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**Clayton**  
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Report on Storm Sewer/Channel  
Water and Sediment Sampling  
Coliseum Way and 50th Avenue  
Oakland, California  
for  
Alameda County Health Care Services  
Agency  
Department of Environmental Health  
Oakland, California

Clayton Project No. 97203.00  
August 5, 1997

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## **1.0 INTRODUCTION**

This report provides a summary of storm sewer/channel water and sediment sampling and the storm sewer inspection conducted on October 1, 1996, and the storm channel inspection conducted on October 17 and November 4, 1996 by Clayton Environmental Consultants near the intersection of Coliseum Way and 50th Avenue, Oakland, California. The site location is shown in Figure 1 and an overall site plan is included as Figure 2.

The purposes of the work efforts were to determine the quality of the water and chemical character of the sediments, and to evaluate the potential for intrusion of metal impacted groundwater from the 5050 Coliseum Way site to the water and sediments of the storm sewer.

The surface water samples collected from the storm channel are most representative of the bay waters and were collected for comparative purposes to the grab water samples collected from the storm sewer.

## **2.0 SCOPE OF WORK**

The specific tasks Clayton completed for this project included:

- Obtaining an entry permit from the Alameda County Flood Control and Water Management Agency;
- Preparing a site-specific health and safety plan;
- Collecting storm sewer/channel water and sediment samples; and
- Inspecting the storm sewer/channel walls.

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

Prior to performing field activities, Clayton obtained permission from the Alameda County Flood Control and Water Management Agency to enter the storm sewer/channel. A site specific health and safety plan was written for these activities.

### **2.2 STORM SEWER/CHANNEL WATER AND SEDIMENT SAMPLING**

The project included work in the storm sewer and storm channel in the vicinity of the 5050 Coliseum Way property. In this report, reference to storm sewer will include the subsurface culvert from the north to the sediment basin to the south (see Figure 3). The storm channel references the concrete channel that begins near the bend at Coliseum Way and runs south towards the Bay.

On October 1, 1996, Clayton collected grab water samples, sediment samples, and surface water samples from the storm sewers and storm channels shown in Figure 4.

During a high tide event, the storm sewer is filled to approximately 70 percent maximum capacity with bay water. The storm sewer has no bay water intrusion during a low tide event. Thus, to get the most representative sample of potential

intruding groundwater into the storm sewer, grab water samples were collected from the storm sewer during a low tide event.

A total of seven grab water samples (CSS-1 through CSS-7) were collected from Second Line G subsurface culvert (storm sewer) beneath the 5050 Coliseum Way and 750 50th Avenue properties and/or at the storm sewer outfall into the sediment basin (Figure 3). One grab water sample (CSL-A) was collected from the outfall of an approximate 6-inch diameter subsurface drain pipe extending from the 5050 Coliseum Way property into the Second Line G subsurface culvert, and one grab water sample (PGSS-1) was collected in the Peralta Creek subsurface culvert within the storm sewer.

At the time of the sampling event, approximately one-inch of water was flowing out of the Second Line G subsurface culvert (estimated flow at 1 gallon per minute) and no flow was observed out of the Peralta Creek subsurface culvert within the storm sewer. Access was limited to the Peralta Creek subsurface culvert due to sediment buildup inside the culvert. The grab water sample collected from the Peralta Creek subsurface culvert was collected from a stagnant pool of water retained in the sediment.

A total of four sediment samples (SED1 through SED4) were collected from the storm sewers (Figure 4). Two of the sediment samples (SED1 and SED2) were collected near the outfall of each storm sewer line. One sediment sample (SED3) was collected near a 50th Avenue inlet located northwest of the 750 50th Avenue property in the Second Line G subsurface culvert and one sample (SED4) was collected approximately 50 feet upstream in the Peralta Creek subsurface culvert within the storm sewer.

A total of six surface water samples (SW-1 through SW-6) were collected from the storm channels south of Coliseum Way while the tide was out and near the end of the outgoing low tide event (Figure 5). Sample SW-6 was collected at the mouth of the storm channels into the San Leandro Bay of the greater San Francisco Bay. The storm channel was accessed using a row boat to minimize disruption of sediment at the bottom of the channel. Surface water sample SW-5 was collected from the shore of the channel.

Each grab or surface water location was sampled by dipping a precleaned plastic bottle into the water stream. Sample CSL-A was obtained from water entering the storm sewer from a lateral drain coming from the 5050 Coliseum Way property.

Sediment samples were collected from materials resting on the concrete bottom of each storm sewer. The sediment samples were collected into a stainless steel sleeve covered with Teflon® tape at each end and capped.

Each sample container was appropriately labelled and placed into a chest filled with ice and submitted to Clayton's State-certified analytical laboratory located in Pleasanton, California for chemical analysis. Each water sample was analyzed for CAM 17 metals (total and dissolved), pH, anions (chloride, fluoride, nitrates and nitrites, ortho-phosphate, and sulfate) cations (total and dissolved calcium, magnesium, potassium, and sodium) and total alkalinity. Water samples collected for dissolved metals analysis were filtered and preserved in the laboratory within eight hours of sample collection. The sediment samples were analyzed for CAM 17 metals and pH.

### **2.3 STORM SEWER/CHANNEL INSPECTION**

At the time of the sampling event, the interior of the Second Line G subsurface storm sewer was video taped to document the sampling event and to document the integrity of the sewer walls. On October 14 and November 4, 1996, the floor and walls of the concrete-lined portion of the storm channel were inspected during low tide and documented with photographs.

The purpose of the inspections was to identify any evidence of groundwater seepage through cracks, seems or weep holes in the concrete walls of the storm sewer or channel.

### **3.0 RESULTS OF THE INVESTIGATION**

The following sections present the analytical results and observations of the storm sewer/channel sampling and inspections. The analytical results for the grab water samples are presented in Table 1, the sediment sample results are presented in Table 2, and the surface water results are presented in Table 3. Certified analytical results for the storm sewer sampling are included as Appendix A to this report. Appendix B includes the analytical reports for the storm channel sampling.

#### **3.1 GRAB WATER**

The total and dissolved metal and cations, anions, pH, and total alkalinity data for the grab water samples collected from the storm sewers are presented in Table 1. For each grab water sample, there was not an appreciable difference between the total and dissolved metal and cation concentrations. The highest metal, cation and anion concentrations were detected in sample PGSS-1 which collected from the Peralta Creek subsurface culvert within the storm sewer.

#### **3.2 SEDIMENT**

The total metal and pH analytical data for the sediment samples are presented in Table 2. All metal concentrations in all samples were less than their respective Title 22 Total Threshold Limit Concentration. The zinc concentration in sample SED4, collected from the Peralta Creek subsurface culvert within the storm sewer, was the one anomalous elevated concentration reported at 1,300 milligrams per kilogram (mg/kg).

#### **3.3 SURFACE WATER**

The total and dissolved metal and cation, anions, pH, and total alkalinity analytical data for the surface water samples collected from the storm channels are presented in Table 3. The chloride and dissolved sodium concentrations were the most notable results with maximum concentrations of 15,000 milligrams per Liter (mg/L) and 7,200 mg/L, respectively. These concentrations are indicative of bay water that was present in the channels.

### **3.4 STORM SEWER/STORM CHANNEL INSPECTION RESULTS**

On October 1, 1996 the integrity of the Second Line G subsurface culvert within the storm sewer was inspected. The culvert runs beneath and is at the downgradient side of the 5050 Coliseum Way property. The storm sewer was inspected from the point of the outfall into the sediment basin to approximately 600 feet upstream in the culvert. The sewer was inspected for evidence of groundwater intrusion. The walls and ceiling of the sewer appeared to be in good condition and no appreciable cracks or holes were observed. The engineered seams in the concrete of the sewer showed no signs of groundwater seepage in the form of algal growth, corrosion, or mineral deposits. No active seeps were observed on the ceiling or walls of the sewer or culvert and no stains that would be indicative of a seep were observed. The inspection and sampling event of the storm sewer were documented on video tape and can be made available upon request. The integrity of the Peralta Creek subsurface culvert within the storm sewer was not inspected.

On October 17 and November 4, 1996 the concrete portion of the storm channel walls and floor downstream of the sediment basin were inspected. The storm channel is located downgradient of the 5050 Coliseum property and was inspected from the downstream end of the sediment basin to the end of the concrete portion of the channel, approximately 200 to 300 feet downstream of the sediment basin. The channel was inspected for evidence of groundwater intrusion into the channel. The channel inspection was video taped on October 17, 1996 and photographed on November 4, 1996.

Though minimal moisture was present during the inspections of the storm channel, it could not be determined whether it was from groundwater seepage or residual water from high tide events. Inspection observations and field notes are included as Appendix C to this report, and inspection photographs are included as Appendix D.

### **4.0 DISCUSSION**

Groundwater located upgradient at the 5050 Coliseum Way property contains elevated levels of metals consisting of zinc, arsenic, cadmium, cobalt, copper, nickel, lead, and zinc. The objective of the sampling and analysis documented in this report was to demonstrate that no metal-impacted groundwater is entering the storm sewer/channel from the 5050 Coliseum Way property.

Grab water samples were collected from the Second Line G subsurface culvert (storm sewer) located beneath the 5050 Coliseum property at the downgradient side. The grab water samples were collected at low tide. At low tide, the water in the storm sewer is not tidally influenced and the exact origin of the water in the storm sewer during a low tide event was not completely identified as part of this investigation. However, it is assumed that the water in the storm sewer (during a non-storm event) could originate from point sources such as industrial facilities or surface runoff from irrigation or from groundwater intrusion.

At the time of the storm sewer water sampling event and inspection, approximately one inch of water was flowing through the storm sewer and two sources of water were

identified. One source of water was discharging from an approximate 6-inch diameter surface sewer pipe, originating from the 5050 Coliseum Way property. This 6-inch line was discharging water at approximate 1 gallon per minute into the storm sewer. A water sample, CSL-A was collected from this discharge point.

The primary identified source of water in the storm sewer was identified at approximately 650 feet upstream of the storm sewer outfall beneath the Southern Pacific Rail Road tracks at a junction assumed to be with the Courtland Creek subsurface culvert. A grab water sample was collected at this junction and at 100 foot intervals from that point to the outfall. No identifiable seeps or other evidence of groundwater intrusion were observed in the storm sewer beneath the 5050 Coliseum Way and 750 50th Avenue properties.

Sediment samples were collected at the outfalls of the Second Line G and Peralta subsurface culverts within the storm sewer, samples SED2 and SED1, respectively. Two additional sediment samples were collected at the junction of the Second Line G and Courtland Creek subsurface culverts (SED3) and 80 feet into the Peralta Creek subsurface culvert (SED4). The sediments in the culverts were used as an indicator of historic discharges of metals contained in groundwater or surface water.

During the sampling event, the storm channels contained tidal water from the bay. Surface water samples were collected from the storm channel down stream of the Second Line G, Courtland Creek, and Peralta Creek subsurface culverts, and from a storm channel that borders the south and southeast boundary of the 5051 Coliseum Way property. The purpose of the surface water samples was to identify background concentrations, the potential dilution factor of contaminants in the channel water as it approaches the bay, and the water quality of the bay water relative to the discharge water from the storm sewer.

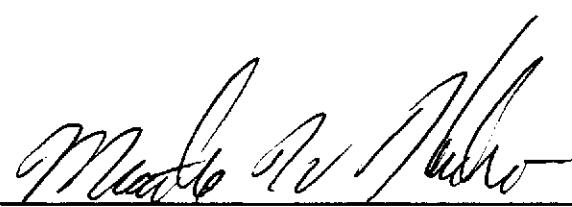
Table 4 presents maximum metal and other water quality parameter concentrations detected in grab water from the Second Line G subsurface culvert, and surface water from the storm channels relative to Water Quality Objectives for Municipal Supply as reported in the California Regional Water Quality Control Board, San Francisco Bay Region, "Water Quality Control Plan for the San Francisco Bay Basin" (1995 Basin Plan).

## **5.0 CONCLUSIONS**

The conclusions of the grab water, sediment, and surface water sampling are as follows:

- Concentrations of metals in grab water and surface water samples collected from the storm sewer/channel are below Water Quality Objectives for Municipal Supply.
- Concentrations of some water quality parameters (e.g., chloride and sulfate) in grab and surface water samples are higher than Water Quality Objective for Municipal Supply due to intrusion of bay waters during high tide events.
- There is no physical or chemical data to indicate that impacted groundwater from the 5050 Coliseum Way property is entering the storm sewer/channel system.

This report prepared by:



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Matthew W. Hanko  
Project Geologist

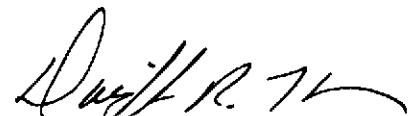
This report reviewed by:



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

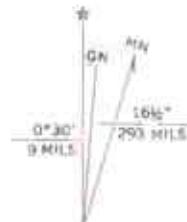
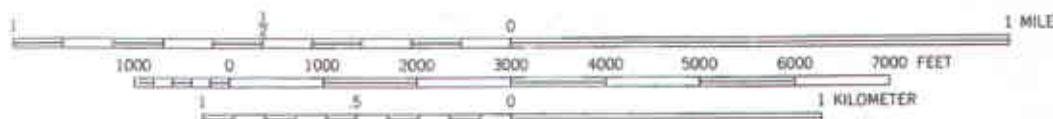
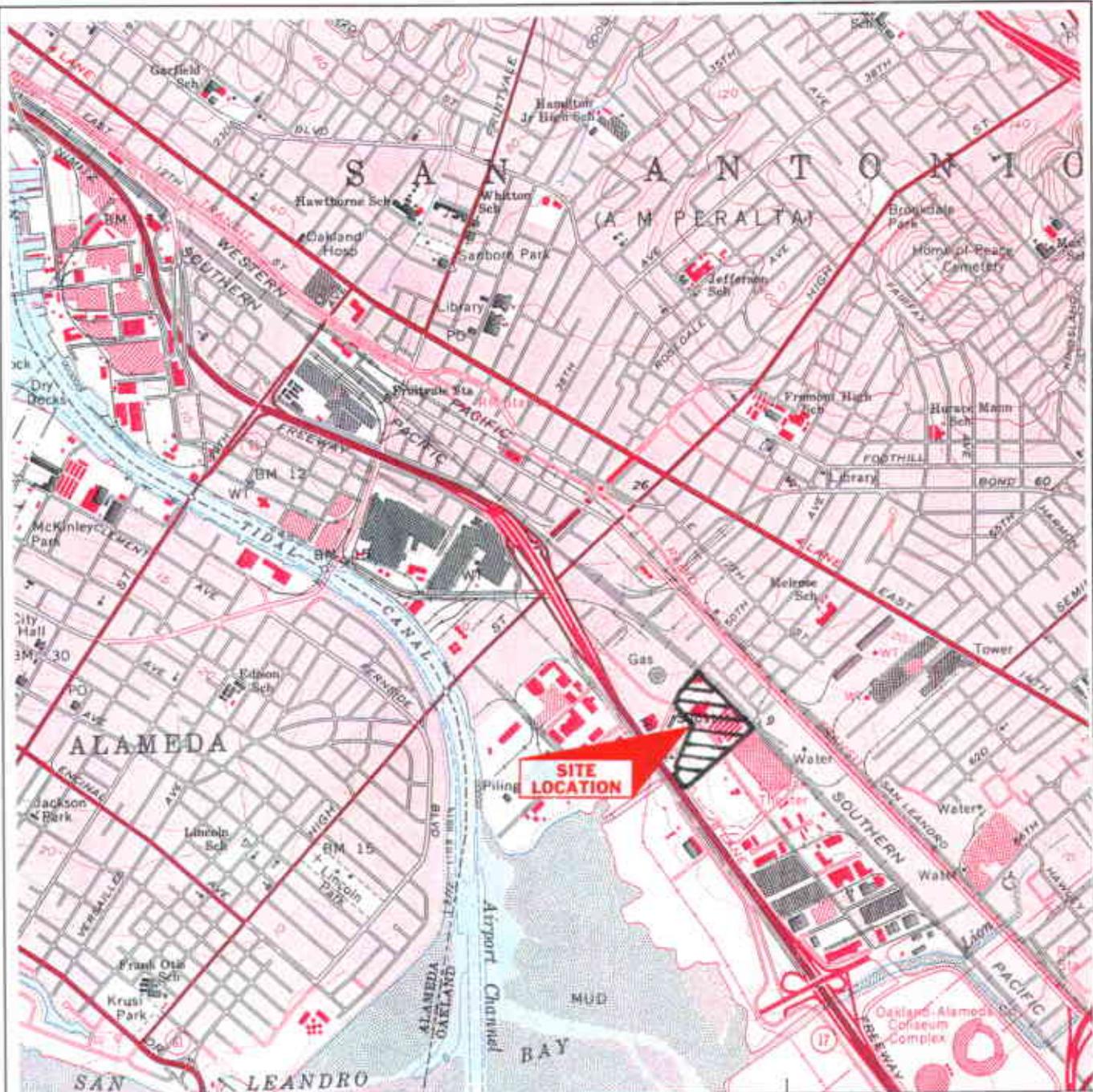
This report approved by:



