6920 Koll Center Parkway
Suite 216
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925.426.2600
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Clayton GROUP SERVICES

April 18, 2001

Mr. Barney Chan
Hazardous Materials Specialists
Alameda County Health Care Services
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Clayton Project No.70-97066.00

Subject: First Quarter 2001 Groundwater Monitoring Report for the former Lemoine Sausage Facility at 630 29th Avenue in Oakland, California

Dear Mr. Chan:

Clayton has prepared the First Quarter 2001 Groundwater Monitoring Report for the former Lemoine Sausage Facility at 630 29th Avenue in Oakland, California.

If you have any comments or questions regarding the First Quarter 2001 Groundwater Monitoring Report please contact me at (925) 426-2665. Jon and I look forward to our meeting on Tuesday, April 24 at 10:30 a.m. to further discuss future characterization efforts for the site.

Sincerely,

Warren B. Chamberlain, R.G., C.HG., P.E.
Project Manager
Environmental Services

Jon A. Rosso, P.E.
Director

WBC/wbc
cc: Donna Proffitt
Marlin Zechman
Rita Repko

Clayton GROUP SERVICES

First Quarter 2001 Groundwater Monitoring Report
for the
Former Lemoine Sausage Facility
630 29th Avenue
Oakland, California

Clayton Project No. 70-97066.00

April 18, 2001

CONTENTS

1. INTRODUCTION

Clayton Group Services, Inc., (Clayton) has conducted a groundwater monitoring of eight monitoring wells located at the former Lemoine Sausage Facility at 630 29th Avenue in Oakland, California (Figure 1). The groundwater monitoring is performed pursuant a request from the Alameda County Health Care Services (ACHCS) in the letter dated June 21, 1999. The purpose of groundwater monitoring is to observe the level of Total Petroleum Hydrocarbons of Gasoline (TPHG) and Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) concentrations in the groundwater in the vicinity of the former underground storage tank (UST). According to the ACHCS, groundwater monitoring will be conducted on a quarterly basis.

This First Quarter 2001 Groundwater Monitoring Report documents field activities, and presents data used to determine the groundwater elevation and gradient at the site, and laboratory analytical results for groundwater samples collected from monitoring wells.

2. SITE DESCRIPTION AND HISTORY

A single 1,000-gallon gasoline underground storage tank (UST) and associated plumbing/piping were formerly located beneath the sidewalk of 7th Street and adjacent (east) of the subject property building (Figure 2). The associated fuel dispenser was located in a "cubby hole" near the building's roll-up door. The UST and associated piping were removed on November 21, 1996 and confirmation soil samples were collected. A petroleum hydrocarbon sheen was noted on top of groundwater and petroleum hydrocarbons were detected in the confirmation soil samples collected at the time of the UST removal.

3. GROUNDWATER MONITORING FIELD ACTIVITIES

The following discussion describes field methods used to obtain depth to water measurements, and collect groundwater samples. Field activities were performed on March 21, and 22, 2001. Groundwater samples were collected from 8 monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, and MW-8).

3.1. GROUNDWATER LEVEL MEASUREMENTS

The depth to water in each monitoring well was measured on March 21, 2001. Clayton measured from the surveyed notch located on the top of each well casing (TOC) to the groundwater interface in each well, with an electronic water level indicator. Subtracting the measured depth to water from the TOC elevation, the groundwater elevation at each well location was determined. In addition, the difference between the groundwater elevation and the bottom of the well casing elevation was used to determine the water column in each well. The (purge) volume of water within each well casing was determined by multiplying the water column height by the well casing cross-sectional area. Field measurements of the depth to water and the determination of the well casing purge volume for each well were recorded on the field data sampling sheets included as Appendix A to this report.

3.2. MONITORING WELL PURGING

Five monitoring wells (MW-1 through MW-5) are constructed with ¾-inch diameter PVC well casings and three monitoring wells (MW-6 through MW-8) are constructed with 2-inch diameter PVC well casings. Approximately four well casing volumes of water were removed from each monitoring well prior to sampling. The five wells with ¾-inch well casings were purged with a peristaltic pump and ¼-inch polytubing, and the three wells with 2 inch well casings were purged by hand bailing with a 1-liter Teflon bailer. Water quality parameters (pH, specific conductivity, oxidation- reduction potential, dissolved oxygen and temperature) were measured and recorded onto field sampling data sheets prior to purging and after removing each well casing volume of water.

Field logs documenting water level measurements and well purging for the First Quarter, 2001 sampling event are presented in Appendix A. Groundwater purged from monitoring wells during sampling was stored onsite in a USDOT approved 55-gallon drum.

3.3. MONITORING WELL SAMPLING

Prior to collecting a groundwater sample from each monitoring well, the well was allowed to recharge until at least 80-percent of the original well casing volume of water was present. Groundwater samples for laboratory analyses were retrieved using either a peristaltic pump with polytubing or with disposable bailers and transferred into appropriately sized and preserved laboratory supplied sample containers. Sample containers were sealed, labeled with identifying information, logged onto the chain-of-custody, and temporarily stored in a chilled ice-chest while awaiting transportation to the laboratory.

3.4. SAMPLE ANALYSES

Groundwater samples were submitted for laboratory analyses to the State of California certified Curtis & Tompkins, Ltd., in Berkeley, California. The samples were analyzed by the following United States Environmental Protection Agency (USEPA) approved analytical methods:

- USEPA Method 8015 Modified for Total Petroleum Hydrocarbons as Gasoline (TPHG)
- USEPA Method 8020 for Aromatic Hydrocarbons (BTEX)
- USEPA Method 8010 for Halogenated Organic Compounds (VOCs)

Certified analytical data sheets and chain-of-custody documentation from the March 21, 2001 groundwater-sampling event are presented in Appendix B.

4. FINDINGS

The following discussion presents an interpretation of groundwater flow conditions and water quality at the site based on the results obtained from field measurements and laboratory analyses.

4.1. GROUNDWATER FLOW CONDITIONS

The site's potentiometric surface map was produced by contouring the groundwater elevation for each monitoring point with respect to each monitoring points surveyed co-ordinate location. The direction of groundwater flow is inferred to be perpendicular to equipotential contours. From the groundwater elevations determined for monitoring wells MW-1 and MW-7, a hydraulic gradient of 0.0194 feet per foot (ft/ft) exists towards the north-northeast.

Historical depth to water measurement and groundwater elevation data are presented on Table 1. The potentiometric contour map as determined from the March 21, 2001 depth to water measurements with the groundwater flow direction indicated are presented on Figure 3.

4.2. PETROLEUM AND AROMATIC HYDROCARBONS

The frequency and range of petroleum hydrocarbons detected in groundwater samples are as follows:

- TPHG was detected in all 8 samples tested, and ranged in concentrations from 160 micrograms per liter (µg/L) to 34,000 µg/L.
- Benzene was detected in 7 of 8 samples tested, and ranged in concentration from 98 µg/L to 10,000 µg/L.
- Toluene was detected in 5 of 8 samples tested, and ranged in concentration from 13 µg/L to 3,200 µg/L.
- Ethylbenzene was detected in 7 of 8 samples tested, and ranged in concentration from 1.4 µg/L to 410 µg/L.
- Xylenes were detected in 6 of 8 samples tested, and ranged in concentration from 0.52 µg/L to 2,600 µg/L.

