1252 Quarry Lane P.O. Box 9019 Pleasanton, CA 94566 (925) 426-2600 Fax (925) 426-0106



March 8, 1999

# 6070

Mr. Barney M. Chan Alameda County Environmental Health Care Service Agency 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577

Clayton Project No.70-97066.00

Subject:

Limited Groundwater Investigation Report for 630 29th Avenue, Oakland,

California

Dear Mr. Chan:

Clayton Environmental Consultants, a division of Clayton Group Services, Inc. is pleased to present the enclosed report on behalf of Bank of America. The report documents the limited subsurface investigation performed at the above-referenced property in January/February 1999.

We look forward to meeting with you to discuss the findings of the investigation and the future actions at the property. If you have any questions, please contact me at (925) 426-2600.

Sincerely,

Joh A. Rosso, P.E.

Director.

Environmental Risk Management and

Remediation

San Francisco Regional Office

JAR/mwh

cc: Donna Proffitt, BofA Environmental Services (4 copies)

# CLAYTON

Limited Groundwater Investigation At Former Lemoine Sausage Facility Oakland, California

Clayton Project No. 70-97066 March 1999







NONE OF

1252 Quarry Lane P.O. Box 9019 Pleasanton, CA 94566 (925) 426-2600 Fax (925) 426-0106



Limited Groundwater Investigation At Former Lemoine Sausage Facility Oakland, California

Clayton Project No. 70-97066

**March 1999** 



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Department. The scope of work consisted of the following components:

- Locate underground utilities,
- Core six holes through the warehouse floor and suspended concrete slab,
- Advance nine soil borings,
- Construct five groundwater monitoring wells and construct four temporary well points,
- Develop groundwater monitoring wells and purge temporary well points,
- Purge and sample groundwater monitoring wells and temporary well points,
- Survey monitoring well top of casing elevations relative to mean sea level,
- Analyze nine groundwater samples, and
- Prepare this report

#### 2.1. LOCATE UTILITIES

At least 48 hours prior to drilling, Clayton contacted Underground Service Alert (USA) to report our proposed drilling schedule and request the location of publicly owned utilities to be marked in the vicinity of the boring locations. Norcal Underground of San Jose, California performed an underground utility survey in the vicinity of the borings located in 7<sup>th</sup> Street.

### 2.2. CONCRETE CORING

Del Secco Diamond Core & Saw, Inc. was on site January 26 and 27, 1999 to core holes through concrete floors and asphalt in 7th Street. The suspended concrete floor in the warehouse was approximately 3.5 feet thick and had structural features as follows:

- 6-inch thick suspended concrete slab over
- 8-inches of void space over
- 10-inches of a broken concrete slab over
- a 2-inch thick wood plank floor over
  - a 1/4-inch thick steel plate over
  - 10-inches of cork over a 6-inch concrete slab.

Concrete Wall Sawing Co., Inc. mobilized to the site on January 28, 1999 to complete two additional core holes for additional boring locations.

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# 2.3. ADVANCE SOIL BOIRNGS/WELL CONSTRUCTION

A total of nine soil borings were advanced. Of the nine borings, five were converted to groundwater monitoring wells (MW-1 through MW-5) and four converted to temporary well points (B-7 through B-10). Temporary well points are similar to monitoring wells except annular space between the well point and boring is not filled with filter sand or grout backfill. The on-site building has some unique access and structural issues. To overcome the building access and structural issues, the groundwater monitoring wells were completed as 3/4-inch diameter groundwater monitoring wells with pre-packed filter sand material around the screen. The rationale for the less than conventionally sized wells is that access with drilling equipment that can install conventionally sized well is extremely limited. Furthermore, the drilling surface is a 6-inch thick suspended concrete slab floor of old construction over multiple layers of former slabs, debris, void spaces, wood planking, steel plate, and cork. The groundwater monitoring wells and temporary well point locations are presented on Figure 2.

Clayton discussed the use of 1-inch diameter wells with Mr. Chan of the ACHCS. Mr. Chan and Mr. Chuck Hedley of the San Francisco Region Water Quality Control Board (RWQCB) conditionally approved the use of ¾-inch diameter wells for this phase of the investigation. The conditions of installing the one-inch diameter wells are that all wells proposed in this workplan (inside or outside the building) will be of the same size.

Monitoring well MW-1 was constructed above the East Bay Municipal Utility District main sewer line and completed to a total depth of 9 feet below grade, monitoring wells MW-2 and MW-3 are located in the suspended concrete floor portion of the warehouse and completed to a total depth of approximately 16 feet below street grade level, well MW-5 was completed to approximately 10 feet below street grade level, and MW-4 was completed at 15 feet below street grade level. Well construction details and boring logs are presented in Appendix A.

All borings were advanced using Geoprobe boring and sampling techniques. Temporary well points B-7 and B-8 were located inside the portion of the warehouse with the suspended concrete floor (the suspended concrete floor is approximately 4 feet above grade at street level) and were advanced to approximately 12 feet below street grade. A \$\frac{3}{4}\$-inch screened PVC casing was inserted into each boring and each boring was checked for the presence of groundwater. No groundwater was present either boring at the time drilling. Each borehole was covered with a steel plate and left open to allow groundwate to enter the borehole. Borings B-9 and B-10 were advanced in 7th Street directly above East Bay Municipal Utility District main sanitary sewer pipeline. Reportedly, the sanitary sewer pipeline is 5-feet in diameter and constructed of 12-inch thick concrete. The top of the pipeline was encountered at approximately 9 feet below grade. Thus, borings (B-8 and B-9) were terminated at 9 feet below grade. Temporary \$\frac{3}{4}\$-inch PVC screened casing was placed inside borings B-9 and B-10 and groundwater samples were collected and submitted for analysis. Borings B-9 and B-10 were abandoned by removing the temporary well screen and grouting the borings with neat cement.



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Upon completion, the monitoring wells were surveyed by Virgil Chavez Surveyors for top of casing elevations relative to mean sea level on March 2, 1999. The well survey report is included in Appendix B.

### 2.4. DEVELOPMENT, SAMPLING, AND ANALYSIS

On February 2, 1999 the groundwater monitoring wells and temporary well points were developed and/or purged. Each monitoring well and temporary well point was purged dry (less than one gallon) with the exception of well MW-3 and MW-4. In the case where the monitoring well/well point was purged dry, water was added to aid in the development process. In each monitoring well/temporary well point where water was added, the full amount added was recovered and purged dry again. Purging was accomplished by using a peristaltic pump.

On February 8, 1999 groundwater levels were measured in each monitoring well and well point. Additionally, the monitoring wells/temporary well points were purged dry using a peristaltic pump and allowed to recover prior to sampling with the exception of MW-3 and MW-4. Approximately three casing volumes were purged from wells MW-3 and MW-4 prior to sampling. Groundwater samples were collected using a peristaltic pump. Clean tubing was used for each purging and sampling event. Well development and sampling field work sheets are included in Appendix C.

Groundwater samples were extracted using a peristaltic pump and placed into the appropriate laboratory containers. The sample containers were labeled, placed into a chilled cooler, and logged on chain-of-custody forms. The samples were transported to Clayton's State Certified analytical laboratory in Pleasanton, California for analysis.

The groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-G) benzene, toluene, ethylbenzene, and xylenes (BTEX), and chlorinated solvents (VOCs) by U.S. EPA Method 8010.

### 3. <u>FINDINGS</u>

The findings of the investigation are presented in the following sections.

### 3.1. LITHOLOGY

The lithology within the subject property building (B-7, B-8, and MW-3 through MW-5) was different than the borings completed outside the building (MW-1, B-9, and B-10). As previously discussed, MW-1, B-9, and B-10 were constructed above the sanitary sewer pipeline and most likely represent fill materials placed during construction. The lithology inside the building consisted of slightly moist dark gray clayey silt extending from grade (street level) to approximately three feet below grade. The clayey silt was underlain by approximately three feet of a low permeable and moist soil mixture of clayey sand/silty sand layer with occasional gravel. During drilling, saturation was encountered in the layer clayey sand/silty sand layer in borings MW-3, MW-4, and MW-5 only. No saturation was encountered during drilling of borings B-7, B-8, and MW-2.



A stiff, slightly moist silty clay was encountered below the clayey sand/silty sand layer and extended to the termination of each respective borehole. The maximum explored depth was approximately 16 feet below grade. For borings B-7, B-8, and MW-2, no appreciable groundwater was observed in the borings when left open overnight. The lithology encountered outside the building was fill material in the EBMUD main sewer line trench. The fill consisted of a sandy clay with gravel backfill from just below the asphalt and base material to approximately 8 feet below grade above approximately one-foot of saturated utility sand over the concrete sanitary sewer main utility pipeline.

### 3.2. HYDROLOGY

The potentiometric groundwater surface was calculated based on the surveyed elevations of the well casings less the depth to groundwater in each respective well. The groundwater elevation data indicated that groundwater was flowing north-northeast toward the sanitary sewer pipeline trench at a gradient of 0.09 ft/ft. The top of casing elevations and potentiometric groundwater surface elevations are presented in Table 3. The potentiometric surface elevation contours and groundwater flow direction are presented on Figure 3. Due to the very low permeability encountered, the groundwater surface in monitoring well MW-2 does not appear to have recovered prior to the water level measurement.

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### 3.3. ANALYTICAL RESULTS

Table 2 presents the analytical results for groundwater samples collected from the four temporary well points and five groundwater monitoring wells as well as all historic groundwater data. Additionally, TPH-G and benzene concentrations are presented on Figure 4.

Petroleum hydrocarbons and associated volatile organic compounds were detected groundwater samples collected from each temporary well point and monitoring well. TPH-G concentrations ranged from 210 ug/L (B-10) to 63,000 ug/L (B-7) and benzene concentrations ranged from 1.4 ug/L (B-10) to 11,000 ug/L (MW-2). The laboratory analytical data sheets and chain-of-custody documents is included in Appendix C.

### 4. **CONCLUSIONS**

Based on the analytical data for groundwater samples collected from recently installed monitoring wells and temporary well points, the extent of groundwater contamination from TPH-G and BTEX compounds has not been fully defined. Additional investigation is warranted.

Following the review of this report by the ACHCS, Clayton would like to arrange a meeting with ACHCS to discuss future investigation needs, potential remedial solutions, and case closure issues. As a result of the meeting, Clayton will prepare a workplan. The workplan will be submitted to ACHCS for comment and approval.

Table 1
Summary of Historical Soil Analytical Data
Former Lemoine Sausage Facility
Oakland, California

Sample	Sample Depth	Date			_	Ethyl		Total
Location	(feet)	Sampled	TPHG	MTBE	Benzene	benzene	Toluene	Xylenes
B-1	2.5	8/29/97	<0.3	NA	< 0.005	< 0.005	< 0.005	< 0.005
B-1	5.5	8/29/97	30	NA	< 0.03	< 0.03	< 0.03	< 0.04
B-2	2.5	8/29/97	< 0.3	NA	< 0.005	< 0.005	< 0.005	< 0.005
B-2	6	8/29/97	660	NA	< 0.5	6	< 0.5	10
B-3	2.5	8/29/97	27	NA	< 0.1	< 0.3	< 0.1	< 0.1
B-3	5	8/29/97	170	NA	<.01	< 0.1	< 0.1	< 0.1
B-4	2.5	8/29/97	< 0.3	NA	< 0.005	< 0.005	< 0.005	< 0.005
B-4	6	8/29/97	25	NA	< 0.1	< 0.1	< 0.2	< 0.1
B-4	9.5	8/29/97	0.3	NA	< 0.005	< 0.005	< 0.005	0.008
B-5	2.5	9/2/97	1.6	NA	0.009	0.012	0.005	0.045
B-5	6	9/2/97	< 0.3	NA	< 0.005	< 0.005	< 0.005	0.005

### Notes:

- 1. All results in milligrams per kilogram (mg/kg)
- 2. NA = Not Analyzed

Table 2
Summary of Groundwater and Grab Groundwater Analytical Data
Former Lemoine Sausage Facility
Oakland, California

Sample	Date				Ethyl		Total	1,2-
Location	Sampled	TPHG	MTBE	Benzene	benzene	Toluene	Xylenes	DCA
B-1	8/29/97	34,000	NA	430	2,400	54	4,649	NA
B-2	9/3/99	5,100	NA	2,800	43	120	140	NA
B-3	9/10/97	51,000	<5	14,000	290	5,900	7,100	410
B-4	9/3/97	100	NA	< 0.4	< 0.3	< 0.3	< 0.4	NA
B-5	9/10/97	78,000	<5	16,000	1,100	22,000	6,000	910
B-7	2/8/99	63,000	NA	5,900	2,700	4,100	9,600	160
B-8	2/8/99	140	NA	5.4	2.6	3.2	4.6	2.9
B-9	1/28/99	51,000	NA	240	640	5,600	3,150	< 0.3
B-10	1/28/99	210	ŇA	1.4	1.9	16.0	100.8	< 0.3
MW-1	2/8/99	48,000	NA	3,900	970	6,300	4,300	<30
MW-2	2/8/99	41,000	NA	11,000	650	4,900	1,720	60
MW-3	2/8/99	35,000	NA	1,200	1,400	3,400	4,900	<30
MW-4	2/8/99	15,000	NA	670	780	90	940	< 30
MW-5	2/8/99	4,900	NA	780	230	440	370	< 0.3