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

August 5, 1997

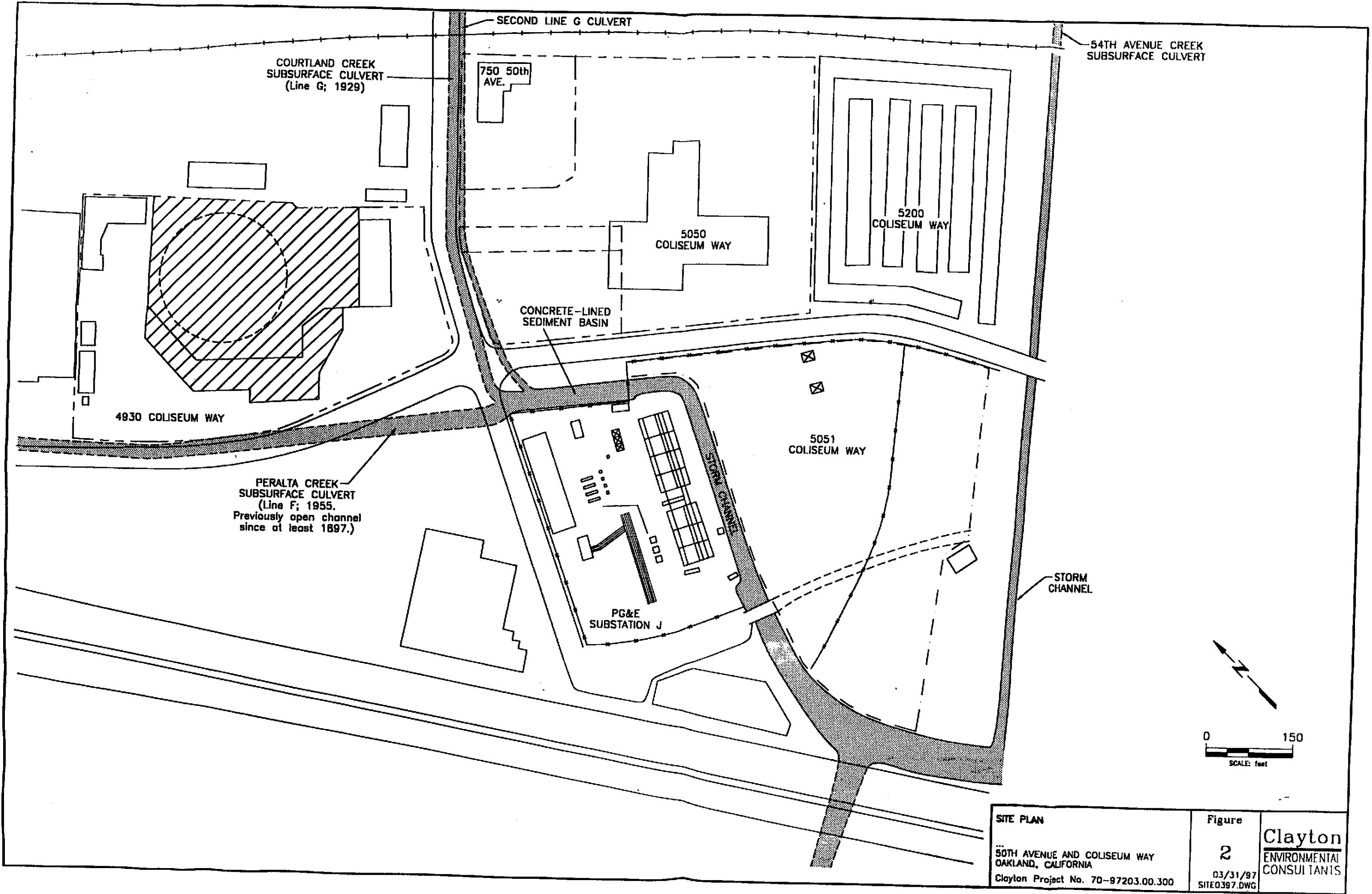


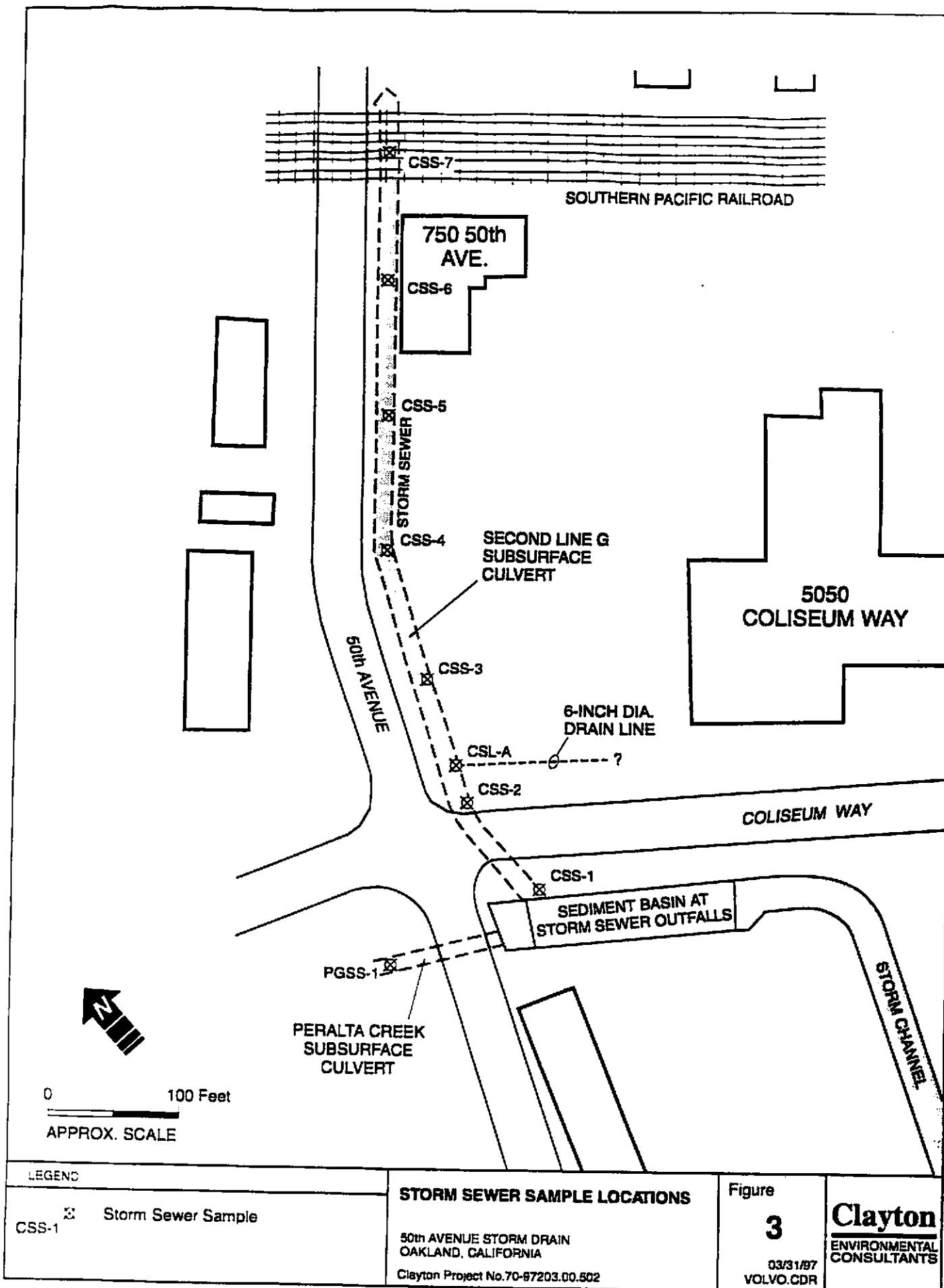
#### SITE LOCATION MAP

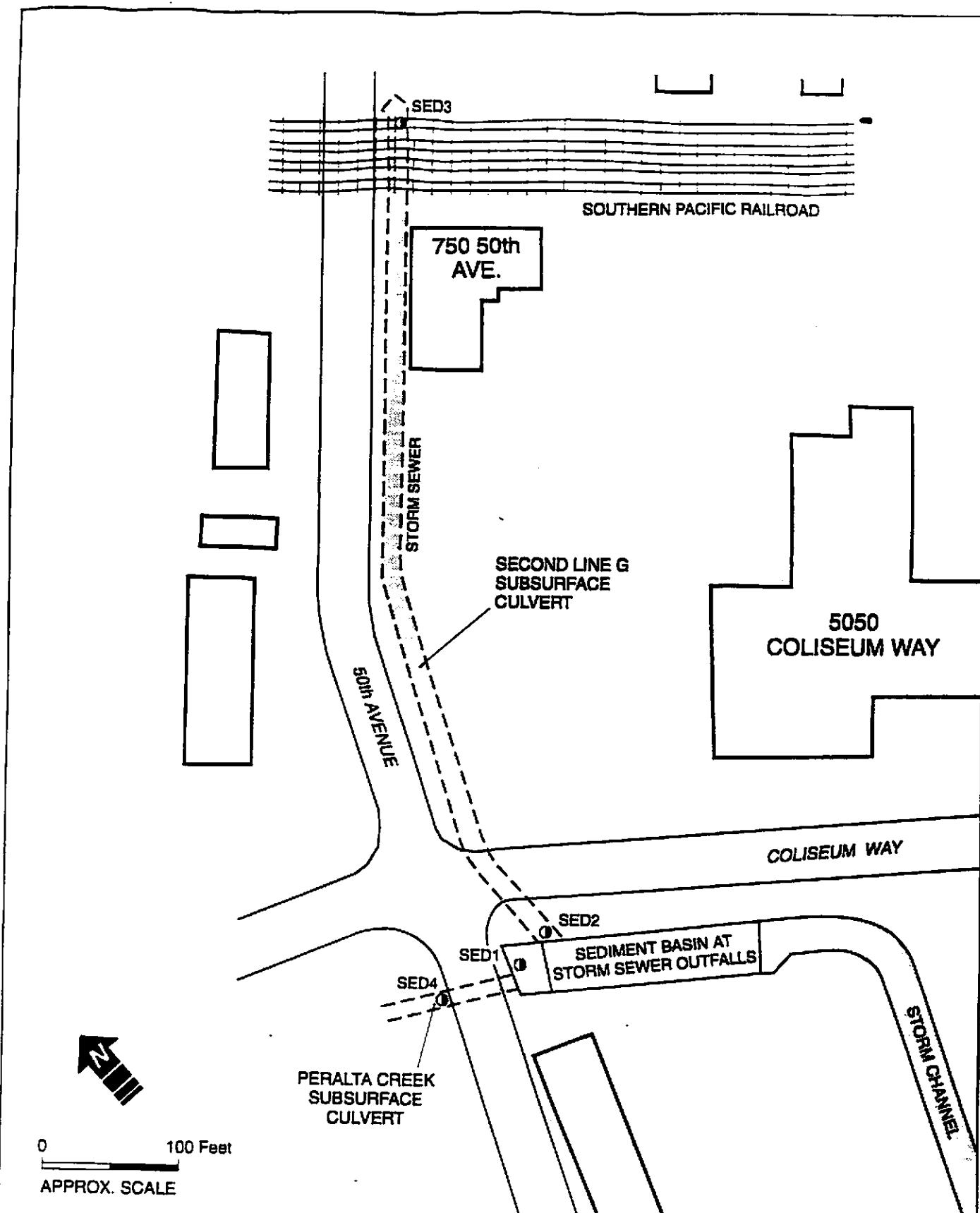
50th AVENUE STORM DRAIN  
OAKLAND, CALIFORNIA  
Clayton Project No. 70-97203.00.500