4.3. PURGEABLE HALOCARBONS

The following VOCs were detected at the following frequency and concentration ranges:

- 1,2-Dichloroethane (DCA) was detected in 3 of 8 samples tested, and ranged in concentration from 2.3 µg/L to 14 µg/L.
- Trichloroethene (TCE) was detected in 1 of 8 samples tested, at 32 µg/L.
- Cis 1,2'-Dichloroethene (DCE) was detected in 2 of 8 samples tested and ranged in concentration from 1.6 µg/L to 760 µg/L.
- Trans 1,2'-DCE was detected in 1 of 8 samples tested, at 39 µg/L.
- Vinyl Chloride (VC) was detected in 1 of 8 samples tested, at 58 µg/L.

5. CONCLUSIONS AND RECOMMENDATIONS

The groundwater gradient determined for the First Quarter 2001 groundwater monitoring event was found to be 0.0194 ft/ft to the north-northeast and is consistent with past

determinations. The distribution of petroleum hydrocarbons in groundwater is consistent with previous determinations, with the exception of results from monitoring well MW-3. & MW-5.

The distribution of VOCs is consistent with past results, with trace levels of the fuel additive 1,2-DCA detected in 3 wells, and TCE, DCE and VC were only detected in monitoring well MW-8. The source of TCE, DCE and VC has not been determined, but an off-site source is suspected.

This report prepared by:

Mike Krzeminski
Staff Environmental Consultant

This report reviewed by:

Warren B. Chamberlain, R.G., C.HG., P.E.
Project Manager
Environmental Services

This report reviewed by:

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

Table 1

Summary of Groundwater Elevation Data
Former Lemoine Sausage Facility
630 29th Avenue
Oakland, California

Well Identification	Date Measured	Top of Casing Elevation (ft,msl)	Depth to Water (feet)	Groundwater Elevation (ft,msl)
MW-1	3/21/01	16.69	4.29	12.40
	12/19/00		5.50	11.19
	9/22/00		6.30	10.39
	6/15/00		4.82	11.87
	2/8/99		3.60	13.09
MW-2	3/21/01	20.79	10.01	10.78
	12/19/00		11.38	9.41
	9/22/00		11.49	9.30
	6/15/00		10.46	10.33
	2/8/99		14.20	6.59
MW-3	3/21/01	21.10	< 8.95 >	12.15
	12/19/00		9.72	11.38
	9/22/00		15.30	5.80
	6/15/00		10.56	10.54
	2/8/99		7.45	13.65
MW-4	3/21/01	17.78	5.77	12.01
	12/19/00		6.40	11.38
	9/22/00		6.90	10.88
	6/15/00		6.30	11.48
	2/8/99		4.13	13.65
MW-5	3/21/01	21.12	< 8.68 >	12.44
	12/19/00		9.99	11.13
	9/22/00		9.99	11.13
	6/15/00		10.36	10.76
	2/8/99		7.62	13.50
MW-6	3/21/01	16.60	4.7	11.90
	12/19/00		5.93	10.67
	9/22/00		6.54	10.06
	6/15/00		5.47	11.13
MW-7	3/21/01	15.47	5.53	9.94
	12/19/00		7.20	8.27
	9/22/00		7.51	7.96
	6/15/00		6.40	9.07

Table 1

Summary of Groundwater Elevation Data
Former Lemoine Sausage Facility
630 29th Avenue
Oakland, California

Well Identification	Date Measured	Top of Casing Elevation (ft,msl)	Depth to Water (feet)	Groundwater Elevation (ft,msl)
MW-8	3/21/01	17.58	6.4	11.18
	12/19/00		7.71	9.87
	9/22/00		8.33	9.25
	6/15/00		7.14	10.44

Notes:
1. All top of casing elevations referenced to mean sea level (msl) and measured with reference to the
2. NM = Not Measured.

Table 2

Summary of Monitoring Well Groundwater Analytical Data
Former Lemoine Sausage Facility
630 29th Avenue
Oakland, California

Sample Location	Date Sampled	TPHG	MTBE	Benzene	Ethyl benzene	Toluene	Total Xylenes	1,2-DCA	TCE	cis-1,2 DCE	trans-1,2-DCE	VC
MW-1	3/21/00	21,000	NA	3,200	290	1,700	2,600	<2.5	<2.5	<2.5	<2.5	<2.5
	12/19/00	25,000	NA	3,200	480	1,900	3,300	<2.5	<2.5	<2.5	<2.5	<2.5
	9/22/00	25,000	<500	3,100	470	1,800	3,600	NA	NA	NA	NA	NA
	6/15/00	29,000	NA	3,900	1,900	<100	4,200	<5.0	<5.0	<5.0	<5.0	<5.0
	2/8/99	48,000	NA	3,900	970	6,300	4,300	<30	NA	NA	NA	NA
MW-2	3/23/01	34,000	NA	10,000	410	3,200	1,220	14	<13	<13	<13	<13
	12/19/00	43,000	NA	9,800	810	4,000	2,430	21	<13	<13	<13	<13
	9/22/00	24,000	<500	10,000	370	2,700	1,200	NA	NA	NA	NA	NA
	6/29/00	31,000	NA	11,000	4,400	930	250	25	<5.0	<5.0	<5.0	<5.0
	2/8/99	41,000	NA	11,000	650	4,900	1,720	60	NA	NA	NA	NA
MW-3	3/22/01	1,300	NA	98	51	67	104	2.3	<0.5	<0.5	<0.5	<0.5
	12/19/00	50,000	NA	1,200	510	1,600	1,810	350	<8.3	<8.3	<8.3	<8.3
	9/22/00	83,000	<1,000	16,000	1,300	20,000	7,000	NA	NA	NA	NA	NA
	6/29/00	39,000	NA	7,800	8,000	630	3,400	600	<5.0	<5.0	<5.0	<5.0
	2/8/99	35,000	NA	1,200	1,400	3,400	4,900	<30	NA	NA	NA	NA
MW-4	3/22/01	5,600	NA	1,100	310	13	303	<0.5	<0.5	1.6	<0.5	<0.5
	12/19/00	2,200	NA	200	100	2.9	81.4	<0.5	<0.5	<0.5	<0.5	<0.5
	9/22/00	12,000	<500	2,800	1,100	82	1,300	NA	NA	NA	NA	NA
	6/15/00	2,300	NA	230	10	<5	94	0.88	<0.5	2.1	<0.5	<0.5
	2/8/99	15,000	NA	670	780	90	940	<30	NA	NA	NA	NA
MW-5	3/22/01	6,200	NA	1,500	310	360	288	3.3	<0.5	<0.5	<0.5	<0.5
	12/19/00	21,000	NA	3,200	1,100	1,100	1,300	15	<4.2	<4.2	<4.2	<4.2
	9/27/00	16,000	<500	4,300	420	3,100	1,600	NA	NA	NA	NA	NA
	6/29/00	3,900	NA	1,500	330	28	260	36	<0.5	<0.5	<0.5	<0.5
	2/8/99	4,900	NA	780	230	440	370	<0.5	<0.5	<0.5	<0.5	<0.5

Table 2

Summary of Monitoring Well Groundwater Analytical Data
Former Lemoine Sausage Facility
630 29th Avenue
Oakland, California

