Western Operations

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Clayton
ENVIRONMENTAL
CONSULTANTS

Report of Sampling and Identification of Materials at Call Mac Transportation, Inc. 461 McGraw Avenue Livermore, California

Clayton Project No. 34062.00
June 3, 1991

CONTENTS

1.0 INTRODUCTION

Clayton Environmental Consultants, Inc. was retained by Call Mac Transportation, Inc. to identify and inventory hazardous materials stored at Call Mac's facility at 461 McGraw Avenue in Livermore, California. The scope of work for this project included soil sampling and analysis of container contents, and an inventory of materials at the site. This work was authorized on March 4, 1991, by Mr. Crandall Mackey, President of Call Mac Transportation.

2.0 BACKGROUND

In August 1990 Mr. Mackey retained Clayton to prepare a work plan (Clayton Project No. 30821.00) that would address problems discovered by an Alameda County Health Care Agency (ACHCA) inspection on May 17, 1990. We sent the prepared work plan to Mr. Mackey on September 19, 1990. A copy was also sent to Mr. Gil Wistar of ACHCA. Mr. Wistar reviewed the plan and granted conditional approval on October 22, 1990.

Mr. Mackey requested a proposal for implementation of the work plan, with costs broken down by task. This proposal was sent to Mr. Mackey on December 6, 1990. Mr. Mackey on March 4, 1991 approved performance of the tasks described in the report.

Because of heavy rains in March 1991, sampling was delayed until late March and early April 1991.

3.0 SAMPLING AND ANALYSIS

We began preliminary inventory and sampling on March 27, 1991. Samples were collected by Mr. Gary Williams, Clayton Senior Environmental Technician.

3.1 SOIL SAMPLING AND ANALYSES

The soil sampling plan is included as Figure 1. Soil samples were collected within a grid and are numbered consecutively. Soil sampling details are summarized in Table 1. Clayton collected samples from the following areas:

- Area beneath a tank used to store waste oil. The tank is an underground storage tank that is being used aboveground. We collected one sample from this area (A-1-1). The sample was analyzed for lead, purgeable halocarbons, and total petroleum hydrocarbons (TPH).

- Visibly oil-stained areas. We did not sample all visibly stained areas at the site. The samples that were collected were assumed to be also representative of the unsampled areas. Samples collected from visibly oil-stained areas (B-1-1, C-1-1, D-1-1, F-1-2, and F-1-3) were composited into one sample for analysis. The sample was analyzed for TPH.

- Truck washing area. The two samples that we collected from this area (L-4-1 and L-4-2) were composited into one sample for analysis. The sample was analyzed for TPH.

- Truck maintenance area. The two samples that we collected from this area (L-2-1 and L-2-2) were composited into one sample for analysis. The sample was analyzed for TPH.

- Area near waste oil/polymer drum pallets (not in use). We collected one sample from this area (D-1-2). The sample was analyzed for lead, purgeable halocarbons, and TPH.

- Area near battery storage pallets. We collected one sample from this area (F-1-1). The sample was analyzed for lead, TPH, and pH.

Soil samples were collected in 1.5- by 6-inch brass tubes. The tube ends were covered with aluminum foil and plastic caps and were sealed with duct tape. The samples were placed on ice and returned to Clayton's state-certified laboratory in Pleasanton, California, for analysis.

3.2 LIQUID SAMPLING AND ANALYSES

Clayton sampled readily accessible containers (tanks, drums, and other containers). We restricted sampling to those containers that appeared to contain oil and grease or waste oil. We did not sample containers that we could not open without drilling or cutting, or containers that contained solids. Drums labeled as containing polymers were not sampled. We also did not sample new product drums that contained solvent or motor oil. Liquid sampling details are summarized in Table 2.

Liquid samples were collected with disposable glass coliwasas, which were used once and then disposed of as laboratory waste. The liquid was placed in 250 millimeter glass jars. Before the samples were delivered to the lab, they were tested with Clor-D-Tect™ screening kits.

The samples were analyzed for TPH as oil and grease; benzene, toluene, ethylbenzene, and xylenes (BTEX); and lead. If the screening kits indicated that chlorinated hydrocarbons were present in a sample, the sample was analyzed for purgeable halocarbons, polychlorinated biphenyls (PCBs), BTEX, TPH, and metals.

4.0 RESULTS OF LABORATORY ANALYSES

4.1 ANALYTICAL RESULTS - SOIL

The laboratory reports on soil sample analysis are included in Appendix A. Notable results are discussed in this section.

Analysis revealed a high TPH concentration (14,000 mg/kg) in sample A-1-1, which was collected from beneath the underground fuel tank that is now used for

aboveground storage of waste oil. A lead concentration of 19 mg/kg was detected in this sample. Oil has been leaking through a small hole in a welded seam.

A high TPH concentration (4,000 mg/kg) was also detected in the composite of samples collected from visibly oil-stained areas. Oil staining in these areas appears to have been caused by leaks from truck tractors stored onsite.

Analysis of the composite samples from the truck wash area, the truck maintenance area, the drum storage area, and the former battery storage area revealed comparatively low concentrations of TPH (30 to 40 mg/kg). Analysis detected a lead concentration of 14 mg/kg in the sample from the drum storage area, and a lead concentration of 25 mg/kg in the sample from the battery storage area.

4.2 ANALYTICAL RESULTS - LIQUID

Analysis of liquid samples revealed oily liquid waste, mostly TPH as oil and grease. BTEX was either not detected or was detected in low concentrations. Purgeable halocarbons were not detected in the liquid samples selected for this type of analysis. Laboratory reports for liquid sample analysis are included as Appendix B.

5.0 OBSERVATIONS

It appears that careless housekeeping is the main problem at the site. Tanks, drums, and equipment, have leaked oil onto the ground. Waste oil has been improperly stored after removal from vehicles. Old motor blocks, transmissions, axles, and other automotive equipment have leaked or are leaking oil.

The truck wash area is not constructed to contain wash water and rinsate for separation of oil and water before disposal. Runoff from the area currently enters the storm drain. There are two former underground storage tanks with capacities of approximately 5,000-gallons at the site. One of the tanks has been used for waste oil storage (Tank A-1-1). The other tank is empty but has not been cleaned. Tank A-1-1 has been leaking. These tanks must be disposed of as hazardous waste unless they are properly cleaned before disposal.

Most of the contamination revealed by our sampling consists of petroleum hydrocarbons. It appears that most of the soil contamination is confined to shallow depths and can be remediated by excavation or scraping.

There are liquid, semi-solid, and solid polymers stored onsite. Polymers in the solid state are not necessarily hazardous. However, polymers contain solvents and other chemicals that may be regulated as hazardous by the State of California. The constituents of semi-solid and liquid polymers may separate.

There is a 6-inch diameter, 157-foot deep water well at the northeast corner of the site. Standing water is 12-feet below grade. It appeared that the well casing may be damaged. There was an upside-down 5-gallon bucket over the well to prevent entry of surface contamination.

There is an underground storage tank in use onsite. Daily inventory reconciliation is performed on the tank. The tank was tested for tightness in 1990; annual testing for 1991 is now due. There is some evidence of minor overspills. An inventory of materials at the site is included in Table 2.

6.0 RECOMMENDATIONS

Clayton's recommendations for cleanup of contamination and correction of potential problems follow.

6.1 TRUCK WASH AREA

Construct a wash area that includes an oil/water separator system. The system should discharge going to the sanitary sewer system rather than the storm drain.

6.2 WASTE OIL DISPOSAL

Arrange proper disposal of liquid identified as waste oil or waste solvent as soon as possible.

6.3 EXCAVATED UNDERGROUND TANKS

Arrange for cleaning and disposal of the former underground tanks at the site as soon as possible.

6.4 INSTALLATION OF SPILL CONTAINMENT FOR HAZARDOUS LIQUIDS

Provide proper containment for drums of automotive lubricating oil stored onsite to prevent contamination from spills. All drums or containers that contain hazardous waste must also be properly contained even if storage time is limited.

