clayton Group Services 6920 Koll Center Parkway, Suite 216 Pleasanton, CA 94566	Client Project ID: #70-01369.01; Shamrock Ford	Date Sampled: 10/12/00
	Client Contact: Donald Ashton	Date Received: 10/12/00
	Client P.O.:	Date Extracted: 10/12/00
		Date Analyzed: 10/13-10/18/00

EPA method 8260

## Volatile Organics By GC/MS

Lab ID	50197
Client ID	B-1@5'
Matrix	S


Compound	Concentration*	Reporting Limit		Compound	Concentration*	Reporting Limit	
		W	S			W	S
Acetone <sup>(b)</sup>	ND<100	5.0	25	trans-1,3-Dichloropropene	ND	1.0	5.0
Benzene	ND	1.0	5.0	Ethylene dibromide	ND	1.0	5.0
Bromobenzene	ND	1.0	5.0	Ethylbenzene	ND	1.0	5.0
Bromochloromethane	ND	1.0	5.0	Hexachlorobutadiene	ND	5.0	25
Bromodichloromethane	ND	1.0	5.0	Iodomethane	ND	1.0	5.0
Bromoform	ND	1.0	5.0	Isopropylbenzene	ND	1.0	5.0
Bromomethane	ND	1.0	5.0	p-Isopropyl toluene	ND	1.0	5.0
n-Butyl benzene	ND	1.0	5.0	Methyl butyl ketone <sup>(d)</sup>	ND	1.0	5.0
sec-Butyl benzene	ND	1.0	5.0	Methylene Chloride <sup>(e)</sup>	ND<10	1.0	5.0
tert-Butyl benzene	ND	1.0	5.0	Methyl ethyl ketone <sup>(f)</sup>	ND	2.0	10
Carbon Disulfide	ND	1.0	5.0	Methyl isobutyl ketone <sup>(g)</sup>	ND	1.0	5.0
Carbon Tetrachloride	ND	1.0	5.0	Methyl tert-Butyl Ether (MTBE)	ND	1.0	5.0
Chlorobenzene	ND	1.0	5.0	Naphthalene	ND	5.0	5.0
Chloroethane	ND	1.0	5.0	n-Propyl benzene	ND	1.0	5.0
2-Chloroethyl Vinyl Ether <sup>(h)</sup>	ND	1.0	5.0	Styrene <sup>(i)</sup>	ND	1.0	5.0
Chloroform	ND	1.0	5.0	1,1,1,2-Tetrachloroethane	ND	1.0	5.0
Chloromethane	ND	1.0	5.0	1,1,2,2-Tetrachloroethane	ND	1.0	5.0
2-Chlorotoluene	ND	1.0	5.0	Tetrachloroethene	ND<25	1.0	5.0
4-Chlorotoluene	ND	1.0	5.0	Toluene <sup>(j)</sup>	ND	1.0	5.0
Dibromochloromethane	ND	1.0	5.0	1,2,3-Trichlorobenzene	ND	5.0	25
1,2-Dibromo-3-chloropropane	ND	2.0	10	1,2,4-Trichlorobenzene	ND	5.0	25
Dibromomethane	ND	1.0	5.0	1,1,1-Trichloroethane	ND	1.0	5.0
1,2-Dichlorobenzene	ND	1.0	5.0	1,1,2-Trichloroethane	ND	1.0	5.0
1,3-Dichlorobenzene	ND	1.0	5.0	Trichloroethene	ND	1.0	5.0
1,4-Dichlorobenzene	ND	1.0	5.0	Trichlorofluoromethane	ND	1.0	5.0
Dichlorodifluoromethane	ND	1.0	5.0	1,2,3-Trichloropropane	ND	1.0	5.0
1,1-Dichloroethane	ND	1.0	5.0	1,2,4-Trimethylbenzene	ND	1.0	5.0
1,2-Dichloroethane	ND	1.0	5.0	1,3,5-Trimethylbenzene	ND	1.0	5.0
1,1-Dichloroethene	ND	1.0	5.0	Vinyl Acetate <sup>(k)</sup>	ND	5.0	25
cis-1,2-Dichloroethene	ND	1.0	5.0	Vinyl Chloride <sup>(l)</sup>	ND	1.0	5.0
trans-1,2-Dichloroethene	ND	1.0	5.0	Xylenes, total <sup>(m)</sup>	ND	1.0	5.0
1,2-Dichloropropane	ND	1.0	5.0	Comments:			
1,3-Dichloropropane	ND	1.0	5.0	Surrogate Recoveries (%)			
2,2-Dichloropropane	ND	1.0	5.0	Dibromofluoromethane		111	
1,1-Dichloropropene	ND	1.0	5.0	Toluene-d8		99	
cis-1,3-Dichloropropene	ND	1.0	5.0	4-Bromofluorobenzene		114	

\*water and vapor samples are reported in ug/L, soil and sludge samples in ug/kg, wipes in ug/wipe and all TCLP / SPLP extracts in ug/L  
 ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis

(b) 2-propanone or dimethyl ketone; (c) (2-chloroethoxy) ethane; (d) 2-hexanone; (e) dichloromethane; (f) 2-butanone; (g) 4-methyl-2-pentanone or isopropylacetone; (h) lighter than water immiscible sheen is present; (i) liquid sample that contains greater than ~5 vol. % sediment; (j) sample diluted due to high organic content; (k) ethenylbenzene; (l) methylbenzene; (m) acetic acid ethenyl ester; (n) chloroethene; (o) dimethylbenzenes.

DHS Certification No. 1644

Edward Hamilton, Lab Director

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	EPA method 8260

Clayton Group Services 6920 Koll Center Parkway, Suite 216 Pleasanton, CA 94566	Client Project ID: #70-01369.01; Shamrock Ford	Date Sampled: 10/12/00
	Client Contact: Donald Ashton	Date Received: 10/12/00
	Client P.O.:	Date Analyzed: 10/13-10/18/00
	Date Extracted: 10/12/00	Date Analyzed: 10/13-10/18/00


EPA method 8260		Volatile Organics By GC/MS	
Lab ID	50200	Client ID	B-2@4
Matrix	S		


Compound	Concentration*	Reporting Limit		Compound	Concentration*	Reporting Limit	
		W	S			W	S
Acetone <sup>(b)</sup>	ND<100	5.0	25	trans-1,3-Dichloropropene	ND	1.0	5.0
Benzene	ND	1.0	5.0	Ethylene dibromide	ND	1.0	5.0
Bromobenzene	ND	1.0	5.0	Ethylbenzene	ND	1.0	5.0
Bromochloromethane	ND	1.0	5.0	Hexachlorobutadiene	ND	5.0	25
Bromodichloromethane	ND	1.0	5.0	Iodomethane	ND	1.0	5.0
Bromoform	ND	1.0	5.0	Isopropylbenzene	ND	1.0	5.0
Bromomethane	ND	1.0	5.0	p-Isopropyl toluene	ND	1.0	5.0
n-Butyl benzene	ND	1.0	5.0	Methyl butyl ketone <sup>(c)</sup>	ND	1.0	5.0
sec-Butyl benzene	ND	1.0	5.0	Methylene Chloride <sup>(d)</sup>	ND<10	1.0	5.0
tert-Butyl benzene	ND	1.0	5.0	Methyl ethyl ketone <sup>(e)</sup>	ND	2.0	10
Carbon Disulfide	ND	1.0	5.0	Methyl isobutyl ketone <sup>(f)</sup>	ND	1.0	5.0
Carbon Tetrachloride	ND	1.0	5.0	Methyl tert-Butyl Ether (MTBE)	ND	1.0	5.0
Chlorobenzene	ND	1.0	5.0	Naphthalene	ND	5.0	5.0
Chloroethane	ND	1.0	5.0	n-Propyl benzene	ND	1.0	5.0
2-Chloroethyl Vinyl Ether <sup>(g)</sup>	ND	1.0	5.0	Styrene <sup>(h)</sup>	ND	1.0	5.0
Chloroform	ND	1.0	5.0	1,1,1,2-Tetrachloroethane	ND	1.0	5.0
Chloromethane	ND	1.0	5.0	1,1,2,2-Tetrachloroethane	ND	1.0	5.0
2-Chlorotoluene	ND	1.0	5.0	Tetrachloroethene	ND<25	1.0	5.0
4-Chlorotoluene	ND	1.0	5.0	Toluene <sup>(i)</sup>	ND	1.0	5.0
Dibromochloromethane	ND	1.0	5.0	1,2,3-Trichlorobenzene	ND	5.0	25
1,2-Dibromo-3-chloropropane	ND	2.0	10	1,2,4-Trichlorobenzene	ND	5.0	25
Dibromomethane	ND	1.0	5.0	1,1,1-Trichloroethane	ND	1.0	5.0
1,2-Dichlorobenzene	ND	1.0	5.0	1,1,2-Trichloroethane	ND	1.0	5.0
1,3-Dichlorobenzene	ND	1.0	5.0	Trichloroethene	ND	1.0	5.0
1,4-Dichlorobenzene	ND	1.0	5.0	Trichlorofluoromethane	ND	1.0	5.0
Dichlorodifluoromethane	ND	1.0	5.0	1,2,3-Trichloropropane	ND	1.0	5.0
1,1-Dichloroethane	ND	1.0	5.0	1,2,4-Trimethylbenzene	ND	1.0	5.0
1,2-Dichloroethane	ND	1.0	5.0	1,3,5-Trimethylbenzene	ND	1.0	5.0
1,1-Dichloroethene	ND	1.0	5.0	Vinyl Acetate <sup>(m)</sup>	ND	5.0	25
cis-1,2-Dichloroethene	ND	1.0	5.0	Vinyl Chloride <sup>(n)</sup>	ND	1.0	5.0
trans-1,2-Dichloroethene	ND	1.0	5.0	Xylenes, total <sup>(o)</sup>	ND	1.0	5.0
1,2-Dichloropropane	ND	1.0	5.0				
1,3-Dichloropropane	ND	1.0	5.0				
2,2-Dichloropropane	ND	1.0	5.0				
1,1-Dichloropropene	ND	1.0	5.0				
cis-1,3-Dichloropropene	ND	1.0	5.0				