### Notes:

All results in micrograms per liter (mg/L)

NA = Not Analyzed

1,2-DCA = 1,2-dichloroethane

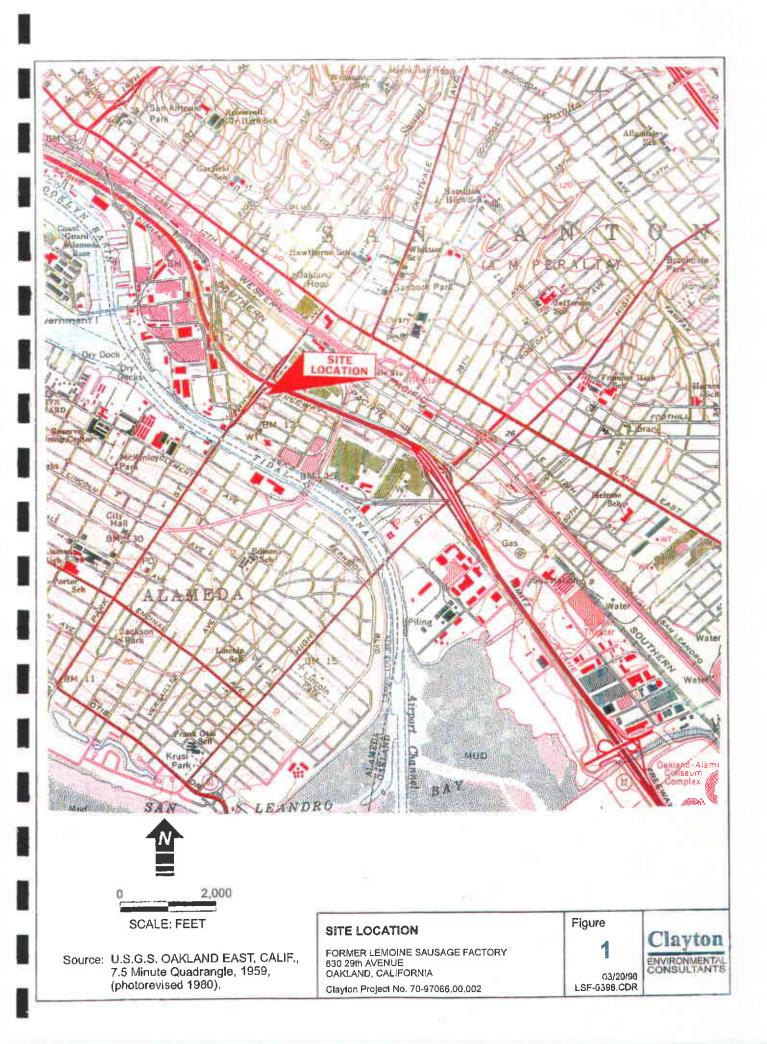
TPHG = Totoal Petroleum Hydrocarbons as Gasoline

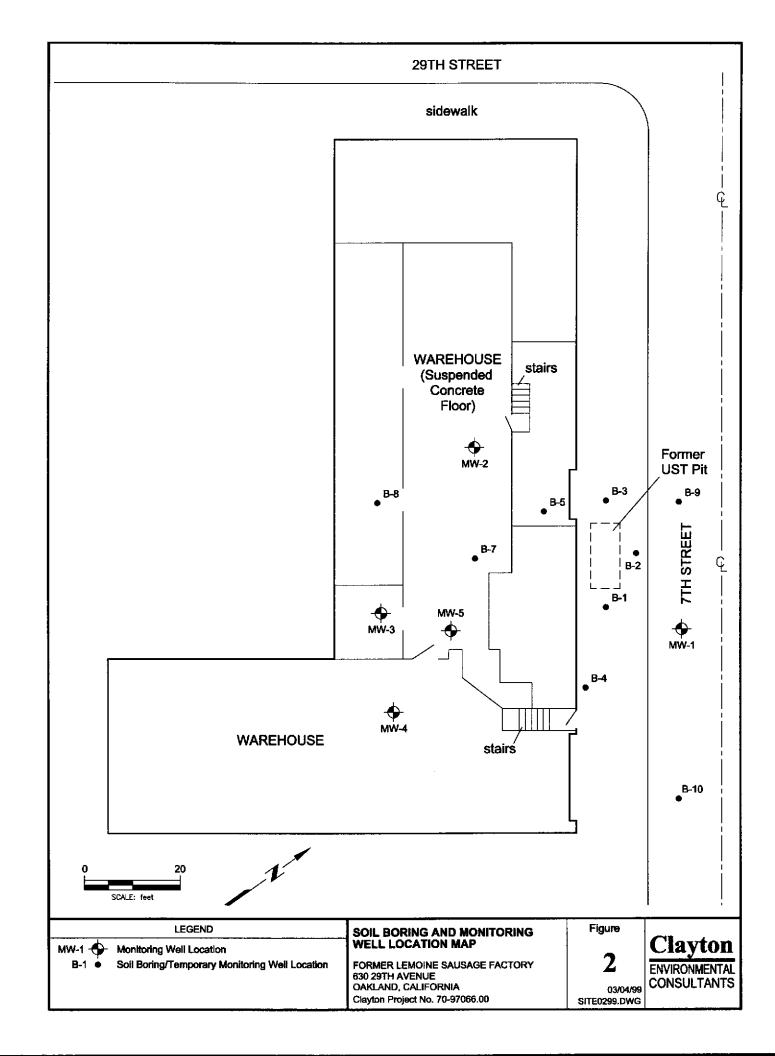
MTBE = methyl tert-butyl ether

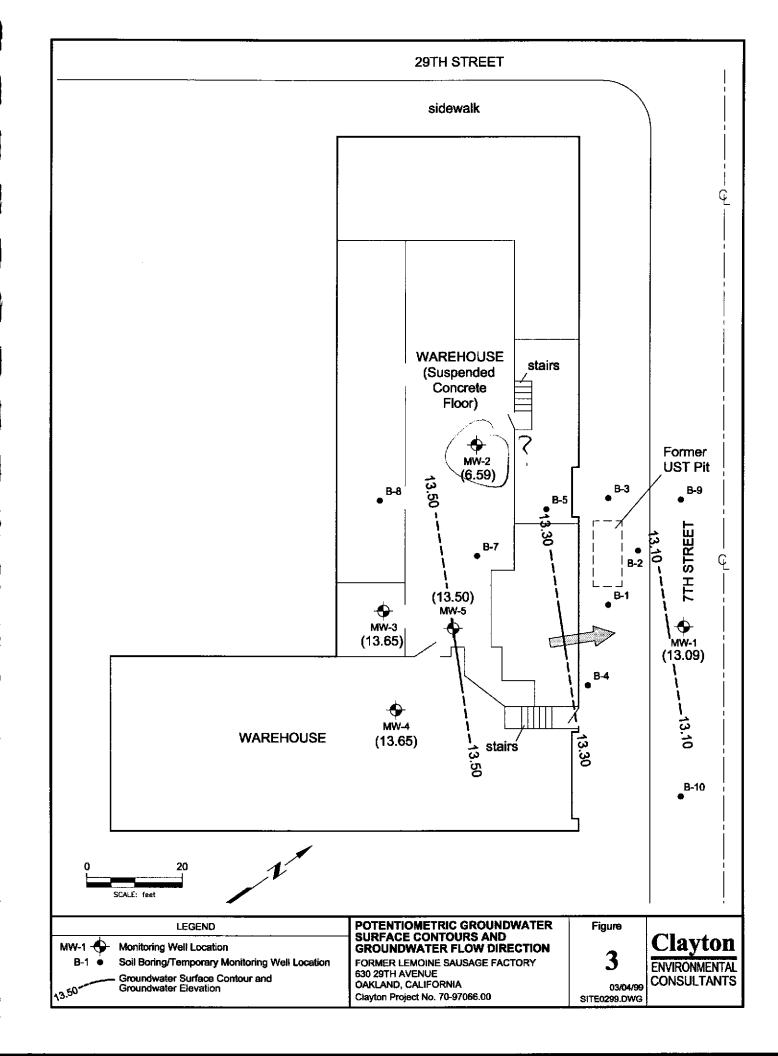
Table 3

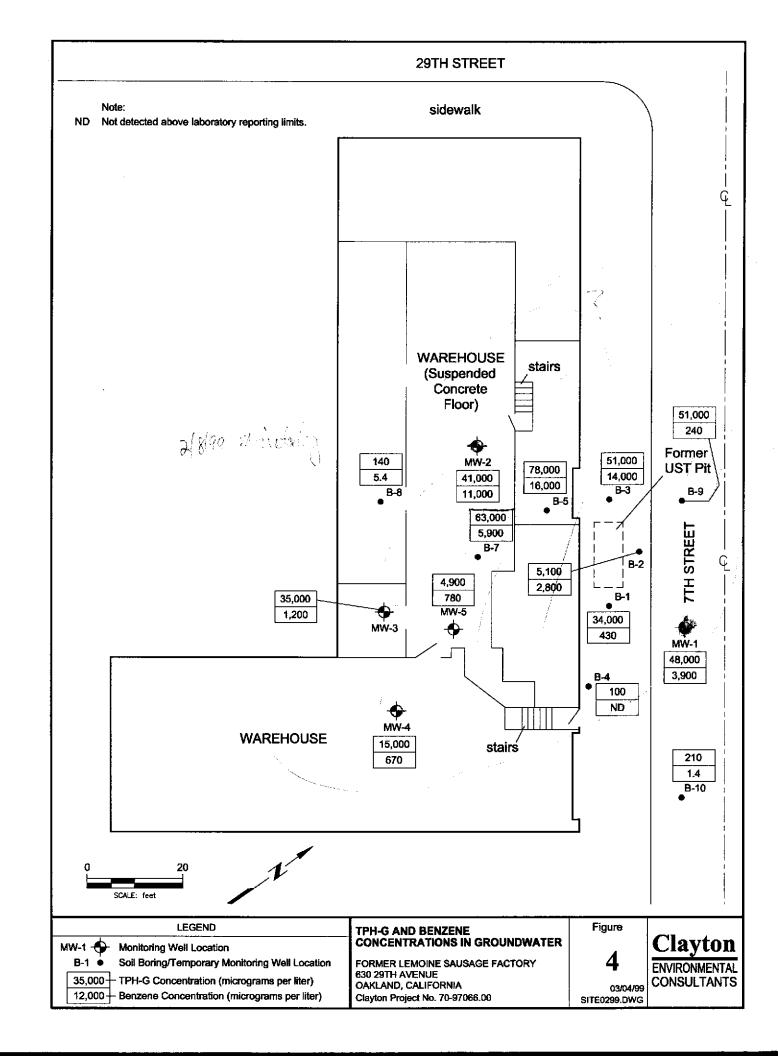
Potentiometric Surface Groundwater Elevations
Former Lemoine Sausage Facility
Oakland, California

Well Identification	Date Measured	Top of Casing Elevation (ft,msl)	Depth to Water (feet)	Groundwater Elevation (feet,msl)
MW-1	2/8/99	16.69	3.6	13.09
MW-2	2/8/99	20.79	14.2	6.59
MW-3	2/8/99	21.10	7.45	13.65
MW-4	2/8/99	17.78	4.13	13.65
MW-5	2/8/99	21.12	7.62	13.50











# APPENDIX A

# BORING LOGS AND WELL CONSTRUCTION DETAILS

**AND** 

WELL DEVELOPMENT AND SAMPLING FIELD SHEETS

Clayton LOG OF BORING MW\_1 Environmental Consultants (Page 1 of 1) SITE INVESTIGATION Date Started : 1-28-99 Driller : Vironex FORMER LEMOINE SAUSAGE FACTORY Date Completed 1-28-99 Logged By : M. Hanko 630 29TH AVENUE Surface (Rim) Elevation 16.99 ft,msl Hole Diameter : 2 in. OAKLAND, CALIFORNIA Drilling Method : Geoprobe Top of Well Casing : 16.69 ft,msl Clayton Project No.: 70-97066.00 Sampling Method Survey By : V. Chavez Well1: MW-1 GRAPHIC Elev.: 16.99 Depth Surf. USCS DESCRIPTION in Elev. Feet 16.99 Cover 0 -Asphalt and Base Material AS/FL Neat Cement 16 Sandy CLAY (CL) with gravel (10,30,25,35), dark brown (10YR 4/2), very stiff, <1/4" angular gravel, saturated gravel lens at 5.5-6.0 feet bgs Blank Bentonite CL 5 #3 Sand 11 3/4-inch Pre-Packed Silty CLAY (CL) with gravel (10,10,35,45), dark gray (10YR 3/1), very stiff,1-inch gravel, strong HC odor 0.020" Slotted Screen CL SAND (SP) (0,100,0,0), dark gray (10YR 3/1), loose, SP saturated, strong HC odor Refusal at 9 feet bgs due to concrete. 10 6 15 C:\mtech5\p97066\97066mw1.bor 20 Notes: 03-03-1999