6.5 OIL-STAINED AREAS

Oil-stained areas must be cleaned up. To accomplish this, it will be necessary to move some of the trucks and vehicles at the site. Much of the surface soil in some areas will need to be scraped up and disposed of. Some areas may require limited excavation. We will base our recommendation for disposal of this soil on laboratory analysis of samples of the soil stock pile.

There are numerous oil stained areas throughout the site that were not sampled. The samples that were collected were most probably representative of the unsampled areas. As the source of contamination was the same (e.g., vehicle engines, transmissions), Clayton recommends that these visibly contaminated areas be cleaned up and that some method of containment be devised to prevent future contamination. This could range from draining and disposing of the oil from the vehicles or other oil containing equipment to simple drip pans. Drip pans will require continuous monitoring to prevent spilling. However, clean up of the contaminated soils is a waste of time, effort, and money unless the source of contamination is eliminated.

6.6 POLYMERS

Laboratory analysis of this material is complicated and expensive. Clayton's laboratory does not analyze this material and we have not identified a laboratory that does. Clayton recommends disposal of the polymers that cannot be used. Containers of polymer that remain onsite must be properly stored to prevent spills and deterioration of the drums.

6.7 WATER WELL

Clayton recommends either abandoning and properly closing the well (if usage is not anticipated), or properly developing and sampling it. The well should be properly protected from possible surface contamination. If unprotected, the well is an avenue for contamination of groundwater.

6.8 UNDERGROUND TANK

Inventory reconciliation and tank testing records must be available for inspection, if required, and must be retained for 3 years. Clayton recommends installation of an overspill protection device. Annual testing for 1991 should be scheduled.

Limitations

The information and opinions rendered in this report are exclusively for use by Client. Clayton Environmental Consultants, Inc. will not distribute this report without your consent except as may be required by law or court order. The information and opinions expressed in this report are given in response to our limited assignment and should be evaluated and implemented only in light of that assignment. We accept responsibility for the competent performance of our duties in executing the assignment and preparing this report in accordance with the normal standards of our profession but disclaim any responsibility for consequential damages.

This report prepared by:

M.D. Holbrook
Supervisor, Field Operations

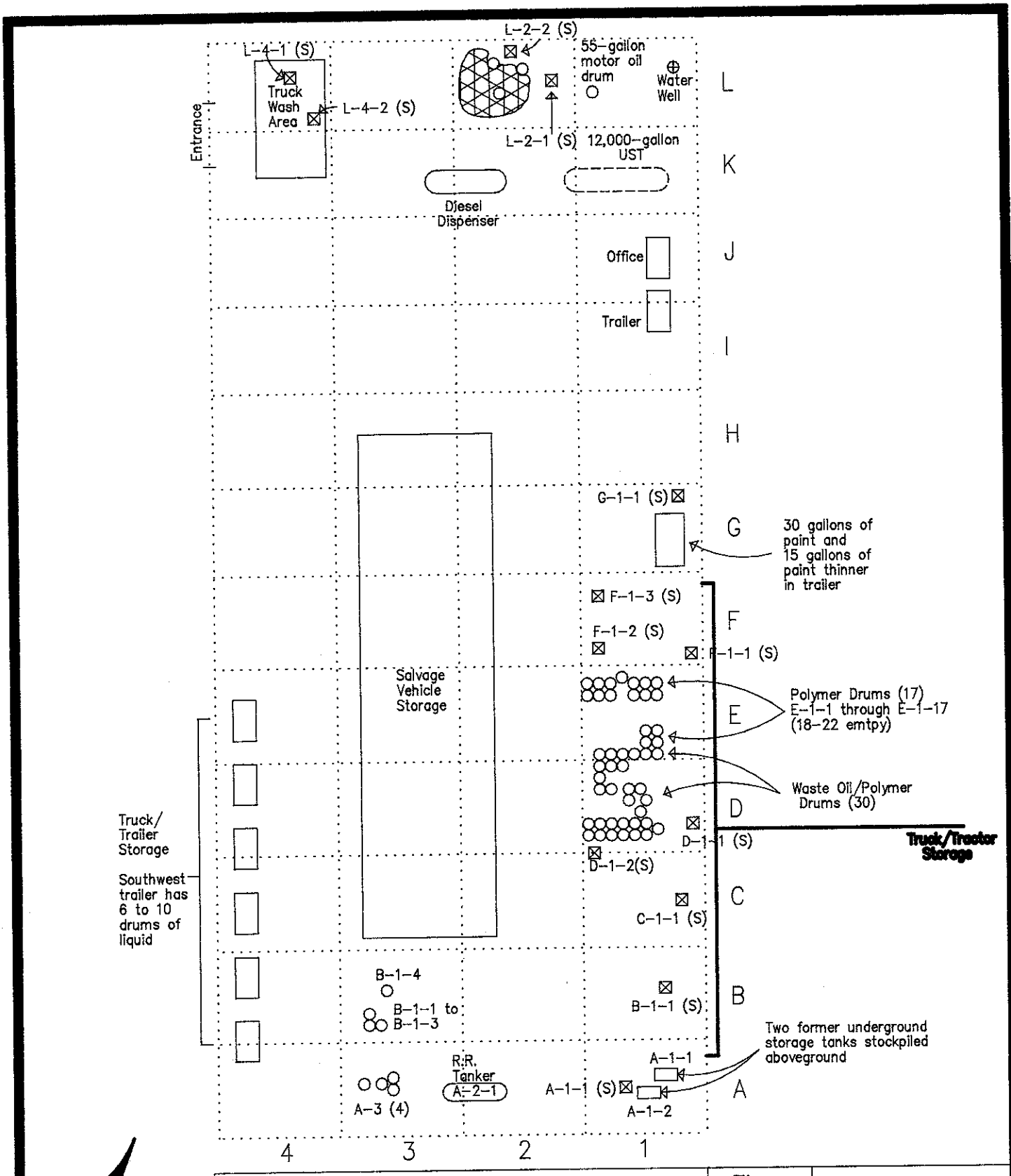
This report reviewed by:

Alan D. Gibbs, R.G.
Supervisor, Geology

June 4, 1991

REGISTERED GEOLOGIST
ALAN D. GIBBS
NO. 4827
STATE OF CALIFORNIA

FIGURE



Site Plan
Call Mac Transportation Company, Inc.
461 McGraw Avenue
Livermore, California

Clayton Project No. 34062.00

(not to scale)

Figure 1

34062-00-16

Clayton ENVIRONMENTAL CONSULTANTS

TABLES

Table 1
Soil Sampling
Call Mac Transportation
Livermore, California

Clayton Project No. 34062.00

Sample No.	Location (see site plan)	Analysis	Comments
B-1-1 (S)	Grid B-1 SE property/under truck	Composite EPA 418.1 (Mod.)	See analytical results
C-1-1 (S)	Grid C-1 SE property/under truck		
D-1-1 (S)	Grid D-1 SE property/under truck		
F-2-1 (S)	Grid F-1 East property/under truck		
F-3-1 (S)	Grid F-1 East property/under truck		
L-4-1	Grid L-4 Northwest truck wash area	Composite EPA 418.1 (Mod.)	See analytical results
L-4-2	Grid L-4 Between wash area and waste oil drums		
L-2-1	Grid L-1 Soil and pump island (NE)	Composite EPA 418.1 (Mod.)	See analytical results
L-2-2	Grid L-2 Behind waste oil drums (NE)		
D-1-2	Grid D-1 Soil under "D" pallets	EPA 8010, 6010, 418.1 Mod.	See analytical results
F-1-1	Grid F-1 Soil under battery pallet	EPA 8010, 6010, 9045, 418.1 Mod.	See analytical results
A-1-1	Grid A-1 Soil under leaking UST	EPA 8010, 6010, 418.1 Mod.	See analytical results

Table 2
Drum Sampling and Inventory
of Materials at
Call Mac Transportation
Livermore, California