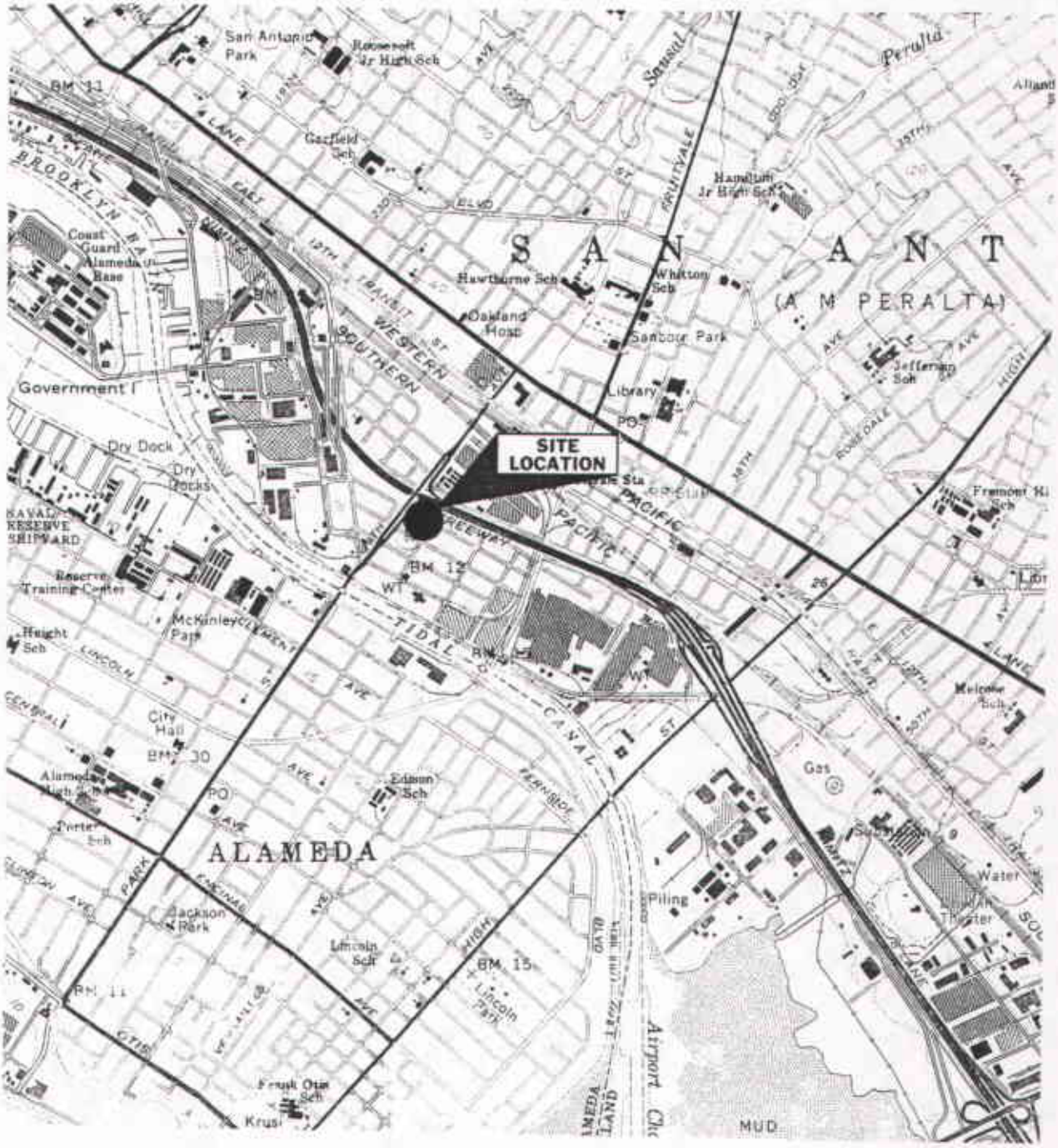
Sample Location	Date Sampled	TPHG	MTBE	Benzene	Ethyl benzene	Toluene	Total Xylenes	1,2-DCA	TCE	cis-1,2 DCE	trans-1,2-DCE	VC
MW-6	3/21/01	820	NA	<0.5	1.4	<0.5	0.52	<0.5*[2]	<0.5	<0.5	<0.5	<0.5
	12/19/00	320	NA	<0.5	<0.5	<0.5	<0.5	<0.5*[1]	<0.5	<0.5	<0.5	<0.5
	9/22/00	71	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
	6/15/00	1,100	NA	3.8	2.1	2.2	4.8	0.78	<0.5	<0.5	<0.5	<0.5
MW-7	3/21/01	160	NA	59	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	12/19/00	<50	NA	1.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	9/22/00	<50	<5	2	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
	6/15/00	1,000	NA	250	<10	<10	16	<0.5	<0.5	<0.5	<0.5	<0.5
MW-8	3/21/01	3,500	NA	530	21	<2.5	<2.5	<3.6	32	760	39	58
	12/19/00	2,700	NA	410	4.8	<2.5	<2.5	9.1	130	1,000	67	48
	9/22/00	1,800	<25	340	<2.5	<2.5	<2.5	NA	NA	NA	NA	NA
	6/15/00	5,400	NA	150	8.9	<5	8.7	<13	210	1,100	73	25

Notes:

1. All results in micrograms per liter (µg/L).
2. NA = Not Analyzed.
3. 1,2-DCA = 1,2-dichloroethane.
4. TPHG = Total Petroleum Hydrocarbons as Gasoline.
5. MTBE = methyl tert-butyl ether.
6. TCE = Trichlororethene.
7. DCE = Dichlororethene.
8. VC= Vinyl Chloride.

*[1] 1,1-DCA detected at 1.1 µg/L.

*[2] 1,1-DCA detected at 0.9 µg/L.



Source: U.S.G.S. OAKLAND EAST, CALIF., 7.5 Minute Quadrangle, 1959, (photorevised 1980).