Clayton LOG OF BORING MW\_2 Environmental Consultants (Page 1 of 1) SITE INVESTIGATION Date Started : 1-27-99 Driller : Vironex FORMER LEMOINE SAUSAGE FACTORY Date Completed : 1-27-99 Logged By : M. Hanko 630 29TH AVENUE Hole Diameter : 2 in. Surface (Rim) Elevation 21.24 ft,msl OAKLAND, CALIFORNIA **Drilling Method** : Geoprobe Top of Well Casing : 20.79 ft,msl Clayton Project No.: 70-97066.00 Sampling Method Survey By : V. Chavez Well1: MW-2 GRAPHIC Elev.: 21.24 Depth Surf. Elev. DESCRIPTION 21.24 Feet 0 -21 Suspended Slab, various layers of concrete slabs, wood slabs, steel slabs, and rubble CC Neat Cement Blank 5 16 Clayey SILT (ML) (0,0,70,30), dark gray (10YR 3/1), medium stiff, slightly moist, plastic ML Silty SAND (SM) with gravel (5,60,30,5), brown (10YR Bentonite 5/3), moist, dense, angular 1/4" gravel, fine sand SM 10 11 Clayey SILT (ML) (0,0,70,30), dark gray (10YR 3/1), medium stiff, slightly moist, plastic - #3 Sand 3/4-inch Pre-Packed 15 ML 0.020" Slotted 6 Screen C:\mtech5\p97066\97066mw2.bor Notes: Petroleum odor @13' bgs, retained sample @ 13'. 03-04-1999

Clayton LOG OF BORING MW\_3 **Environmental Consultants** (Page 1 of 1) SITE INVESTIGATION Date Started : 1-27-99 Driller : Vironex FORMER LEMOINE SAUSAGE FACTORY Date Completed : 1-27-99 Logged By : М. Напко 630 29TH AVENUE Hole Diameter : 2 in. Surface (Rim) Elevation 21.30 ft,msl OAKLAND, CALIFORNIA Drilling Method : Geoprobe Top of Well Casing : 21.10 ft,msl Clayton Project No.: 70-97066.00 Sampling Method Survey By ; V. Chavez Well1: MW-3 GRAPHIC Depth Surf. Elev.: 21.3 **USCS** in Elev. DESCRIPTION 21.30 Feet Cover 0 -21 Suspended Slab, various layers of concrete slabs, wood slabs, steel slabs, and rubble CC 4-Neat Cement + Clayey SILT (ML) (0,0,70,30), dark gray (10YR 3/1), medium stiff, slightly moist, plastic Blank 5 16 ML Clayey SAND (SC) with gravel, brown (10YR 5/3), Bentonite slightly moist, saturated at 11.5 - 12.5 feet below the warehouse floor ~12-50-1 DTW SC 10 11 Silty CLAY (CL) (0,5,45,50), light brown (10YR5/3), very stiff to hard, slightly moist -#3 Sand 3/4-inch Pre-Packed 0.020" Slotted 15 -6 Screen ML C:\mlech5\p97066\97066mw3.bor 20 Notes: 03-04-1999

Clayton LOG OF BORING MW\_4 **Environmental Consultants** (Page 1 of 1) SITE INVESTIGATION Date Started : 1-28-99 Driller : Vironex FORMER LEMOINE SAUSAGE FACTORY Date Completed : 1-28-99 Logged By ; M. Hanko 630 29TH AVENUE Hole Diameter : 2 in. Surface (Rim) Elevation 17.92 ft,msl OAKLAND, CALIFORNIA **Drilling Method** : Geoprobe Top of Well Casing : 17.78 ft,msl Sampling Method Clayton Project No.: 70-97066.00 Survey By : V. Chavez Well1: MW-4 GRAPHIC Elev.: 17.92 Depth Surf. uscs DESCRIPTION in Elev. Feet 17.92 Cover 0 -CONCRETE Floor CC 17 Clayey SILT (ML) (0,0,70,30), dark gray (10YR 3/1), medium stiff, slightly moist, plastic Blank ML Neat Cement - Bentonite Clayey SAND (SC) with gravel, brown (10YR 5/3), slightly moist, saturated at 8.5 - 9.5 feet bgs 5 12 SC #3 Sand 3/4-inch Pre-Packed Silty CLAY (CL) (0,5,45,50), light brown (10YR5/3), very stiff to hard, slightly moist 10 0.020" Slotted Screen 7 CL 15 2 C:\rntech5\p97066\97066mw4.bor 20 Notes: 03-04-1999

Clayton LOG OF BORING MW 5 **Environmental Consultants** (Page 1 of 1) SITE INVESTIGATION Date Started : 1-27-99 Driller : Vironex FORMER LEMOINE SAUSAGE FACTORY **Date Completed** : 1-27-99 : M. Hanko Logged By 630 29TH AVENUE Hole Diameter : 2 in. Surface (Rim ) Elevation not determined OAKLAND, CALIFORNIA **Drilling Method** : Geoprobe Top of Well Casing : 21.12 ft,msl Clayton Project No.: 70-97066.00 Sampling Method Survey By ; V. Chavez Well1: MW-5 GRAPHIC Depth Elev.: 21.5 Surf. Elev. DESCRIPTION Feet 21.5 Cover 0 Suspended Slab, various layers of concrete slabs, wood 21 slabs, steel slabs, and rubble + CC + Neat Cement Clayey SILT (ML) (0,0,70,30), dark gray (10YR 3/1), Blank medium stiff, slightly moist, plastic 5 16 ML - Bentonite Silty SAND (SM) with gravel (5,60,30,5), brown (10YR 5/3), moist, dense, angular1/4" gravel, fine sand SM 10 Clayey SILT (ML) (5,10,50,35), stiff, slightly moist, #3 Sand 11 very plastic 3/4-inch Pre-Packed 0.020" Slotted Screen ML Borehole collapsed from 16 to 14.5 feet bgs prior to installation of casing. 15 6 C:\mtech5\p97066\97066mw5.bor Notes: Arbitrary surface datum set at 21.5 feet. 03-04-1999

Clayton LOG OF BORING B-7 **Environmental Consultants** (Page 1 of 1) SITE INVESTIGATION Date Started : 1-27-99 Driller : Vironex FORMER LEMOINE SAUSAGE FACTORY Date Completed : 1-27-99 Logged By : M. Hanko 630 29TH AVENUE Hole Diameter : 2 in. OAKLAND, CALIFORNIA **Drilling Method** : Geoprobe Clayton Project No.: 70-97066.00 Sampling Method GRAPHIC Depth Surf. USCS Elev. **DESCRIPTION** Feet 18 0 1 18 CONCRETE Floor CC 5 + 13 Clayey SILT (ML) (0,0,70,30), dark gray (10YR 3/1), medium stiff, slightly moist, plastic ML Silty SAND (SM) with gravel (5,60,30,5), brown (10YR 5/3), moist, dense, angular 1/4" gravel, fine sand SM 10 \ 8 Clayey SILT (ML) (0.0,70,30), dark gray (10YR 3/1), medium stiff, slightly moist, plastic, HC odor in soil ML15  $\downarrow$  3 C:\mtech5\p97066\97066b7.bor 20 Notes: Arbitrary surface datum set at 18 feet. 03-04-1999

# Clayton Environmental Consultants LOG OF BORING B-8 (Page 1 of 1) SITE INVESTIGATION Date Started : 1-27-99 Driller : Vironex FORMER LEMOINE SAUSAGE FACTORY Date Completed : 1-27-99 Logged By : M. Hanko 630 29TH AVENUE Hole Diameter : 2 in. OAKLAND, CALIFORNIA **Drilling Method** : Geoprobe Clayton Project No.: 70-97066.00 Sampling Method GRAPHIC Surf. Depth Elev. **DESCRIPTION** Feet 18 0 \ 18 CONCRETE Floor CC 5 + 13Clayey SILT (ML) (0,0,70,30), dark gray (10YR 3/1), medium stiff, slightly moist, plastic ML Sandy SILT (ML) (0,20,60,20), grayish brown (10YR 4/2), slightly moist, stiff ML Silty CLAY (CL) (0,25,35,40), yellowish brown (10YR 4/3), very stiff, slightly moist 10 ↓ 8 CL 15 + 3C:\mtech5\p97066\97066b8.bar Notes: Arbitrary surface datum set a t 18 feet.

	Clayton Environmental Consultants					LOG	OF BORING E	3-9		
		Envi	ronmeni	al Cor	nsultants				(Page 1	of 1)
	SITE INVESTIGATION FORMER LEMOINE SAUSAGE FACTORY 630 29TH AVENUE OAKLAND, CALIFORNIA Clayton Project No.: 70-97066.00					Date Started Date Completed Hole Diameter Drilling Method Sampling Method	: 1-28-99 : 1-28-99 : 2 in. : Geoprobe :	Driller Logged By	: Viror : M. H	
	Depth in Feet	Surf. Elev. 18	uscs	GRAPHIC		DESCRIPTION	N			
	0 -	18	AS/FL		Asphalt and Base Sandy CLAY (CL) (10YR 4/2), very s Static water at 3.6	with gravel (10,30,3 stiff, <1/4" angular g	25,35), dark brown ravel			
	5 - - -	13	CL		Silty CLAY (CL) w (10YR 3/1), very s	ens at 5.5-6.0 feet b vith gravel (10,10,35 stiff,1-inch gravel, st 0,0,0), dark gray (10 rong HC odor	,45), dark gray rong HC odor			
	- 10 - - -	8			Refusal at 9 feet b	ogs due to sanitary s	sewer pipeline .			
9.bor	- 15 - -	3								
C:\mtech5\p97066\97066b9.bor	20 -	Arhitran	surface		et at 18 feet.					
03-03-1999	INDIES:	Arolifary	SUITACE (	iaium s	હા સા 10 1861.					

## Clayton LOG OF BORING B-10 Environmental Consultants (Page 1 of 1) SITE INVESTIGATION Date Started Driller : Vironex : 1-28-99 FORMER LEMOINE SAUSAGE FACTORY Date Completed : 1-28-99 Logged By : M. Hanko 630 29TH AVENUE Hole Diameter : 2 in. OAKLAND, CALIFORNIA **Drilling Method** : Geoprobe Clayton Project No.: 70-97066.00 Sampling Method GRAPHIC Depth Surf. Elev. **CSCS** DESCRIPTION in Feet 18 0 + 18AS/FL Asphalt and Base Material Sandy CLAY (CL) with gravel (10,30,25,35), dark brown (10YR 4/2), very stiff, <1/4" angular gravel CL. Static water at 3.6 feet bgs 5 + 13 saturated gravel lens at 5.5-6.0 feet bgs Silty CLAY (CL) with gravel (10,10,35,45), dark gray (10YR 3/1), very stiff,1-inch gravel, strong HC odor CL SAND (SP) (0,100,0,0), dark gray (10YR 3/1), very stiff,saturated, strong HC odor SP Refusal at 9 feet bgs due to sanitary sewer pipeline. 10 $\pm$ 8 15 -- 3 C:\mtech5\p97066\97066b10.box Notes: Arbitrary surface datum set at 18 feet. 03-03-1999

DATE: 2/2/99	ONITORI	NG WEL		SHEET	-97066,	00,000	
CLIENT: SHUSHGE F	-ACTORY		-	MILEAGE:			]
FACILITY: 630 21	TH AVE		. !	RELD TECH: MA	M		]
OAKLAN	D. CA_		. !	PAGE: OF:			
		·	<del></del> -		MUS	<del></del>	MN-1
WELL #	B-8 g	MW-WK	MW-2	B-7 8	8-6-1	MW-46	\$
TIME OPENED (24 hr)	1254	1257	256	1253	1255	12.58	BOC
TIME (24 hr)	1308	1311	1305	303	B13	1315	1317
WATER DEPTH (TO -5 THE	) 16,66	12,99	21.98	13.85	12.72	9,81	8.76
WELL DEPTH (R)	19.94	24,59	24.78	18,92	19,04	19,53	339,, 3/4",
WELL CIAMETER (in)	3/4"	3/4"	3/4"	75"	3/4"	3/4"	<b>-</b> ∤ '
WELL VOLUME (gal) C. 10259/4	0.082	0,29	0,07	0.12	0,16	0,22	0,22
SHEEN OR FILM	· ·						]
PRODUCT THICKNESS (%)							_
FIELD SAMPLE COLOR							
PURGE							
DEVELOP			!				
SAMPLE							
METHOD							_
PURGED WATER VOL. (gal)						<u> </u>	
PURGED COLOR							
PURGED PROD. VOL. (gal)						-	_
PURGE SEQUENCE							_
PROD DETECT METHOD						<u> </u>	_
COMMENTS: BY							37
0,44		•					