Clayton Project No. 34062.00

Drum #	Contents	Volume (Gallons)	Analysis	Comments
D-1-1	Waste oil	55	Composite EPA 8020 EPA 6010 (<1) EPA 418.1 Mod. (See analytical results)	
D-1-2	Waste oil	55		Spilling from open bung
D-1-3	Waste oil	55		
D-1-4	Waste oil	55		Ring lid drum
D-1-5	Waste oil	55	Composite EPA____ EPA 6010 (<1) EPA 418.1 Mod	
D-1-6	Waste oil	55		
D-1-7	Waste oil	55		Spilling
D-1-8	Grease/oil	10		
D-1-9	Unknown	15	Not sampled	Amber colored solid
D-1-10	Grease/oil	15	EPA 8020, EPA 6010 (<1) (See analytical results) (composited with D-1-12 and A-3-1	Semi-solid
D-1-11	Grease/oil	7	Not sampled	Leaking
D-1-12	Grease/oil	20	EPA 8020 (See analytical results) (composited with D-1-12 and A-3-1)	Semi-solid
D-1-13	Unknown	10	Not sampled	Upside-down with holes
D-1-14	Grease/oil	20	EPA 8020, 8010 (ND), 8080 (ND), 6010 (BLD) 418.1 Mod	Corroded ring lid

Table 2
Drum Sampling and Inventory
of Materials at
Call Mac Transportation
Livermore, California

Clayton Project No. 34062.00

Drum #	Contents	Volume (Gallons)	Analysis	Comments
D-1-15	Unknown	55	Not sampled	Upside-down
D-1-16	Polymer	20	Not sampled	Liquid
D-1-17	Polymer	10	Not sampled	Solid/corroded drum
D-1-18	Polymer	20	Not sampled	Liquid
D-1-19	Water/solvent	55	Not sampled	
D-1-20	Grease/solvent	55	Not sampled	~5 gallons grease on bottom with 50 gallons of purple liquid
D-1-21	Unknown	55	Not sampled	Unable to open
D-1-22	Polymer	55	Not sampled	Liquid
D-1-23	Polymer?	20	Not sampled	Cannot open, rusted through lid
D-1-24	Polymer?	55	Not sampled	
D-1-25	Solvent	5	Not sampled	
D-1-26	Unknown	10	Not sampled	Clear liquid, cannot open
D-1-27	Polymer?	55	Not sampled	Liquid (polymer drum)
D-1-28	Polymer	20	Not sampled	Cannot open
D-1-29	Polymer	10	Not sampled	Solid/drum rusted through

Table 2
Drum Sampling and Inventory
of Materials at
Call Mac Transportation
Livermore, California

Clayton Project No. 34062.00

Drum #	Contents	Volume (Gallons)	Analysis	Comments
E-1-1	Unknown	50	Not sampled	Solid pasty material, strong odor/rusted drum
E-1-2	Unknown	55	Not sampled	Solid material/rusted through drum (marked "polyester")
E-1-3	Grease/oil	10	Not samples	
E-1-4	Unknown	40	Not sampled	Drum upside-down
E-1-5	Empty	N/A	N/A	
E-1-6	Empty	N/A	N/A	
E-1-7	Empty	N/A	N/A	
E-1-8	Polymer?	5	Not sampled	Cannot open
E-1-9	Polymer?	55	Not sampled	Solid/cannot open
E-1-10	Polymer?	25	Not sampled	Solid/cannot open, rusted through
E-1-11	Polymer?	5	Not sampled	Solid/cannot open, rusted through
E-1-12	Polymer?	30	Not sampled	Solid/cannot open, rusted through
E-1-13	Polymer?	55	Not sampled	Solid/cannot open, rusted through
E-1-14	Polymer	25	Not sampled	Drum rusted through

Table 2
Drum Sampling and Inventory
of Materials at
Call Mac Transportation
Livermore, California

Clayton Project No. 34062.00

Drum #	Contents	Volume (Gallons)	Analysis	Comments
E-1-15	Polymer	55	Not sampled	Drum rusted through
E-1-16	Polymer	55		Drum rusted through
E-1-17	Polymer	55	Not sampled	Solid
E-1-18	Polymer	55	Not sampled	Drum rusted through
E-1-19	Polymer	10	Not sampled	Solid
E-1-20	Polymer	10	Not sampled	Solid
E-1-21	Polymer	55	Not sampled	Solid
E-1-22	Polymer	55	Not sampled	Solid
A-1-1	Unknown	5,000	EPA 8020, 8010 (ND), 8080 (ND), 6010 (BLD), 418.1 Mod. (See analytical results)	Aboveground UST (leaking)
A-2-1	Unknown	50	EPA 8020 (ND), 8080 (ND), 6010, 418.1 (See analytical results)	Railroad tanker
A-3	Solvent (Chevron)?		Not sampled	Cannot open
A-3				
A-3				
A-3-1	Waste oil/solvent	55	Composited with D-1-10 and D-1-12 EPA 8020, 418.1 Mod.	

Clayton
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APPENDIX A

LABORATORY ANALYSIS
SOIL SAMPLES

Western Operations

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Clayton
ENVIRONMENTAL
CONSULTANTS

April 16, 1991

Mr. Mike Holbrook
CLAYTON ENVIRONMENTAL CONSULTANTS, INC.
1252 Quarry Lane
Pleasanton, CA 94566

Client Ref. 34062.00
Clayton Project No. 91040.53

Dear Mr. Holbrook:

Attached is our analytical laboratory report for the samples received on April 5, 1991. A copy of the Chain-of-Custody form acknowledging receipt of these samples is attached.

Please note that any unused portion of the samples will be disposed of 30 days after the date of this report, unless you have requested otherwise.

We appreciate the opportunity to be of assistance to you. If you have any questions, please contact Maryann Gambino, Client Services Supervisor, at (415) 426-2657.

Sincerely,

Ronald H. Peters, CIH
Director, Laboratory Services
Western Operations

RHP/tb
Attachments

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.53

Sample Identification: D-1-2 SOIL "D" PALLETS
Lab Number: 9104053-13A
Sample Matrix/Media: SOIL
Preparation Method: EPA 5030
Analytical Method: EPA 8010

Date Sampled: 03/29/91
Date Received: 04/05/91
Date Prepared: 04/11/91
Date Analyzed: 04/11/91

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
Purgeable Halocarbons			
Chloromethane	74-87-3	ND	0.06
Bromomethane	74-83-9	ND	0.07
Vinyl chloride	75-01-4	ND	0.05
Chloroethane	75-00-3	ND	0.05
Methylene chloride	75-09-2	ND	0.2
1,1-Dichloroethene	75-35-4	ND	0.02
1,1-Dichloroethane	75-35-3	ND	0.04
Trans-1,2-Dichloroethene	156-60-5	ND	0.04
Cis-1,2-Dichloroethene	156-59-2	ND	0.04
1,2-Dichloroethene (total)	540-59-0	ND	0.04
Chloroform	67-66-3	ND	0.05
1,2-Dichloroethane	107-06-2	ND	0.03
1,1,1-Trichloroethane	71-55-6	ND	0.05
Carbon tetrachloride	56-23-5	ND	0.06
Bromodichloromethane	75-27-4	ND	0.07
1,2-Dichloropropane	78-87-5	ND	0.05
Cis-1,3-Dichloropropene	10061-01-5	ND	0.05
Trichloroethene	79-01-6	ND	0.03
Dibromochloromethane	124-48-1	ND	0.06
1,1,2-Trichloroethane	79-00-5	ND	0.06
Trans-1,3-Dichloropropene	10061-02-6	ND	0.06
2-Chloroethylvinylether	100-75-8	ND	0.1
Bromoform	75-25-2	ND	0.07
Tetrachloroethene	127-18-4	0.31	0.05
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.05
Chlorobenzene	108-90-7	ND	0.07
1,3-Dichlorobenzene	541-73-7	ND	0.2
1,2-Dichlorobenzene	95-50-1	ND	0.4
1,4-Dichlorobenzene	106-46-7	ND	0.4
Dichlorodifluoromethane	75-71-8	ND	0.1
Trichlorofluoromethane	75-69-4	ND	0.04
Freon 113	76-13-1	ND	0.06

ND Not detected at or above limit of detection
-- Information not available or not applicable