Figure  
**1**  
02/27/97  
FIG500.CDR

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LEGEND

● Sediment Sample  
SED1

SEDIMENT SAMPLE LOCATIONS

50th AVENUE STORM DRAIN  
OAKLAND, CALIFORNIA

Clayton Project No. 70-97203.00.502

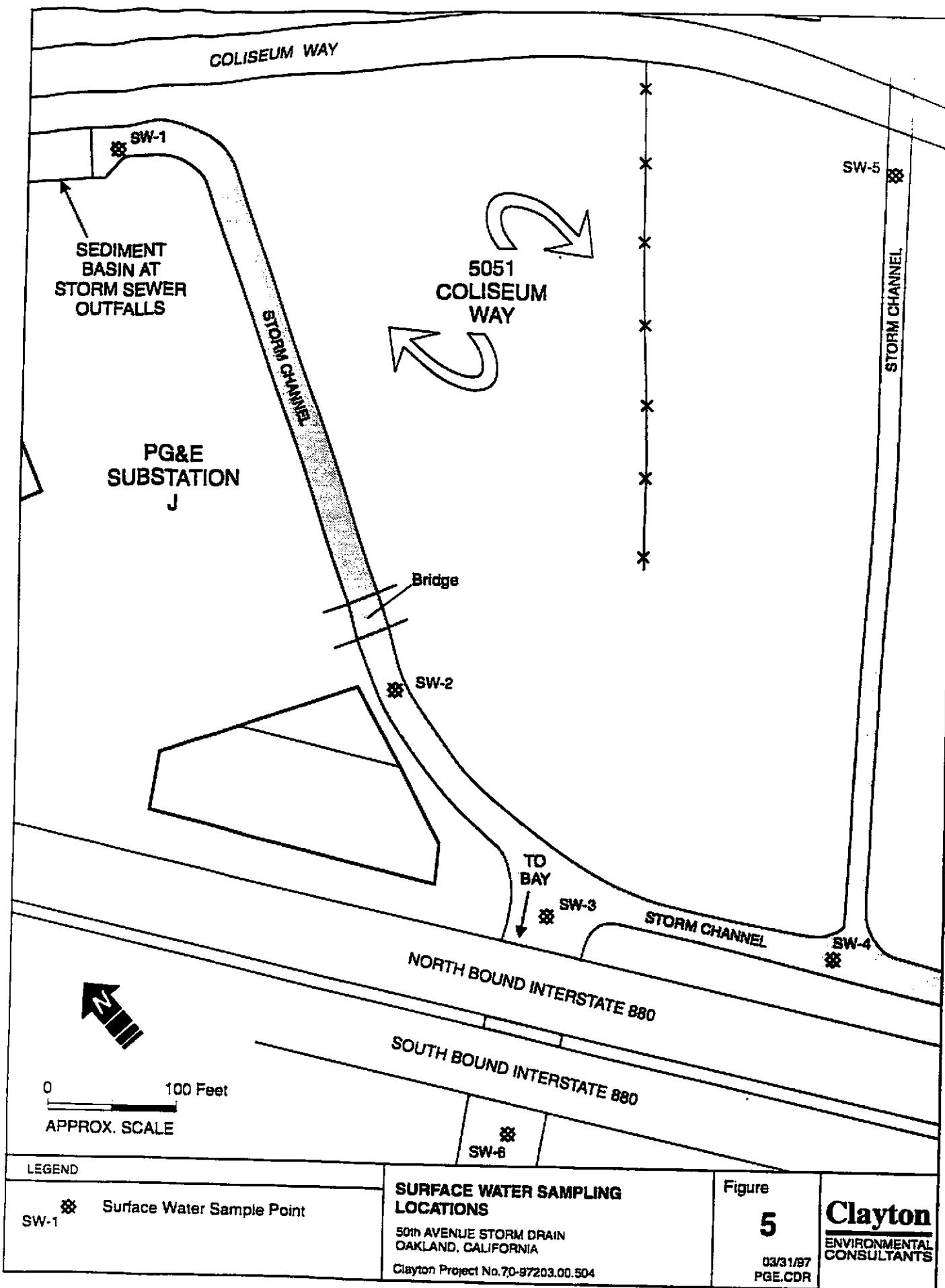
Figure

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**TABLE 1**  
**Summary of Metals, Cations, Anions, pH, and Total Alkalinity Results**  
**Storm Sewer Grab Water Samples**  
**50th Avenue and Coliseum Way, Oakland, California**  
[All data, except pH, reported in milligrams per Liter (mg/L)]

Parameter	CSS-1	CSS-2	CSS-3	CSS-4	CSS-5	CSS-6	CSS-7	CSL-A	PGSS-1
<b>METALS</b>									
Antimony	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Antimony, Dissolved	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Arsenic	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Arsenic, Dissolved	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Barium	0.06	0.09	0.05	0.06	0.06	0.06	0.07	0.24	0.24
Barium, Dissolved	0.05	0.06	0.04	0.05	0.05	0.05	0.05	0.14	0.11
Beryllium	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Beryllium, Dissolved	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cadmium	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cadmium, Dissolved	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.01	0.03
Chromium, Dissolved	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cobalt	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cobalt, Dissolved	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Copper	< 0.01	0.02	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.06	0.09
Copper, Dissolved	< 0.01	0.19	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.01	< 0.01
Lead	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.07	0.13
Lead, Dissolved	< 0.05	0.06	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Mercury	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Mercury, Dissolved	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005

**TABLE 1**  
**Summary of Metals, Cations, Anions, pH, and Total Alkalinity Results**  
**Storm Sewer Grab Water Samples**  
**50th Avenue and Coliseum Way, Oakland, California**  
[All data, except pH, reported in milligrams per Liter (mg/L)]

Parameter	CSS-1	CSS-2	CSS-3	CSS-4	CSS-5	CSS-6	CSS-7	CSL-A	PGSS-1
<b>METALS (cont)</b>									
Molybdenum	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Molybdenum, Dissolved	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Nickel	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.02	0.04
Nickel, Dissolved	< 0.02	0.04	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Selenium	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Selenium, Dissolved	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Silver	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Silver, Dissolved	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Thallium	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Thallium, Dissolved	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Vanadium	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.02
Vanadium, Dissolved	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Zinc	0.04	0.1	< 0.01	0.01	< 0.01	< 0.01	0.04	0.36	1.3
Zinc, Dissolved	0.02	0.1	< 0.01	< 0.01	< 0.01	0.01	< 0.01	0.11	0.68
Total Alkalinity	160	160	160	160	160	160	160	70	140
pH	8.1	8.2	8.2	8.2	8.2	8.2	8.2	7.4	7.3

**TABLE 1**  
**Summary of Metals, Cations, Anions, pH, and Total Alkalinity Results**  
**Storm Sewer Grab Water Samples**  
**50th Avenue and Coliseum Way, Oakland, California**  
[All data, except pH, reported in milligrams per Liter (mg/L)]

Parameter	CSS-1	CSS-2	CSS-3	CSS-4	CSS-5	CSS-6	CSS-7	CSL-A	PGSS-1
<b>CATIONS</b>									
Calcium	51	32	31	31	30	30	30	26	280
Calcium, Dissolved	46	33	30	30	29	29	28	23	240
Magnesium	110	44	43	41	39	38	39	4.7	870
Magnesium, Dissolved	97	43	41	41	39	37	36	3.8	760
Potassium	30	9	6	5	4	5	4	6	270
Potassium, Dissolved	26	10	6	6	5	5	4	5	250
Sodium	720	180	130	120	100	100	96	23	7,300
Sodium, Dissolved	600	200	130	120	110	100	85	23	6,600
<b>ANIONS</b>									
Bromide	4.1	1.2	0.71	0.7	0.53	0.51	0.45	0.08	56
Chloride	1,000	340	210	200	160	150	140	24	14,000
Fluoride	2.3	1.3	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.77	23
Nitrate/Nitrite	2.3	2.3	2.6	2.6	2.6	2.7	2.7	0.06	< 0.5
Ortho-phosphate	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 1
Sulfate	130	64	48	47	42	40	38	19	1,500

**TABLE 2**  
**Summary of Metals and pH Results**  
**Storm Sewer Sediment Samples**  
**50th Avenue and Coliseum Way, Oakland, California**  
[All data, except pH, reported in milligrams per Liter (mg/L)]

<b>Parameter</b>	<b>SED1</b>	<b>SED2</b>	<b>SED3</b>	<b>SED4</b>
Antimony	< 1	< 1	< 1	< 1
Arsenic	< 1	< 1	< 1	1
Barium	67	86	81	41
Beryllium	0.2	0.1	0.1	0.2
Cadmium	0.7	1.3	1	< 0.4
Chromium	51	58	50	86
Cobalt	11	8	8	18
Copper	110	47	83	130
Lead	160	140	210	96
Mercury	0.2	0.2	0.2	< 0.1
Molybdenum	< 1	2	< 1	< 1
Nickel	96	59	66	170
Selenium	< 1	< 1	< 1	< 1
Silver	< 0.5	< 0.5	< 0.5	< 0.5
Thallium	< 1	< 1	< 1	< 1
Vanadium	25	25	26	37
Zinc	750	310	260	1,300
pH	7.0	8.1	7.8	8.2

**TABLE 3**  
**Summary of Metals, Cations, Anions, pH, and Total Alkalinity Results**  
**Storm Channel Surface Water Samples**  
**50th Avenue and Coliseum Way, Oakland, California**  
[All data, except pH, reported in milligrams per Liter (mg/L)]

Parameter	SW-1	SW-2	SW-3	SW-4	SW-5	SW-6
<b>METALS</b>						
Antimony	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Antimony, Dissolved	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic, Dissolved	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.06	0.05	0.05	0.05	0.07	0.05
Barium, Dissolved	0.06	0.06	0.06	0.05	0.07	0.05
Beryllium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Beryllium, Dissolved	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cadmium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cadmium, Dissolved	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium, Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt, Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Copper	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Copper, Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Lead	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lead, Dissolved	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Mercury	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Mercury, Dissolved	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum, Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel, Dissolved	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Selenium, Dissolved	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silver	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Silver, Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thallium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Thallium, Dissolved	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Vanadium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Vanadium, Dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zinc	0.1	0.06	0.06	0.08	0.03	0.05
Zinc, Dissolved	0.06	0.05	0.07	0.06	0.02	0.04

**TABLE 3**  
**Summary of Metals, Cations, Anions, pH, and Total Alkalinity Results**  
**Storm Channel Surface Water Samples**  
**50th Avenue and Coliseum Way, Oakland, California**  
[All data, except pH, reported in milligrams per Liter (mg/L)]

Parameter	SW-1	SW-2	SW-3	SW-4	SW-5	SW-6
Total Alkalinity	140	140	130	140	150	130
pH	7.8	7.7	7.6	7.4	8.4	7.6
<b>CATIONS</b>						
Calcium	170	200	250	290	270	260
Calcium, Dissolved	140	190	190	290	260	260
Magnesium	530	630	820	930	850	840
Magnesium, Dissolved	410	600	600	930	830	830
Potassium	170	200	260	290	250	260
Potassium, Dissolved	130	180	180	280	250	260
Sodium	4,200	5,000	6,400	7,400	6,500	6,700
Sodium, Dissolved	3,200	4,700	4,700	7,200	6,300	7,000
<b>ANIONS</b>						
Bromide	27	37	50	62	51	59
Chloride	6,300	8,800	12,000	16,000	13,000	15,000
Fluoride	13	17	22	26	23	24
Nitrate/Nitrite	1	0.9	<0.5	<0.5	<0.5	0.9
Sulfate	700	970	1,300	1,600	1,400	1,600

**TABLE 4**  
**Maximum Water Quality Parameters in**  
**Grab Water and Surface Water**  
**50th Avenue and Coliseum Way, Oakland, California**  
[All data reported in milligrams per Liter (mg/L)]

Parameter	Grab Water	Surface Water	WQO
Antimony	< 0.03	< 0.03	0.006
Arsenic	< 0.005	< 0.005	0.05
Barium	0.09	0.07	1
Beryllium	< 0.005	< 0.005	0.004
Chloride	1,000	16,000	250
Cadmium	< 0.005	< 0.005	0.005
Chromium	< 0.01	< 0.01	0.05
Copper	< 0.01	< 0.01	1
Flouride	2.3	26	0.8-1.7
Iron	NA	NA	0.3
Lead	0.06	< 0.05	0.05
Manganese	NA	NA	0.05
Mercury	< 0.0005	< 0.0005	0.002
Nickel	< 0.02	< 0.02	0.1
Nitrate/Nitrite	2.7	1	10
Selenium	< 0.05	< 0.05	0.05
Silver	< 0.01	< 0.01	0.05
Sulfate	130	1,600	250
Thallium	< 0.05	< 0.05	0.002
Zinc	1.1	0.07	5

Grab Water = Grab water sample maximum analytical data collected from Second Line G  
subsurface culvert within the storm drain in October 1996.

Surface Water = Surface water sample maximum analytical data collected from the storm channels  
near the intersection of 50th avenue and Coliseum Way in October 1996.

WQO = Water Quality Objective for Municipal Supply (1995 Basin Plan).

## **APPENDIX A**

### **STORM SEWER SAMPLE ANALYTICAL RESULTS**

**San Francisco Regional Office**

1252 Quarry Lane  
P.O. Box 9019  
Pleasanton, CA 94566  
(510) 426-2600  
Fax (510) 426-0106

**Clayton**  
**ENVIRONMENTAL**  
**CONSULTANTS**

October 4, 1996

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

Client Ref.: Pending  
Clayton Project No.: 96100.11

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/ses

Attachments

**Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96100.11**

Sample Identification: SED 1  
 Lab Number: 9610011-07  
 Sample Matrix/Media: SOIL

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	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601	
Arsenic	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601	
Barium	67	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601	
Beryllium	0.2	0.1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601	
Cadmium	0.7	0.4	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601	
Chromium	51	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601	
Cobalt	11	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601	
Copper	110	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601	
Lead	160	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601	
Mercury	0.2	0.1	mg/kg	10/03/96	10/03/96	EPA 7471A	EPA 7471	
Molybdenum	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601	
Nickel	96	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601	
Selenium	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601	
Silver	<0.5	0.5	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601	
Thallium	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601	
Vanadium	25	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601	
Zinc	750	2	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601	
pH	7.0	--	S.U.	--	10/01/96	--	EPA 9045	

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. 96100.11

Sample Identification: SED 2  
Lab Number: 9610011-08  
Sample Matrix/Media: SOIL

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	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010	
Arsenic	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010	
Barium	86	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010	
Beryllium	0.1	0.1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010	
Cadmium	1.3	0.4	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010	
Chromium	58	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010	
Cobalt	8	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010	
Copper	47	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010	
Lead	140	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010	
Mercury	0.2	0.1	mg/kg	10/03/96	10/03/96	EPA 3050A	EPA 6010	
Molybdenum	2	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010	
Nickel	59	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010	
Selenium	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010	
Silver	<0.5	0.5	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010	
Thallium	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010	
Vanadium	25	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010	
Zinc	310	2	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010	
pH	8.1	--	S.U.	--	10/01/96	--	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. 96100.11**

Sample Identification: SED 3  
 Lab Number: 9610011-09  
 Sample Matrix/Media: SOIL

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

Analyte	Concentration	Method Detection		Date Prepared	Date Analyzed	Prep Method	Method Reference
		Limit	Units				
Antimony	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010
Arsenic	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010
Barium	81	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010
Beryllium	0.1	0.1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010
Cadmium	1.0	0.4	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010
Chromium	50	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010
Cobalt	8	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010
Copper	83	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010
Lead	210	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010
Mercury	0.2	0.1	mg/kg	10/03/96	10/03/96	EPA 7471A	EPA 7471
Molybdenum	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010
Nickel	66	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010
Selenium	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010
Silver	<0.5	0.5	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010
Thallium	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010
Vanadium	26	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010
Zinc	260	2	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 6010
pH	7.8	--	S.U.	--	10/01/96	--	EPA 9045

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. 96100.11

Sample Identification: SED 4  
 Lab Number: 9610011-10  
 Sample Matrix/Media: SOIL

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

Analyte	Concentration	Method Detection			Date Prepared	Date Analyzed	Prep Method	Method Reference
		Limit	Units					
Antimony	<1	1	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Arsenic	1	1	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Barium	41	1	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Beryllium	0.2	0.1	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Cadmium	<0.4	0.4	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Chromium	86	1	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Cobalt	18	1	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Copper	130	1	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Lead	96	1	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Mercury	<0.1	0.1	mg/kg		10/03/96	10/03/96	EPA 7471A	EPA 7471
Molybdenum	<1	1	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Nickel	170	1	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Selenium	<1	1	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Silver	<0.5	0.5	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Thallium	<1	1	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Vanadium	37	1	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Zinc	1300	2	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
pH	8.2	--	S.U.	--	10/01/96	--		EPA 9045

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. 96100.11**

Sample Identification: CSS-1  
 Lab Number: 9610011-11  
 Sample Matrix/Media: WATER

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

Analyte	Concentration	Method Detection		Date Prepared	Date Analyzed	Prep Method	Method Reference
		Limit	Units				
Alkalinity, Tot. (CaCO <sub>3</sub> )	160	5	mg/L	--	10/03/96	--	EPA 310.
Antimony	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Antimony, dissolved	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Arsenic	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Arsenic, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Barium	0.06	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Barium, dissolved	0.05	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Beryllium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Beryllium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Bromide	4.1	0.05	mg/L	--	10/02/96	--	EPA 300.
Cadmium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Cadmium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Calcium	51	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Calcium, dissolved	46	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Chloride	1000	0.1	mg/L	--	10/02/96	--	EPA 300.
Chromium	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Chromium, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Cobalt	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Cobalt, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Copper	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Copper, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Fluoride	2.3	0.05	mg/L	--	10/02/96	--	EPA 300.
Lead	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Lead, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Magnesium	110	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Magnesium, dissolved	97	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Mercury	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245.2
Mercury, dissolved	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245.2
Molybdenum	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7
Molybdenum, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7
Nickel	<0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7
Nickel, dissolved	<0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7
Nitrate-N	2.3	0.5	mg/L	--	10/02/96	--	EPA 300.0
Nitrite-N	<0.5	0.5	a mg/L	--	10/02/96	--	EPA 300.0
Ortho-Phosphate	<0.1	0.1	mg/L	--	10/02/96	--	EPA 300.0
Potassium	30	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7

**Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96100.11**

Sample Identification: CSS-1  
 Lab Number: 9610011-11  
 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					
Potassium, dissolved	25	1	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Selenium	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Selenium, dissolved	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Silver	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Silver, dissolved	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Sodium	720	1	mg/L		10/02/96	10/03/96	EPA 200.7	EPA 200.
Sodium, dissolved	600	1	mg/L		10/02/96	10/03/96	EPA 200.7	EPA 200.
Sulfate	130	0.1	mg/L	--		10/02/96	--	EPA 300.
Thallium	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Thallium, dissolved	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Vanadium	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Vanadium, dissolved	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Zinc	0.04	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Zinc, dissolved	0.02	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
pH	8.1	--	S.U.	--		10/01/96	--	EPA 150.

