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Limited Soil and Groundwater Investigation  
Coliseum Storage  
5200 Coliseum Way  
Oakland, California

Clayton Project No. 70-97203.00.500  
October 2, 1997

#6072

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October 2, 1997

Mr. Barney Chan  
Department of Environmental Health  
Alameda County Health Agency  
1131 Harbor Bay Parkway, Second Floor  
Alameda, California 94502

Clayton Project No. 70-97203.00.500

Subject: Report on Limited Soil and Groundwater Investigation of the Coliseum  
Storage Facility at 5200 Coliseum Way in Oakland, California

Dear Mr. Chan:

Enclosed please find the above-referenced report, which describes our field activities to characterize the fill material and groundwater at five locations beneath the subject site. If you have any questions or comments, please call me at (510) 426-2686.

Sincerely,



Dwight R. Hoenig  
Vice President, Western Regional Director  
Environmental Management and Remediation  
San Francisco Regional Office

DRH/

cc: Timothy Colvig, Lempres and Wulfsberg  
Patrick Sullivan, Forensic Management Associates

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## **1.0 INTRODUCTION**

This report provides a summary of fieldwork conducted by Clayton Environmental Consultants between September 26 and October 1, 1996 at the Coliseum Storage site located at 5200 Coliseum Way, Oakland, California. The site location is shown in Figure 1. The purpose of the investigation was to characterize the fill material and groundwater at five locations beneath the subject site.

## **2.0 SCOPE OF WORK AND METHODOLOGIES**

To characterize soil and groundwater beneath the subject site, Clayton performed the following tasks:

- Conduct prefield activities
- Advance soil borings and collect soil samples
- Construct and develop groundwater monitoring wells
- Collect groundwater samples
- Analyze soil and groundwater samples
- Prepare summary report

These tasks are described in the following sections of this report. All field activities were conducted in accordance with the field protocols contained in Appendix E.

### **2.1 CONDUCT PRE-FIELD ACTIVITIES**

A site specific health and safety plan was prepared in accordance with the requirements of Title 29 of the Code of Federal Regulations, Section 1910.120 (29 CFR 1910.120) and California Occupational Safety and Health Administration (Cal/OSHA) General Industry Safety Order (GISO) 5192 for the activities described in the work plan. A copy of this health and safety plan was maintained onsite during Clayton field activities.

Additionally, Clayton obtained Well Installation Permits from Alameda County Flood Control and Water Conservation District - Zone 7, and contacted Underground Service Alert 48 hours prior to conducting field activities.

Prior to commencing the drilling activities, Clayton subcontracted with California Utility Surveys of San Ramon, California to locate underground utilities in the vicinity of the soil borings. The utility clearance was performed on September 26, 1996, the first day of the drilling activities.

### **2.2 ADVANCE SOIL BORINGS AND COLLECT SOIL SAMPLES**

Five soil borings, CW-1 through CW-5, were advanced at the site on September 26 and 27, 1996 using a hollow stem auger drill rig operated by Gregg Drilling and Testing of Martinez, California. All five of these borings were completed as groundwater monitoring wells. Monitoring well locations are shown on Figure 2.

Soil samples were collected from each boring at approximate two-foot intervals using a California Modified split spoon sampler. Four soil samples each from CW-1 through CW-4 and two soil samples from CW-5 were preserved for laboratory analysis. Those soil

samples selected for laboratory analysis were collected in six-inch stainless steel sleeves by placing Teflon® sheets and plastic end caps over each end of the sleeve, labelling the sleeve, and placing it in cold storage for transport to Clayton's State-certified analytical laboratory under formal chain-of-custody. For boring CW-5, a grab slag sample was collected and placed into a zip-lock plastic bag directly from the augers from a depth of about three to four feet.

Between samples and boring locations, soil sampling equipment was decontaminated with a solution of non-phosphate detergent, double rinsed with clean tap water, and air dried prior to each sample event.

### **2.3 CONSTRUCT AND DEVELOP MONITORING WELLS**

Following drilling, wells were constructed using flush-threaded two-inch PVC well casing installed to an approximate depth of 15 feet below ground surface. Flush-mounted, traffic-rated vault boxes were used to complete the wells. Well construction details for each well are included on boring logs contained in Appendix A.

Clayton retained Geotopo, Inc., a State-licensed land surveyor, to survey each surface completion and top-of-casing elevation relative to City of Oakland Bench Mark 1094. The surveyor's report is included as Appendix B.

After well construction was completed, each well was developed by pumping and bailing to remove excess sediment in the well casing and filter pack. Groundwater parameters of temperature, electrical conductivity, and pH were monitored during development. Development continued until the parameters stabilized and at least ten casing volumes were removed. The development event was documented on Clayton's water sampling field survey forms included in Appendix C.

### **2.4 COLLECT GROUNDWATER SAMPLES**

The five new wells were monitored on October 1, 1996. Well monitoring consisted of measuring groundwater levels in each of the wells to the nearest 0.01 foot, purging at least three well volumes, and collecting representative groundwater samples. Each of the wells was purged using a new disposable bailer. During purging, parameters of temperature, pH, and specific conductance were periodically monitored. After these parameters had stabilized, groundwater was poured directly from the bailer into laboratory-supplied containers. Each container was tightly sealed, labelled, and placed in cold storage for transport to Clayton's State-certified analytical laboratory under formal chain-of-custody. Water sampling field survey forms for each well are included in Appendix C. Groundwater elevation data for the five wells are included in Table 1.

### **2.5 ANALYZE SOIL AND GROUNDWATER SAMPLES**

A total of 18 soil samples, four each from CW-1 through CW-4 and two from CW-5, were analyzed for CAM 17 Metals, pH, Sulfate, and Total Sulfur. The grab slag sample from CW-5 was analyzed for CAM 17 Metals. Seven selected soil samples, including one sample from CW-2, four samples from CW-4, and two samples from CW-5, were analyzed for Total Petroleum Hydrocarbons as gasoline (TPH-G), Total Petroleum Hydrocarbons as diesel (TPH-D), Total Petroleum Hydrocarbons as oil (TPH-O), volatile organic compounds (VOCs), and semivolatile organic compounds (SVOCs).



One groundwater sample from each of the five wells was analyzed for metals, general water quality (cations and anions), and SVOCs. Samples collected for metals analysis were filtered by the analytical laboratory within eight hours of collection using a 0.2 micron filter. Groundwater samples from CW-4 and CW-5 were also analyzed for TPH-G and Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX).

All analyses were conducted by Clayton's State-certified analytical laboratory in Pleasanton, California.

### **3.0 RESULTS OF INVESTIGATION**

Results of this investigation are described in the following sections of this report.

#### **3.1 GENERAL SUBSURFACE CONDITIONS**

Soils encountered in the upper ten to twelve feet in the five well borings appear to consist of imported fill materials. These fill materials comprise a variety of construction debris and industrial process residues, including slag, cinders, ash deposits and coarse grained "black sand" deposits. Beneath these fill materials, dark gray to black Bay Mud deposits were encountered down to total depths of about 15 feet below grade. Hydrocarbon odors and sheens were noted in soils from CW-4 and CW-5 below about nine feet in depth.

Groundwater was encountered in the five wells at depths of about eight to nine feet below surface grade. During well development and sampling, hydrocarbon odors and sheens were noted in purge water from CW-4 and CW-5.

Groundwater depth measurements and elevation calculations are included in Table 1, and groundwater elevations are shown on Figure 3. Groundwater flow direction at the site is to the southeast at a gradient of 0.008 vertical feet/horizontal foot. This southeasterly groundwater flow direction is not consistent with the west-southwesterly flow direction documented on adjacent sites (Figures 4 and 5). Clayton is concurrently submitting results of a tidal influence study which incorporates groundwater depth measurements collected during high and low tides from wells located at 4930, 5050, 5051, and 5200 Coliseum Way. While groundwater flow direction may vary from site to site, overall groundwater flow direction at these sites is to the west-southwest.

#### **3.2 RESULTS OF LABORATORY ANALYSIS**

Laboratory analytical data sheets and chain-of-custody documents for all analyses are included in Appendix D. Soil analytical results for CAM 17 Metals, pH, and Total Sulfur are summarized in Table 2. CAM 17 Metal analytical results for the grab slag sample from CW-5 are summarized in Table 3. Soil analytical results for TPH-D, TPH-O, VOCs, and SVOCs are summarized in Table 4.

Groundwater analytical results for CAM 17 Metals, water quality, and field parameters are summarized in Table 5. Groundwater analytical results for SVOCs are summarized in Table 6. TPH-G and BTEX analytical results for groundwater samples from CW-4 and CW-5 are summarized in Table 7.

#### 4.0 CONCLUSIONS

The physical and chemical data gathered during this investigation allows Clayton to reach the following conclusions relative to this site:

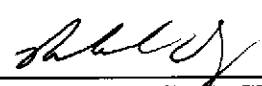
- The fill material encountered above about ten to twelve feet in depth at the site contains significant amounts of debris and processing waste, with accompanying high concentrations of heavy metals, particularly barium, lead, and zinc.
- Groundwater beneath the site apparently does not exhibit the low pH conditions which characterizes the groundwater on the adjoining property at 5050 Coliseum Way, and which appear to contribute to the high levels of dissolved metals in groundwater on this adjoining site.
- Groundwater beneath this site appears to contain only background levels of most heavy metals. Only barium was detected at levels which would appear to be significant, with the CW-3 groundwater sample containing 1,000 milligrams per liter (mg/L). *STL = 1000ppm*
- Subsurface soils adjacent to CW-4 and CW-5 appear to be impacted primarily by heavy-range hydrocarbons, likely associated with former tar storage activities in this area of the site. *PNA's*
- Groundwater adjacent to CW-4 and CW-5 appears to be impacted both by heavy-range hydrocarbons and by gasoline-range hydrocarbons. While the source of heavy hydrocarbons can probably be attributed to former tar storage activities at the site, the source of gasoline-range hydrocarbons is not known.

As was found by previous investigations, the shallow aquifer appears to be perched above a thick layer of Bay Mud which appears to act as a regional barrier to the downward migration of water and contaminants. No data or other information was found to indicate that water in the shallow zone is connected to a drinking water aquifer of any kind.

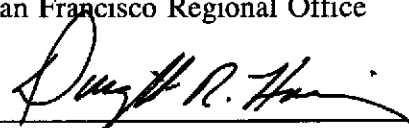
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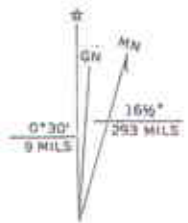
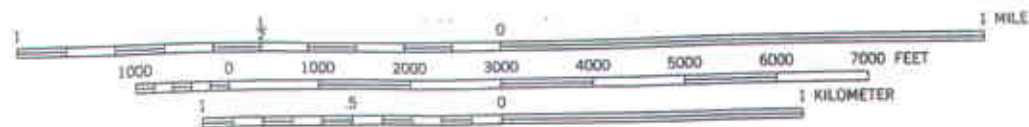
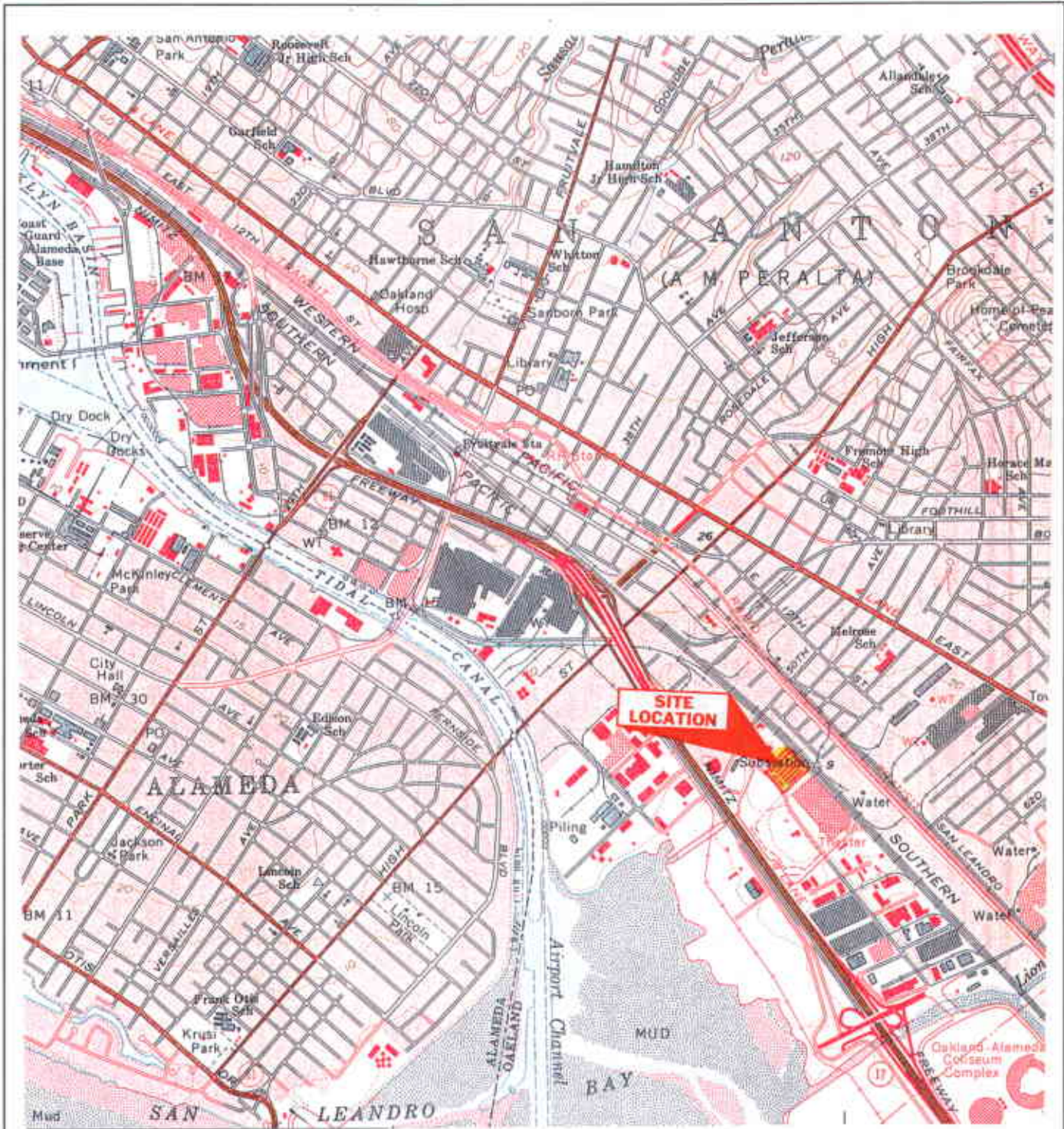
  
Matthew W. Hanko  
Project Geologist

This report reviewed by:

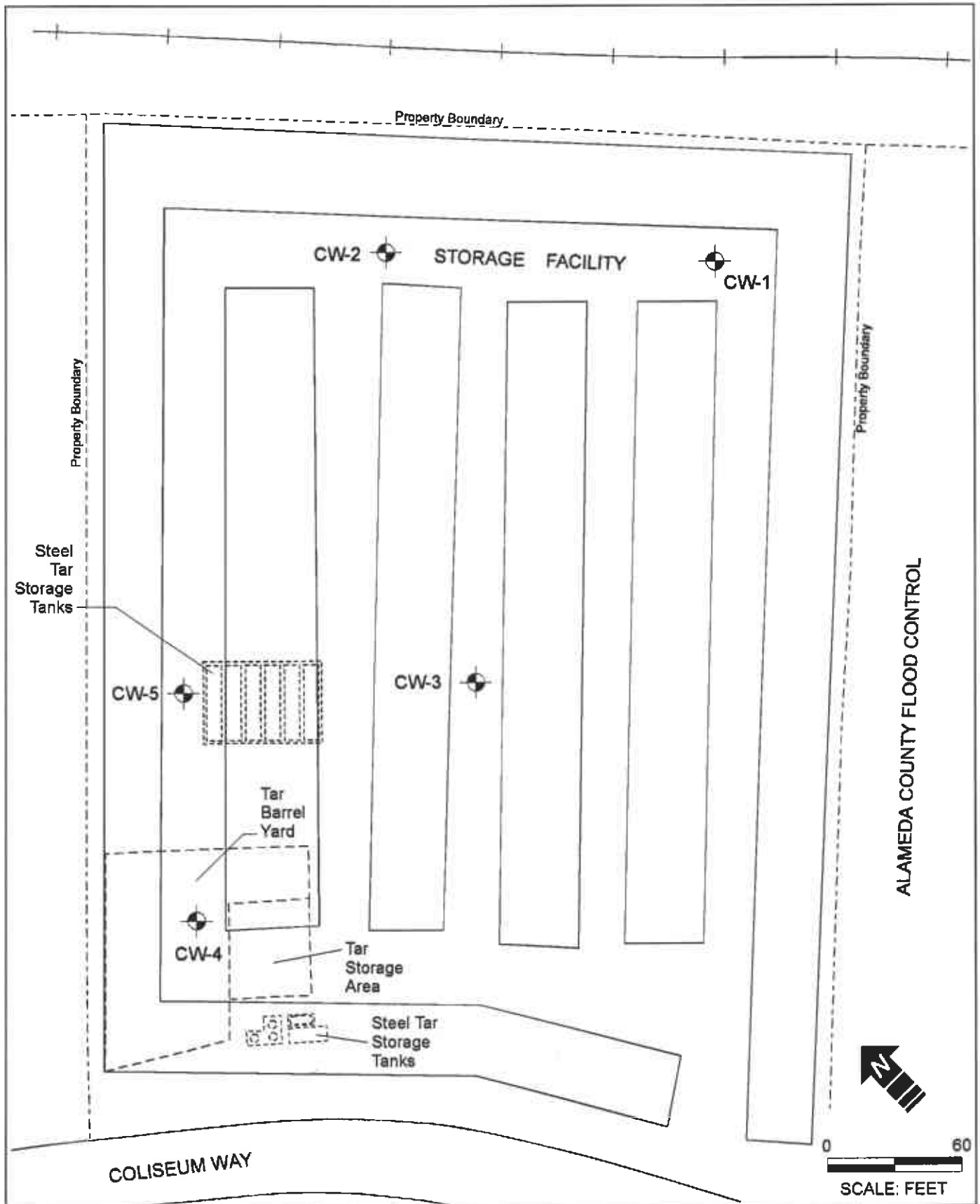
  
Richard W. Day, CEG, CHG  
Supervisor, Geosciences/Remediation  
Environmental Management and Remediation  
San Francisco Regional Office

This report reviewed by:

  
Dwight K. Hoenig  
Vice President, Western Regional Director  
Environmental Management and Remediation  
San Francisco Regional Office




<p><b>SITE LOCATION MAP</b></p> <p>5200 COLISEUM WAY OAKLAND, CALIFORNIA</p> <p>Clayton Project No. 70-97203.00.500</p>	<p>Figure <b>1</b></p> <p>08/06/97 97203slm.cdr</p>	<p><b>Clayton</b> ENVIRONMENTAL CONSULTANTS</p>
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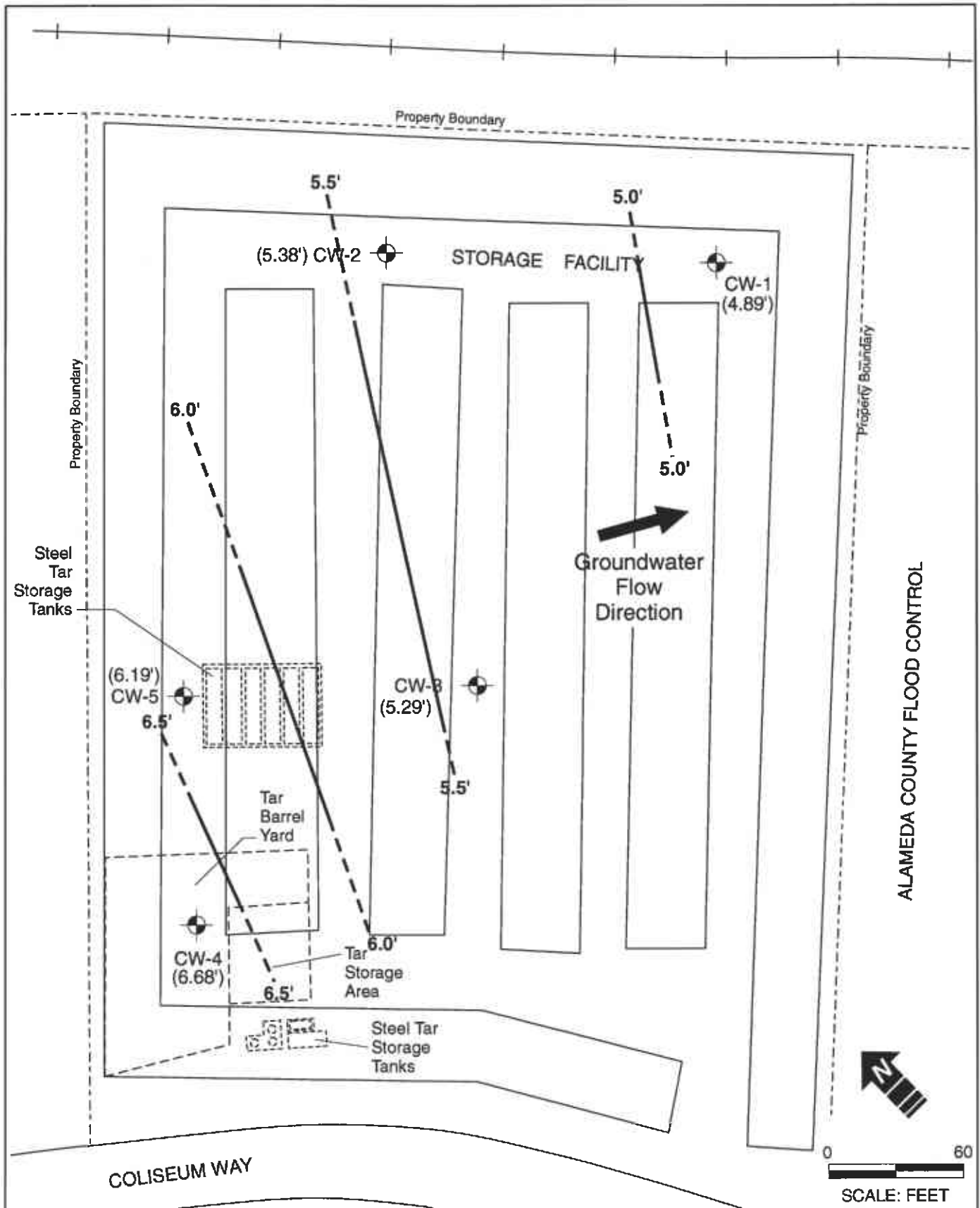


ALAMEDA COUNTY FLOOD CONTROL





0 60  
SCALE: FEET

<p>LEGEND:</p>	<p>SITE PLAN</p>	<p>Figure</p>	<p>Clayton ENVIRONMENTAL CONSULTANTS</p>
<p>CW-1  Monitoring Well</p>	<p>5200 COLISEUM WAY OAKLAND, CALIFORNIA Clayton Project No. 70-97203.00.500</p>	<p><b>2</b> 08/06/97 5200col.cdr</p>	



ALAMEDA COUNTY FLOOD CONTROL

**LEGEND:**

- CW-1  Monitoring Well
- (5.29') Groundwater Elevation (ft msl)
- 5.5'  Groundwater Elevation Contour (ft msl)

**GROUNDWATER CONTOUR MAP  
SEPTEMBER 30, 1996**

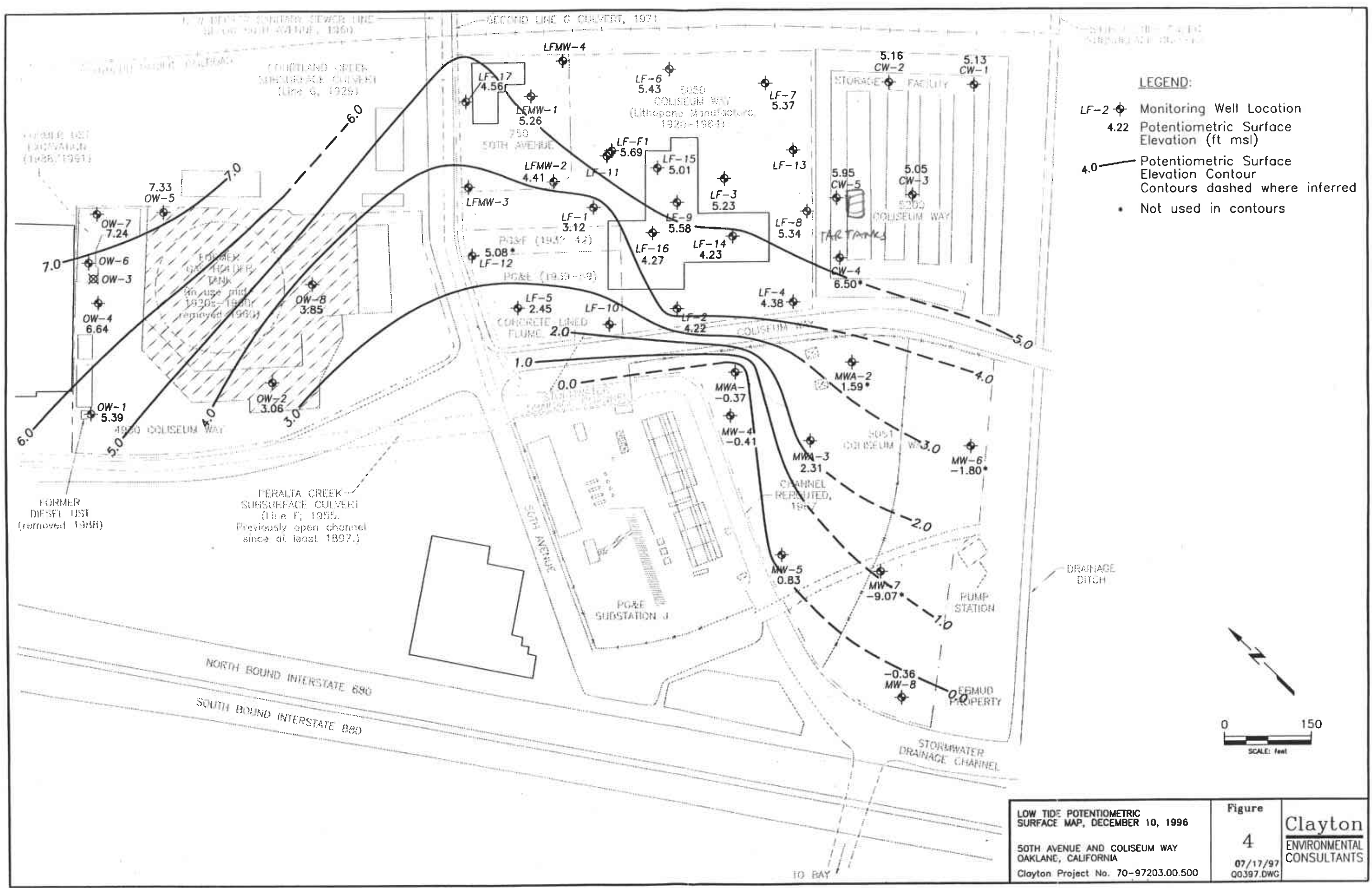
5200 COLISEUM WAY  
OAKLAND, CALIFORNIA  
Clayton Project No. 70-97203.00.500

Figure

**3**

03/23/97  
5200col.cdr

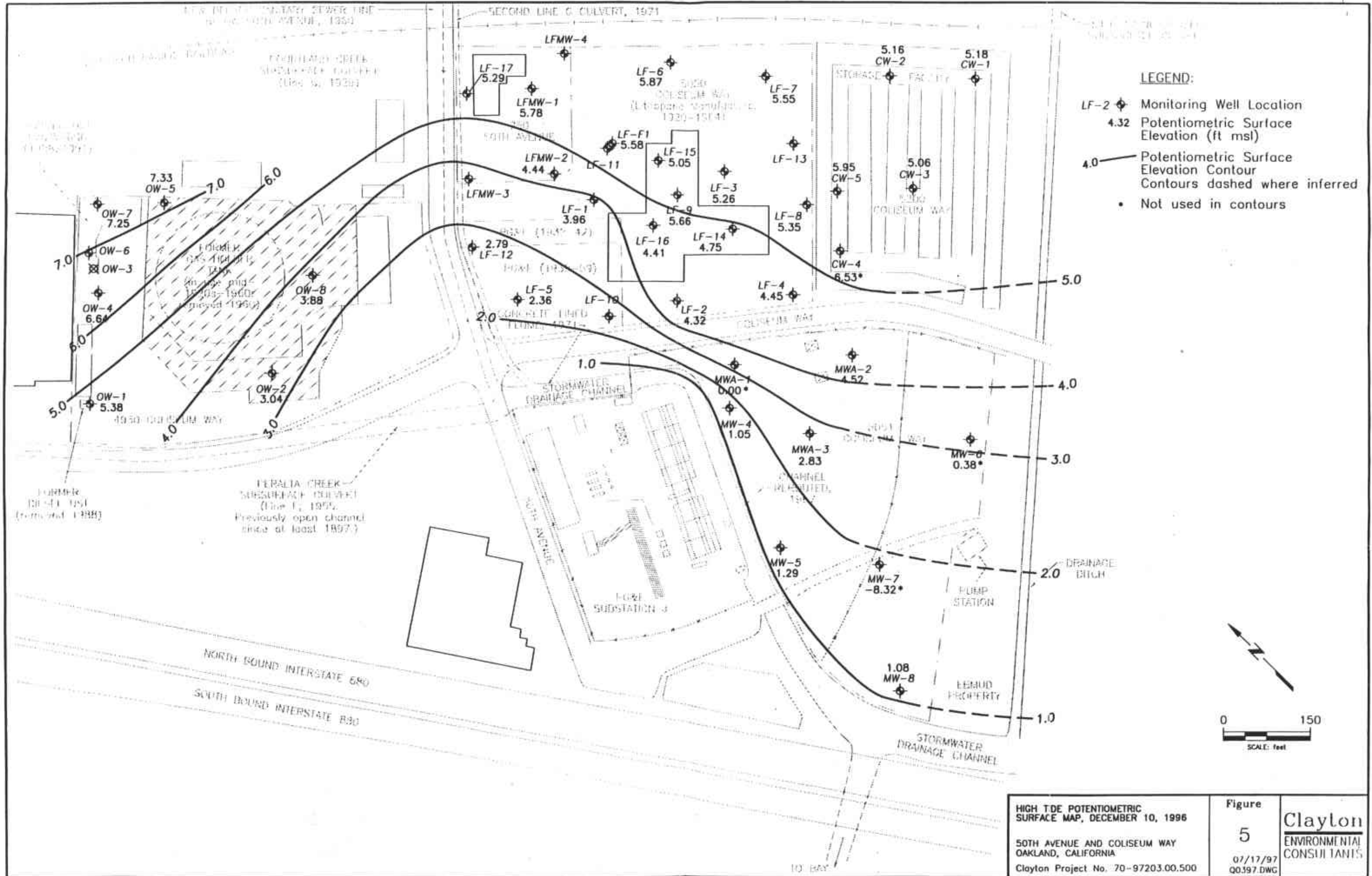
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**LEGEND:**

- LF-2 ◆ Monitoring Well Location
- 4.22 Potentiometric Surface Elevation (ft msl)
- 4.0 — Potentiometric Surface Elevation Contour  
Contours dashed where inferred
- Not used in contours

<p>LOW TIDE POTENTIOMETRIC SURFACE MAP, DECEMBER 10, 1996</p> <p>50TH AVENUE AND COLISEUM WAY OAKLAND, CALIFORNIA</p> <p>Clayton Project No. 70-97203.00.500</p>	<p>Figure 4</p> <p>07/17/97 Q0397.DWG</p>	<p><b>Clayton</b> ENVIRONMENTAL CONSULTANTS</p>
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**HIGH TDE POTENTIOMETRIC SURFACE MAP, DECEMBER 10, 1996**

50TH AVENUE AND COLISEUM WAY  
OAKLAND, CALIFORNIA  
Clayton Project No. 70-97203.00.500

Figure 5  
07/17/97  
00397.DWG

**Clayton ENVIRONMENTAL CONSULTANTS**

**TABLE 1**

**GROUNDWATER ELEVATIONS  
SEPTEMBER 30, 1996  
COLISEUM STORAGE  
5200 COLISEUM WAY  
OAKLAND, CALIFORNIA**

**The Data is Reported in Feet**

	<b>CW-1</b>	<b>CW-2</b>	<b>CW-3</b>	<b>CW-4</b>	<b>CW-5</b>
Elevation*	14.110	19.875	14.065	14.755	14.360
Depth to Water	9.22	9.50	8.78	8.08	8.17
Groundwater Elevation	4.89	5.38	5.29	6.68	6.19

\* Datum: Mean Seal Level



TABLE 2

SUMMARY OF SOIL SAMPLE ANALYTICAL DATA FOR  
 METALS, pH, AND SULFUR  
 COLISEUM STORAGE  
 5200 COLISEUM WAY  
 OAKLAND, CALIFORNIA

Metal and Sulfur Results are Reported in milligrams per kilogram (mg/kg)

SIL 7104	TTLIC	CW-1				CW-2				CW-3				CW-4				CW-5	
		6.5'	8'	9'	11'	3.5'	5'	7.5'	9.5'	3.5'	6'	9'	11'	5.5'	7.5'	11.5'	12.5'	7.5'	11'
Sb 15	500	32	19	<1	<1	51	48	<1	3	79	<1	<1	<1	120	<1	37	12	3	10
As 5	500	890	97	31	2	210	29	4	170	310	2	15	77	21	<1	87	120	68	85
Ba 100	10,000	240	800	110,000	540	2,000	1,800	190,000	33,000	11,000	72,000	75,000	41,000	14,000	2,200	1,200	230	2,900	420
Be 75	75	0.1	0.4	1.1	0.4	0.3	0.3	0.2	0.2	0.5	0.3	0.3	0.9	0.2	0.3	0.1	0.2	0.1	0.3
Cd 1	100	200	200	2.9	0.8	29	28	<0.4	1	60	14	<0.4	<0.4	230	2.2	<0.4	4.9	51	U
Cr 500	2,500	19	5	17	33	49	34	4	5	49	10	4	20	20	41	6	17	25	24
Co 80	8,000	45	43	79	7	15	13	150	36	25	66	67	77	25	12	4	11	14	15
Cu 25	2,500	5,400	5,500	100	24	420	390	13	58	50	58	32	120	4,300	22	79	100	310	470
Pb 5	1,000	23,000	4,000	54	17	1,700	1,900	13	110	3,700	150	14	42	4,200	26	200	490	810	1,400
Hg .2	20	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mo 650	3,500	5	<1	9	<1	2	7	<1	<1	6	<1	<1	1	<1	<1	7	6	<1	2
Ni 20	2,000	19	44	420	25	73	48	76	84	93	69	89	600	69	81	21	44	45	47
Se 1	7 (100)	25	2	<1	<1	6	6	<1	<1	12	<1	<1	<1	9	<1	5	3	<1	12
Ag 5	500	6	17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	4.5	<0.5	<0.5	<0.5	7.5	<0.5	13	4.9	<0.5	<0.5
Sulfate	--	910	220	<20	230	150	70	<20	<20	<20	<20	<20	<20	<20	90	<20	30	<20	30
Th 7	700	1	<1	2	<1	1	<1	<1	<1	8	1	1	4	4	<1	<1	<1	<1	<1
Va 25	2,400	55	220	1,000	30	44	41	120	160	70	150	240	780	86	32	54	40	40	41
Zn 250	5,000	37,000	65,000	1,200	78	8,700	11,000	390	1,100	8,600	6,700	59	400	23,000	1,100	56	9,900	8,100	2,200
pH	2-12.5*	5.7	5.9	11.0	9.3	8.3	8.6	10.8	8.6	9.0	10.9	11.1	10.5	8.6	9.0	10.4	10.0	8.8	8.9
Sulfur	--	<70	760	<70	550	1,680	2,770	<70	450	<70	<70	<70	<70	<70	880	14,400	11,900	30,300	1,050