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.53

Sample Identification:	A-1-1 STORED UST (LEAKING)	Date Sampled:	04/03/91
Lab Number:	9104053-15A	Date Received:	04/05/91
Sample Matrix/Media:	SOIL	Date Prepared:	04/11/91
Preparation Method:	EPA 5030	Date Analyzed:	04/15/91
Analytical Method:	EPA 8010		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
Purgeable Halocarbons			
Chloromethane	74-87-3	ND	0.06
Bromomethane	74-83-9	ND	0.07
Vinyl chloride	75-01-4	ND	0.05
Chloroethane	75-00-3	ND	0.05
Methylene chloride	75-09-2	ND	0.2
1,1-Dichloroethene	75-35-4	ND	0.02
1,1-Dichloroethane	75-35-3	ND	0.04
Trans-1,2-Dichloroethene	156-60-5	ND	0.04
Cis-1,2-Dichloroethene	156-59-2	ND	0.04
1,2-Dichloroethene (total)	540-59-0	ND	0.04
Chloroform	67-66-3	ND	0.05
1,2-Dichloroethane	107-06-2	ND	0.03
1,1,1-Trichloroethane	71-55-6	ND	0.05
Carbon tetrachloride	56-23-5	ND	0.06
Bromodichloromethane	75-27-4	ND	0.07
1,2-Dichloropropane	78-87-5	ND	0.05
Cis-1,3-Dichloropropene	10061-01-5	ND	0.05
Trichloroethene	79-01-6	ND	0.03
Dibromochloromethane	124-48-1	ND	0.06
1,1,2-Trichloroethane	79-00-5	ND	0.06
Trans-1,3-Dichloropropene	10061-02-6	ND	0.06
2-Chloroethylvinylether	100-75-8	ND	0.1
Bromoform	75-25-2	ND	0.07
Tetrachloroethene	127-18-4	ND	0.05
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.05
Chlorobenzene	108-90-7	ND	0.07
1,3-Dichlorobenzene	541-73-7	ND	0.2
1,2-Dichlorobenzene	95-50-1	ND	0.4
1,4-Dichlorobenzene	106-46-7	ND	0.4
Dichlorodifluoromethane	75-71-8	ND	0.1
Trichlorofluoromethane	75-69-4	ND	0.04
Freon 113	76-13-1	ND	0.06

ND Not detected at or above limit of detection
-- Information not available or not applicable

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.53

Sample Identification: METHOD BLANK
Lab Number: 9104053-16A
Sample Matrix/Media: SOIL
Preparation Method: EPA 5030
Analytical Method: EPA 8010

Date Sampled: --
Date Received: --
Date Prepared: 04/11/91
Date Analyzed: 04/11/91

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
Purgeable Halocarbons			
Chloromethane	74-87-3	ND	0.06
Bromomethane	74-83-9	ND	0.07
Vinyl chloride	75-01-4	ND	0.05
Chloroethane	75-00-3	ND	0.05
Methylene chloride	75-09-2	ND	0.2
1,1-Dichloroethene	75-35-4	ND	0.02
1,1-Dichloroethane	75-35-3	ND	0.04
Trans-1,2-Dichloroethene	156-60-5	ND	0.04
Cis-1,2-Dichloroethene	156-59-2	ND	0.04
1,2-Dichloroethene (total)	540-59-0	ND	0.04
Chloroform	67-66-3	ND	0.05
1,2-Dichloroethane	107-06-2	ND	0.03
1,1,1-Trichloroethane	71-55-6	ND	0.05
Carbon tetrachloride	56-23-5	ND	0.06
Bromodichloromethane	75-27-4	ND	0.07
1,2-Dichloropropane	78-87-5	ND	0.05
Cis-1,3-Dichloropropene	10061-01-5	ND	0.05
Trichloroethene	79-01-6	ND	0.03
Dibromochloromethane	124-48-1	ND	0.06
1,1,2-Trichloroethane	79-00-5	ND	0.06
Trans-1,3-Dichloropropene	10061-02-6	ND	0.06
2-Chloroethylvinylether	100-75-8	ND	0.1
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1,4-Dichlorobenzene	106-46-7	ND	0.4
Dichlorodifluoromethane	75-71-8	ND	0.1
Trichlorofluoromethane	75-69-4	ND	0.04
Freon 113	76-13-1	ND	0.06

ND Not detected at or above limit of detection
-- Information not available or not applicable

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.53

Sample Identification:	See below	Date Sampled:	03/29-04/03/91
Lab Number:	9104053	Date Received:	04/05/91
Sample Matrix/Media:	Soil	Date Digested:	04/08/91
Digestion Method:	EPA 3010	Date Analyzed:	04/09/91
Analytical Method:	EPA 6010		

Laboratory No.	Sample Identification	Lead (mg/kg)
-13	D-1-2 Soil "D" Pallets	14
-14	F-1-1 Soil (Battery Pallet)	25
-15	A-1-1 Stored UST (Leaking)	19
-MB	Method Blank	<1
Limit of Detection:		1

< Less than the indicated limit of detection (LOD)

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.53

Sample Identification:	See below	Date Sampled:	03/29/91
Lab Number:	9104053	Date Received:	04/05/91
Sample Matrix/Media:	Soil	Date Analyzed:	04/05/91
Analytical Method:	EPA 9045		

Laboratory No.	Sample Identification	pH (Standard Units)
-14	F-1-1 Soil (Battery Pallet)	6.1

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.53

Sample Identification:	See below	Date Sampled:	03/29-04/03/91
Lab Number:	9104053	Date Received:	04/05/91
Sample Matrix/Media:	Soil	Date Analyzed:	04/09/91
Analytical Method:	EPA 418.1 (Modified)		

Laboratory No.	Sample Identification	Total Recoverable Petroleum Hydrocarbons (mg/kg)
-06	Comp. of B-1-1 thru F-1-3	4,000
-09	Comp. of L-1-1 & L-1-2	30
-12	Comp. of L-2-1 & L-2-2	40
-13	D-1-2 Soil "D" Pallets	40
-14	F-1-1 Soil (Battery Pallet)	30
-15	A-1-1 Stored UST (Leaking)	14,000
-MB	Method Blank	<10
Limit of Detection:		10

< Less than the indicated limit of detection(LOD)

Clayton
ENVIRONMENTAL CONSULTANTS
A Marsh & McLennan Company

REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Clayton Use Only	Page ____ of ____
Project No. 34062.00	
Batch No. 9104053	
Client No.	
Date Logged In 4/5/91	By RBR

REPORT RESULTS TO
Name M. HOLBROOK CEC | Title
Company CALMAC TRANSPORTATION (FOR) | Dept.
Mailing Address
City, State, Zip
Telephone No. | Telefax No.

Purchase Order No. | Client Job No.

SEND INVOICE TO
Name M. HOLBROOK (FOR)
Company CALMAC TRANS | Dept.
Address
City, State, Zip

Date Results Required: | Rush Charges Authorized? ☐ Yes ☑ No | Phone Results ☐

Special Instructions: (method, limit of detection, etc.)

* Explanation of Preservative:

Samples are: (check if applicable)
☐ Drinking Water
☐ Collected in the State of New York

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	VOA'S	TPH 418.1									FOR LAB USE ONLY
B-1-1	3-29-91	SOIL		1											-01A
C-1-1	↓	↓		1											02
D-1-1 COMPOSITE				1	X	X									03 -06A
F-1-2				1											04
F-1-3	↓	↓		1											05↓
L-1-1 COMPOSITE	4-3-91	SOIL		1	X	X									-07A -09A
L-1-2	4-4-91	↓		1											-08↓
L-2-1 COMPOSITE	4-3-91			1	X	X									-10A -12A
L-2-2	4-4-91	↓		1											-11↓

CHAIN OF CUSTODY
Relinquished by: [signature] | Date/Time 4-5-91 0915
Relinquished by: | Date/Time
Method of Shipment:

Received by: | Date/Time
Received at Lab by: Rebecca L Turner-Charles | Date/Time 4/5/91 9:15
Sample Condition Upon Receipt: ☑ Acceptable ☐ Other (explain)

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

22345 Roethel Drive
Novi, MI 48050
(313) 344-1770

Raritan Center
160 Fieldcrest Ave.
Edison, NJ 08837
(201) 225-6040

400 Chastain Center Blvd., N.W.
Suite 490
Kennesaw, GA 30144
(404) 499-7500

1252 Quarry Lane
Pleasanton, CA 94566
(415) 426-2600

6/90

DISTRIBUTION:
WHITE - Clayton Laboratory
YELLOW - Clayton Accounting
PINK - Client Copy

Clayton
ENVIRONMENTAL CONSULTANTS
A Marsh & McLennan Company

REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Clayton Use Only	Page ____ of ____
Project No.	34062.60
Batch No.	9104053
Client No.	
Date Logged In	4/5/91 By RBA

REPORT RESULTS TO
Name: M. HOLBROOK (C&C) FOR
Company: CAL MAC TRANS.
Title:
Dept.:
Mailing Address:
City, State, Zip:
Telephone No.:
Telefax No.:

Purchase Order No.:
Client Job No.:

SEND INVOICE TO
Name: M. HOLBROOK (C&C) FOR
Company: CAL MAC
Dept.:
Address:
City, State, Zip:

Date Results Required:
Rush Charges Authorized? ☐ Yes ☒ No
Phone Results ☐

Special Instructions: (method, limit of detection, etc.)