ND: Not detected at or above limit of detection

--: Information not available or not applicable

a Note: Detection limits increased due to matrix interference.

**Analytical Results  
for**

Clayton Environmental Consultants, Inc.

Client Reference: Pending

Clayton Project No. 96100.11

Sample Identification: CSS-2  
 Lab Number: 9610011-12  
 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					
Alkalinity, Tot. (CaCO <sub>3</sub> )	160	5	mg/L	--	10/02/96	10/02/96	--	EPA 310
Antimony	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Antimony, dissolved	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Arsenic	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Arsenic, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Barium	0.09	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Barium, dissolved	0.06	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Beryllium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Beryllium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Bromide	1.2	0.05	mg/L	--	10/02/96	--	EPA 300	
Cadmium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Cadmium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Calcium	32	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Calcium, dissolved	33	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Chloride	340	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Chromium	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Chromium, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Cobalt	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Cobalt, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Copper	0.02	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Copper, dissolved	0.19	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Fluoride	1.3	0.05	mg/L	--	10/02/96	--	EPA 200	
Lead	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Lead, dissolved	0.06	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Magnesium	44	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Magnesium, dissolved	43	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Mercury	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245	
Mercury, dissolved	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245	
Molybdenum	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Molybdenum, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Nickel	<0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Nickel, dissolved	0.04	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Nitrate-N	2.3	0.05	mg/L	--	10/02/96	--	EPA 300	
Nitrite-N	<0.05	0.05	mg/L	--	10/02/96	--	EPA 300	
Ortho-Phosphate	<0.1	0.1	mg/L	--	10/02/96	--	EPA 300	
Potassium	9	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	

**Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96100.11**

Sample Identification: CSS-2  
 Lab Number: 9610011-12  
 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					
Potassium, dissolved	10	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	
Selenium	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	
Selenium, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	
Silver	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	
Silver, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	
Sodium	180	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	
Sodium, dissolved	200	1	mg/L	10/02/96	10/03/96	EPA 200.7	EPA 200.7	
Sulfate	64	0.1	mg/L	--	10/02/96	--	EPA 200.7	
Thallium	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	
Thallium, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	
Vanadium	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	
Vanadium, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	
Zinc	0.10	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	
Zinc, dissolved	1.1	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	
pH	8.2	--	S.U.	--	10/01/96	--	EPA 150.1	

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. 96100.11**

Sample Identification: CSS-3  
 Lab Number: 9610011-13  
 Sample Matrix/Media: WATER

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

Analyte	Concentration	Method Detection			Date Prepared	Date Analyzed	Prep Method	Method Reference
		Limit	Units					
Alkalinity, Tot. (CaCO <sub>3</sub> )	160	5	mg/L	--	10/02/96	10/03/96	--	EPA 310
Antimony	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Antimony, dissolved	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Arsenic	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Arsenic, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Barium	0.05	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Barium, dissolved	0.04	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Beryllium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Beryllium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Bromide	0.71	0.05	mg/L	--	10/02/96	--	EPA 300	
Cadmium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Cadmium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Calcium	31	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Calcium, dissolved	30	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Chloride	210	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Chromium	<0.01	0.01	mg/L	--	10/02/96	--	EPA 300	
Chromium, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Cobalt	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Cobalt, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Copper	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Copper, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Fluoride	<0.05	0.05	mg/L	--	10/02/96	--	EPA 200	
Lead	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Lead, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Magnesium	43	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Magnesium, dissolved	41	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Mercury	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245.	
Mercury, dissolved	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245.	
Molybdenum	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Molybdenum, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Nickel	<0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Nickel, dissolved	<0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Nitrate-N	2.6	0.05	mg/L	--	10/02/96	--	EPA 300	
Nitrite-N	<0.05	0.05	mg/L	--	10/02/96	--	EPA 300	
Ortho-Phosphate	<0.1	0.1	mg/L	--	10/02/96	--	EPA 300	
Potassium	6	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96100.11

Sample Identification: CSS-3  
Lab Number: 9610011-13  
Sample Matrix/Media: WATER

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

Analyte	Concentration	Method			Prepared	Date Analyzed	Prep Method	Method Reference
		Detection	Limit	Units				
Potassium, dissolved	6		1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7
Selenium	<0.05		0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7
Selenium, dissolved	<0.05		0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7
Silver	<0.01		0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7
Silver, dissolved	<0.01		0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7
Sodium	130		1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7
Sodium, dissolved	130		1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7
Sulfate	48		0.1	mg/L	--	10/02/96	--	EPA 300.7
Thallium	<0.05		0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7
Thallium, dissolved	<0.05		0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7
Vanadium	<0.01		0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7
Vanadium, dissolved	<0.01		0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7
Zinc	<0.01		0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7
Zinc, dissolved	<0.01		0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7
pH	8.2	--	S.U.		--	10/01/96	--	EPA 150.7

ND: Not detected at or above limit of detection

--: Information not available or not applicable

## Analytical Results

for

Clayton Environmental Consultants, Inc.

Client Reference: Pending

Clayton Project No. 96100.11

Sample Identification: CSS-4  
 Lab Number: 9610011-14  
 Sample Matrix/Media: WATER

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

Analyte	Concentration	Method Detection			Date Prepared	Date Analyzed	Prep Method	Method Reference
		Limit	Units					
Alkalinity, Tot. (CaCO <sub>3</sub> )	160	5	mg/L	--	10/02/96	10/02/96	EPA 200.7	EPA 310
Antimony	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Antimony, dissolved	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Arsenic	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Arsenic, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Barium	0.06	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Barium, dissolved	0.05	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Beryllium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Beryllium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Bromide	0.70	0.05	mg/L	--	10/02/96	--	EPA 300	
Cadmium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Cadmium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Calcium	31	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Calcium, dissolved	30	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Chloride	200	0.1	mg/L	--	10/02/96	--	EPA 300	
Chromium	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Chromium, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Cobalt	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Cobalt, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Copper	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Copper, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Fluoride	<0.05	0.05	mg/L	--	10/02/96	--	EPA 300	
Lead	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Lead, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Magnesium	41	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Magnesium, dissolved	41	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Mercury	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245	
Mercury, dissolved	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245	
Molybdenum	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Molybdenum, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Nickel	<0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Nickel, dissolved	<0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Nitrate-N	2.6	0.05	mg/L	--	10/02/96	--	EPA 300	
Nitrite-N	<0.05	0.05	mg/L	--	10/02/96	--	EPA 300	
Ortho-Phosphate	<0.1	0.1	mg/L	--	10/02/96	--	EPA 300	
Potassium	5	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	

**Analytical Results**  
for  
**Clayton Environmental Consultants, Inc.**  
**Client Reference: Pending**  
**Clayton Project No. 96100.11**

Sample Identification: CSS-4  
Lab Number: 9610011-14  
Sample Matrix/Media: WATER

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

Analyte	Concentration	Method Detection			Date Prepared	Date Analyzed	Prep Method	Method Reference
		Limit	Units					
Potassium, dissolved	6	1	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Selenium	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Selenium, dissolved	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Silver	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Silver, dissolved	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Sodium	120	1	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Sodium, dissolved	120	1	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Sulfate	47	0.1	mg/L		--	10/02/96	--	EPA 300.
Thallium	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Thallium, dissolved	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Vanadium	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Vanadium, dissolved	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Zinc	0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Zinc, dissolved	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
pH	8.2	--	S.U.		--	10/01/96	--	EPA 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. 96100.11**

Sample Identification: CSS-5  
 Lab Number: 9610011-15  
 Sample Matrix/Media: WATER

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

Analyte	Concentration	Method Detection		Date Prepared	Date Analyzed	Prep Method	Method Reference
		Limit	Units				
Alkalinity, Tot. (CaCO <sub>3</sub> )	160	5	mg/L	--	10/03/96	--	EPA 310
Antimony	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Antimony, dissolved	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Arsenic	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Arsenic, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Barium	0.06	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Barium, dissolved	0.05	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Beryllium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Beryllium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Bromide	0.53	0.05	mg/L	--	10/02/96	--	EPA 300
Cadmium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Cadmium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Calcium	30	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Calcium, dissolved	29	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Chloride	160	0.1	mg/L	--	10/02/96	--	EPA 300
Chromium	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Chromium, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Cobalt	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Cobalt, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Copper	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Copper, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Fluoride	<0.05	0.05	mg/L	--	10/02/96	--	EPA 300
Lead	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Lead, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Magnesium	39	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Magnesium, dissolved	39	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Mercury	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245
Mercury, dissolved	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245
Molybdenum	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Molybdenum, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Nickel	<0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Nickel, dissolved	<0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Nitrate-N	2.6	0.05	mg/L	--	10/02/96	--	EPA 300
Nitrite-N	<0.05	0.05	mg/L	--	10/02/96	--	EPA 300
Ortho-Phosphate	<0.1	0.1	mg/L	--	10/02/96	--	EPA 300
Potassium	4	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200

**Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96100.11**

Sample Identification: CSS-5  
 Lab Number: 9610011-15  
 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					
Potassium, dissolved	5	1	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Selenium	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Selenium, dissolved	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Silver	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Silver, dissolved	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Sodium	100	1	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Sodium, dissolved	110	1	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Sulfate	42	0.1	mg/L		--	10/02/96	--	EPA 300
Thallium	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Thallium, dissolved	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Vanadium	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Vanadium, dissolved	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Zinc	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Zinc, dissolved	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
pH	8.2	--	S.U.		--	10/01/96	--	EPA 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. 96100.11

Sample Identification: CSS-6  
 Lab Number: 9610011-16  
 Sample Matrix/Media: WATER

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

Analyte	Concentration	Method Detection			Date Prepared	Date Analyzed	Prep Method	Method Reference
		Limit	Units					
Alkalinity, Tot. (CaCO <sub>3</sub> )	160	5	mg/L	--	10/02/96	10/02/96	--	EPA 310.
Antimony	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Antimony, dissolved	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Arsenic	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Arsenic, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Barium	0.06	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Barium, dissolved	0.05	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Beryllium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Beryllium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Bromide	0.51	0.05	mg/L	--	10/02/96	--	EPA 300.	
Cadmium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Cadmium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Calcium	30	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Calcium, dissolved	29	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Chloride	150	0.1	mg/L	--	10/02/96	--	EPA 300.	
Chromium	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Chromium, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Cobalt	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Cobalt, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Copper	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Copper, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Fluoride	0.05	0.05	mg/L	--	10/02/96	--	EPA 300.	
Lead	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Lead, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Magnesium	38	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Magnesium, dissolved	37	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Mercury	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245.2	
Mercury, dissolved	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245.2	
Molybdenum	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	
Molybdenum, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	
Nickel	<0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	
Nickel, dissolved	<0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	
Nitrate-N	2.7	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	5	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	

**Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96100.11**

Sample Identification: CSS-6  
Lab Number: 9610011-16  
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					
Potassium, dissolved	5	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Selenium	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Selenium, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Silver	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Silver, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Sodium	100	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Sodium, dissolved	100	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Sulfate	40	0.1	mg/L	--	10/02/96	--	EPA 303	
Thallium	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Thallium, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Vanadium	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Vanadium, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Zinc	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Zinc, dissolved	0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
pH	8.2	--	S.U.	--	10/01/96	--	EPA 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. 96100.11**

Sample Identification: CSS-7  
Lab Number: 9610011-17  
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				
Alkalinity, Tot. (CaCO <sub>3</sub> )	160	5	mg/L	--	10/03/96	--	EPA 310.
Antimony	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Antimony, dissolved	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Arsenic	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Arsenic, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Barium	0.07	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Barium, dissolved	0.05	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Beryllium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Beryllium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Bromide	0.45	0.05	mg/L	--	10/02/96	--	EPA 300.
Cadmium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Cadmium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Calcium	30	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Calcium, dissolved	28	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Chloride	140	0.1	mg/L	--	10/02/96	--	EPA 300.
Chromium	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Chromium, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Cobalt	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Cobalt, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Copper	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Copper, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Fluoride	<0.05	0.05	mg/L	--	10/02/96	--	EPA 200.
Lead	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 300.
Lead, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Magnesium	39	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Magnesium, dissolved	36	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Mercury	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245.2
Mercury, dissolved	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245.2
Molybdenum	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Molybdenum, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Nickel	<0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Nickel, dissolved	<0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Nitrate-N	2.7	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	4	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96100.11

Sample Identification: CSS-7  
Lab Number: 9610011-17  
Sample Matrix/Media: WATER

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

Analyte	Concentration	Method Detection		Date Prepared	Date Analyzed	Prep Method	Method Reference
		Limit	Units				
Potassium, dissolved	4	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Selenium	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Selenium, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Silver	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Silver, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Sodium	96	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Sodium, dissolved	85	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Sulfate	38	0.1	mg/L	--	10/02/96	--	EPA 200.
Thallium	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 300.
Thallium, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Vanadium	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Vanadium, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Zinc	0.04	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Zinc, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
pH	8.2	--	S.U.	--	10/01/96	--	EPA 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. 96100.11

Sample Identification: CSL-A  
 Lab Number: 9610011-18  
 Sample Matrix/Media: WATER