- Sb = Antimony
- As = Arsenic
- Ba = Barium
- Be = Beryllium
- Cd = Cadmium
- Cr = Chromium
- Co = Cobalt
- Cu = Copper
- Pb = Lead

- Hg = Mercury
- Mo = Molybdenum
- Ni = Nickel
- Se = Selenium
- Ag = Silver
- Th = Thallium
- Va = Vanadium
- Zn = Zinc

- <0.1 = Analyte not reported above the stated laboratory reporting limit
- TTLIC = Total Threshold Limit Concentration from California Code of Regulations (CCR) Title 22, Section 66261.24(a)(2)
- \* = pH of <2 or >12.5 defines material as a corrosive waste. CCR Title 22, Section 66261.22
- = No TTLIC Established

TABLE 3

SUMMARY OF SLAG SAMPLE ANALYTICAL DATA  
 FOR METALS  
 COLISEUM STORAGE  
 5200 COLISEUM WAY  
 OAKLAND, CALIFORNIA

Data is Reported in milligrams per kilogram (mg/kg)

	TTLIC	CW-5-SLAG
Antimony	500	<5
Arsenic	500	60
Barium	10,000	52
Beryllium	75	0.4
Cadmium	100	12
Chromium	2,500	31
Cobalt	8,000	29
Copper	2,500	1,200
Lead	1,000	10,000
Mercury	20	<0.1
Molybdenum	3,500	140
Nickel	2,000	42
Silver	500	<5
Selenium	100	<0.5
Thallium	700	7
Vanadium	2,400	83
Zinc	5,000	27,000

ND = Not Detected

mg/kg = milligrams per kilogram

TTLIC = Total Threshold Limit Concentration from California Code of Regulations (CCR)  
 Title 22, Section 66261.24(a)(2)(A)

TABLE 4

**SUMMARY OF SOIL SAMPLE ANALYTICAL DATA  
FOR TPH AND VOCs  
COLISEUM STORAGE  
5200 COLISEUM WAY  
OAKLAND, CALIFORNIA**

Only those compounds detected are reported in milligrams per kilogram (mg/kg)

	PRG	CW-2 @ 9.5'	CW-4 @ 5.5'	CW-4 @ 7.5'	CW-4 @ 11.5'	CW-4 @ 12.5'	CW-5 @ 7.5'	CW-5 @ 11'
<b>EPA Method 8260 - VOCs</b>								
Acetone	8,800	<2	0.07	<0.02	<0.02	<10	<10	<10
Benzene	1.4	<0.5	<0.005	<0.005	0.15	<3	4	<3
Ethylbenzene	230	<0.5	<0.005	<0.005	0.12	4	8	3
Methylene Chloride	18	0.7	0.007	<0.005	0.006	<3	<3	<3
Naphthalene	--	9.8	0.03	0.011	0.009	240	2,100	260
Styrene	680	<0.5	<0.005	<0.005	<0.005	<3	6	<3
Toluene	880	<0.5	<0.005	<0.005	0.014	<3	12	<3
1,2,3-Trimethylbenzene	--	<0.5	<0.005	<0.005	<0.005	6	16	4
1,3,5-Trimethylbenzene	--	<0.5	<0.005	<0.005	<0.005	3	7	<3
o-Xylene	320	<0.5	<0.005	<0.005	0.049	3	11	3
p,m-Xylenes	320	<0.5	<0.005	<0.005	0.11	6	19	4
<b>EPA Method 8015 ( Modified)</b>								
TPH-E (Total Petroleum Hydrocarbons - Extractable)	--	510	780	22	37	10,000	130	22,000
TPH-D (Diesel)	--	<100	<100	<5	<40	<7,000	<90	<10,000
TPH-O (Oil)	--	390	690	17	5	3,700	40	8,700
<b>EPA Method 8270 - Acid Extractable Semi-VOCs</b>								
2,4-Dimethylphenol	14,000	<10	<0.2	<0.2	6	<1	13	<1
2-Methylphenol	34,000	<10	<0.2	<0.2	7	<1	3.0	<1
4-Methylphenol	3,400	<10	<0.2	<0.2	11	<1	0.4	<1
Phenol	100,000	<10	<0.2	<0.2	<4	<1	<0.2	5
<b>EPA Method 8270 - Base/Neutral Semi-VOCs</b>								
Acenaphthene	110	20	0.6	<0.2	200	210	<0.2	310
Acenaphthelene	--	<10	<0.2	<0.2	58	6	<0.2	6
Anthracene	5.7	40	1.6	<0.2	2,400	70	<0.2	190
Benzo(a)anthracene	2.6	80	2.9	<0.2	150	40	<0.2	60

TABLE 4

SUMMARY OF SOIL SAMPLE ANALYTICAL DATA  
 FOR TPH AND VOCs  
 COLISEUM STORAGE  
 5200 COLISEUM WAY  
 OAKLAND, CALIFORNIA

Only those compounds detected are reported in milligrams per kilogram (mg/kg)

	PRG	CW-2 @ 9.5'	CW-4 @ 5.5'	CW-4 @ 7.5'	CW-4 @ 11.5'	CW-4 @ 12.5'	CW-5 @ 7.5'	CW-5 @ 11'
Benzo(b)fluoranthene	2.6	50	2.5	<0.2	110	19	<0.2	28
Benzo(k)fluoranthene	26	40	1.5	<0.2	130	7	<0.2	18
Benzo (ghi)perylene	--	20	0.8	<0.2	39	2	<0.2	6
Benzo(a)pyrene	0.26	70	2.9	<0.2	110	15	<0.2	26
Chrysene	7.2	80	3.4	<0.2	240	50	<0.2	90
Dibenzo(a,h)anthracene	0.26	<10	0.3	<0.2	15	1	<0.2	11
Dibenzofuran	140	<10	0.4	<0.2	160	110	<0.2	140
Fluoranthene	27,000	160	5.0	<0.2	540	170	<0.2	250
Fluorene	90	20	0.4	<0.2	350	140	<0.2	230
Indeno(1,2,3-cd)pyrene	2.6	20	1.3	<0.2	47	4	<0.2	8
2-Methylnaphthalene	--	20	0.8	<0.2	470	290	<0.2	250
Naphthalene	240	30	1.1	0.2	1,200	320	<0.2	470
N-Nitrosodiphenylamine	--	20	<0.2	<0.2	<4	<1	<0.2	<1
Phenanthrene	--	100	5	<0.2	1,300	460	<0.2	690
Pyrene	100	270	8	<0.2	600	160	<0.2	280

TPH = Total Petroleum Hydrocarbons

VOCs = Volatile and Semivolatile Organic Compounds

<50 = The analyte was not detected above the stated laboratory reporting limit

PRG = United States Environmental Protection Agency (USEPA) Preliminary Remediation Goals (August 1, 1996) for Industrial Soils. PRGs are based on common health risks and do not consider impact to groundwater or address geological concerns.

-- = PRG not Established

TABLE 5

**SUMMARY OF GROUNDWATER ANALYTICAL DATA  
FOR DISSOLVED METALS, WATER QUALITY AND FIELD PARAMETERS  
COLISEUM STORAGE  
5200 COLISEUM WAY  
OAKLAND, CALIFORNIA**

All data is reported in milligrams per liter (mg/L)

	MCL	CW-1	CW-2	CW-3	CW-4	CW-5
<b>Metals</b>						
Antimony	0.006	<0.03	<0.03	<0.03	<0.3	<0.03
Arsenic	0.05	0.52	3.5	3.3	0.24	0.54
Barium	1	2.5	220	1,000	3.6	31
Beryllium	0.004	<0.005	<0.005	<0.005	<0.005	<0.005
Cadmium	0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium	--	19	70	37	4.2	43
Chromium	0.05	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	--	<0.01	0.2	0.9	<0.01	0.03
Copper	1,000	<0.01	<0.01	<0.01	<0.01	<0.01
Lead	0.05	<0.05	<0.05	<0.05	<0.05	<0.01
Magnesium	--	18	34	0.5	0.5	20
Mercury	0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Molybdenum	--	0.02	<0.01	0.02	0.13	0.01
Nickel	0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Potassium	--	28	31	46	20	32
Selenium	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silver	0.1	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	--	480	230	510	620	520
Thallium	0.002	<0.05	<0.05	<0.05	<0.05	<0.05
Vanadium	--	0.08	<0.01	0.04	0.04	0.01
Zinc	5	0.01	0.06	<0.01	0.02	0.01
<b>Water Quality Parameters</b>						
Bromide	--	9.3	1.6	3.5	3.9	1.8
Chloride	500	440	480	1,300	310	410
Fluoride	1.8	2.8	1.9	2.1	3.1	2.7
Nitrate	45	<0.05	<0.05	<0.05	<0.05	<0.05
Nitrite	1	<0.05	<0.05	<0.05	<0.05	<0.05
Orthophosphate	--	0.2	<0.1	<0.1	0.1	<0.1
Sulfate	500	11	0.7	1.2	34	2.7
<b>Field Parameters (Units as Listed)</b>						
pH (pH Units)	--	8.1	6.9	10.3	9.9	7.3
Temperature (°C)	--	21.9	22.5	21.3	22.1	22.3
Conductivity (umhos)		>2,000	>2,000	>2,000	>2,000	>2,000

<0.03 = The analyte was not detected above the laboratory reporting limit

°C = Degrees Centigrade

MCL = Maximum Contaminant Levels for Drinking Water from California Code of Regulations (CCR) Title 22, Sections 64431 through 64444

TABLE 6

**SUMMARY OF GROUNDWATER ANALYTICAL DATA  
FOR SVOCs  
COLISEUM STORAGE  
5200 COLISEUM WAY  
OAKLAND, CALIFORNIA**

Only those analytes detected are reported in micrograms per Liter ( $\mu\text{g/L}$ )

	MCL	CW-1	CW-2	CW-3	CW-4	CW-5
<i>probably FP</i>						
<b>EPA Method 8270 - Acid Extractables</b>						
2-Chlorophenol	--	<5	<5	19	<50	<300
2,4-Dimethylphenol	--	<5	<5	<5	330	<300
2-Methylphenol	--	<5	<5	11	190	<300
4-Methylphenol	--	<5	<5	18	<50	300
Phenol	--	<5	<5	9	<50	<300
<b>EPA Method 8270 - Base/Neutral Extractables</b>						
Acenaphthene	--	<5	<5	<5	1,900	9,000
Acenaphthylene	--	<5	<5	<5	90	500
Anthracene	--	<5	<5	<5	590	7,000
Benzo(a)anthracene	--	<5	<5	<5	380	1,800
Benzo(a)pyrene	0.0002	<5	<5	<5	130	600
Benzo(b)fluoranthene	--	<5	<5	<5	150	700
Benzoic Acid	--	<20	<20	<20	300	<1,000
Benzo(k)fluoranthene	--	<5	<5	<5	60	300
Chrysene	--	<5	<5	<5	350	2,400
Dibenzofuran	--	<5	<5	<5	1,500	5,000
Fluoranthene	--	<5	<5	<5	1,400	7,000
Fluorene	--	<5	<5	<5	1,100	6,000
2-Methylnaphthalene	--	<5	<5	<5	4,500	18,000
Naphthalene	--	<5	<5	<5	12,000	33,000
Phenanthrene	--	<5	8	<5	3,800	19,000
Pyrene	--	<5	10	<5	1,300	6,000

SVOCs = Semivolatile Organic Compound  
MCL = Maximum Contaminant Levels for Drinking Water from California Code of Regulations (CCR) Title 22, Sections 64431 through 64444  
-- = No MCL has been established

TABLE 7

SUMMARY OF GRAB GROUNDWATER ANALYTICAL DATA  
FOR TPH-G AND BTEX  
FROM MONITORING WELLS CW-4 AND CW-5  
SEPTEMBER 30, 1996  
COLISEUM STORAGE  
5200 COLISEUM WAY  
OAKLAND, CALIFORNIA  
Only those analytes detected are reported in micrograms per Liter ( $\mu\text{g/L}$ )

PARAMETER	CW-4	CW-5
Total Petroleum Hydrocarbons-Gasoline	34,000	78,000
Benzene	100	510
Toluene	230	650
Ethylbenzene	430	290
Xylene	1,070	840

**APPENDIX A**

**BORING LOGS**



# Monitoring Well No. CW-1

**PROJECT:** Lemprus & Wulfsberg  
**DRILL RIG:**  
**INITIAL GW DEPTH:** 8.5 ft.

**DATE:** 9/26/96  
**HOLE DIA.:** 8 in.  
**FINAL GW:** 9.29 ft.

**LOGGED BY:** Peter Schaefer  
**SAMPLER:** Cal. Split Spoon  
**HOLE ELEV.:**

DESCRIPTION	USCS CLASS	GRAPHIC LOG	DEPTH	SAMPLE	Blows/foot	WELL CONSTRUCTION DETAIL
Three inches of AC	AC	0.0	0			
SANDY GRAVEL: dark gray brown (10 YR 4/2), approximately 50% gravel, 30% sand, and 20% silt, 1/4- to 1-inch diameter rounded gravel	GP	0.0	1		30	
Concrete, PID = 0 ppm at 1 ft bgs	Conc.	0.0	2			
GRAVELLY SAND: dark gray brown (10 YR 4/1), approximately 50% sand, 30% gravel, and 20% silt PID = 0 ppm at 3 ft bgs	SM	0.0	3		20	
sandstone chips present			4		10	
augers bouncing			5		10	
GRAVELLY SAND: dark gray brown (10 YR 4/1) with some rust colored streaking, with specks of blue green in clumps (weathered copper color); some soft light gray material (clay?) - texture similar to putty; approximately 50% sand, 30% gravel, and 20% silt PID = 0 ppm at 8.5 ft bgs	CL	0.0	6		16	
SILTY CLAY: rusty brown (5YR 4/4), PID = 0 ppm 7 ft bgs	SM	0.0	7		8	
SAND: pale brown (10 YR 6/3), partially cemented, fine to coarse grained, with yellow spots (sulfur colored) PID = 0 ppm at 8 ft bgs	SP	0.0	8		3	
SAND: black (7.5 YR 6/3), angular medium to very coarse grained, ∇ Groundwater first encountered at 8.5 ft bgs ∇ Groundwater static depth at 9.29 ft bgs (10/1/96) PID = 0 ppm at 9.5 ft bgs	CH	0.0	10		5	
CLAY: black (10 YR 2/1), organic fibers (roots?), similar to "Bay Mud" PID = 0 ppm at 11 ft bgs		0.0	11		2	
		0.0	12		2	
Total depth of boring = 13.4 feet			13			
			14			
Prepared By / Date: <i>PSM / 10-2-96</i>			15			
			16			
Approved By / Date:			17			
			18			
			19			
			20			

**Clayton Environmental Consultants**  
 1252 Quarry Lane  
 Pleasanton, California

Notes:

Project No.  
 89998.00

# Monitoring Well No. CW-2

**PROJECT:** Lemprus & Wulfsberg  
**DRILL RIG:** Mobile Drill Rig  
**INITIAL GW DEPTH:** 8 ft.

**DATE:** 9/26/96  
**HOLE DIA.:** 8 in.  
**FINAL GW:** 9.55 ft.

**LOGGED BY:** Peter Schaefer  
**SAMPLER:** Cal. Split Spoon  
**HOLE ELEV.:**

DESCRIPTION	USGS CLASS	GRAPHIC LOG	DEPTH	SAMPLE	Blows/Foot	WELL CONSTRUCTION DETAIL
Two inches of AC	AC		0			
SANDY GRAVEL: dark gray brown (10 YR 4/1) PID = 0 ppm at 0.5 ft bgs	GP		1		15	
SLAG: gray (2.5 yr 4/0), glassy, with gravel and sand and small particles resembling pyrite, 80% slag, 30% gravel, and 10% sand and silt	Slag		2			
GRAVELLY SAND: dark gray brown (10 YR 4/1), with 2-inch piece of slag stuck in shoe, 40% gravel, 30% slag, 20% sand, and 10% silt	GP		3	⊗		
PID = 0 ppm at 4 ft bgs			4		38	
SAND: gray brown (10 YR, 5/2), fine to coarse grained, partially cemented, subangular	SP		5	⊗	65+	
PID = 0 ppm at 5 ft bgs			6			
SAND: black (7.5 YR 2/0), fine to coarse grained, fine and medium grained - spherical, coarse grained - angular	SP		7		8	
PID = 0 ppm at 8.5 ft bgs			8		5	
∇ Groundwater first encountered at 8 ft bgs, PID = 0 ppm at 8 ft bgs			8			
hydrocarbon odor, with wood fibers			9	⊗	3	
PID = 40 ppm at 9.5 ft bgs			10			
∇ Groundwater static depth at 9.55 ft (10/1/96)			10			
SAND: very light gray (10 YR 7/1), fine grained, with wood fibers, PID = 1.2 ppm at 11 ft bgs	SP		11		3	
CLAY: black (10 YR 2/1), "Bay Mud"	CH		12			
PID = 0 ppm at 12.5 ft bgs			13		2	
Total depth of boring = 13.5 ft			14			
Prepared By / Date: <i>DAM/10-2-96</i>			15			
Approved By / Date:			16			
			17			
			18			
			19			
			20			

**Clayton Environmental Consultants**  
 1252 Quarry Lane  
 Pleasanton, California

Notes:

Project No.  
 89998.00



# Monitoring Well No. CW-4

**PROJECT:** Lemprus & Wulfsberg  
**DRILL RIG:** Mobile Drill Rig  
**INITIAL GW DEPTH:** 8 ft.

**DATE:** 9/26/96  
**HOLE DIA.:** 8 in.  
**FINAL GW:** 8.16 ft.

**LOGGED BY:** Peter Schaefer  
**SAMPLER:** Cal. Split Spoon  
**HOLE ELEV.:**

DESCRIPTION	USCS CLASS	GRAPHIC LOG	DEPTH	SAMPLE	Blows/foot	WELL CONSTRUCTION DETAIL
Two inches of AC	AC		0			
Base Rock	GP		0.5			
Concrete	Conc		1			
SILTY CLAY: dark gray brown (10 YR 4/2), bits of glass and wood, some sand and gravel present (5 to 10%) PID = 0 ppm at 2 ft bgs	CL		2	■	34	
dark gray brown (10 YR 4/3) PID = 0 ppm at 4 ft bgs			3	■		
			4	■	18	
			5	⊗		
SAND: gray (7.5 YR 8/0), strongly cemented in some layers, medium to coarse grained PID = 0 ppm at 6 ft bgs	SP		6	■	50	
SILTY CLAY: dark gray brown (10 YR 3/2), with approximately 10 to 15% sand	CL		7	⊗		
SAND: black (7.5 YR 2/0), medium to coarse grained ∅ Groundwater first encountered at 8 ft bgs, PID = 0 ppm at 8 ft bgs	SP		8	■	7	
∇ Groundwater static depth at 8.16 ft (10/1/96)	GM		9	■		
SILTY GRAVEL: brown with black mottling	SP		9	■	17	
SAND: black (7.5 YR 2/0), medium to coarse grained, odor noted, PID = 0 ppm at 9 ft bgs sheen, oily, PID = 4 ppm at 11 ft bgs			10	■		
			11	⊗	7	
CLAY: dark gray (7.5 YR 4/0), hydrocarbon sheen on sample and sampler, "Bay Mud" PID = 44 ppm at 12.5 ft bgs	CH		12	■		
			13	■	2	
			14	■		
Total depth of boring = 14.5 feet			15			
			16			
Prepared By / Date: <i>DSM / 10-2-96</i>			17			
			18			
Approved By / Date:			19			
			20			

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1252 Quarry Lane  
 Pleasanton, California

Notes:

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 88998.00

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# Monitoring Well No. CW-5

**PROJECT:** Lemprus & Wulfsberg

**DATE:** 9/26/98

**LOGGED BY:** Peter Schaefer

**DRILL RIG:** Mobile Drill Rig

**HOLE DIA.:** 8 in.

**SAMPLER:** Cal. Split Spoon

**INITIAL GW DEPTH:** ft.

**FINAL GW:** 8.19 ft.

**HOLE ELEV.:**

DESCRIPTION	USCS CLASS	GRAPHIC LOG	DEPTH	SAMPLE	Blows/Foot	WELL CONSTRUCTION DETAIL
Two inches of AC	AC	AC	0			
Base Rock	CL	CL	1			
SILTY CLAY: dark gray brown (10 YR 4/2), bits of debris, some sand and gravel present (5 to 10%) PID = 0 ppm at 2 ft bgs		[Hatched Pattern]	2	[Black Box]	22	
slag in cutting from 3.5 to 4.5 ft bgs, PID = 0 ppm at 3.5 ft bgs		[Hatched Pattern]	3	[Black Box]	23	
PID = 0 ppm at 5 ft bgs		[Hatched Pattern]	4	[Black Box]	20	
		[Hatched Pattern]	5	[Black Box]	20	
SAND: light brown, strongly cemented	SP	SP	6	[Black Box]	45	
SILTY CLAY: dark gray brown (10 YR 4/2), with 5% sand and gravel	CL	CL	6	[Black Box]	45	
SAND: black, oily, some organic fibers	SP	SP	7	[Black Box]	45	
PID = 0 ppm at 6.5 ft bgs	CL	CL	7	[X]	11	
SILTY CLAY: gray, blue gray, and brown, mottled		[Hatched Pattern]	8	[Black Box]	11	
PID = 120 ppm at 7.5 ft bgs		[Hatched Pattern]	8	[Black Box]	11	
Groundwater static depth at 8.19 ft. (10/1/98)		[Hatched Pattern]	8	[Black Box]	11	
SANDY GRAVEL: black, oily sheen and odor, 70% gravel and 30% sand, copper wire in shoe, some bits of brick and wood	GM	GM	9	[Black Box]	15	
PID = 130 ppm at 9.5 ft bgs		[Stippled Pattern]	10	[Black Box]	14	
PID = 158 ppm at 11 ft bgs		[Stippled Pattern]	11	[X]	14	
CLAY: black, "Bay Mud"	CH	CH	12	[X]	12	
PID = 80 ppm at 12.5 ft bgs		[Hatched Pattern]	13	[X]	12	
		[Hatched Pattern]	14	[X]	12	
Total Depth of Boring = 14.5 feet			15			
			16			
			17			
			18			
			19			
			20			

Prepared By / Date: *DSM/10-2-98*

Approved By / Date:

**Clayton Environmental Consultants**

1252 Quarry Lane  
Pleasanton, California

Notes:

Project No.  
88998.00

Page 1 of 1

**APPENDIX B**

**SURVEYOR'S REPORT**



**SURVEYING • MAPPING • GIS/CADD SERVICES  
RIGHT-OF-WAY SERVICES**

**Job No. 96048  
10/18/96  
Revised 10/23/96**

**CLAYTON ENVIROMENTAL CONSULTANTS  
MONITORING WELLS  
STORAGE FACILITY @ 5200 COLISEUM WAY**

Monitor Well No.	Elevations	
	City of Oakland Datum	Mean Sea Level
CW-1	11.110	14.110
CW-2	11.875	14.875
CW-3	11.065	14.065
CW-4	11.755	14.755
CW-5	11.360	14.360

**Note:**

- 1.) BENCH MARK - City of Oakland Bench 1094 - Elevation: City of Oakland Datum = 4.85  
Mean Sea Level = 7.85
- 2.) All elevations were taken on the North rim of the montoring wells with assumed North being .  
Coliseum Way toward downtown Oakland.



# RON ARCHER

CIVIL ENGINEER INC.

CONSULTING • PLANNING • DESIGN • SURVEYING

4133 Mohr Ave., Suite E • Pleasanton, CA 94566  
(510) 462-9372



JUNE 1, 1995

JOB NO 2293

ELEVATIONS OF EXISTING MONITORING WELLS AT AND IN THE VICINITY OF THE PG & E MAINTENANCE FACILITY, LOCATED AT 5151 COLISEUM WAY, CITY OF OAKLAND, ALAMEDA COUNTY, CALIFORNIA.

FOR: **MILLER BROOKS ENVIRONMENTAL INC.**

**BENCHMARK: # 1094**

A FOUND "T" CUT IN THE TOP OF A CONCRETE HEADWALL ON THE SOUTHERLY SIDE OF COLISEUM WAY AT 50<sup>TH</sup> AVENUE, 3.4 FEET NORTH OF THE SOUTH END OF WALL OVER PERALTA CREEK. ELEVATION TAKEN AS 7.85 M.S.L.

## MONITORING WELL DATA TABLE

WELL DESIGNATION	TOP OF CASING ELEVATION	TOP OF BOX ELEVATION
MWA-1	12.29	12.83
MWA-2	10.79	11.44
MWA-3	13.51	14.01
MWLF-2	9.83	10.17
MWLF-4	10.36	10.54

## SOIL BORING DATA TABLE

SOIL BORING DESIGNATION	SOIL BORING ELEVATION
BA-4	11.6
BA-5	10.8
MWA-3-R	13.8



Table 2

SURVEY AND FLUID-LEVEL MONITORING DATA  
Pacific Gas & Electric/Volvo-GM Facilities  
Oakland, California

Well Number	Monitoring Date	Surface Elevation (feet)*	Depth to Water (feet)	Ground-Water Elevation (feet)
<i>Pacific Gas &amp; Electric Facility</i>				
MWA-1	6-2-95	12.29	8.45	3.84
MWA-2	6-2-95	10.79	4.68	6.11
MWA-3	6-2-95	13.51	7.76	5.75
BA-4	---	11.6	---	---
BA-5	---	10.8	---	---
<i>Volvo-GM Facility</i>				
LF-1	6-2-95	7.56	2.32	5.24
LF-2	6-2-95	9.84	4.41	5.43
LF-4	6-2-95	10.36	4.49	5.87
LF-5	6-2-95	8.03	5.80	2.23
LF-10	6-2-95	9.43	5.75	3.68
LF-11	6-2-95	9.07	2.92	6.15
LF-12	6-2-95	8.70	7.12	1.58
Notes:	<p>* Elevations are in feet above mean sea level (National Geodetic Vertical Datum, 1929)</p> <p>Monitoring wells were surveyed to a "T" cut in the top of the concrete headwall on the southerly side of Coliseum Way and 50th Avenue, 3.4 feet north of the south end of the wall over Peralta Creek (elevation = 7.85 feet above mean sea level).</p> <p>Monitoring wells were surveyed relative to the top of the well casing; ground surface elevations were surveyed for Borings BA-4 and BA-5.</p> <p>PG&amp;E monitoring wells and borings were surveyed on June 1, 1995; Volvo-GM monitoring wells were previously surveyed by others.</p>			

Miller Brooks Environmental, Inc.

**APPENDIX C**

**FIELD SURVEY FORMS**

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Project #: 69998.00 Site: LEMPERES Date: 9-30-96  
 Well #: QW-1 Sampling Team: R. SILVA  
 Sampling Method: N/A

Field Conditions: PARTLY CLOUDY, COOL, SLIGHT BREEZE, 65°F

Describe Equipment D-Con Before Sampling This Well: \_\_\_\_\_

Total Depth of Well: 13.21 feet Time: 1131 Depth to Water Before Pumping: 9.22 feet

Height of Water Column: 3.99 feet

	<u>Diameter</u>							
	<u>2-inch</u>	<u>4-inch</u>	=	<u>Volume</u>	*	<u>Purge Factor</u>	=	<u>Volume To Purge</u>
	<u>.16</u>	<u>.65</u>	=	<u>0.64 gal</u>	*	<u>5</u>	=	<u>3.20 gal</u>

Depth Purging From: 13 feet Time Purging Begins: 1205

Notes on Initial Discharge: BROWNISH, SILTY

<u>Time</u>	<u>Volume Purged</u>	<u>pH</u>	<u>Conductivity</u>	<u>T</u>	<u>Notes</u>
<u>1206</u>	<u>3-GAL</u>	<u>10.4</u>	<u>2000+</u>	<u>18.4</u>	<u>SILTY, BROWNISH</u>
<u>1215</u>	<u>5-GAL</u>	<u>9.7</u>	<u>2000+</u>	<u>18.0</u>	<u>SILTY, BROWNISH</u>
<u>1230</u>	<u>8-GAL</u>	<u>10.1</u>	<u>2000+</u>	<u>17.9</u>	<u>TURBID</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

⊕ PURGED DRY

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM  
(CONTINUED)

Time Field Parameter Measurement Begins: \_\_\_\_\_

	<u>Rep #1</u>	<u>Rep #2</u>	<u>Rep #3</u>	<u>Rep #4</u>
pH	_____	_____	_____	_____
Conductivity	_____	_____	_____	_____
T°C	_____	_____	_____	_____

Pre-sample Collection Gallons Purged: \_\_\_\_\_

Time Sample Collection Begins: \_\_\_\_\_

Time Sample Collection Ends: \_\_\_\_\_

Total Gallons Purged: \_\_\_\_\_

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
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CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Project #: 69998-00 Site: LEMPERES Date: 9-30-96  
 Well #: RW-2 Sampling Team: R. SILVA  
 Sampling Method: N/A

Field Conditions: PARTLY CLOUDY, COOL, SLIGHT BREEZE, 26.5°C

Describe Equipment D-Con Before Sampling This Well: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Total Depth of Well: 13.06 feet Time: 1135 Depth to Water Before Pumping: 9.50 feet

Height of Water Column: 3.56 feet

	<u>Diameter</u>							
	<u>2-inch</u>	<u>4-inch</u>	=	<u>Volume</u>	•	<u>Purge Factor</u>	=	<u>Volume To Purge</u>
	<u>.16</u>	<u>.65</u>	=	<u>0.57 gal</u>	•	<u>5</u>	=	<u>2.85 gal</u>

Depth Purging From: 13 feet Time Purging Begins: 1250

Notes on Initial Discharge: BROWNISH, SILTY

<u>Time</u>	<u>Volume Purged</u>	<u>pH</u>	<u>Conductivity</u>	<u>T</u>	<u>Notes</u>
<u>1253</u>	<u>⊗ 3-GALS</u>	<u>10.4</u>	<u>2000</u>	<u>18.4</u>	<u>BROWNISH, SILTY</u>
<u>1301</u>	<u>⊗ 5-GALS</u>	<u>9.0</u>	<u>2000</u>	<u>20.3</u>	<u>BROWNISH, SILTY</u>
<u>1315</u>	<u>⊗ 8-GAL</u>	<u>8.3</u>	<u>2000</u>	<u>20.7</u>	<u>BROWNISH, SILTY</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

⊗ PURGED DRY

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM  
(CONTINUED)

Time Field Parameter Measurement Begins: \_\_\_\_\_

	<u>Rep #1</u>	<u>Rep #2</u>	<u>Rep #3</u>	<u>Rep #4</u>
pH	_____	_____	_____	_____
Conductivity	_____	_____	_____	_____
T°C	_____	_____	_____	_____

Pre-sample Collection Gallons Purged: \_\_\_\_\_

Time Sample Collection Begins: \_\_\_\_\_

Time Sample Collection Ends: \_\_\_\_\_

Total Gallons Purged: \_\_\_\_\_

Comments: \_\_\_\_\_  
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CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Project #: 69998.00 Site: LEMPERES Date: 9-30-96  
 Well #: RW-3 Sampling Team: R. SILVA  
 Sampling Method: N/A

Field Conditions: CLOUDY, COOL, SLIGHT BREEZE, 65°F

Describe Equipment D-Con Before Sampling This Well: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Total Depth of Well: 13.20 feet Time: 1138 Depth to Water Before Pumping: 8.78 feet

Height of Water Column: 4.42 feet

	<u>Diameter</u>						
	<u>2-inch</u>	<u>4-inch</u>		<u>Volume</u>		<u>Purge Factor</u>	<u>Volume To Purge</u>
	<u>.16</u>	<u>.65</u>	=	<u>2.71 gal</u>	*	<u>5</u>	= <u>3.35 gal</u>

Depth Purging From: 13 feet Time Purging Begins: 1350

Notes on Initial Discharge: BLACKISH, SILTY

Time	Volume Purged	pH	Conductivity	T	Notes
<u>1353</u>	<u>3-GAL</u>	<u>10.5</u>	<u>2000+</u>	<u>16.1</u>	<u>BLACKISH, SILTY</u>
<u>1400</u>	<u>6-GAL</u>	<u>10.3</u>	<u>2000+</u>	<u>19.1</u>	<u>BLACKISH, SILTY</u>
<u>1410</u>	<u>9-GAL</u>	<u>10.1</u>	<u>2000+</u>	<u>19.4</u>	<u>SLIGHTLY TURBID</u>

⊕ PUMPED DRY

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM  
(CONTINUED)

Time Field Parameter Measurement Begins: \_\_\_\_\_

	<u>Rep #1</u>	<u>Rep #2</u>	<u>Rep #3</u>	<u>Rep #4</u>
pH	_____	_____	_____	_____
Conductivity	_____	_____	_____	_____
T°C	_____	_____	_____	_____

Pre-sample Collection Gallons Purged: \_\_\_\_\_

Time Sample Collection Begins: \_\_\_\_\_

Time Sample Collection Ends: \_\_\_\_\_

Total Gallons Purged: \_\_\_\_\_

Comments: \_\_\_\_\_  
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CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Project #: 6999B-00 Site: LEMPERES Date: 9-30-96  
 Well #: 10210-4 Sampling Team: R. SILVA  
 Sampling Method: N/A

Field Conditions: CLOUDY, COOL, SLIGHT BREEZE, 46.5°F

Describe Equipment D-Con Before Sampling This Well: \_\_\_\_\_

Total Depth of Well: 14.05 feet Time: 1142 Depth to Water Before Pumping: 8.08 feet

Height of Water Column: 5.97 feet

	<u>Diameter</u>							
	<u>2-inch</u>	<u>4-inch</u>	=	<u>Volume</u>	*	<u>Purge Factor</u>	=	<u>Volume To Purge</u>
	<u>.16</u>	<u>.65</u>	=	<u>0.96 gal</u>	*	<u>5</u>	=	<u>4.80 gal</u>

Depth Purging From: 14 feet Time Purging Begins: 1430

Notes on Initial Discharge: BLACKISH, OILY, STRONG PETROLEUM ODOR

Time	Volume Purged	pH	Conductivity	T	Notes
<u>1432</u>	<u>2-GAL</u>	<u>9.9</u>	<u>2000+</u>	<u>22.1</u>	<u>BLACKISH, OILY</u>
<u>1434</u>	<u>4-GAL</u>	<u>9.8</u>	<u>2000+</u>	<u>22.0</u>	<u>BLACKISH, OILY</u>
<u>1436</u>	<u>6-GAL</u>	<u>10.1</u>	<u>2000+</u>	<u>22.0</u>	<u>BLACKISH, OILY</u>
<u>1438</u>	<u>8-GAL</u>	<u>10.2</u>	<u>2000+</u>	<u>22.1</u>	<u>BLACKISH, OILY</u>

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM  
(CONTINUED)

Time Field Parameter Measurement Begins: \_\_\_\_\_

	<u>Rep #1</u>	<u>Rep #2</u>	<u>Rep #3</u>	<u>Rep #4</u>
pH	_____	_____	_____	_____
Conductivity	_____	_____	_____	_____
T°C	_____	_____	_____	_____

Pre-sample Collection Gallons Purged: \_\_\_\_\_

Time Sample Collection Begins: \_\_\_\_\_

Time Sample Collection Ends: \_\_\_\_\_

Total Gallons Purged: \_\_\_\_\_

Comments: \_\_\_\_\_  
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CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Project #: 69998.00 Site: LEMPERES Date: 9-30-96  
 Well #: W10-5 Sampling Team: R SILVA  
 Sampling Method: N/A

Field Conditions: CLOUDY, COOL, SLIGHT BREEZE, ~70°F

Describe Equipment D-Con Before Sampling This Well: \_\_\_\_\_

Total Depth of Well: 13.68 feet Time: 1145 Depth to Water Before Pumping: 8.17 feet