Comments:	
Surrogate Recoveries (%)	
Dibromofluoromethane	111
Toluene-d8	96
4-Bromofluorobenzene	115

\* water and vapor samples are reported in ug/L. soil and sludge samples in ug/kg, wipes in ug/wipe and all TCLP / SPLP extracts in ug/L  
 ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis  
 (b) 2-propanone or dimethyl ketone; (c) (2-chloroethoxy) ethene; (d) 2-hexanone; (e) dichloromethane; (f) 2-butanone; (g) 4-methyl-2-pentanone or isopropylacetone; (h) lighter than water immiscible sheen is present; (i) liquid sample that contains greater than ~5 vol. % sediment; (j) sample diluted due to high organic content; (k) ethylbenzene; (l) methylbenzene; (m) acetic acid ethenyl ester; (n) chloroethene; (o) dimethylbenzenes.

DHS Certification No. 1644

 Edward Hamilton, Lab Director

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Clayton Group Services 6920 Koll Center Parkway, Suite 216 Pleasanton, CA 94566	Client Project ID: #70-01369.01;	Date Sampled: 10/12/00
	Shamrock Ford	Date Received: 10/12/00
	Client Contact: Donald Ashton	Date Extracted: 10/12/00
	Client P.O.:	Date Analyzed: 10/13-10/18/00

EPA method 8260


**Volatile Organics By GC/MS**


Lab ID	50201
Client ID	B-2@7
Matrix	S

Compound	Concentration*	Reporting Limit		Compound	Concentration*	Reporting Limit	
		W	S			W	S
Acetone (b)	ND<100	5.0	25	trans-1,3-Dichloropropene	ND	1.0	5.0
Benzene	ND	1.0	5.0	Ethylene dibromide	ND	1.0	5.0
Bromobenzene	ND	1.0	5.0	Ethylbenzene	ND	1.0	5.0
Bromochloromethane	ND	1.0	5.0	Hexachlorobutadiene	ND	5.0	25
Bromodichloromethane	ND	1.0	5.0	Iodomethane	ND	1.0	5.0
Bromoform	ND	1.0	5.0	Isopropylbenzene	ND	1.0	5.0
Bromomethane	ND	1.0	5.0	p-Isopropyl toluene	ND	1.0	5.0
n-Butyl benzene	ND	1.0	5.0	Methyl butyl ketone (d)	ND	1.0	5.0
sec-Butyl benzene	ND	1.0	5.0	Methylene Chloride (e)	ND<10	1.0	5.0
tert-Butyl benzene	ND	1.0	5.0	Methyl ethyl ketone (f)	ND	2.0	10
Carbon Disulfide	ND	1.0	5.0	Methyl isobutyl ketone (g)	ND	1.0	5.0
Carbon Tetrachloride	ND	1.0	5.0	Methyl tert-Butyl Ether (MTBE)	ND	1.0	5.0
Chlorobenzene	ND	1.0	5.0	Naphthalene	ND	5.0	5.0
Chloroethane	ND	1.0	5.0	n-Propyl benzene	ND	1.0	5.0
2-Chloroethyl Vinyl Ether (h)	ND	1.0	5.0	Styrene (i)	ND	1.0	5.0
Chloroform	ND	1.0	5.0	1,1,1,2-Tetrachloroethane	ND	1.0	5.0
Chloromethane	ND	1.0	5.0	1,1,2,2-Tetrachloroethane	ND	1.0	5.0
2-Chlorotoluene	ND	1.0	5.0	Tetrachloroethene	ND<25	1.0	5.0
4-Chlorotoluene	ND	1.0	5.0	Toluene (j)	ND	1.0	5.0
Dibromochloromethane	ND	1.0	5.0	1,2,3-Trichlorobenzene	ND	5.0	25
1,2-Dibromo-3-chloropropane	ND	2.0	10	1,2,4-Trichlorobenzene	ND	5.0	25
Dibromomethane	ND	1.0	5.0	1,1,1-Trichloroethane	ND	1.0	5.0
1,2-Dichlorobenzene	ND	1.0	5.0	1,1,2-Trichloroethane	ND	1.0	5.0
1,3-Dichlorobenzene	ND	1.0	5.0	Trichloroethene	ND	1.0	5.0
1,4-Dichlorobenzene	ND	1.0	5.0	Trichlorofluoromethane	ND	1.0	5.0
Dichlorodifluoromethane	ND	1.0	5.0	1,2,3-Trichloropropane	ND	1.0	5.0
1,1-Dichloroethane	ND	1.0	5.0	1,2,4-Trimethylbenzene	ND	1.0	5.0
1,2-Dichloroethane	ND	1.0	5.0	1,3,5-Trimethylbenzene	ND	1.0	5.0
1,1-Dichloroethene	ND	1.0	5.0	Vinyl Acetate (m)	ND	5.0	25
cis-1,2-Dichloroethene	ND	1.0	5.0	Vinyl Chloride (n)	ND	1.0	5.0
trans-1,2-Dichloroethene	ND	1.0	5.0	Xylenes, total (o)	ND	1.0	5.0
1,2-Dichloropropane	ND	1.0	5.0	<b>Comments:</b>			
1,3-Dichloropropane	ND	1.0	5.0	<b>Surrugate Recoveries (%)</b>			
2,2-Dichloropropane	ND	1.0	5.0	Dibromofluoromethane		107	
1,1-Dichloropropene	ND	1.0	5.0	Toluene-d8		98	
cis-1,3-Dichloropropene	ND	1.0	5.0	4-Bromofluorobenzene		118	

\* water and vapor samples are reported in ug/l, soil and sludge samples in ug/kg, wipes in ug/wipe and all TCLP / SPLP extracts in ug/l.  
 ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis  
 (b) 2-propanone or dimethyl ketone; (c) (2-chloroethoxy) ethene; (d) 2-hexanone; (e) dichloromethane; (f) 2-butanone; (g) 4-methyl-2-pentanone or isopropylacetone; (h) lighter than water immiscible sheen is present; (i) liquid sample that contains greater than ~5 vol. % sediment; (j) sample diluted due to high organic content; (k) ethenylbenzene; (l) methylbenzene; (m) acetic acid ethenyl ester; (n) chloroethene; (o) dimethylbenzenes.