					A 711/ 12
	SAMP	LING DATA S	HEET	JOB#:70-	-97066.00,00
JOB LOCATION: 650			DATE PURGED: 2/2	199	
	LAND. CA			RISTALTIC	PUMP
1.77			DATE & TIME SAMPLED:	F/A	
SAMPLING LOCATION	¥ B-7		SAMPLING METHOD:	1/A	
<del></del>	8 8 85		SAMPLE TYPE:GRA	BCOMPOSITE	
WELL BOTTOM DEPTH:	\$13.92		PRESERVATIVES: N//	4, .	
WELL CASING VOLUME:	0,12		# OF CONTAINERS: N	14	
CASING VOLUMES PURG	ED:		FIELD TECH: MRM		
PURGE RATE:			WEATHER CONDITIONS:	000000000000000000000000000000000000000	
TIME	VOLUME	ELECTRICAL	PH	TEMPERATURE	TURBIDITY
(24 hr)	REMOVED (gal)	CONDUCTIVITY (\mu mhos/cm)		, (*£)	(ntu)
1405		5,77 x1000	6,56	55,7	DK BRM
1407	2 875	6,46 "	6147	57,2	71
,	BAILE		1 2 2 2		
1415	2.2675	RECOVERE	<i>D</i>		BRN'
	i				<u> </u>
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NOTES:					. <del></del>
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PURGE METHOD: PERTETHITI PUMP  DATE & TIME SAMPLED: N/A  SAMPLING LOCATION B - 8  SAMPLING METHOD: N/A  SAMPLE TYPE:GRABCOMPOSITE  WELL BOTTOM DEPTH: 14,94  WELL CASING VOLUME: 1,082 GAL  CASING VOLUMES PURGED:  PURGE METHOD: PERTETHITI PUMP  DATE & TIME SAMPLED: N/A  SAMPLE TYPE:GRABCOMPOSITE  PRESERVATIVES: N/A  # OF CONTAINERS: N/A  FIELD TECH: MRM	<u> </u>	SAMP	PLING DATA S	HEET	JOB#: ///	97066,00
PURGE ARTE  OAK WAND OF THE PURGE  SAMPLING LOCATION B B - 8  SAMPLING LOCATION B B - 8  SAMPLING METHOD. N/A	JOB LOCATION: 63	30 2974 A	VE_	DATE PURGED: Z/Z	199	
DATE & TIME SAMPLED: A APPLIES AND METHOD: A APPLIES AND APPLIES A	01		<del>4</del>	PURGE METHOD:	PERISTALIZI	PUMP
SAMPLING LOCATION ## B ## BAMPLING METHOD. W/# DEPTH TO WATER	<i></i>				/'/=	
DEPTH TO WATER: 1/4,66 WELL BOTTOM DEPTH: 1/4,974 WELL CASING VOLUME: 1/4,874 WELL CAS	SAMPLING LOCATION	B-8			TA	
WELL BOTTOM DEPTH: 14,94 WELL CASING VOLUME	DEPTH TO WATER:	- 11,66		SAMPLE TYPE:GR	ABCOMPOSITE	
CASING VOLUMES PURGED:  PURGE RATE:  VOLUME REMOVED (24 hr) (gal) (gal) (purhos/cm) (ef) (ntu)  1536 O 12,73400 6182 55,7 BKW  1538 IN MELLEN DRY 339" 6167 57,4 11  BATLEN DRY + 2015  (543 RECOVERED 2,2 075	WELL BOTTOM DEPTH:			PRESERVATIVES: N	4	
CASING VOLUMES PURGED:  PURGE RATE:  VOLUME REMOVED (24 hr) (gal) (gal) (purhos/cm) (ef) (ntu)  1536 O 12,73400 6182 55,7 BKW  1538 IN MELLEN DRY 339" 6167 57,4 11  BATLEN DRY + 2015  (543 RECOVERED 2,2 075	WELL CASING VOLUME:	1,082 6	AL	# OF CONTAINERS: P	TA	
TIME REMOVED CONDUCTIVITY (#1000 (91) (1000)  1536 O 12.73 x1000 6182 55.7 PKN  1538 IN MELLEN DRY 3.39 G165 57.4 11  BATILEN DRY + 2015  (543 RECOVERE) 2.2 075  17. BRN	CASING VOLUMES PURG	ED.		FIELD TECH: MR		
Temporal   Conductivity   (ef)   (ntu)     1536	PURGE RATE:		-131000 DODIE	WEATHER CONDITIONS	: INCORS/col	16
1536 O 12,93 x1000 6182 55,7 PKN 1538 IN MERCENTRY 13,39" 6.65 57,4 11 BATILED PRY + 2075  (543 RECOVERED 2,2075 LT, BRN		REMOVED	CONDUCTIVITY			
1538 107 MILED DRY + 2975  1543 RECOVERED 3.2 075  17. BR	1536	0	· · · · · · · · · · · · · · · · · · ·	6182	55.7	BKN
BATLED PRY + 2075  1543  RECOVERED 2.2 OTS  17. BRA		SHELLA		6,65	57,4	* / //
		BAILEI	DRY+	2015		
	1543	RECOVE	DEN 3.7 (	TS		I.T. BRN
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-	CAMP	LING DATA S	HEET	JOB #: <u>}</u> ( *	97166,00,000	
				100		
JOB LOCATION: 63	0 297# AV	<u></u>	PURGED: 2/2/99 PURGE METHOD: PERTATALTIC PUMP			
OFK	MIN, CH	<u></u>			(JEJY	
A	M MIL I		DATE & TIME SAMPLED:	1 / / / / / / / / / / / / / / / / / / /		
SAMPLING LOCATION	SE OC		SAMPLING METHOD: /	<u>///</u>		
DEPTH TO WATER:	73/16 842 ZG		SAMPLE TYPE:GRA			
WELL BOTTOM DEPTH: '	0,22 64	· )	# OF CONTAINERS: //	/+ 1 <sub>4</sub> 1		
CASING VOLUMES PURG		<u>k</u>	FIELD TECH: MRM	<u></u>		
PURGE RATE:	• E-V -	······································	WEATHER CONDITIONS	: 511VN4/COO	L-	
TIME	VOLUME	ELECTRICAL	PH	TEMPERATURE	TURBIDITY	
	REMOVED	CONDUCTIVITY	'''			
(24 hr)	(gal)	(µmhos/cm)		(°f)	(ntu)	
1658	Ö	161 X1000	7.05	53.4	DK GREY	
6.00	BAILED	DRY IN				
		1,54 2/160	7,05	52,7	FBE)	
402	ADDED Z	GTS FITT	(ED CAST	Ma		
1620	RECOVE		775			
				· · · · · · · · · · · · · · · · · · ·		
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NOTES:	1	0008/5	HEEN	1	<u></u>	

	CALAD	LINIO DATA O		JOB#: 76 -	97066,00,000
		LING DATA S		100	
JOB LOCATION: 6.30	297 AUF		DATE PURGED: 2/2/	177	1410
OHKL	ATYU, CH	<u> </u>		/ .	MP
	8 Mil -	<del></del>	DATE & TIME SAMPLED:	r/4	
SAMPLING LOCATION	1 PW-2	<del></del> •	SAMPLING METHOD:	<u></u>	
DEPTH TO WATER:	1,99	<del></del>	SAMPLE TYPE:GRAI	BCOMPOSITE	·
WELL BOTTOM DEPTH:	19/5/	<del></del>	PRESERVATIVES: /*//	<u>r</u>	
WELL CASING VOLUME:	- 0,276A1	<del></del>	124	A	
CASING VOLUMES PURG	ED:	· · · · · · · · · · · · · · · · · · ·	FIELD TECH: MR///	(An a ) -	
PURGE RATE:			WEATHER CONDITIONS:		
TIME	VOLUME REMOVED	ELECTRICAL CONDUCTIVITY	PH	TEMPERATURE	TURBIDITY
(24 hr)	(gal)	(µmhos/cm)		(°f)	(ntu)
1220	0	7,58 X1000	6,47	57.7	LT, BRN
1424	YZ QT	7,42 11	6,56	57,2	11
1433	ADPIZIO	42 6A1	HRECOVER	PED	
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<del></del>		LING DATA S	HEET	1. 1000	
JOB LOCATION: 63	0 297H A	<u>VE</u>	DATE PURGED:	12/98	· · · · · · · · · · · · · · · · · · ·
<i>Op</i> f	KLAND, CA	<del>-</del>	PURGE METHOD:	PEARY PUMF	<del></del>
<del></del>			DATE & TIME SAMPLED:	1/1	
SAMPLING LOCATION	NW-3	·	SAMPLING METHOD:	N/A	
DEPTH TO WATER:	8,99		SAMPLE TYPE:GR/	BCOMPOSITE	
WELL BOTTOM DEPTH:	19,59		PRESERVATIVES: //	H-	
WELL CASING VOLUME	0,0829		# OF CONTAINERS: /	<u>//</u>	
CASING VOLUMES PUR	GED: **	<del></del>	FIELD TECH: MRM		
PURGE RATE:			WEATHER CONDITIONS	: INDOUBALCO	?
TIME	VOLUME REMOVED	ELECTRICAL CONDUCTIVITY	PH	TEMPERATURE	TURBIDITY
(24 hr)	(gal)	(µmhos/cm)		F. (4) E	(ntu)
1337	0	11,12) 41000	6,48	61,0	OK GRY
1341	3 QTS	10,19 "	6,30	60.0	ERY
1344	+3975	9.63 "	6,24	59,2	LT, GRY
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NOTES:		RISHEEN	ــــــــــــــــــــــــــــــــــــــ	<u> </u>	<u> </u>

					JOB#: 7₽	-970£6.00 01		
			LING DATA S	HEET /	<i>j</i>			
JOB LOCA	TION: 63/	= 29 TH AV	E	DATE PURGED: 2/2/99				
	CAK	WAND, CA		PURGE METHOD:	STETALTIC	PUMP		
		· · · · · · · · · · · · · · · · · · ·		DATE & TIME SAMPLED:	NA			
SAMPLING	LOCATION	MW-4		SAMPLING METHOD: $\int_{0}^{\sqrt{y}}$	<i>la</i>			
DEPTH TO	WATER: 4	3:81		SAMPLE TYPE:GRA	BCOMPOSITE			
WELL BOT	TOM DEPTH:	13.58		PRESERVATIVES: N/H				
WELL CAS	ING VOLUME:	0,2261	rtL_	# OF CONTAINERS: N	H			
CASING V	OLUMES PURG	ED:	<del></del>	FIELD TECH: NIRM		· · · · · · · · · · · · · · · · · · ·		
PURGE RA	NTE:			WEATHER CONDITIONS:	INCORS/CO	<u> </u>		
Т	IME	VOLUME	ELECTRICAL	PH	TEMPERATURE	TURBIDITY		
(24	hr)	REMOVED (gal)	CONDUCTIVITY		, (°£)	(mtu)		
1.7	11.67	(941)	(µmhos/cm)	7117	(1)	(ntu)		
15	48		2,9 = XMO	1,46	2612	DK BBL		
15	49	2015	469 "	7,37	56,8	BRN		
15	51	1 cal	1,81 "	7,21	56.8	LT.BRN		
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				JOB#: 76	97166,00,00							
		LING DATA S	HEET									
JOB LOCATION: (20)		<u> </u>	DATE PURGED: 2/7	/99								
EAKLAIND, CA			PURGEMETHOD: PERISTALTIC PUMP									
	·		DATE & TIME SAMPLED: F/A									
DEPTH TO WATER: 7,72  WELL BOTTOM DEPTH: 14,04			SAMPLING METHOD: N/H  SAMPLE TYPE:GRABCOMPOSITE  PRESERVATIVES: N/H									
							WELL CASING VOLUME:	0.16		# OF CONTAINERS: /V/	<u> </u>	, <u></u>
							CASING VOLUMES PURG	ED:		FIELD TECH: MRIV		
PURGE RATE:			WEATHER CONDITIONS	INVOORS/CE	rol-							
TIME	VOLUME	ELECTRICAL	PH	TEMPERATURE	TURBIDITY							
(24 hr)	REMOVED (gal)	CONDUCTIVITY (		. (°£)	(ntu)							
1352	1/2 (1)	3,52 X1060	7,21	57.4	D4 BBM							
	BATLED O	RY + ADDED	H201/20	AL								
1400	BECOVE	BD ~ YZ-61	4.									
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	ONITOR	ING WE	LL DATA	SHEET	•		
DATE: 2/8/99		. ?	_	PROJECT#:			
	E FACTOR	Υ	<del></del>	MILEAGE:	<del></del> _		_
FACILITY:	<del></del>	<del></del>	<u>-</u>	PELD TECH:	<u> </u>		
	<u> </u>		_	PAGE: OF:			4
WELL #	Mw -1	MW-Z	MW-3	MW-4	nw-5	B-7	B-8
TIME OPENED (24 hr)	OPEN-	-μ··· υ	74.14.	7110-7		10-7	<b>≯</b> "
TIME (24 hr)	1171	117.6	1129	1133	1136	1138	4
WATER DEPTH (0) -5 TATE	8.60	19.20	12,45	9.13	12,62	13,24	1141
WELL DEPTH (tt)	BUNG 139	24,78	24,59	9,81	179,04	18,92	7
WELL DIAMETER (in)	0,22					10112	19,79
WELL VOLUME (gmi)							1
SHEEN OR FILM 80%	9.56	19,54			13,90	14,38	16,00
PRODUCT THICKNESS (R)		<del>- [ -  </del>			12770	<u> </u>	
FIELD SAMPLE COLOR							1
PURGE		·· · · · · · · · · · · · · · · · · · ·		· ·			
DEVELOP		·				,	ĺ
SAMPLE					,	<del>*************************************</del>	1
МЕТНОО	·			-			i
PURGED WATER VOL. (gal)							
PURGED COLOR				·			
PURGED PROD. VOL. (gal)							
PURGE SEQUENCE							
ROD DETECT METHOD							
OMMENTS:				<u></u>	I		
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	SAIVI	PLING DATA S		0/19		
OB LOCATION:			DATE PURGED: 2/	<del>5///</del>		
			PURGE METHOD:	- 310/a0 1- 03	- VOIT	
AMPLING LOCATION:	B-7	<del></del>	DATE & TIME SAMPLED: 2/8/99 1202 + 1805 00 SAMPLING METHOD:			
<del></del>	Ь"/					
PEPTH TO WATER:				GRABCOMPOSITE		
VELL CASING VOLUME			PRESERVATIVES:	·		
ASING VOLUMES PUR		<del></del>	# OF CONTAINERS: FIELD TECH:		· · · · · · · · · · · · · · · · ·	
PURGE RATE:			WEATHER CONDITION	nne.		
TIME	VOLUME	ELECTRICAL	PH	TEMPERATURE	TURBIDITY	
(24 hr)	REMOVED (gal)	CONDUCTIVITY (µmhos/cm)	""	(°f)	(ntu)	
	0	,,,				
1202	7 7 7	OALL A AAN			BRU	
1206	2 QTS	BOTLED DRY			V. LI. BRI	
		<u> </u>				
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NOTES:						
RF CAMPIET	0 W/1'R	ECAMERY				