Height of Water Column: 5.51 feet

	<u>Diameter</u>							
	<u>2-inch</u>	<u>4-inch</u>	=	<u>Volume</u>		<u>Purge Factor</u>	=	<u>Volume To Purge</u>
	<u>.16</u>	<u>.65</u>		<u>0.88 gal</u>		<u>5</u>		<u>4.40 gal</u>

Depth Purging From: 13 feet Time Purging Begins: 1507

Notes on Initial Discharge: BLACKISH, SILTY

<u>Time</u>	<u>Volume Purged</u>	<u>pH</u>	<u>Conductivity</u>	<u>T</u>	<u>Notes</u>
<u>1510</u>	<u>3-GAL</u>	<u>7.3</u>	<u>2000+</u>	<u>17.8</u>	<u>BLACKISH, SILTY</u>
<u>1512</u>	<u>5-GAL</u>	<u>6.9</u>	<u>2000+</u>	<u>18.9</u>	<u>TURBID</u>
<u>1514</u>	<u>7-GAL</u>	<u>7.2</u>	<u>2000+</u>	<u>19.4</u>	<u>TURBID</u>
<u>1516</u>	<u>10-GAL</u>	<u>7.9</u>	<u>2000+</u>	<u>19.4</u>	<u>SLIGHTLY TURBID</u>
<u>1518</u>	<u>12-GAL</u>	<u>7.7</u>	<u>2000+</u>	<u>19.4</u>	<u>CLEAR</u>

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM  
(CONTINUED)

Time Field Parameter Measurement Begins: \_\_\_\_\_

	Rep #1	Rep #2	Rep #3	Rep #4
pH	_____	_____	_____	_____
Conductivity	_____	_____	_____	_____
T°C	_____	_____	_____	_____

Pre-sample Collection Gallons Purged: \_\_\_\_\_

Time Sample Collection Begins: \_\_\_\_\_

Time Sample Collection Ends: \_\_\_\_\_

Total Gallons Purged: \_\_\_\_\_

Comments: \_\_\_\_\_  
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CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Project #: 169998.02 Site: LEMPERES Date: 10-1-96

Well #: M10-1 Sampling Team: R. SILVA

Sampling Method: DISPOSABLE BALLER

Field Conditions: PARTLY CLOUDY, WARM, SLIGHT BREEZE, ~70°F

Describe Equipment D-Con Before Sampling This Well: \_\_\_\_\_

Total Depth of Well: 13.21 feet Time: 1117 Depth to Water Before Pumping: 9.29 feet

Height of Water Column: 3.92 feet

	<u>Diameter</u>						
	<u>2-inch</u>	<u>4-inch</u>		<u>Volume</u>		<u>Purge Factor</u>	<u>Volume To Purge</u>
	<u>.16</u>	<u>.65</u>	=	<u>0.63 gal</u>	*	<u>5</u>	= <u>3.15 gal</u>

Depth Purging From: 13 feet Time Purging Begins: 1154

Notes on Initial Discharge: CLEAR

<u>Time</u>	<u>Volume Purged</u>	<u>pH</u>	<u>Conductivity</u>	<u>T</u>	<u>Notes</u>
<u>1155</u>	<u>⊗ 2-GAL</u>	<u>7.2</u>	<u>2000+</u>	<u>18.0</u>	<u>CLEAR</u> <sup>PURGED DRY</sup>
<u>1215</u>	<u>⊗ 3-GAL</u>	<u>6.4</u>	<u>2000+</u>	<u>72.8</u>	<u>SLIGHTLY TURBID</u> <sup>PURGED DRY</sup>
<u>1225</u>	<u>⊗ 4-GAL</u>	<u>8.1</u>	<u>2000+</u>	<u>21.9</u>	<u>SLIGHTLY, TURBID</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

⊗ PURGED DRY

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM  
(CONTINUED)

Time Field Parameter Measurement Begins: 1232

	<u>Rep #1</u>	<u>Rep #2</u>	<u>Rep #3</u>	<u>Rep #4</u>
pH	<u>8.4</u>	<u>8.3</u>	<u>8.4</u>	<u>8.4</u>
Conductivity	<u>2800+</u>	<u>2800+</u>	<u>2800+</u>	<u>2800+</u>
T°C	<u>21.9</u>	<u>21.8</u>	<u>21.7</u>	<u>21.7</u>

Pre-sample Collection Gallons Purged: 4  
Time Sample Collection Begins: 1235  
Time Sample Collection Ends: 1240  
Total Gallons Purged: 5

Comments: \_\_\_\_\_  
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CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Project #: 69998.00 Site: LEMPERES Date: 10-1-96

Well #: MW-2 Sampling Team: R. SILVA

Sampling Method: DISPOSABLE BAILER

Field Conditions: CLOUDY, WARM, SLIGHT BREEZE, ~70°F

Describe Equipment D-Con Before Sampling This Well: \_\_\_\_\_

Total Depth of Well: 13.06 feet Time: 1120 Depth to Water Before Pumping: 9.55 feet

Height of Water Column: 3.51 feet

	<u>Diameter</u>					
	<u>2-inch</u>	<u>4-inch</u>		<u>Volume</u>	<u>Purge</u>	<u>Volume</u>
	<u>.16</u>	<u>.65</u>	=	<u>0.56</u> gal	*	<u>5</u>
					=	<u>2.80</u> gal

Depth Purging From: 13 feet Time Purging Begins: 1254

Notes on Initial Discharge: BROWNISH, SILTY

<u>Time</u>	<u>Volume Purged</u>	<u>pH</u>	<u>Conductivity</u>	<u>T</u>	<u>Notes</u>
<u>1255</u>	<u>1-GAL</u>	<u>7.9</u>	<u>2000+</u>	<u>22.0</u>	<u>SLIGHTLY TURBID</u>
<u>1256</u>	<u>2-GAL</u>	<u>7.4</u>	<u>2000+</u>	<u>22.3</u>	<u>SLIGHTLY TURBID</u>
<u>1309</u>	<u>3-GAL</u>	<u>7.0</u>	<u>2000+</u>	<u>22.4</u>	<u>SLIGHTLY TURBID</u>
<u>1310</u>	<u>4-GAL</u>	<u>6.9</u>	<u>2000+</u>	<u>22.5</u>	<u>SLIGHTLY TURBID</u>

PURGED DRY

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM  
(CONTINUED)

Time Field Parameter Measurement Begins: 1315

	<u>Rep #1</u>	<u>Rep #2</u>	<u>Rep #3</u>	<u>Rep #4</u>
pH	<u>6.8</u>	<u>6.8</u>	<u>6.8</u>	<u>6.8</u>
Conductivity	<u>2000+</u>	<u>2000+</u>	<u>2000+</u>	<u>2000+</u>
T°C	<u>22.2</u>	<u>22.4</u>	<u>22.5</u>	<u>22.6</u>

Pre-sample Collection Gallons Purged: 4  
Time Sample Collection Begins: 1318  
Time Sample Collection Ends: 1323  
Total Gallons Purged: 5

Comments: \_\_\_\_\_  
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CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Project #: 6999E.00 Site: LEMPERES Date: 10-1-96

Well #: M10-3 Sampling Team: R. SILVA

Sampling Method: DISPOSABLE BAILER

Field Conditions: PARTLY CLOUDY, COOL, WINDY, ~65°F

Describe Equipment D-Con Before Sampling This Well: \_\_\_\_\_

Total Depth of Well: 13.21 feet Time: 1125 Depth to Water Before Pumping: 8.81 feet

Height of Water Column: 4.40 feet

	<u>Diameter</u>						
	<u>2-inch</u>	<u>4-inch</u>		<u>Volume</u>		<u>Purge Factor</u>	<u>Volume To Purge</u>
	<u>.16</u>	<u>.65</u>	=	<u>0.70 gal</u>	*	<u>5</u>	= <u>3.50 gal</u>

Depth Purging From: 13 feet Time Purging Begins: 1345

Notes on Initial Discharge: GRAYISH, SILTY

<u>Time</u>	<u>Volume Purged</u>	<u>pH</u>	<u>Conductivity</u>	<u>T</u>	<u>Notes</u>
<u>1346</u>	<u>1-GAL</u>	<u>9.5</u>	<u>2000+</u>	<u>21.5</u>	<u>CLEAR</u>
<u>1347</u>	<u>2-GAL</u>	<u>10.1</u>	<u>2000+</u>	<u>20.7</u>	<u>CLEAR</u>
<u>1348</u>	<u>⊗ 3-GAL</u>	<u>10.1</u>	<u>2000+</u>	<u>21.0</u>	<u>CLEAR</u>
<u>1352</u>	<u>4-GAL</u>	<u>10.3</u>	<u>2000+</u>	<u>21.3</u>	<u>CLEAR</u>

⊗ PURGED DRY

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM  
(CONTINUED)

Time Field Parameter Measurement Begins: 1356

	<u>Rep #1</u>	<u>Rep #2</u>	<u>Rep #3</u>	<u>Rep #4</u>
pH	<u>10.3</u>	<u>10.2</u>	<u>10.1</u>	<u>10.1</u>
Conductivity	<u>2000t</u>	<u>2000t</u>	<u>2000t</u>	<u>2000t</u>
T°C	<u>21.8</u>	<u>21.9</u>	<u>21.9</u>	<u>21.8</u>

Pre-sample Collection Gallons Purged: 4  
Time Sample Collection Begins: 1401  
Time Sample Collection Ends: 1406  
Total Gallons Purged: 5

Comments: \_\_\_\_\_  
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CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Project #: 69998.00 Site: LEMPERES Date: 10-1-96

Well #: MW-4 Sampling Team: R. SILVA

Sampling Method: DISPOSABLE BAILER

Field Conditions: CLEAR SKIES, WARM, SLIGHT BREEZE, 70°F

Describe Equipment D-Con Before Sampling This Well: \_\_\_\_\_

Total Depth of Well: 1407 feet Time: 1135 Depth to Water Before Pumping: 8.16 feet

Height of Water Column: 5.91 feet

	Diameter						
	2-inch	4-inch		Volume		Purge Factor	Volume To Purge
	.16	.65	=	0.95 gal	*	5	= 4.75 gal

Depth Purging From: 14 feet Time Purging Begins: 1415

Notes on Initial Discharge: BLACK, OILY SHEEN, STRONG PREDIXT ODOR.

Time	Volume Purged	pH	Conductivity	T	Notes
<u>1418</u>	<u>2 GAL</u>	<u>9.8</u>	<u>2000+</u>	<u>22.2</u>	<u>BLACKISH, OILY</u>
<u>1421</u>	<u>3 GAL</u>	<u>10.0</u>	<u>2000+</u>	<u>22.2</u>	<u>BLACKISH, OILY</u>
<u>1424</u>	<u>4 GAL</u>	<u>10.0</u>	<u>2000+</u>	<u>22.1</u>	<u>BLACKISH, OILY</u>
<u>1427</u>	<u>5 GAL</u>	<u>9.9</u>	<u>2000+</u>	<u>22.1</u>	<u>BLACKISH, OILY</u>

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM  
(CONTINUED)

Time Field Parameter Measurement Begins: 1432

	<u>Rep #1</u>	<u>Rep #2</u>	<u>Rep #3</u>	<u>Rep #4</u>
pH	<u>9.8</u>	<u>9.9</u>	<u>9.8</u>	<u>9.8</u>
Conductivity	<u>2000+</u>	<u>2000+</u>	<u>2000+</u>	<u>2000+</u>
T°C	<u>22.4</u>	<u>22.4</u>	<u>22.3</u>	<u>22.3</u>

Pre-sample Collection Gallons Purged: 5  
Time Sample Collection Begins: 1435  
Time Sample Collection Ends: 1440  
Total Gallons Purged: 6

Comments: \_\_\_\_\_  
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CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Project #: 6999E.00 Site: LEMPERES Date: 10-1-96

Well #: MW-5 Sampling Team: R. SILVA

Sampling Method: DISPOSABLE BAILER

Field Conditions: CLEAR SKIES, WINDY, WARM, ~70°F

Describe Equipment D-Con Before Sampling This Well: \_\_\_\_\_

Total Depth of Well: 1369 feet Time: 1131 Depth to Water Before Pumping: 8.19 feet

Height of Water Column: 5.50 feet

	<u>Diameter</u>					
	<u>2-inch</u>	<u>4-inch</u>	=	<u>Volume</u>	•	<u>Purge Factor</u>
	<u>.16</u>	<u>.65</u>	=	<u>0.88 gal</u>	•	<u>5</u>
					=	<u>4.40 gal</u>

Depth Purging From: 13 feet Time Purging Begins: 1452

Notes on Initial Discharge: BLACKISH, OILY, STRONG PRODUCT ODOR

<u>Time</u>	<u>Volume Purged</u>	<u>pH</u>	<u>Conductivity</u>	<u>T</u>	<u>Notes</u>
<u>1455</u>	<u>2-GAL</u>	<u>8.3</u>	<u>2000+</u>	<u>22.3</u>	<u>BLACKISH, OILY</u>
<u>1458</u>	<u>3-GAL</u>	<u>7.6</u>	<u>2000+</u>	<u>22.4</u>	<u>BLACKISH, OILY</u>
<u>1501</u>	<u>4-GAL</u>	<u>7.4</u>	<u>2000+</u>	<u>22.3</u>	<u>BLACKISH, OILY</u>
<u>1504</u>	<u>5-GAL</u>	<u>7.3</u>	<u>2000+</u>	<u>22.3</u>	<u>BLACKISH, OILY</u>

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM  
(CONTINUED)

Time Field Parameter Measurement Begins: 1510

	<u>Rep #1</u>	<u>Rep #2</u>	<u>Rep #3</u>	<u>Rep #4</u>
pH	<u>7.2</u>	<u>7.2</u>	<u>7.1</u>	<u>7.7</u>
Conductivity	<u>2000+</u>	<u>2000+</u>	<u>2000+</u>	<u>2000+</u>
T°C	<u>22.7</u>	<u>22.4</u>	<u>22.3</u>	<u>22.2</u>

Pre-sample Collection Gallons Purged: 5

Time Sample Collection Begins: 1513

Time Sample Collection Ends: 1516

Total Gallons Purged: 6

Comments: \_\_\_\_\_  
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**APPENDIX D**

**ANALYTICAL DATA SHEETS AND CHAIN-OF-CUSTODY  
DOCUMENTS**

San Francisco Regional Office

1252 Quarry Lane  
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**Clayton**  
ENVIRONMENTAL  
CONSULTANTS

October 4, 1996

Mr. Peter Schaefer  
CLAYTON ENVIRONMENTAL CONS.  
1252 Quarry Lane  
Pleasanton, CA 94566

Client Ref.: 69998.00  
Clayton Project No.: 96100.18

Dear Mr. Schaefer:

Attached is our analytical laboratory report for the samples received on October 1, 1996. As discussed with Rick Day, we are unable to provide ferrous iron results. Also enclosed is a copy of the Chain-of-Custody record acknowledging receipt of these samples.

Please note that any unused portion of the samples will be discarded after November 3, 1996, unless you have requested otherwise.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact Suzanne Haus, Client Services Supervisor, at (510) 426-2657.

Sincerely,



Harriotte A. Hurley, CIH  
Director, Laboratory Services  
San Francisco Regional Office

HAH/tjb

Attachments



Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: 69998.00  
Clayton Project No. 96100.18

Sample Identification: MW-1	Date Sampled: 10/01/96
Lab Number: 9610018-01C	Date Received: 10/01/96
Sample Matrix/Media: WATER	Date Extracted: 10/01/96
Extraction Method: EPA 3510	Date Analyzed: 10/02/96
Method Reference: EPA 8270B	Analyst: ASC

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
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Acid Extractables

4-Chloro-3-methylphenol	59-50-7	ND	5
2-Chlorophenol	95-57-8	ND	5
2,4-Dichlorophenol	120-83-2	ND	5
2,4-Dimethylphenol	105-67-9	ND	5
2,4-Dinitrophenol	51-28-5	ND	20
2-Methyl-4,6-dinitrophenol	534-52-1	ND	20
2-Methylphenol	95-48-7	ND	5
4-Methylphenol	106-44-5	ND	5
2-Nitrophenol	88-75-5	ND	5
4-Nitrophenol	100-02-7	ND	20
Pentachlorophenol	87-86-5	ND	20
Phenol	108-95-2	ND	5
2,4,5-Trichlorophenol	95-95-4	ND	5
2,4,6-Trichlorophenol	88-06-2	ND	5

Base/Neutral Extractables

Acenaphthene	83-32-9	ND	5
Acenaphthylene	208-96-8	ND	5
Anthracene	120-12-7	ND	5
Benzidine	92-87-5	ND	50
Benzo(a)anthracene	56-55-3	ND	5
Benzo(a)pyrene	50-32-8	ND	5
Benzo(b)fluoranthene	205-99-2	ND	5
Benzo(ghi)perylene	191-24-2	ND	5
Benzoic acid	65-85-0	ND	20
Benzo(k)fluoranthene	207-08-9	ND	5
Benzyl alcohol	100-51-6	ND	10
Benzyl butyl phthalate	85-68-7	ND	5
Bis(2-chloroethoxy)methane	111-91-1	ND	5

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: 69998.00  
Clayton Project No. 96100.18

Sample Identification: MW-1	Date Sampled: 10/01/96
Lab Number: 9610018-01C	Date Received: 10/01/96
Sample Matrix/Media: WATER	Date Extracted: 10/01/96
Extraction Method: EPA 3510	Date Analyzed: 10/02/96
Method Reference: EPA 8270B	Analyst: ASC

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
<u>Base/Neutral Extractables (Continued)</u>			
Bis(2-chloroethyl)ether	111-44-4	ND	5
Bis(2-chloroisopropyl)ether	108-60-1	ND	5
Bis(2-ethylhexyl)phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	5
4-Chloroaniline	106-47-8	ND	20
2-Chloronaphthalene	91-58-7	ND	5
4-Chlorophenyl phenyl ether	7005-72-3	ND	5
Chrysene	218-01-9	ND	5
Dibenzo(a,h)anthracene	53-70-3	ND	5
Dibenzofuran	132-64-9	ND	5
1,2-Dichlorobenzene	95-50-1	ND	5
1,3-Dichlorobenzene	541-73-1	ND	5
1,4-Dichlorobenzene	106-46-7	ND	5
3,3'-Dichlorobenzidine	91-94-1	ND	40
Diethylphthalate	84-66-2	ND	5
Dimethylphthalate	131-11-3	ND	10
Di-n-butylphthalate	84-74-2	ND	5
2,4-Dinitrotoluene	121-14-2	ND	5
2,6-Dinitrotoluene	606-20-2	ND	5
Di-n-octylphthalate	117-84-0	ND	5
Fluoranthene	206-44-0	ND	5
Fluorene	86-73-7	ND	5
Hexachlorobenzene	118-74-1	ND	5
Hexachlorobutadiene	87-68-3	ND	5
Hexachlorocyclopentadiene	77-47-4	ND	5
Hexachloroethane	67-72-1	ND	5
Indeno(1,2,3-cd)pyrene	193-39-5	ND	5
Isophorone	78-59-1	ND	5
2-Methyl naphthalene	91-57-6	ND	5
Naphthalene	91-20-3	ND	5

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: 69998.00  
Clayton Project No. 96100.18

Sample Identification: MW-1	Date Sampled: 10/01/96
Lab Number: 9610018-01C	Date Received: 10/01/96
Sample Matrix/Media: WATER	Date Extracted: 10/01/96
Extraction Method: EPA 3510	Date Analyzed: 10/02/96
Method Reference: EPA 8270B	Analyst: ASC

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
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Base/Neutral Extractables (Continued)

2-Nitroaniline	88-74-4	ND	20
3-Nitroaniline	99-09-2	ND	20
4-Nitroaniline	100-01-6	ND	20
Nitrobenzene	98-95-3	ND	5
N-Nitrosodi-n-propylamine	621-64-7	ND	5
N-Nitrosodiphenylamine	86-30-6	ND	5
Phenanthrene	85-01-8	ND	5
Pyrene	129-00-0	ND	5
1,2,4-Trichlorobenzene	120-82-1	ND	5

<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
2-Fluorobiphenyl	321-60-8	83	43 - 116
2-Fluorophenol	367-12-4	55	21 - 100
Nitrobenzene-d5	4165-60-0	98	35 - 114
Phenol-d5	13127-88-3	35	10 - 94
Terphenyl-d14	98904-43-9	118	33 - 141
2,4,6-Tribromophenol	118-79-6	99	10 - 123

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

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: 69998.00  
Clayton Project No. 96100.18

Sample Identification:	MW-2	Date Sampled:	10/01/96
Lab Number:	9610018-02C	Date Received:	10/01/96
Sample Matrix/Media:	WATER	Date Extracted:	10/01/96
Extraction Method:	EPA 3510	Date Analyzed:	10/03/96
Method Reference:	EPA 8270B	Analyst:	ASC

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
<u>Acid Extractables</u>			
4-Chloro-3-methylphenol	59-50-7	ND	5
2-Chlorophenol	95-57-8	ND	5
2,4-Dichlorophenol	120-83-2	ND	5
2,4-Dimethylphenol	105-67-9	ND	5
2,4-Dinitrophenol	51-28-5	ND	20
2-Methyl-4,6-dinitrophenol	534-52-1	ND	20
2-Methylphenol	95-48-7	ND	5
4-Methylphenol	106-44-5	ND	5
2-Nitrophenol	88-75-5	ND	5
4-Nitrophenol	100-02-7	ND	20
Pentachlorophenol	87-86-5	ND	20
Phenol	108-95-2	ND	5
2,4,5-Trichlorophenol	95-95-4	ND	5
2,4,6-Trichlorophenol	88-06-2	ND	5

Base/Neutral Extractables

Acenaphthene	83-32-9	ND	5
Acenaphthylene	208-96-8	ND	5
Anthracene	120-12-7	ND	5
Benzidine	92-87-5	ND	50
Benzo(a)anthracene	56-55-3	ND	5
Benzo(a)pyrene	50-32-8	ND	5
Benzo(b)fluoranthene	205-99-2	ND	5
Benzo(ghi)perylene	191-24-2	ND	5
Benzoic acid	65-85-0	ND	20
Benzo(k)fluoranthene	207-08-9	ND	5
Benzyl alcohol	100-51-6	ND	10
Benzyl butyl phthalate	85-68-7	ND	5
Bis(2-chloroethoxy)methane	111-91-1	ND	5

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: 69998.00  
Clayton Project No. 96100.18

Sample Identification: MW-2	Date Sampled: 10/01/96
Lab Number: 9610018-02C	Date Received: 10/01/96
Sample Matrix/Media: WATER	Date Extracted: 10/01/96
Extraction Method: EPA 3510	Date Analyzed: 10/03/96
Method Reference: EPA 8270B	Analyst: ASC

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
<u>Base/Neutral Extractables (Continued)</u>			
Bis(2-chloroethyl) ether	111-44-4	ND	5
Bis(2-chloroisopropyl) ether	108-60-1	ND	5
Bis(2-ethylhexyl) phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	5
4-Chloroaniline	106-47-8	ND	20
2-Chloronaphthalene	91-58-7	ND	5
4-Chlorophenyl phenyl ether	7005-72-3	ND	5
Chrysene	218-01-9	ND	5
Dibenzo(a,h) anthracene	53-70-3	ND	5
Dibenzofuran	132-64-9	ND	5
1,2-Dichlorobenzene	95-50-1	ND	5
1,3-Dichlorobenzene	541-73-1	ND	5
1,4-Dichlorobenzene	106-46-7	ND	5
3,3'-Dichlorobenzidine	91-94-1	ND	40
Diethylphthalate	84-66-2	ND	5
Dimethylphthalate	131-11-3	ND	10
Di-n-butylphthalate	84-74-2	ND	5
2,4-Dinitrotoluene	121-14-2	ND	5
2,6-Dinitrotoluene	606-20-2	ND	5
Di-n-octylphthalate	117-84-0	ND	5
Fluoranthene	206-44-0	ND	5
Fluorene	86-73-7	ND	5
Hexachlorobenzene	118-74-1	ND	5
Hexachlorobutadiene	87-68-3	ND	5
Hexachlorocyclopentadiene	77-47-4	ND	5
Hexachloroethane	67-72-1	ND	5
Indeno(1,2,3-cd) pyrene	193-39-5	ND	5
Isophorone	78-59-1	ND	5
2-Methyl naphthalene	91-57-6	ND	5
Naphthalene	91-20-3	ND	5

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: 69998.00  
Clayton Project No. 96100.18

Sample Identification: MW-2	Date Sampled: 10/01/96
Lab Number: 9610018-02C	Date Received: 10/01/96
Sample Matrix/Media: WATER	Date Extracted: 10/01/96
Extraction Method: EPA 3510	Date Analyzed: 10/03/96
Method Reference: EPA 8270B	Analyst: ASC

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
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Base/Neutral Extractables (Continued)

2-Nitroaniline	88-74-4	ND	20
3-Nitroaniline	99-09-2	ND	20
4-Nitroaniline	100-01-6	ND	20
Nitrobenzene	98-95-3	ND	5
N-Nitrosodi-n-propylamine	621-64-7	ND	5
N-Nitrosodiphenylamine	86-30-6	ND	5
Phenanthrene	85-01-8	8	5
Pyrene	129-00-0	10	5
1,2,4-Trichlorobenzene	120-82-1	ND	5

<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
2-Fluorobiphenyl	321-60-8	86	43 - 116
2-Fluorophenol	367-12-4	52	21 - 100
Nitrobenzene-d5	4165-60-0	94	35 - 114
Phenol-d5	13127-88-3	35	10 - 94
Terphenyl-d14	98904-43-9	116	33 - 141
2,4,6-Tribromophenol	118-79-6	114	10 - 123

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

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: 69998.00  
Clayton Project No. 96100.18

Sample Identification: MW-3	Date Sampled: 10/01/96
Lab Number: 9610018-03C	Date Received: 10/01/96
Sample Matrix/Media: WATER	Date Extracted: 10/01/96
Extraction Method: EPA 3510	Date Analyzed: 10/02/96
Method Reference: EPA 8270B	Analyst: ASC

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
<u>Acid Extractables</u>			
4-Chloro-3-methylphenol	59-50-7	ND	5
2-Chlorophenol	95-57-8	19	5
2,4-Dichlorophenol	120-83-2	ND	5
2,4-Dimethylphenol	105-67-9	ND	5
2,4-Dinitrophenol	51-28-5	ND	20
2-Methyl-4,6-dinitrophenol	534-52-1	ND	20
2-Methylphenol	95-48-7	11	5
4-Methylphenol	106-44-5	18	5
2-Nitrophenol	88-75-5	ND	5
4-Nitrophenol	100-02-7	ND	20
Pentachlorophenol	87-86-5	ND	20
Phenol	108-95-2	9	5
2,4,5-Trichlorophenol	95-95-4	ND	5
2,4,6-Trichlorophenol	88-06-2	ND	5

Base/Neutral Extractables

Acenaphthene	83-32-9	ND	5
Acenaphthylene	208-96-8	ND	5
Anthracene	120-12-7	ND	5
Benzidine	92-87-5	ND	50
Benzo(a)anthracene	56-55-3	ND	5
Benzo(a)pyrene	50-32-8	ND	5
Benzo(b)fluoranthene	205-99-2	ND	5
Benzo(ghi)perylene	191-24-2	ND	5
Benzoic acid	65-85-0	ND	20
Benzo(k)fluoranthene	207-08-9	ND	5
Benzyl alcohol	100-51-6	ND	10
Benzyl butyl phthalate	85-68-7	ND	5
Bis(2-chloroethoxy)methane	111-91-1	ND	5

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: 69998.00  
Clayton Project No. 96100.18

Sample Identification: MW-3	Date Sampled: 10/01/96
Lab Number: 9610018-03C	Date Received: 10/01/96
Sample Matrix/Media: WATER	Date Extracted: 10/01/96
Extraction Method: EPA 3510	Date Analyzed: 10/02/96
Method Reference: EPA 8270B	Analyst: ASC

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
<u>Base/Neutral Extractables (Continued)</u>			
Bis(2-chloroethyl)ether	111-44-4	ND	5
Bis(2-chloroisopropyl)ether	108-60-1	ND	5
Bis(2-ethylhexyl)phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	5
4-Chloroaniline	106-47-8	ND	20
2-Chloronaphthalene	91-58-7	ND	5
4-Chlorophenyl phenyl ether	7005-72-3	ND	5
Chrysene	218-01-9	ND	5
Dibenzo(a,h)anthracene	53-70-3	ND	5
Dibenzofuran	132-64-9	ND	5
1,2-Dichlorobenzene	95-50-1	ND	5
1,3-Dichlorobenzene	541-73-1	ND	5
1,4-Dichlorobenzene	106-46-7	ND	5
3,3'-Dichlorobenzidine	91-94-1	ND	40
Diethylphthalate	84-66-2	ND	5
Dimethylphthalate	131-11-3	ND	10
Di-n-butylphthalate	84-74-2	ND	5
2,4-Dinitrotoluene	121-14-2	ND	5
2,6-Dinitrotoluene	606-20-2	ND	5
Di-n-octylphthalate	117-84-0	ND	5
Fluoranthene	206-44-0	ND	5
Fluorene	86-73-7	ND	5
Hexachlorobenzene	118-74-1	ND	5
Hexachlorobutadiene	87-68-3	ND	5
Hexachlorocyclopentadiene	77-47-4	ND	5
Hexachloroethane	67-72-1	ND	5
Indeno(1,2,3-cd)pyrene	193-39-5	ND	5
Isophorone	78-59-1	ND	5
2-Methyl naphthalene	91-57-6	ND	5
Naphthalene	91-20-3	ND	5



Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: 69998.00  
Clayton Project No. 96100.18

Sample Identification: MW-3	Date Sampled: 10/01/96
Lab Number: 9610018-03C	Date Received: 10/01/96
Sample Matrix/Media: WATER	Date Extracted: 10/01/96
Extraction Method: EPA 3510	Date Analyzed: 10/02/96
Method Reference: EPA 8270B	Analyst: ASC

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
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Base/Neutral Extractables (Continued)

2-Nitroaniline	88-74-4	ND	20
3-Nitroaniline	99-09-2	ND	20
4-Nitroaniline	100-01-6	ND	20
Nitrobenzene	98-95-3	ND	5
N-Nitrosodi-n-propylamine	621-64-7	ND	5
N-Nitrosodiphenylamine	86-30-6	ND	5
Phenanthrene	85-01-8	ND	5
Pyrene	129-00-0	ND	5
1,2,4-Trichlorobenzene	120-82-1	ND	5

<u>Surrogates</u>		<u>Recovery (%)</u>	<u>OC Limits (%)</u>
2-Fluorobiphenyl	321-60-8	88	43 - 116
2-Fluorophenol	367-12-4	50	21 - 100
Nitrobenzene-d5	4165-60-0	95	35 - 114
Phenol-d5	13127-88-3	33	10 - 94
Terphenyl-d14	98904-43-9	125	33 - 141
2,4,6-Tribromophenol	118-79-6	100	10 - 123

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

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: 69998.00  
Clayton Project No. 96100.18

Sample Identification: MW-4	Date Sampled: 10/01/96
Lab Number: 9610018-04C	Date Received: 10/01/96
Sample Matrix/Media: WATER	Date Extracted: 10/01/96
Extraction Method: EPA 3510	Date Analyzed: 10/03/96
Method Reference: EPA 8270B	Analyst: ASC

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
<u>Acid Extractables</u>			
4-Chloro-3-methylphenol	59-50-7	ND	50
2-Chlorophenol	95-57-8	ND	50
2,4-Dichlorophenol	120-83-2	ND	50
2,4-Dimethylphenol	105-67-9	330	50
2,4-Dinitrophenol	51-28-5	ND	200
2-Methyl-4,6-dinitrophenol	534-52-1	ND	200
2-Methylphenol	95-48-7	190	50
4-Methylphenol	106-44-5	ND	50
2-Nitrophenol	88-75-5	ND	50
4-Nitrophenol	100-02-7	ND	200
Pentachlorophenol	87-86-5	ND	200
Phenol	108-95-2	ND	50
2,4,5-Trichlorophenol	95-95-4	ND	50
2,4,6-Trichlorophenol	88-06-2	ND	50

Base/Neutral Extractables

Acenaphthene	83-32-9	1900	50
Acenaphthylene	208-96-8	90	50
Anthracene	120-12-7	590	50
Benzidine	92-87-5	ND	500
Benzo(a)anthracene	56-55-3	380	50
Benzo(a)pyrene	50-32-8	130	50
Benzo(b)fluoranthene	205-99-2	150	50
Benzo(ghi)perylene	191-24-2	ND	50
Benzoic acid	65-85-0	300	200
Benzo(k)fluoranthene	207-08-9	60	50
Benzyl alcohol	100-51-6	ND	100
Benzyl butyl phthalate	85-68-7	ND	50
Bis(2-chloroethoxy)methane	111-91-1	ND	50

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: 69998.00  
Clayton Project No. 96100.18

Sample Identification: MW-4	Date Sampled: 10/01/96
Lab Number: 9610018-04C	Date Received: 10/01/96
Sample Matrix/Media: WATER	Date Extracted: 10/01/96
Extraction Method: EPA 3510	Date Analyzed: 10/03/96
Method Reference: EPA 8270B	Analyst: ASC

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
<u>Base/Neutral Extractables (Continued)</u>			
Bis(2-chloroethyl)ether	111-44-4	ND	50
Bis(2-chloroisopropyl)ether	108-60-1	ND	50
Bis(2-ethylhexyl)phthalate	117-81-7	ND	100
4-Bromophenyl phenyl ether	101-55-3	ND	50
4-Chloroaniline	106-47-8	ND	200
2-Chloronaphthalene	91-58-7	ND	50
4-Chlorophenyl phenyl ether	7005-72-3	ND	50
Chrysene	218-01-9	350	50
Dibenzo(a,h)anthracene	53-70-3	ND	50
Dibenzofuran	132-64-9	1500	50
1,2-Dichlorobenzene	95-50-1	ND	50
1,3-Dichlorobenzene	541-73-1	ND	50
1,4-Dichlorobenzene	106-46-7	ND	50
3,3'-Dichlorobenzidine	91-94-1	ND	400
Diethylphthalate	84-66-2	ND	50
Dimethylphthalate	131-11-3	ND	100
Di-n-butylphthalate	84-74-2	ND	50
2,4-Dinitrotoluene	121-14-2	ND	50
2,6-Dinitrotoluene	606-20-2	ND	50
Di-n-octylphthalate	117-84-0	ND	50
Fluoranthene	206-44-0	1400	50
Fluorene	86-73-7	1100	50
Hexachlorobenzene	118-74-1	ND	50
Hexachlorobutadiene	87-68-3	ND	50
Hexachlorocyclopentadiene	77-47-4	ND	50
Hexachloroethane	67-72-1	ND	50
Indeno(1,2,3-cd)pyrene	193-39-5	ND	50
Isophorone	78-59-1	ND	50
2-Methyl naphthalene	91-57-6	4500	50
Naphthalene	91-20-3	12000	50

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: 69998.00  
Clayton Project No. 96100.18

Sample Identification: MW-4	Date Sampled: 10/01/96
Lab Number: 9610018-04C	Date Received: 10/01/96
Sample Matrix/Media: WATER	Date Extracted: 10/01/96
Extraction Method: EPA 3510	Date Analyzed: 10/03/96
Method Reference: EPA 8270B	Analyst: ASC

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
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Base/Neutral Extractables (Continued)

2-Nitroaniline	88-74-4	ND	200
3-Nitroaniline	99-09-2	ND	200
4-Nitroaniline	100-01-6	ND	200
Nitrobenzene	98-95-3	ND	50
N-Nitrosodi-n-propylamine	621-64-7	ND	50
N-Nitrosodiphenylamine	86-30-6	ND	50
Phenanthrene	85-01-8	3800	50
Pyrene	129-00-0	1300	50
1,2,4-Trichlorobenzene	120-82-1	ND	50