DHS Certification No. 1644

 Edward Hamilton, Lab Director

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Clayton Group Services 6920 Koll Center Parkway, Suite 216 Pleasanton, CA 94566	Client Project ID: #70-01369.01; Shamrock Ford	Date Sampled: 10/12/00
	Client Contact: Donald Ashton	Date Received: 10/12/00
	Client P.O.:	Date Analyzed: 10/13-10/18/00

EPA method 8260 **Volatile Organics By GC/MS**

Lab ID: 50206  
 Client ID: B-3@S  
 Matrix: S

Compound	Concentration*	Reporting Limit		Compound	Concentration*	Reporting Limit	
		W	S			W	S
Acetone (b)	ND<100	5.0	25	trans-1,3-Dichloropropene	ND	1.0	5.0
Benzene	ND	1.0	5.0	Ethylene dibromide	ND	1.0	5.0
Bromobenzene	ND	1.0	5.0	Ethylbenzene	ND	1.0	5.0
Bromochloromethane	ND	1.0	5.0	Hexachlorobutadiene	ND	5.0	25
Bromodichloromethane	ND	1.0	5.0	Iodomethane	ND	1.0	5.0
Bromoform	ND	1.0	5.0	Isopropylbenzene	ND	1.0	5.0
Bromomethane	ND	1.0	5.0	p-Isopropyl toluene	ND	1.0	5.0
n-Butyl benzene	ND	1.0	5.0	Methyl butyl ketone (k)	ND	1.0	5.0
sec-Butyl benzene	ND	1.0	5.0	Methylene Chloride (e)	ND<10	1.0	5.0
tert-Butyl benzene	ND	1.0	5.0	Methyl ethyl ketone (l)	ND	2.0	10
Carbon Disulfide	ND	1.0	5.0	Methyl isobutyl ketone (m)	ND	1.0	5.0
Carbon Tetrachloride	ND	1.0	5.0	Methyl tert-Butyl Ether (MTBE)	ND	1.0	5.0
Chlorobenzene	ND	1.0	5.0	Naphthalene	ND	5.0	5.0
Chloroethane	ND	1.0	5.0	n-Propyl benzene	ND	1.0	5.0
2-Chloroethyl Vinyl Ether (f)	ND	1.0	5.0	Styrene (n)	ND	1.0	5.0
Chloroform	ND	1.0	5.0	1,1,1,2-Tetrachloroethane	ND	1.0	5.0
Chloromethane	ND	1.0	5.0	1,1,2,2-Tetrachloroethane	ND	1.0	5.0
2-Chlorotoluene	ND	1.0	5.0	Tetrachloroethene	ND<25	1.0	5.0
4-Chlorotoluene	ND	1.0	5.0	Toluene (o)	ND	1.0	5.0
Dibromochloromethane	ND	1.0	5.0	1,2,3-Trichlorobenzene	ND	5.0	25
1,2-Dibromo-3-chloropropane	ND	2.0	10	1,2,4-Trichlorobenzene	ND	5.0	25
Dibromomethane	ND	1.0	5.0	1,1,1-Trichloroethane	ND	1.0	5.0
1,2-Dichlorobenzene	ND	1.0	5.0	1,1,2-Trichloroethane	ND	1.0	5.0
1,3-Dichlorobenzene	ND	1.0	5.0	Trichloroethene	ND	1.0	5.0
1,4-Dichlorobenzene	ND	1.0	5.0	Trichlorofluoromethane	ND	1.0	5.0
Dichlorodifluoromethane	ND	1.0	5.0	1,2,3-Trichloropropane	ND	1.0	5.0
1,1-Dichloroethane	ND	1.0	5.0	1,2,4-Trimethylbenzene	ND	1.0	5.0
1,2-Dichloroethane	ND	1.0	5.0	1,3,5-Trimethylbenzene	ND	1.0	5.0
1,1-Dichloroethene	ND	1.0	5.0	Vinyl Acetate (p)	ND	5.0	25
cis-1,2-Dichloroethene	ND	1.0	5.0	Vinyl Chloride (q)	ND	1.0	5.0
trans-1,2-Dichloroethene	ND	1.0	5.0	Xylenes, total (r)	ND	1.0	5.0
1,2-Dichloropropane	ND	1.0	5.0	Comments:			
1,3-Dichloropropane	ND	1.0	5.0	Surrogate Recoveries (%)			
2,2-Dichloropropane	ND	1.0	5.0	Dibromofluoromethane		105	
1,1-Dichloropropene	ND	1.0	5.0	Toluene-d8		96	
cis-1,3-Dichloropropene	ND	1.0	5.0	4-Bromofluorobenzene		123	

\*water and vapor samples are reported in ug/L, soil and sludge samples in ug/kg, wipes in ug/wipe and all TCLP / SPI.P extracts in ug/L  
 ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis

(b) 2-propanone or dimethyl ketone; (c) (2-chloroethoxy) ethene; (d) 2-hexanone; (e) dichloromethane; (f) 2-butanone; (g) 4-methyl-2-pentanone or isopropylacetone; (h) lighter than water immiscible sheen is present; (i) liquid sample that contains greater than ~5 vol. % sediment; (j) sample diluted due to high organic content; (k) ethenylbenzene; (l) methylbenzene; (m) acetic acid ethenyl ester; (n) chloroethene; (o) dimethylbenzenes.

DHS Certification No. 1644

 Edward Hamilton, Lab Director



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Clayton Group Services 6920 Koll Center Parkway, Suite 216 Pleasanton, CA 94566	Client Project ID: #70-01369.01; Shamrock Ford	Date Sampled: 10/12/00
	Client Contact: Donald Ashton	Date Received: 10/12/00
	Client P.O.:	Date Extracted: 10/12/00
		Date Analyzed: 10/13-10/18/00

EPA method 8260

## Volatile Organics By GC/MS

Lab ID	50209
Client ID	B-4@4
Matrix	S

Compound	Concentration*	Reporting Limit		Compound	Concentration*	Reporting Limit	
		W	S			W	S
Acetone <sup>(b)</sup>	ND<100	5.0	25	trans-1,3-Dichloropropene	ND	1.0	5.0
Benzene	ND	1.0	5.0	Ethylene dibromide	ND	1.0	5.0
Bromobenzene	ND	1.0	5.0	Ethylbenzene	ND	1.0	5.0
Bromochloromethane	ND	1.0	5.0	Hexachlorobutadiene	ND	5.0	25
Bromodichloromethane	ND	1.0	5.0	Iodomethane	ND	1.0	5.0
Bromoforn	ND	1.0	5.0	Isopropylbenzene	ND	1.0	5.0
Bromomethane	ND	1.0	5.0	p-Isopropyl toluene	ND	1.0	5.0
n-Butyl benzene	ND	1.0	5.0	Methyl butyl ketone <sup>(k)</sup>	ND	1.0	5.0
sec-Butyl benzene	ND	1.0	5.0	Methylene Chloride <sup>(m)</sup>	ND<10	1.0	5.0
tert-Butyl benzene	ND	1.0	5.0	Methyl ethyl ketone <sup>(l)</sup>	ND	2.0	10
Carbon Disulfide	ND	1.0	5.0	Methyl isobutyl ketone <sup>(g)</sup>	ND	1.0	5.0
Carbon Tetrachloride	ND	1.0	5.0	Methyl tert-Butyl Ether (MTBE)	7.1	1.0	5.0
Chlorobenzene	ND	1.0	5.0	Naphthalene	ND	5.0	5.0
Chloroethane	ND	1.0	5.0	n-Propyl benzene	ND	1.0	5.0
2-Chloromethyl Vinyl Ether <sup>(o)</sup>	ND	1.0	5.0	Styrene <sup>(n)</sup>	ND	1.0	5.0
Chloroform	ND	1.0	5.0	1,1,1,2-Tetrachloroethane	ND	1.0	5.0
Chloromethane	ND	1.0	5.0	1,1,2,2-Tetrachloroethane	ND	1.0	5.0
2-Chlorotoluene	ND	1.0	5.0	Tetrachloroethene	ND<25	1.0	5.0
4-Chlorotoluene	ND	1.0	5.0	Toluene <sup>(i)</sup>	ND	1.0	5.0
Dibromochloromethane	ND	1.0	5.0	1,2,3-Trichlorobenzene	ND	5.0	25
1,2-Dibromo-3-chloropropane	ND	2.0	10	1,2,4-Trichlorobenzene	ND	5.0	25
Dibromomethane	ND	1.0	5.0	1,1,1-Trichloroethane	ND	1.0	5.0
1,2-Dichlorobenzene	ND	1.0	5.0	1,1,2-Trichloroethane	ND	1.0	5.0
1,3-Dichlorobenzene	ND	1.0	5.0	Trichloroethene	ND	1.0	5.0
1,4-Dichlorobenzene	ND	1.0	5.0	Trichlorofluoromethane	ND	1.0	5.0
Dichlorodifluoromethane	ND	1.0	5.0	1,2,3-Trichloropropane	ND	1.0	5.0
1,1-Dichloroethane	ND	1.0	5.0	1,2,4-Trimethylbenzene	ND	1.0	5.0
1,2-Dichloroethane	ND	1.0	5.0	1,3,5-Trimethylbenzene	ND	1.0	5.0
1,1-Dichloroethene	ND	1.0	5.0	Vinyl Acetate <sup>(h)</sup>	ND	5.0	25
cis-1,2-Dichloroethene	ND	1.0	5.0	Vinyl Chloride <sup>(j)</sup>	ND	1.0	5.0
trans-1,2-Dichloroethene	ND	1.0	5.0	Xylenes, total <sup>(k)</sup>	ND	1.0	5.0
1,2-Dichloropropane	ND	1.0	5.0				
1,3-Dichloropropane	ND	1.0	5.0	Comments:			
2,2-Dichloropropane	ND	1.0	5.0	Surrogate Recoveries (%)			
1,1-Dichloropropene	ND	1.0	5.0	Dibromofluoromethane			100
cis-1,3-Dichloropropene	ND	1.0	5.0	Toluene-d8			104
				4-Bromofluorobenzene			99