* Explanation of Preservative:

Samples are: (check if applicable)
☐ Drinking Water
☐ Collected in the State of New York

ANALYSIS REQUESTED
(Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added. *)

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	LEAD	~~OIL~~ CHC 8010	TPH 418.1	PH	FOR LAB USE ONLY
D-1-2 SOIL "D" PALLETS	3-29-91	SOIL		1	X	X	X		-13A
F-1-1 SOIL (BATTERY PALLET)	3-29-91	SOIL		1	X		X	X	-14A
A-1-1 STORED UST (LEAKING)	4-3-91	SOIL		1	X	X	X		-15A

CHAIN OF CUSTODY
Relinquished by: [signature] Date/Time: 4-5-91 0915
Relinquished by: Date/Time:
Method of Shipment:

Received by: Date/Time:
Received at Lab by: Rebecca Tinen Chiarello Date/Time: 4/5/91 9:15
Sample Condition Upon Receipt: ☒ Acceptable ☐ Other (explain)

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

22345 Roethel Drive
Novi, MI 48050
(313) 344-1770

Raritan Center
160 Fieldcrest Ave.
Edison, NJ 08837
(201) 225-6040

400 Chastain Center Blvd., N.W.
Suite 490
Kennesaw, GA 30144
(404) 499-7500

1252 Quarry Lane
Pleasanton, CA 94566
(415) 426-2600

6/90

DISTRIBUTION:
WHITE - Clayton Laboratory
YELLOW - Clayton Accounting
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APPENDIX B

LABORATORY ANALYSIS
LIQUID SAMPLES

Western Operations

1252 Quarry Lane
Pleasanton, CA 94566
(415) 426-2600
Fax (415) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

April 26, 1991

Mr. Mike Holbrook
CLAYTON ENVIRONMENTAL CONSULTANTS, INC.
1252 Quarry Lane
Pleasanton, CA 94566

Client Ref. 34062.00
Clayton Project No. 91040.09

Dear Mr. Holbrook:

Attached is our analytical laboratory report for the samples received on April 1, 1991. On April 11, 1991 you authorized analysis of these samples even though there was limited sample volume. A copy of the Chain-of-Custody form acknowledging receipt of these samples is attached.

Please note that any unused portion of the samples will be disposed of 30 days after the date of this report, unless you have requested otherwise.

We appreciate the opportunity to be of assistance to you. If you have any questions, please contact Maryann Gambino, Client Services Supervisor, at (415) 426-2657.

Sincerely,

Ronald H. Peters, CIH
Director, Laboratory Services
Western Operations

RHP/dt
Attachments

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.09

Sample Identification:	COMP.D-1-1 TO D-1-4	Date Sampled:	03/27/91
Lab Number:	9104009-05A	Date Received:	04/01/91
Sample Matrix/Media:	OIL	Date Extracted:	04/16/91
Extraction Method:	EPA 5030	Date Analyzed:	04/17/91
Analytical Method:	EPA 8020		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
BTEX			
Benzene	71-43-2	0.25	0.05
Toluene	108-88-3	4.8	0.05
Ethylbenzene	100-41-4	2.7	0.05
Xylenes	1330-20-7	22	0.05

ND Not detected at or above limit of detection
-- Information not available or not applicable

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.09

Sample Identification:	COMP.D-1-5 TO D-1-8	Date Sampled:	03/27/91
Lab Number:	9104009-10A	Date Received:	04/01/91
Sample Matrix/Media:	OIL	Date Extracted:	04/16/91
Extraction Method:	EPA 5030	Date Analyzed:	04/17/91
Analytical Method:	EPA 8020		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
BTEX			
Benzene	71-43-2	1.4	0.05
Toluene	108-88-3	12	0.05
Ethylbenzene	100-41-4	11	0.05
Xylenes	1330-20-7	32	0.05

ND Not detected at or above limit of detection
-- Information not available or not applicable

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.09

Sample Identification:	D-1-14	Date Sampled:	03/27/91
Lab Number:	9104009-11A	Date Received:	04/01/91
Sample Matrix/Media:	OIL	Date Extracted:	04/16/91
Extraction Method:	EPA 5030	Date Analyzed:	04/18/91
Analytical Method:	EPA 8020		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
BTEX			
Benzene	71-43-2	0.64	0.05
Toluene	108-88-3	7.6	0.05
Ethylbenzene	100-41-4	6.1	0.05
Xylenes	1330-20-7	26	0.05

ND Not detected at or above limit of detection
-- Information not available or not applicable

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.09

Sample Identification:	B-3-2	Date Sampled:	03/27/91
Lab Number:	9104009-12A	Date Received:	04/01/91
Sample Matrix/Media:	OIL	Date Extracted:	04/16/91
Extraction Method:	EPA 5030	Date Analyzed:	04/18/91
Analytical Method:	EPA 8020		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
BTEX			
Benzene	71-43-2	ND	0.05
Toluene	108-88-3	0.68	0.05
Ethylbenzene	100-41-4	0.55	0.05
Xylenes	1330-20-7	25	0.05

ND Not detected at or above limit of detection
-- Information not available or not applicable

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.09

Sample Identification:	A-1-1	Date Sampled:	03/27/91
Lab Number:	9104009-13A	Date Received:	04/01/91
Sample Matrix/Media:	OIL	Date Extracted:	04/16/91
Extraction Method:	EPA 5030	Date Analyzed:	04/18/91
Analytical Method:	EPA 8020		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
BTEX			
Benzene	71-43-2	0.4	0.1
Toluene	108-88-3	0.7	0.1
Ethylbenzene	100-41-4	0.5	0.1
Xylenes	1330-20-7	4.0	0.1

ND Not detected at or above limit of detection
-- Information not available or not applicable

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.09

Sample Identification:	A-2-1	Date Sampled:	03/27/91
Lab Number:	9104009-14A	Date Received:	04/01/91
Sample Matrix/Media:	OIL	Date Extracted:	04/16/91
Extraction Method:	EPA 5030	Date Analyzed:	04/18/91
Analytical Method:	EPA 8020		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
BTEX			
Benzene	71-43-2	ND	0.05
Toluene	108-88-3	ND	0.05
Ethylbenzene	100-41-4	ND	0.05
Xylenes	1330-20-7	ND	0.05

ND Not detected at or above limit of detection
-- Information not available or not applicable

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.09

Sample Identification:	COMP.D-1-10 TO A-3-1	Date Sampled:	03/27/91
Lab Number:	9104009-18A	Date Received:	04/01/91
Sample Matrix/Media:	OIL	Date Extracted:	04/16/91
Extraction Method:	EPA 5030	Date Analyzed:	04/18/91
Analytical Method:	EPA 8020		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
BTEX			
Benzene	71-43-2	ND	0.05
Toluene	108-88-3	1.0	0.05
Ethylbenzene	100-41-4	4.6	0.05
Xylenes	1330-20-7	14	0.05

ND Not detected at or above limit of detection
-- Information not available or not applicable