Surrogates

		Recovery (%)	QC Limits (%)
2-Fluorobiphenyl	321-60-8	57	43 - 116
2-Fluorophenol	367-12-4	35	21 - 100
Nitrobenzene-d5	4165-60-0	50	35 - 114
Phenol-d5	13127-88-3	23	10 - 94
Terphenyl-d14	98904-43-9	67	33 - 141
2,4,6-Tribromophenol	118-79-6	62	10 - 123

ND: Not detected at or above limit of detection

--: Information not available or not applicable

Note: Detection limits increased due to dilution necessary for quantitation.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: 69998.00  
Clayton Project No. 96100.18

Sample Identification:	MW-5	Date Sampled:	10/01/96
Lab Number:	9610018-05C	Date Received:	10/01/96
Sample Matrix/Media:	WATER	Date Extracted:	10/01/96
Extraction Method:	EPA 3510	Date Analyzed:	10/03/96
Method Reference:	EPA 8270B	Analyst:	ASC

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
<u>Acid Extractables</u>			
4-Chloro-3-methylphenol	59-50-7	ND	300
2-Chlorophenol	95-57-8	ND	300
2,4-Dichlorophenol	120-83-2	ND	300
2,4-Dimethylphenol	105-67-9	ND	300
2,4-Dinitrophenol	51-28-5	ND	1000
2-Methyl-4,6-dinitrophenol	534-52-1	ND	1000
2-Methylphenol	95-48-7	ND	300
4-Methylphenol	106-44-5	300	300
2-Nitrophenol	88-75-5	ND	300
4-Nitrophenol	100-02-7	ND	1000
Pentachlorophenol	87-86-5	ND	1000
Phenol	108-95-2	ND	300
2,4,5-Trichlorophenol	95-95-4	ND	300
2,4,6-Trichlorophenol	88-06-2	ND	300

Base/Neutral Extractables

Acenaphthene	83-32-9	9000	300
Acenaphthylene	208-96-8	500	300
Anthracene	120-12-7	7000	300
Benzidine	92-87-5	ND	3000
Benzo(a)anthracene	56-55-3	1800	300
Benzo(a)pyrene	50-32-8	600	300
Benzo(b)fluoranthene	205-99-2	700	300
Benzo(ghi)perylene	191-24-2	ND	300
Benzoic acid	65-85-0	ND	1000
Benzo(k)fluoranthene	207-08-9	300	300
Benzyl alcohol	100-51-6	ND	500
Benzyl butyl phthalate	85-68-7	ND	300
Bis(2-chloroethoxy)methane	111-91-1	ND	300

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: 69998.00  
Clayton Project No. 96100.18

Sample Identification: MW-5	Date Sampled: 10/01/96
Lab Number: 9610018-05C	Date Received: 10/01/96
Sample Matrix/Media: WATER	Date Extracted: 10/01/96
Extraction Method: EPA 3510	Date Analyzed: 10/03/96
Method Reference: EPA 8270B	Analyst: ASC

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
<u>Base/Neutral Extractables (Continued)</u>			
Bis(2-chloroethyl)ether	111-44-4	ND	300
Bis(2-chloroisopropyl)ether	108-60-1	ND	300
Bis(2-ethylhexyl)phthalate	117-81-7	ND	500
4-Bromophenyl phenyl ether	101-55-3	ND	300
4-Chloroaniline	106-47-8	ND	1000
2-Chloronaphthalene	91-58-7	ND	300
4-Chlorophenyl phenyl ether	7005-72-3	ND	300
Chrysene	218-01-9	2400	300
Dibenzo(a,h)anthracene	53-70-3	ND	300
Dibenzofuran	132-64-9	5000	300
1,2-Dichlorobenzene	95-50-1	ND	300
1,3-Dichlorobenzene	541-73-1	ND	300
1,4-Dichlorobenzene	106-46-7	ND	300
3,3'-Dichlorobenzidine	91-94-1	ND	2000
Diethylphthalate	84-66-2	ND	300
Dimethylphthalate	131-11-3	ND	500
Di-n-butylphthalate	84-74-2	ND	300
2,4-Dinitrotoluene	121-14-2	ND	300
2,6-Dinitrotoluene	606-20-2	ND	300
Di-n-octylphthalate	117-84-0	ND	300
Fluoranthene	206-44-0	7000	300
Fluorene	86-73-7	6000	300
Hexachlorobenzene	118-74-1	ND	300
Hexachlorobutadiene	87-68-3	ND	300
Hexachlorocyclopentadiene	77-47-4	ND	300
Hexachloroethane	67-72-1	ND	300
Indeno(1,2,3-cd)pyrene	193-39-5	ND	300
Isophorone	78-59-1	ND	300
2-Methyl naphthalene	91-57-6	18000	300
Naphthalene	91-20-3	33000	300

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: 69998.00  
Clayton Project No. 96100.18

Sample Identification: MW-5	Date Sampled: 10/01/96
Lab Number: 9610018-05C	Date Received: 10/01/96
Sample Matrix/Media: WATER	Date Extracted: 10/01/96
Extraction Method: EPA 3510	Date Analyzed: 10/03/96
Method Reference: EPA 8270B	Analyst: ASC

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
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Base/Neutral Extractables (Continued)

2-Nitroaniline	88-74-4	ND	1000
3-Nitroaniline	99-09-2	ND	1000
4-Nitroaniline	100-01-6	ND	1000
Nitrobenzene	98-95-3	ND	300
N-Nitrosodi-n-propylamine	621-64-7	ND	300
N-Nitrosodiphenylamine	86-30-6	ND	300
Phenanthrene	85-01-8	19000	300
Pyrene	129-00-0	6000	300
1,2,4-Trichlorobenzene	120-82-1	ND	300

Surrogates

Recovery (%)      QC Limits (%)

2-Fluorobiphenyl	321-60-8	D	43 - 116
2-Fluorophenol	367-12-4	D	21 - 100
Nitrobenzene-d5	4165-60-0	D	35 - 114
Phenol-d5	13127-88-3	D	10 - 94
Terphenyl-d14	98904-43-9	D	33 - 141
2,4,6-Tribromophenol	118-79-6	D	10 - 123

ND: Not detected at or above limit of detection

--: Information not available or not applicable

Note: Detection limits increased due to dilution necessary for quantitation.

D = Surrogate is diluted out.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: 69998.00  
Clayton Project No. 96100.18

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9610018-06B	Date Received:	--
Sample Matrix/Media:	WATER	Date Extracted:	10/01/96
Extraction Method:	EPA 3510	Date Analyzed:	10/02/96
Method Reference:	EPA 8270B	Analyst:	ASC

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
<u>Acid Extractables</u>			
4-Chloro-3-methylphenol	59-50-7	ND	5
2-Chlorophenol	95-57-8	ND	5
2,4-Dichlorophenol	120-83-2	ND	5
2,4-Dimethylphenol	105-67-9	ND	5
2,4-Dinitrophenol	51-28-5	ND	20
2-Methyl-4,6-dinitrophenol	534-52-1	ND	20
2-Methylphenol	95-48-7	ND	5
4-Methylphenol	106-44-5	ND	5
2-Nitrophenol	88-75-5	ND	5
4-Nitrophenol	100-02-7	ND	20
Pentachlorophenol	87-86-5	ND	20
Phenol	108-95-2	ND	5
2,4,5-Trichlorophenol	95-95-4	ND	5
2,4,6-Trichlorophenol	88-06-2	ND	5

Base/Neutral Extractables

Acenaphthene	83-32-9	ND	5
Acenaphthylene	208-96-8	ND	5
Anthracene	120-12-7	ND	5
Benzidine	92-87-5	ND	50
Benzo(a)anthracene	56-55-3	ND	5
Benzo(a)pyrene	50-32-8	ND	5
Benzo(b)fluoranthene	205-99-2	ND	5
Benzo(ghi)perylene	191-24-2	ND	5
Benzoic acid	65-85-0	ND	20
Benzo(k)fluoranthene	207-08-9	ND	5
Benzyl alcohol	100-51-6	ND	10
Benzyl butyl phthalate	85-68-7	ND	5
Bis(2-chloroethoxy)methane	111-91-1	ND	5



Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: 69998.00  
Clayton Project No. 96100.18

Sample Identification: METHOD BLANK	Date Sampled: --
Lab Number: 9610018-06B	Date Received: --
Sample Matrix/Media: WATER	Date Extracted: 10/01/96
Extraction Method: EPA 3510	Date Analyzed: 10/02/96
Method Reference: EPA 8270B	Analyst: ASC

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
<u>Base/Neutral Extractables (Continued)</u>			
Bis(2-chloroethyl) ether	111-44-4	ND	5
Bis(2-chloroisopropyl) ether	108-60-1	ND	5
Bis(2-ethylhexyl) phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	5
4-Chloroaniline	106-47-8	ND	20
2-Chloronaphthalene	91-58-7	ND	5
4-Chlorophenyl phenyl ether	7005-72-3	ND	5
Chrysene	218-01-9	ND	5
Dibenzo(a,h) anthracene	53-70-3	ND	5
Dibenzofuran	132-64-9	ND	5
1,2-Dichlorobenzene	95-50-1	ND	5
1,3-Dichlorobenzene	541-73-1	ND	5
1,4-Dichlorobenzene	106-46-7	ND	5
3,3'-Dichlorobenzidine	91-94-1	ND	40
Diethylphthalate	84-66-2	ND	5
Dimethylphthalate	131-11-3	ND	10
Di-n-butylphthalate	84-74-2	ND	5
2,4-Dinitrotoluene	121-14-2	ND	5
2,6-Dinitrotoluene	606-20-2	ND	5
Di-n-octylphthalate	117-84-0	ND	5
Fluoranthene	206-44-0	ND	5
Fluorene	86-73-7	ND	5
Hexachlorobenzene	118-74-1	ND	5
Hexachlorobutadiene	87-68-3	ND	5
Hexachlorocyclopentadiene	77-47-4	ND	5
Hexachloroethane	67-72-1	ND	5
Indeno(1,2,3-cd)pyrene	193-39-5	ND	5
Isophorone	78-59-1	ND	5
2-Methyl naphthalene	91-57-6	ND	5
Naphthalene	91-20-3	ND	5

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: 69998.00  
Clayton Project No. 96100.18

Sample Identification: METHOD BLANK	Date Sampled: --
Lab Number: 9610018-06B	Date Received: --
Sample Matrix/Media: WATER	Date Extracted: 10/01/96
Extraction Method: EPA 3510	Date Analyzed: 10/02/96
Method Reference: EPA 8270B	Analyst: ASC

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
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Base/Neutral Extractables (Continued)

2-Nitroaniline	88-74-4	ND	20
3-Nitroaniline	99-09-2	ND	20
4-Nitroaniline	100-01-6	ND	20
Nitrobenzene	98-95-3	ND	5
N-Nitrosodi-n-propylamine	621-64-7	ND	5
N-Nitrosodiphenylamine	86-30-6	ND	5
Phenanthrene	85-01-8	ND	5
Pyrene	129-00-0	ND	5
1,2,4-Trichlorobenzene	120-82-1	ND	5

Surrogates

Recovery (%)      QC Limits (%)

2-Fluorobiphenyl	321-60-8	88	43 - 116
2-Fluorophenol	367-12-4	64	21 - 100
Nitrobenzene-d5	4165-60-0	97	35 - 114
Phenol-d5	13127-88-3	41	10 - 94
Terphenyl-d14	98904-43-9	123	33 - 141
2,4,6-Tribromophenol	118-79-6	93	10 - 123

ND: Not detected at or above limit of detection

--: Information not available or not applicable

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: 69998.00  
Clayton Project No. 96100.18

Sample Identification: MW-1  
Lab Number: 9610018-01  
Sample Matrix/Media: WATER

Date Sampled: 10/01/96  
Date Received: 10/01/96

Analyte	Concentration	Method		Date Prepared	Date Analyzed	Prep Method	Method Reference
		Detection Limit	Units				
Antimony, dissolved	<0.03	0.03	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Arsenic, dissolved	0.52	0.05	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Barium, dissolved	2.5	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Beryllium, dissolved	<0.005	0.005	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Bromide	9.3	0.05	mg/L	--	10/02/96	--	EPA 300.0
Cadmium, dissolved	<0.005	0.005	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Calcium, dissolved	19	0.1	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Chloride	440	0.1	mg/L	--	10/02/96	--	EPA 300.0
Chromium, dissolved	<0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Cobalt, dissolved	<0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Copper, dissolved	<0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Fluoride	2.8	0.05	mg/L	--	10/02/96	--	EPA 300.0
Lead, dissolved	<0.05	0.05	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Magnesium, dissolved	18	0.1	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Mercury, dissolved	<0.0005	0.0005	mg/L	10/03/96	10/03/96	EPA 245.2	EPA 245.2
Molybdenum, dissolved	0.02	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Nickel, dissolved	<0.02	0.02	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Nitrate-N	<0.05	0.05	mg/L	--	10/02/96	--	EPA 300.0
Nitrite-N	<0.05	0.05	mg/L	--	10/02/96	--	EPA 300.0
Ortho-Phosphate	0.2	0.1	mg/L	--	10/02/96	--	EPA 300.0
Potassium, dissolved	28	1	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Selenium, dissolved	<0.05	0.05	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Silver, dissolved	<0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Sodium, dissolved	480	1	mg/L	10/03/96	10/04/96	EPA 200.7	EPA 200.7
Sulfate	11	0.1	mg/L	--	10/02/96	--	EPA 300.0
Thallium, dissolved	<0.05	0.05	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Vanadium, dissolved	0.08	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Zinc, dissolved	0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7

ND: Not detected at or above limit of detection

--: Information not available or not applicable

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: 69998.00  
Clayton Project No. 96100.18

Sample Identification: MW-2  
Lab Number: 9610018-02  
Sample Matrix/Media: WATER

Date Sampled: 10/01/96  
Date Received: 10/01/96

Analyte	Concentration	Method		Date Prepared	Date Analyzed	Prep Method	Method Reference
		Detection Limit	Units				
Antimony, dissolved	<0.03	0.03	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Arsenic, dissolved	3.5	0.05	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Barium, dissolved	220	0.01	mg/L	10/03/96	10/04/96	EPA 200.7	EPA 200.7
Beryllium, dissolved	<0.005	0.005	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Bromide	1.6	0.05	mg/L	--	10/02/96	--	EPA 300.0
Cadmium, dissolved	<0.005	0.005	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Calcium, dissolved	70	0.1	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Chloride	480	0.1	mg/L	--	10/02/96	--	EPA 300.0
Chromium, dissolved	<0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Cobalt, dissolved	0.20	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Copper, dissolved	<0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Fluoride	1.9	0.05	mg/L	--	10/02/96	--	EPA 300.0
Lead, dissolved	<0.05	0.05	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Magnesium, dissolved	34	0.1	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Mercury, dissolved	<0.0005	0.0005	mg/L	10/03/96	10/03/96	EPA 245.2	EPA 245.2
Molybdenum, dissolved	<0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Nickel, dissolved	<0.02	0.02	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Nitrate-N	<0.05	0.05	mg/L	--	10/02/96	--	EPA 300.0
Nitrite-N	<0.05	0.05	mg/L	--	10/02/96	--	EPA 300.0
Ortho-Phosphate	<0.1	0.1	mg/L	--	10/02/96	--	EPA 300.0
Potassium, dissolved	31	1	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Selenium, dissolved	<0.05	0.05	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Silver, dissolved	<0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Sodium, dissolved	230	1	mg/L	10/03/96	10/04/96	EPA 200.7	EPA 200.7
Sulfate	0.7	0.1	mg/L	--	10/02/96	--	EPA 300.0
Thallium, dissolved	<0.05	0.05	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Vanadium, dissolved	<0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Zinc, dissolved	0.06	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7

ND: Not detected at or above limit of detection

--: Information not available or not applicable

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: 69998.00  
Clayton Project No. 96100.18

Sample Identification: MW-3  
Lab Number: 9610018-03  
Sample Matrix/Media: WATER

Date Sampled: 10/01/96  
Date Received: 10/01/96

Analyte	Concentration	Method		Date Prepared	Date Analyzed	Prep Method	Method Reference
		Detection Limit	Units				
Antimony, dissolved	<0.03	0.03	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Arsenic, dissolved	3.3	0.05	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Barium, dissolved	1000	0.01	mg/L	10/03/96	10/04/96	EPA 200.7	EPA 200.7
Beryllium, dissolved	<0.005	0.005	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Bromide	3.5	0.05	mg/L	--	10/02/96	--	EPA 300.0
Cadmium, dissolved	<0.005	0.005	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Calcium, dissolved	37	0.1	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Chloride	1300	0.1	mg/L	--	10/02/96	--	EPA 300.0
Chromium, dissolved	<0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Cobalt, dissolved	0.90	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Copper, dissolved	<0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Fluoride	2.1	0.05	mg/L	--	10/02/96	--	EPA 300.0
Lead, dissolved	<0.05	0.05	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Magnesium, dissolved	0.5	0.1	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Mercury, dissolved	<0.0005	0.0005	mg/L	10/03/96	10/03/96	EPA 245.2	EPA 245.2
Molybdenum, dissolved	0.02	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Nickel, dissolved	<0.02	0.02	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Nitrate-N	<0.05	0.05	mg/L	--	10/02/96	--	EPA 300.0
Nitrite-N	<0.05	0.05	mg/L	--	10/02/96	--	EPA 300.0
Ortho-Phosphate	<0.1	0.1	mg/L	--	10/02/96	--	EPA 300.0
Potassium, dissolved	46	1	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Selenium, dissolved	<0.05	0.05	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Silver, dissolved	<0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Sodium, dissolved	510	1	mg/L	10/03/96	10/04/96	EPA 200.7	EPA 200.7
Sulfate	1.2	0.1	mg/L	--	10/02/96	--	EPA 300.0
Thallium, dissolved	<0.05	0.05	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Vanadium, dissolved	0.04	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Zinc, dissolved	<0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7

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

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: 69998.00  
Clayton Project No. 96100.18

Sample Identification: MW-4  
Lab Number: 9610018-04  
Sample Matrix/Media: WATER

Date Sampled: 10/01/96  
Date Received: 10/01/96

Analyte	Concentration	Method		Date Prepared	Date Analyzed	Prep Method	Method Reference
		Detection Limit	Units				
Antimony, dissolved	<0.03	0.03	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Arsenic, dissolved	0.24	0.05	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Barium, dissolved	3.6	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Beryllium, dissolved	<0.005	0.005	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Bromide	3.9	0.05	mg/L	--	10/02/96	--	EPA 300.0
Cadmium, dissolved	<0.005	0.005	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Calcium, dissolved	4.2	0.1	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Chloride	310	0.1	mg/L	--	10/02/96	--	EPA 300.0
Chromium, dissolved	<0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Cobalt, dissolved	<0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Copper, dissolved	<0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Fluoride	3.1	0.05	mg/L	--	10/02/96	--	EPA 300.0
Lead, dissolved	<0.05	0.05	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Magnesium, dissolved	0.5	0.1	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Mercury, dissolved	<0.0005	0.0005	mg/L	10/03/96	10/03/96	EPA 245.2	EPA 245.2
Molybdenum, dissolved	0.13	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Nickel, dissolved	<0.02	0.02	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Nitrate-N	<0.05	0.05	mg/L	--	10/02/96	--	EPA 300.0
Nitrite-N	<0.05	0.05	mg/L	--	10/02/96	--	EPA 300.0
Ortho-Phosphate	0.1	0.1	mg/L	--	10/02/96	--	EPA 300.0
Potassium, dissolved	20	1	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Selenium, dissolved	<0.05	0.05	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Silver, dissolved	<0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Sodium, dissolved	620	1	mg/L	10/03/96	10/04/96	EPA 200.7	EPA 200.7
Sulfate	34	0.1	mg/L	--	10/02/96	--	EPA 300.0
Thallium, dissolved	<0.05	0.05	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Vanadium, dissolved	0.04	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Zinc, dissolved	0.02	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7

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

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: 69998.00  
Clayton Project No. 96100.18

Sample Identification: MW-5  
Lab Number: 9610018-05  
Sample Matrix/Media: WATER

Date Sampled: 10/01/96  
Date Received: 10/01/96

Analyte	Concentration	Method		Date Prepared	Date Analyzed	Prep Method	Method Reference
		Detection Limit	Units				
Antimony, dissolved	<0.03	0.03	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Arsenic, dissolved	0.54	0.05	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Barium, dissolved	31	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Beryllium, dissolved	<0.005	0.005	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Bromide	1.8	0.05	mg/L	--	10/02/96	--	EPA 300.0
Cadmium, dissolved	<0.005	0.005	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Calcium, dissolved	43	0.1	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Chloride	410	0.1	mg/L	--	10/02/96	--	EPA 300.0
Chromium, dissolved	<0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Cobalt, dissolved	0.03	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Copper, dissolved	<0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Fluoride	2.7	0.05	mg/L	--	10/02/96	--	EPA 300.0
Lead, dissolved	<0.05	0.05	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Magnesium, dissolved	20	0.1	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Mercury, dissolved	<0.0005	0.0005	mg/L	10/03/96	10/03/96	EPA 245.2	EPA 245.2
Molybdenum, dissolved	0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Nickel, dissolved	<0.02	0.02	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Nitrate-N	<0.05	0.05	mg/L	--	10/02/96	--	EPA 300.0
Nitrite-N	<0.05	0.05	mg/L	--	10/02/96	--	EPA 300.0
Ortho-Phosphate	<0.1	0.1	mg/L	--	10/02/96	--	EPA 300.0
Potassium, dissolved	32	1	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Selenium, dissolved	<0.05	0.05	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Silver, dissolved	<0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Sodium, dissolved	520	1	mg/L	10/03/96	10/04/96	EPA 200.7	EPA 200.7
Sulfate	2.7	0.1	mg/L	--	10/02/96	--	EPA 300.0
Thallium, dissolved	<0.05	0.05	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Vanadium, dissolved	0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Zinc, dissolved	0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7

ND: Not detected at or above limit of detection

--: Information not available or not applicable

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: 69998.00  
Clayton Project No. 96100.18

Sample Identification: METHOD BLANK  
Lab Number: 9610018-06  
Sample Matrix/Media: WATER

Date Sampled: --  
Date Received: --

Analyte	Concentration	Method Detection Limit	Units	Date Prepared	Date Analyzed	Prep Method	Method Reference
Antimony, dissolved	<0.03	0.03	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Arsenic, dissolved	<0.05	0.05	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Barium, dissolved	<0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Beryllium, dissolved	<0.005	0.005	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Bromide	<0.05	0.05	mg/L	--	10/02/96	--	EPA 300.0
Cadmium, dissolved	<0.005	0.005	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Calcium, dissolved	<0.1	0.1	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Chloride	<0.1	0.1	mg/L	--	10/02/96	--	EPA 300.0
Chromium, dissolved	<0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Cobalt, dissolved	<0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Copper, dissolved	<0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Fluoride	<0.05	0.05	mg/L	--	10/02/96	--	EPA 300.0
Iron, dissolved	<0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Lead, dissolved	<0.05	0.05	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Magnesium, dissolved	<0.1	0.1	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Mercury, dissolved	<0.0005	0.0005	mg/L	10/03/96	10/03/96	EPA 245.2	EPA 245.2
Molybdenum, dissolved	<0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Nickel, dissolved	<0.02	0.02	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Nitrate-N	<0.05	0.05	mg/L	--	10/02/96	--	EPA 300.0
Nitrite-N	<0.05	0.05	mg/L	--	10/02/96	--	EPA 300.0
Ortho-Phosphate	<0.1	0.1	mg/L	--	10/02/96	--	EPA 300.0
Potassium, dissolved	<1	1	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Selenium, dissolved	<0.05	0.05	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Silver, dissolved	<0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Sodium, dissolved	<1	1	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Sulfate	<0.1	0.1	mg/L	--	10/02/96	--	EPA 300.0
Thallium, dissolved	<0.05	0.05	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Vanadium, dissolved	<0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7
Zinc, dissolved	<0.01	0.01	mg/L	10/03/96	10/03/96	EPA 200.7	EPA 200.7

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



San Francisco Regional Office

1252 Quarry Lane  
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**Clayton**  
ENVIRONMENTAL  
CONSULTANTS

October 4, 1996

Mr. Dwight Hoenig  
CLAYTON ENVIRONMENTAL CONS.  
1252 Quarry Lane  
Pleasanton, CA 94566

Client Ref.: 69998.00  
Clayton Project No.: 96100.19

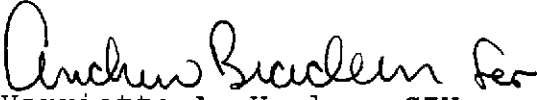
Dear Mr. Hoenig:

Attached is our analytical laboratory report for the samples received on October 1, 1996. Also enclosed is a copy of the Chain-of-Custody record acknowledging receipt of these samples.

Please note that any unused portion of the samples will be discarded after November 3, 1996, unless you have requested otherwise.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact Suzanne Haus, Client Services Supervisor, at (510) 426-2657.

Sincerely,

  
Harriotte A. Hurley, CIH  
Director, Laboratory Services  
San Francisco Regional Office

HAH/tjb

Attachments

Analytical Results  
For  
Clayton Environmental Consultants, Inc.  
Client Reference: 69998.00  
Clayton Project No. 96100.19

Sample Identification: CW-5 SLAG  
Lab Number: 9610019-01  
Sample Matrix/Media: SLAG

Date Sampled: 09/27/96  
Date Received: 10/01/96

Analyte	Concentration	Method Detection Limit	Units	Date Prepared	Date Analyzed	Prep Method	Method Reference
Antimony	<5	5	mg/kg	10/02/96	10/04/96	EPA 3050A	EPA 6010A
Arsenic	60	5	mg/kg	10/02/96	10/04/96	EPA 3050A	EPA 6010A
Barium	52	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010A
Beryllium	0.4	0.1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010A
Cadmium	12	2	mg/kg	10/02/96	10/04/96	EPA 3050A	EPA 6010A
Chromium	31	5	mg/kg	10/02/96	10/04/96	EPA 3050A	EPA 6010A
Cobalt	29	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010A
Copper	1200	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010A
Lead	10000	1	mg/kg	10/02/96	10/04/96	EPA 3050A	EPA 6010A
Mercury	<0.1	0.1	mg/kg	10/04/96	10/04/96	EPA 7471A	EPA 7471A
Molybdenum	140	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010A
Nickel	42	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010A
Selenium	<5	5	mg/kg	10/02/96	10/04/96	EPA 3050A	EPA 6010A
Silver	<0.5	0.5	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010A
Thallium	7	5	mg/kg	10/02/96	10/04/96	EPA 3050A	EPA 6010A
Vanadium	83	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010A
Zinc	27000	1	mg/kg	10/02/96	10/04/96	EPA 3050A	EPA 6010A

ND: Not detected at or above limit of detection

--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: 69998.00  
Clayton Project No. 96100.19

Sample Identification: METHOD BLANK  
Lab Number: 9610019-02  
Sample Matrix/Media: SLAG

Date Sampled: --  
Date Received: --

Analyte	Concentration	Method Detection Limit	Units	Date Prepared	Date Analyzed	Prep Method	Method Reference
Antimony	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010A
Arsenic	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010A
Barium	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010A
Beryllium	<0.1	0.1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010A
Cadmium	<0.4	0.4	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010A
Chromium	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010A
Cobalt	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010A
Copper	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010A
Lead	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010A
Mercury	<0.1	0.1	mg/kg	10/04/96	10/04/96	EPA 7471A	EPA 7471A
Molybdenum	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010A
Nickel	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010A
Selenium	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010A
Silver	<0.5	0.5	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010A
Thallium	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010A
Vanadium	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010A
Zinc	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010A

ND: Not detected at or above limit of detection

--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

San Francisco Regional Office

1252 Quarry Lane  
P.O. Box 9019  
Pleasanton, CA 94566  
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Fax (510) 426-0106

**Clayton**  
ENVIRONMENTAL  
CONSULTANTS

October 9, 1996

Mr. Peter Schaefer  
CLAYTON ENVIRONMENTAL CONS.  
1252 Quarry Lane  
Pleasanton, CA 94566

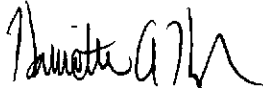
ADDITIONAL REPORT  
Client Ref.: Pending  
Clayton Project No.: 96094.03

Dear Mr. Schaefer:

Attached is our additional analytical laboratory report for the samples received on September 27, 1996 and originally reported on October 3, 1996. Sulfur results are provided by GTF Labs.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact Suzanne Haus, Client Services Supervisor, at (510) 426-2657.

Sincerely,



Harriotte A. Hurley, CIH  
Director, Laboratory Services  
San Francisco Regional Office

HAH/tjb

Attachments


**GTF Labs  
Inc.**

October 9, 1996

Clayton Environmental Services

P.O. Box 9019

Pleasanton, CA 94566

ATTN: Suzanne Haus

REPORT OF ANALYSIS: Sample ID; P.O. # 45211, Job # 9609403

**RESULTS:**

Sample	mg/Kg Sulfur	Sample	mg/Kg Sulfur
CW-1-6.5	<70	CW-3-6	<70
CW-1-8.0	760	CW-3-9	<70
CW-1-9.0	<70	CW-3-11	<70
CW-1-11	550	CW-4-5.5	<70
CW-2-3.5	1680	CW-4-7.5	880
CW-2-5.0	2770	CW-4-11.5	14,400
CW-2-7.5	<70	CW-4-12.5	11,900
CW-2-9.5	450	CW-5-7.5	30,300
CW-3-3.5	<70	CW-5-11	1050

Method: AOAC 15th Ed. Method # 980.02, Total Sulfur in Fertilizers.

Spike Recovery: Sample CW-3-6 was spiked with 44 mg Sulfur, 87% Recovered.

 John L. Peterson  
Chemist/Lab Manager

San Francisco Regional Office

1252 Quarry Lane  
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**Clayton**  
ENVIRONMENTAL  
CONSULTANTS

October 3, 1996

Mr. Peter Schaefer  
CLAYTON ENVIRONMENTAL CONS.  
1252 Quarry Lane  
Pleasanton, CA 94566

PARTIAL REPORT  
Client Ref.: Pending  
Clayton Project No.: 96094.03

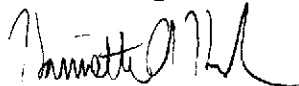
Dear Mr. Schaefer:

Attached is our partial analytical laboratory report for the samples received on September 27, 1996. Sulfur results will be available on 10/8/96 and will be forwarded to you upon completion. Also enclosed is a copy of the Chain-of-Custody record acknowledging receipt of these samples.

Please note that any unused portion of the samples will be discarded after November 2, 1996, unless you have requested otherwise.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact Suzanne Haus, Client Services Supervisor, at (510) 426-2657.

Sincerely,



Harriotte A. Hurley, CIH  
Director, Laboratory Services  
San Francisco Regional Office

HAH/tjb

Attachments

QUALITY CONTROL NARRATIVE  
for  
Clayton Environmental Consultants, Inc.  
Clayton Project No. 96094.03

**Sample Information/Problems:**

There were no problems with sample receipt.

**Analytical Problems:**

Detection limits are elevated for samples 08, 13 thru 18, 20, 22, and 23 for EPA Method 8270B due to dilution necessary for quantitation.

Detection limits are elevated for samples 8, 16, 17, 18, 22, and 23 for EPA Method 8260A due to matrix interference.

Detection limits are elevated for samples 8, 13-23 for TPH-Extractables due to the presence of heavier hydrocarbons.

The Methylene Chloride results for samples 13 and 15 for EPA Method 8260A may be due to laboratory contamination. (The method blank associated with these samples shows all results as 'None Detected').

The method blank for EPA Method 8260A (09/28/96 only) contains 0.5 mg/kg of Methylene Chloride. Samples results have not been blank subtracted. The only two samples which are associated with this contaminated method blank, which had positive results for Methylene Chloride are 8 and 23. Methylene Chloride results for these two samples should be considered suspect.

**Quality Control:**

The quality control data is summarized in the Quality Assurance Data Package, which follows the analytical report.

- MS/MSD: A matrix spike and matrix spike duplicate were analyzed where applicable. Matrix spikes for EPA Method showed several recoveries out of range due to high sample concentrations. The LCSs for this method shows acceptable recoveries for these analytes.
- LCS/LCSD: A laboratory control spike and duplicate were analyzed where applicable, and all results were acceptable.
- ICV/CCV: Response for all analytes met Clayton acceptance criteria.

- Surrogate Recoveries: The surrogate recoveries for samples 08 and 15 for EPA Method 8270B and for samples 13, 16, 18, 20, 22, and 23 for TPH-Extractables are diluted out. The surrogate recoveries, where applicable, are listed on the sample result pages.



Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-2-9.5'	Date Sampled: 09/26/96
Lab Number: 9609403-08A	Date Received: 09/27/96
Sample Matrix/Media: SOIL	Date Prepared: 09/27/96
Preparation Method: EPA 5030A	Date Analyzed: 09/30/96
Method Reference: EPA 8260A	Analyst: JP

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Volatile Organic Compounds</u>			
Acetone	67-64-1	ND	2
Benzene	71-43-2	ND	0.5
Bromobenzene	108-86-1	ND	0.5
Bromochloromethane	74-97-5	ND	0.5
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
2-Butanone	78-93-3	ND	2
n-Butylbenzene	104-51-8	ND	0.5
Carbon disulfide	75-15-0	ND	2
Carbon tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethylvinyl ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
2-Chlorotoluene	95-49-8	ND	0.5
4-Chlorotoluene	106-43-4	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dibromo-3-chloropropane	96-12-8	ND	2
1,2-Dibromoethane	106-93-4	ND	0.5
Dibromomethane	74-95-3	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-34-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
cis-1,2-Dichloroethene	156-59-2	ND	0.5

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-2-9.5'	Date Sampled: 09/26/96
Lab Number: 9609403-08A	Date Received: 09/27/96
Sample Matrix/Media: SOIL	Date Prepared: 09/27/96
Preparation Method: EPA 5030A	Date Analyzed: 09/30/96
Method Reference: EPA 8260A	Analyst: JP

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Volatile Organic Compounds (Continued)</u>			
trans-1,2-Dichloroethene	156-60-5	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
1,3-Dichloropropane	142-28-9	ND	0.5
2,2-Dichloropropane	594-20-7	ND	0.5
1,1-Dichloropropene	563-58-6	ND	0.5
cis-1,3-dichloropropene	10061-01-5	ND	0.5
trans-1,3-dichloropropene	10061-02-6	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
Freon 113	76-13-1	ND	0.5
Hexachlorobutadiene	87-68-3	ND	0.5
2-Hexanone	591-78-6	ND	2
Isopropylbenzene	98-82-8	ND	0.5
p-Isopropyltoluene	99-87-6	ND	0.5
Methylene chloride	75-09-2	0.7 a	0.5
4-Methyl-2-pentanone	108-10-1	ND	2
MTBE	1634-04-4	ND	0.5
Naphthalene	91-20-3	9.8	0.5
n-Propylbenzene	103-65-1	ND	0.5
sec-Butylbenzene	135-98-8	ND	0.5
Styrene	100-42-5	ND	0.5
tert-Butylbenzene	98-06-6	ND	0.5
1,1,1,2-Tetrachloroethane	630-20-6	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
Toluene	108-88-3	ND	0.5
1,2,3-Trichlorobenzene	87-61-6	ND	0.5
1,2,4-Trichlorobenzene	120-82-1	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-2-9.5'	Date Sampled: 09/26/96
Lab Number: 9609403-08A	Date Received: 09/27/96
Sample Matrix/Media: SOIL	Date Prepared: 09/27/96
Preparation Method: EPA 5030A	Date Analyzed: 09/30/96
Method Reference: EPA 8260A	Analyst: JP

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
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Volatile Organic Compounds (Continued)

Trichlorofluoromethane	75-69-4	ND	0.5
1,2,3-Trichloropropane	96-18-4	ND	0.5
1,2,4-Trimethylbenzene	95-63-6	ND	0.5
1,3,5-Trimethylbenzene	108-67-8	ND	0.5
Vinyl acetate	108-05-4	ND	2
Vinyl chloride	75-01-4	ND	0.5
o-Xylene	95-47-6	ND	0.5
p,m-Xylenes	--	ND	0.5

Surrogates

Recovery (%)      QC Limits (%)

4-Bromofluorobenzene	460-00-4	101	74 - 121
Dibromofluoromethane	1868-53-7	99	80 - 120
1,2-Dichloroethane-d4	17060-07-0	100	70 - 121
Toluene-d8	2037-26-5	97	81 - 117

ND: Not detected at or above limit of detection

--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Note: Detection limits increased due to matrix interference.