\*water and vapor samples are reported in ug/L, soil and sludge samples in ug/kg, wipes in ug/wipe and all TCLP / S/PLP extracts in ug/L  
 ND) means not detected above the reporting limit; N/A means analyte not applicable to this analysis

(b) 2-propanone or dimethyl ketone; (c) (2-chloroethoxy) ethene; (d) 2-hexanone; (e) dichloromethane; (f) 2-butanone; (g) 4-methyl-2-pentanone or isopropylacetone; (h) lighter than water immiscible sheen is present; (i) liquid sample that contains greater than ~5 vol. % sediment; (j) sample diluted due to high organic content; (k) ethylbenzene; (l) methylbenzene; (m) acetic acid ethenyl ester; (n) chloroethene; (o) dimethylbenzenes

DHS Certification No. 1644

Edward Hamilton, Lab Director



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Clayton Group Services 6920 Koll Center Parkway, Suite 216 Pleasanton, CA 94566	Client Project ID: #70-01369.01; Shamrock Ford	Date Sampled: 10/12/00
	Client Contact: Donald Ashton	Date Received: 10/12/00
	Client P.O:	Date Extracted: 10/12/00
		Date Analyzed: 10/13-10/18/00

EPA method 8260 **Volatile Organics By GC/MS**

Lab ID: 50212  
 Client ID: B-5@5  
 Matrix: S

Compound	Concentration*	Reporting Limit		Compound	Concentration*	Reporting Limit	
		W	S			W	S
Acetone (b)	ND<100	5.0	25	trans-1,3-Dichloropropene	ND	1.0	5.0
Benzene	ND	1.0	5.0	Ethylene dibromide	ND	1.0	5.0
Bromobenzene	ND	1.0	5.0	Ethylbenzene	ND	1.0	5.0
Bromochloromethane	ND	1.0	5.0	Hexachlorobutadiene	ND	5.0	25
Bromodichloromethane	ND	1.0	5.0	Iodomethane	ND	1.0	5.0
Bromoform	ND	1.0	5.0	Isopropylbenzene	ND	1.0	5.0
Bromomethane	ND	1.0	5.0	p-Isopropyl toluene	ND	1.0	5.0
n-Butyl benzene	ND	1.0	5.0	Methyl butyl ketone (d)	ND	1.0	5.0
sec-Butyl benzene	ND	1.0	5.0	Methylene Chloride (e)	ND<10	1.0	5.0
tert-Butyl benzene	ND	1.0	5.0	Methyl ethyl ketone (f)	ND	2.0	10
Carbon Disulfide	ND	1.0	5.0	Methyl isobutyl ketone (g)	ND	1.0	5.0
Carbon Tetrachloride	ND	1.0	5.0	Methyl tert-Butyl Ether (MTBE)	13	1.0	5.0
Chlorobenzene	ND	1.0	5.0	Naphthalene	ND	5.0	5.0
Chloroethane	ND	1.0	5.0	n-Propyl benzene	ND	1.0	5.0
2-Chloroethyl Vinyl Ether (c)	ND	1.0	5.0	Styrene (h)	ND	1.0	5.0
Chloroform	ND	1.0	5.0	1,1,1,2-Tetrachloroethane	ND	1.0	5.0
Chloromethane	ND	1.0	5.0	1,1,2,2-Tetrachloroethane	ND	1.0	5.0
2-Chlorotoluene	ND	1.0	5.0	Tetrachloroethene	ND<25	1.0	5.0
4-Chlorotoluene	ND	1.0	5.0	Toluene (i)	ND	1.0	5.0
Dibromochloromethane	ND	1.0	5.0	1,2,3-Trichlorobenzene	ND	5.0	25
1,2-Dibromo-3-chloropropane	ND	2.0	10	1,2,4-Trichlorobenzene	ND	5.0	25
Dibromomethane	ND	1.0	5.0	1,1,1-Trichloroethane	ND	1.0	5.0
1,2-Dichlorobenzene	ND	1.0	5.0	1,1,2-Trichloroethane	ND	1.0	5.0
1,3-Dichlorobenzene	ND	1.0	5.0	Trichloromethane	ND	1.0	5.0
1,4-Dichlorobenzene	ND	1.0	5.0	Trichlorofluoromethane	ND	1.0	5.0
Dichlorodifluoromethane	ND	1.0	5.0	1,2,3-Trichloropropane	ND	1.0	5.0
1,1-Dichloroethane	ND	1.0	5.0	1,2,4-Trimethylbenzene	ND	1.0	5.0
1,2-Dichloroethane	ND	1.0	5.0	1,3,5-Trimethylbenzene	ND	1.0	5.0
1,1-Dichloroethene	ND	1.0	5.0	Vinyl Acetate (m)	ND	5.0	25
cis-1,2-Dichloromethane	ND	1.0	5.0	Vinyl Chloride (n)	ND	1.0	5.0
trans-1,2-Dichloromethane	ND	1.0	5.0	Xylenes, total (o)	ND	1.0	5.0
1,2-Dichloropropane	ND	1.0	5.0	<b>Comments:</b>			
1,3-Dichloropropane	ND	1.0	5.0	<b>Surrogate Recoveries (%)</b>			
2,2-Dichloropropane	ND	1.0	5.0	Dibromofluoromethane	119		
1,1-Dichloropropene	ND	1.0	5.0	Toluene-d8	99		
cis-1,3-Dichloropropene	ND	1.0	5.0	4-Bromofluorobenzene	102		

\*water and vapor samples are reported in ug/L, soil and sludge samples in ug/kg, wipes in ug/wipe and all TCLP / SPLP extracts in ug/L  
 ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis

(b) 2-propanone or dimethyl ketone; (c) (2-chloroethoxy) ethene; (d) 2-hexanone; (e) dichloromethane; (f) 2-butanone; (g) 4-methyl-2-pentanone or isopropylacetone; (h) lighter than water immiscible sheen is present; (i) liquid sample that contains greater than ~5 vol. % sediment; (j) sample diluted due to high organic content; (k) ethylbenzene; (l) methylbenzene; (m) acetic acid ethenyl ester; (n) chloroethene; (o) dimethylbenzenes.

DHS Certification No. 1644

*JA* Edward Hamilton, Lab Director





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Clayton Group Services 6920 Koll Center Parkway, Suite 216 Pleasanton, CA 94566	Client Project ID: #70-01369.01; Shamrock Ford	Date Sampled: 10/12/00
	Client Contact: Donald Ashton	Date Received: 10/12/00
	Client P.O:	Date Analyzed: 10/13-10/18/00