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

Analyte	Concentration	Method Detection			Date Prepared	Date Analyzed	Prep Method	Method Reference
		Limit	Units					
Alkalinity, Tot. (CaCO <sub>3</sub> )	70	5	mg/L	--	10/02/96	10/02/96	--	EPA 310
Antimony	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Antimony, dissolved	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Arsenic	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Arsenic, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Barium	0.24	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Barium, dissolved	0.14	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Beryllium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Beryllium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Bromide	0.08	0.05	mg/L	--	10/02/96	--	EPA 300	
Cadmium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Cadmium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Calcium	26	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Calcium, dissolved	23	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Chloride	24	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Chromium	0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 300	
Chromium, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Cobalt	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Cobalt, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Copper	0.06	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Copper, dissolved	0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Fluoride	0.77	0.05	mg/L	--	10/02/96	--	EPA 300	
Lead	0.07	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 300	
Lead, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Magnesium	4.7	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Magnesium, dissolved	3.8	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Mercury	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245	
Mercury, dissolved	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245	
Molybdenum	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Molybdenum, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Nickel	0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Nickel, dissolved	<0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Nitrate-N	0.06	0.05	mg/L	--	10/02/96	--	EPA 300	
Nitrite-N	<0.05	0.05	mg/L	--	10/02/96	--	EPA 300	
Ortho-Phosphate	<0.1	0.1	mg/L	--	10/02/96	--	EPA 300	
Potassium	6	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96100.11

Sample Identification: CSL-A  
Lab Number: 9610011-18  
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					
Potassium, dissolved	5	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Selenium	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Selenium, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Silver	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Silver, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Sodium	23	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Sodium, dissolved	23	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Sulfate	19	0.1	mg/L	--	10/02/96	--	EPA 200.	
Thallium	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 300.	
Thallium, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Vanadium	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Vanadium, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Zinc	0.36	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Zinc, dissolved	0.11	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
pH	7.4	--	S.U.	--	10/01/96	--	EPA 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. 96100.11**

Sample Identification: PGSS-1  
 Lab Number: 9610011-19  
 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					
Alkalinity, Tot. (CaCO <sub>3</sub> )	140	5	mg/L	--	10/03/96	--	--	EPA 310.
Antimony	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Antimony, dissolved	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Arsenic	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Arsenic, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Barium	0.24	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Barium, dissolved	0.11	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Beryllium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Beryllium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Bromide	56	0.05	mg/L	--	10/02/96	--	EPA 300.	
Cadmium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Cadmium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Calcium	280	0.1	mg/L	10/02/96	10/03/96	EPA 200.7	EPA 200.	
Calcium, dissolved	240	0.1	mg/L	10/02/96	10/03/96	EPA 200.7	EPA 200.	
Chloride	14000	0.1	mg/L	--	10/02/96	--	EPA 300.	
Chromium	0.03	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Chromium, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Cobalt	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Cobalt, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Copper	0.09	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Copper, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Fluoride	23	0.05	mg/L	--	10/02/96	--	EPA 300.	
Lead	0.13	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Lead, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Magnesium	870	0.1	mg/L	10/02/96	10/03/96	EPA 200.7	EPA 200.	
Magnesium, dissolved	760	0.1	mg/L	10/02/96	10/03/96	EPA 200.7	EPA 200.	
Mercury	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245.2	
Mercury, dissolved	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245.2	
Molybdenum	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Molybdenum, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Nickel	0.04	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Nickel, dissolved	<0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Nitrate-N	<0.5	0.5	mg/L	--	10/02/96	--	EPA 300.	
Nitrite-N	<0.5	0.5	a mg/L	--	10/02/96	--	EPA 300.	
Ortho-Phosphate	<1	1	a mg/L	--	10/02/96	--	EPA 300.	
Potassium	270	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	

**Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96100.11**

Sample Identification: PGSS-1  
 Lab Number: 9610011-19  
 Sample Matrix/Media: WATER

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

Analyte	Concentration	Method Detection		Date Prepared	Date Analyzed	Prep Method	Method Reference
		Limit	Units				
Potassium, dissolved	250	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Selenium	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Selenium, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Silver	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Silver, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Sodium	7300	1	mg/L	10/02/96	10/04/96	EPA 200.7	EPA 200
Sodium, dissolved	6600	1	mg/L	10/02/96	10/04/96	EPA 200.7	EPA 200
Sulfate	1500	0.1	mg/L	--	10/02/96	--	EPA 300
Thallium	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Thallium, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Vanadium	0.02	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Vanadium, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Zinc	1.3	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Zinc, dissolved	0.68	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
pH	7.3	--	S.U.	--	10/01/96	--	EPA 150

ND: Not detected at or above limit of detection

--: Information not available or not applicable

a Note: Detection limits increased due to matrix interference.

**Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96100.11**

Sample Identification: METHOD BLANK  
 Lab Number: 9610011-21  
 Sample Matrix/Media: WATER

Date Sampled: --  
 Date Received: --

Analyte	Concentration	Method Detection			Date Prepared	Date Analyzed	Prep Method	Method Reference
		Limit	Units					
Alkalinity, Tot. (CaCO <sub>3</sub> )	<5	5	mg/L	--	10/02/96	10/02/96	--	EPA 310
Antimony	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Antimony, dissolved	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Arsenic	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Arsenic, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Barium	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Barium, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Beryllium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Beryllium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Bromide	<0.05	0.05	mg/L	--	10/02/96	--	EPA 300	
Cadmium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Cadmium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Calcium	<0.1	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Calcium, dissolved	<0.1	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Chloride	<0.1	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Chromium	<0.01	0.01	mg/L	--	10/02/96	--	EPA 300	
Chromium, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Cobalt	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Cobalt, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Copper	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Copper, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Fluoride	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Lead	<0.05	0.05	mg/L	--	10/02/96	--	EPA 300	
Lead, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Magnesium	<0.1	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Magnesium, dissolved	<0.1	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Mercury	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245	
Mercury, dissolved	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245	
Molybdenum	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Molybdenum, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Nickel	<0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Nickel, dissolved	<0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Nitrate-N	<0.05	0.05	mg/L	--	10/02/96	--	EPA 300	
Nitrite-N	<0.05	0.05	mg/L	--	10/02/96	--	EPA 300	
Ortho-Phosphate	<0.1	0.1	mg/L	--	10/02/96	--	EPA 300	
Potassium	<1	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	

**Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96100.11**

Sample Identification: METHOD BLANK  
 Lab Number: 9610011-21  
 Sample Matrix/Media: WATER

Date Sampled: --  
 Date Received: --

Analyte	Concentration	Method			Date Prepared	Date Analyzed	Prep Method	Method Reference
		Detection Limit	Units					
Potassium, dissolved	<1	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Selenium	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Selenium, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Silver	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Silver, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Sodium	<1	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Sodium, dissolved	<1	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Sulfate	<0.1	0.1	mg/L	--	10/02/96	--	EPA 300.	
Thallium	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Thallium, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Vanadium	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Vanadium, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Zinc	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Zinc, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	

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. 96100.11

Sample Identification: METHOD BLANK  
Lab Number: 9610011-22  
Sample Matrix/Media: SOIL

Date Sampled: --  
Date Received: --

Analyte	Concentration	Method Detection			Date Prepared	Date Analyzed	Prep Method	Method Reference
		Limit	Units					
Antimony	<1	1	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Arsenic	<1	1	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Barium	<1	1	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Beryllium	<0.1	0.1	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Cadmium	<0.4	0.4	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Chromium	<1	1	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Cobalt	<1	1	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Copper	<1	1	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Lead	<1	1	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Mercury	<0.1	0.1	mg/kg		10/03/96	10/03/96	EPA 7471A	EPA 747
Molybdenum	<1	1	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Nickel	<1	1	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Selenium	<1	1	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Silver	<0.5	0.5	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Thallium	<1	1	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Vanadium	<1	1	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601
Zinc	<1	1	mg/kg		10/02/96	10/03/96	EPA 3050A	EPA 601

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.

**Clayton**  
ENVIRONMENTAL  
CONSULTANTS

**REQUEST FOR LABORATORY  
ANALYTICAL SERVICES**

For Clayton Use Only	Page <u>1</u> of <u>2</u>
Project No.	
Batch No. <u>9610011</u>	
Ind. Code	W.P.
Date Logged In <u>11/1</u>	By <u>DR</u>

REPORT TO	Name <u>DWIGHT HORNIG</u>	Title
RESULTS TO	Company <u>CLAYTON</u>	Dept.
Mailing Address		
City, State, Zip		
Telephone No.	Telefax No.	

Date Results Req.: 10-2-96 Rush Charges Authorized?  Yes  No Phone / Fax Results

Special Instructions: (method, limit of detection, etc.) \* FILTER +  
 PRESERVE ~~AS IS~~ UNFILTERED DISSOLVED  
 METALS SAMPLES ARE INEXACTABLE  
 Explanation of Preservative: FIL MONGAT RDN FILTERED  
 (Y = H2O3)  
 SAMPTEK 100

CLIENT SAMPLE IDENTIFICATION

	DATE SAMPLED	MATRIX/ MEDIA	MT VOLUME (specify units)
--	-----------------	------------------	------------------------------

SW-1 (SURFACE WATER)	10/1/96	WATER	3x250 ml
SW-2			
SW-3			
SW-4			
SW-5			
SW-6			
SED 1 (MID BASIN)			
SED 2 (ENTRANCE TO 50TH AVE SS)			
SED 3 (-0680' INTO 60TH AVE SS)			
SED 4 (-80' INTO PACIFIC GULV. SS)			

SEGMENT 2" x 6" SEGS.

SEND INVOICE TO	Purchase Order No.	Client Job No.
	Name	Address

Number of Containers	ANALYSIS REQUESTED (Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added.)							
	CAN 1/2 METALS	TOTAL ALKALI	TOTAL ACIDITY	DISSOLVED GASES	ANIONS	CATIONS	TOTAL PRESERVATIVE	PH. HEAT/COOL
3	X	X	X	X	Y	X	Y	Y
3	X	X	X	X	X	X	X	X
3	X	X	X	X	X	X	X	X
3	X	X	X	X	X	X	X	X
3	X	X	X	X	X	X	X	X
3	X	X	X	X	X	X	X	X
1	X				X			
1	X				X			
1	X				X			
1	X				X			

FOR LAB  
USE ONLY

01A

02

03

04

05

06

07A

07B

08

09

10

Collected by: <u>Dwight Hornig</u>	Print: <u>Hornig</u>
Relinquished by: <u>Mark W. Glabio</u>	Date/Time: <u>10-1-96 1:00pm</u>
Relinquished by:	Date/Time

Collector's Signature: <u>Mark W. Glabio</u>	Date/Time
Received by:	Date/Time
Received at Lab by: <u>Carol Hemmerberg</u>	Date/Time <u>10/1/96 1:00pm</u>
Sample Condition Upon Receipt: <input checked="" type="checkbox"/> Acceptable	<input type="checkbox"/> Other (explain)

Method of Shipment:  
 Authorized by: Mark W. Glabio Date 10-1-96  
 (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) 428-2657

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 WHITE - Clayton Laboratory  
 YELLOW - Clayton Accounting

**Clayton**  
ENVIRONMENTAL  
CONSULTANTS

**REQUEST FOR LABORATORY  
ANALYTICAL SERVICES**

REPORT RESULTS TO		Name PW1647 HORNIG	Client Job No.
Company CLAYTON		Dept.	
Mailing Address			
City, State, Zip FL 335			
Telephone No.		FAX No.	

Special Instructions and/or specific regulatory requirements:  
(method, limit of detection, etc.)  
~~NO FILTER, PRESERVE~~ ~~NO FILTER, UNPRESERVED~~  
~~METALS SAMPLE. IF RESULTS ARE NOT~~  
~~WATERBORN, RUN FILTERED~~  
Explanation of Preservative: SAMPLE NOW.  
O-HN03

Samples are:  
(check if applicable)  
 Drinking Water  
 Groundwater  
 Wastewater

SEND INVOICE TO

Purchase Order No.  
Name  
Company  
Address  
City, State, Zip

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

	CHL 15 METALS	CHL 13 INORGANIC	CHL 12 DISSOLVENTS	ANALYS	CATIONS TOTAL	TOTAL IONIC	PH	ALKALINITY	HOLD	FOR LAB USE ONLY
CSS-1 (ENTRANCE TO SS)	X	X	X	X	X	X	X	X		11A-C
CSS-2 (100' INTO CSS)	X	X	X	X	X	X	X	X		12
CSS-3 (200' " "	X	X	X	X	X	X	X	X		13
CSS-4 (300' " "	X	X	X	X	X	X	X	X		14
CSS-5 (400' " "	X	X	X	X	X	X	X	X		15
CSS-6 (500' " "	X	X	X	X	X	X	X	X		16
CSS-7 (600' " "	X	X	X	X	X	X	X	X		
GSL-A (GARAGE @ N 120')	X	X	X	X	X	X	X	X		
PGSS-1 (70' INTO PGSS)	V	11:20								
STALACTITES	V									
Collected by:	John Schaeffer, MFT	Hanks	(print)	Collector's Signature:	<i>John Schaeffer, MFT</i>					
Relinquished by:	<i>Mark Hanks</i>	Date/Time	10/1/96 10:00 AM	Received by:						
Relinquished by:		Date/Time		Received by:						
Method of Shipment:				Received at Lab by:	<i>Carol Hammerborg</i>					
Authorized by:	<i>Mark Hanks</i>	Date	10-1-96	Sample Condition Upon Receipt:	<input checked="" type="checkbox"/> Acceptable					
(Client Signature MUST Accompany Request)				<input type="checkbox"/> Other (explain)						

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

Detroit Regional Lab 22345 Roehl Drive Novi, MI 48375 (800) 806-5887 (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 4636 E. Marginal Way S., Suite 215 Seattle, WA 98134 (800) 568-7755 (206) 783-7364 FAX (206) 783-4189
---	--	--	---

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Yellow = Clayton Accounting  
Pink = Client Copy

Page 2 of 2

For Clayton Use Only  
Clayton Lab Project No.

**9610011**

## **APPENDIX B**

### **STORM CHANNEL SAMPLE ANALYTICAL RESULTS**

**San Francisco Regional Office**

1252 Quarry Lane  
P.O. Box 9019  
Pleasanton, CA 94566  
(510) 426-2600  
Fax (510) 426-0106

**Clayton**  
**ENVIRONMENTAL**  
**CONSULTANTS**

October 4, 1996

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

Client Ref.: Pending  
Clayton Project No.: 96100.11

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,



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

HAH/ses

Attachments

## Analytical Results

for

Clayton Environmental Consultants, Inc.

Client Reference: Pending

Clayton Project No. 96100.11

Sample Identification: SW-1  
 Lab Number: 9610011-01  
 Sample Matrix/Media: WATER

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

Analyte	Concentration	Method Detection			Date Prepared	Date Analyzed	Prep Method	Method Reference
		Limit	Units					
Alkalinity, Tot. (CaCO <sub>3</sub> )	140	5	mg/L	--	10/02/96	10/03/96	--	EPA 310
Antimony	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Antimony, dissolved	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Arsenic	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Arsenic, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Barium	0.06	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Barium, dissolved	0.06	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Beryllium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Beryllium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Bromide	27	0.05	mg/L	--	10/02/96	--	EPA 200.7	EPA 200
Cadmium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Cadmium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Calcium	170	0.1	mg/L	10/02/96	10/03/96	EPA 200.7	EPA 200	
Calcium, dissolved	140	0.1	mg/L	10/02/96	10/03/96	EPA 200.7	EPA 200	
Chloride	6300	0.1	mg/L	--	10/02/96	--	EPA 200.7	EPA 200
Chromium	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Chromium, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Cobalt	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Cobalt, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Copper	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Copper, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Fluoride	13	0.05	mg/L	--	10/02/96	--	EPA 200.7	EPA 200
Lead	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Lead, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Magnesium	530	0.1	mg/L	10/02/96	10/03/96	EPA 200.7	EPA 200	
Magnesium, dissolved	410	0.1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Mercury	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245	
Mercury, dissolved	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245	
Molybdenum	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Molybdenum, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Nickel	<0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Nickel, dissolved	<0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Nitrate-N	1.0	0.5	mg/L	--	10/02/96	--	EPA 300	EPA 300
Nitrite-N	<0.5	0.5	a mg/L	--	10/02/96	--	EPA 300	EPA 300
Ortho-Phosphate	<1	1	a mg/L	--	10/02/96	--	EPA 300	EPA 300
Potassium	170	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	

**Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96100.11**

Sample Identification: SW-1  
 Lab Number: 9610011-01  
 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					
Potassium, dissolved	130	1	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Selenium	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Selenium, dissolved	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Silver	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Silver, dissolved	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Sodium	4200	1	mg/L		10/02/96	10/04/96	EPA 200.7	EPA 200.
Sodium, dissolved	3200	1	mg/L		10/02/96	10/04/96	EPA 200.7	EPA 200.
Sulfate	700	0.1	mg/L		--	10/02/96	--	EPA 200.
Thallium	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 300.
Thallium, dissolved	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Vanadium	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Vanadium, dissolved	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Zinc	0.10	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Zinc, dissolved	0.06	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
pH	7.8	--	S.U.		--	10/01/96	--	EPA 150.1

ND: Not detected at or above limit of detection

--: Information not available or not applicable

a Note: Detection limits increased due to matrix interference.

**Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96100.11**

Sample Identification: SW-2  
 Lab Number: 9610011-02  
 Sample Matrix/Media: WATER

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

Analyte	Concentration	Method Detection			Date Prepared	Date Analyzed	Prep Method	Method Reference
		Limit	Units					
Alkalinity, Tot. (CaCO <sub>3</sub> )	140	5	mg/L	--	10/02/96	10/03/96	--	EPA 310
Antimony	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Antimony, dissolved	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Arsenic	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Arsenic, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Barium	0.05	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Barium, dissolved	0.06	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Beryllium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Beryllium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Bromide	37	0.05	mg/L	--	10/02/96	--	EPA 200	
Cadmium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 300	
Cadmium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Calcium	200	0.1	mg/L	10/02/96	10/03/96	EPA 200.7	EPA 200	
Calcium, dissolved	190	0.1	mg/L	10/02/96	10/03/96	EPA 200.7	EPA 200	
Chloride	8800	0.1	mg/L	--	10/02/96	--	EPA 200	
Chromium	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 300	
Chromium, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Cobalt	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Cobalt, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Copper	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Copper, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Fluoride	17	0.05	mg/L	--	10/02/96	--	EPA 200	
Lead	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 300	
Lead, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Magnesium	630	0.1	mg/L	10/02/96	10/03/96	EPA 200.7	EPA 200	
Magnesium, dissolved	600	0.1	mg/L	10/02/96	10/03/96	EPA 200.7	EPA 200	
Mercury	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245	
Mercury, dissolved	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245	
Molybdenum	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Molybdenum, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Nickel	<0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Nickel, dissolved	<0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Nitrate-N	0.9	0.5	mg/L	--	10/02/96	--	EPA 300	
Nitrite-N	<0.5	0.5	a mg/L	--	10/02/96	--	EPA 300	
Ortho-Phosphate	<1	1	a mg/L	--	10/02/96	--	EPA 300	
Potassium	200	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	

**Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96100.11**

Sample Identification: SW-2  
 Lab Number: 9610011-02  
 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					
Potassium, dissolved	180	1	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Selenium	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Selenium, dissolved	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Silver	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Silver, dissolved	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Sodium	5000	1	mg/L		10/02/96	10/04/96	EPA 200.7	EPA 200.
Sodium, dissolved	4700	1	mg/L		10/02/96	10/04/96	EPA 200.7	EPA 200.
Sulfate	970	0.1	mg/L		--	10/02/96	--	EPA 200.
Thallium	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 300.
Thallium, dissolved	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Vanadium	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Vanadium, dissolved	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Zinc	0.06	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Zinc, dissolved	0.05	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
pH	7.7	--	S.U.		--	10/01/96	--	EPA 150.

ND: Not detected at or above limit of detection

--: Information not available or not applicable

a Note: Detection limits increased due to matrix interference.

**Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96100.11**

Sample Identification: SW-3  
 Lab Number: 9610011-03  
 Sample Matrix/Media: WATER

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

Analyte	Concentration	Method Detection			Date Prepared	Date Analyzed	Prep Method	Method Reference
		Limit	Units					
Alkalinity, Tot. (CaCO <sub>3</sub> )	130	5	mg/L	--	10/03/96	--	--	EPA 310.
Antimony	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Antimony, dissolved	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Arsenic	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Arsenic, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Barium	0.05	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Barium, dissolved	0.06	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Beryllium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Beryllium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Bromide	50	0.05	mg/L	--	10/02/96	--	--	EPA 300.
Cadmium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Cadmium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Calcium	250	0.1	mg/L	10/02/96	10/03/96	EPA 200.7	EPA 200.	
Calcium, dissolved	190	0.1	mg/L	10/02/96	10/03/96	EPA 200.7	EPA 200.	
Chloride	12000	0.1	mg/L	--	10/02/96	--	--	EPA 300.
Chromium	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Chromium, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Cobalt	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Cobalt, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Copper	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Copper, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Fluoride	22	0.05	mg/L	--	10/02/96	--	--	EPA 300.
Lead	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Lead, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Magnesium	820	0.1	mg/L	10/02/96	10/03/96	EPA 200.7	EPA 200.	
Magnesium, dissolved	600	0.1	mg/L	10/02/96	10/03/96	EPA 200.7	EPA 200.	
Mercury	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245.2	
Mercury, dissolved	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245.2	
Molybdenum	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Molybdenum, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Nickel	<0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Nickel, dissolved	<0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Nitrate-N	<0.5	0.5	mg/L	--	10/02/96	--	--	EPA 300.0
Nitrite-N	<0.5	0.5	a mg/L	--	10/02/96	--	--	EPA 300.0
Ortho-Phosphate	<1	1	a mg/L	--	10/02/96	--	--	EPA 300.0
Potassium	260	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96100.11

Sample Identification: SW-3  
Lab Number: 9610011-03  
Sample Matrix/Media: WATER

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

Analyte	Concentration	Method Detection			Date Prepared	Date Analyzed	Prep Method	Method Reference
		Limit	Units					
Potassium, dissolved	180	1	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Selenium	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Selenium, dissolved	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Silver	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Silver, dissolved	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Sodium	6400	1	mg/L		10/02/96	10/04/96	EPA 200.7	EPA 200
Sodium, dissolved	4700	1	mg/L		10/02/96	10/04/96	EPA 200.7	EPA 200
Sulfate	1300	0.1	mg/L	--	10/02/96	--	--	EPA 300
Thallium	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Thallium, dissolved	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Vanadium	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Vanadium, dissolved	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Zinc	0.06	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Zinc, dissolved	0.07	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
pH	7.6	--	S.U.	--	10/01/96	--	--	EPA 150

ND: Not detected at or above limit of detection

--: Information not available or not applicable

a Note: Detection limits increased due to matrix interference.

**Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96100.11**

Sample Identification: SW-4  
 Lab Number: 9610011-04  
 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				
Alkalinity, Tot. (CaCO <sub>3</sub> )	140	5	mg/L	--	10/03/96	--	EPA 310.
Antimony	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Antimony, dissolved	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Arsenic	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Arsenic, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Barium	0.05	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Barium, dissolved	0.05	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Beryllium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Beryllium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Bromide	62	0.05	mg/L	--	10/02/96	--	EPA 300.
Cadmium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Cadmium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Calcium	290	0.1	mg/L	10/02/96	10/03/96	EPA 200.7	EPA 200.
Calcium, dissolved	290	0.1	mg/L	10/02/96	10/03/96	EPA 200.7	EPA 200.
Chloride	16000	0.1	mg/L	--	10/02/96	--	EPA 300.
Chromium	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Chromium, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Cobalt	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Cobalt, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Copper	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Copper, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Fluoride	26	0.05	mg/L	--	10/02/96	--	EPA 200.
Lead	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 300.
Lead, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.
Magnesium	930	0.1	mg/L	10/02/96	10/03/96	EPA 200.7	EPA 200.
Magnesium, dissolved	930	0.1	mg/L	10/02/96	10/03/96	EPA 200.7	EPA 200.
Mercury	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245.2
Mercury, dissolved	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245.2
Molybdenum	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7
Molybdenum, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7
Nickel	<0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7
Nickel, dissolved	<0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7
Nitrate-N	<0.5	0.5	mg/L	--	10/02/96	--	EPA 300.0
Nitrite-N	<0.5	0.5	a mg/L	--	10/02/96	--	EPA 300.0
Ortho-Phosphate	<1	1	a mg/L	--	10/02/96	--	EPA 300.0
Potassium	290	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7

**Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96100.11**

Sample Identification: SW-4  
 Lab Number: 9610011-04  
 Sample Matrix/Media: WATER

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

Analyte	Concentration	Method Detection			Date Prepared	Date Analyzed	Prep Method	Method Reference
		Limit	Units					
Potassium, dissolved	280	1	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Selenium	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Selenium, dissolved	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Silver	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Silver, dissolved	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Sodium	7400	1	mg/L		10/02/96	10/04/96	EPA 200.7	EPA 200
Sodium, dissolved	7200	1	mg/L		10/02/96	10/04/96	EPA 200.7	EPA 200
Sulfate	1600	0.1	mg/L		--	10/02/96	--	
Thallium	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Thallium, dissolved	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Vanadium	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Vanadium, dissolved	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Zinc	0.08	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
Zinc, dissolved	0.06	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200
pH	7.4	--	S.U.		--	10/01/96	--	EPA 150

ND: Not detected at or above limit of detection

--: Information not available or not applicable

a Note: Detection limits increased due to matrix interference.

**Analytical Results**  
**for**  
**Clayton Environmental Consultants, Inc.**  
**Client Reference: Pending**  
**Clayton Project No. 96100.11**

Sample Identification: SW-5  
Lab Number: 9610011-05  
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					
Alkalinity, Tot. (CaCO <sub>3</sub> )	150	5	mg/L	--	10/02/96	10/02/96	--	EPA 310.
Antimony	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Antimony, dissolved	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Arsenic	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Arsenic, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Barium	0.07	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Barium, dissolved	0.07	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Beryllium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Beryllium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Bromide	51	0.05	mg/L	--	10/02/96	--	EPA 200.7	EPA 200.
Cadmium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Cadmium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Calcium	270	0.1	mg/L	10/02/96	10/03/96	EPA 200.7	EPA 200.	
Calcium, dissolved	260	0.1	mg/L	10/02/96	10/03/96	EPA 200.7	EPA 200.	
Chloride	13000	0.1	mg/L	--	10/02/96	--	EPA 200.7	EPA 200.
Chromium	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 300.0	
Chromium, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	
Cobalt	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	
Cobalt, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	
Copper	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	
Copper, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	
Fluoride	23	0.05	mg/L	--	10/02/96	--	EPA 200.7	EPA 200.7
Lead	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 300.0	
Lead, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	
Magnesium	850	0.1	mg/L	10/02/96	10/03/96	EPA 200.7	EPA 200.7	
Magnesium, dissolved	830	0.1	mg/L	10/02/96	10/03/96	EPA 200.7	EPA 200.7	
Mercury	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245.2	
Mercury, dissolved	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245.2	
Molybdenum	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	
Molybdenum, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	
Nickel	<0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	
Nickel, dissolved	<0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	
Nitrate-N	<0.5	0.5	mg/L	--	10/02/96	--	EPA 300.0	EPA 300.0
Nitrite-N	<0.5	0.5	a mg/L	--	10/02/96	--	EPA 300.0	EPA 300.0
Ortho-Phosphate	<1	1	a mg/L	--	10/02/96	--	EPA 300.0	EPA 300.0
Potassium	250	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96100.11

Sample Identification: SW-5  
Lab Number: 9610011-05  
Sample Matrix/Media: WATER

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

Analyte	Concentration	Method Detection		Date Prepared	Date Analyzed	Prep Method	Method Reference
		Limit	Units				
Potassium, dissolved	250	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Selenium	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Selenium, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Silver	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Silver, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Sodium	6500	1	mg/L	10/02/96	10/04/96	EPA 200.7	EPA 200
Sodium, dissolved	6300	1	mg/L	10/02/96	10/04/96	EPA 200.7	EPA 200
Sulfate	1400	0.1	mg/L	--	10/02/96	--	EPA 300
Thallium	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Thallium, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Vanadium	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Vanadium, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Zinc	0.03	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
Zinc, dissolved	0.02	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200
pH	8.4	--	S.U.	--	10/01/96	--	EPA 150

ND: Not detected at or above limit of detection

--: Information not available or not applicable

a Note: Detection limits increased due to matrix interference.

**Analytical Results  
for**

Clayton Environmental Consultants, Inc.

Client Reference: Pending

Clayton Project No. 96100.11

Sample Identification: SW-6  
 Lab Number: 9610011-06  
 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					
Alkalinity, Tot. (CaCO <sub>3</sub> )	130	5	mg/L	--	10/02/96	10/02/96	--	EPA 310.
Antimony	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Antimony, dissolved	<0.03	0.03	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Arsenic	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Arsenic, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Barium	0.05	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Barium, dissolved	0.05	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Beryllium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Beryllium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Bromide	59	0.05	mg/L	--	10/02/96	--	EPA 300.	
Cadmium	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Cadmium, dissolved	<0.005	0.005	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Calcium	260	0.1	mg/L	10/02/96	10/03/96	EPA 200.7	EPA 200.	
Calcium, dissolved	260	0.1	mg/L	10/02/96	10/03/96	EPA 200.7	EPA 200.	
Chloride	15000	0.1	mg/L	--	10/02/96	--	EPA 200.	
Chromium	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Chromium, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Cobalt	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Cobalt, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Copper	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Copper, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Fluoride	24	0.05	mg/L	--	10/02/96	--	EPA 200.	
Lead	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Lead, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Magnesium	840	0.1	mg/L	10/02/96	10/03/96	EPA 200.7	EPA 200.	
Magnesium, dissolved	830	0.1	mg/L	10/02/96	10/03/96	EPA 200.7	EPA 200.	
Mercury	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245.2	
Mercury, dissolved	<0.0005	0.0005	mg/L	10/02/96	10/02/96	EPA 245.2	EPA 245.2	
Molybdenum	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Molybdenum, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Nickel	<0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Nickel, dissolved	<0.02	0.02	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.	
Nitrate-N	0.9	0.5	mg/L	--	10/02/96	--	EPA 300.0	
Nitrite-N	<0.5	0.5	a mg/L	--	10/02/96	--	EPA 300.0	
Ortho-Phosphate	<1	1	a mg/L	--	10/02/96	--	EPA 300.0	
Potassium	260	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200.7	

Analytical Results  
for  
Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96100.11

Sample Identification: SW-6  
Lab Number: 9610011-06  
Sample Matrix/Media: WATER

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

Analyte	Concentration	Method Detection			Date Prepared	Date Analyzed	Prep Method	Method Reference
		Limit	Units					
Potassium, dissolved	260	1	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Selenium	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Selenium, dissolved	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Silver	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Silver, dissolved	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Sodium	6700	1	mg/L		10/02/96	10/04/96	EPA 200.7	EPA 200.
Sodium, dissolved	7000	1	mg/L		10/02/96	10/04/96	EPA 200.7	EPA 200.
Sulfate	1600	0.1	mg/L		--	10/02/96	--	EPA 200.
Thallium	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 300.
Thallium, dissolved	<0.05	0.05	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Vanadium	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Vanadium, dissolved	<0.01	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Zinc	0.05	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
Zinc, dissolved	0.04	0.01	mg/L		10/02/96	10/02/96	EPA 200.7	EPA 200.
pH	7.6	--	S.U.		--	10/01/96	--	EPA 150.