Sample result associated with a contaminated laboratory reagent blank.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-2-9.5'	Date Sampled:	09/26/96
Lab Number:	9609403-08A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Extracted:	09/29/96
Extraction Method:	EPA 3550	Date Analyzed:	09/30/96
Method Reference:	EPA 8015 (Modified)	Analyst:	CTS

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Total Extractable Hydrocarbons</u>			
TPH-Extractables	--	510	10 a
TPH-Diesel	--	ND	100 a
TPH-Oil	--	390	40 a
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
p-Terphenyl	92-94-4	92	50 - 150

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

Results are reported on a wet weight basis, as received.  
TPH-Extractables = Extractable hydrocarbons from C10 to C42 quantitated as diesel. Concentrations for other reported hydrocarbons are included in this value.  
TPH-D = Extractable hydrocarbons, that appear to match the typical diesel pattern from C10 to C20 quantitated as diesel.  
TPH-O = Extractable hydrocarbons, that appear to match the typical oil pattern from C20 to C42 quantitated as oil.  
a Detection limit increased due to presence of heavier hydrocarbons.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-4-5.5	Date Sampled:	09/27/96
Lab Number:	9609403-13A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Prepared:	09/30/96
Preparation Method:	EPA 5030A	Date Analyzed:	09/30/96
Method Reference:	EPA 8260A	Analyst:	JP

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Volatile Organic Compounds</u>			
Acetone	67-64-1	0.07	0.02
Benzene	71-43-2	ND	0.005
Bromobenzene	108-86-1	ND	0.005
Bromochloromethane	74-97-5	ND	0.005
Bromodichloromethane	75-27-4	ND	0.005
Bromoform	75-25-2	ND	0.005
Bromomethane	74-83-9	ND	0.005
2-Butanone	78-93-3	ND	0.02
n-Butylbenzene	104-51-8	ND	0.005
Carbon disulfide	75-15-0	ND	0.02
Carbon tetrachloride	56-23-5	ND	0.005
Chlorobenzene	108-90-7	ND	0.005
Chloroethane	75-00-3	ND	0.005
2-Chloroethylvinyl ether	110-75-8	ND	0.005
Chloroform	67-66-3	ND	0.005
Chloromethane	74-87-3	ND	0.005
2-Chlorotoluene	95-49-8	ND	0.005
4-Chlorotoluene	106-43-4	ND	0.005
Dibromochloromethane	124-48-1	ND	0.005
1,2-Dibromo-3-chloropropane	96-12-8	ND	0.02
1,2-Dibromoethane	106-93-4	ND	0.005
Dibromomethane	74-95-3	ND	0.005
1,2-Dichlorobenzene	95-50-1	ND	0.005
1,3-Dichlorobenzene	541-73-1	ND	0.005
1,4-Dichlorobenzene	106-46-7	ND	0.005
Dichlorodifluoromethane	75-71-8	ND	0.005
1,1-Dichloroethane	75-34-3	ND	0.005
1,2-Dichloroethane	107-06-2	ND	0.005
1,1-Dichloroethene	75-35-4	ND	0.005
cis-1,2-Dichloroethene	156-59-2	ND	0.005

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-4-5.5	Date Sampled:	09/27/96
Lab Number:	9609403-13A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Prepared:	09/30/96
Preparation Method:	EPA 5030A	Date Analyzed:	09/30/96
Method Reference:	EPA 8260A	Analyst:	JP

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Volatile Organic Compounds (Continued)</u>			
trans-1,2-Dichloroethene	156-60-5	ND	0.005
1,2-Dichloropropane	78-87-5	ND	0.005
1,3-Dichloropropane	142-28-9	ND	0.005
2,2-Dichloropropane	594-20-7	ND	0.005
1,1-Dichloropropene	563-58-6	ND	0.005
cis-1,3-dichloropropene	10061-01-5	ND	0.005
trans-1,3-dichloropropene	10061-02-6	ND	0.005
Ethylbenzene	100-41-4	ND	0.005
Freon 113	76-13-1	ND	0.005
Hexachlorobutadiene	87-68-3	ND	0.005
2-Hexanone	591-78-6	ND	0.02
Isopropylbenzene	98-82-8	ND	0.005
p-Isopropyltoluene	99-87-6	ND	0.005
Methylene chloride	75-09-2	0.007	0.005
4-Methyl-2-pentanone	108-10-1	ND	0.02
MTBE	1634-04-4	ND	0.005
Naphthalene	91-20-3	0.030	0.005
n-Propylbenzene	103-65-1	ND	0.005
sec-Butylbenzene	135-98-8	ND	0.005
Styrene	100-42-5	ND	0.005
tert-Butylbenzene	98-06-6	ND	0.005
1,1,1,2-Tetrachloroethane	630-20-6	ND	0.005
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.005
Tetrachloroethene	127-18-4	ND	0.005
Toluene	108-88-3	ND	0.005
1,2,3-Trichlorobenzene	87-61-6	ND	0.005
1,2,4-Trichlorobenzene	120-82-1	ND	0.005
1,1,1-Trichloroethane	71-55-6	ND	0.005
1,1,2-Trichloroethane	79-00-5	ND	0.005
Trichloroethene	79-01-6	ND	0.005

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-4-5.5	Date Sampled:	09/27/96
Lab Number:	9609403-13A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Prepared:	09/30/96
Preparation Method:	EPA 5030A	Date Analyzed:	09/30/96
Method Reference:	EPA 8260A	Analyst:	JP

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Volatile Organic Compounds (Continued)</u>			
Trichlorofluoromethane	75-69-4	ND	0.005
1,2,3-Trichloropropane	96-18-4	ND	0.005
1,2,4-Trimethylbenzene	95-63-6	ND	0.005
1,3,5-Trimethylbenzene	108-67-8	ND	0.005
Vinyl acetate	108-05-4	ND	0.02
Vinyl chloride	75-01-4	ND	0.005
o-Xylene	95-47-6	ND	0.005
p,m-Xylenes	--	ND	0.005
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
4-Bromofluorobenzene	460-00-4	83	74 - 121
Dibromofluoromethane	1868-53-7	119	80 - 120
1,2-Dichloroethane-d4	17060-07-0	113	70 - 121
Toluene-d8	2037-26-5	111	81 - 117

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

Results are reported on a wet-weight basis, as received.  
Note: Methylene chloride result is possibly due to laboratory contamination.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-4-5.5	Date Sampled:	09/27/96
Lab Number:	9609403-13A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Extracted:	09/29/96
Extraction Method:	EPA 3550	Date Analyzed:	09/30/96
Method Reference:	EPA 8015 (Modified)	Analyst:	CTS

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Total Extractable Hydrocarbons</u>			
TPH-Extractables	--	780	50 a
TPH-Diesel	--	ND	100 a
TPH-Oil	--	690	50 a
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
p-Terphenyl	92-94-4	D	50 - 150

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

Results are reported on a wet weight basis, as received.  
TPH-Extractables = Extractable hydrocarbons from C10 to C42 quantitated as diesel. Concentrations for other reported hydrocarbons are included in this value.  
TPH-D = Extractable hydrocarbons, that appear to match the typical diesel pattern from C10 to C20 quantitated as diesel.  
TPH-O = Extractable hydrocarbons, that appear to match the typical oil pattern from C20 to C42 quantitated as oil.  
D = Surrogate diluted out.  
a Detection limit increased due to presence of heavier hydrocarbons.



Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-4-7.5	Date Sampled:	09/27/96
Lab Number:	9609403-14A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Prepared:	10/01/96
Preparation Method:	EPA 5030A	Date Analyzed:	10/01/96
Method Reference:	EPA 8260A	Analyst:	JP

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Volatile Organic Compounds</u>			
Acetone	67-64-1	ND	0.02
Benzene	71-43-2	ND	0.005
Bromobenzene	108-86-1	ND	0.005
Bromochloromethane	74-97-5	ND	0.005
Bromodichloromethane	75-27-4	ND	0.005
Bromoform	75-25-2	ND	0.005
Bromomethane	74-83-9	ND	0.005
2-Butanone	78-93-3	ND	0.02
n-Butylbenzene	104-51-8	ND	0.005
Carbon disulfide	75-15-0	ND	0.02
Carbon tetrachloride	56-23-5	ND	0.005
Chlorobenzene	108-90-7	ND	0.005
Chloroethane	75-00-3	ND	0.005
2-Chloroethylvinyl ether	110-75-8	ND	0.005
Chloroform	67-66-3	ND	0.005
Chloromethane	74-87-3	ND	0.005
2-Chlorotoluene	95-49-8	ND	0.005
4-Chlorotoluene	106-43-4	ND	0.005
Dibromochloromethane	124-48-1	ND	0.005
1,2-Dibromo-3-chloropropane	96-12-8	ND	0.02
1,2-Dibromoethane	106-93-4	ND	0.005
Dibromomethane	74-95-3	ND	0.005
1,2-Dichlorobenzene	95-50-1	ND	0.005
1,3-Dichlorobenzene	541-73-1	ND	0.005
1,4-Dichlorobenzene	106-46-7	ND	0.005
Dichlorodifluoromethane	75-71-8	ND	0.005
1,1-Dichloroethane	75-34-3	ND	0.005
1,2-Dichloroethane	107-06-2	ND	0.005
1,1-Dichloroethene	75-35-4	ND	0.005
cis-1,2-Dichloroethene	156-59-2	ND	0.005

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-4-7.5	Date Sampled:	09/27/96
Lab Number:	9609403-14A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Prepared:	10/01/96
Preparation Method:	EPA 5030A	Date Analyzed:	10/01/96
Method Reference:	EPA 8260A	Analyst:	JP

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Volatile Organic Compounds (Continued)</u>			
trans-1,2-Dichloroethene	156-60-5	ND	0.005
1,2-Dichloropropane	78-87-5	ND	0.005
1,3-Dichloropropane	142-28-9	ND	0.005
2,2-Dichloropropane	594-20-7	ND	0.005
1,1-Dichloropropene	563-58-6	ND	0.005
cis-1,3-dichloropropene	10061-01-5	ND	0.005
trans-1,3-dichloropropene	10061-02-6	ND	0.005
Ethylbenzene	100-41-4	ND	0.005
Freon 113	76-13-1	ND	0.005
Hexachlorobutadiene	87-68-3	ND	0.005
2-Hexanone	591-78-6	ND	0.02
Isopropylbenzene	98-82-8	ND	0.005
p-Isopropyltoluene	99-87-6	ND	0.005
Methylene chloride	75-09-2	ND	0.005
4-Methyl-2-pentanone	108-10-1	ND	0.02
MTBE	1634-04-4	ND	0.005
Naphthalene	91-20-3	0.011	0.005
n-Propylbenzene	103-65-1	ND	0.005
sec-Butylbenzene	135-98-8	ND	0.005
Styrene	100-42-5	ND	0.005
tert-Butylbenzene	98-06-6	ND	0.005
1,1,1,2-Tetrachloroethane	630-20-6	ND	0.005
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.005
Tetrachloroethene	127-18-4	ND	0.005
Toluene	108-88-3	ND	0.005
1,2,3-Trichlorobenzene	87-61-6	ND	0.005
1,2,4-Trichlorobenzene	120-82-1	ND	0.005
1,1,1-Trichloroethane	71-55-6	ND	0.005
1,1,2-Trichloroethane	79-00-5	ND	0.005
Trichloroethene	79-01-6	ND	0.005

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-4-7.5	Date Sampled:	09/27/96
Lab Number:	9609403-14A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Prepared:	10/01/96
Preparation Method:	EPA 5030A	Date Analyzed:	10/01/96
Method Reference:	EPA 8260A	Analyst:	JP

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Volatile Organic Compounds (Continued)</u>			
Trichlorofluoromethane	75-69-4	ND	0.005
1,2,3-Trichloropropane	96-18-4	ND	0.005
1,2,4-Trimethylbenzene	95-63-6	ND	0.005
1,3,5-Trimethylbenzene	108-67-8	ND	0.005
Vinyl acetate	108-05-4	ND	0.02
Vinyl chloride	75-01-4	ND	0.005
o-Xylene	95-47-6	ND	0.005
p,m-Xylenes	--	ND	0.005

<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
4-Bromofluorobenzene	460-00-4	100	74 - 121
Dibromofluoromethane	1868-53-7	114	80 - 120
1,2-Dichloroethane-d4	17060-07-0	119	70 - 121
Toluene-d8	2037-26-5	96	81 - 117

ND: Not detected at or above limit of detection

--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-4-7.5	Date Sampled:	09/27/96
Lab Number:	9609403-14A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Extracted:	09/29/96
Extraction Method:	EPA 3550	Date Analyzed:	09/30/96
Method Reference:	EPA 8015 (Modified)	Analyst:	CTS

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Total Extractable Hydrocarbons</u>			
TPH-Extractables	--	22	1
TPH-Diesel	--	ND	5 a
TPH-Oil	--	17	4
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
p-Terphenyl	92-94-4	90	50 - 150

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

Results are reported on a wet-weight basis, as received.

TPH-Extractables = Extractable hydrocarbons from C10 to C42 quantitated as diesel. Concentrations for other reported hydrocarbons are included in this value.

TPH-D = Extractable hydrocarbons, that appear to match the typical diesel pattern from C10 to C20 quantitated as diesel.

TPH-O = Extractable hydrocarbons, that appear to match the typical oil pattern from C20 to C42 quantitated as oil.

a Detection limit increased due to presence of heavier hydrocarbons.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-4-11.5	Date Sampled:	09/27/96
Lab Number:	9609403-15A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Prepared:	09/30/96
Preparation Method:	EPA 5030A	Date Analyzed:	09/30/96
Method Reference:	EPA 8260A	Analyst:	JP

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Volatile Organic Compounds</u>			
Acetone	67-64-1	ND	0.02
Benzene	71-43-2	0.15	0.005
Bromobenzene	108-86-1	ND	0.005
Bromochloromethane	74-97-5	ND	0.005
Bromodichloromethane	75-27-4	ND	0.005
Bromoform	75-25-2	ND	0.005
Bromomethane	74-83-9	ND	0.005
2-Butanone	78-93-3	ND	0.02
n-Butylbenzene	104-51-8	ND	0.005
Carbon disulfide	75-15-0	ND	0.02
Carbon tetrachloride	56-23-5	ND	0.005
Chlorobenzene	108-90-7	ND	0.005
Chloroethane	75-00-3	ND	0.005
2-Chloroethylvinyl ether	110-75-8	ND	0.005
Chloroform	67-66-3	ND	0.005
Chloromethane	74-87-3	ND	0.005
2-Chlorotoluene	95-49-8	ND	0.005
4-Chlorotoluene	106-43-4	ND	0.005
Dibromochloromethane	124-48-1	ND	0.005
1,2-Dibromo-3-chloropropane	96-12-8	ND	0.02
1,2-Dibromoethane	106-93-4	ND	0.005
Dibromomethane	74-95-3	ND	0.005
1,2-Dichlorobenzene	95-50-1	ND	0.005
1,3-Dichlorobenzene	541-73-1	ND	0.005
1,4-Dichlorobenzene	106-46-7	ND	0.005
Dichlorodifluoromethane	75-71-8	ND	0.005
1,1-Dichloroethane	75-34-3	ND	0.005
1,2-Dichloroethane	107-06-2	ND	0.005
1,1-Dichloroethene	75-35-4	ND	0.005
cis-1,2-Dichloroethene	156-59-2	ND	0.005

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-4-11.5	Date Sampled:	09/27/96
Lab Number:	9609403-15A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Prepared:	09/30/96
Preparation Method:	EPA 5030A	Date Analyzed:	09/30/96
Method Reference:	EPA 8260A	Analyst:	JP

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Volatile Organic Compounds (Continued)</u>			
trans-1,2-Dichloroethene	156-60-5	ND	0.005
1,2-Dichloropropane	78-87-5	ND	0.005
1,3-Dichloropropane	142-28-9	ND	0.005
2,2-Dichloropropane	594-20-7	ND	0.005
1,1-Dichloropropene	563-58-6	ND	0.005
cis-1,3-dichloropropene	10061-01-5	ND	0.005
trans-1,3-dichloropropene	10061-02-6	ND	0.005
Ethylbenzene	100-41-4	0.12	0.005
Freon 113	76-13-1	ND	0.005
Hexachlorobutadiene	87-68-3	ND	0.005
2-Hexanone	591-78-6	ND	0.02
Isopropylbenzene	98-82-8	ND	0.005
p-Isopropyltoluene	99-87-6	ND	0.005
Methylene chloride	75-09-2	0.006	0.005
4-Methyl-2-pentanone	108-10-1	ND	0.02
MTBE	1634-04-4	ND	0.005
Naphthalene	91-20-3	0.009	0.005
n-Propylbenzene	103-65-1	ND	0.005
sec-Butylbenzene	135-98-8	ND	0.005
Styrene	100-42-5	ND	0.005
tert-Butylbenzene	98-06-6	ND	0.005
1,1,1,2-Tetrachloroethane	630-20-6	ND	0.005
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.005
Tetrachloroethene	127-18-4	ND	0.005
Toluene	108-88-3	0.014	0.005
1,2,3-Trichlorobenzene	87-61-6	ND	0.005
1,2,4-Trichlorobenzene	120-82-1	ND	0.005
1,1,1-Trichloroethane	71-55-6	ND	0.005
1,1,2-Trichloroethane	79-00-5	ND	0.005
Trichloroethene	79-01-6	ND	0.005

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-4-11.5	Date Sampled: 09/27/96
Lab Number: 9609403-15A	Date Received: 09/27/96
Sample Matrix/Media: SOIL	Date Prepared: 09/30/96
Preparation Method: EPA 5030A	Date Analyzed: 09/30/96
Method Reference: EPA 8260A	Analyst: JP

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Volatile Organic Compounds (Continued)</u>			
Trichlorofluoromethane	75-69-4	ND	0.005
1,2,3-Trichloropropane	96-18-4	ND	0.005
1,2,4-Trimethylbenzene	95-63-6	ND	0.005
1,3,5-Trimethylbenzene	108-67-8	ND	0.005
Vinyl acetate	108-05-4	ND	0.02
Vinyl chloride	75-01-4	ND	0.005
o-Xylene	95-47-6	0.049	0.005
p,m-Xylenes	--	0.11	0.005

<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
4-Bromofluorobenzene	460-00-4	91	74 - 121
Dibromofluoromethane	1868-53-7	108	80 - 120
1,2-Dichloroethane-d4	17060-07-0	114	70 - 121
Toluene-d8	2037-26-5	99	81 - 117

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

Results are reported on a wet-weight basis, as received.  
Note: Methylene chloride result is possibly due to laboratory contamination.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-4-11.5	Date Sampled:	09/27/96
Lab Number:	9609403-15A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Extracted:	09/29/96
Extraction Method:	EPA 3550	Date Analyzed:	09/30/96
Method Reference:	EPA 8015 (Modified)	Analyst:	CTS

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Total Extractable Hydrocarbons</u>			
TPH-Extractables	--	37	1
TPH-Diesel	--	ND	40 a
TPH-Oil	--	5	4
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
p-Terphenyl	92-94-4	77	50 - 150

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

Results are reported on a wet-weight basis, as received.  
TPH-Extractables = Extractable hydrocarbons from C10 to C42 quantitated as diesel. Concentrations for other reported hydrocarbons are included in this value.  
TPH-D = Extractable hydrocarbons, that appear to match the typical diesel pattern from C10 to C20 quantitated as diesel.  
TPH-O = Extractable hydrocarbons, that appear to match the typical oil pattern from C20 to C42 quantitated as oil.  
a Detection limit increased due to presence of heavier hydrocarbons.



Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-4-12.5	Date Sampled:	09/27/96
Lab Number:	9609403-16A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Prepared:	09/27/96
Preparation Method:	EPA 5030A	Date Analyzed:	09/28/96
Method Reference:	EPA 8260A	Analyst:	JP

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Volatile Organic Compounds</u>			
Acetone	67-64-1	ND	10
Benzene	71-43-2	ND	3
Bromobenzene	108-86-1	ND	3
Bromochloromethane	74-97-5	ND	3
Bromodichloromethane	75-27-4	ND	3
Bromoform	75-25-2	ND	3
Bromomethane	74-83-9	ND	3
2-Butanone	78-93-3	ND	10
n-Butylbenzene	104-51-8	ND	3
Carbon disulfide	75-15-0	ND	10
Carbon tetrachloride	56-23-5	ND	3
Chlorobenzene	108-90-7	ND	3
Chloroethane	75-00-3	ND	3
2-Chloroethylvinyl ether	110-75-8	ND	3
Chloroform	67-66-3	ND	3
Chloromethane	74-87-3	ND	3
2-Chlorotoluene	95-49-8	ND	3
4-Chlorotoluene	106-43-4	ND	3
Dibromochloromethane	124-48-1	ND	3
1,2-Dibromo-3-chloropropane	96-12-8	ND	10
1,2-Dibromoethane	106-93-4	ND	3
Dibromomethane	74-95-3	ND	3
1,2-Dichlorobenzene	95-50-1	ND	3
1,3-Dichlorobenzene	541-73-1	ND	3
1,4-Dichlorobenzene	106-46-7	ND	3
Dichlorodifluoromethane	75-71-8	ND	3
1,1-Dichloroethane	75-34-3	ND	3
1,2-Dichloroethane	107-06-2	ND	3
1,1-Dichloroethene	75-35-4	ND	3
cis-1,2-Dichloroethene	156-59-2	ND	3

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-4-12.5	Date Sampled:	09/27/96
Lab Number:	9609403-16A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Prepared:	09/27/96
Preparation Method:	EPA 5030A	Date Analyzed:	09/28/96
Method Reference:	EPA 8260A	Analyst:	JP

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Volatile Organic Compounds (Continued)</u>			
trans-1,2-Dichloroethene	156-60-5	ND	3
1,2-Dichloropropane	78-87-5	ND	3
1,3-Dichloropropane	142-28-9	ND	3
2,2-Dichloropropane	594-20-7	ND	3
1,1-Dichloropropene	563-58-6	ND	3
cis-1,3-dichloropropene	10061-01-5	ND	3
trans-1,3-dichloropropene	10061-02-6	ND	3
Ethylbenzene	100-41-4	4	3
Freon 113	76-13-1	ND	3
Hexachlorobutadiene	87-68-3	ND	3
2-Hexanone	591-78-6	ND	10
Isopropylbenzene	98-82-8	ND	3
p-Isopropyltoluene	99-87-6	ND	3
Methylene chloride	75-09-2	ND	3
4-Methyl-2-pentanone	108-10-1	ND	10
MTBE	1634-04-4	ND	3
Naphthalene	91-20-3	240	3
n-Propylbenzene	103-65-1	ND	3
sec-Butylbenzene	135-98-8	ND	3
Styrene	100-42-5	ND	3
tert-Butylbenzene	98-06-6	ND	3
1,1,1,2-Tetrachloroethane	630-20-6	ND	3
1,1,2,2-Tetrachloroethane	79-34-5	ND	3
Tetrachloroethene	127-18-4	ND	3
Toluene	108-88-3	ND	3
1,2,3-Trichlorobenzene	87-61-6	ND	3
1,2,4-Trichlorobenzene	120-82-1	ND	3
1,1,1-Trichloroethane	71-55-6	ND	3
1,1,2-Trichloroethane	79-00-5	ND	3
Trichloroethene	79-01-6	ND	3

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-4-12.5	Date Sampled:	09/27/96
Lab Number:	9609403-16A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Prepared:	09/27/96
Preparation Method:	EPA 5030A	Date Analyzed:	09/28/96
Method Reference:	EPA 8260A	Analyst:	JP

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Volatile Organic Compounds (Continued)</u>			
Trichlorofluoromethane	75-69-4	ND	3
1,2,3-Trichloropropane	96-18-4	ND	3
1,2,4-Trimethylbenzene	95-63-6	6	3
1,3,5-Trimethylbenzene	108-67-8	3	3
Vinyl acetate	108-05-4	ND	10
Vinyl chloride	75-01-4	ND	3
o-Xylene	95-47-6	3	3
p,m-Xylenes	--	6	3
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
4-Bromofluorobenzene	460-00-4	97	74 - 121
Dibromofluoromethane	1868-53-7	98	80 - 120
1,2-Dichloroethane-d4	17060-07-0	93	70 - 121
Toluene-d8	2037-26-5	96	81 - 117

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

Results are reported on a wet-weight basis, as received.  
Note: Detection limits increased due to matrix interference.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-4-12.5	Date Sampled:	09/27/96
Lab Number:	9609403-16A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Extracted:	09/29/96
Extraction Method:	EPA 3550	Date Analyzed:	09/30/96
Method Reference:	EPA 8015 (Modified)	Analyst:	CTS

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Total Extractable Hydrocarbons</u>			
TPH-Extractables	--	10000	500 a
TPH-Diesel	--	ND	7000 a
TPH-Oil	--	3700	500 a
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
p-Terphenyl	92-94-4	D	50 - 150

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

Results are reported on a wet weight basis, as received.  
TPH-Extractables = Extractable hydrocarbons from C10 to C42 quantitated as diesel. Concentrations for other reported hydrocarbons are included in this value.  
TPH-D = Extractable hydrocarbons, that appear to match the typical diesel pattern from C10 to C20 quantitated as diesel.  
TPH-O = Extractable hydrocarbons, that appear to match the typical oil pattern from C20 to C42 quantitated as oil.  
D = Surrogate diluted out.  
a Detection limit increased due to presence of heavier hydrocarbons.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-5-7.5	Date Sampled:	09/27/96
Lab Number:	9609403-17A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Prepared:	09/27/96
Preparation Method:	EPA 5030A	Date Analyzed:	09/28/96
Method Reference:	EPA 8260A	Analyst:	JP

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Volatile Organic Compounds</u>			
Acetone	67-64-1	ND	10
Benzene	71-43-2	4	3
Bromobenzene	108-86-1	ND	3
Bromochloromethane	74-97-5	ND	3
Bromodichloromethane	75-27-4	ND	3
Bromoform	75-25-2	ND	3
Bromomethane	74-83-9	ND	3
2-Butanone	78-93-3	ND	10
n-Butylbenzene	104-51-8	ND	3
Carbon disulfide	75-15-0	ND	10
Carbon tetrachloride	56-23-5	ND	3
Chlorobenzene	108-90-7	ND	3
Chloroethane	75-00-3	ND	3
2-Chloroethylvinyl ether	110-75-8	ND	3
Chloroform	67-66-3	ND	3
Chloromethane	74-87-3	ND	3
2-Chlorotoluene	95-49-8	ND	3
4-Chlorotoluene	106-43-4	ND	3
Dibromochloromethane	124-48-1	ND	3
1,2-Dibromo-3-chloropropane	96-12-8	ND	10
1,2-Dibromoethane	106-93-4	ND	3
Dibromomethane	74-95-3	ND	3
1,2-Dichlorobenzene	95-50-1	ND	3
1,3-Dichlorobenzene	541-73-1	ND	3
1,4-Dichlorobenzene	106-46-7	ND	3
Dichlorodifluoromethane	75-71-8	ND	3
1,1-Dichloroethane	75-34-3	ND	3
1,2-Dichloroethane	107-06-2	ND	3
1,1-Dichloroethene	75-35-4	ND	3
cis-1,2-Dichloroethene	156-59-2	ND	3

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-5-7.5	Date Sampled:	09/27/96
Lab Number:	9609403-17A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Prepared:	09/27/96
Preparation Method:	EPA 5030A	Date Analyzed:	09/28/96
Method Reference:	EPA 8260A	Analyst:	JP

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Volatile Organic Compounds (Continued)</u>			
trans-1,2-Dichloroethene	156-60-5	ND	3
1,2-Dichloropropane	78-87-5	ND	3
1,3-Dichloropropane	142-28-9	ND	3
2,2-Dichloropropane	594-20-7	ND	3
1,1-Dichloropropene	563-58-6	ND	3
cis-1,3-dichloropropene	10061-01-5	ND	3
trans-1,3-dichloropropene	10061-02-6	ND	3
Ethylbenzene	100-41-4	8	3
Freon 113	76-13-1	ND	3
Hexachlorobutadiene	87-68-3	ND	3
2-Hexanone	591-78-6	ND	10
Isopropylbenzene	98-82-8	ND	3
p-Isopropyltoluene	99-87-6	ND	3
Methylene chloride	75-09-2	ND	3
4-Methyl-2-pentanone	108-10-1	ND	10
MTBE	1634-04-4	ND	3
Naphthalene	91-20-3	2100	3
n-Propylbenzene	103-65-1	ND	3
sec-Butylbenzene	135-98-8	ND	3
Styrene	100-42-5	6	3
tert-Butylbenzene	98-06-6	ND	3
1,1,1,2-Tetrachloroethane	630-20-6	ND	3
1,1,2,2-Tetrachloroethane	79-34-5	ND	3
Tetrachloroethene	127-18-4	ND	3
Toluene	108-88-3	12	3
1,2,3-Trichlorobenzene	87-61-6	ND	3
1,2,4-Trichlorobenzene	120-82-1	ND	3
1,1,1-Trichloroethane	71-55-6	ND	3
1,1,2-Trichloroethane	79-00-5	ND	3
Trichloroethene	79-01-6	ND	3

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-5-7.5	Date Sampled:	09/27/96
Lab Number:	9609403-17A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Prepared:	09/27/96
Preparation Method:	EPA 5030A	Date Analyzed:	09/28/96
Method Reference:	EPA 8260A	Analyst:	JP

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Volatile Organic Compounds (Continued)</u>			
Trichlorofluoromethane	75-69-4	ND	3
1,2,3-Trichloropropane	96-18-4	ND	3
1,2,4-Trimethylbenzene	95-63-6	16	3
1,3,5-Trimethylbenzene	108-67-8	7	3
Vinyl acetate	108-05-4	ND	10
Vinyl chloride	75-01-4	ND	3
o-Xylene	95-47-6	11	3
p,m-Xylenes	--	19	3

<u>Surrogates</u>		<u>Recovery (%)</u>	<u>OC Limits (%)</u>
4-Bromofluorobenzene	460-00-4	98	74 - 121
Dibromofluoromethane	1868-53-7	97	80 - 120
1,2-Dichloroethane-d4	17060-07-0	93	70 - 121
Toluene-d8	2037-26-5	96	81 - 117

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

Results are reported on a wet-weight basis, as received.  
Note: Detection limits increased due to matrix interference.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-5-7.5	Date Sampled:	09/27/96
Lab Number:	9609403-17A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Extracted:	09/29/96
Extraction Method:	EPA 3550	Date Analyzed:	09/30/96
Method Reference:	EPA 8015 (Modified)	Analyst:	CTS

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Total Extractable Hydrocarbons</u>			
TPH-Extractables	--	130	5 a
TPH-Diesel	--	ND	90 a
TPH-Oil	--	40	20 a
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
p-Terphenyl	92-94-4	77	50 - 150

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

Results are reported on a wet-weight basis, as received.  
TPH-Extractables = Extractable hydrocarbons from C10 to C42 quantitated as diesel. Concentrations for other reported hydrocarbons are included in this value.  
TPH-D = Extractable hydrocarbons, that appear to match the typical diesel pattern from C10 to C20 quantitated as diesel.  
TPH-O = Extractable hydrocarbons, that appear to match the typical oil pattern from C20 to C42 quantitated as oil.  
a Detection limit increased due to presence of heavier hydrocarbons.



Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-5-11	Date Sampled:	09/27/96
Lab Number:	9609403-18A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Prepared:	09/27/96
Preparation Method:	EPA 5030A	Date Analyzed:	09/28/96
Method Reference:	EPA 8260A	Analyst:	JP

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Volatile Organic Compounds</u>			
Acetone	67-64-1	ND	10
Benzene	71-43-2	ND	3
Bromobenzene	108-86-1	ND	3
Bromochloromethane	74-97-5	ND	3
Bromodichloromethane	75-27-4	ND	3
Bromoform	75-25-2	ND	3
Bromomethane	74-83-9	ND	3
2-Butanone	78-93-3	ND	10
n-Butylbenzene	104-51-8	ND	3
Carbon disulfide	75-15-0	ND	10
Carbon tetrachloride	56-23-5	ND	3
Chlorobenzene	108-90-7	ND	3
Chloroethane	75-00-3	ND	3
2-Chloroethylvinyl ether	110-75-8	ND	3
Chloroform	67-66-3	ND	3
Chloromethane	74-87-3	ND	3
2-Chlorotoluene	95-49-8	ND	3
4-Chlorotoluene	106-43-4	ND	3
Dibromochloromethane	124-48-1	ND	3
1,2-Dibromo-3-chloropropane	96-12-8	ND	10
1,2-Dibromoethane	106-93-4	ND	3
Dibromomethane	74-95-3	ND	3
1,2-Dichlorobenzene	95-50-1	ND	3
1,3-Dichlorobenzene	541-73-1	ND	3
1,4-Dichlorobenzene	106-46-7	ND	3
Dichlorodifluoromethane	75-71-8	ND	3
1,1-Dichloroethane	75-34-3	ND	3
1,2-Dichloroethane	107-06-2	ND	3
1,1-Dichloroethene	75-35-4	ND	3
cis-1,2-Dichloroethene	156-59-2	ND	3

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-5-11	Date Sampled:	09/27/96
Lab Number:	9609403-18A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Prepared:	09/27/96
Preparation Method:	EPA 5030A	Date Analyzed:	09/28/96
Method Reference:	EPA 8260A	Analyst:	JP

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Volatile Organic Compounds (Continued)</u>			
trans-1,2-Dichloroethene	156-60-5	ND	3
1,2-Dichloropropane	78-87-5	ND	3
1,3-Dichloropropane	142-28-9	ND	3
2,2-Dichloropropane	594-20-7	ND	3
1,1-Dichloropropene	563-58-6	ND	3
cis-1,3-dichloropropene	10061-01-5	ND	3
trans-1,3-dichloropropene	10061-02-6	ND	3
Ethylbenzene	100-41-4	3	3
Freon 113	76-13-1	ND	3
Hexachlorobutadiene	87-68-3	ND	3
2-Hexanone	591-78-6	ND	10
Isopropylbenzene	98-82-8	ND	3
p-Isopropyltoluene	99-87-6	ND	3
Methylene chloride	75-09-2	ND	3
4-Methyl-2-pentanone	108-10-1	ND	10
MTBE	1634-04-4	ND	3
Naphthalene	91-20-3	260	3
n-Propylbenzene	103-65-1	ND	3
sec-Butylbenzene	135-98-8	ND	3
Styrene	100-42-5	ND	3
tert-Butylbenzene	98-06-6	ND	3
1,1,1,2-Tetrachloroethane	630-20-6	ND	3
1,1,2,2-Tetrachloroethane	79-34-5	ND	3
Tetrachloroethene	127-18-4	ND	3
Toluene	108-88-3	ND	3
1,2,3-Trichlorobenzene	87-61-6	ND	3
1,2,4-Trichlorobenzene	120-82-1	ND	3
1,1,1-Trichloroethane	71-55-6	ND	3
1,1,2-Trichloroethane	79-00-5	ND	3
Trichloroethene	79-01-6	ND	3

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-5-11	Date Sampled:	09/27/96
Lab Number:	9609403-18A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Prepared:	09/27/96
Preparation Method:	EPA 5030A	Date Analyzed:	09/28/96
Method Reference:	EPA 8260A	Analyst:	JP

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
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Volatile Organic Compounds (Continued)

Trichlorofluoromethane	75-69-4	ND	3
1,2,3-Trichloropropane	96-18-4	ND	3
1,2,4-Trimethylbenzene	95-63-6	4	3
1,3,5-Trimethylbenzene	108-67-8	ND	3
Vinyl acetate	108-05-4	ND	10
Vinyl chloride	75-01-4	ND	3
o-Xylene	95-47-6	3	3
p,m-Xylenes	--	4	3

<u>Surrogates</u>		<u>Recovery (%)</u>	<u>OC Limits (%)</u>
4-Bromofluorobenzene	460-00-4	97	74 - 121
Dibromofluoromethane	1868-53-7	99	80 - 120
1,2-Dichloroethane-d4	17060-07-0	90	70 - 121
Toluene-d8	2037-26-5	96	81 - 117

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

Results are reported on a wet-weight basis, as received.  
Note: Detection limits increased due to matrix interference.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-5-11	Date Sampled:	09/27/96
Lab Number:	9609403-18A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Extracted:	09/29/96
Extraction Method:	EPA 3550	Date Analyzed:	09/30/96
Method Reference:	EPA 8015 (Modified)	Analyst:	CTS

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Total Extractable Hydrocarbons</u>			
TPH-Extractables	--	22000	500 a
TPH-Diesel	--	ND	10000 a
TPH-Oil	--	8700	500 a
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
p-Terphenyl	92-94-4	D	50 - 150

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

Results are reported on a wet weight basis, as received.