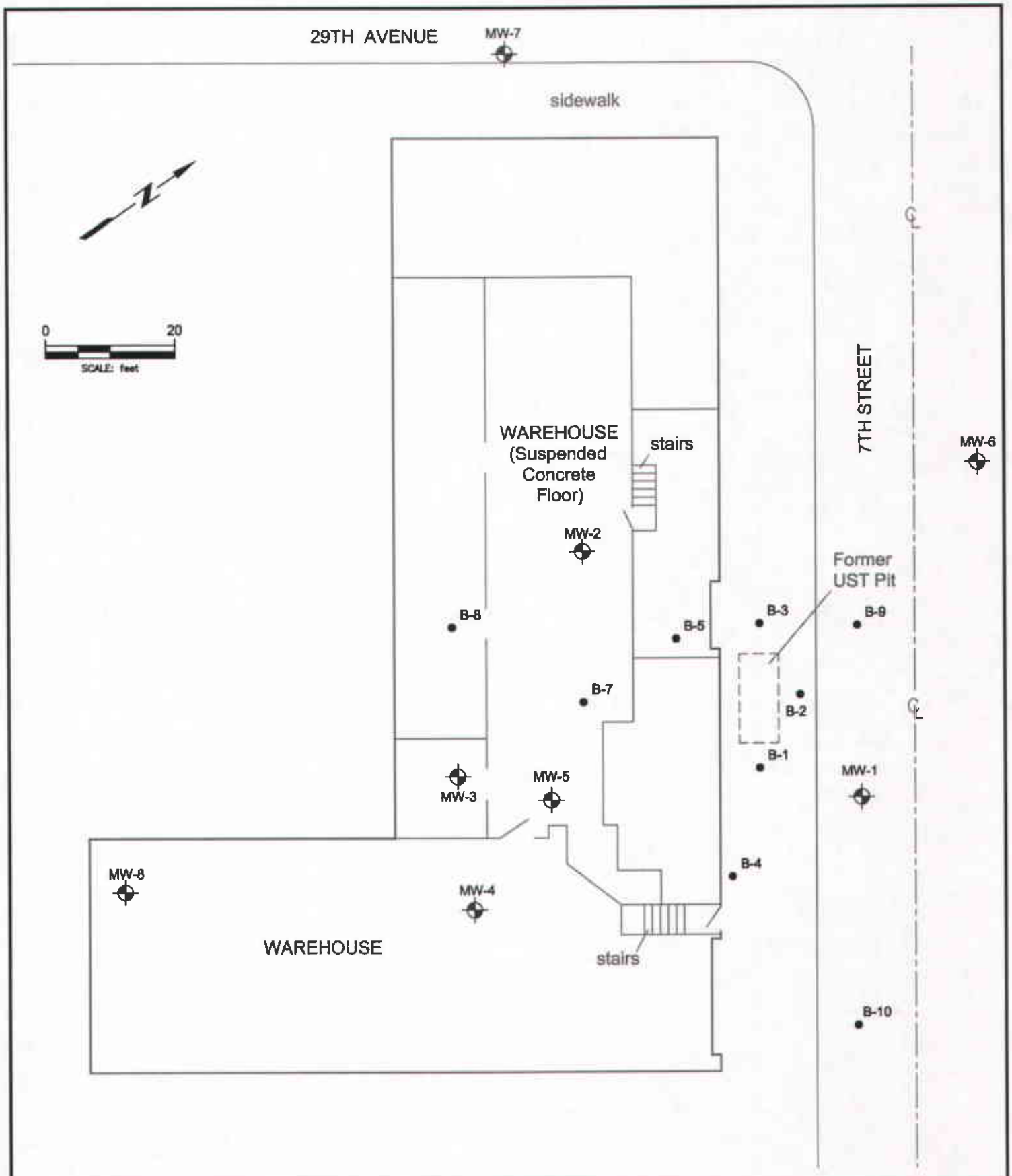
SITE LOCATION

FORMER LEMOINE SAUSAGE FACTORY
630 29th AVENUE
OAKLAND, CALIFORNIA

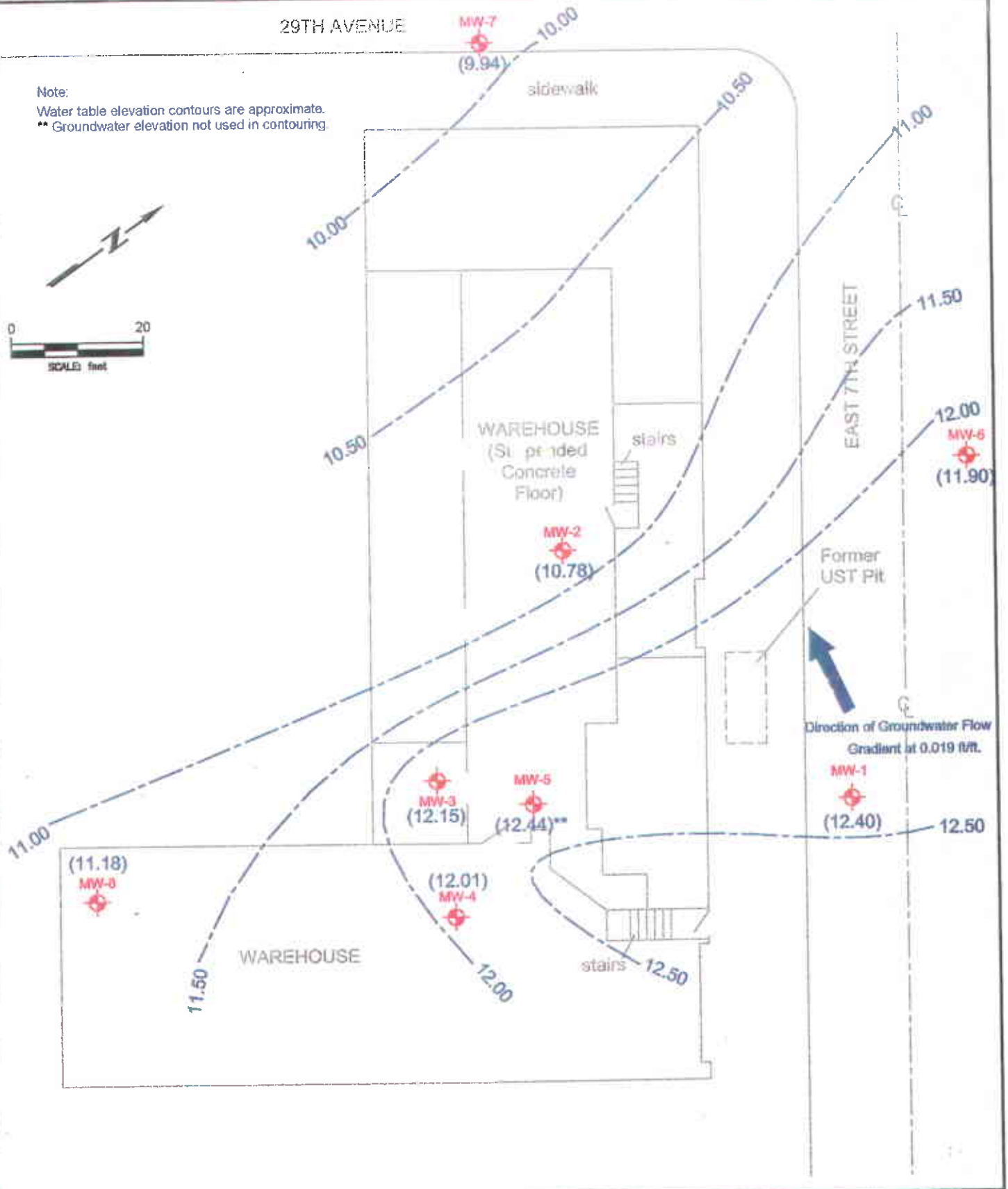
Clayton Project No. 70-97066.00.002

Figure
1
12/31/96
TOPOFIG1.CDR

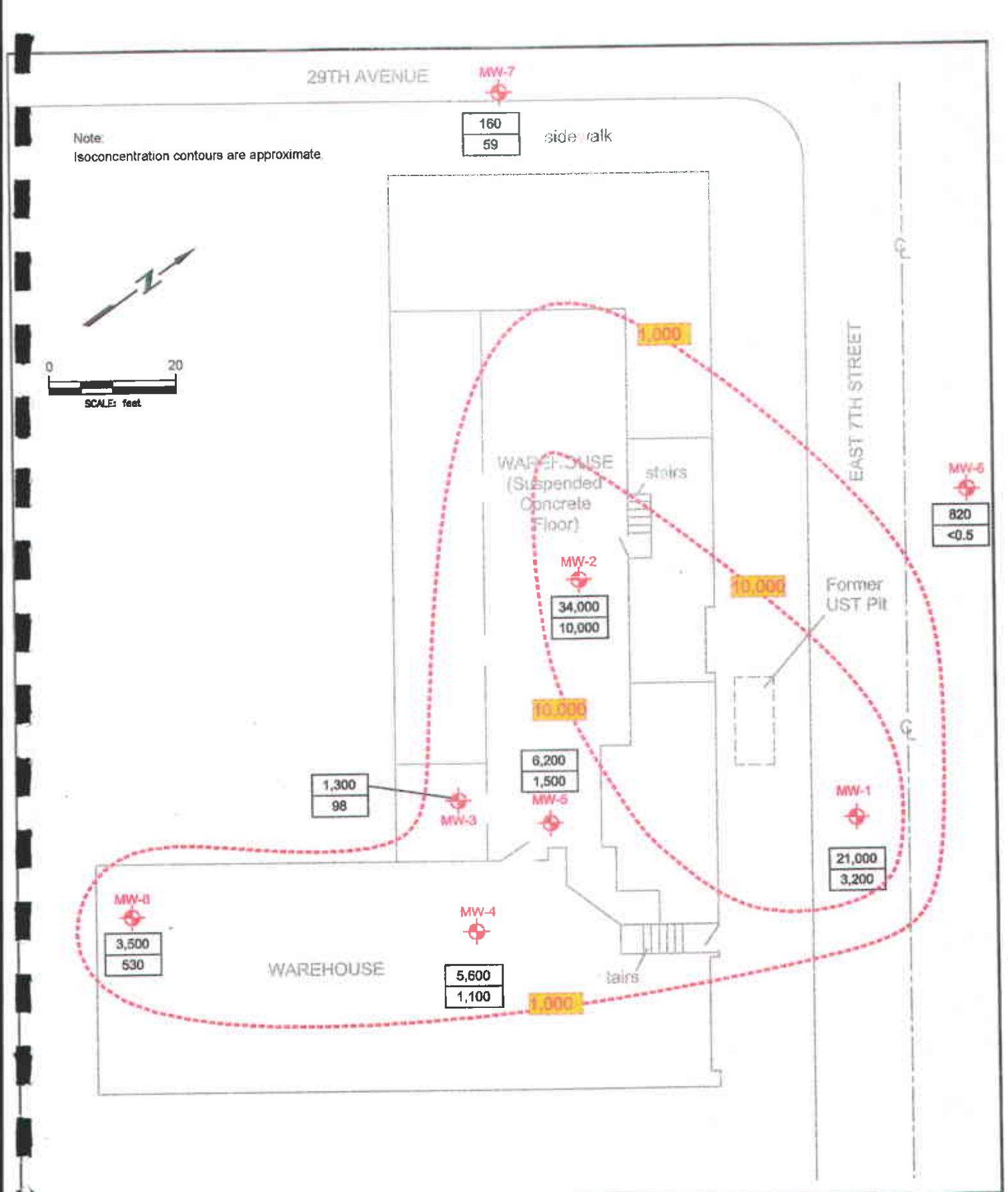
Clayton
ENVIRONMENTAL CONSULTANTS



LEGEND	SITE PLAN SHOWING MONITORING WELL AND SOIL BORING LOCATIONS	Figure	Clayton ENVIRONMENTAL CONSULTANTS
MW-1 ⊕ Monitoring Well Location B-1 ● Soil Boring/Temporary Monitoring Well Location	FORMER LEMOINE SAUSAGE FACTORY 630 29TH AVENUE OAKLAND, CALIFORNIA Clayton Project No. 70-97066.00	2 9/19/00 SITEFSRD.DWG	