## Volatile Organics By GC/MS

EPA method 8260

Compound	Concentration*	Reporting Limit		Compound	Concentration*	Reporting Limit	
		W	S			W	S
Acetone <sup>(b)</sup>	ND<100	5.0	25	trans-1,3-Dichloropropene	ND	1.0	5.0
Benzene	ND	1.0	5.0	Ethylene dibromide	ND	1.0	5.0
Bromobenzene	ND	1.0	5.0	Ethylbenzene	ND	1.0	5.0
Bromochloromethane	ND	1.0	5.0	Hexachlorobutadiene	ND	5.0	25
Bromodichloromethane	ND	1.0	5.0	Iodomethane	ND	1.0	5.0
Bromoform	ND	1.0	5.0	Isopropylbenzene	ND	1.0	5.0
Bromomethane	ND	1.0	5.0	p-Isopropyl toluene	ND	1.0	5.0
n-Butyl benzene	ND	1.0	5.0	Methyl butyl ketone <sup>(d)</sup>	ND	1.0	5.0
sec-Butyl benzene	ND	1.0	5.0	Methylene Chloride <sup>(e)</sup>	ND<10	1.0	5.0
tert-Butyl benzene	ND	1.0	5.0	Methyl ethyl ketone <sup>(f)</sup>	ND	2.0	10
Carbon Disulfide	ND	1.0	5.0	Methyl isobutyl ketone <sup>(g)</sup>	ND	1.0	5.0
Carbon Tetrachloride	ND	1.0	5.0	Methyl tert-Butyl Ether (MTBE)	ND	1.0	5.0
Chlorobenzene	ND	1.0	5.0	Naphthalene	ND	5.0	5.0
Chloroethane	ND	1.0	5.0	n-Propyl benzene	ND	1.0	5.0
2-Chloroethyl Vinyl Ether <sup>(h)</sup>	ND	1.0	5.0	Styrene <sup>(i)</sup>	ND	1.0	5.0
Chloroform	ND	1.0	5.0	1,1,1,2-Tetrachloroethane	ND	1.0	5.0
Chloromethane	ND	1.0	5.0	1,1,2,2-Tetrachloroethane	ND	1.0	5.0
2-Chlorotoluene	ND	1.0	5.0	Tetrachloroethene	ND<25	1.0	5.0
4-Chlorotoluene	ND	1.0	5.0	Toluene <sup>(j)</sup>	ND	1.0	5.0
Dibromochloromethane	ND	1.0	5.0	1,2,3-Trichlorobenzene	ND	5.0	25
1,2-Dibromo-3-chloropropane	ND	2.0	10	1,2,4-Trichlorobenzene	ND	5.0	25
Dibromomethane	ND	1.0	5.0	1,1,1-Trichloromethane	ND	1.0	5.0
1,2-Dichlorobenzene	ND	1.0	5.0	1,1,2-Trichloroethane	ND	1.0	5.0
1,3-Dichlorobenzene	ND	1.0	5.0	Trichloroethene	ND	1.0	5.0
1,4-Dichlorobenzene	ND	1.0	5.0	Trichlorofluoromethane	ND	1.0	5.0
Dichlorodifluoromethane	ND	1.0	5.0	1,2,3-Trichloropropane	ND	1.0	5.0
1,1-Dichloroethane	ND	1.0	5.0	1,2,4-Trimethylbenzene	ND	1.0	5.0
1,2-Dichloroethane	ND	1.0	5.0	1,3,5-Trimethylbenzene	ND	1.0	5.0
1,1-Dichloroethene	ND	1.0	5.0	Vinyl Acetate <sup>(k)</sup>	ND	5.0	25
cis-1,2-Dichloroethene	ND	1.0	5.0	Vinyl Chloride <sup>(l)</sup>	ND	1.0	5.0
trans-1,2-Dichloroethene	ND	1.0	5.0	Xylenes, total <sup>(m)</sup>	ND	1.0	5.0
1,2-Dichloropropane	ND	1.0	5.0	Comments:			
1,3-Dichloropropane	ND	1.0	5.0	Surrogate Recoveries (%)			
2,2-Dichloropropane	ND	1.0	5.0	Dibromofluoromethane			114
1,1-Dichloropropene	ND	1.0	5.0	Toluene-d8			100
cis-1,3-Dichloropropene	ND	1.0	5.0	4-Bromofluorobenzene			112


\*water and vapor samples are reported in ug/L, soil and sludge samples in ug/kg, wipes in ug/wipe and all TCLP / SPLP extracts in ug/l.

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

(b) 2-propanone or dimethyl ketone; (c) (2-chloromethoxy) ethene; (d) 2-hexanone; (e) dichloromethane; (f) 2-butanone; (g) 4-methyl-2-pentanone or isopropylacetone; (h) lighter than water immiscible when is present; (i) liquid sample that contains greater than ~5 vol. % sediment; (j) sample diluted due to high organic content; (k) ethenylbenzene; (l) methylbenzene; (m) acetic acid ethenyl ester; (n) chloroethene; (o) dimethylbenzenes.

DHS Certification No. 1644

Edward Hamilton, Lab Director

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	EPA method 8260

Clayton Group Services 6920 Koll Center Parkway, Suite 216 Pleasanton, CA 94566	Client Project ID: #70-01369.01; Shamrock Ford	Date Sampled: 10/12/00
	Client Contact: Donald Ashton	Date Received: 10/12/00
	Client P.O.:	Date Analyzed: 10/13-10/18/00

**Volatile Organics By GC/MS**

Lab ID	50218
Client ID	B-7@5
Matrix	S

Compound	Concentration*	Reporting Limit		Compound	Concentration*	Reporting Limit	
		W	S			W	S
Acetone <sup>(b)</sup>	ND<100	5.0	25	trans-1,3-Dichloropropene	ND	1.0	5.0
Benzene	ND	1.0	5.0	Ethylene dibromide	ND	1.0	5.0
Bromobenzene	ND	1.0	5.0	Ethylbenzene	ND	1.0	5.0
Bromochloromethane	ND	1.0	5.0	Hexachlorobutadiene	ND	5.0	25
Bromodichloromethane	ND	1.0	5.0	Iodomethane	ND	1.0	5.0
Bromoform	ND	1.0	5.0	Isopropylbenzene	ND	1.0	5.0
Bromomethane	ND	1.0	5.0	p-Isopropyl toluene	ND	1.0	5.0
n-Butyl benzene	ND	1.0	5.0	Methyl butyl ketone <sup>(d)</sup>	ND	1.0	5.0
sec-Butyl benzene	ND	1.0	5.0	Methylene Chloride <sup>(e)</sup>	ND<10	1.0	5.0
tert-Butyl benzene	ND	1.0	5.0	Methyl ethyl ketone <sup>(f)</sup>	ND	2.0	10
Carbon Disulfide	ND	1.0	5.0	Methyl isobutyl ketone <sup>(g)</sup>	ND	1.0	5.0
Carbon Tetrachloride	ND	1.0	5.0	Methyl tert-Butyl Ether (MTBE)	ND	1.0	5.0
Chlorobenzene	ND	1.0	5.0	Naphthalene	ND	5.0	5.0
Chloroethane	ND	1.0	5.0	n-Propyl benzene	ND	1.0	5.0
2-Chloroethyl Vinyl Ether <sup>(h)</sup>	ND	1.0	5.0	Styrene <sup>(i)</sup>	ND	1.0	5.0
Chloroform	ND	1.0	5.0	1,1,1,2-Tetrachloroethane	ND	1.0	5.0
Chloromethane	ND	1.0	5.0	1,1,2,2-Tetrachloroethane	ND	1.0	5.0
2-Chlorotoluene	ND	1.0	5.0	Tetrachloroethene	ND<25	1.0	5.0
4-Chlorotoluene	ND	1.0	5.0	Toluene <sup>(j)</sup>	ND	1.0	5.0
Dibromochloromethane	ND	1.0	5.0	1,2,3-Trichlorobenzene	ND	5.0	25
1,2-Dibromo-3-chloropropane	ND	2.0	10	1,2,4-Trichlorobenzene	ND	5.0	25
Dibromomethane	ND	1.0	5.0	1,1,1-Trichloroethane	ND	1.0	5.0
1,2-Dichlorobenzene	ND	1.0	5.0	1,1,2-Trichloroethane	ND	1.0	5.0
1,3-Dichlorobenzene	ND	1.0	5.0	Trichloroethene	ND	1.0	5.0
1,4-Dichlorobenzene	ND	1.0	5.0	Trichlorofluoromethane	ND	1.0	5.0
Dichlorodifluoromethane	ND	1.0	5.0	1,2,3-Trichloropropane	ND	1.0	5.0
1,1-Dichloroethane	ND	1.0	5.0	1,2,4-Trimethylbenzene	ND	1.0	5.0
1,2-Dichloroethane	ND	1.0	5.0	1,3,5-Trimethylbenzene	ND	1.0	5.0
1,1-Dichloroethene	ND	1.0	5.0	Vinyl Acetate <sup>(k)</sup>	ND	5.0	25
cis-1,2-Dichloroethene	ND	1.0	5.0	Vinyl Chloride <sup>(l)</sup>	ND	1.0	5.0
trans-1,2-Dichloroethene	ND	1.0	5.0	Xylenes, total <sup>(m)</sup>	ND	1.0	5.0
1,2-Dichloropropane	ND	1.0	5.0				
1,3-Dichloropropane	ND	1.0	5.0				
2,2-Dichloropropane	ND	1.0	5.0				
1,1-Dichloropropene	ND	1.0	5.0				
cis-1,3-Dichloropropene	ND	1.0	5.0				

\*water and vapor samples are reported in ug/L, soil and sludge samples in ug/kg, wipes in ug/wipe and all TCLP / SPLP extracts in ug/l.  
 ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis  
 (b) 2-propanone or dimethyl ketone; (c) (2-chloroethoxy) ethene; (d) 2-hexanone; (e) dichloromethane; (f) 2-butanone; (g) 4-methyl-2-pentanone or isopropylacetone; (h) lighter than water immiscible sheen is present; (i) liquid sample that contains greater than ~5 vol. % sediment; (j) sample diluted due to high organic content; (k) ethenylbenzene; (l) methylbenzene; (m) acetic acid ethenyl ester; (n) chloroethene; (o) dimethylbenzenes.