TPH-Extractables = Extractable hydrocarbons from C10 to C42 quantitated as diesel. Concentrations for other reported hydrocarbons are included in this value.

TPH-D = Extractable hydrocarbons, that appear to match the typical diesel pattern from C10 to C20 quantitated as diesel.

TPH-O = Extractable hydrocarbons, that appear to match the typical oil pattern from C20 to C42 quantitated as oil.

D = Surrogate diluted out.

a Detection limit increased due to presence of heavier hydrocarbons.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: METHOD BLANK	Date Sampled: --
Lab Number: 9609403-27A	Date Received: --
Sample Matrix/Media: SOIL	Date Prepared: 09/27/96
Preparation Method: EPA 5030A	Date Analyzed: 09/28/96
Method Reference: EPA 8260A	Analyst: JP

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Volatile Organic Compounds</u>			
Acetone	67-64-1	ND	2
Benzene	71-43-2	ND	0.5
Bromobenzene	108-86-1	ND	0.5
Bromochloromethane	74-97-5	ND	0.5
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
2-Butanone	78-93-3	ND	2
n-Butylbenzene	104-51-8	ND	0.5
Carbon disulfide	75-15-0	ND	2
Carbon tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethylvinyl ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
2-Chlorotoluene	95-49-8	ND	0.5
4-Chlorotoluene	106-43-4	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dibromo-3-chloropropane	96-12-8	ND	2
1,2-Dibromoethane	106-93-4	ND	0.5
Dibromomethane	74-95-3	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-34-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
cis-1,2-Dichloroethene	156-59-2	ND	0.5

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: METHOD BLANK	Date Sampled: --
Lab Number: 9609403-27A	Date Received: --
Sample Matrix/Media: SOIL	Date Prepared: 09/27/96
Preparation Method: EPA 5030A	Date Analyzed: 09/28/96
Method Reference: EPA 8260A	Analyst: JP

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Volatile Organic Compounds (Continued)</u>			
trans-1,2-Dichloroethene	156-60-5	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
1,3-Dichloropropane	142-28-9	ND	0.5
2,2-Dichloropropane	594-20-7	ND	0.5
1,1-Dichloropropene	563-58-6	ND	0.5
cis-1,3-dichloropropene	10061-01-5	ND	0.5
trans-1,3-dichloropropene	10061-02-6	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
Freon 113	76-13-1	ND	0.5
Hexachlorobutadiene	87-68-3	ND	0.5
2-Hexanone	591-78-6	ND	2
Isopropylbenzene	98-82-8	ND	0.5
p-Isopropyltoluene	99-87-6	ND	0.5
Methylene chloride	75-09-2	0.5 a	0.5
4-Methyl-2-pentanone	108-10-1	ND	2
MTBE	1634-04-4	ND	0.5
Naphthalene	91-20-3	ND	0.5
n-Propylbenzene	103-65-1	ND	0.5
sec-Butylbenzene	135-98-8	ND	0.5
Styrene	100-42-5	ND	0.5
tert-Butylbenzene	98-06-6	ND	0.5
1,1,1,2-Tetrachloroethane	630-20-6	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
Toluene	108-88-3	ND	0.5
1,2,3-Trichlorobenzene	87-61-6	ND	0.5
1,2,4-Trichlorobenzene	120-82-1	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: METHOD BLANK	Date Sampled: --
Lab Number: 9609403-27A	Date Received: --
Sample Matrix/Media: SOIL	Date Prepared: 09/27/96
Preparation Method: EPA 5030A	Date Analyzed: 09/28/96
Method Reference: EPA 8260A	Analyst: JP

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
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Volatile Organic Compounds (Continued)

Trichlorofluoromethane	75-69-4	ND	0.5
1,2,3-Trichloropropane	96-18-4	ND	0.5
1,2,4-Trimethylbenzene	95-63-6	ND	0.5
1,3,5-Trimethylbenzene	108-67-8	ND	0.5
Vinyl acetate	108-05-4	ND	2
Vinyl chloride	75-01-4	ND	0.5
o-Xylene	95-47-6	ND	0.5
p,m-Xylenes	--	ND	0.5

Surrogates

		Recovery (%)	QC Limits (%)
4-Bromofluorobenzene	460-00-4	97	74 - 121
Dibromofluoromethane	1868-53-7	96	80 - 120
1,2-Dichloroethane-d4	17060-07-0	94	70 - 121
Toluene-d8	2037-26-5	96	81 - 117

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

Results are reported on a wet-weight basis, as received.  
a Actual blank value; sample results have not been blank corrected.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9609403-27A	Date Received:	--
Sample Matrix/Media:	SOIL	Date Extracted:	09/29/96
Extraction Method:	EPA 3550	Date Analyzed:	09/30/96
Method Reference:	EPA 8015 (Modified)	Analyst:	CTS

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Total Extractable Hydrocarbons</u>			
TPH-Extractables	--	ND	1
TPH-Diesel	--	ND	1
TPH-Oil	--	ND	4
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
p-Terphenyl	92-94-4	100	50 - 150

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

Results are reported on a wet-weight basis, as received.

TPH-Extractables = Extractable hydrocarbons from C10 to C42 quantitated as diesel. Concentrations for other reported hydrocarbons are included in this value.

TPH-D = Extractable hydrocarbons, that appear to match the typical diesel pattern from C10 to C20 quantitated as diesel.

TPH-O = Extractable hydrocarbons, that appear to match the typical oil pattern from C20 to C42 quantitated as oil.



Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9609403-27C	Date Received:	--
Sample Matrix/Media:	SOIL	Date Prepared:	09/30/96
Preparation Method:	EPA 5030A	Date Analyzed:	09/30/96
Method Reference:	EPA 8260A	Analyst:	JP

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Volatile Organic Compounds</u>			
Acetone	67-64-1	ND	0.02
Benzene	71-43-2	ND	0.005
Bromobenzene	108-86-1	ND	0.005
Bromochloromethane	74-97-5	ND	0.005
Bromodichloromethane	75-27-4	ND	0.005
Bromoform	75-25-2	ND	0.005
Bromomethane	74-83-9	ND	0.005
2-Butanone	78-93-3	ND	0.02
n-Butylbenzene	104-51-8	ND	0.005
Carbon disulfide	75-15-0	ND	0.02
Carbon tetrachloride	56-23-5	ND	0.005
Chlorobenzene	108-90-7	ND	0.005
Chloroethane	75-00-3	ND	0.005
2-Chloroethylvinyl ether	110-75-8	ND	0.005
Chloroform	67-66-3	ND	0.005
Chloromethane	74-87-3	ND	0.005
2-Chlorotoluene	95-49-8	ND	0.005
4-Chlorotoluene	106-43-4	ND	0.005
Dibromochloromethane	124-48-1	ND	0.005
1,2-Dibromo-3-chloropropane	96-12-8	ND	0.02
1,2-Dibromoethane	106-93-4	ND	0.005
Dibromomethane	74-95-3	ND	0.005
1,2-Dichlorobenzene	95-50-1	ND	0.005
1,3-Dichlorobenzene	541-73-1	ND	0.005
1,4-Dichlorobenzene	106-46-7	ND	0.005
Dichlorodifluoromethane	75-71-8	ND	0.005
1,1-Dichloroethane	75-34-3	ND	0.005
1,2-Dichloroethane	107-06-2	ND	0.005
1,1-Dichloroethene	75-35-4	ND	0.005
cis-1,2-Dichloroethene	156-59-2	ND	0.005

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9609403-27C	Date Received:	--
Sample Matrix/Media:	SOIL	Date Prepared:	09/30/96
Preparation Method:	EPA 5030A	Date Analyzed:	09/30/96
Method Reference:	EPA 8260A	Analyst:	JP

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Volatile Organic Compounds (Continued)</u>			
trans-1,2-Dichloroethene	156-60-5	ND	0.005
1,2-Dichloropropane	78-87-5	ND	0.005
1,3-Dichloropropane	142-28-9	ND	0.005
2,2-Dichloropropane	594-20-7	ND	0.005
1,1-Dichloropropene	563-58-6	ND	0.005
cis-1,3-dichloropropene	10061-01-5	ND	0.005
trans-1,3-dichloropropene	10061-02-6	ND	0.005
Ethylbenzene	100-41-4	ND	0.005
Freon 113	76-13-1	ND	0.005
Hexachlorobutadiene	87-68-3	ND	0.005
2-Hexanone	591-78-6	ND	0.02
Isopropylbenzene	98-82-8	ND	0.005
p-Isopropyltoluene	99-87-6	ND	0.005
Methylene chloride	75-09-2	ND	0.005
4-Methyl-2-pentanone	108-10-1	ND	0.02
MTBE	1634-04-4	ND	0.005
Naphthalene	91-20-3	ND	0.005
n-Propylbenzene	103-65-1	ND	0.005
sec-Butylbenzene	135-98-8	ND	0.005
Styrene	100-42-5	ND	0.005
tert-Butylbenzene	98-06-6	ND	0.005
1,1,1,2-Tetrachloroethane	630-20-6	ND	0.005
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.005
Tetrachloroethene	127-18-4	ND	0.005
Toluene	108-88-3	ND	0.005
1,2,3-Trichlorobenzene	87-61-6	ND	0.005
1,2,4-Trichlorobenzene	120-82-1	ND	0.005
1,1,1-Trichloroethane	71-55-6	ND	0.005
1,1,2-Trichloroethane	79-00-5	ND	0.005
Trichloroethene	79-01-6	ND	0.005

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: METHOD BLANK	Date Sampled: --
Lab Number: 9609403-27C	Date Received: --
Sample Matrix/Media: SOIL	Date Prepared: 09/30/96
Preparation Method: EPA 5030A	Date Analyzed: 09/30/96
Method Reference: EPA 8260A	Analyst: JP

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
<u>Volatile Organic Compounds (Continued)</u>			
Trichlorofluoromethane	75-69-4	ND	0.005
1,2,3-Trichloropropane	96-18-4	ND	0.005
1,2,4-Trimethylbenzene	95-63-6	ND	0.005
1,3,5-Trimethylbenzene	108-67-8	ND	0.005
Vinyl acetate	108-05-4	ND	0.02
Vinyl chloride	75-01-4	ND	0.005
o-Xylene	95-47-6	ND	0.005
p,m-Xylenes	--	ND	0.005

<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
4-Bromofluorobenzene	460-00-4	101	74 - 121
Dibromofluoromethane	1868-53-7	101	80 - 120
1,2-Dichloroethane-d4	17060-07-0	97	70 - 121
Toluene-d8	2037-26-5	100	81 - 117

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

Results are reported on a wet-weight basis, as received.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-2-9.5'	Date Sampled:	09/26/96
Lab Number:	9609403-08A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Extracted:	09/28/96
Extraction Method:	EPA 3550	Date Analyzed:	09/30/96
Method Reference:	EPA 8270B	Analyst:	ASC

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
<u>Acid Extractables</u>			
4-Chloro-3-methylphenol	59-50-7	ND	10
2-Chlorophenol	95-57-8	ND	10
2,4-Dichlorophenol	120-83-2	ND	10
2,4-Dimethylphenol	105-67-9	ND	10
2,4-Dinitrophenol	51-28-5	ND	50
2-Methyl-4,6-dinitrophenol	534-52-1	ND	50
2-Methylphenol	95-48-7	ND	10
4-Methylphenol	106-44-5	ND	10
2-Nitrophenol	88-75-5	ND	10
4-Nitrophenol	100-02-7	ND	50
Pentachlorophenol	87-86-5	ND	50
Phenol	108-95-2	ND	10
2,4,5-Trichlorophenol	95-95-4	ND	10
2,4,6-Trichlorophenol	88-06-2	ND	10

Base/Neutral Extractables

Acenaphthene	83-32-9	20	10
Acenaphthylene	208-96-8	ND	10
Anthracene	120-12-7	40	10
Benzidine	92-87-5	ND	400
Benzoic acid	65-85-0	ND	40
Benzo(a)anthracene	56-55-3	80	10
Benzo(b)fluoranthene	205-99-2	50	10
Benzo(k)fluoranthene	207-08-9	40	10
Benzo(ghi)perylene	191-24-2	20	10
Benzo(a)pyrene	50-32-8	70	10
Benzyl alcohol	100-51-6	ND	20
Benzyl butyl phthalate	85-68-7	ND	10
Bis(2-chloroethoxy)methane	111-91-1	ND	10

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-2-9.5'	Date Sampled:	09/26/96
Lab Number:	9609403-08A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Extracted:	09/28/96
Extraction Method:	EPA 3550	Date Analyzed:	09/30/96
Method Reference:	EPA 8270B	Analyst:	ASC

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
<u>Base/Neutral Extractables (Continued)</u>			
Bis(2-chloroethyl)ether	111-44-4	ND	10
Bis(2-chloroisopropyl)ether	108-60-1	ND	10
Bis(2-ethylhexyl)phthalate	117-81-7	ND	100
4-Bromophenyl phenyl ether	101-55-3	ND	10
4-Chloroaniline	106-47-8	ND	50
2-Chloronaphthalene	91-58-7	ND	10
4-Chlorophenyl phenyl ether	7005-72-3	ND	10
Chrysene	218-01-9	80	10
Dibenzo(a,h)anthracene	53-70-3	ND	10
Dibenzofuran	132-64-9	ND	10
Di-n-butylphthalate	84-74-2	ND	10
1,2-Dichlorobenzene	95-50-1	ND	10
1,3-Dichlorobenzene	541-73-1	ND	10
1,4-Dichlorobenzene	106-46-7	ND	10
3,3'-Dichlorobenzidine	91-94-1	ND	300
Diethylphthalate	84-66-2	ND	10
Dimethylphthalate	131-11-3	ND	10
2,4-Dinitrotoluene	121-14-2	ND	10
2,6-Dinitrotoluene	606-20-2	ND	10
Di-n-octylphthalate	117-84-0	ND	10
Fluoranthene	206-44-0	160	10
Fluorene	86-73-7	20	10
Hexachlorobenzene	118-74-1	ND	10
Hexachlorobutadiene	87-68-3	ND	10
Hexachlorocyclopentadiene	77-47-4	ND	100
Hexachloroethane	67-72-1	ND	10
Indeno(1,2,3-cd)pyrene	193-39-5	20	10
Isophorone	78-59-1	ND	10
2-Methyl naphthalene	91-57-6	20	10
Naphthalene	91-20-3	30	10

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-2-9.5'	Date Sampled: 09/26/96
Lab Number: 9609403-08A	Date Received: 09/27/96
Sample Matrix/Media: SOIL	Date Extracted: 09/28/96
Extraction Method: EPA 3550	Date Analyzed: 09/30/96
Method Reference: EPA 8270B	Analyst: ASC

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
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Base/Neutral Extractables (Continued)

2-Nitroaniline	88-74-4	ND	50
3-Nitroaniline	99-09-2	ND	50
4-Nitroaniline	100-01-6	ND	50
Nitrobenzene	98-95-3	ND	10
N-Nitrosodiphenylamine	86-30-6	20	10
N-Nitrosodi-n-propylamine	621-64-7	ND	10
Phenanthrene	85-01-8	100	10
Pyrene	129-00-0	270	10
1,2,4-Trichlorobenzene	120-82-1	ND	10

<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
2-Fluorobiphenyl	321-60-8	D	30 - 115
2-Fluorophenol	367-12-4	D	25 - 121
Nitrobenzene-d5	4165-60-0	D	23 - 120
Phenol-d5	13127-88-3	D	24 - 113
Terphenyl-d14	98904-43-9	D	18 - 137
2,4,6-Tribromophenol	118-79-6	D	19 - 122

ND: Not detected at or above limit of detection

--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Note: Detection limits increased due to dilution necessary for quantitation.

D = Surrogate diluted out.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-4-5.5	Date Sampled:	09/27/96
Lab Number:	9609403-13A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Extracted:	09/28/96
Extraction Method:	EPA 3550	Date Analyzed:	09/30/96
Method Reference:	EPA 8270B	Analyst:	ASC

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
<u>Acid Extractables</u>			
4-Chloro-3-methylphenol	59-50-7	ND	0.2
2-Chlorophenol	95-57-8	ND	0.2
2,4-Dichlorophenol	120-83-2	ND	0.2
2,4-Dimethylphenol	105-67-9	ND	0.2
2,4-Dinitrophenol	51-28-5	ND	1
2-Methyl-4,6-dinitrophenol	534-52-1	ND	1
2-Methylphenol	95-48-7	ND	0.2
4-Methylphenol	106-44-5	ND	0.2
2-Nitrophenol	88-75-5	ND	0.2
4-Nitrophenol	100-02-7	ND	1
Pentachlorophenol	87-86-5	ND	1
Phenol	108-95-2	ND	0.2
2,4,5-Trichlorophenol	95-95-4	ND	0.2
2,4,6-Trichlorophenol	88-06-2	ND	0.2

Base/Neutral Extractables

Acenaphthene	83-32-9	0.6	0.2
Acenaphthylene	208-96-8	ND	0.2
Anthracene	120-12-7	1.6	0.2
Benzidine	92-87-5	ND	8
Benzoic acid	65-85-0	ND	0.8
Benzo(a)anthracene	56-55-3	2.9	0.2
Benzo(b)fluoranthene	205-99-2	2.5	0.2
Benzo(k)fluoranthene	207-08-9	1.5	0.2
Benzo(ghi)perylene	191-24-2	0.8	0.2
Benzo(a)pyrene	50-32-8	2.9	0.2
Benzyl alcohol	100-51-6	ND	0.4
Benzyl butyl phthalate	85-68-7	ND	0.2
Bis(2-chloroethoxy)methane	111-91-1	ND	0.2

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-4-5.5	Date Sampled:	09/27/96
Lab Number:	9609403-13A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Extracted:	09/28/96
Extraction Method:	EPA 3550	Date Analyzed:	09/30/96
Method Reference:	EPA 8270B	Analyst:	ASC

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
<u>Base/Neutral Extractables (Continued)</u>			
Bis(2-chloroethyl)ether	111-44-4	ND	0.2
Bis(2-chloroisopropyl)ether	108-60-1	ND	0.2
Bis(2-ethylhexyl)phthalate	117-81-7	ND	2
4-Bromophenyl phenyl ether	101-55-3	ND	0.2
4-Chloroaniline	106-47-8	ND	1
2-Chloronaphthalene	91-58-7	ND	0.2
4-Chlorophenyl phenyl ether	7005-72-3	ND	0.2
Chrysene	218-01-9	3.4	0.2
Dibenzo(a,h)anthracene	53-70-3	0.3	0.2
Dibenzofuran	132-64-9	0.4	0.2
Di-n-butylphthalate	84-74-2	ND	0.2
1,2-Dichlorobenzene	95-50-1	ND	0.2
1,3-Dichlorobenzene	541-73-1	ND	0.2
1,4-Dichlorobenzene	106-46-7	ND	0.2
3,3'-Dichlorobenzidine	91-94-1	ND	5
Diethylphthalate	84-66-2	ND	0.2
Dimethylphthalate	131-11-3	ND	0.2
2,4-Dinitrotoluene	121-14-2	ND	0.2
2,6-Dinitrotoluene	606-20-2	ND	0.2
Di-n-octylphthalate	117-84-0	ND	0.2
Fluoranthene	206-44-0	5.0	0.2
Fluorene	86-73-7	0.4	0.2
Hexachlorobenzene	118-74-1	ND	0.2
Hexachlorobutadiene	87-68-3	ND	0.2
Hexachlorocyclopentadiene	77-47-4	ND	2
Hexachloroethane	67-72-1	ND	0.2
Indeno(1,2,3-cd)pyrene	193-39-5	1.3	0.2
Isophorone	78-59-1	ND	0.2
2-Methyl naphthalene	91-57-6	0.8	0.2
Naphthalene	91-20-3	1.1	0.2



Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-4-5.5	Date Sampled: 09/27/96
Lab Number: 9609403-13A	Date Received: 09/27/96
Sample Matrix/Media: SOIL	Date Extracted: 09/28/96
Extraction Method: EPA 3550	Date Analyzed: 09/30/96
Method Reference: EPA 8270B	Analyst: ASC

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
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Base/Neutral Extractables (Continued)

2-Nitroaniline	88-74-4	ND	1
3-Nitroaniline	99-09-2	ND	1
4-Nitroaniline	100-01-6	ND	1
Nitrobenzene	98-95-3	ND	0.2
N-Nitrosodiphenylamine	86-30-6	ND	0.2
N-Nitrosodi-n-propylamine	621-64-7	ND	0.2
Phenanthrene	85-01-8	5	1
Pyrene	129-00-0	8	1
1,2,4-Trichlorobenzene	120-82-1	ND	0.2

Surrogates

		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
2-Fluorobiphenyl	321-60-8	80	30 - 115
2-Fluorophenol	367-12-4	58	25 - 121
Nitrobenzene-d5	4165-60-0	69	23 - 120
Phenol-d5	13127-88-3	70	24 - 113
Terphenyl-d14	98904-43-9	91	18 - 137
2,4,6-Tribromophenol	118-79-6	88	19 - 122

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

Results are reported on a wet-weight basis, as received.

Note: Detection limits increased due to dilution necessary for quantitation.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-4-7.5	Date Sampled:	09/27/96
Lab Number:	9609403-14A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Extracted:	09/28/96
Extraction Method:	EPA 3550	Date Analyzed:	09/30/96
Method Reference:	EPA 8270B	Analyst:	ASC

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
<u>Acid Extractables</u>			
4-Chloro-3-methylphenol	59-50-7	ND	0.2
2-Chlorophenol	95-57-8	ND	0.2
2,4-Dichlorophenol	120-83-2	ND	0.2
2,4-Dimethylphenol	105-67-9	ND	0.2
2,4-Dinitrophenol	51-28-5	ND	1
2-Methyl-4,6-dinitrophenol	534-52-1	ND	1
2-Methylphenol	95-48-7	ND	0.2
4-Methylphenol	106-44-5	ND	0.2
2-Nitrophenol	88-75-5	ND	0.2
4-Nitrophenol	100-02-7	ND	1
Pentachlorophenol	87-86-5	ND	1
Phenol	108-95-2	ND	0.2
2,4,5-Trichlorophenol	95-95-4	ND	0.2
2,4,6-Trichlorophenol	88-06-2	ND	0.2

Base/Neutral Extractables

Acenaphthene	83-32-9	ND	0.2
Acenaphthylene	208-96-8	ND	0.2
Anthracene	120-12-7	ND	0.2
Benzidine	92-87-5	ND	8
Benzoic acid	65-85-0	ND	0.8
Benzo(a)anthracene	56-55-3	ND	0.2
Benzo(b)fluoranthene	205-99-2	ND	0.2
Benzo(k)fluoranthene	207-08-9	ND	0.2
Benzo(ghi)perylene	191-24-2	ND	0.2
Benzo(a)pyrene	50-32-8	ND	0.2
Benzyl alcohol	100-51-6	ND	0.4
Benzyl butyl phthalate	85-68-7	ND	0.2
Bis(2-chloroethoxy)methane	111-91-1	ND	0.2

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-4-7.5	Date Sampled:	09/27/96
Lab Number:	9609403-14A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Extracted:	09/28/96
Extraction Method:	EPA 3550	Date Analyzed:	09/30/96
Method Reference:	EPA 8270B	Analyst:	ASC

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
<u>Base/Neutral Extractables (Continued)</u>			
Bis(2-chloroethyl)ether	111-44-4	ND	0.2
Bis(2-chloroisopropyl)ether	108-60-1	ND	0.2
Bis(2-ethylhexyl)phthalate	117-81-7	ND	2
4-Bromophenyl phenyl ether	101-55-3	ND	0.2
4-Chloroaniline	106-47-8	ND	1
2-Chloronaphthalene	91-58-7	ND	0.2
4-Chlorophenyl phenyl ether	7005-72-3	ND	0.2
Chrysene	218-01-9	ND	0.2
Dibenzo(a,h)anthracene	53-70-3	ND	0.2
Dibenzofuran	132-64-9	ND	0.2
Di-n-butylphthalate	84-74-2	ND	0.2
1,2-Dichlorobenzene	95-50-1	ND	0.2
1,3-Dichlorobenzene	541-73-1	ND	0.2
1,4-Dichlorobenzene	106-46-7	ND	0.2
3,3'-Dichlorobenzidine	91-94-1	ND	5
Diethylphthalate	84-66-2	ND	0.2
Dimethylphthalate	131-11-3	ND	0.2
2,4-Dinitrotoluene	121-14-2	ND	0.2
2,6-Dinitrotoluene	606-20-2	ND	0.2
Di-n-octylphthalate	117-84-0	ND	0.2
Fluoranthene	206-44-0	ND	0.2
Fluorene	86-73-7	ND	0.2
Hexachlorobenzene	118-74-1	ND	0.2
Hexachlorobutadiene	87-68-3	ND	0.2
Hexachlorocyclopentadiene	77-47-4	ND	2
Hexachloroethane	67-72-1	ND	0.2
Indeno(1,2,3-cd)pyrene	193-39-5	ND	0.2
Isophorone	78-59-1	ND	0.2
2-Methyl naphthalene	91-57-6	ND	0.2
Naphthalene	91-20-3	0.2	0.2

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-4-7.5	Date Sampled: 09/27/96
Lab Number: 9609403-14A	Date Received: 09/27/96
Sample Matrix/Media: SOIL	Date Extracted: 09/28/96
Extraction Method: EPA 3550	Date Analyzed: 09/30/96
Method Reference: EPA 8270B	Analyst: ASC

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
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Base/Neutral Extractables (Continued)

2-Nitroaniline	88-74-4	ND	1
3-Nitroaniline	99-09-2	ND	1
4-Nitroaniline	100-01-6	ND	1
Nitrobenzene	98-95-3	ND	0.2
N-Nitrosodiphenylamine	86-30-6	ND	0.2
N-Nitrosodi-n-propylamine	621-64-7	ND	0.2
Phenanthrene	85-01-8	ND	0.2
Pyrene	129-00-0	ND	0.2
1,2,4-Trichlorobenzene	120-82-1	ND	0.2

<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
2-Fluorobiphenyl	321-60-8	68	30 - 115
2-Fluorophenol	367-12-4	51	25 - 121
Nitrobenzene-d5	4165-60-0	67	23 - 120
Phenol-d5	13127-88-3	49	24 - 113
Terphenyl-d14	98904-43-9	97	18 - 137
2,4,6-Tribromophenol	118-79-6	67	19 - 122

ND: Not detected at or above limit of detection

--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-4-11.5	Date Sampled:	09/27/96
Lab Number:	9609403-15A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Extracted:	09/28/96
Extraction Method:	EPA 3550	Date Analyzed:	09/30/96
Method Reference:	EPA 8270B	Analyst:	ASC

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
<u>Acid Extractables</u>			
4-Chloro-3-methylphenol	59-50-7	ND	4
2-Chlorophenol	95-57-8	ND	4
2,4-Dichlorophenol	120-83-2	ND	4
2,4-Dimethylphenol	105-67-9	6	4
2,4-Dinitrophenol	51-28-5	ND	20
2-Methyl-4,6-dinitrophenol	534-52-1	ND	20
2-Methylphenol	95-48-7	7	4
4-Methylphenol	106-44-5	11	4
2-Nitrophenol	88-75-5	ND	4
4-Nitrophenol	100-02-7	ND	20
Pentachlorophenol	87-86-5	ND	20
Phenol	108-95-2	ND	4
2,4,5-Trichlorophenol	95-95-4	ND	4
2,4,6-Trichlorophenol	88-06-2	ND	4

Base/Neutral Extractables

Acenaphthene	83-32-9	200	4
Acenaphthylene	208-96-8	58	4
Anthracene	120-12-7	2400	4
Benzidine	92-87-5	ND	200
Benzoic acid	65-85-0	ND	20
Benzo(a)anthracene	56-55-3	150	4
Benzo(b)fluoranthene	205-99-2	110	4
Benzo(k)fluoranthene	207-08-9	130	4
Benzo(ghi)perylene	191-24-2	39	4
Benzo(a)pyrene	50-32-8	110	4
Benzyl alcohol	100-51-6	ND	8
Benzyl butyl phthalate	85-68-7	ND	4
Bis(2-chloroethoxy)methane	111-91-1	ND	4

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-4-11.5	Date Sampled:	09/27/96
Lab Number:	9609403-15A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Extracted:	09/28/96
Extraction Method:	EPA 3550	Date Analyzed:	09/30/96
Method Reference:	EPA 8270B	Analyst:	ASC

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
<u>Base/Neutral Extractables (Continued)</u>			
Bis(2-chloroethyl)ether	111-44-4	ND	4
Bis(2-chloroisopropyl)ether	108-60-1	ND	4
Bis(2-ethylhexyl)phthalate	117-81-7	ND	40
4-Bromophenyl phenyl ether	101-55-3	NE	4
4-Chloroaniline	106-47-8	ND	20
2-Chloronaphthalene	91-58-7	ND	4
4-Chlorophenyl phenyl ether	7005-72-3	ND	4
Chrysene	218-01-9	240	4
Dibenzo(a,h)anthracene	53-70-3	15	4
Dibenzofuran	132-64-9	160	4
Di-n-butylphthalate	84-74-2	ND	4
1,2-Dichlorobenzene	95-50-1	ND	4
1,3-Dichlorobenzene	541-73-1	ND	4
1,4-Dichlorobenzene	106-46-7	ND	4
3,3'-Dichlorobenzidine	91-94-1	ND	100
Diethylphthalate	84-66-2	ND	4
Dimethylphthalate	131-11-3	ND	4
2,4-Dinitrotoluene	121-14-2	ND	4
2,6-Dinitrotoluene	606-20-2	ND	4
Di-n-octylphthalate	117-84-0	ND	4
Fluoranthene	206-44-0	540	4
Fluorene	86-73-7	350	4
Hexachlorobenzene	118-74-1	ND	4
Hexachlorobutadiene	87-68-3	ND	4
Hexachlorocyclopentadiene	77-47-4	ND	40
Hexachloroethane	67-72-1	ND	4
Indeno(1,2,3-cd)pyrene	193-39-5	47	4
Isophorone	78-59-1	ND	4
2-Methyl naphthalene	91-57-6	470	4
Naphthalene	91-20-3	1200	4

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-4-11.5	Date Sampled: 09/27/96
Lab Number: 9609403-15A	Date Received: 09/27/96
Sample Matrix/Media: SOIL	Date Extracted: 09/28/96
Extraction Method: EPA 3550	Date Analyzed: 09/30/96
Method Reference: EPA 8270B	Analyst: ASC

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
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Base/Neutral Extractables (Continued)

2-Nitroaniline	88-74-4	ND	20
3-Nitroaniline	99-09-2	ND	20
4-Nitroaniline	100-01-6	ND	20
Nitrobenzene	98-95-3	ND	4
N-Nitrosodiphenylamine	86-30-6	ND	4
N-Nitrosodi-n-propylamine	621-64-7	ND	4
Phenanthrene	85-01-8	1300	4
Pyrene	129-00-0	600	4
1,2,4-Trichlorobenzene	120-82-1	ND	4

<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
2-Fluorobiphenyl	321-60-8	D	30 - 115
2-Fluorophenol	367-12-4	D	25 - 121
Nitrobenzene-d5	4165-60-0	D	23 - 120
Phenol-d5	13127-88-3	D	24 - 113
Terphenyl-d14	98904-43-9	D	18 - 137
2,4,6-Tribromophenol	118-79-6	D	19 - 122

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

Results are reported on a wet-weight basis, as received.

Note: Detection limits increased due to dilution necessary for quantitation.

D = Surrogate diluted out.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-4-12.5	Date Sampled:	09/27/96
Lab Number:	9609403-16A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Extracted:	09/28/96
Extraction Method:	EPA 3550	Date Analyzed:	09/30/96
Method Reference:	EPA 8270B	Analyst:	ASC

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
<u>Acid Extractables</u>			
4-Chloro-3-methylphenol	59-50-7	ND	1
2-Chlorophenol	95-57-8	ND	1
2,4-Dichlorophenol	120-83-2	ND	1
2,4-Dimethylphenol	105-67-9	ND	1
2,4-Dinitrophenol	51-28-5	ND	6
2-Methyl-4,6-dinitrophenol	534-52-1	ND	6
2-Methylphenol	95-48-7	ND	1
4-Methylphenol	106-44-5	ND	1
2-Nitrophenol	88-75-5	ND	1
4-Nitrophenol	100-02-7	ND	6
Pentachlorophenol	87-86-5	ND	6
Phenol	108-95-2	ND	1
2,4,5-Trichlorophenol	95-95-4	ND	1
2,4,6-Trichlorophenol	88-06-2	ND	1

Base/Neutral Extractables

Acenaphthene	83-32-9	210	1
Acenaphthylene	208-96-8	6	1
Anthracene	120-12-7	70	1
Benzidine	92-87-5	ND	50
Benzoic acid	65-85-0	ND	5
Benzo(a)anthracene	56-55-3	40	1
Benzo(b)fluoranthene	205-99-2	19	1
Benzo(k)fluoranthene	207-08-9	7	1
Benzo(ghi)perylene	191-24-2	2	1
Benzo(a)pyrene	50-32-8	15	1
Benzyl alcohol	100-51-6	ND	2
Benzyl butyl phthalate	85-68-7	ND	1
Bis(2-chloroethoxy)methane	111-91-1	ND	1



Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-4-12.5	Date Sampled:	09/27/96
Lab Number:	9609403-16A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Extracted:	09/28/96
Extraction Method:	EPA 3550	Date Analyzed:	09/30/96
Method Reference:	EPA 8270B	Analyst:	ASC

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
<u>Base/Neutral Extractables (Continued)</u>			
Bis(2-chloroethyl) ether	111-44-4	ND	1
Bis(2-chloroisopropyl) ether	108-60-1	ND	1
Bis(2-ethylhexyl) phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	1
4-Chloroaniline	106-47-8	ND	6
2-Chloronaphthalene	91-58-7	ND	1
4-Chlorophenyl phenyl ether	7005-72-3	ND	1
Chrysene	218-01-9	50	1
Dibenzo(a,h) anthracene	53-70-3	1	1
Dibenzofuran	132-64-9	110	1
Di-n-butylphthalate	84-74-2	ND	1
1,2-Dichlorobenzene	95-50-1	ND	1
1,3-Dichlorobenzene	541-73-1	ND	1
1,4-Dichlorobenzene	106-46-7	ND	1
3,3'-Dichlorobenzidine	91-94-1	ND	30
Diethylphthalate	84-66-2	ND	1
Dimethylphthalate	131-11-3	ND	1
2,4-Dinitrotoluene	121-14-2	ND	1
2,6-Dinitrotoluene	606-20-2	ND	1
Di-n-octylphthalate	117-84-0	ND	1
Fluoranthene	206-44-0	170	1
Fluorene	86-73-7	140	1
Hexachlorobenzene	118-74-1	ND	1
Hexachlorobutadiene	87-68-3	ND	1
Hexachlorocyclopentadiene	77-47-4	ND	10
Hexachloroethane	67-72-1	ND	1
Indeno(1,2,3-cd) pyrene	193-39-5	4	1
Isophorone	78-59-1	ND	1
2-Methyl naphthalene	91-57-6	290	1
Naphthalene	91-20-3	320	1

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-4-12.5	Date Sampled: 09/27/96
Lab Number: 9609403-16A	Date Received: 09/27/96
Sample Matrix/Media: SOIL	Date Extracted: 09/28/96
Extraction Method: EPA 3550	Date Analyzed: 09/30/96
Method Reference: EPA 8270B	Analyst: ASC

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
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Base/Neutral Extractables (Continued)

2-Nitroaniline	88-74-4	ND	6
3-Nitroaniline	99-09-2	ND	6
4-Nitroaniline	100-01-6	ND	6
Nitrobenzene	98-95-3	ND	1
N-Nitrosodiphenylamine	86-30-6	ND	1
N-Nitrosodi-n-propylamine	621-64-7	ND	1
Phenanthrene	85-01-8	460	1
Pyrene	129-00-0	160	1
1,2,4-Trichlorobenzene	120-82-1	ND	1

<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
2-Fluorobiphenyl	321-60-8	56	30 - 115
2-Fluorophenol	367-12-4	57	25 - 121
Nitrobenzene-d5	4165-60-0	50	23 - 120
Phenol-d5	13127-88-3	75	24 - 113
Terphenyl-d14	98904-43-9	78	18 - 137
2,4,6-Tribromophenol	118-79-6	77	19 - 122

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

Results are reported on a wet-weight basis, as received.