A ANA MANAGEM & FL ADM			DATE PURGED: 2/	3/99				
JOB LOCATION:  SAMPLING LOCATION:  DEPTH TO WATER:  WELL BOTTOM DEPTH:  WELL CASING VOLUME:  CASING VOLUMES PURGED:			PURGE METHOD:  DATE & TIME SAMPLED: 2/8/99 1445					
							SAMPLING METHOD:	4911
			SAMPLING METHOD:  SAMPLE TYPE:GRABCOMPOSITE					
			PRESERVATIVES: # OF CONTAINERS:					
								FIELD TECH:
			URGE RATE:		<del></del>	WEATHER CONDITIO	NS:	
			TIME	VOLUME REMOVED	ELECTRICAL CONDUCTIVITY	PH	TEMPERATURE	TURBIDITY
(24 hr)	(gal)	(µmhos/cm)		(°f)	(ntu)			
11 47	0				LT, BAN			
1153	1.6 075				VILT, 8AN			
	MILE	O DRY						
	1114 00	V VV) /						
			-					
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		<u>                                     </u>	<del> </del>					
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1			<u> </u>		<u> </u>			

JOB#:						
	SAMF	PLING DATA S		<u></u>		
JOB LOCATION:			DATE PURGED: 17	13/19		
			PURGE METHOD:			
			DATE & TIME SAMPLE	ED: 1220 200A +	+1530 3 WOA	
SAMPLING LOCATION:	MIN-I		SAMPLING METHOD:		<u> </u>	
DEPTH TO WATER:			SAMPLE TYPE:	GRABCOMPOSITE		
WELL BOTTOM DEPTH:			PRESERVATIVES:			
WELL CASING VOLUME:			# OF CONTAINERS:			
CASING VOLUMES PURG	ED:		FIELD TECH:			
PURGE RATE:	•	•	WEATHER CONDITIO	)NS:		
TIME (24 hr)	VOLUME REMOVED	ELECTRICAL CONDUCTIVITY (µmhos/cm)	PH	TEMPERATURE (°f)	TURBIDITY (ntu)	
1220	O				L2K	
1224	100	BATLED	hav		V. LT. BRIV	
1661	<del></del>	DILLEV	ומין		V: LIVIII	
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		ODOR	SHEEN			

	CAME	U INC DATA C		JOB#:	
<del></del>	SAIVIF	LING DATA S		2/901	
JOB LOCATION:		<del></del>	DATE PURGED: 2/9	<i>3/19</i>	
			PURGE METHOD:	1	<u> </u>
			DATE & TIME SAMPLED	: 1515	
SAMPLING LOCATION:	$MW^{-}Z$	<del></del>	SAMPLING METHOD:	<u></u>	
DEPTH TO WATER:				ABCOMPOSITE	<u> </u>
WELL BOTTOM DEPTH:				CI VICE	
WELL CASING VOLUME:			# OF CONTAINERS: 3	VOA-5	
CASING VOLUMES PURG	ED:		FIELD TECH:		
PURGE RATE:			WEATHER CONDITIONS		
TIME (24 hr)	VOLUME (gal)	ELECTRICAL CONDUCTIVITY (µmhos/cm)	PH	TEMPERATURE ( *f)	TURBIDITY (ntu)
B1155	0				
1157	1,3 0,75	BAILED DR	y'		
11-7-7	117 412	VIII VII	<u> </u>		
			-		
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NOTES:				<u> </u>	····
BG SH	NPLED W/	1.5' BECOL	IÆR'Y		

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				JOB#:		
	SAMP	LING DATA S		<u> </u>		
JOB LOCATION:			DATE PURGED: 2/8/	99		
			PURGE METHOD:			
	1 4 4 4		DATE & TIME SAMPLED: 2/8/99 1234			
SAMPLING LOCATION:	MM-3		SAMPLING METHOD:			
DEPTH TO WATER:			SAMPLE TYPE:GRA	LBCOMPOSITE		
WELL BOTTOM DEPTH:			PRESERVATIVES:			
WELL CASING VOLUME:		<u> </u>	# OF CONTAINERS:	<u> </u>		
CASING VOLUMES PURG	3ED:	<del></del>	FIELD TECH:			
PURGE RATE:			WEATHER CONDITIONS			
TIME	VOLUME	ELECTRICAL	PH	TEMPERATURE	TURBIDITY	
(24 hr)	REMOVED (gal)	CONDUCTIVITY (µmhos/cm)		(°£)	(ntu)	
IVANAG						
1229	O				GREY	
1233	Igal				LT. GREY	
	DEO	NOT BHILL	DRY			
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	SAMI	PLING DATA S		<del></del>	
JOB LOCATION:			DATE PURGED: 2/2	199	
··	<u>-</u>		PURGE METHOD:		
	<del></del>	<del>- ,</del>	DATE & TIME SAMPLED	2/8/99 125	<u> </u>
SAMPLING LOCATION:	MW-4		SAMPLING METHOD:		- <del>-</del>
DEPTH TO WATER:		<del></del>	SAMPLE TYPE:GR	ABCOMPOSITE	
WELL BOTTOM DEPTH:		<del></del>	PRESERVATIVES:		·····
WELL CASING VOLUME:			# OF CONTAINERS:		
CASING VOLUMES PURG	iED:	<u></u>	FIELD TECH:		
PURGE RATE:			WEATHER CONDITION	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	••••
TIME (24 hr)	VOLUME REMOVED (gal)	ELECTRICAL CONDUCTIVITY (µmhos/cm)	PH	TEMPERATURE (°f)	TURBIDITY (ntu)
1250	0	1			Du Bell
1_ ; i_	1-1				$\nu_{\rm K} \nu_{\rm D} \nu_{\rm C}$
7.55	gar_	<u> </u>			LT. BAN
		DID NOT BY	DRY		
			-		
					<u> </u>
		<u> </u>			<del></del>
					··· ·
	i 				
				-	
		!			
NOTES:			5.7		

				JOB#:	
	SAMP	LING DATA S		10 10 11	
JOB LOCATION:		<del></del>	DATE PURGED: 2/	3/99	
			PURGE METHOD:	2/2 /200	
			DATE & TIME SAMPLE	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10013) +1494 (3 60)
SAMPLING LOCATION:	-6 MW-	5	SAMPLING METHOD:	· · · · · · · · · · · · · · · · · · ·	
DEPTH TO WATER:			SAMPLE TYPE:G	GRABCOMPOSITE	
WELL BOTTOM DEPTH:			PRESERVATIVES:		
WELL CASING VOLUME:			# OF CONTAINERS:		
CASING VOLUMES PURGE	D:		FIELD TECH:		
PURGE RATE:			WEATHER CONDITIO		
TIME (24 hr)	VOLUME (gal)	ELECTRICAL CONDUCTIVITY (µmhos/cm)	PH	TEMPERATURE (°f)	TURBIDITY (ntu)
1208	0				BBP
1214	0.9 25	BATLED	DAY		IT. BAN
			,	· · · · · · · · · · · · · · · · · · ·	
			1 *		
	-	<u> </u>			
	<del></del>				
			<del> </del>		*-
1			<u></u>		

# APPENDIX B

WELL SURVEY REPORT

#### Virgil Chavez Land Surveying

312 Georgia Street, Suite 200 Vallejo, California 94590 (707) 553-2476 • Fax (707) 553-8698

March 2, 1999 Project No. 1605-01

Matt Hanko Clayton Environmental Consultants 1252 Quarry Lane Pleasanton, Ca. 94566

Subject: Monitoring Well Survey 630 29th Ave. Oakland, Ca.

#### Dear Matt:

This is to confirm that we have proceeded at your request to survey the monitoring wells at the above referenced site. Our findings are shown in the tables below. The survey was performed on March 1, 1999. Measurement locations were marked at approximate north side of top of casing, and top of box. The face of building on 7th Street was used as reference line for top of casing locations. The benchmark for the survey was a cut square in the easterly curb return at the northerly corner of Peterson Street & East 7th Street.

Benchmark Elevation = 17.91 feet, MSL.

Well No.	Rim <u>Elevation</u>	TOC <u>Elevation</u>	<u>Station</u>	<u>Offset</u>
MW - 1 MW - 2 MW - 3 MW - 4 MW - 5	16.99' 21.24' 21.30' 17.92'	16.69' 20.79' 21.10' 17.78' 21.12'	1+02.87 0+66.12 0+98.06 1+19.51 1+01.43	-21.09(Lt.) 21.05(Rt.) 39.66(Rt.) 36.00(Rt.) 24.83(Rt.)
N'ly Bldg Bldg Face-			0+00	0.00

No. 6323 CAND SUPPLIES OF CALIFORNIA

Sincerely,

Virgil D. Chavez, PLS 6323

# APPENDIX C LABORATORY ANALYTICAL DATA REPORT AND CHAIN-OFCUSTODY DOCUMENTS

1252 Quarry Lane P.O. Box 9019 Pleasanton, CA 94566 (925) 426-2600 Fax (925) 426-0106



February 18, 1999

Mr. Matt Hanko CLAYTON ENVIRONMENTAL CONS. 1252 Quarry Lane Pleasanton, CA 94566

> Client Ref.: 70-97066.00 Clayton Project No.: 99012.52

Dear Mr. Hanko:

Attached is our analytical laboratory report for the samples received on January 28, 1999. 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 March 18, 1999, unless you have requested otherwise.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact Client Services at (925) 426-2657.

Sincerely,

Patricia Flynn

Client Services Representative San Francisco Regional Office

PVF/pvf

Attachments

California DHS ELAP Certification Number 1196



of 12 Page 2

## Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00 Clayton Project No. 99012.52

ample Identification: B-9

Lab Number:

Sample Matrix/Media:

reparation Method: Method Reference:

9901252-01C

WATER EPA 5030

EPA 8010

Date Sampled: Date Received: Date Analyzed:

01/28/99 01/28/99 02/03/99

Analyst	:	MSF
---------	---	-----

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
Purgeable Halocarbons			
	•		
Bromodichloromethane	75-27-4	ND	0.7
Bromoform	75-25-2	ND	0.7
■ Bromomethane	74-83-9	ND	0.7
Carbon tetrachloride	56-23-5	ND	0.6
Chlorobenzene	108-90-7	ND	0.7
Chloroethane	75-00-3	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.6
Dibromochloromethane	124-48-1	ND	0.6
1,2-Dibromoethane	106-93-4	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
■ 1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	1
1,1-Dichloroethane	75-34-3	ND	0.4
1,2-Dichloroethane	107-06-2	ND	0.3
1,1-Dichloroethene	75-35-4	ND	0.2
cis-1,2-Dichloroethene	156-59-2	ND	0.4
trans-1,2-Dichloroethene	156-60-5	ND	0.4
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.6
Freon 113	76-13-1	ND	0.6
Methylene chloride	75-09-2	ND	2
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.6
Trichloroethene	79-01-6	ND	0.3
Trichlorofluoromethane	75-69-4	ND	0.4

Page 3 of 12

Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00

Clayton Project No. 99012.52

ample Identification: B-9

Lab Number:

9901252-01C

Sample Matrix/Media:

WATER

reparation Method: ethod Reference:

EPA 5030

EPA 8010

Date Sampled:

01/28/99 01/28/99

Date Received: Date Analyzed:

02/03/99

Analyst:

MSF

			Limit
			of
_		Concentration	Detection
Analyte	CAS #	(ug/L)	(ug/L)

Purgeable Halocarbons (Continued)

Vinyl chloride

75-01-4

ND

0.5

T - - - - - -

<u>urrogates</u>

Recovery (%) QC Limits (%)

1-Chloro-2-methylpropene

513-37-1

96

70 - 130



Page 4 of 12

## Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00 Clayton Project No. 99012.52

ample Identification: B-10 Lab Number: 99012

9901252-02C

Sample Matrix/Media: WATER reparation Method: EPA 5030

lethod Reference:

EPA 8010

Date Analyzed: 02/04/99

Analyst:

Date Sampled:

01/28/99 Date Received: 01/28/99

MSF

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
Purgeable Halocarbons			
	-		
Bromodichloromethane	75-27-4	, <b>N</b> D	0.7
Bromoform	75-25-2	ND	0.7
<pre>Bromomethane</pre>	74-83-9	ND	0.7
Carbon tetrachloride	56-23-5	ND	0.6
Chlorobenzene	108-90-7	ND	0.7
Chloroethane	75-00-3	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.6
Dibromochloromethane	124-48-1	ND	0.6
1,2-Dibromoethane	106-93-4	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	1
1,1-Dichloroethane	75-34-3	ND	0.4
_ 1,2-Dichloroethane	107-06-2	ND	0.3
1,1-Dichloroethene	75-35-4	ND	0.2
cis-1,2-Dichloroethene	156-59-2	ND	0.4
trans-1,2-Dichloroethene	156-60-5	ND	0.4
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.6
Freon 113	76-13-1	ND	0.6
Methylene chloride	75-09-2	ND	2
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.6
Trichloroethene	79-01-6	ND	0.3
Trichlorofluoromethane	75-69-4	ND	0.4

Page 5 of 12

Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00

Clayton Project No. 99012.52

ample Identification: B-10

Lab Number:

9901252-02C

Sample Matrix/Media: reparation Method:

WATER EPA 5030

lethod Reference:

EPA 8010

Date Sampled: Date Received:

01/28/99 01/28/99

Date Analyzed:

02/04/99

Analyst:

MSF

			Limit
Analyte	CAS #	Concentration $(ug/L)$	Detection (ug/L)
<b>4</b>	5355 11	1-3/-/	(5,,

Purgeable Halocarbons (Continued)

Vinyl chloride

75-01-4

ND

0.5

urrogates

Recovery (%) QC Limits (%)

1-Chloro-2-methylpropene

513-37-1

88

70 - 130



Page 6 of 12

## Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00 Clayton Project No. 99012.52

ample Identification: METHOD BLANK

Lab Number:

9901252-05A

Sample Matrix/Media:

WATER

Preparation Method: Method Reference:

EPA 5030

EPA 8010

Date Sampled: Date Received:

Date Analyzed: 02/03/99

Analyst:

MSF

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
Purgeable Halocarbons	•		
Bromodichloromethane	75-27-4	ND	0.7
Bromoform	75-25-2	ND	0.7
Bromomethane	74-83-9	ND	0.7
Carbon tetrachloride	56-23-5	ND ND	0.6
Chlorobenzene	108-90-7	ND	0.7
Chloroethane	75-00-3	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.6
Dibromochloromethane	124-48-1	ND ND	0.6
1,2-Dibromoethane	106-93-4	ND ND	0.5
1,2-Dichlorobenzene	95-50-1	ND ND	0.5
1,3-Dichlorobenzene	95-50-1 541-73-1	ND ND	0.5
•		ND ND	0.5
1,4-Dichlorobenzene Dichlorodifluoromethane	106-46-7 75-71-8	ND ND	1
1,1-Dichloroethane	75-71-8 75-34-3	ND ND	0.4
1,2-Dichloroethane	107-06-2	ND	0.4
•		ND ND	0.3
1,1-Dichloroethene	75-35-4		0.2
cis-1,2-Dichloroethene	156-59-2	ND	
trans-1,2-Dichloroethene	156-60-5	ND	0.4
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.6
Freon 113	76-13-1	ND	0.6
Methylene chloride	75-09-2	ND	2
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.6
Trichloroethene	79-01-6	ND	0.3
Trichlorofluoromethane	75-69-4	ND	0.4

Page 7 of 12

Analytical Results

for

Clayton Environmental Consultants, Inc.

Client Reference: 70-97066.00 Clayton Project No. 99012.52

ample Identification: METHOD BLANK

Lab Number:

9901252-05A

Sample Matrix/Media: WATER Preparation Method: EPA 5030

Method Reference:

EPA 8010

Date Sampled:

Date Received:

Date Analyzed:

02/03/99

Analyst:

MSF

			Limit of
		Concentration	Detection
Analyte	CAS #	$(\mathtt{ug/L})$	(ug/L)

Purgeable Halocarbons (Continued)

Vinyl chloride

75-01-4

ND

0.5

Recovery (%) QC Limits (%) urrogates

1-Chloro-2-methylpropene

513-37-1

85

70 - 130



Page 8 of 12

#### Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00 Clayton Project No. 99012.52

Sample Identification: MW-2 @ 13'

Lab Number:

9901252-03A

Sample Matrix/Media:

Preparation Method: Method Reference:

SOIL

EPA 5030

EPA 8015/8020

Date Sampled:

01/27/99 Date Received: 01/28/99 Date Prepared: 01/29/99 Date Analyzed: 01/29/99

ASC Analyst:

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
BTEX/Gasoline			
Benzene Ethylbenzene Toluene o-Xylene p,m-Xylenes Gasoline	71-43-2 100-41-4 108-88-3 95-47-6	0.085 1.7 0.18 0.13 0.73	0.005 0.005 0.005 0.005 0.005
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	108	50 - 150

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

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

Page 9 of 12

Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00

Clayton Project No. 99012.52

ample Identification: METHOD BLANK

9901252-06A

Lab Number:

22012

Sample Matrix/Media:

SOIL

reparation Method: lethod Reference: EPA 5030

EPA 8015/8020

Date Sampled:

Date Received:

Date Prepared: Date Analyzed:

01/29/99 01/29/99

Analyst:

ASC

Analyte	CAS #	Concentration (mg/kg)	Limit of Detection (mg/kg)
BTEX/Gasoline	_		
Benzene Ethylbenzene Toluene o-Xylene p,m-Xylenes Gasoline	71-43-2 100-41-4 108-88-3 95-47-6	ND ND ND ND ND ND	0.005 0.005 0.005 0.005 0.005
urrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	119	50 - 150

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

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



Page 10 of 12

### Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00 Clayton Project No. 99012.52

ample Identification: B-9

Lab Number:

9901252-01A

<u>S</u>ample Matrix/Media: reparation Method:

EPA 5030

ethod Reference:

WATER

EPA 8015/8020

Date Sampled:

01/28/99 Date Received: 01/28/99 Date Prepared: 02/08/99

Date Analyzed: 02/08/99

Analyst: ASC

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
BTEX/Gasoline	•		
Benzene Ethylbenzene Toluene o-Xylene p,m-Xylenes Gasoline	71-43-2 100-41-4 108-88-3 95-47-6	240 640 5600 950 2200 51000	20 20 20 20 20 20 3000
Jurrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	126	50 - 150

Page 11 of 12

#### Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00

Clayton Project No. 99012.52

ample Identification: B-10

Lab Number:

9901252-02A

<u>S</u>ample Matrix/Media: reparation Method: ethod Reference:

WATER EPA 5030

EPA 8015/8020

Date Sampled:

01/28/99 01/28/99

Date Received: Date Prepared:

02/08/99

Date Analyzed:

02/08/99

Analyst:

ASC

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
BTEX/Gasoline	-		
Benzene	71-43-2	1.4	0.4
Ethylbenzene	100-41-4	1.9	0.3
■ Toluene	108-88-3	16	0.3
o-Xylene	95-47-6	3.2	0.4
p,m-Xylenes		7.6	0.4
Gasoline	·	210	50
urrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	111	50 - 150

Page 12 of 12

#### Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00

Clayton Project No. 99012.52

ample Identification: METHOD BLANK

Lab Number:

9901252-05A

Sample Matrix/Media:

reparation Method: ethod Reference:

EPA 5030

WATER

EPA 8015/8020

Date Sampled:

Date Received:

Date Prepared:

Date Analyzed:

02/08/99 02/08/99

Analyst:

ASC

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
BTEX/Gasoline	-		
Benzene	71-43-2	ND	0.4
Ethylbenzene	100-41-4	ND	0.3
■ Toluene	108-88-3	ND	0.3
o-Xylene	95-47-6	ND	0.4
p,m-Xylenes		ND	0.4
Gasoline		ND	50
Jurrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	122	50 - 150

1252 Quarry Lane P.O. Box 9019 Pleasanton, CA 94566 (925) 426-2600 Fax (925) 426-0106



February 19, 1999

Mr. Marc Mullaney CLAYTON ENVIRONMENTAL CONS. 1252 Quarry Lane Pleasanton, CA 94566

> Client Ref.: 70-97066.00.000 Clayton Project No.: 99020.84

Dear Mr. Mullaney:

Attached is our analytical laboratory report for the samples received on February 8, 1999. 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 March 21, 1999, unless you have requested otherwise.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact Client Services at (925) 426-2657.

Sincerely,

Patricia Flynn

Client Services Representative San Francisco Regional Office

PVF/pvf

Attachments

California DHS ELAP Certification Number 1196



Page 4 of 25

## Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00.000 Clayton Project No. 99020.84

ample Identification: B-7 15:05 Lab Number:

9902084-04A

Sample Matrix/Media: WATER reparation Method: EPA 5030 ethod Reference:

EPA 8010

Date Sampled: Date Received:

02/08/99 02/08/99 Date Prepared: 02/19/99

Date Analyzed:

02/19/99

Analyst: MSF

		Concentration	Limit of Detection
Analyte	CAS #	(ug/L)	(ug/L)
Purgeable Halocarbons	•		
Bromodichloromethane	75-27-4	ND	70
Bromoform	75-25-2	ND	70
■ Bromomethane	74-83-9	ND	70
Carbon tetrachloride	56-23-5	ND	60
Chlorobenzene	108-90-7	ND	70
_ Chloroethane	75-00-3	ND	50
Chloroform	67-66-3	ND	50
Chloromethane	74-87-3	ND	60
Dibromochloromethane	124-48-1	ND	60
1,2-Dibromoethane	106-93-4	ND	50
1,2-Dichlorobenzene	95-50-1	ND	50
1,3-Dichlorobenzene	541-73-1	ND	50
1,4-Dichlorobenzene	106-46-7	ND	50
Dichlorodifluoromethane	75-71-8	ND	100
1,1-Dichloroethane	75-34-3	ND	40
1,2-Dichloroethane	107-06-2	160	30
1,1-Dichloroethene	75-35-4	ND	20
cis-1,2-Dichloroethene	156-59-2	ND	4.0
trans-1,2-Dichloroethene	156-60-5	ND	40
1,2-Dichloropropane	78-87-5	ND	50
cis-1,3-Dichloropropene	10061-01-5	ND	50
trans-1,3-Dichloropropene	10061-02-6	ND	60
Freon 113	76-13-1	ND	60
Methylene chloride	75-09-2	ND	200
1,1,2,2-Tetrachloroethane	79-34-5	ND	50
Tetrachloroethene	127-18 <b>-</b> 4	ND	50
1,1,1-Trichloroethane	71~55-6	ND	50
1,1,2-Trichloroethane	79-00-5	ND	60
Trichloroethene	79-01-6	ND	30
Trichlorofluoromethane	75-69-4	ND	40

Page 5 of 25

Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00.000 Clayton Project No. 99020.84

ample Identification: B-7 15:05

Lab Number:

9902084-04A

Sample Matrix/Media:

WATER

reparation Method:

EPA 5030

ethod Reference:

EPA 8010

Date Sampled:

02/08/99 02/08/99

Date Received: Date Prepared:

02/19/99

Date Analyzed:

02/19/99

Analyst:

MSF

Limit of Concentration (ug/L)

**∆**nalyte

CAS #

(ug/L)

Detection

Purgeable Halocarbons (Continued)

Vinyl chloride

75-01-4

ND

50

urrogates

Recovery (%)

OC Limits (%)

1-Chloro-2-methylpropene

513-37-1

116

70 - 130



Page 6 of 25

## Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00.000 Clayton Project No. 99020.84

ample Identification: B-8 14:45 Lab Number:

Sample Matrix/Media: reparation Method:

lethod Reference:

9902084-05A WATER

EPA 5030 EPA 8010

02/08/99 Date Sampled: Date Received: 02/08/99

Date Prepared: 02/19/99 Date Analyzed: 02/19/99

Analyst: MSF

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
Purgeable Halocarbons	-		
Bromoform Bromomethane Carbon tetrachloride Chlorobenzene Chloroethane Chloroform Chloromethane	75-25-2 74-83-9 56-23-5 108-90-7 75-00-3 67-66-3 74-87-3	ND ND ND ND ND ND ND	0.7 0.7 0.6 0.7 0.5 0.5
Dibromochloromethane 1,2-Dibromoethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene Dichlorodifluoromethane	124-48-1 106-93-4 95-50-1 541-73-1 106-46-7 75-71-8	ND ND ND ND ND ND	0.6 0.5 0.5 0.5 1
1,1-Dichloroethane 1,2-Dichloroethane 1,1-Dichloroethene cis-1,2-Dichloroethene trans-1,2-Dichloroethene 1,2-Dichloropropane	75-34-3 107-06-2 75-35-4 156-59-2 156-60-5 78-87-5	ND 2.9 ND ND ND ND ND ND	0.4 0.3 0.2 0.4 0.4
cis-1,3-Dichloropropene trans-1,3-Dichloropropene Freon 113 Methylene chloride 1,1,2,2-Tetrachloroethane Tetrachloroethene	10061-01-5 10061-02-6 76-13-1 75-09-2 79-34-5 127-18-4	ND ND ND ND ND ND	0.5 0.6 0.6 2 0.5
<pre>1,1,1-Trichloroethane 1,1,2-Trichloroethane Trichloroethene Trichlorofluoromethane</pre>	71-55-6 79-00-5 79-01-6 75-69-4	ND ND ND ND	0.5 0.6 0.3 0.4