LEGEND	GROUNDWATER ELEVATION CONTOUR MAP (MARCH 21, 2001)	Figure	Clayton ENVIRONMENTAL CONSULTANTS
MW-1 Monitoring Well Location (10.78) Groundwater Elevation in Feet above Mean Sea Level 10.50 Groundwater Surface Contour and Elevation	FORMER LEMOINE SAUSAGE FACTORY 630 29TH AVENUE OAKLAND, CALIFORNIA Clayton Project No. 70-97066.00	3 4/13/01 Q1ST_01.DWG	



LEGEND

MW-1 Monitoring Well Location

34,000 TPH-G Concentration (micrograms per liter)

10,000 Benzene Concentration (micrograms per liter)

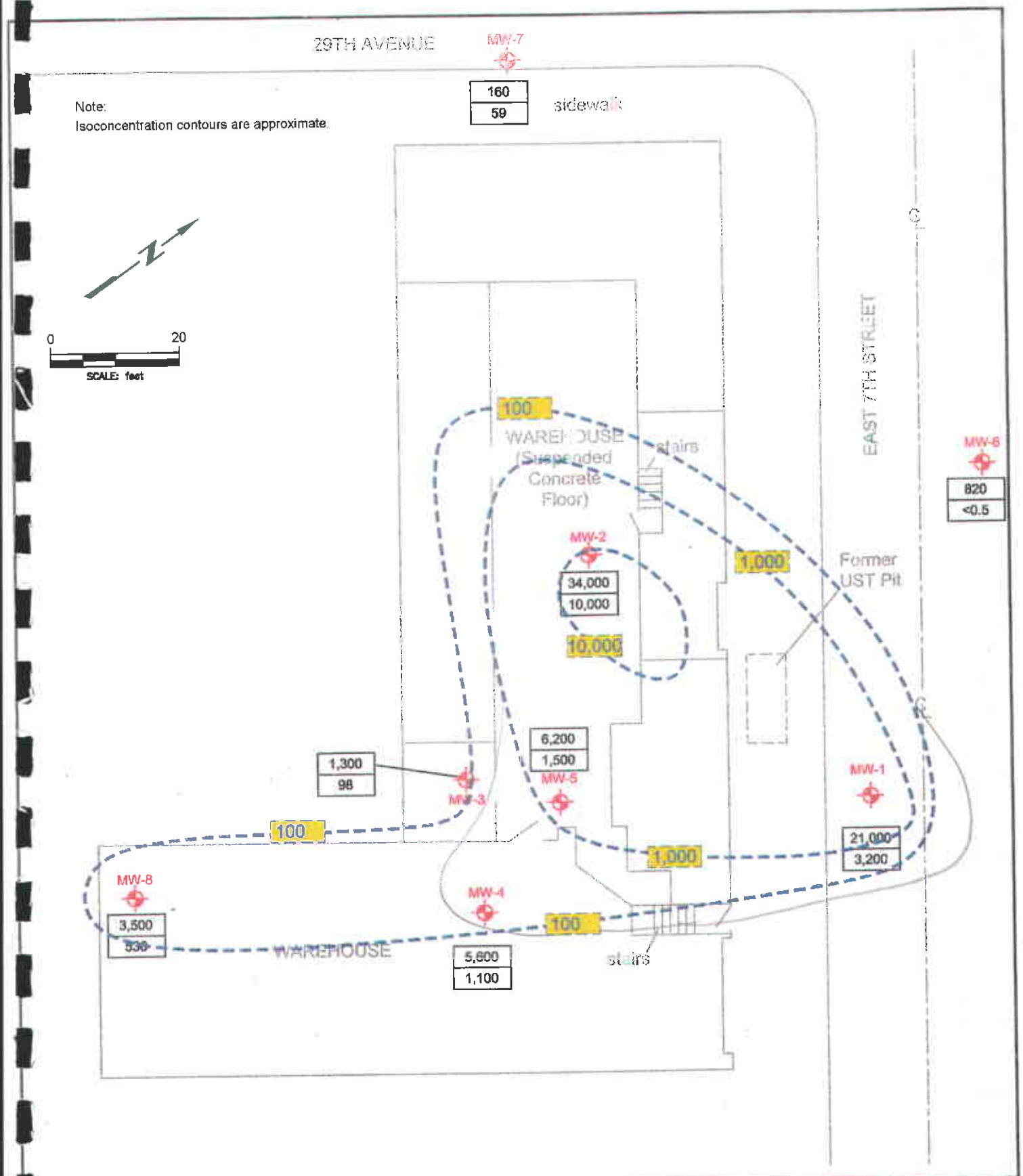
1,000 Isoconcentration Contour (micrograms per liter)