Note: Detection limits increased due to dilution necessary for quantitation.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-5-7.5	Date Sampled:	09/27/96
Lab Number:	9609403-17A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Extracted:	09/28/96
Extraction Method:	EPA 3550	Date Analyzed:	09/30/96
Method Reference:	EPA 8270B	Analyst:	ASC

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
<u>Acid Extractables</u>			
4-Chloro-3-methylphenol	59-50-7	ND	0.2
2-Chlorophenol	95-57-8	ND	0.2
2,4-Dichlorophenol	120-83-2	ND	0.2
2,4-Dimethylphenol	105-67-9	13	0.2
2,4-Dinitrophenol	51-28-5	ND	1
2-Methyl-4,6-dinitrophenol	534-52-1	ND	1
2-Methylphenol	95-48-7	3.0	0.2
4-Methylphenol	106-44-5	0.4	0.2
2-Nitrophenol	88-75-5	ND	0.2
4-Nitrophenol	100-02-7	ND	1
Pentachlorophenol	87-86-5	ND	1
Phenol	108-95-2	ND	0.2
2,4,5-Trichlorophenol	95-95-4	ND	0.2
2,4,6-Trichlorophenol	88-06-2	ND	0.2

<u>Base/Neutral Extractables</u>			
Acenaphthene	83-32-9	ND	0.2
Acenaphthylene	208-96-8	ND	0.2
Anthracene	120-12-7	ND	0.2
Benzidine	92-87-5	ND	8
Benzoic acid	65-85-0	ND	4
Benzo(a)anthracene	56-55-3	ND	0.2
Benzo(b)fluoranthene	205-99-2	ND	0.2
Benzo(k)fluoranthene	207-08-9	ND	0.2
Benzo(ghi)perylene	191-24-2	ND	0.2
Benzo(a)pyrene	50-32-8	ND	0.2
Benzyl alcohol	100-51-6	ND	0.4
Benzyl butyl phthalate	85-68-7	ND	0.2
Bis(2-chloroethoxy)methane	111-91-1	ND	0.2

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-5-7.5	Date Sampled: 09/27/96
Lab Number: 9609403-17A	Date Received: 09/27/96
Sample Matrix/Media: SOIL	Date Extracted: 09/28/96
Extraction Method: EPA 3550	Date Analyzed: 09/30/96
Method Reference: EPA 8270B	Analyst: ASC

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
<u>Base/Neutral Extractables (Continued)</u>			
Bis(2-chloroethyl)ether	111-44-4	ND	0.2
Bis(2-chloroisopropyl)ether	108-60-1	ND	0.2
Bis(2-ethylhexyl)phthalate	117-81-7	ND	2
4-Bromophenyl phenyl ether	101-55-3	ND	0.2
4-Chloroaniline	106-47-8	ND	1
2-Chloronaphthalene	91-58-7	ND	0.2
4-Chlorophenyl phenyl ether	7005-72-3	ND	0.2
Chrysene	218-01-9	ND	0.2
Dibenzo(a,h)anthracene	53-70-3	ND	0.2
Dibenzofuran	132-64-9	ND	0.2
Di-n-butylphthalate	84-74-2	ND	0.2
1,2-Dichlorobenzene	95-50-1	ND	0.2
1,3-Dichlorobenzene	541-73-1	ND	0.2
1,4-Dichlorobenzene	106-46-7	ND	0.2
3,3'-Dichlorobenzidine	91-94-1	ND	5
Diethylphthalate	84-66-2	ND	0.2
Dimethylphthalate	131-11-3	ND	0.2
2,4-Dinitrotoluene	121-14-2	ND	0.2
2,6-Dinitrotoluene	606-20-2	ND	0.2
Di-n-octylphthalate	117-84-0	ND	0.2
Fluoranthene	206-44-0	ND	0.2
Fluorene	86-73-7	ND	0.2
Hexachlorobenzene	118-74-1	ND	0.2
Hexachlorobutadiene	87-68-3	ND	0.2
Hexachlorocyclopentadiene	77-47-4	ND	2
Hexachloroethane	67-72-1	ND	0.2
Indeno(1,2,3-cd)pyrene	193-39-5	ND	0.2
Isophorone	78-59-1	ND	0.2
2-Methyl naphthalene	91-57-6	ND	0.2
Naphthalene	91-20-3	ND	0.2

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-5-7.5	Date Sampled:	09/27/96
Lab Number:	9609403-17A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Extracted:	09/28/96
Extraction Method:	EPA 3550	Date Analyzed:	09/30/96
Method Reference:	EPA 8270B	Analyst:	ASC

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
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Base/Neutral Extractables (Continued)

2-Nitroaniline	88-74-4	ND	1
3-Nitroaniline	99-09-2	ND	1
4-Nitroaniline	100-01-6	ND	1
Nitrobenzene	98-95-3	ND	0.2
N-Nitrosodiphenylamine	86-30-6	ND	0.2
N-Nitrosodi-n-propylamine	621-64-7	ND	0.2
Phenanthrene	85-01-8	ND	0.2
Pyrene	129-00-0	ND	0.2
1,2,4-Trichlorobenzene	120-82-1	ND	0.2

<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
2-Fluorobiphenyl	321-60-8	79	30 - 115
2-Fluorophenol	367-12-4	76	25 - 121
Nitrobenzene-d5	4165-60-0	81	23 - 120
Phenol-d5	13127-88-3	82	24 - 113
Terphenyl-d14	98904-43-9	94	18 - 137
2,4,6-Tribromophenol	118-79-6	86	19 - 122

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

Results are reported on a wet-weight basis, as received.

Note: Detection limits increased due to dilution necessary for quantitation.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-5-11	Date Sampled: 09/27/96
Lab Number: 9609403-18A	Date Received: 09/27/96
Sample Matrix/Media: SOIL	Date Extracted: 09/28/96
Extraction Method: EPA 3550	Date Analyzed: 09/30/96
Method Reference: EPA 8270B	Analyst: ASC

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
<u>Acid Extractables</u>			
4-Chloro-3-methylphenol	59-50-7	ND	1
2-Chlorophenol	95-57-8	ND	1
2,4-Dichlorophenol	120-83-2	ND	1
2,4-Dimethylphenol	105-67-9	ND	1
2,4-Dinitrophenol	51-28-5	ND	6
2-Methyl-4,6-dinitrophenol	534-52-1	ND	6
2-Methylphenol	95-48-7	ND	1
4-Methylphenol	106-44-5	ND	1
2-Nitrophenol	88-75-5	ND	1
4-Nitrophenol	100-02-7	ND	6
Pentachlorophenol	87-86-5	ND	6
Phenol	108-95-2	5	1
2,4,5-Trichlorophenol	95-95-4	ND	1
2,4,6-Trichlorophenol	88-06-2	ND	1

Base/Neutral Extractables

Acenaphthene	83-32-9	310	1
Acenaphthylene	208-96-8	6	1
Anthracene	120-12-7	190	1
Benzidine	92-87-5	ND	50
Benzoic acid	65-85-0	ND	5
Benzo(a)anthracene	56-55-3	60	1
Benzo(b)fluoranthene	205-99-2	28	1
Benzo(k)fluoranthene	207-08-9	18	1
Benzo(ghi)perylene	191-24-2	6	1
Benzo(a)pyrene	50-32-8	26	1
Benzyl alcohol	100-51-6	ND	2
Benzyl butyl phthalate	85-68-7	ND	1
Bis(2-chloroethoxy)methane	111-91-1	ND	1

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	CW-5-11	Date Sampled:	09/27/96
Lab Number:	9609403-18A	Date Received:	09/27/96
Sample Matrix/Media:	SOIL	Date Extracted:	09/28/96
Extraction Method:	EPA 3550	Date Analyzed:	09/30/96
Method Reference:	EPA 8270B	Analyst:	ASC

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
<u>Base/Neutral Extractables (Continued)</u>			
Bis(2-chloroethyl)ether	111-44-4	ND	1
Bis(2-chloroisopropyl)ether	108-60-1	ND	1
Bis(2-ethylhexyl)phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	1
4-Chloroaniline	106-47-8	ND	6
2-Chloronaphthalene	91-58-7	ND	1
4-Chlorophenyl phenyl ether	7005-72-3	ND	1
Chrysene	218-01-9	90	1
Dibenzo(a,h)anthracene	53-70-3	11	1
Dibenzofuran	132-64-9	140	1
Di-n-butylphthalate	84-74-2	ND	1
1,2-Dichlorobenzene	95-50-1	ND	1
1,3-Dichlorobenzene	541-73-1	ND	1
1,4-Dichlorobenzene	106-46-7	ND	1
3,3'-Dichlorobenzidine	91-94-1	ND	30
Diethylphthalate	84-66-2	ND	1
Dimethylphthalate	131-11-3	ND	1
2,4-Dinitrotoluene	121-14-2	ND	1
2,6-Dinitrotoluene	606-20-2	ND	1
Di-n-octylphthalate	117-84-0	ND	1
Fluoranthene	206-44-0	250	1
Fluorene	86-73-7	230	1
Hexachlorobenzene	118-74-1	ND	1
Hexachlorobutadiene	87-68-3	ND	1
Hexachlorocyclopentadiene	77-47-4	ND	10
Hexachloroethane	67-72-1	ND	1
Indeno(1,2,3-cd)pyrene	193-39-5	8	1
Isophorone	78-59-1	ND	1
2-Methyl naphthalene	91-57-6	250	1
Naphthalene	91-20-3	470	1

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-5-11	Date Sampled: 09/27/96
Lab Number: 9609403-18A	Date Received: 09/27/96
Sample Matrix/Media: SOIL	Date Extracted: 09/28/96
Extraction Method: EPA 3550	Date Analyzed: 09/30/96
Method Reference: EPA 8270B	Analyst: ASC

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
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Base/Neutral Extractables (Continued)

2-Nitroaniline	88-74-4	ND	6
3-Nitroaniline	99-09-2	ND	6
4-Nitroaniline	100-01-6	ND	6
Nitrobenzene	98-95-3	ND	1
N-Nitrosodiphenylamine	86-30-6	ND	1
N-Nitrosodi-n-propylamine	621-64-7	ND	1
Phenanthrene	85-01-8	690	1
Pyrene	129-00-0	280	1
1,2,4-Trichlorobenzene	120-82-1	ND	1

<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
2-Fluorobiphenyl	321-60-8	54	30 - 115
2-Fluorophenol	367-12-4	56	25 - 121
Nitrobenzene-d5	4165-60-0	51	23 - 120
Phenol-d5	13127-88-3	69	24 - 113
Terphenyl-d14	98904-43-9	85	18 - 137
2,4,6-Tribromophenol	118-79-6	64	19 - 122

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

Results are reported on a wet-weight basis, as received.

Note: Detection limits increased due to dilution necessary for quantitation.



Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: METHOD BLANK	Date Sampled: --
Lab Number: 9609403-27A	Date Received: --
Sample Matrix/Media: SOIL	Date Extracted: 09/28/96
Extraction Method: EPA 3550	Date Analyzed: 09/30/96
Method Reference: EPA 8270B	Analyst: ASC

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
<u>Acid Extractables</u>			
4-Chloro-3-methylphenol	59-50-7	ND	0.2
2-Chlorophenol	95-57-8	ND	0.2
2,4-Dichlorophenol	120-83-2	ND	0.2
2,4-Dimethylphenol	105-67-9	ND	0.2
2,4-Dinitrophenol	51-28-5	ND	1
2-Methyl-4,6-dinitrophenol	534-52-1	ND	1
2-Methylphenol	95-48-7	ND	0.2
4-Methylphenol	106-44-5	ND	0.2
2-Nitrophenol	88-75-5	ND	0.2
4-Nitrophenol	100-02-7	ND	1
Pentachlorophenol	87-86-5	ND	1
Phenol	108-95-2	ND	0.2
2,4,5-Trichlorophenol	95-95-4	ND	0.2
2,4,6-Trichlorophenol	88-06-2	ND	0.2

Base/Neutral Extractables

Acenaphthene	83-32-9	ND	0.2
Acenaphthylene	208-96-8	ND	0.2
Anthracene	120-12-7	ND	0.2
Benzidine	92-87-5	ND	8
Benzoic acid	65-85-0	ND	0.8
Benzo(a)anthracene	56-55-3	ND	0.2
Benzo(b)fluoranthene	205-99-2	ND	0.2
Benzo(k)fluoranthene	207-08-9	ND	0.2
Benzo(ghi)perylene	191-24-2	ND	0.2
Benzo(a)pyrene	50-32-8	ND	0.2
Benzyl alcohol	100-51-6	ND	0.4
Benzyl butyl phthalate	85-68-7	ND	0.2
Bis(2-chloroethoxy)methane	111-91-1	ND	0.2

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9609403-27A	Date Received:	--
Sample Matrix/Media:	SOIL	Date Extracted:	09/28/96
Extraction Method:	EPA 3550	Date Analyzed:	09/30/96
Method Reference:	EPA 8270B	Analyst:	ASC

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
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Base/Neutral Extractables (Continued)

Bis(2-chloroethyl)ether	111-44-4	ND	0.2
Bis(2-chloroisopropyl)ether	108-60-1	ND	0.2
Bis(2-ethylhexyl)phthalate	117-81-7	ND	2
4-Bromophenyl phenyl ether	101-55-3	ND	0.2
4-Chloroaniline	106-47-8	ND	1
2-Chloronaphthalene	91-58-7	ND	0.2
4-Chlorophenyl phenyl ether	7005-72-3	ND	0.2
Chrysene	218-01-9	ND	0.2
Dibenzo(a,h)anthracene	53-70-3	ND	0.2
Dibenzofuran	132-64-9	ND	0.2
Di-n-butylphthalate	84-74-2	ND	0.2
1,2-Dichlorobenzene	95-50-1	ND	0.2
1,3-Dichlorobenzene	541-73-1	ND	0.2
1,4-Dichlorobenzene	106-46-7	ND	0.2
3,3'-Dichlorobenzidine	91-94-1	ND	5
Diethylphthalate	84-66-2	ND	0.2
Dimethylphthalate	131-11-3	ND	0.2
2,4-Dinitrotoluene	121-14-2	ND	0.2
2,6-Dinitrotoluene	606-20-2	ND	0.2
Di-n-octylphthalate	117-84-0	ND	0.2
Fluoranthene	206-44-0	ND	0.2
Fluorene	86-73-7	ND	0.2
Hexachlorobenzene	118-74-1	ND	0.2
Hexachlorobutadiene	87-68-3	ND	0.2
Hexachlorocyclopentadiene	77-47-4	ND	2
Hexachloroethane	67-72-1	ND	0.2
Indeno(1,2,3-cd)pyrene	193-39-5	ND	0.2
Isophorone	78-59-1	ND	0.2
2-Methyl naphthalene	91-57-6	ND	0.2
Naphthalene	91-20-3	ND	0.2

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: METHOD BLANK	Date Sampled: --
Lab Number: 9609403-27A	Date Received: --
Sample Matrix/Media: SOIL	Date Extracted: 09/28/96
Extraction Method: EPA 3550	Date Analyzed: 09/30/96
Method Reference: EPA 8270B	Analyst: ASC

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
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Base/Neutral Extractables (Continued)

2-Nitroaniline	88-74-4	ND	1
3-Nitroaniline	99-09-2	ND	1
4-Nitroaniline	100-01-6	ND	1
Nitrobenzene	98-95-3	ND	0.2
N-Nitrosodiphenylamine	86-30-6	ND	0.2
N-Nitrosodi-n-propylamine	621-64-7	ND	0.2
Phenanthrene	85-01-8	ND	0.2
Pyrene	129-00-0	ND	0.2
1,2,4-Trichlorobenzene	120-82-1	ND	0.2

Surrogates		Recovery (%)	OC Limits (%)
2-Fluorobiphenyl	321-60-8	62	30 - 115
2-Fluorophenol	367-12-4	53	25 - 121
Nitrobenzene-d5	4165-60-0	64	23 - 120
Phenol-d5	13127-88-3	64	24 - 113
Terphenyl-d14	98904-43-9	102	18 - 137
2,4,6-Tribromophenol	118-79-6	67	19 - 122

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

Results are reported on a wet-weight basis, as received.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-5 @ 12	Date Sampled: 09/27/96
Lab Number: 9609403-26A	Date Received: 09/27/96
Sample Matrix/Media: WATER	Date Prepared: 09/28/96
Preparation Method: EPA 5030	Date Analyzed: 09/28/96
Method Reference: EPA 8015/8020	Analyst: NAN

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>BTEX/Gasoline</u>			
Benzene	71-43-2	510	0.4
Ethylbenzene	100-41-4	290	0.3
Toluene	108-88-3	650	0.3
o-Xylene	95-47-6	340	0.4
p,m-Xylenes	--	500	0.4
Gasoline	--	78000	50
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
a,a,a-Trifluorotoluene	98-08-8	104	50 - 150

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

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-4	Date Sampled: 09/27/96
Lab Number: 9609403-24A	Date Received: 09/27/96
Sample Matrix/Media: WATER	Date Prepared: 09/28/96
Preparation Method: EPA 5030	Date Analyzed: 09/28/96
Method Reference: EPA 8015/8020	Analyst: NAN

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>BTEX/Gasoline</u>			
Benzene	71-43-2	100	0.4
Ethylbenzene	100-41-4	430	0.3
Toluene	108-88-3	230	0.3
o-Xylene	95-47-6	360	0.4
p,m-Xylenes	--	710	0.4
Gasoline	--	34000	50
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
a,a,a-Trifluorotoluene	98-08-8	100	50 - 150

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

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9609403-27B	Date Received:	--
Sample Matrix/Media:	WATER	Date Prepared:	09/28/96
Preparation Method:	EPA 5030	Date Analyzed:	09/28/96
Method Reference:	EPA 8015/8020	Analyst:	NAN

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>BTEX/Gasoline</u>			
Benzene	71-43-2	ND	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	ND	0.3
o-Xylene	95-47-6	ND	0.4
p,m-Xylenes	--	ND	0.4
Gasoline	--	ND	50
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
a,a,a-Trifluorotoluene	98-08-8	103	50 - 150

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

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-1-6.5'  
Lab Number: 9609403-01  
Sample Matrix/Media: SOIL

Date Sampled: 09/26/96  
Date Received: 09/27/96

Analyte	Concentration	Method		Date Prepared	Date Analyzed	Prep Method	Method Reference
		Detection Limit	Units				
Antimony	320	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Arsenic	890	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Barium	240	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Beryllium	0.1	0.1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cadmium	200	0.4	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Chromium	19	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cobalt	45	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Copper	5400	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Lead	23000	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Mercury	<0.1	0.1	mg/kg	09/28/96	09/28/96	EPA 7471A	EPA 7471A
Molybdenum	5	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Nickel	19	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Selenium	25	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Silver	63	0.5	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Sulfate	910	20	mg/kg	--	09/30/96	--	EPA 9036
Thallium	1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Vanadium	55	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Zinc	37000	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
pH	5.7	--	S.U.	--	09/30/96	--	EPA 9045C

ND: Not detected at or above limit of detection

--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-1-8'  
Lab Number: 9609403-02  
Sample Matrix/Media: SOIL

Date Sampled: 09/26/96  
Date Received: 09/27/96

Analyte	Concentration	Method		Date Prepared	Date Analyzed	Prep Method	Method Reference
		Detection Limit	Units				
Antimony	19	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Arsenic	97	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Barium	800	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Beryllium	0.4	0.1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cadmium	200	0.4	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Chromium	5	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cobalt	43	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Copper	5500	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Lead	4000	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Mercury	<0.1	0.1	mg/kg	09/28/96	09/28/96	EPA 7471A	EPA 7471A
Molybdenum	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Nickel	44	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Selenium	2	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Silver	17	0.5	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Sulfate	220	20	mg/kg	--	09/30/96	--	EPA 9036
Thallium	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Vanadium	220	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Zinc	65000	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
pH	5.9	--	S.U.	--	09/30/96	--	EPA 9045C

ND: Not detected at or above limit of detection

--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.



Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-1-9.0'  
Lab Number: 9609403-03  
Sample Matrix/Media: SOIL

Date Sampled: 09/26/96  
Date Received: 09/27/96

Analyte	Concentration	Method Detection Limit	Units	Date Prepared	Date Analyzed	Prep Method	Method Reference
Antimony	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Arsenic	31	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Barium	110000	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Beryllium	1.1	0.1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cadmium	2.9	0.4	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Chromium	17	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cobalt	79	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Copper	100	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Lead	54	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Mercury	<0.1	0.1	mg/kg	09/28/96	09/28/96	EPA 7471A	EPA 7471A
Molybdenum	9	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Nickel	420	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Selenium	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Silver	<0.5	0.5	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Sulfate	<20	20	mg/kg	--	09/30/96	--	EPA 9036
Thallium	2	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Vanadium	1000	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Zinc	1200	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
pH	11.0	--	S.U.	--	09/30/96	--	EPA 9045C

ND: Not detected at or above limit of detection

--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-1-11'  
Lab Number: 9609403-04  
Sample Matrix/Media: SOIL

Date Sampled: 09/26/96  
Date Received: 09/27/96

Analyte	Concentration	Method Detection Limit	Units	Date Prepared	Date Analyzed	Prep Method	Method Reference
Antimony	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Arsenic	2	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Barium	540	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Beryllium	0.4	0.1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cadmium	0.8	0.4	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Chromium	33	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cobalt	7	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Copper	24	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Lead	17	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Mercury	<0.1	0.1	mg/kg	09/28/96	09/28/96	EPA 7471A	EPA 7471A
Molybdenum	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Nickel	25	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Selenium	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Silver	<0.5	0.5	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Sulfate	230	20	mg/kg	--	09/30/96	--	EPA 9036
Thallium	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Vanadium	30	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Zinc	78	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
pH	9.3	--	S.U.	--	09/30/96	--	EPA 9045C

ND: Not detected at or above limit of detection

--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-2-3.5 \*GRIND\*  
Lab Number: 9609403-05  
Sample Matrix/Media: SOIL

Date Sampled: 09/26/96  
Date Received: 09/27/96

Analyte	Concentration	Method		Date Prepared	Date Analyzed	Prep Method	Method Reference
		Detection Limit	Units				
Antimony	51	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Arsenic	210	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Barium	2000	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Beryllium	0.3	0.1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cadmium	29	0.4	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Chromium	49	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cobalt	15	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Copper	420	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Lead	1700	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Mercury	<0.1	0.1	mg/kg	09/28/96	09/28/96	EPA 7471A	EPA 7471A
Molybdenum	2	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Nickel	73	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Selenium	6	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Silver	<0.5	0.5	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Sulfate	150	20	mg/kg	--	09/30/96	--	EPA 9036
Thallium	1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Vanadium	44	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Zinc	8700	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
pH	8.3	--	S.U.	--	09/30/96	--	EPA 9045C

ND: Not detected at or above limit of detection

--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-2-5.0  
Lab Number: 9609403-06  
Sample Matrix/Media: SOIL

Date Sampled: 09/26/96  
Date Received: 09/27/96

Analyte	Concentration	Method		Date Prepared	Date Analyzed	Prep Method	Method Reference
		Detection Limit	Units				
Antimony	48	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Arsenic	290	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Barium	1800	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Beryllium	0.3	0.1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cadmium	28	0.4	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Chromium	34	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cobalt	13	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Copper	390	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Lead	1900	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Mercury	<0.1	0.1	mg/kg	09/28/96	09/28/96	EPA 7471A	EPA 7471A
Molybdenum	7	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Nickel	48	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Selenium	6	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Silver	<0.5	0.5	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Sulfate	70	20	mg/kg	--	09/30/96	--	EPA 9036
Thallium	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Vanadium	41	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Zinc	11000	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
pH	8.6	--	S.U.	--	09/30/96	--	EPA 9045C

ND: Not detected at or above limit of detection

--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-2-7.5'  
Lab Number: 9609403-07  
Sample Matrix/Media: SOIL

Date Sampled: 09/26/96  
Date Received: 09/27/96

Analyte	Concentration	Method Detection Limit	Units	Date Prepared	Date Analyzed	Prep Method	Method Reference
Antimony	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Arsenic	4	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Barium	190000	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Beryllium	0.2	0.1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cadmium	<0.4	0.4	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Chromium	4	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cobalt	150	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Copper	13	1	mg/kg	09/26/96	09/28/96	EPA 3050A	EPA 6010A
Lead	13	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Mercury	<0.1	0.1	mg/kg	09/28/96	09/28/96	EPA 7471A	EPA 7471A
Molybdenum	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Nickel	76	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Selenium	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Silver	<0.5	0.5	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Sulfate	<20	20	mg/kg	--	09/30/96	--	EPA 9036
Thallium	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Vanadium	120	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Zinc	390	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
pH	10.8	--	S.U.	--	09/30/96	--	EPA 9045C

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

Results are reported on a wet-weight basis, as received.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-2-9.5'  
Lab Number: 9609403-08  
Sample Matrix/Media: SOIL

Date Sampled: 09/26/96  
Date Received: 09/27/96

Analyte	Concentration	Method		Date Prepared	Date Analyzed	Prep Method	Method Reference
		Detection Limit	Units				
Antimony	3	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Arsenic	170	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Barium	33000	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Beryllium	0.2	0.1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cadmium	1.0	0.4	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Chromium	5	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cobalt	36	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Copper	58	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Lead	110	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Mercury	<0.1	0.1	mg/kg	09/28/96	09/28/96	EPA 7471A	EPA 7471A
Molybdenum	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Nickel	84	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Selenium	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Silver	<0.5	0.5	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Sulfate	<20	20	mg/kg	--	09/30/96	--	EPA 9036
TPH-G	58 a	0.3	mg/kg	09/27/96	09/27/96	EPA 5030	EPA 8015*
Thallium	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Vanadium	160	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Zinc	1100	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
pH	8.6	--	S.U.	--	09/30/96	--	EPA 9045C

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

Results are reported on a wet-weight basis, as received.

TPH-G = Volatile petroleum hydrocarbons from C4 to C14 quantitated as gasoline.

\* = Modified

a Sample appears to be weathered gasoline.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-3-3.5  
Lab Number: 9609403-09  
Sample Matrix/Media: SOIL

Date Sampled: 09/26/96  
Date Received: 09/27/96

Analyte	Concentration	Method		Date Prepared	Date Analyzed	Prep Method	Method Reference
		Detection Limit	Units				
Antimony	79	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Arsenic	310	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Barium	11000	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Beryllium	0.5	0.1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cadmium	60	0.4	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Chromium	49	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cobalt	25	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Copper	560	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Lead	3700	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Mercury	<0.1	0.1	mg/kg	09/28/96	09/28/96	EPA 7471A	EPA 7471A
Molybdenum	6	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Nickel	93	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Selenium	13	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Silver	4.5	0.5	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Sulfate	<20	20	mg/kg	--	09/30/96	--	EPA 9036
Thallium	8	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Vanadium	70	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Zinc	8600	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
pH	9.0	--	S.U.	--	09/30/96	--	EPA 9045C

ND: Not detected at or above limit of detection

--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-3-6  
Lab Number: 9609403-10  
Sample Matrix/Media: SOIL

Date Sampled: 09/26/96  
Date Received: 09/27/96

Analyte	Concentration	Method		Units	Date Prepared	Date Analyzed	Prep Method	Method Reference
		Detection	Limit					
Antimony	<1	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Arsenic	2	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Barium	72000	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Beryllium	0.3	0.1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cadmium	14	0.4		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Chromium	10	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cobalt	66	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Copper	58	1		ng/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Lead	150	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Mercury	<0.1	0.1		mg/kg	09/28/96	09/28/96	EPA 7471A	EPA 7471A
Molybdenum	<1	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Nickel	69	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Selenium	<1	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Silver	<0.5	0.5		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Sulfate	<20	20		mg/kg	--	09/30/96	--	EPA 9036
Thallium	1	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Vanadium	150	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Zinc	6700	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
pH	10.9	--		S.U.	--	09/30/96	--	EPA 9045C

ND: Not detected at or above limit of detection

--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.



Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-3-9  
Lab Number: 9609403-11  
Sample Matrix/Media: SOIL

Date Sampled: 09/26/96  
Date Received: 09/27/96

Analyte	Concentration	Method		Units	Date Prepared	Date Analyzed	Prep Method	Method Reference
		Detection Limit						
Antimony	<1	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Arsenic	15	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Barium	75000	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Beryllium	0.3	0.1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cadmium	<0.4	0.4		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Chromium	4	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cobalt	67	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Copper	32	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Lead	14	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Mercury	<0.1	0.1		mg/kg	09/28/96	09/28/96	EPA 7471A	EPA 7471A
Molybdenum	<1	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Nickel	89	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Selenium	<1	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Silver	<0.5	0.5		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Sulfate	<20	20		mg/kg	--	09/30/96	--	EPA 9036
Thallium	1	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Vanadium	240	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Zinc	59	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
pH	11.1	--		S.U.	--	09/30/96	--	EPA 9045C

ND: Not detected at or above limit of detection

--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-3-11  
Lab Number: 9609403-12  
Sample Matrix/Media: SOIL

Date Sampled: 09/26/96  
Date Received: 09/27/96

Analyte	Concentration	Method		Units	Date Prepared	Date Analyzed	Prep Method	Method Reference
		Detection	Limit					
Antimony	<1	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Arsenic	77	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Barium	41000	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Beryllium	0.9	0.1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cadmium	<0.4	0.4		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Chromium	20	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cobalt	77	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Copper	120	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Lead	42	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Mercury	<0.1	0.1		mg/kg	09/28/96	09/28/96	EPA 7471A	EPA 7471A
Molybdenum	1	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Nickel	600	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Selenium	<1	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Silver	<0.5	0.5		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Sulfate	<20	20		mg/kg	--	09/30/96	--	EPA 9036
Thallium	4	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Vanadium	780	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Zinc	400	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
pH	10.5	--		S.U.	--	09/30/96	--	EPA 9045C

ND: Not detected at or above limit of detection

--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-4-5.5  
Lab Number: 9609403-13  
Sample Matrix/Media: SOIL

Date Sampled: 09/27/96  
Date Received: 09/27/96

Analyte	Concentration	Method		Units	Date Prepared	Date Analyzed	Prep Method	Method Reference
		Detection Limit						
Antimony	120	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Arsenic	210	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Barium	14000	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Beryllium	0.2	0.1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cadmium	230	0.4		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Chromium	20	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cobalt	25	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Copper	4300	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Lead	4200	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Mercury	<0.1	0.1		mg/kg	09/28/96	09/28/96	EPA 7471A	EPA 7471A
Molybdenum	<1	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Nickel	69	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Selenium	9	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Silver	7.5	0.5		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Sulfate	<20	20		mg/kg	--	09/30/96	--	EPA 9036
TPH-G	0.6 a	0.3		mg/kg	09/27/96	09/27/96	EPA 5030	EPA 8015*
Thallium	4	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Vanadium	86	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Zinc	23000	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
pH	8.6	--		S.U.	--	09/30/96	--	EPA 9045C

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

Results are reported on a wet-weight basis, as received.

TPH-G = Volatile petroleum hydrocarbons from C4 to C14 quantitated as gasoline.

\* = Modified

a Sample appears to be weathered gasoline.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-4-7.5  
Lab Number: 9609403-14  
Sample Matrix/Media: SOIL

Date Sampled: 09/27/96  
Date Received: 09/27/96

Analyte	Concentration	Method		Units	Date Prepared	Date Analyzed	Prep Method	Method Reference
		Detection Limit						
Antimony	<1	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Arsenic	<1	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Barium	2200	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Beryllium	0.3	0.1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cadmium	2.2	0.4		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Chromium	41	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cobalt	12	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Copper	22	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Lead	26	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Mercury	<0.1	0.1		mg/kg	09/28/96	09/28/96	EPA 7471A	EPA 7471A
Molybdenum	<1	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Nickel	81	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Selenium	<1	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Silver	<0.5	0.5		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Sulfate	90	20		mg/kg	--	09/30/96	--	EPA 9036
TPH-G	0.4 a	0.3		mg/kg	09/27/96	09/27/96	EPA 5030	EPA 8015*
Thallium	<1	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Vanadium	32	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Zinc	1100	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
pH	9.0	--		S.U.	--	09/30/96	--	EPA 9045C

ND: Not detected at or above limit of detection

--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

TPH-G = Volatile petroleum hydrocarbons from C4 to C14 quantitated as gasoline.

\* = Modified

a Sample appears to be weathered gasoline.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-4-11.5  
Lab Number: 9609403-15  
Sample Matrix/Media: SOIL

Date Sampled: 09/27/96  
Date Received: 09/27/96

Analyte	Concentration	Method Detection Limit	Units	Date Prepared	Date Analyzed	Prep Method	Method Reference
Antimony	37	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Arsenic	87	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Barium	1200	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Beryllium	0.1	0.1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cadmium	<0.4	0.4	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Chromium	6	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cobalt	4	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Copper	79	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Lead	200	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Mercury	<0.1	0.1	mg/kg	09/28/96	09/28/96	EPA 7471A	EPA 7471A
Molybdenum	7	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Nickel	21	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Selenium	5	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Silver	13	0.5	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Sulfate	<20	20	mg/kg	--	09/30/96	--	EPA 9036
TPH-G	0.7 a	0.3	mg/kg	09/27/96	09/28/96	EPA 5030	EPA 8015*
Thallium	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Vanadium	54	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Zinc	56	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
pH	10.4	--	S.U.	--	09/30/96	--	EPA 9045C

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

Results are reported on a wet-weight basis, as received.

TPH-G = Volatile petroleum hydrocarbons from C4 to C14 quantitated as gasoline.