DHS Certification No. 1644

*Edward Hamilton* Edward Hamilton, Lab Director



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Clayton Group Services 6920 Koll Center Parkway, Suite 216 Pleasanton, CA 94566	Client Project ID: #70-01369.01; Shamrock Ford	Date Sampled: 10/12/00
	Client Contact: Donald Ashton	Date Received: 10/12/00
	Client P.O.:	Date Analyzed: 10/13-10/18/00
		Date Extracted: 10/12/00

## Volatile Organics By GC/MS

EPA method 8260

Compound	Concentration*	Reporting Limit		Compound	Concentration*	Reporting Limit	
		W	S			W	S
Acetone <sup>(b)</sup>	ND<100	5.0	25	trans-1,3-Dichloropropene	ND	1.0	5.0
Benzene	ND	1.0	5.0	Ethylene dibromide	ND	1.0	5.0
Bromobenzene	ND	1.0	5.0	Ethylbenzene	ND	1.0	5.0
Bromochloromethane	ND	1.0	5.0	Hexachlorobutadiene	ND	5.0	25
Bromodichloromethane	ND	1.0	5.0	Iodomethane	ND	1.0	5.0
Bromoform	ND	1.0	5.0	Isopropylbenzene	ND	1.0	5.0
Bromomethane	ND	1.0	5.0	p-Isopropyl toluene	ND	1.0	5.0
n-Butyl benzene	ND	1.0	5.0	Methyl butyl ketone <sup>(m)</sup>	ND	1.0	5.0
sec-Butyl benzene	ND	1.0	5.0	Methylene Chloride <sup>(c)</sup>	ND<10	1.0	5.0
tert-Butyl benzene	ND	1.0	5.0	Methyl ethyl ketone <sup>(j)</sup>	ND	2.0	10
Carbon Disulfide	ND	1.0	5.0	Methyl isobutyl ketone <sup>(j)</sup>	ND	1.0	5.0
Carbon Tetrachloride	ND	1.0	5.0	Methyl tert-Butyl Ether (MTBE)	ND	1.0	5.0
Chlorobenzene	ND	1.0	5.0	Naphthalene	ND	5.0	5.0
Chloroethane	ND	1.0	5.0	n-Propyl benzene	ND	1.0	5.0
2-Chloromethyl Vinyl Ether <sup>(k)</sup>	ND	1.0	5.0	Styrene <sup>(l)</sup>	ND	1.0	5.0
Chloroform	ND	1.0	5.0	1,1,1,2-Tetrachloroethane	ND	1.0	5.0
Chloromethane	ND	1.0	5.0	1,1,2,2-Tetrachloroethane	ND	1.0	5.0
2-Chlorotoluene	ND	1.0	5.0	Tetrachloroethene	ND<25	1.0	5.0
4-Chlorotoluene	ND	1.0	5.0	Toluene <sup>(n)</sup>	ND	1.0	5.0
Dibromochloromethane	ND	1.0	5.0	1,2,3-Trichlorobenzene	ND	5.0	25
1,2-Dibromo-3-chloropropane	ND	2.0	10	1,2,4-Trichlorobenzene	ND	5.0	25
Dibromomethane	ND	1.0	5.0	1,1,1-Trichloroethane	ND	1.0	5.0
1,2-Dichlorobenzene	ND	1.0	5.0	1,1,2-Trichloroethane	ND	1.0	5.0
1,3-Dichlorobenzene	ND	1.0	5.0	Trichloroethene	ND	1.0	5.0
1,4-Dichlorobenzene	ND	1.0	5.0	Trichlorofluoromethane	ND	1.0	5.0
Dichlorodifluoromethane	ND	1.0	5.0	1,2,3-Trichloropropane	ND	1.0	5.0
1,1-Dichloroethane	ND	1.0	5.0	1,2,4-Trimethylbenzene	ND	1.0	5.0
1,2-Dichloroethane	ND	1.0	5.0	1,3,5-Trimethylbenzene	ND	1.0	5.0
1,1-Dichloroethene	ND	1.0	5.0	Vinyl Acetate <sup>(o)</sup>	ND	5.0	25
cis-1,2-Dichloroethene	ND	1.0	5.0	Vinyl Chloride <sup>(m)</sup>	ND	1.0	5.0
trans-1,2-Dichloroethene	ND	1.0	5.0	Xylenes, total <sup>(n)</sup>	ND	1.0	5.0
1,2-Dichloropropane	ND	1.0	5.0	Comments:			
1,3-Dichloropropane	ND	1.0	5.0	Surrogate Recoveries (%)			
2,2-Dichloropropane	ND	1.0	5.0	Dibromofluoromethane		111	
1,1-Dichloropropene	ND	1.0	5.0	Toluene-d8		99	
cis-1,3-Dichloropropene	ND	1.0	5.0	4-Bromofluorobenzene		107	

\*water and vapor samples are reported in ug/l., soil and sludge samples in ug/kg, wipes in ug/wipe and all TCLP / SPLP extracts in ug/l.  
 ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis

(b) 2-propanone or dimethyl ketone; (c) (2-chloroethoxy) ethene; (d) 2-hexanone; (e) dichloromethane; (f) 2-butanone; (g) 4-methyl-2-pentanone or isopropylacetone; (h) lighter than water immiscible sheen is present; (i) liquid sample that contains greater than ~5 vol. % sediment; (j) sample diluted due to high organic content; (k) ethenylbenzene; (l) methylbenzene; (m) acetic acid ethenyl ester; (n) chloroethene; (o) dimethylbenzene.

DHS Certification No. 1644

Edward Hamilton, Lab Director



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Clayton Group Services 6920 Koll Center Parkway, Suite 216 Pleasanton, CA 94566	Client Project ID: #70-01369.01; Shamrock Ford	Date Sampled: 10/12/00
	Client Contact: Donald Ashton	Date Received: 10/12/00
	Client P.O.:	Date Analyzed: 10/13-10/18/00
		Date Extracted: 10/12/00

## Volatile Organics By GC/MS

EPA method 8260

Lab ID	50224
Client ID	B-9@6
Matrix	S

Compound	Concentration*	Reporting Limit		Compound	Concentration*	Reporting Limit	
		W	S			W	S
Acetone <sup>(b)</sup>	ND<100	5.0	25	trans-1,3-Dichloropropene	ND	1.0	5.0
Benzene	ND	1.0	5.0	Ethylene dibromide	ND	1.0	5.0
Bromobenzene	ND	1.0	5.0	Ethylbenzene	ND	1.0	5.0
Bromochloromethane	ND	1.0	5.0	Hexachlorobutadiene	ND	5.0	25
Bromodichloromethane	ND	1.0	5.0	Iodomethane	ND	1.0	5.0
Bromoform	ND	1.0	5.0	Isopropylbenzene	ND	1.0	5.0
Bromomethane	ND	1.0	5.0	p-Isopropyl toluene	ND	1.0	5.0
n-Butyl benzene	ND	1.0	5.0	Methyl butyl ketone <sup>(a)</sup>	ND	1.0	5.0
sec-Butyl benzene	ND	1.0	5.0	Methylene Chloride <sup>(a)</sup>	ND<10	1.0	5.0
tert-Butyl benzene	ND	1.0	5.0	Methyl ethyl ketone <sup>(a)</sup>	ND	2.0	10
Carbon Disulfide	ND	1.0	5.0	Methyl isobutyl ketone <sup>(a)</sup>	ND	1.0	5.0
Carbon Tetrachloride	ND	1.0	5.0	Methyl tert-Butyl Ether (MTBE)	ND	1.0	5.0
Chlorobenzene	ND<10	1.0	5.0	Naphthalene	ND	5.0	5.0
Chloroethane	ND	1.0	5.0	n-Propyl benzene	ND	1.0	5.0
2-Chloroethyl Vinyl Ether <sup>(j)</sup>	ND	1.0	5.0	Styrene <sup>(b)</sup>	ND	1.0	5.0
Chloroform	ND	1.0	5.0	1,1,1,2-Tetrachloroethane	ND	1.0	5.0
Chloromethane	ND	1.0	5.0	1,1,2,2-Tetrachloroethane	ND<10	1.0	5.0
2-Chlorotoluene	ND<10	1.0	5.0	Tetrachloroethene	ND<25	1.0	5.0
4-Chlorotoluene	ND	1.0	5.0	Toluene <sup>(a)</sup>	ND	1.0	5.0
Dibromochloromethane	ND	1.0	5.0	1,2,3-Trichlorobenzene	ND	5.0	25
1,2-Dibromo-3-chloropropane	ND	2.0	10	1,2,4-Trichlorobenzene	ND	5.0	25
Dibromomethane	ND	1.0	5.0	1,1,1-Trichloroethane	ND	1.0	5.0
1,2-Dichlorobenzene	ND	1.0	5.0	1,1,2-Trichloroethane	ND	1.0	5.0
1,3-Dichlorobenzene	ND	1.0	5.0	Trichloroethene	ND	1.0	5.0
1,4-Dichlorobenzene	ND	1.0	5.0	Trichlorofluoromethane	ND	1.0	5.0
Dichlorodifluoromethane	ND	1.0	5.0	1,2,3-Trichloropropane	ND	1.0	5.0
1,1-Dichloroethane	ND	1.0	5.0	1,2,4-Trimethylbenzene	ND	1.0	5.0
1,2-Dichloroethane	ND	1.0	5.0	1,3,5-Trimethylbenzene	ND	1.0	5.0
1,1-Dichloroethene	ND	1.0	5.0	Vinyl Acetate <sup>(m)</sup>	ND	5.0	25
cis-1,2-Dichloroethene	ND	1.0	5.0	Vinyl Chloride <sup>(a)</sup>	ND	1.0	5.0
trans-1,2-Dichloroethene	ND	1.0	5.0	Xylenes, total <sup>(a)</sup>	ND	1.0	5.0
1,2-Dichloropropane	ND	1.0	5.0	Comments:			
1,3-Dichloropropane	ND	1.0	5.0	Surrogate Recoveries (%)			
2,2-Dichloropropane	ND	1.0	5.0	Dibromofluoromethane			105
1,1-Dichloropropene	ND	1.0	5.0	Toluene-d8			98
cis-1,3-Dichloropropene	ND	1.0	5.0	4-Bromofluorobenzene			131