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.09

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9104009-19A	Date Received:	--
Sample Matrix/Media:	OIL	Date Extracted:	04/16/91
Extraction Method:	EPA 5030	Date Analyzed:	04/18/91
Analytical Method:	EPA 8020		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
BTEX			
Benzene	71-43-2	ND	0.005
Toluene	108-88-3	ND	0.005
Ethylbenzene	100-41-4	ND	0.005
Xylenes	1330-20-7	ND	0.005

ND Not detected at or above limit of detection
-- Information not available or not applicable

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.09

Sample Identification:	D-1-14	Date Sampled:	03/27/91
Lab Number:	9104009-11A	Date Received:	04/01/91
Sample Matrix/Media:	OIL	Date Prepared:	04/16/91
Preparation Method:	EPA 5030	Date Analyzed:	04/18/91
Analytical Method:	EPA 8010		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
Purgeable Halocarbons			
Chloromethane	74-87-3	ND	0.6
Bromomethane	74-83-9	ND	0.7
Vinyl chloride	75-01-4	ND	0.5
Chloroethane	75-00-3	ND	0.5
Methylene chloride	75-09-2	ND	2
1,1-Dichloroethene	75-35-4	ND	0.2
1,1-Dichloroethane	75-35-3	ND	0.4
Trans-1,2-Dichloroethene	156-60-5	ND	0.4
Cis-1,2-Dichloroethene	156-59-2	ND	0.4
1,2-Dichloroethene (total)	540-59-0	ND	0.4
Chloroform	67-66-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.3
1,1,1-Trichloroethane	71-55-6	ND	0.5
Carbon tetrachloride	56-23-5	ND	0.6
Bromodichloromethane	75-27-4	ND	0.7
1,2-Dichloropropane	78-87-5	ND	0.5
Cis-1,3-Dichloropropene	10061-01-5	ND	0.5
Trichloroethene	79-01-6	ND	0.3
Dibromochloromethane	124-48-1	ND	0.6
1,1,2-Trichloroethane	79-00-5	ND	0.6
Trans-1,3-Dichloropropene	10061-02-6	ND	0.6
2-Chloroethylvinylether	100-75-8	ND	1
Bromoform	75-25-2	ND	0.7
Tetrachloroethene	127-18-4	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.7
1,3-Dichlorobenzene	541-73-7	ND	2
1,2-Dichlorobenzene	95-50-1	ND	4
1,4-Dichlorobenzene	106-46-7	ND	4
Dichlorodifluoromethane	75-71-8	ND	1
Trichlorofluoromethane	75-69-4	ND	0.4
Freon 113	76-13-1	ND	0.6

ND Not detected at or above limit of detection
-- Information not available or not applicable

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.09

Sample Identification:	B-3-2	Date Sampled:	03/27/91
Lab Number:	9104009-12A	Date Received:	04/01/91
Sample Matrix/Media:	OIL	Date Prepared:	04/16/91
Preparation Method:	EPA 5030	Date Analyzed:	04/18/91
Analytical Method:	EPA 8010		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
Purgeable Halocarbons			
Chloromethane	74-87-3	ND	0.6
Bromomethane	74-83-9	ND	0.7
Vinyl chloride	75-01-4	ND	0.5
Chloroethane	75-00-3	ND	0.5
Methylene chloride	75-09-2	ND	2
1,1-Dichloroethene	75-35-4	ND	0.2
1,1-Dichloroethane	75-35-3	ND	0.4
Trans-1,2-Dichloroethene	156-60-5	ND	0.4
Cis-1,2-Dichloroethene	156-59-2	ND	0.4
1,2-Dichloroethene (total)	540-59-0	ND	0.4
Chloroform	67-66-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.3
1,1,1-Trichloroethane	71-55-6	ND	0.5
Carbon tetrachloride	56-23-5	ND	0.6
Bromodichloromethane	75-27-4	ND	0.7
1,2-Dichloropropane	78-87-5	ND	0.5
Cis-1,3-Dichloropropene	10061-01-5	ND	0.5
Trichloroethene	79-01-6	ND	0.3
Dibromochloromethane	124-48-1	ND	0.6
1,1,2-Trichloroethane	79-00-5	ND	0.6
Trans-1,3-Dichloropropene	10061-02-6	ND	0.6
2-Chloroethylvinylether	100-75-8	ND	1
Bromoform	75-25-2	ND	0.7
Tetrachloroethene	127-18-4	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.7
1,3-Dichlorobenzene	541-73-7	ND	2
1,2-Dichlorobenzene	95-50-1	ND	4
1,4-Dichlorobenzene	106-46-7	ND	4
Dichlorodifluoromethane	75-71-8	ND	1
Trichlorofluoromethane	75-69-4	ND	0.4
Freon 113	76-13-1	ND	0.6

ND Not detected at or above limit of detection
-- Information not available or not applicable

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.09

Sample Identification:	A-1-1	Date Sampled:	03/27/91
Lab Number:	9104009-13A	Date Received:	04/01/91
Sample Matrix/Media:	OIL	Date Prepared:	04/16/91
Preparation Method:	EPA 5030	Date Analyzed:	04/18/91
Analytical Method:	EPA 8010		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
Purgeable Halocarbons			
Chloromethane	74-87-3	ND	2
Bromomethane	74-83-9	ND	2
Vinyl chloride	75-01-4	ND	1
Chloroethane	75-00-3	ND	1
Methylene chloride	75-09-2	ND	5
1,1-Dichloroethene	75-35-4	ND	0.5
1,1-Dichloroethane	75-35-3	ND	1
Trans-1,2-Dichloroethene	156-60-5	ND	1
Cis-1,2-Dichloroethene	156-59-2	ND	1
1,2-Dichloroethene (total)	540-59-0	ND	1
Chloroform	67-66-3	ND	1
1,2-Dichloroethane	107-06-2	ND	0.8
1,1,1-Trichloroethane	71-55-6	ND	1
Carbon tetrachloride	56-23-5	ND	2
Bromodichloromethane	75-27-4	ND	2
1,2-Dichloropropane	78-87-5	ND	1
Cis-1,3-Dichloropropene	10061-01-5	ND	1
Trichloroethene	79-01-6	ND	0.8
Dibromochloromethane	124-48-1	ND	2
1,1,2-Trichloroethane	79-00-5	ND	2
Trans-1,3-Dichloropropene	10061-02-6	ND	2
2-Chloroethylvinylether	100-75-8	ND	3
Bromoform	75-25-2	ND	2
Tetrachloroethene	127-18-4	ND	1
1,1,2,2-Tetrachloroethane	79-34-5	ND	1
Chlorobenzene	108-90-7	ND	2
1,3-Dichlorobenzene	541-73-7	ND	5
1,2-Dichlorobenzene	95-50-1	ND	10
1,4-Dichlorobenzene	106-46-7	ND	10
Dichlorodifluoromethane	75-71-8	ND	3
Trichlorofluoromethane	75-69-4	ND	1
Freon 113	76-13-1	ND	2

ND Not detected at or above limit of detection
-- Information not available or not applicable

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.09

Sample Identification:	A-2-1	Date Sampled:	03/27/91
Lab Number:	9104009-14A	Date Received:	04/01/91
Sample Matrix/Media:	OIL	Date Prepared:	04/16/91
Preparation Method:	EPA 5030	Date Analyzed:	04/18/91
Analytical Method:	EPA 8010		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
Purgeable Halocarbons			
Chloromethane	74-87-3	ND	0.6
Bromomethane	74-83-9	ND	0.7
Vinyl chloride	75-01-4	ND	0.5
Chloroethane	75-00-3	ND	0.5
Methylene chloride	75-09-2	ND	2
1,1-Dichloroethene	75-35-4	ND	0.2
1,1-Dichloroethane	75-35-3	ND	0.4
Trans-1,2-Dichloroethene	156-60-5	ND	0.4
Cis-1,2-Dichloroethene	156-59-2	ND	0.4
1,2-Dichloroethene (total)	540-59-0	ND	0.4
Chloroform	67-66-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.3
1,1,1-Trichloroethane	71-55-6	ND	0.5
Carbon tetrachloride	56-23-5	ND	0.6
Bromodichloromethane	75-27-4	ND	0.7
1,2-Dichloropropane	78-87-5	ND	0.5
Cis-1,3-Dichloropropene	10061-01-5	ND	0.5
Trichloroethene	79-01-6	ND	0.3
Dibromochloromethane	124-48-1	ND	0.6
1,1,2-Trichloroethane	79-00-5	ND	0.6
Trans-1,3-Dichloropropene	10061-02-6	ND	0.6
2-Chloroethylvinylether	100-75-8	ND	1
Bromoform	75-25-2	ND	0.7
Tetrachloroethene	127-18-4	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.7
1,3-Dichlorobenzene	541-73-7	ND	2
1,2-Dichlorobenzene	95-50-1	ND	4
1,4-Dichlorobenzene	106-46-7	ND	4
Dichlorodifluoromethane	75-71-8	ND	1
Trichlorofluoromethane	75-69-4	ND	0.4
Freon 113	76-13-1	ND	0.6