TPH-G
CONCENTRATIONS IN GROUNDWATER
MARCH 2001

FORMER LEMOINE SAUSAGE FACTORY
630 29TH AVENUE
OAKLAND, CALIFORNIA
Clayton Project No. 70-97066.00

Figure
4a
1/08/01
Q1ST_01.DWG

Clayton
ENVIRONMENTAL
CONSULTANTS



LEGEND

MW-1 Monitoring Well Location

34,000 TPH-G Concentration (micrograms per liter)

10,000 Benzene Concentration (micrograms per liter)

1,000 Isoconcentration Contour (micrograms per liter)

BENZENE CONCENTRATIONS IN GROUNDWATER MARCH 2001

FORMER LEMOINE SAUSAGE FACTORY
630 29TH AVENUE
OAKLAND, CALIFORNIA
Clayton Project No. 70-97066.00

Figure
4b
1/08/01
Q1ST_01.DWG

Clayton ENVIRONMENTAL CONSULTANTS

APPENDIX A

FIELD SAMPLING DATA SHEETS

FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	3-21-01
	Oakland, California	Purge Method:	peristaltic pump
Sampling Location:	**MW-1**	Date & Time Sampled:	3/21 - 10:15
Top of Casing:	16.69 (ft, msl)	Sampling Method:	peristaltic pump
Depth to Water:	4.29	Sample Type:	TPHG/BTEX / 8010
Groundwater Elevation	12.40	Preservatives:	HCl
Well Bottom	7.69	# of Containers:	5
Water Column:	4.71	Field Tech:	Mike K.
Well Casing Volume:	.0471 (WC* 0.01)	Weather Conditions:	~~Overcast~~ - Turned
Casing Volumes Purged:	4		Sunny at purge beginning ~11:30
Purge Rate:	.011 gal/min	3/4" dia well	

Time	Volume Removed (gal)	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Dissolved Oxygen (mg/L)
11:14	350 mL	6.73	2.06	36	17.6°C	1.23
11:20	330	7.16	1.654	19	17.0	1.07
11:33	350	7.27	1.549	12	17.2	1.02
11:36	300	7.31	1.482	8	16.8	-
:	→ Purged Dry					
:						
:						
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Field Notes:

~~Also analyzed by SM 4500-P [redacted]~~
~~and EPA method 300.0 for Nitr[redacted]Nitrite~~

FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	3-23
	Oakland, California	Purge Method:	peristaltic pump
Sampling Location:	**MW-2**	Date & Time Sampled:	3-23 9:30 AM
Top of Casing:	20.79 (ft, msl)	Sampling Method:	peristaltic pump
Depth to Water:	10.01	Sample Type:	TPHG/BTEX / 8010
Groundwater Elevation	10.78	Preservatives:	HCl
Well Bottom	0.79	# of Containers:	5
Water Column:	9.99	Field Tech:	Mike L.
Well Casing Volume:	1.099 (WC* 0.01)	Weather Conditions:	overcast
Casing Volumes Purged:	4		
Purge Rate:	.0363 gal/min	3/4" dia well	

Time	Volume Removed (gal) mL	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Dissolved Oxygen (mg/L)
9:29	350	6.58	9.85	34	15.9	1.38
9:33	350	6.61	9.95	40	16.4	-
9:34	350	6.61	9.99	38	16.4	-
9:40	350	6.63	10.04	38	16.5	-
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Field Notes:

FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	3-22
	Oakland, California	Purge Method:	peristaltic pump
Sampling Location:	**MW-3**	Date & Time Sampled:	3-22 2:30 pm
Top of Casing:	21.1 (ft, msl)	Sampling Method:	peristaltic pump
Depth to Water:	8.95	Sample Type:	TPHG/BTEX / 8010
Groundwater Elevation	12.15	Preservatives:	HCl
Well Bottom	1.10	# of Containers:	5
Water Column:	11.05	Field Tech:	Mickey
Well Casing Volume:	.1105 (WC* 0.01)	Weather Conditions:	Overcast
Casing Volumes Purged:	4		
Purge Rate:	.0276 gal/min	3/4" dia well	

Time	Volume Removed (gal) ml	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Dissolved Oxygen (mg/L)
2:24	350 ml	6.66	17.83	45	16.7	0.69
2:34	350	6.56	14.07	39	16.3	-
2:39	350	6.64	11.01	32	16.2	-
2:40	350	6.78	10.03	27	16.2	
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Field Notes:

FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	3-22
	Oakland, California	Purge Method:	peristaltic pump
Sampling Location:	**MW-4**	Date & Time Sampled:	3-22 . 3:30 pm
Top of Casing:	17.78 (ft, msl)	Sampling Method:	peristaltic pump
Depth to Water:	5.77	Sample Type:	TPHG/BTEX / 8010
Groundwater Elevation	12.01	Preservatives:	HCL
Well Bottom	2.78	# of Containers:	5
Water Column:	4.23	Field Tech:	Mike L.
Well Casing Volume:	.0923 (WC* 0.01)	Weather Conditions:	overcast
Casing Volumes Purged:	4		
Purge Rate:	.03692 gal/min	3/4" dia well	

Time	Volume Removed ~~(gal)~~ ml	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Dissolved Oxygen (mg/L)
3:33	350	6.75	1.63	24	15.9	0.95
3:36	350	6.98	4.07	16	15.6	-
3:40	350	7.25	2.36	1	15.4	-
3:43	400	7.24	2.27	7	15.3	-
:						
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Field Notes:

FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	3-22
	Oakland, California	Purge Method:	peristaltic pump
Sampling Location:	**MW-5**	Date & Time Sampled:	3-22 3:00 pm
Top of Casing:	21.12 (ft, msl)	Sampling Method:	peristaltic-pump
Depth to Water:	8.68	Sample Type:	TPHG/BTEX / 8010
Groundwater Elevation	12.44	Preservatives:	HCl
Well Bottom	6.12	# of Containers:	5
Water Column:	6.32	Field Tech:	Mike L.
Well Casing Volume:	.0632 (WC* 0.01)	Weather Conditions:	Overcast
Casing Volumes Purged:	2.5		
Purge Rate:	0.143 gal/min	3/4" dia well	

Time	Volume Removed (gal) ml	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Dissolved Oxygen (mg/L)
2:50	250	7.21	3.66	3	16.1	1.42
2:54	300	6.73	9.58	30	16.3	-
3:01	100	Pumped dry				
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:						
:						
:						
:						

Field Notes:

FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	3-21-01
	Oakland, California	Purge Method:	Bailer
Sampling Location:	**MW-6**	Date & Time Sampled:	3-21 - 11:30Am
Top of Casing:	16.6 (ft, msl)	Sampling Method:	Bailer
Depth to Water:	4.70 Feet	Sample Type:	TPHG/BTEX / 8010
Groundwater Elevation	11.90	Preservatives:	HCL
Well Bottom	-3.40	# of Containers:	5
Water Column:	15.3	Field Tech:	Mikek.
Well Casing Volume:	2.5 (WC* 0.16)	Weather Conditions:	overcast
Casing Volumes Purged:	4		
Purge Rate:	.333 gal/min	2" dia well	

Time	Volume Removed (gal)	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Dissolved Oxygen (mg/L)
11:20						.38
11:44	0	7.33	1.805	14	18.1 C	-
11:58	2.5	7.43	1.827	4	17.8	-
12:04	2.5	7.32	1.761	10	17.5	-
12:10	2.5	7.27	1.659	14	18.0	-
12:15	2.5	7.19	1.724	15	18.1	-
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:						

Field Notes:

FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	3-21
	Oakland, California	Purge Method:	Bailer
Sampling Location:	**MW-7**	Date & Time Sampled:	3-21 12:30 pm
Top of Casing:	15.47 (ft, msl)	Sampling Method:	Bailer
Depth to Water:	5.53	Sample Type:	TPHG/BTEX / 8010
Groundwater Elevation	9.94	Preservatives:	HCl
Well Bottom	-4.53	# of Containers:	5
Water Column:	14.47	Field Tech:	Mike L.
Well Casing Volume:	2.3 (WC* 0.16)	Weather Conditions:	Overcast
Casing Volumes Purged:	4		
Purge Rate:	.4 gal/min		2" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Dissolved Oxygen (mg/L)
12:25	0	7.46	1.254	1	17.6	0.66
12:31	2.3	7.47	1.296	3	16.9	-
12:36	2.3	7.53	1.247	2	17.0	-
12:43	2.3	7.65	1.313	1	17.4	-
12:48	2.3	7.51	1.263	2	17.7	-
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:						

Field Notes:

~~Also analyze by SM 4500-P for Orthophosphate~~
~~and EPA method 300.0 for Nitrate and Nitrite~~

FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	3-21
	Oakland, California	Purge Method:	Bailer
Sampling Location:	**MW-8**	Date & Time Sampled:	3-21 - 11:00 hr
Top of Casing:	17.58 (ft, msl)	Sampling Method:	Bailer
Depth to Water:	6.40	Sample Type:	TPHG/BTEX / 8010
Groundwater Elevation	11.18	Preservatives:	HCl
Well Bottom	-2.42	# of Containers:	5
Water Column:	13.6	Field Tech:	Mike K.
Well Casing Volume:	2.2 (WC* 0.16)	Weather Conditions:	Overcast - Sunny ~ L
Casing Volumes Purged:	4		11:30
Purge Rate:	.382 gal / m.n.		2" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Dissolved Oxygen (mg/L)
1:00	0	7.42	1.854	3	15.3	0.41
1:05	2.2	7.47	1.854	0	14.7	—
1:10	2.2	7.41	1.803	6	14.4	—
1:17	2.2	7.35	1.807	6	15.4	—
1:20	2.2	7.41	1.840	4	15.6	—
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Field Notes:

APPENDIX B

LABORATORY ANALYTICAL RESULTS

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510)486-0900 V
(510)486-0532 F

FACSIMILE TRANSMISSION
FACSIMILE TRANSMISSION
FACSIMILE TRANSMISSION

TO: Mike Krzeminski
Clayton Group Services
Pleasanton, CA

DATE: 4/3/01

PAGE 1 of 17

FAX #: (925) 426-0106

FROM: Patricia Flynn

SUBJECT: Analytical Results for Login 151036

*** If you would like to receive your reports via email (PDF format), please contact your project manager for details.

Clayton GROUP SERVICES

REQUEST FOR LABORATORY ANALYTICAL SERVICES

IMPORTANT
Date Results Requested: _____
Rush Charges Authorized? ☐ Yes ☐ No
☐ Phone or ☐ Fax Results

Page ___ of ___
For Clayton Use Only
Clayton Lab Project No.
151036

Name: Mike Krzeminski	Client Job No.: 70-97049	Purchase Order No.	
Company: Clayton	Dept.	Name	
Mailing Address: 6920 Koll Center Parkway Suite 210		Company	Dept.
City, State, Zip: Pleasanton, CA 94566		Address	
Telephone No.: 925-426-2670	FAX No.: 925-426-0106	City, State, Zip	

Special instructions and/or specific regulatory requirements: (method, limit of detection, etc.)

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

* Explanation of Preservative

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

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	TIME SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	TPH 6/ BTEX 8010										FOR LAB USE ONLY
mw-1	3-21	9:00			5	X	X									
mw-1	3-21	"														
mw-1	3-21	"														
mw-1	3-21	"														
mw-1	3-21	"														
mw-2	3-23	9:15			5	X	X									
mw-2	3-23	"														
mw-2	3-23	"														
mw-2	3-23	"														
mw-2	3-23	"														

Received ☐ On Ice ☐ Cold ☐ Ambient ☒ Intact

Preservation Correct? ☒ Yes ☐ No ☐ N/A

CHAIN OF CUSTODY

Collected by: Mike Krzeminski (print)		Collector's Signature:	
Relinquished by: Mike Krzeminski	Date/Time 3/23 10:15	Received by:	Date/Time 3/23 1015
Relinquished by:	Date/Time	Received by:	Date/Time
Method of Shipment:		Received at Lab by:	Date/Time
Authorized by: _____ (Client Signature MUST Accompany Request)	Date 3-23-01	Sample Condition Upon Receipt: ☐ Acceptable ☐ Other (explain)	

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

Detroit Regional Lab
22345 Roethel Drive
Novi, MI 48375
(800) 805-5867
(248) 344-1770
FAX (248) 344-2855

Atlanta Regional Lab
3380 Chastain Meadows Parkway, Suite 300
Kennesaw, GA 30144
(800) 252-9919
(770) 499-7600
FAX (770) 423-4990

Seattle Regional Lab
4636 E. Marginal Way S., Suite 215
Seattle, WA 98134
(800) 568-7755
(206) 763-7364
FAX (206) 763-4189

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

1/00 20K

Clayton GROUP SERVICES

REQUEST FOR LABORATORY ANALYTICAL SERVICES

IMPORTANT

Date Results Requested: ______

Rush Charges Authorized? ☐ Yes ☐ No

☐ Phone or ☐ Fax Results

Page ___ of ___

For Clayton Use Only
Clayton Lab Project No. 151036

Name Mike Krzeminski	Client Job No. 70-97066
Company Clayton	Dept.
Mailing Address 6920 Koll Center Parkway Suite 216	
City, State, Zip Pleasanton CA 94566	
Telephone No. 925-426-2670	FAX No. 925-426-0106

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

Special instructions and/or specific regulatory requirements:
(method, limit of detection, etc.)