Page 7 of 25

Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00.000 Clayton Project No. 99020.84

Sample Identification: B-8 14:45

Lab Number:

9902084-05A

Sample Matrix/Media: reparation Method:

WATER

Method Reference:

EPA 5030

EPA 8010

Date Sampled:

02/08/99 02/08/99

Date Received: Date Prepared:

02/19/99

Date Analyzed:

02/19/99

Analyst:

MSF

Limit of Concentration Analyte

CAS #

(ug/L)

Detection

(ug/L)

Purgeable Halocarbons (Continued)

Vinyl chloride

75-01-4

ND

0.5

<u>urrogates</u>

Recovery (%)

QC Limits (%)

1-Chloro-2-methylpropene

513-37-1

121

70 - 130



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## Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00.000 Clayton Project No. 99020.84

ample Identification: MW-1 15:30

Lab Number:

9902084-07A

Sample Matrix/Media: reparation Method:

WATER

ethod Reference:

EPA 5030 EPA 8010 Date Received:

Date Sampled:

02/08/99 02/08/99

Date Prepared: Date Analyzed:

02/19/99 02/19/99

MSF

Analyst:

		Limit
		of
- • ·	Concentration	Detection
Analyte CAS #	(ug/L)	(ug/L)

_ _Analyte	CAS #	Concentration (ug/L)	Detection (ug/L)
Purgeable Halocarbons	•		
Bromodichloromethane	75-27-4	ND	70
Bromoform	75-25-2	ND	70.
Bromomethane	74-83-9	ND	70
Carbon tetrachloride	56-23-5	ND	60
Chlorobenzene	108-90-7	ND	70
Chloroethane	75-00-3	ND	50
Chloroform	67-66 <b>-</b> 3	ND	50
Chloromethane	74 - 8 <b>7 -</b> 3	ND	60
Dibromochloromethane	124-48-1	ND	60
1,2-Dibromoethane	106-93-4	ND	50
1,2-Dichlorobenzene	95-50 <b>-</b> 1	ND	50
1,3-Dichlorobenzene	541-73-1	ND	50
1,4-Dichlorobenzene	106-46-7	ND	50
Dichlorodifluoromethane	75-71-8	ND	100
1,1-Dichloroethane	75-34-3	ND	40
1,2-Dichloroethane	107-06-2	ND	30
1,1-Dichloroethene	75-35-4	ND	20
cis-1,2-Dichloroethene	156-59-2	ND	40
trans-1,2-Dichloroethene	156-60-5	ND	40
1,2-Dichloropropane	78-87-5	ND	50
cis-1,3-Dichloropropene	10061-01-5	ND	50
trans-1,3-Dichloropropene	10061-02-6	ND	60
Freon 113	76-13-1	ND	60
Methylene chloride	75-09-2	ND	200
1,1,2,2-Tetrachloroethane	79-34-5	ND	50
Tetrachloroethene	127-18-4	ND	50
1,1,1-Trichloroethane	71-55-6	ND	50
1,1,2-Trichloroethane	79-00-5	ND	60
Trichloroethene	79-01-6	ND	30
Trichlorofluoromethane	75-69-4	ND	40

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Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00.000 Clayton Project No. 99020.84

ample Identification: MW-1 15:30

Lab Number:

Sample Matrix/Media:

9902084-07A WATER

reparation Method:

EPA 5030

lethod Reference:

EPA 8010

Date Sampled:

Date Received:

02/08/99 02/08/99

Date Prepared: Date Analyzed:

02/19/99 02/19/99

Analyst:

MSF

Limit of Concentration Detection Analyte CAS # (ug/L) (ug/L)

Purgeable Halocarbons (Continued)

Vinyl chloride

75-01-4

ND

50

<u>urrogates</u>

Recovery (%)

QC Limits (%)

1-Chloro-2-methylpropene

513-37-1

117

70 - 130



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### Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00.000 Clayton Project No. 99020.84

Sample Identification: MW-2 15:15 Date Sampled: 02/08/99 Lab Number: Date Received: 9902084-08A 02/08/99 Sample Matrix/Media: WATER Date Prepared: 02/19/99 Preparation Method: Method Reference: Date Analyzed: 02/19/99 EPA 5030 EPA 8010 Analyst: MSF

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
Purqeable Halocarbons			
	75 OF 4	<b></b>	50
Bromodichloromethane	75-27-4	ND	70
Bromoform	75-25-2	ND	70
Bromomethane	74-83-9	ND	70
Carbon tetrachloride Chlorobenzene	56-23-5	ND	60
_ Chloroethane	108-90-7 75-00-3	ND ND	70 50
Chloroform	67-66-3	ND ND	50
Chloromethane	74-87-3	ND	60
Dibromochloromethane	124-48-1	ND	60
1,2-Dibromoethane	106-93-4	ND	50
1,2-Dichlorobenzene	95-50-1	ND	50
1,3-Dichlorobenzene	541-73-1	ND	50
■ 1,4-Dichlorobenzene	106-46-7	ND	50
Dichlorodifluoromethane	75-71-8	ND	100
1,1-Dichloroethane	75-34-3	ND	40
1,2-Dichloroethane	107-06-2	(60)	30
1,1-Dichloroethene	75-35-4	ND	20
cis-1,2-Dichloroethene	156-59-2	ND	40
trans-1,2-Dichloroethene	156-60-5	ND	40
	78-87-5	ND	50
cis-1,3-Dichloropropene	10061-01-5	ND	50
trans-1,3-Dichloropropene	10061-02-6	ND	60
Freon 113	76-13-1	ND	60
Methylene chloride	75-09-2	ND	200
1,1,2,2-Tetrachloroethane	79-34-5	ND	50
Tetrachloroethene	127-18-4	ND	50
1,1,1-Trichloroethane	71-55-6	ND	50
1,1,2-Trichloroethane	79-00 <b>-</b> 5	ND	60
Trichloroethene	79-01-6	ND	30
Trichlorofluoromethane	75-69-4	ND	40

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Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00.000

Clayton Project No. 99020.84

ample Identification: MW-2 15:15

Lab Number:

9902084-08A

Sample Matrix/Media: reparation Method:

WATER EPA 5030

lethod Reference:

EPA 8010

Date Sampled:

02/08/99 Date Received: 02/08/99

Date Prepared: Date Analyzed:

02/19/99 02/19/99

Analyst:

MSF

			Limit of
Analyte	CAS #	Concentration (ug/L)	Detection (ug/L)

<u>Purgeable Halocarbons (Continued)</u>

Vinyl chloride

75-01-4

ND

50

<u>urroqates</u>

Recovery (%)

QC Limits (%)

1-Chloro-2-methylpropene

513-37-1

109

70 - 130



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#### Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00.000 Clayton Project No. 99020.84

ample Identification: MW-3 12:34 Lab Number:

9902084-09A

<u>Sample Matrix/Media:</u> reparation Method:

WATER EPA 5030 8010 Date Sampled: Date Received:

Date Prepared:

02/08/99 02/08/99 02/19/99

Date Analyzed: Analyst:

02/19/99 MSF

_	_		
lethod	Reference:	EPA	8

		Limit
		of
	Concentration	Detecti
CAS #	(ug/L)	(uq/L)

Purqeable Halocarbons	
Furgeable halocarbons	
Bromodichloromethane 75-27-	40
Bromoform 75-25-	40 ·
Bromomethane 74-83-	40
Carbon tetrachloride 56-23-	30
Chlorobenzene 108-90-	40
Chloroethane 75-00-	30
Chloroform 67-66-	30
Chloromethane 74-87-	30
Dibromochloromethane 124-48-	30
1,2-Dibromoethane 106-93-	30
1,2-Dichlorobenzene 95-50-	30
1,3-Dichlorobenzene 541-73-	30
1,4-Dichlorobenzene 106-46-	30
Dichlorodifluoromethane 75-71-	50
1,1-Dichloroethane 75-34-	20
1,2-Dichloroethane 107-06-	20
1,1-Dichloroethene 75-35-	10
cis-1,2-Dichloroethene 156-59-	20
trans-1,2-Dichloroethene 156-60-	20
1,2-Dichloropropane 78-87-	30
cis-1,3-Dichloropropene 10061-01-	30
trans-1,3-Dichloropropene 10061-02-	30
Freon 113 76-13- Methylene chloride 75-09-:	30 100
	30
1,1,2,2-Tetrachloroethane 79-34- Tetrachloroethene 127-18-	30
1,1,1-Trichloroethane 71-55-	30
1,1,1-Trichloroethane 71-55- 1,1,2-Trichloroethane 79-00-	30
Trichloroethene 79-01-	20
Trichlorofluoromethane 75-69-	20

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Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00.000 Clayton Project No. 99020.84

Sample Identification: MW-3 12:34

Lab Number:

9902084-09A

Sample Matrix/Media: Preparation Method:

WATER

Method Reference:

EPA 5030

EPA 8010

Date Sampled:

02/08/99 Date Received: 02/08/99

Date Prepared:

02/19/99

Date Analyzed:

02/19/99 MSF

Analyst:

Limit of Detection Concentration Analyte CAS # (ug/L) (ug/L)

Purgeable Halocarbons (Continued)

Vinyl chloride

75-01-4

ND

30

<u>Surrogates</u> Recovery (%) OC Limits (%)

1-Chloro-2-methylpropene

513-37-1

110

70 - 130



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#### Analytical Results for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00.000 Clayton Project No. 99020.84

ample Identification: MW-4 12:58

Lab Number:

9902084-10A

≦ample Matrix/Media: reparation Method:

WATER

Method Reference:

EPA 5030

EPA 8010

Date Sampled:

Date Received:

02/08/99 02/08/99

Date Prepared: Date Analyzed:

02/19/99 02/19/99

Analyst:

MSF

	Add the addition of the second of	Concentration	Limit of Detection
inalyte	CAS #	(ug/L)	(ug/L)
Purgeable Halocarbons	-		
Bromodichloromethane	75-27-4	ND	40
Bromoform	75-27-4 75-25-2	ND	40
■ Bromomethane	73-23-2 74-83 <b>-</b> 9	ND ND	40
Carbon tetrachloride	56-23-5	ND	30
Chlorobenzene	108-90-7	ND ND	40
■ Chloroethane	75-00-3	ND ND	30
Chloroform	67-66-3	ND	30
Chloromethane	74-87-3	ND	30
Dibromochloromethane	124-48-1	ND	30
1,2-Dibromoethane	106-93-4	ND	30
1,2-Dichlorobenzene	95-50-1	ND	30
1,3-Dichlorobenzene	541-73-1	ND	30
■ 1,4-Dichlorobenzene	106-46-7	ND	30
Dichlorodifluoromethane	75-71 <b>-</b> 8	ND	50
1,1-Dichloroethane	75-34-3	ND	20
_ 1,2-Dichloroethane	107-06-2	ND	20
1,1-Dichloroethene	75-35 <b>-</b> 4	ND	10
cis-1,2-Dichloroethene	156-59-2	ND	20
trans-1,2-Dichloroethene	156-60-5	ND	20
1,2-Dichloropropane	78-87-5	ND	30
cis-1,3-Dichloropropene	10061-01-5	ND	30
trans-1,3-Dichloropropene	10061-02-6	ND	30
Freon 113	76-13-1	ND	30
Methylene chloride	75-09-2	ND	100
1,1,2,2-Tetrachloroethane	79-34-5	ND	30
_ Tetrachloroethene	127-18-4	ND	30
1,1,1-Trichloroethane	71-55-6	ND	30
<pre>1,1,2-Trichloroethane</pre>	79-00-5	ND	30
Trichloroethene	79-01-6	ND	20
Trichlorofluoromethane	75-69-4	ND	20

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#### Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00.000 Clayton Project No. 99020.84

ample Identification: MW-4 12:58

02/08/99

Lab Number:

9902084-10A

Sample Matrix/Media:

WATER

02/08/99 02/19/99

reparation Method:

EPA 5030

Date Prepared: Date Analyzed:

Date Sampled:

Date Received:

02/19/99

ethod Reference:

EPA 8010

Analyst:

MSF

			Limit
		Concentration	of Detection
nalyte	CAS #	(ug/L)	(ug/L)

<u>Purgeable Halocarbons (Continued)</u>

Vinyl chloride

75-01-4

ND

30

<u>urrogates</u>

Recovery (%)

OC Limits (%)

1-Chloro-2-methylpropene

513-37-1

108

70 - 130



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#### Analytical Results for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00.000 Clayton Project No. 99020.84

ample Identification: METHOD BLANK

Lab Number:

9902084-11A

Sample Matrix/Media: WATER

EPA 5030

reparation Method: method Reference:

EPA 8010

Date Sampled:

Date Received:

Date Prepared: Date Analyzed:

02/19/99 02/19/99

Analyst:

MSF

			Limit of
nalyte	CAS #	Concentration (ug/L)	Detection (ug/L)
Purqeable Halocarbons	-		
Bromodichloromethane	75-27-4	ND	0.7
Bromoform	75-25-2	ND	0.7
Bromomethane	74-83-9	ND	0.7
Carbon tetrachloride	56-23-5	ND	0.6
Chlorobenzene	108-90-7	ND	0.7
Chloroethane	75-00-3	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.6
Dibromochloromethane	124-48-1	ND	0.6
1,2-Dibromoethane	106 <b>-</b> 93-4	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	1
1,1-Dichloroethane	75-34-3	ND	0.4
1,2-Dichloroethane	107-06-2	ND	0.3
1,1-Dichloroethene	75-35-4	ND	0.2
cis-1,2-Dichloroethene	156-59-2	ND	0.4
trans-1,2-Dichloroethene	156-60-5	ND	0.4
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.6
Freon 113	76-13-1	ND	0.6
Methylene chloride	75-09-2	ND	2
1,1,2,2-Tetrachloroethane	79 <b>-</b> 34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.6
Trichloroethene	79-01-6	ND	0.3
Trichlorofluoromethane	75-69-4	ND	0.4



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#### Analytical Results for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00.000 Clayton Project No. 99020.84

ample Identification: MW-5 14:55 Lab Number:

9902084-02A

➡ample Matrix/Media: WATER reparation Method: Method Reference:

EPA 5030 EPA 8010

Date Sampled: Date Received: Date Prepared:

02/08/99. 02/08/99 02/19/99 02/19/99

Date Analyzed: MSF Analyst:

		<del>-</del>	
Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
Purgeable Halocarbons			
Bromodichloromethane	75-27-4	ND	7
Bromoform	75-25-2	ND	7
Bromomethane	74-83-9	ND	7
Carbon tetrachloride	56-23-5	ND	6
Chlorobenzene	108-90-7	ND	7
Chloroethane	75-00-3	ND	5 5
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	6
_ Dibromochloromethane	124-48-1	ND	6
1,2-Dibromoethane	106-93-4	ND	5
1,2-Dichlorobenzene	95-50-1	ND	5 5
1,3-Dichlorobenzene	541-73-1	ND	5
1,4-Dichlorobenzene	106-46-7	ND	5
Dichlorodifluoromethane	75-71-8	ND	10
1,1-Dichloroethane	75-34-3	NE	4
1,2-Dichloroethane	107-06-2	(32)	3
1,1-Dichloroethene	75-35-4	ND	2
cis-1,2-Dichloroethene	156-59-2	ND	4
trans-1,2-Dichloroethene	156-60-5	ND	4
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5 6
trans-1,3-Dichloropropene	10061-02-6	ND	6
Freon 113 Methylene chloride	76-13-1	ND	
	75-09-2	ND	20
1,1,2,2-Tetrachloroethane	79-34-5	ND	5 5
Tetrachloroethene	127-18-4	ND	5 5
1,1,1-Trichloroethane	71-55-6	ND	5 6
1,1,2-Trichloroethane Trichloroethene	79-00-5	ND	3
Trichlorofluoromethane	79-01-6 75-69-4	ND ND	4

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Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00.000 Clayton Project No. 99020.84

ample Identification: MW-5 14:55

Lab Number:

9902084-02A

Sample Matrix/Media: reparation Method:

WATER

Method Reference:

EPA 5030

EPA 8010

Date Sampled:

02/08/99 Date Received: 02/08/99

Date Prepared: Date Analyzed:

02/19/99 02/19/99

MSF

Analyst:

			Limit
			of
		Concentration	Detection
<b>d</b> nalyte	CAS #	(ug/L)	(ug/L)

Purgeable Halocarbons (Continued)

Vinyl chloride

75-01-4

ND

5

urrogates

Recovery (%)

QC Limits (%)

1-Chloro-2-methylpropene

513-37-1

124

70 - 130

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Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00.000 Clayton Project No. 99020.84

ample Identification: METHOD BLANK

Lab Number:

9902084-11A

Sample Matrix/Media: reparation Method:

EPA 5030

Method Reference:

WATER

EPA 8010

Date Sampled:

Date Received:

Date Prepared: Date Analyzed: 02/19/99 02/19/99

Analyst:

MSF

Purgeable Halocarbons (Continued)

Vinyl chloride

75-01-4

CAS #

ND

Concentration

(ug/L)

0.5

Limit οf

Detection

(ug/L)

<u>urroqates</u>

malyte

Recovery (%)

QC Limits (%)

1-Chloro-2-methylpropene

513-37-1

124

70 - 130

Not detected at or above limit of detection

Information not available or not applicable



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#### Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00.000 Clayton Project No. 99020.84

Lab Number:

Sample Identification: B-7 15:05

Sample Matrix/Media: reparation Method:

WATER EPA 5030

Method Reference:

9902084-04A

EPA 8015/8020

Date Sampled:

02/08/99 Date Received: 02/08/99 Date Prepared:

Date Analyzed:

02/17/99 02/17/99

Analyst:

**ASC** 

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
BTEX/Gasoline	-		
Dengene	71 42 2	E800	4.0

Benzene	/1-43-2	5900	40
Ethylbenzene	100-41-4	2700	3.0
Toluene	108-88-3	4100	30
o-Xylene	95-47-6	3300	40
p,m-Xylenes		6300	40
Gasoline	<u></u>	63000	5000
'			

<u>surrogates</u>		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	93	50 - 150

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



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#### Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00.000 Clayton Project No. 99020.84

ample Identification: B-8 14:45

Lab Number: Sample Matrix/Media:

9902084-05A

reparation Method:

WATER EPA 5030

lethod Reference: EPA 8015/8020 Date Sampled:

02/08/99 Date Received: 02/08/99 Date Prepared: 02/17/99 Date Analyzed: 02/17/99

ASC Analyst:

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
BTEX/Gasoline	-		
Benzene Ethylbenzene Toluene o-Xylene p,m-Xylenes Gasoline	71-43-2 100-41-4 108-88-3 95-47-6	5.4 2.6 3.2 1.7 2.9	0.4 0.3 0.3 0.4 0.4
<u>surrogates</u>		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	103	50 - 150



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#### Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00.000

Clayton Project No. 99020.84

ample Identification: MW-1 15:30

9902084-07A

Lab Number: Sample Matrix/Media:

WATER

reparation Method: Method Reference:

EPA 5030

EPA 8015/8020

Date Sampled: Date Received:

02/08/99 02/08/99 02/17/99

Date Prepared: Date Analyzed:

02/18/99

Analyst:

ASC

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
BTEX/Gasoline	•		
Benzene	71-43-2	3900	. 20
Ethylbenzene	100-41-4	970	20
Toluene	108-88-3	6300	20
o-Xylene	95-47-6	1500	20
p,m-Xylenes	<del></del>	2800	20
Gasoline	<del>-</del> -	48000	3000
<u>surrogates</u>		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	86	50 - 150

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



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#### Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00.000

Clayton Project No. 99020.84

ample Identification: MW-2 15:15

Lab Number: Sample Matrix/Media:

9902084-08A WATER

reparation Method:

EPA 5030

Method Reference:

EPA 8015/8020

Date Sampled: Date Received:

02/08/99 02/08/99 02/17/99

Date Prepared: Date Analyzed:

02/18/99

ASC Analyst:

		-	
Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
BTEX/Gasoline	-		
Benzene	71-43-2	11000	20
Ethylbenzene	100-41-4	650	20
■ Toluene	108-88-3	4900	20
o-Xylene	95-47-6	520	20
p,m-Xylenes		1200	20
Gasoline		41000	3000
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	92	50 - 150

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



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#### Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00.000 Clayton Project No. 99020.84

ample Identification: MW-3 12:34 Lab Number:

9902084-09A

Sample Matrix/Media: reparation Method: Method Reference:

WATER EPA 5030

EPA 8015/8020

Date Sampled: Date Received:

02/08/99 02/08/99 Date Prepared: 02/17/99

Date Analyzed: Analyst:

02/18/99 ASC

	(ug/L)	(ug/L)
71-43-2	1200	20
100-41-4	1400	20
108-88-3	3400	20
95-47-6	1300	20
	3600	20
	35000	3000
	Recovery (%)	QC Limits (%)
98-08-8	96	50 - 150
	100-41-4 108-88-3 95-47-6 	100-41-4 108-88-3 95-47-6  3600  35000 Recovery (%)

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



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#### Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00.000

Clayton Project No. 99020.84

Sample Identification: MW-4 12:58

Lab Number:

9902084-10A

Sample Matrix/Media:

WATER

Preparation Method:

EPA 5030

Method Reference:

EPA 8015/8020

Date Sampled: Date Received:

02/08/99 02/08/99 02/17/99 Date Prepared:

Date Analyzed:

02/18/99

Analyst:

ASC

CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
÷		
71-43-2	670	20
100-41-4	780	20
108-88-3	90	20
95-47-6	80	20
	860	20
	15000	3000
	Recovery (%)	QC Limits (%)
98-08-8	107	50 - 150
	71-43-2 100-41-4 108-88-3 95-47-6	T1-43-2 670 100-41-4 780 108-88-3 90 95-47-6 80 860 15000  Recovery (%)

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



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#### Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00.000 Clayton Project No. 99020.84

ample Identification: MW-5 14:55

Lab Number:

9902084-02A

Sample Matrix/Media: reparation Method:

WATER

lethod Reference:

EPA 5030

EPA 8015/8020

Date Sampled: Date Received:

02/08/99 02/08/99 02/17/99 Date Prepared:

Date Analyzed:

02/17/99

ASC Analyst:

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
BTEX/Gasoline	-		
Benzene Ethylbenzene Toluene o-Xylene p,m-Xylenes Gasoline	71-43-2 100-41-4 108-88-3 95-47-6	780 230 440 140 230 4900	4 3 3 4 4 500
<u>Surrogates</u>		Recovery (%)	OC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	92	50 - 150

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

Page 25 of 25

#### Analytical Results

for

Clayton Environmental Consultants, Inc. Client Reference: 70-97066.00.000 Clayton Project No. 99020.84

ample Identification: METHOD BLANK

Lab Number:

9902084-11A

Sample Matrix/Media: WATER

reparation Method: EPA 5030 lethod Reference:

EPA 8015/8020

Date Sampled:

Date Received:

Date Prepared: 02/17/99

Date Analyzed: 02/17/99

Analyst:

ASC

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
BTEX/Gasoline	-		
Benzene Ethylbenzene Toluene	71-43-2 100-41-4 108-88-3	ND ND ND	0.4 0.3 0.3
o-Xylene p,m-Xylenes Gasoline	95-47-6  	ND ND ND	0.4 0.4 50
<u>surroqates</u>		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	91	50 - 150

Clayton
LABORATORY

## REQUEST FOR LABORATORY ANALYTICAL SERVICES

IMPORTANT			
ate Results Requested: 10 V/			
lush Charges Authorized?			X No

Phone or Fax Results

	Page	- 01	1
For Cla	yton Use	Only	
Clayton i	Lab Proje	ect No.	

9902084

	36	YUSDOE FAC	TORY TORY
Name Company Mailing Address City, State, Zip Telephone No. Special Instructions and/or specific regulatory re(method, limit of detection, etc.)	E) Client Jot	No. 70-9706	6,00, Braffage Order No.
Company V	Dept.		
Mailing Address			Name Company Address City State Zip
City, State, Zip	1		Address
Telephone No.	FAX No.		ONT, ONCE, ED
Special Instructions and/or specific regulatory re (method, limit of detection, etc.)	equirements:	Samples are: (check if applicable)	ANALYSIS REQUESTED (Enter an 'X' in the box below to 'yill cate request. Enter a 'P' if Preservative added.')
* Explanation of Preservative		☐ Drinking Water☐ Groundwater☐ Wastewater	ber of Contain
CLIENT SAMPLE IDENTIFICATION	DATE TIME SAMPLED SAMPLE	MATRIX/ AIR VOLUME D MEDIA (specify units	
B-6	4899 1209		2 X -01
B-6	1459		3 'X X -12
B-7	1202	2	3 X -63
B-7	505	-	3 XX -04
6-8	1445		2 X X -05
MW-/	1220		2 × -06
MW-/	1530		3 X X   -67
MW-2	1 1515		3 × × - 08
MW-3	1/1234	t \/	3 X X X
MW-4	125	31//	3 X X M - 10
Collected by: MARC W	WHAPEY.	(print	Collector's Signature:  Collector's Signature:  Collector's Signature:  Collector's Signature:  Collector's Signature:
CHAIN OF CUSTODY Relinquished by:	Mulleur	Date/Time	Received by:  Date/Time
Method of Shipment:	<del>                                     </del>	1	Received at Lab by:   Date/Time 26/99 @
Authorized by: Date		te	Sample Condition Upon Receipt: Acceptable Other (explain)  4.7°C average was temp. — 054
Commence of the Clarker Commence of the Clarker Commence of the State			

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

Detroit Regional Lab 22345 Roathel Drive Novi, MI 48375 (800) 806-5887 (248) 344-1770 FAX (248) 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 (925) 426-2657 FAX (925) 426-0106 Seattle Regional Lab 4636 E. Marginal Way S., Suite 215 Seattle, WA 98134 (800) 568-7755 (206) 763-7364 FAX (206) 763-4189 DISTRIBUTION:

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Pink = Client Copy