ND Not detected at or above limit of detection
-- Information not available or not applicable

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.09

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9104009-19A	Date Received:	--
Sample Matrix/Media:	OIL	Date Prepared:	04/16/91
Preparation Method:	EPA 5030	Date Analyzed:	04/18/91
Analytical Method:	EPA 8010		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
Purgeable Halocarbons			
Chloromethane	74-87-3	ND	0.06
Bromomethane	74-83-9	ND	0.07
Vinyl chloride	75-01-4	ND	0.05
Chloroethane	75-00-3	ND	0.05
Methylene chloride	75-09-2	ND	0.2
1,1-Dichloroethene	75-35-4	ND	0.02
1,1-Dichloroethane	75-35-3	ND	0.04
Trans-1,2-Dichloroethene	156-60-5	ND	0.04
Cis-1,2-Dichloroethene	156-59-2	ND	0.04
1,2-Dichloroethene (total)	540-59-0	ND	0.04
Chloroform	67-66-3	ND	0.05
1,2-Dichloroethane	107-06-2	ND	0.03
1,1,1-Trichloroethane	71-55-6	ND	0.05
Carbon tetrachloride	56-23-5	ND	0.06
Bromodichloromethane	75-27-4	ND	0.07
1,2-Dichloropropane	78-87-5	ND	0.05
Cis-1,3-Dichloropropene	10061-01-5	ND	0.05
Trichloroethene	79-01-6	ND	0.03
Dibromochloromethane	124-48-1	ND	0.06
1,1,2-Trichloroethane	79-00-5	ND	0.06
Trans-1,3-Dichloropropene	10061-02-6	ND	0.06
2-Chloroethylvinylether	100-75-8	ND	0.1
Bromoform	75-25-2	ND	0.07
Tetrachloroethene	127-18-4	ND	0.05
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.05
Chlorobenzene	108-90-7	ND	0.07
1,3-Dichlorobenzene	541-73-7	ND	0.2
1,2-Dichlorobenzene	95-50-1	ND	0.4
1,4-Dichlorobenzene	106-46-7	ND	0.4
Dichlorodifluoromethane	75-71-8	ND	0.1
Trichlorofluoromethane	75-69-4	ND	0.04
Freon 113	76-13-1	ND	0.06

ND Not detected at or above limit of detection
-- Information not available or not applicable

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.09

Sample Identification:	D-1-14	Date Sampled:	03/27/91
Lab Number:	9104009-11A	Date Received:	04/01/91
Sample Matrix/Media:	OIL	Date Extracted:	04/16/91
Extraction Method:	EPA 600/4-81-045	Date Analyzed:	04/18/91
Analytical Method:	EPA 8080		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
Polychlorinated Biphenyls (PCBs)			
Aroclor 1016	12674-11-2	ND	1
Aroclor 1221	1104-28-2	ND	1
Aroclor 1232	11141-16-5	ND	1
Aroclor 1242	53469-21-9	ND	1
Aroclor 1248	12672-29-6	ND	1
Aroclor 1254	11097-69-1	ND	1
Aroclor 1260	11096-82-5	ND	1

ND Not detected at or above limit of detection
-- Information not available or not applicable

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.09

Sample Identification:	B-3-2	Date Sampled:	03/27/91
Lab Number:	9104009-12A	Date Received:	04/01/91
Sample Matrix/Media:	OIL	Date Extracted:	04/16/91
Extraction Method:	EPA 600/4-81-045	Date Analyzed:	04/24/91
Analytical Method:	EPA 8080		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection[a] (mg/kg)
Polychlorinated Biphenyls (PCBs)			
Aroclor 1016	12674-11-2	ND	20
Aroclor 1221	1104-28-2	ND	20
Aroclor 1232	11141-16-5	ND	20
Aroclor 1242	53469-21-9	ND	20
Aroclor 1248	12672-29-6	ND	20
Aroclor 1254	11097-69-1	ND	20
Aroclor 1260	11096-82-5	ND	20

ND Not detected at or above limit of detection
-- Information not available or not applicable

[a] Detection limit increased due to matrix interference

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.09

Sample Identification:	A-1-1	Date Sampled:	03/27/91
Lab Number:	9104009-13A	Date Received:	04/01/91
Sample Matrix/Media:	OIL	Date Extracted:	04/16/91
Extraction Method:	EPA 600/4-81-045	Date Analyzed:	04/24/91
Analytical Method:	EPA 8080		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
Polychlorinated Biphenyls (PCBs)			
Aroclor 1016	12674-11-2	ND	1
Aroclor 1221	1104-28-2	ND	1
Aroclor 1232	11141-16-5	ND	1
Aroclor 1242	53469-21-9	ND	1
Aroclor 1248	12672-29-6	ND	1
Aroclor 1254	11097-69-1	ND	1
Aroclor 1260	11096-82-5	ND	1

ND Not detected at or above limit of detection
-- Information not available or not applicable

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.09

Sample Identification:	A-2-1	Date Sampled:	03/27/91
Lab Number:	9104009-14A	Date Received:	04/01/91
Sample Matrix/Media:	OIL	Date Extracted:	04/16/91
Extraction Method:	EPA 600/4-81-045	Date Analyzed:	04/18/91
Analytical Method:	EPA 8080		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
Polychlorinated Biphenyls (PCBs)			
Aroclor 1016	12674-11-2	ND	1
Aroclor 1221	1104-28-2	ND	1
Aroclor 1232	11141-16-5	ND	1
Aroclor 1242	53469-21-9	ND	1
Aroclor 1248	12672-29-6	ND	1
Aroclor 1254	11097-69-1	ND	1
Aroclor 1260	11096-82-5	ND	1

ND Not detected at or above limit of detection
-- Information not available or not applicable

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.09

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9104009-19A	Date Received:	--
Sample Matrix/Media:	OIL	Date Extracted:	04/16/91
Extraction Method:	EPA 600/4-81-045	Date Analyzed:	04/18/91
Analytical Method:	EPA 8080		

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
Polychlorinated Biphenyls (PCBs)			
Aroclor 1016	12674-11-2	ND	1
Aroclor 1221	1104-28-2	ND	1
Aroclor 1232	11141-16-5	ND	1
Aroclor 1242	53469-21-9	ND	1
Aroclor 1248	12672-29-6	ND	1
Aroclor 1254	11097-69-1	ND	1
Aroclor 1260	11096-82-5	ND	1

ND Not detected at or above limit of detection
-- Information not available or not applicable

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.09

Sample Identification:	D-1-14	Date Sampled:	03/27/91
Lab Number:	9104009-11A	Date Received:	04/01/91
Sample Matrix/Media:	OIL	Date Digested:	04/22/91
Digestion Method:	EPA 3050	Date Analyzed:	04/24/91
Analytical Method:	EPA 6010		

Analyte	Concentration (mg/kg)	Limit of Detection (mg/kg)
Cadmium	<0.1	0.1
Chromium	<1	1
Lead	<1	1
Nickel	<1	1
Zinc	<1	1

< Less than, below limit of detection
-- Information not available or not applicable

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.09

Sample Identification:	B-3-2	Date Sampled:	03/27/91
Lab Number:	9104009-12A	Date Received:	04/01/91
Sample Matrix/Media:	OIL	Date Digested:	04/22/91
Digestion Method:	EPA 3050	Date Analyzed:	04/24/91
Analytical Method:	EPA 6010		