\*water and vapor samples are reported in ug/L, soil and sludge samples in ug/kg, wipes in ug/wipe and all TCLP / SPLP extracts in ug/L  
 ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis

(b) 2-propanone or dimethyl ketone; (c) (2-chloroethoxy) ethene; (d) 2-hexanone; (e) dichloromethane; (f) 2-butanone; (g) 4-methyl-2-pentanone or isopropylacetone; (h) lighter than water immiscible sheen is present; (i) liquid sample that contains greater than ~5 vol. % sediment; (j) sample diluted due to high organic content; (k) ethylbenzene; (l) methylbenzene; (m) acetic acid ethenyl ester; (n) chloromethane; (o) dimethylbenzenes.

DHS Certification No. 1644

Edward Hamilton, Lab Director



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Clayton Group Services 6920 Koll Center Parkway, Suite 216 Pleasanton, CA 94566	Client Project ID: #70-01369.01; Shamrock Ford	Date Sampled: 10/12/00
	Client Contact: Donald Ashton	Date Received: 10/12/00
	Client P.O.:	Date Analyzed: 10/13-10/18/00

## Volatile Organics By GC/MS

EPA method 8260

Compound	Concentration*	Reporting Limit		Compound	Concentration*	Reporting Limit	
		W	S			W	S
Acetone <sup>(b)</sup>	ND<100	5.0	25	trans-1,3-Dichloropropene	ND	1.0	5.0
Benzene	ND	1.0	5.0	Ethylene dibromide	ND	1.0	5.0
Bromobenzene	ND	1.0	5.0	Ethylbenzene	ND	1.0	5.0
Bromochloromethane	ND	1.0	5.0	Hexachlorobutadiene	ND	5.0	25
Bromodichloromethane	ND	1.0	5.0	Iodomethane	ND	1.0	5.0
Bromoform	ND	1.0	5.0	Isopropylbenzene	ND	1.0	5.0
Bromomethane	ND	1.0	5.0	p-Isopropyl toluene	ND	1.0	5.0
n-Butyl benzene	ND	1.0	5.0	Methyl butyl ketone <sup>(d)</sup>	ND	1.0	5.0
sec-Butyl benzene	ND	1.0	5.0	Methylene Chloride <sup>(e)</sup>	ND<10	1.0	5.0
tert-Butyl benzene	ND	1.0	5.0	Methyl ethyl ketone <sup>(f)</sup>	ND	2.0	10
Carbon Disulfide	ND	1.0	5.0	Methyl isobutyl ketone <sup>(g)</sup>	ND	1.0	5.0
Carbon Tetrachloride	ND	1.0	5.0	Methyl tert-Butyl Ether (MTBE)	ND	1.0	5.0
Chlorobenzene	ND	1.0	5.0	Naphthalene	ND	5.0	5.0
Chloroethane	ND	1.0	5.0	n-Propyl benzene	ND	1.0	5.0
2-Chloroethyl Vinyl Ether <sup>(h)</sup>	ND	1.0	5.0	Styrene <sup>(i)</sup>	ND	1.0	5.0
Chloroform	ND	1.0	5.0	1,1,1,2-Tetrachloroethane	ND	1.0	5.0
Chloromethane	ND	1.0	5.0	1,1,2,2-Tetrachloroethane	ND	1.0	5.0
2-Chlorotoluene	ND	1.0	5.0	Tetrachloroethene	ND<25	1.0	5.0
4-Chlorotoluene	ND	1.0	5.0	Toluene <sup>(j)</sup>	ND	1.0	5.0
Dibromochloromethane	ND	1.0	5.0	1,2,3-Trichlorobenzene	ND	5.0	25
1,2-Dibromo-3-chloropropane	ND	2.0	10	1,2,4-Trichlorobenzene	ND	5.0	25
Dibromomethane	ND	1.0	5.0	1,1,1-Trichloroethane	ND	1.0	5.0
1,2-Dichlorobenzene	ND	1.0	5.0	1,1,2-Trichloroethane	ND	1.0	5.0
1,3-Dichlorobenzene	ND	1.0	5.0	Trichloroethene	ND	1.0	5.0
1,4-Dichlorobenzene	ND	1.0	5.0	Trichlorofluoromethane	ND	1.0	5.0
Dichlorodifluoromethane	ND	1.0	5.0	1,2,3-Trichloropropane	ND	1.0	5.0
1,1-Dichloroethane	ND	1.0	5.0	1,2,4-Trimethylbenzene	ND	1.0	5.0
1,2-Dichloroethane	ND	1.0	5.0	1,3,5-Trimethylbenzene	ND	1.0	5.0
1,1-Dichloroethene	ND	1.0	5.0	Vinyl Acetate <sup>(k)</sup>	ND	5.0	25
cis-1,2-Dichloroethene	ND	1.0	5.0	Vinyl Chloride <sup>(l)</sup>	ND	1.0	5.0
trans-1,2-Dichloroethene	ND	1.0	5.0	Xylenes, total <sup>(m)</sup>	ND	1.0	5.0
1,2-Dichloropropane	ND	1.0	5.0	Comments:			
1,3-Dichloropropane	ND	1.0	5.0	Surrogate Recoveries (%)			
2,2-Dichloropropane	ND	1.0	5.0	Dibromofluoromethane		104	
1,1-Dichloropropene	ND	1.0	5.0	Toluene-d8		96	
cis-1,3-Dichloropropene	ND	1.0	5.0	4-Bromofluorobenzene		129	

\*water and vapor samples are reported in ug/L, soil and sludge samples in ug/kg, wipes in ug/wipe and all TCLP / SPLP extracts in ug/L  
 ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis

(b) 2-propanone or dimethyl ketone; (c) (2-chloroethoxy) ethene; (d) 2-hexanone; (e) dichloromethane; (f) 2-butanone; (g) 4-methyl-2-pentanone or isopropylacetone; (h) lighter than water immiscible sheen is present; (i) liquid sample that contains greater than ~5 vol. % sediment; (j) sample diluted due to high organic content; (k) ethynylbenzene; (l) methylbenzene; (m) acetic acid ethenyl ester; (n) chloroethene; (o) dimethylbenzenes.