ND: Not detected at or above limit of detection

--: Information not available or not applicable

a Note: Detection limits increased due to matrix interference.

Analytical Results  
for

Clayton Environmental Consultants, Inc.  
Client Reference: Pending  
Clayton Project No. 96100.11

Sample Identification: METHOD BLANK  
Lab Number: 9610011-21  
Sample Matrix/Media: WATER

Date Sampled: --  
Date Received: --

Analyte	Concentration	Method			Date Prepared	Date Analyzed	Prep Method	Method Reference
		Detection Limit	Units					
Potassium, dissolved	<1	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Selenium	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Selenium, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Silver	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Silver, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Sodium	<1	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Sodium, dissolved	<1	1	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Sulfate	<0.1	0.1	mg/L	--	10/02/96	--	EPA 300	
Thallium	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Thallium, dissolved	<0.05	0.05	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Vanadium	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Vanadium, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Zinc	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	
Zinc, dissolved	<0.01	0.01	mg/L	10/02/96	10/02/96	EPA 200.7	EPA 200	

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. 96100.11

Sample Identification: METHOD BLANK  
Lab Number: 9610011-22  
Sample Matrix/Media: SOIL

Date Sampled: --  
Date Received: --

Analyte	Concentration	Method Detection		Date Prepared	Date Analyzed	Prep Method	Method Reference
		Limit	Units				
Antimony	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601
Arsenic	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601
Barium	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601
Beryllium	<0.1	0.1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601
Cadmium	<0.4	0.4	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601
Chromium	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601
Cobalt	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601
Copper	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601
Lead	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601
Mercury	<0.1	0.1	mg/kg	10/03/96	10/03/96	EPA 3050A	EPA 601
Molybdenum	<1	1	mg/kg	10/02/96	10/03/96	EPA 7471A	EPA 7471
Nickel	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601
Selenium	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601
Silver	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601
Thallium	<0.5	0.5	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601
Vanadium	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601
Zinc	<1	1	mg/kg	10/02/96	10/03/96	EPA 3050A	EPA 601

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.

# Clayton

ENVIRONMENTAL  
CONSULTANTS

## REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Clayton Use Only	Page <u>1</u> of <u>2</u>
Project No.	
Batch No.	<u>9610011</u>
Ind. Code	W.P.
Date Logged In	10/1
By	John

REPORT TO	Name <u>BWIGHT HORNIG</u>	Title	Purchase Order No.
	Company <u>CLAYTON</u>	Depl.	
	Mailing Address		
	City, State, Zip		
Telephone No.	Telefax No.		
Date Results Req.: <u>10-2-96</u>	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
Special Instructions: (method, limit of detection, etc.) * FILTER + PRESERVE <del>AMMONIUM UNPOLLUTED</del> Dissolved METALS SAMPLE. <del>ACIDIC</del> - <del>ALKALINE</del> - <del>NEUTRAL</del> pH Explanation of Preservative: <del>NO</del> <del>NO</del> AT 20% Filtered (V = HNO3) Sample Name			
CLIENT SAMPLE IDENTIFICATION		DATE SAMPLED	MATRIX/ MEDIA
SW-1	(SURFACE WATER)	10/1/96	WATER 3x250 ml
SW-2			
SW-3			
SW-4			
SW-5			
SW-6			
SED 1	(MID BASIN)		
SED 2	(ENTRANCE TO 50TH AVE SS)		
SED 3	(-0680' INT 60TH AVE SS)		
SED 4	(-80' INTG PACIFIC GVN. SS)		
CHAIN OF CUSTODY	Collected by: <u>George Sylwester Matt Hornig</u>	(print)	
	Relinquished by: <u>Mark W. Shultz</u>	Date/Time <u>10-1-96 1:00 pm</u>	
	Relinquished by:	Date/Time	
	Method of Shipment:		
Authorized by: <u>Mark W. Shultz</u>	Date <u>10-1-96</u>		
(Client Signature Must Accompany Request)			

SEND INVOICE TO	Purchase Order No.	Client Job No.
	Name	
	Company	
	Address	
City, State, Zip	Dept.	

Number of Containers	ANALYSIS REQUESTED (Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added.)									
	CAN 1/2 METALS	TOTAL METALS	CAN 1/2 DRINKING DISSOLVED	ANIONS	TOTAL CATION	PHT.	HEAT TEST	TESTS	TESTS	TESTS
3	X	X	X	Y	X	X				
3	X	X	X	X	X	X				
3	X	X	X	X	X	X				
3	X	X	X	X	X	X				
3	X	X	X	X	X	X				
3	X	X	X	X	X	X				
3	X	X	X	X	X	X				
1	X									
1	X									
1	X									
1	X									

FOR LAB  
USE ONLY

01

02

03

04

05

06

07

08

09

10

Collector's Signature: Mark W. Shultz

Received by: \_\_\_\_\_ Date/Time \_\_\_\_\_

Received at Lab by: Carol Hemminger Date/Time 10/17/96 1:00 pm

Sample Condition Upon Receipt:  Acceptable  Other (explain)

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

22345 Roethel Drive Raritan Center  
Novi, MI 48375 160 Fieldcrest Ave.  
(810) 344-1770 Edison, NJ 08837  
(908) 225-6040

400 Chastain Center Blvd., N.W. 1252 Quarry Lane  
Suite 490 Pleasanton, CA 94566  
Kennesaw, GA 30144 (510) 426-2657  
(404) 499-7500

DISTRIBUTION  
WHITE Clayton Environmental,  
YELLOW Clayton Accounting  
DRAFT

**Clayton**  
ENVIRONMENTAL  
CONSULTANTS

**REQUEST FOR LABORATORY  
ANALYTICAL SERVICES**

REPORT  
RESULTS TO

Name DWIGHT MORNING  
Company CLAYTON  
Mailing Address  
City, State, Zip MI 48169  
Telephone No.

Client Job No.  
Dept.

FAX No.

Special Instructions and/or specific regulatory requirements:  
(method, limit of detection, etc.)  
~~\* FILTERS PRESENT AND NOT IN PRESERVE~~  
~~METALS SAMPLE. IF BOOTS ARE NOT~~  
~~WATER - DRAINS, RUN FILTERED~~  
Explanation of Preservative: SAMPLE NOW.

Samples are:  
(check if applicable)  
 Drinking Water  
 Groundwater  
 Wastewater

SEND  
INVOICE  
TO

Purchase Order No.  
Name  
Company  
Address  
City, State, Zip

**IMPORTANT**

Date Results Requested: 10-2-96  
Rush Charges Authorized?  Yes  No  
 Phone or  Fax Results

Page 2 of 2  
For Clayton Use Only  
Clayton Lab Project No.

**9610011**

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	TIME SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)
CSS-1 (ENTRANCE TO SS)	10/1/96	10:00	WATER	250ml
CSS-2 (100' INTO CSS)		10:10		
CSS-3 (200' " "		10:20		
CSS-4 (300' " "		10:30		
CSS-5 (400' " "		10:40		
CSS-6 (500' " "		10:50		
CSS-7 (600' " "		11:00		
DSL-A (MINERAL @ N 120')		10:15		
PGSS-1 (70' INTO PGSS)	V	11:20		
STALACTITES	V		S94D phaggio	I

CHAIN  
OF  
CUSTODY

Collected by: Dwight Morning Matt Henks (print)  
Relinquished by: Marta and Paula  
Relinquished by:  
Method of Shipment:  
Authorized by: Dwight Morning Matt Henks  
(Client Signature MUST Accompany Request)

Date 10-1-96

ANALYSIS REQUESTED		FOR LAB USE ONLY	
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<input checked="" type="checkbox"/>	CHLORINE	<input checked="" type="checkbox"/>	100

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

Detroit Regional Lab  
22345 Hoechel Drive  
Novi, MI 48375  
(800) 808-5887  
(810) 344-1770  
FAX (810) 344-2855

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) 428-2657  
FAX (510) 428-0106

Seattle Regional Lab  
4636 E. Marginal Way S., Suite 215  
Seattle, WA 98134  
(800) 568-7755  
(206) 783-7364  
FAX (206) 783-4180

DISTRIBUTION:  
White = Clayton Laboratory  
Yellow = Clayton Accounting  
Pink = Client Copy

## **APPENDIX C**

### **STORM CHANNEL INSPECTION OBSERVATIONS AND FIELD NOTES**

1252 Quarry Lane  
P.O. Box 9019  
Pleasanton, CA 94566  
(510) 426-2600  
Fax (510) 426-0106



## MEMORANDUM

**To:** Dwight Hoenig  
**From:** Rick Day  
**Subject:** Inspection of 50th and Coliseum Storm Channel  
**Date:** February 11, 1997

This memo summarizes my observations from the October 17, 1996 visual inspection of the storm channel located at the intersection of 50th Street and Coliseum Way in Oakland, California.

I arrived at the site at 9:20 AM and was met by John Thorton and Patrick Sullivan. Mr. Thorton had opened the gate adjacent to the storm channel to allow for access. My inspection began at approximately 9:35 AM when I entered the storm channel near the silt sump via a ladder. The tide was just beginning to come in and approximately six inches of water was present in the channel.

The purpose of the inspection was to determine if there was any degradation of the concrete within storm channel through visual inspection. I walked the entire length of the channel and visually inspected both of the channel walls. The channel floor was not visible as it was covered with approximately two inches of fine grained sediment. The water in the channel was quite clear and the top of undisturbed sediment was readily visible.

### Channel Floor

Upon initial visual observation, it appeared that the channel floor had dendritic fracture patterns in many locations. Further investigation, consisting of slightly disturbing the sediment with my hand, showed that the dendritic patterns were only sediment surface variations presumably caused by differential rates of sediment disposition.

During the inspection, I used my feet to "feel" for variations or cracks in the floor surface. Other than the engineered channel joints, I did not find any cracks or degradation in the channel floor.

### Channel Wall on North Side

No cracks were observed on the north wall. I did observe the engineered joints between concrete sections which varied in width from ~1/4" to ~1/2". Putty was present in the joints, predominately above the high tide line. I did not observe any concrete degradation on the north wall of the storm channel. The wall appeared to be vertical and no deflection along the length of the wall was noted.

I did observe two approximately 6-inch diameter pipes exiting the wall from the PG&E substation (see attached photos). There was a small discharge noted from the pipes at a rate of approximately one drop every 10-12 seconds.

### Channel Wall on South Side

The engineered joints observed on the north wall were also present on the south wall (and channel floor), and were very similar in nature. I did not observe any other cracks in the south wall which appeared to be vertical and no deflection along the length of the wall was noted.

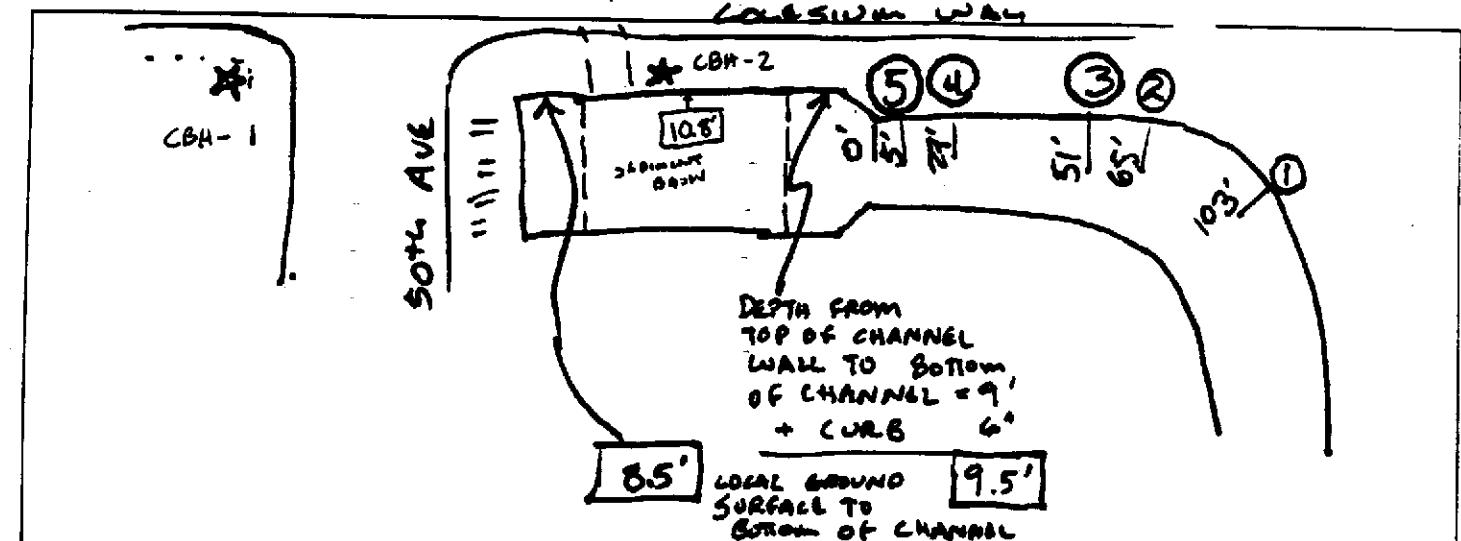
I did find one area of degraded concrete in the "bend" of the channel near Coliseum Way. The first "spot" consisted of an approximate 8-inch diameter portion of the wall in which only the aggregate (up to 1/2" in diameter) remained. It appears that the cement matrix has been completely removed from around the aggregate. This location is documented in the attached video. Surrounding the first spot, were several smaller spots (up to 1/4") where it appeared that a similar action was occurring. The majority of the smaller spots were within eight inches of the larger first spot. A few other "spots" were noted upstream of the first spot and are also documented in the video.

### Summary

I did not observe any indications that the concrete in the storm channel was degraded and required repair.