Analyte	Concentration (mg/kg)	Limit of Detection (mg/kg)
Cadmium	<0.1	0.1
Chromium	<1	1
Lead	<1	1
Nickel	<1	1
Zinc	<1	1

< Less than, below limit of detection
-- Information not available or not applicable

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.09

Sample Identification:	A-1-1	Date Sampled:	03/27/91
Lab Number:	9104009-13A	Date Received:	04/01/91
Sample Matrix/Media:	OIL	Date Digested:	04/22/91
Digestion Method:	EPA 3050	Date Analyzed:	04/24/91
Analytical Method:	EPA 6010		

Analyte	Concentration (mg/kg)	Limit of Detection (mg/kg)
Cadmium	<0.1	0.1
Chromium	<1	1
Lead	<1	1
Nickel	<1	1
Zinc	<1	1

< Less than, below limit of detection
-- Information not available or not applicable

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.09

Sample Identification:	A-2-1	Date Sampled:	03/27/91
Lab Number:	9104009-14A	Date Received:	04/01/91
Sample Matrix/Media:	OIL	Date Digested:	04/22/91
Digestion Method:	EPA 3050	Date Analyzed:	04/24/91
Analytical Method:	EPA 6010		

Analyte	Concentration (mg/kg)	Limit of Detection (mg/kg)
Cadmium	<0.1	0.1
Chromium	1	1
Lead	3	1
Nickel	1	1
Zinc	9	1

< Less than, below limit of detection
-- Information not available or not applicable

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.09

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9104009-19A	Date Received:	--
Sample Matrix/Media:	OIL	Date Digested:	04/22/91
Digestion Method:	EPA 3050	Date Analyzed:	04/22/91
Analytical Method:	EPA 6010		

Analyte	Concentration (mg/kg)	Limit of Detection (mg/kg)
Cadmium	<0.1	0.1
Chromium	<1	1
Lead	<1	1
Nickel	<1	1
Zinc	<1	1

< Less than, below limit of detection
-- Information not available or not applicable

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.09

Sample Identification:	See below	Date Sampled:	03/27/91
Lab Number:	9104009	Date Received:	04/01/91
Sample Matrix/Media:	Oil	Date Digested:	04/22/91
Digestion Method:	EPA 3050	Date Analyzed:	04/24/91
Analytical Method:	EPA 6010		

Laboratory No.	Sample Identification	Lead (mg/kg)
-05	Comp. D-1-1 to D-1-4	<1
-10	Comp. D-1-5 To D-1-8	<1
-18	Comp. D-1-10 to A-3-1	<1
-MB	Method Blank	<1
Limit of Detection:		1

< Less than the indicated limit of detection (LOD)

Results of Analysis
for
Call Mac Transportation

Client Reference: 34062.00
Clayton Project No. 91040.09

Sample Identification:	See below	Date Sampled:	03/27/91
Lab Number:	9104009	Date Received:	04/01/91
Sample Matrix/Media:	Oil	Date Analyzed:	04/26/91
Analytical Method:	EPA 418.1 (Modified)		

Laboratory No.	Sample Identification	Total Recoverable Petroleum Hydrocarbons (mg/kg)
-05	Comp. D-1-1 To D-1-4	950,000
-10	Comp. D-1-5 To D-1-8	830,000
-11	D-1-14	890,000
-12	B-3-2	990,000
-13	A-1-1	950,000
-14	A-2-1	3,500
-18	Comp. D-1-10 To A-3-1	680,000
-MB	Method Blank	<10
Limit of Detection:		10

ND = Not detected at or above limit of detection

Clayton
ENVIRONMENTAL
CONSULTANTS
A Marsh & McLennan Company

REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Clayton Use Only | Page 1 of 2
Project No. 34062.00
Batch No. 9104009
Client No.
Date Logged In 4-1-91 | By TS

REPORT RESULTS TO
Name M. HOLBROOK (CEC) | Title
Company CALMAC TRANSP. | Dept.
Mailing Address
City, State, Zip
Telephone No. | Telefax No.

Purchase Order No. | Client Job No.

SEND INVOICE TO
Name M. HOLBROOK (CEC)
Company | Dept.
Address
City, State, Zip

Date Results Required: | Rush Charges Authorized? ☐ Yes ☐ No | Phone Results ☐

Special Instructions: (method, limit of detection, etc.)

* Explanation of Preservative:

Samples are: (check if applicable)
☐ Drinking Water
☐ Collected in the State of New York

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	ANALYSIS REQUESTED (Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added. *) BTEX / TPH 418.1 / LEAD	FOR LAB USE ONLY
D1-1			Med Sgt	1		01A
D-1-2 COMPOSITE	3-27-91	OIL		1	X X X	02
D-1-3				1		03 COMP
D-1-4			↓	1		04 ✓ 05A
D-1-5			Med Sgt	1		06A
D-1-6 COMPOSITE	3-27-91	OIL		1	X X X	07
D-1-7				1		08
D-1-8			↓	1		09 ✓ COMP 10A

CHAIN OF CUSTODY
Relinquished by: [signature] | Date/Time 4-1-91 1500 | Received by: | Date/Time
Relinquished by: | Date/Time | Received at Lab by: [signature] | Date/Time 4/1/91 3:00pm
Method of Shipment: | Sample Condition Upon Receipt: ☒ Acceptable ☐ Other (explain)

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

22345 Roethel Drive
Novi, MI 48050
(313) 344-1770

Raritan Center
160 Fieldcrest Ave.
Edison, NJ 08837
(201) 225-6040

400 Chastain Center Blvd., N.W.
Suite 490
Kennesaw, GA 30144
(404) 499-7500

1252 Quarry Lane
Pleasanton, CA 94566
(415) 426-2600

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Clayton
ENVIRONMENTAL
CONSULTANTS
A Marsh & McLennan Company

REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Clayton Use Only | Page 2 of 2
Project No. 34062.00
Batch No. 9104009
Client No.
Date Logged In 4-1-91 | By TS

REPORT RESULTS TO
Name M. HOLBROOK | Title
Company CEC (PLEAS) (CALL MAC TRANSP.) | Dept.
Mailing Address
City, State, Zip
Telephone No. | Telefax No.

Purchase Order No. | Client Job No.

SEND INVOICE TO
Name M. HOLBROOK
Company CEC (PLEAS) | Dept.
Address
City, State, Zip

Date Results Required: | Rush Charges Authorized? ☐ Yes ☑ No | Phone Results ☐

Special Instructions: (method, limit of detection, etc.)

* Explanation of Preservative:

Samples are: (check if applicable)
☐ Drinking Water
☐ Collected in the State of New York

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	BTEX	TPH 418.1	CLHC (8010)	METALS CD, CR, ZN, NI	PCB	LEAD	FOR LAB USE ONLY
D-1-14	3-27-91	OIL	MEDSqt	1	X	X	X	X	X		11 A
B-3-2	3-27-91	OIL		1	X	X	X	X	X		12
A-1-1 UST	3-27-91	OIL		1	X	X	X	X	X		13
A-2-1 TRAILER TANK	3-27-91	OIL	↓	1	X	X	X	X	X		14 ↓ 15A
D-1-10			MedSqt	1							16 A 15A
D-1-12 COMPOSITE	3-27-91	OIL		1	X	X				X	17 16A (comp)
A-3-1			↓	1							18 ↓ 17A 18A

CHAIN OF CUSTODY
Relinquished by: [signature] | Date/Time 1500 4-1-91
Relinquished by: | Date/Time
Method of Shipment:

Received by: | Date/Time
Received at Lab by: Trey Sales | Date/Time 4/1/91 3:00pm
Sample Condition Upon Receipt: ☒ Acceptable ☐ Other (explain)

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

22345 Roethel Drive
Novi, MI 48050
(313) 344-1770

Raritan Center
160 Fieldcrest Ave.
Edison, NJ 08837
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400 Chastain Center Blvd., N.W.
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Kennesaw, GA 30144
(404) 499-7500

1252 Quarry Lane
Pleasanton, CA 94566
(415) 426-2600

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