DHS Certification No. 1644

Edward Hamilton, Lab Director



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Clayton Group Services 6920 Koll Center Parkway, Suite 216 Pleasanton, CA 94566	Client Project ID: #70-01369.01; Shamrock Ford	Date Sampled: 10/12/00
	Client Contact: Donald Ashton	Date Received: 10/12/00
	Client P.O.:	Date Analyzed: 10/13-10/18/00
		Date Extracted: 10/12/00

## Volatile Organics By GC/MS

EPA method 8260

Compound	Concentration*	Reporting Limit		Compound	Concentration*	Reporting Limit	
		W	S			W	S
Acetone <sup>(b)</sup>	ND<100	5.0	25	trans-1,3-Dichloropropene	ND	1.0	5.0
Benzene	ND	1.0	5.0	Ethylene dibromide	ND	1.0	5.0
Bromobenzene	ND	1.0	5.0	Ethylbenzene	ND	1.0	5.0
Bromochloromethane	ND	1.0	5.0	Hexachlorobutadiene	ND	5.0	25
Bromodichloromethane	ND	1.0	5.0	Iodomethane	ND	1.0	5.0
Bromoform	ND	1.0	5.0	Isopropylbenzene	ND	1.0	5.0
Bromomethane	ND	1.0	5.0	p-Isopropyl toluene	ND	1.0	5.0
n-Butyl benzene	ND	1.0	5.0	Methyl butyl ketone <sup>(d)</sup>	ND	1.0	5.0
sec-Butyl benzene	ND	1.0	5.0	Methylene Chloride <sup>(e)</sup>	ND<10	1.0	5.0
tert-Butyl benzene	ND	1.0	5.0	Methyl ethyl ketone <sup>(f)</sup>	ND	2.0	10
Carbon Disulfide	ND	1.0	5.0	Methyl isobutyl ketone <sup>(g)</sup>	ND	1.0	5.0
Carbon Tetrachloride	ND	1.0	5.0	Methyl tert-Butyl Ether (MTBE)	ND	1.0	5.0
Chlorobenzene	ND	1.0	5.0	Naphthalene	ND	5.0	5.0
Chloroethane	ND	1.0	5.0	n-Propyl benzene	ND	1.0	5.0
2-Chloroethyl Vinyl Ether <sup>(h)</sup>	ND	1.0	5.0	Styrene <sup>(i)</sup>	ND	1.0	5.0
Chloroform	ND	1.0	5.0	1,1,2-Tetrachloroethane	ND	1.0	5.0
Chloromethane	ND	1.0	5.0	1,1,2,2-Tetrachloroethane	ND	1.0	5.0
2-Chlorotoluene	ND	1.0	5.0	Tetrachloroethene	ND<25	1.0	5.0
4-Chlorotoluene	ND	1.0	5.0	Toluene <sup>(j)</sup>	ND	1.0	5.0
Dibromochloromethane	ND	1.0	5.0	1,2,3-Trichlorobenzene	ND	5.0	25
1,2-Dibromo-3-chloropropane	ND	2.0	10	1,2,4-Trichlorobenzene	ND	5.0	25
Dibromomethane	ND	1.0	5.0	1,1,1-Trichloroethane	ND	1.0	5.0
1,2-Dichlorobenzene	ND	1.0	5.0	1,1,2-Trichloroethane	ND	1.0	5.0
1,3-Dichlorobenzene	ND	1.0	5.0	Trichloroethene	ND	1.0	5.0
1,4-Dichlorobenzene	ND	1.0	5.0	Trichlorofluoromethane	ND	1.0	5.0
Dichlorodifluoromethane	ND	1.0	5.0	1,2,3-Trichloropropane	ND	1.0	5.0
1,1-Dichloroethane	ND	1.0	5.0	1,2,4-Trimethylbenzene	ND	1.0	5.0
1,2-Dichloroethane	ND	1.0	5.0	1,3,5-Trimethylbenzene	ND	1.0	5.0
1,1-Dichloroethene	ND	1.0	5.0	Vinyl Acetate <sup>(m)</sup>	ND	5.0	25
cis-1,2-Dichloroethene	ND	1.0	5.0	Vinyl Chloride <sup>(n)</sup>	ND	1.0	5.0
trans-1,2-Dichloroethene	ND	1.0	5.0	Xylenes, total <sup>(o)</sup>	ND	1.0	5.0
1,2-Dichloropropane	ND	1.0	5.0	Comments:			
1,3-Dichloropropane	ND	1.0	5.0	Surrogate Recoveries (%)			
2,2-Dichloropropane	ND	1.0	5.0	Dibromofluoromethane		105	
951132,1-Dichloropropene	ND	1.0	5.0	Toluene-d8		95	
cis-1,3-Dichloropropene	ND	1.0	5.0	4-Bromofluorobenzene		132	

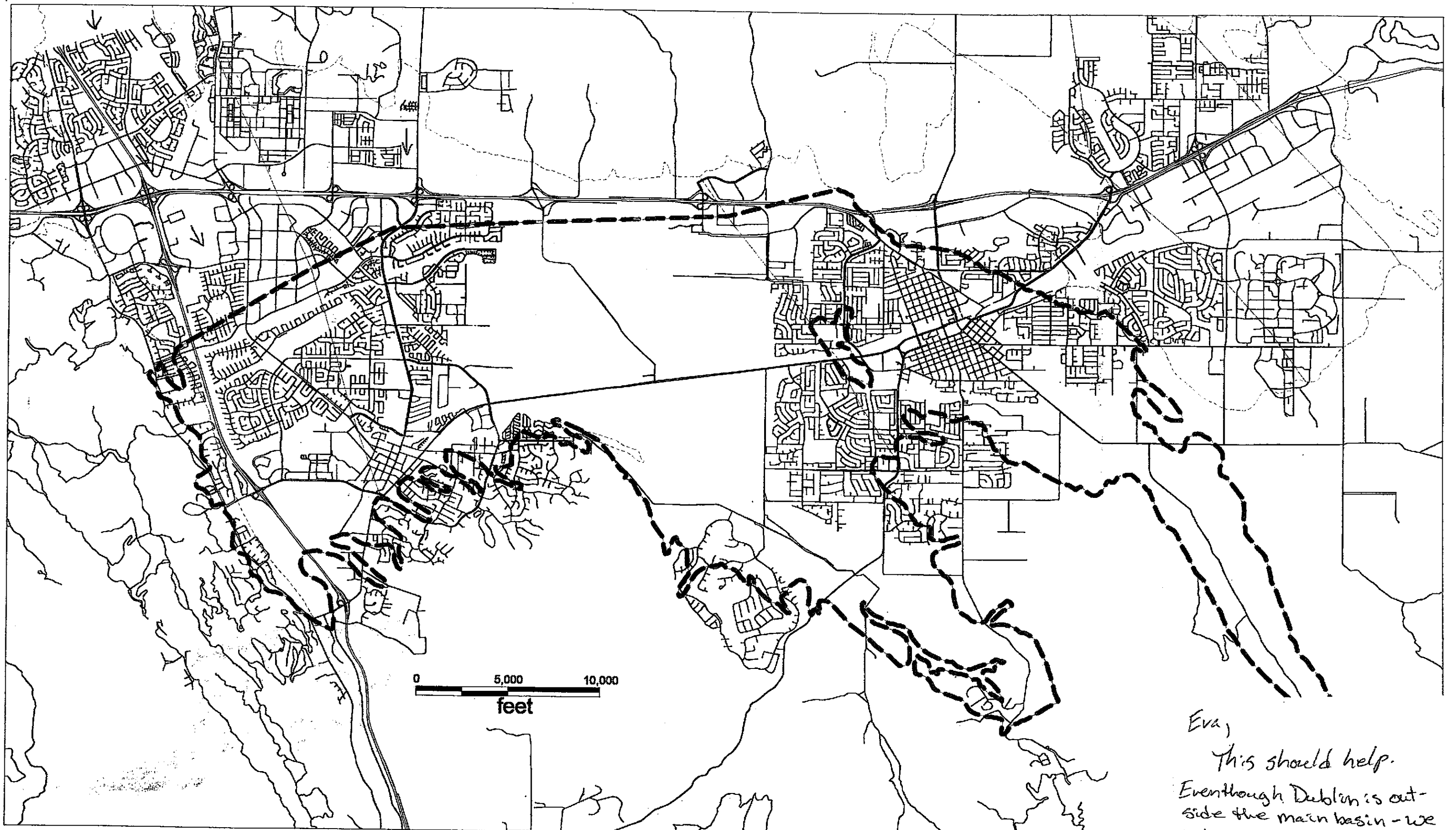
\*water and vapor samples are reported in ug/L, soil and sludge samples in ug/kg, wipes in ug/wipe and all TCLP / SPLP extracts in ug/L

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

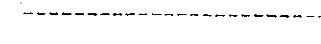
(b) 2-propanone or dimethyl ketone; (c) (2-chloroethoxy) ethene; (d) 2-hexanone; (e) dichloromethane; (f) 2-butanone; (g) 4-methyl-2-pentanone or isopropylacetone; (h) lighter than water immiscible sheen is present; (i) liquid sample that contains greater than -5 vol. % sediment; (j) sample diluted due to high organic content; (k) ethenylbenzene; (l) methylbenzene; (m) acetic acid ethenyl ester; (n) chloroethene; (o) dimethylbenzenes.

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**Main Basin Boundary**



**Groundwater Basin Boundary**

Eva,  
This should help.

Eventhough Dublin is outside the main basin - we believe that quite a bit of water is contributed to the main basin from the Dublin sub basin. I drew in arrows for GW flow direction in that area. Carol