SIGNATURE Peter Schaefer DATE \_\_\_\_\_ CHECKED \_\_\_\_\_ DATE 11/4/96  
 PROJECT CAMPBELLS + WOLFSBERG JOB NO. 69998.00  
 SUBJECT CHANNEL INSPECTION 11/4/96 SHEET 1 OF 1 SHEETS

69998.00

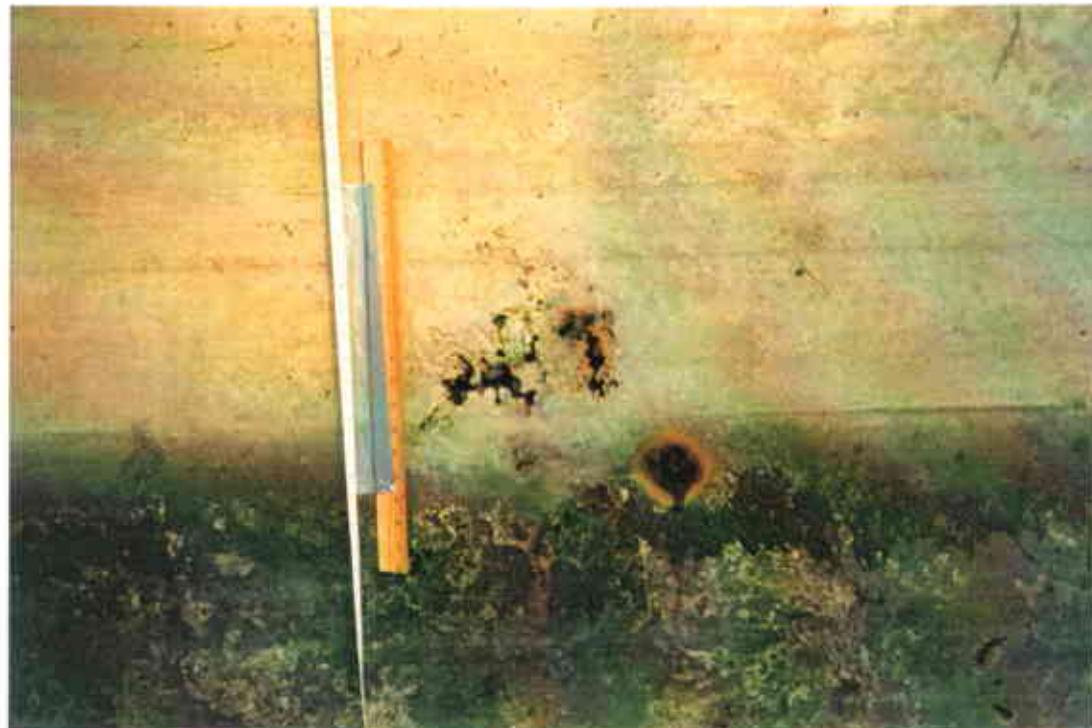


NOTES (PHOTO LOCATIONS)

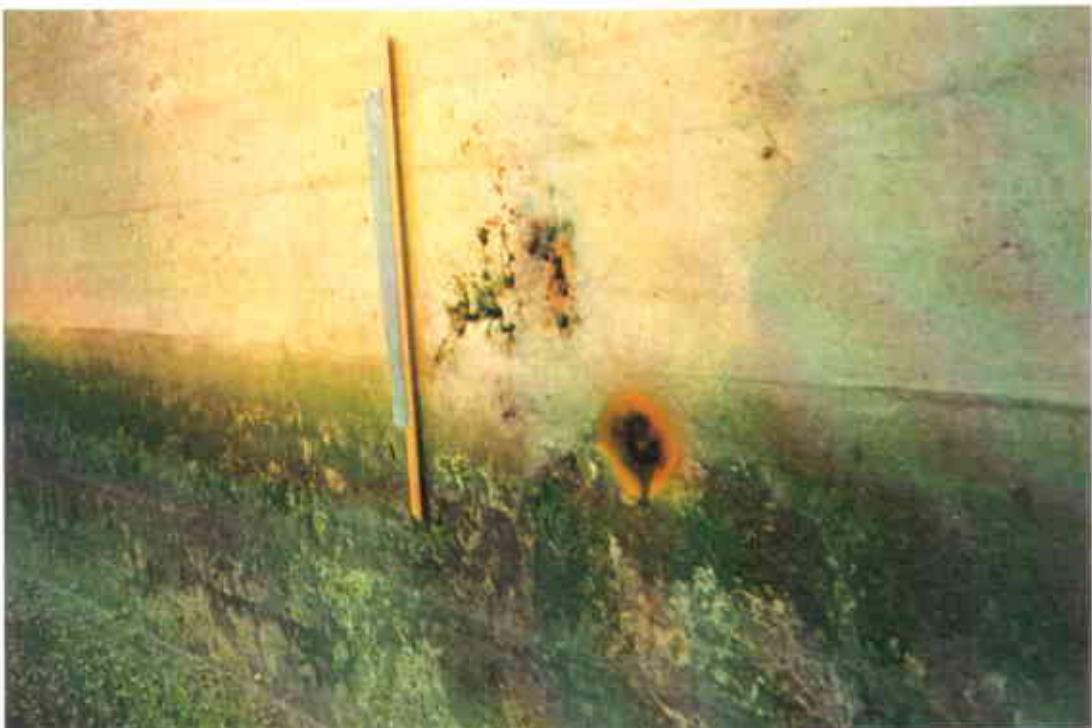
- (1) • AREA OF HOLES IN CONCRETE UP TO 1" DEEP.  
• ~18" DIAMETER AREA, SLIGHT WET SURFACE?  
• LIGHT SKIN COAT OF GROUT HAS BEEN USED TO REPAIR THE AREA.  
• CENTER OF AREA IS APPROXIMATELY 4 FEET UP THE 9' CHANNEL WALL.
- (2) • AREA OF LOOSE (SPALLING) CONCRETE ~9" LONG
- (3) • SEAM WITH RUST STAINING ON SIDES
- (4) • TINY SEEP ( $\frac{1}{4}$ " DIA) RUSTY "CAP" (MINERALIZED BUILDUP OVER CRACK/HOLE IN CONCRETE) REMOVED w/ SCREW DRIVER  
• SLIGHT SEEPAGE ( $\frac{1}{2}$  CC) ( $<1$  CC), STOPPED IMMEDIATELY
- (5) • SEEP ( $\frac{3}{4}$ " DIA) RUSTY "CAP" (AS ABOVE (4)) REMOVED w/ SCREW DRIVER  
• SLIGHT SEEPAGE (1-2 CC), STOPPED IMMEDIATELY.

## **APPENDIX D**

### **STORM CHANNEL INSPECTION PHOTOGRAPHS**



Clayton Project No. 70-97203.00.500	Description	Storm Water Channel Wall	1 Photo Date 11/04/96
	Site Name	Coliseum Way and 50th Avenue in Oakland, California	
	Client	Lempres & Wulfsberg	



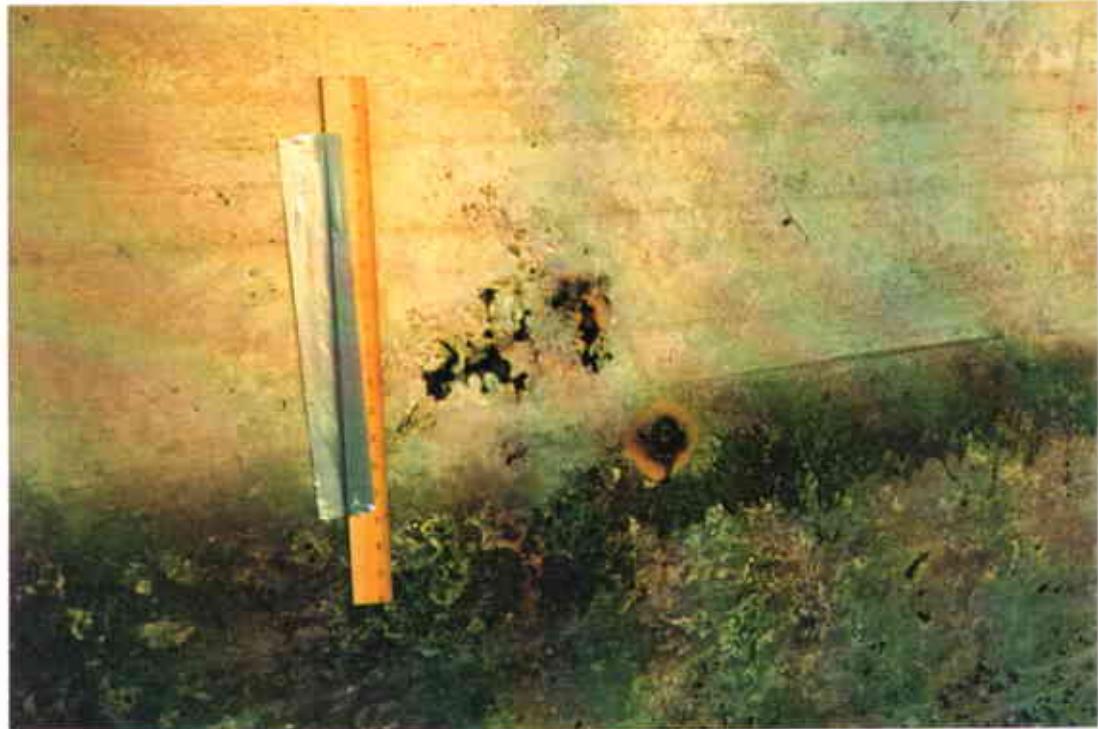
Clayton Project No. 70-97203.00.500	Description	Storm Water Channel Wall	2 Photo Date 11/04/96
	Site Name	Coliseum Way and 50th Avenue in Oakland, California	
	Client	Lempres & Wulfsberg	



Clayton Project No. 70-97203.00.500	Description	Storm Water Channel Wall	3 Photo Date 11/04/96
	Site Name	Coliseum Way and 50th Avenue in Oakland, California	
	Client	Lempres & Wulfsberg	



Clayton Project No. 70-97203.00.500	Description	Storm Water Channel Wall	4 Photo Date 11/04/96
	Site Name	Coliseum Way and 50th Avenue in Oakland, California	
	Client	Lempres & Wulfsberg	



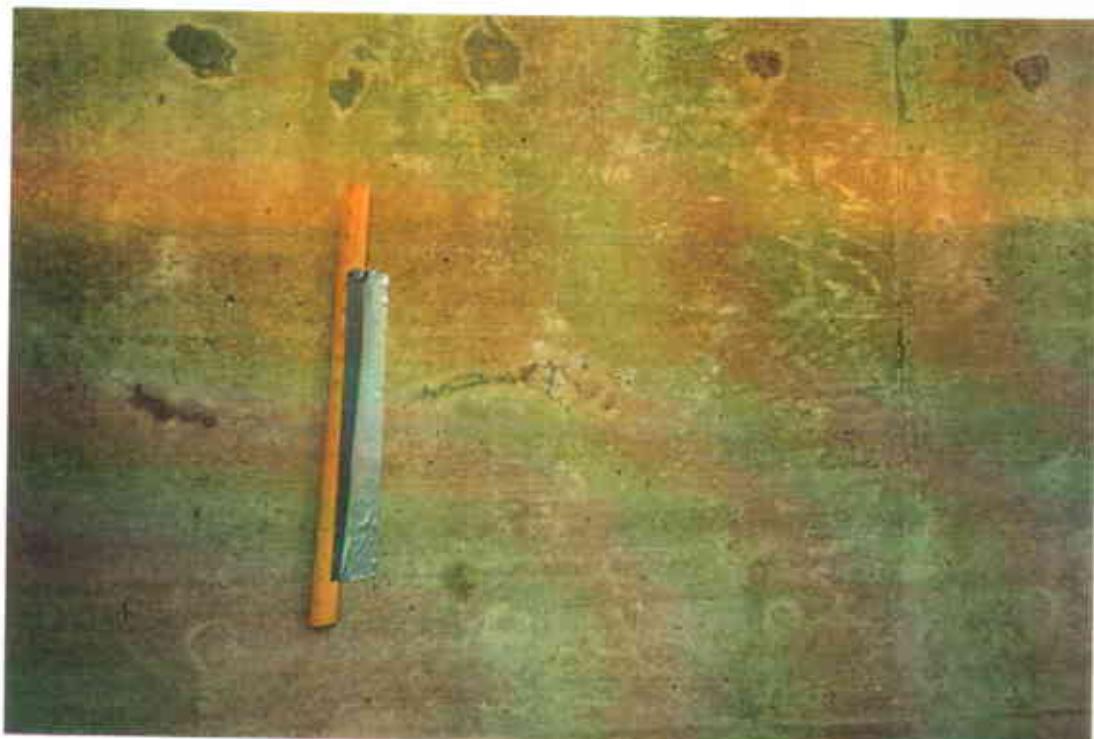
Clayton Project No.	Description	Storm Water Channel Wall	5
	Site Name	Coliseum Way and 50th Avenue in Oakland, California	
70-97203.00.500	Client	Lempres & Wulfsberg	Photo Date 11/04/96



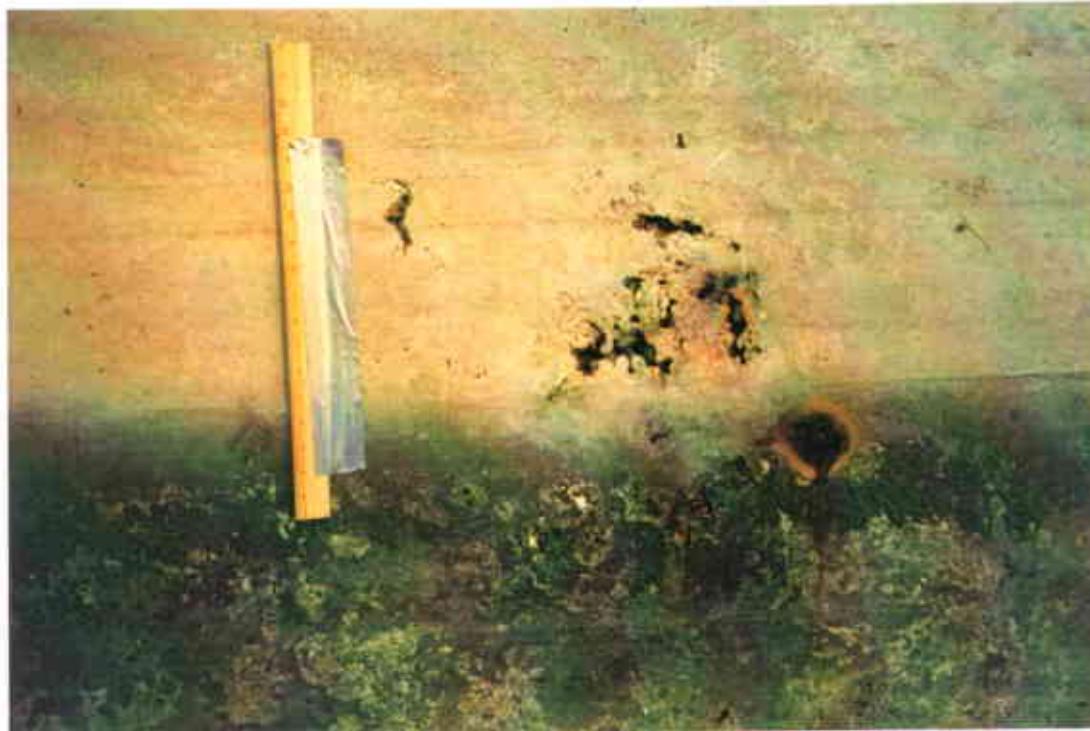
Clayton Project No.	Description	Storm Water Channel Wall	6
	Site Name	Coliseum Way and 50th Avenue in Oakland, California	
70-97203.00.500	Client	Lempres & Wulfsberg	Photo Date 11/04/96



Clayton Project No.	Description	Storm Water Channel Wall	7
70-97203.00.500	Site Name	Coliseum Way and 50th Avenue in Oakland, California	Photo Date
70-97203.00.500	Client	Lempres & Wulfsberg	11/04/96



Clayton Project No.	Description	Storm Water Channel Wall	8
70-97203.00.500	Site Name	Coliseum Way and 50th Avenue in Oakland, California	Photo Date
70-97203.00.500	Client	Lempres & Wulfsberg	11/04/96



Clayton Project No. 70-97203.00.500	Description	Storm Water Channel Wall	9
	Site Name	Coliseum Way and 50th Avenue in Oakland, California	Photo Date 11/04/96
	Client	Lempres & Wulfsberg	



Clayton Project No. 70-97203.00.500	Description	Storm Water Channel Wall	10
	Site Name	Coliseum Way and 50th Avenue in Oakland, California	Photo Date 11/04/96
	Client	Lempres & Wulfsberg	