\* = Modified

a Sample appears to be weathered gasoline.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-4-12.5  
Lab Number: 9609403-16  
Sample Matrix/Media: SOIL

Date Sampled: 09/27/96  
Date Received: 09/27/96

Analyte	Concentration	Method Detection Limit	Units	Date Prepared	Date Analyzed	Prep Method	Method Reference
Antimony	12	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Arsenic	120	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Barium	230	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Beryllium	0.2	0.1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cadmium	4.9	0.4	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Chromium	17	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cobalt	11	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Copper	100	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Lead	490	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Mercury	<0.1	0.1	mg/kg	09/28/96	09/28/96	EPA 7471A	EPA 7471A
Molybdenum	6	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Nickel	44	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Selenium	3	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Silver	4.9	0.5	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Sulfate	30	20	mg/kg	--	09/30/96	--	EPA 9036
TPH-G	590 a	0.3	mg/kg	09/27/96	09/28/96	EPA 5030	EPA 8015*
Thallium	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Vanadium	40	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Zinc	9900	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
pH	10.0	--	S.U.	--	09/30/96	--	EPA 9045C

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

Results are reported on a wet-weight basis, as received.

TPH-G = Volatile petroleum hydrocarbons from C4 to C14 quantitated as gasoline.

\* = Modified

a Sample appears to be weathered gasoline.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-5-7.5  
Lab Number: 9609403-17  
Sample Matrix/Media: SOIL

Date Sampled: 09/27/96  
Date Received: 09/27/96

Analyte	Concentration	Method		Units	Date Prepared	Date Analyzed	Prep Method	Method Reference
		Detection	Limit					
Antimony	3	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Arsenic	68	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Barium	2900	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Beryllium	0.1	0.1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cadmium	51	0.4		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Chromium	25	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cobalt	14	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Copper	310	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Lead	810	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Mercury	<0.1	0.1		mg/kg	09/28/96	09/28/96	EPA 7471A	EPA 7471A
Molybdenum	<1	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Nickel	45	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Selenium	<1	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Silver	<0.5	0.5		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Sulfate	<20	20		mg/kg	--	09/30/96	--	EPA 9036
TPH-G	4000 a	0.3		mg/kg	09/27/96	09/28/96	EPA 5030	EPA 8015*
Thallium	<1	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Vanadium	40	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Zinc	8100	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
pH	8.8	--		S.U.	--	09/30/96	--	EPA 9045C

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

Results are reported on a wet-weight basis, as received.

TPH-G = Volatile petroleum hydrocarbons from C4 to C14 quantitated as gasoline.

\* = Modified

a Sample appears to be weathered gasoline.

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: CW-5-11  
Lab Number: 9609403-18  
Sample Matrix/Media: SOIL

Date Sampled: 09/27/96  
Date Received: 09/27/96

Analyte	Concentration	Method		Units	Date Prepared	Date Analyzed	Prep Method	Method Reference
		Detection Limit						
Antimony	10	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Arsenic	85	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Barium	420	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Beryllium	0.3	0.1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cadmium	4.9	0.4		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Chromium	24	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cobalt	15	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Copper	470	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Lead	1400	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Mercury	<0.1	0.1		mg/kg	09/28/96	09/28/96	EPA 7471A	EPA 7471A
Molybdenum	2	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Nickel	47	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Selenium	12	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Silver	<0.5	0.5		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Sulfate	30	20		mg/kg	--	09/30/96	--	EPA 9036
TPH-G	760 a	0.3		mg/kg	09/27/96	09/28/96	EPA 5030	EPA 8015*
Thallium	<1	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Vanadium	41	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Zinc	2200	1		mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
pH	8.9	--		S.U.	--	09/30/96	--	EPA 9045C

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

Results are reported on a wet-weight basis, as received.

TPH-G = Volatile petroleum hydrocarbons from C4 to C14 quantitated as gasoline.

\* = Modified

a Sample appears to be weathered gasoline.



Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: METHOD BLANK  
Lab Number: 9609403-27  
Sample Matrix/Media: SOIL

Date Sampled: --  
Date Received: --

Analyte	Concentration	Method Detection Limit	Units	Date Prepared	Date Analyzed	Prep Method	Method Reference
Antimony	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Arsenic	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Barium	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Beryllium	<0.1	0.1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cadmium	<0.4	0.4	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Chromium	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cobalt	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Copper	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Lead	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Mercury	<0.1	0.1	mg/kg	09/28/96	09/28/96	EPA 7471A	EPA 7471A
Molybdenum	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Nickel	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Selenium	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Silver	<0.5	0.5	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Sulfate	<20	20	mg/kg	--	09/30/96	--	EPA 9036
TPH-G	ND	0.3	mg/kg	09/27/96	09/27/96	EPA 5030	EPA 8015*
Thallium	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Vanadium	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Zinc	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A

ND: Not detected at or above limit of detection

--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

TPH-G = Volatile petroleum hydrocarbons from C4 to C14 quantitated as gasoline.

\* = Modified

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96094.03

Sample Identification: METHOD BLANK  
Lab Number: 9609403-28  
Sample Matrix/Media: SOIL

Date Sampled: --  
Date Received: --

Analyte	Concentration	Method Detection Limit	Units	Date Prepared	Date Analyzed	Prep Method	Method Reference
Antimony	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Arsenic	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Barium	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Beryllium	<0.1	0.1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cadmium	<0.4	0.4	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Chromium	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Cobalt	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Copper	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Lead	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Mercury	<0.1	0.1	mg/kg	09/28/96	09/28/96	EPA 7471A	EPA 7471A
Molybdenum	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Nickel	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Selenium	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Silver	<0.5	0.5	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Thallium	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Vanadium	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A
Zinc	<1	1	mg/kg	09/28/96	09/28/96	EPA 3050A	EPA 6010A

ND: Not detected at or above limit of detection

--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

# INTERNAL CHAIN-OF-CUSTODY

**IMPORTANT**

Date Results Requested: 8/30/96

Rush Charges Authorized?  Yes  No

Phone or  Fax Results

For Clayton Use Only  
Clayton Lab Project No.

9609403

**CONSULTANT'S INFORMATION**

Consultant's Name: PETER SCHAEFER

Consultant's Office Location: PLEASANTON

Consultant's Internal Project No.: 70

**OUTSIDE CLIENT INFORMATION**

CFMS Client Code: \_\_\_\_\_

Company Name: CLAYTON

Client Name: LEPPERS + WULFSBERG

Mailing Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_ Telephone No.: \_\_\_\_\_

**BILLING INFO**

Discount Off List Fees \_\_\_\_\_ %

Proposal Fees Attached

Billing Sheet Attached

Fee Schedule Pricing

Send Report to:

Client  Internal Office

Bill to:  Client  Internal Office

Office Location if other than your own: \_\_\_\_\_

**Special Instructions:** TAKE OUT FRACTIONS FOR VOCATILE SAMPLES AND HOMOGENIZE PRIOR TO RUNNING REMAINING PARAMETERS!

**Samples are:** (check if applicable)

Drinking Water

Groundwater

Wastewater

SOIL

Routine QA Acceptable?  Yes  No

Routine Detection Limits Acceptable?  Yes  No

Routine Analyte List Acceptable?  Yes  No

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

Number of Containers	TOTAL CARBON 19 METALS	PH	SULFIDE	TOTAL SULFUR	TPH-D	TPH-G	VOCs (EPA 524)	SVOCs (EPA 523)	FOR LAB USE ONLY

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	TIME SAMPLED	MATRIX/MEDIA	AIR VOLUME (specify units)														
CW-1-0.5'	9/26/96	1015	SOIL	2x6" sleeve	1	X	X	X	X									01 A
CW-1-8'		1030			1	X	X	X	X									02
CW-1-9.0'		1045			1	X	X	X	X									03
CW-1-11'		1100			1	X	X	X	X									04
CW-2-3.5 *GRIND*		1230			1	X	X	X	X									05
CW-2-5.0		1245			1	X	X	X	X									06
CW-2-7.5		1315			1	X	X	X	X									07 V
<del>CW-2-10.5</del>		<del>1330</del>			<del>1</del>	<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>									
CW-2-11.5		1322			1	X	X	X	X	X	X	X						08 A

**CHAIN OF CUSTODY**

Collected by: P. Schaefer (print) Collector's Signature: [Signature]

Relinquished by: [Signature] Date/Time: 7-27-96 2:00 Received by: [Signature] Date/Time: 8/30/96 1:5

Authorized by: [Signature] Date: 7-27-96 Sample Condition Upon Receipt:  Acceptable  Other (explain)

(Client Signature MUST Accompany Request)

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

<p><b>Detroit Regional Lab</b> 22345 Roethel Drive Novi, MI 48375 (800) 806-5887 (810) 344-1770 FAX (810) 344-2655</p>	<p><b>Atlanta Regional Lab</b> 400 Chastain Center Blvd., N.W., Suite 490 Kennesaw, GA 30144 (800) 252-9919 (770) 499-7500 FAX (770) 423-4990</p>	<p><b>San Francisco Regional Lab</b> 1252 Quarry Lane Pleasanton, CA 94566 (800) 294-1755 (510) 426-2657 FAX (510) 426-0106</p>	<p><b>Seattle Regional Lab</b> 4636 E. Marginal Way S., Suite 215 Seattle, WA 98134 (800) 568-7755 (206) 763-7364 FAX (206) 763-4189</p>
--	---	---	--

DISTRIBUTION:  
Blue = Clayton Laboratory

8/96

**IMPORTANT**

Date Results Requested: 29/30/96

Rush Charges Authorized?  Yes  No

Phone or  Fax Results

For Clayton Use Only  
Clayton Lab Project No.

**9609403**

**CONSULTANT'S INFORMATION**

Consultant's Name: PIPER SHAFER

Consultant's Office Location: PLEASANTON

Consultant's Internal Project No.: 90

**OUTSIDE CLIENT INFORMATION**

CFMS Client Code:

Company Name: CLAYTON

Client Name: LEWIS AND WULFBERG

Mailing Address:

City, State, Zip: Telephone No.:

**BILLING INFO**

Discount Off List Fees \_\_\_\_\_ %

Proposal Fees Attached

Billing Sheet Attached

Fee Schedule Pricing

Send Report to:

Client  Internal Office

Bill to:  Client  Internal Office

Office Location if other than your own:

**Special Instructions:**  
Petroleum Hydrocarbons will be high

Routine QA Acceptable?  Yes  No

Routine Detection Limits Acceptable?  Yes  No

Routine Analyte List Acceptable?  Yes  No

**Samples are:** (check if applicable)

Drinking Water

Groundwater

Wastewater

X SOIL

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

TOTAL CATIONIC METALS	PH	SULFIDE	TOTAL SULFUR	TPH-D	TPH-B	VOCs (EPA 8240)	SUBCS (EPA 8230)	FOR LAB USE ONLY
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CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	TIME SAMPLED	MATRIX/MEDIA	AIR VOLUME (specify units)	Number of Containers	TOTAL CATIONIC METALS	PH	SULFIDE	TOTAL SULFUR	TPH-D	TPH-B	VOCs (EPA 8240)	SUBCS (EPA 8230)	FOR LAB USE ONLY
<u>C073-3.5</u>	<u>9/20/96</u>	<u>1430</u>	<u>SOIL</u>	<u>2'x6" slr...</u>	1	X	X	X	X	X	X	X	X	<u>09 A</u>
<u>C073-6</u>		<u>1415</u>			1	X	X	X	X	X	X	X	X	<u>10</u>
<u>C103-9</u>		<u>1430</u>			1	X	X	X	X	X	X	X	X	<u>11</u>
<u>C073-11</u>		<u>1415</u>			1	X	X	X	X	X	X	X	X	<u>12</u>
<u>C074-5.5</u>	<u>9/27/96</u>				1	X	X	X	X	X	X	X	X	<u>13</u>
<u>C074-7.5</u>					1	X	X	X	X	X	X	X	X	<u>14</u>
<u>C074-11.5</u>					1	X	X	X	X	X	X	X	X	<u>15</u>
<u>C074-17.5</u>					1	X	X	X	X	X	X	X	X	<u>16</u>
<u>C075-7.5</u>					1	X	X	X	X	X	X	X	X	<u>17</u>

**CHAIN OF CUSTODY**

Collected by: Matt Hunko (print) Collector's Signature: [Signature]

Relinquished by: [Signature] Date/Time: 7-27-96 2:00 Received by: [Signature] Date/Time: 9/27/96 1:55

Authorized by: [Signature] Date: Sample Condition Upon Receipt:  Acceptable  Other (explain)

(Client Signature MUST Accompany Request)

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

<p><b>Detroit Regional Lab</b> 22345 Roethel Drive Novi, MI 48375 (800) 806-5887 (810) 344-1770 FAX (810) 344-2655</p>	<p><b>Atlanta Regional Lab</b> 400 Chastain Center Blvd., N.W., Suite 480 Kennesaw, GA 30144 (800) 252-9919 (770) 499-7500 FAX (770) 423-4990</p>	<p><b>San Francisco Regional Lab</b> 1252 Quarry Lane Pleasanton, CA 94566 (800) 294-1755 (510) 426-2657 FAX (510) 426-0106</p>	<p><b>Seattle Regional Lab</b> 4636 E. Marginal Way S., Suite 215 Seattle, WA 98134 (800) 568-7755 (206) 763-7364 FAX (206) 763-4189</p>
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DISTRIBUTION:  
Blue = Clayton Laboratory

8/96

# INTERNAL CHAIN-OF-CUSTODY

**CONSULTANT'S INFORMATION**

Consultant's Name: Peter Schneider  
 Consultant's Office Location: PLEASANTON  
 Consultant's Internal Project No.: Z.D.

**IMPORTANT**

Date Results Requested: 8/30/96  
 Rush Charges Authorized?  Yes  No  
 Phone or  Fax Results

**For Clayton Use Only**  
 Clayton Lab Project No.  
9609403

*See Summary Hand*

**OUTSIDE CLIENT INFORMATION**

CFMS Client Code:  
 Company Name: CLAYTON  
 Client Name: LEMPUS AND WOLFSBERG  
 Mailing Address:  
 City, State, Zip: Telephone No.:

**BILLING INFO**

Discount Off List Fees \_\_\_\_\_ %  
 Proposal Fees Attached  
 Billing Sheet Attached  
 Fee Schedule Pricing

Send Report to:  
 Client  Internal Office  
 Bill to:  Client  Internal Office  
 Office Location if other than your own:

**Special Instructions:**  
All Drum samples can have a standard TAT

Routine QA Acceptable?  Yes  No  
 Routine Detection Limits Acceptable?  Yes  No  
 Routine Analyte List Acceptable?  Yes  No

**Samples are:** (check if applicable)  
 Drinking Water  
 Groundwater  
 Wastewater  
 Soil

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

TOTAL CADM	PH	SULFIDE	TOTAL SULFUR	TPH-D	TPH-G	NOES CCPA 8245	SVOCs CCPA 8270	FOR LAB USE ONLY
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CLIENT-SAMPLE IDENTIFICATION	DATE SAMPLED	TIME SAMPLED	MATRIX/MEDIA	AIR VOLUME (specify units)	ANALYSIS REQUESTED								FOR LAB USE ONLY	
<u>Drum-1</u>	<u>9/23/96</u>		<u>Soil</u>	<u>2x6 soil sieves</u>	1	X	X	X	X	X	X	X		<u>18 A</u>
<del>Drum-2</del>	<del>9/23/96</del>		<del>Soil</del>	<del>2x6 soil sieves</del>										
<del>Drum-3</del>	<del>9/23/96</del>		<del>Soil</del>	<del>2x6 soil sieves</del>										
<u>Drum-1</u>						X			X	X	X			<u>19 A</u>
<u>Drum-2</u>														<u>20</u>
<u>Drum-3</u>														<u>21</u>
<u>Drum-4</u>														<u>22</u>
<u>Drum-5</u>														<u>23</u>

**CHAIN OF CUSTODY**

Collected by: Pratt Harko (print) Collector's Signature: Pratt Harko  
 Relinquished by: Pratt Harko Date/Time: 7-27-96 2:00 Received by: Pratt Harko Date/Time:  
 Authorized by: Pratt Harko Date: 7-27-96 Sample Condition Upon Receipt:  Acceptable  Other (explain)

(Client Signature MUST Accompany Request)

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

<p><b>Detroit Regional Lab</b>                  22345 Rochel Drive                  Novi, MI 48375                  (800) 806-5887                  (810) 344-1770                  FAX (810) 344-2655</p>	<p><b>Atlanta Regional Lab</b>                  400 Chastain Center Blvd., N.W., Suite 490                  Kennesaw, GA 30144                  (800) 252-9919                  (770) 499-7500                  FAX (770) 423-4990</p>	<p><b>San Francisco Regional Lab</b>                  1252 Quarry Lane                  Pleasanton, CA 94568                  (800) 294-1755                  (510) 426-2657                  FAX (510) 426-0106</p>	<p><b>Seattle Regional Lab</b>                  4636 E. Marginal Way S., Suite 215                  Seattle, WA 98134                  (800) 568-7755                  (206) 763-7364                  FAX (206) 763-4189</p>
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DISTRIBUTION:  
 Blue = Clayton Laboratory

8/96

# INTERNAL CHAIN-OF-CUSTODY

INTERNAL  
NOTES

**IMPORTANT**

Date Results Requested: 9-30-96  
 Rush Charges Authorized?  Yes  No  
 Phone or  Fax Results

For Clayton Use Only  
 Clayton Lab Project No.

**9609403**

CONSULTANTS INFORMATION  
 Consultant's Name \_\_\_\_\_  
 Consultant's Office Location \_\_\_\_\_  
 Consultant's Internal Project No. SAME

CLIENT INFORMATION  
 CFMS Client Code: \_\_\_\_\_  
 Company Name: \_\_\_\_\_  
 Client Name: \_\_\_\_\_  
 Mailing Address: \_\_\_\_\_  
 City, State, Zip: \_\_\_\_\_ Telephone No.: \_\_\_\_\_

BILLING INFO  
 Discount Off List Fees \_\_\_\_\_ %  
 Proposal Fees Attached  
 Billing Sheet Attached  
 Fee Schedule Pricing  
 Send Report to:  
 Client  Internal Office  
 Bill to:  Client  Internal Office  
 Office Location if other than your own: \_\_\_\_\_

Special Instructions:  
 Routine QA Acceptable?  Yes  No  
 Routine Detection Limits Acceptable?  Yes  No  
 Routine Analyte List Acceptable?  Yes  No

Samples are:  
 (check if applicable)  
 Drinking Water  
 Groundwater  
 Wastewater  
Container

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

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	TIME SAMPLED	MATRIX/MEDIA	AIR VOLUME (specify units)	Number of Containers	ANALYSIS REQUESTED										FOR LAB USE ONLY				
CW-4	9-27-96	AM	Point	100	1	X	X	X												24
CW-5 @ 11					1															24
CW-5 @ 12					1	X	X	X												25
																				26

CHAIN OF CUSTODY  
 Collected by: Matt Hanks (print) Collector's Signature: [Signature]  
 Relinquished by: [Signature] Date/Time: 7-27-96 2:00 Received by: [Signature] Date/Time: 7-27-96 2:00  
 Authorized by: [Signature] Date: 7-27-96 Sample Condition Upon Receipt:  Acceptable  Other (explain)

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

- Detroit Regional Lab**  
 22345 Roethel Drive  
 Novi, MI 48375  
 (800) 808-5887  
 (810) 344-1770  
 FAX (810) 344-2655
- Atlanta Regional Lab**  
 400 Chastain Center Blvd., N.W., Suite 490  
 Kennesaw, GA 30144  
 (800) 252-9919  
 (770) 499-7500  
 FAX (770) 423-4990
- San Francisco Regional Lab**  
 1252 Quarry Lane  
 Pleasanton, CA 94566  
 (800) 294-1755  
 (510) 426-2657  
 FAX (510) 426-0106
- Seattle Regional Lab**  
 4638 E. Marginal Way S., Suite 215  
 Seattle, WA 98134  
 (800) 568-7755  
 (206) 763-7364  
 FAX (206) 763-4189

DISTRIBUTION:  
 Blue = Clayton Laboratory

# Clayton

ENVIRONMENTAL  
CONSULTANTS

## REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Clayton Use Only Page      of     

Project No.	
Batch No.	<b>9610019</b>
Ind. Code	
Date Logged In	<b>10/1</b>
W.P.	
By	<b>eh</b>

REPORT RESULTS TO	Name <b>Dwight Hoernig</b>	Title	Purchase Order No. <b>69998.00</b>		Client Job No.							
	Company <b>Clayton</b>	Dept.	Name	Company					Dept.			
	Mailing Address		Address									
	City, State, Zip		City, State, Zip									
Telephone No.	Telefax No.	Date Results Req.: <b>10-4-96</b>	Rush Charges Authorized? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Phone / Fax Results: <input type="checkbox"/> <input type="checkbox"/>	Samples are: (check if applicable) <input type="checkbox"/> Drinking Water <input type="checkbox"/> 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 *)						
Special Instructions: (method, limit of detection, etc.) <b>The sample is "slag". Please crush prior to analysis.</b>			Explanation of Preservative: <b>n/a</b>			Number of Containers						
CLIENT SAMPLE IDENTIFICATION		DATE SAMPLED	MATRIX/MEDIA	AIR VOLUME (specify units)	FOR LAB USE ONLY							
<b>CW-5 Slag</b>		<b>9/27/96</b>	<b>slag</b>	<b>pl baggie</b>	<b>1</b>	<b>X</b>						<b>+01A</b>
Collected by: <b>Mark Decker, Matt Hunter</b>		Collector's Signature: <b>Mark Decker</b>										
CHAIN OF CUSTODY	Relinquished by: <b>Mark Decker</b>	Date/Time: <b>10-1-96 4:50 PM</b>	Received by: <b>Anna Shaw</b>		Date/Time: <b>10/1/96 4:50</b>							
	Relinquished by:	Date/Time:	Received at Lab by:		Date/Time:							
	Method of Shipment:	Sample Condition Upon Receipt: <input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Other (explain)										
Authorized by: <b>Mark Decker</b> Date <b>10-1-96</b>		(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 48375 (810) 344-1770	Raritan Center 160 Fieldcrest Ave. Edison, NJ 08837 (908) 225-6040	400 Chastain Center Blvd., N.W. Suite 490 Kennesaw, GA 30144 (404) 499-7500	1252 Quarry Lane Pleasanton, CA 94566 (510) 426-2657
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DISTRIBUTION:  
WHITE - Clayton Laboratory  
YELLOW - Clayton Accounting  
PINK - Client Retains

# Clayton

ENVIRONMENTAL CONSULTANTS

## REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Clayton Use Only Page 1 of 2

Project No. \_\_\_\_\_  
 Batch No. \_\_\_\_\_  
 Ind. Code \_\_\_\_\_ W.P. \_\_\_\_\_  
 Date Logged In \_\_\_\_\_ By \_\_\_\_\_

P. 1/3  
 2689869  
 10:14AM MONTEREY WAREHOUSE  
 09 15

REPORT RESULTS TO	Name <u>Suzanne Haus</u>		Title _____		Purchase Order No. <u>4521</u>		Client Job No. <u>9609403</u>		
	Company <u>Clayton Environmental</u>				Dept. _____		Name _____		
	Mailing Address <u>1252 Quarry Lane</u>				City, State, Zip _____		Company _____ Dept. _____		
	City, State, Zip <u>Pleasanton, CA 94566</u>				Telephone No. <u>(510) 426-2657</u>		Address _____		
Date Results Req. <u>10/19/00</u>				Rush Charges Authorized? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Phone / Fax Results <input type="checkbox"/> Phone <input checked="" type="checkbox"/> Fax		Samples are: (check if applicable)	
Special Instructions: (method, limit of detection, etc.) <u>80. per sample includes surcharges</u>				Explanation of Preservative: _____		<input type="checkbox"/> Drinking Water		<input type="checkbox"/> Collected in the State of New York	
CLIENT SAMPLE IDENTIFICATION				DATE SAMPLED	MATRIX/MEDIA	AIR VOLUME (specify units)	ANALYSIS REQUESTED (Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added. *)		
CW-1-6.5'				9/26	Soil	20mlp	Total Surfer		
CW-1-8'							FOR LAB USE ONLY		
CW-1-9.0'									
CW-1-11'									
CW-2-3.5' *bind*									
CW-2-5.0									
CW-2-7.5									
CW-2-9.5									
CW-3-3.5									
CW-3-6									
CHAIN OF CUSTODY		Collected by: _____ (print)		Collector's Signature: _____		Received by: _____		Date/Time <u>10-3-00 0900</u>	
		Relinquished by: _____		Date/Time <u>10/19/00</u>		Received at Lab by: <u>John L. Peterson</u>		Date/Time <u>10-26-00 0900</u>	
		Relinquished by: _____		Date/Time _____		Sample Condition Upon Receipt: <input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Other (explain)			
		Method of Shipment: _____		Authorized by: _____ Date _____					
		(Client Signature <u>Must</u> Accompany Request)							

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

- |   |   |  |  |
|---|---|--|--|
| 22345 Roethel Drive<br>Novi, MI 48375<br>(810) 344-1770 | Raritan Center<br>180 Fieldcrest Ave.<br>Edison, NJ 08837<br>(908) 225-6040 | 400 Chastain Center Blvd., N.W.<br>Suite 490<br>Kennesaw, GA 30144<br>(404) 499-7500 | 1252 Quarry Lane<br>Pleasanton, CA 94566<br>(510) 426-2657 |
|---|---|--|--|

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



## REQUEST FOR LABORATORY ANALYTICAL SERVICES

**IMPORTANT**

Date Results Requested: ASAP  
 Rush Charges Authorized?  Yes  No  
 Phone or  Fax Results

For Clayton Use Only  
Clayton Lab Project No.

**9610018**

REPORT RESULTS TO	Name <u>PETER SCHAEFER</u>	Client Job No. <u>69998.00</u>	Purchase Order No.
	Company <u>CLAYTON</u>	Dept.	Name
	Mailing Address		Company <u>5200 COLISEUM WAY</u>
	City, State, Zip		Dept.
	Telephone No.	FAX No.	Address
			City, State, Zip

**Special instructions and/or specific regulatory requirements:**  
(method, limit of detection, etc.)

FILTER METALS PRIOR TO PRESERVATION  
(USE AMBER DUPLICATES)

\* Explanation of Preservative: P = HNO3

**Samples are:**  
(check if applicable)

Drinking Water  
 Groundwater  
 Wastewater

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	TIME 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.)										FOR LAB USE ONLY		
						ANIONS	PERVIOUS ION	PERVIOUS ION	PERVIOUS ION	PERVIOUS ION	PERVIOUS ION	PERVIOUS ION	PERVIOUS ION	PERVIOUS ION	PERVIOUS ION		PERVIOUS ION	PERVIOUS ION
MW-1	10-1-96	1235	H2O	250 MLS	1	X												-01A
				250 PL MLS	1		X											1 B
				500 MLS	1			X										1 R
				LITER	2				X	X								VC, DF
MW-2		1318		250 MLS	1	X												-02A
				250 PL MLS	1		X											1 B
				500 MLS	1			X										1 R
				LITER	2				X	X								VC, DE
MW-3		1401		250 MLS	1	X												-03A
MW-3		1401		250 MLS	1		X											1 B

CHAIN OF CUSTODY	Collected by: <u>RICHARD SILVA</u> (print)	Collector's Signature: <u>Richard Silva</u>		
	Relinquished by: <u>Richard Silva</u>	Date/Time: <u>10-1-96 5:05 PM</u>	Received by:	Date/Time:
	Relinquished by:	Date/Time:	Received by:	Date/Time:
	Method of Shipment:	Received at Lab by: <u>ALAN DREW</u>	Date/Time: <u>10/1/96 5:05</u>	
Authorized by: _____	Date: _____	Sample Condition Upon Receipt: <input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Other (explain)		



**APPENDIX E**

**DRILLING, WELL CONSTRUCTION, AND SAMPLING  
PROTOCOLS**

## DRILLING, WELL CONSTRUCTION, AND SAMPLING PROTOCOLS FOR BOREHOLE/MONITORING WELL INSTALLATION

### BOREHOLE INSTALLATION

Clayton Environmental Consultants, Inc. acquires the proper governmental agency permits to bore, drill, or destroy all proposed boreholes and monitoring wells that intersect with groundwater aquifers and writes a health and safety plan.

Clayton subcontracts only with drillers who possess a current C-57 water well contractor's license issued by the State of California and whose personnel have attended the OSHA 40-hour Hazardous Materials Safety Training. Prior to starting work, a "tailgate" safety meeting including discussion of the safety hazards and precautions relevant to the particular job will be held with all personnel working on the job. Well drillers are identified on permit applications.

Borings are drilled dry by hollow- or solid-stem, continuous flight augers. Augers, drill rods, and other working components of the drilling rig are steam-cleaned before arriving onsite to prevent the introduction of contaminants. These components are also steam-cleaned between borings away from boring locations. Cleaned augers, rods, and other components are stored, and/or covered when not in use.

Our bore logs include a detailed description of subsurface stratigraphy. Clayton examines the soil brought to the surface by drilling operations, and samples undisturbed soil every 5 feet or as otherwise specified. Soil cuttings are screened for hydrocarbon contamination using a photoionization detector. Boring logs are filled out in the field by a professional geologist, civil engineer, engineering geologist who is registered by the State of California, or a technician who is trained and working under the supervision of one of the previously mentioned persons, using the Unified Soil Classification System.

### SOIL SAMPLING

Soil samples are taken every 5 feet, at areas of obvious contamination, or as otherwise specified, with a California modified split-spoon sampler that is lined with three six-inch brass tubes. The sampler and rod are inserted into the borehole to the current depth and a hammer of known weight and height above the sampler are allowed to free-fall onto the rod, advancing the assembly 18 inches into undisturbed soil. Clayton uses the number of blows necessary to drive the sampler into the ground to help evaluate the consistency of materials encountered. The sampler is then pulled from the borehole and disassembled, and the three brass tubes are separated for inspection and labeling.

Clayton uses new brass liners or liners cleaned with a trisodium phosphate (TSP) solution, double rinsed with clean tap water, and air dried prior to each sampling. The sampler is also cleaned with TSP and rinsed with tap water between sampling events.

Soil samples selected for laboratory analysis are left in the brass liners, sealed with aluminum foil and plastic caps, taped for air tightness, labeled, and immediately placed into a pre-cooled ice chest chilled to less than 4°C. Labels contain the following information: site name, date and time sampled, borehole number and depth, and the sampler's initials. The samples are transported under chain-of-custody to a state-certified laboratory. The laboratory analyzes soil samples within the prescribed holding time, storing them at temperatures below 4°C at all times.

Pending results of laboratory analysis, excess drilling and sampling cuttings are placed into Department of Transportation (DOT)-approved drums, labeled with the name of the site, address, and well number, and left at the site. Uncontaminated soil may be disposed of by the client. Soil found to contain levels of contaminants above local or state action levels will require that the client dispose of it in accordance with hazardous waste regulations. At the client's request, we will assist with the disposal of contaminated soil.

### WELL CONSTRUCTION

Boreholes are converted to monitoring wells by placing 2-inch or 4-inch diameter well casing with flush-threaded joints and slotted screen into the borehole. Construction materials include polyvinyl chloride (PVC), stainless steel, or low carbon steel. The most suitable material for a particular installation will depend on the parameters to be monitored. All screens and casings used are in a contaminant-free condition when placed in the ground. No thread lubrication is used, other than teflon tape, for connecting the casing segments.

Wells extend at least 10 feet into the upper saturated zone, but do not extend through any clay layers greater than 5 feet that are below the shallow water table. The standard practice for wells installed at hydrocarbon contamination sites is to construct a well with a 20-foot long perforated interval extending 15 feet below and 5 feet above the water table in an unconfined aquifer. The top of the well is solid casing. The annular space of the borehole is backfilled with washed, kiln-dried sand to a point at least 1 foot above the slotted screen. A seal above the filter pack is formed by placing a 1- to 2-foot layer of bentonite pellets on top of the sand. The bentonite pellets are moistened by pouring clean tap water down the hole so that they can expand and seal the annulus. A neat cement grout is placed above the bentonite seal and brought to the ground surface.

Well casings are protected from surface contamination, accidental damage, and unauthorized entry or tampering with water-tight locking caps on the well casings. The caps are usually surrounded by a concrete vault. Wells are clearly identified with a metal tag or other device where the following information is recorded: well number, depth to water, depth of well, casing data including location of screened interval.

### WELL DEVELOPMENT

The well seal in newly developed wells must set up for 48 to 72 hours prior to development. Since development of the well can volatilize contaminants present, the well must also settle for at least 48 to 72 hours between development and the first purging/sampling incident.

All monitoring wells are initially developed to clean the well and stabilize sand, gravel, and disturbed aquifer materials around the screened internal perforations. Wells are developed by pumping (or bailing) and surging until water turbidity and specific conductance stabilize. In some cases, where wells are installed in low permeability formations and the wells purge dry, the well is allowed to recover and is purged dry three times. Clean tap water is introduced into the well if it does not recover rapidly enough.

Pending results by laboratory analysis, purge water from well development and sampling is placed into DOT-approved drums, labeled with the name of the site, address, well number, and left at the site. Uncontaminated water may be disposed of by the client. Water found to contain levels of contaminants above local or state action levels requires that the client dispose of it in accordance with hazardous waste requirements. At the client's request, we can assist with the disposal of contaminated purge water.

## GROUNDWATER SAMPLING

To collect a representative sample of the groundwater, stagnant water within the well casing and filter material must be purged and fresh aquifer water allowed to replace it. The water is purged from the well by pumping or bailing at least three well volumes. Well volumes are calculated by measuring depth to groundwater to the nearest 0.01 foot upon arrival at the well before any purging has begun. Groundwater samples are collected only after purging has been of sufficient duration for pH, temperature, and electrical conductivity to stabilize. When purging low-yield wells, the wells are purged to dryness. When the well recovers to 80% of the depth measured upon arrival, samples are collected.

Field sampling logs maintained for each well include:

- Monitoring well identification
- Static water level, before and after pumping
- Well depth
- Condition of water prior to purging (e.g., amount of free product)
- Purge rate and volume
- pH, temperature, and conductivity during purging
- Time purged
- Time of sample collection
- Sampling method
- Name of sampler
- Climatic conditions

Water samples are collected using clean teflon bailers. All equipment that contacts samples is thoroughly cleaned before arrival at the site and between sampling events.

Water is collected in clean laboratory-supplied containers, labeled, placed immediately into an ice chest pre-cooled to 4°C, and transported to Clayton's laboratory for analysis. One trip blank will be furnished in accordance with our quality assurance/quality control (QA/QC) program.

All samples are collected in such a manner so as to minimize the volatilization of a sample due to agitation and/or transfer from bailer to sample container. Samples are collected so that contaminants most sensitive to volatilization are sampled first.

Preservatives are not added to any sample, unless instructed. If requested, they are supplied by Clayton's laboratory.

All sample containers are labeled in the field. Labels contain the following information: project name, sample identification number, project number, date and time of collection, and sampler's initials.

Under no circumstances are sealed sample containers opened by anyone other than the laboratory personnel who perform the requested analyses. If it is necessary for samples or sample chests to leave the immediate control of the sampler prior to delivery to the laboratory, for example during shipment by an overnight shipper, a custody seal is placed on each sample container and/or sample chest to ensure that the samples have not been tampered with during transportation. The custody seal is signed by the sampler, and the date and time that the seal was placed is recorded. The elapsed time between sample collection and delivery to the laboratory never exceeds 48 hours. Water samples are not held for more than 14 days prior to analysis and are kept at 4°C at all times.

To document and trace samples from time of collection, a signed chain-of-custody record is filled out by the sampler and accompanies the samples through the laboratory analyses. The completed chain-of-custody is included with the analytical report from the laboratory.

### REFERENCES

Groundwater Monitoring Guidelines, Revised February 1990. Alameda County District Groundwater Protection Program.

Leaking Underground Fuel Tank (LUFT) Field Manual: Guidelines for Site Assessment, Cleanup, and Underground Tank Closure, May 1988. State of California LUFT Task Force.

Regional Board Staff Recommendations for Initial Evaluation and Investigation of Underground Tanks, Revised November 1989. North Coast, San Francisco Bay, and Central Valley regions of the California State Water Quality Control Board.

Standards for the Construction and Destruction of Wells and Other Deep Excavations in Santa Clara County, Revised June 1989. Santa Clara Valley Water District.