* Explanation of Preservative

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

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

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	TIME SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	TPHG/BTEX	8010									FOR LAB USE ONLY
mw-3	3-22	10:00			5	X	X									
mw-3	"	"														
mw-3	"	"														
mw-3	"	"														
mw-3	"	"														
mw-4	"	10:36			5	X	X									
mw-4	"	"														
mw-4	"	"														
mw-4	"	"														
mw-4	"	"														

CHAIN OF CUSTODY

Collected by: Mike Krzeminski (print)		Collector's Signature: [signature]	
Relinquished by: Mike Krzeminski	Date/Time 3/23 10:15	Received by: [signature]	Date/Time 3/23/01 1015
Relinquished by:	Date/Time	Received by:	Date/Time
Method of Shipment:		Received at Lab by:	Date/Time

Authorized by: ______ Date ______
(Client Signature MUST Accompany Request)

Sample Condition Upon Receipt ☐ Acceptable ☐ Other (explain)

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

Detroit Regional Lab
22345 Roethel Drive
Novi, MI 48375
(800) 806-5887
(248) 344-1770
FAX (248) 344-2655

Atlanta Regional Lab
3380 Chastain Meadows Parkway, Suite 300
Kennesaw, GA 30144
(800) 252-9919
(770) 499-7500
FAX (770) 423-4990

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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REQUEST FOR LABORATORY ANALYTICAL SERVICES

Clayton GROUP SERVICES

IMPORTANT
Date Results Requested: _____
Rush Charges Authorized? ☐ Yes ☐ No
☐ Phone or ☐ Fax Results

Page ___ of ___

For Clayton Use Only
Clayton Lab Project No
151036

Name Mike Krzeminski	Client Job No. 70-97064	Purchase Order No.	
Company Clayton	Dept.	Name	
Mailing Address 1629 Koll Center Parkway Suite 216		Company	Dept.
City, State, Zip Pleasanton, CA 94566		Address	
Telephone No. 925-426-2070	FAX No. 925-426-0106	City, State, Zip	

Special instructions and/or specific regulatory requirements:
(method, limit of detection, etc.)

* Explanation of Preservative

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

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

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	TIME SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	TPH6/BTEX 6010											FOR LAB USE ONLY
mw-5	3-22	11:00			5	X	X										
mw-5	"	"															
mw-5	"	"															
mw-5	"	"															
mw-5	"	"															
mw-6	3-21	9:15			5	X	X										
mw-6	"	"															
mw-6	"	"															
mw-6	"	"															
mw-6	"	"															

Collected by: Mike Krzeminski (print) — Collector's Signature: [signature]

Relinquished by: Mike Krzeminski — Date/Time 3/23 10:15 — Received by: [signature] — Date/Time 3/23/01 1015

Relinquished by: — Date/Time — Received by: — Date/Time

Method of Shipment: — Received at Lab by: — Date/Time

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

Sample Condition Upon Receipt ☐ Acceptable ☐ Other (explain)

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

Detroit Regional Lab
22345 Rosthel Drive
Novi, MI 48375
(800) 806-5687
(248) 344-1770
FAX (248) 344-9655

Atlanta Regional Lab
3360 Chastain Meadows Parkway, Suite 300
Kennesaw, GA 30144
(800) 252-9918
(770) 499-7500
FAX (770) 423-4990

Seattle Regional Lab
4536 E. Marginal Way S., Suite 215
Seattle, WA 98134
(800) 566-7755
(206) 763-7364
FAX (206) 763-4189

DISTRIBUTION
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1/00 20K

Clayton GROUP SERVICES

REQUEST FOR LABORATORY ANALYTICAL SERVICES

IMPORTANT

Date Results Requested: ______

Rush Charges Authorized? ☐ Yes ☐ No

☐ Phone or ☐ Fax Results

Page ___ of ___

For Clayton Use Only
Clayton Lab Project No. 151036

REPORT RESULTS TO			
Name Mike Krzeminski	Client Job No. 70-97066	Purchase Order No.	
Company Clayton	Dept.	Name	
Mailing Address 6920 Koll Center Parkway Suite 216		Company	Dept
City, State, Zip Pleasanton, CA 94566		Address	
Telephone No. 925-426-2670	FAX No. 925-426-0106	City, State, Zip	

Special instructions and/or specific regulatory requirements: (method, limit of detection, etc.)

* Explanation of Preservative

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

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

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	TIME SAMPLED	MATRIX/MEDIA	AIR VOLUME (specify units)	Number of Containers	TPH-g/BTEX	8010										FOR LAB USE ONLY
mw-7	3-21	4:20			5	X	X										
mw-7	"	"															
mw-7	"	"															
mw-7	"	"															
mw-7	"	"															
mw-8	"	4:30			5	X	X										
mw-8	"	"															
mw-8	"	"															
mw-8	"	"															
mw-8	"	"															

CHAIN OF CUSTODY			
Collected by: Mike Krzeminski (print)		Collector's Signature: [signature]	
Relinquished by: Mike Krzeminski	Date/Time 3/23/01 10:15	Received by: [signature]	Date/Time 3/23/01 1015
Relinquished by:	Date/Time	Received by:	Date/Time
Method of Shipment:		Received at Lab by:	Date/Time

Authorized by: ______ Date ______
(Client Signature MUST Accompany Request)

Sample Condition Upon Receipt: ☐ Acceptable ☐ Other (explain)

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

Detroit Regional Lab
22345 Roethel Drive
Novi, MI 48375
(800) 806-5887
(248) 344-1770
FAX (248) 344-2656

Atlanta Regional Lab
3380 Chastain Meadows Parkway, Suite 300
Kennesaw, GA 30144
(800) 252-9919
(770) 499-7500
FAX (770) 423-4990

Seattle Regional Lab
4636 E. Marginal Way S., Suite 215
Seattle, WA 98134
(800) 568-7755
(206) 763-7364
FAX (206) 763-4189

DISTRIBUTION:
White = Clayton Laboratory
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Pink = Client Copy

1/00 20K

Curtis & Tompkins, Ltd

Curtis & Tompkins Laboratories Analytical Report

Lab #:	151036	Project#:	STANDARD
Client:	Clayton Group Services	Prep:	EPA 5030
Matrix:	Water	Received:	03/23/01
Units:	ug/L		

Field ID: MW-1
Type: SAMPLE
Lab ID: 151036-001
Batch#: 62552
Sampled: 03/21/01
Analyzed: 03/29/01

Analyte	Result	RL	Dil Fac	Analysis
Gasoline C7-C12	21,000	500	10.00	EPA 8015M
Benzene	3,200	10	20.00	EPA 8021B
Toluene	1,700	10	20.00	EPA 8021B
Ethylbenzene	290	10	20.00	EPA 8021B
m,p-Xylenes	1,500	10	20.00	EPA 8021B
o-Xylene	1,100	10	20.00	EPA 8021B

Surrogate	%REC	Limits	Dil Fac	Analysis
Trifluorotoluene (FID)	109	59-135	10.00	EPA 8015M
Bromofluorobenzene (FID)	98	60-140	10.00	EPA 8015M
Trifluorotoluene (PID)	108	56-142	20.00	EPA 8021B
Bromofluorobenzene (PID)	101	55-149	20.00	EPA 8021B

Field ID: MW-2
Type: SAMPLE
Lab ID: 151036-002
Batch#: 62552
Sampled: 03/23/01

Analyte	Result	RL	Dil Fac	Analyzed	Analysis
Gasoline C7-C12	34,000	1,300	25.00	03/29/01	EPA 8015M
Benzene	10,000	50	100.0	03/30/01	EPA 8021B
Toluene	3,200	50	100.0	03/30/01	EPA 8021B
Ethylbenzene	410	50	100.0	03/30/01	EPA 8021B
m,p-Xylenes	950	50	100.0	03/30/01	EPA 8021B
o-Xylene	270	50	100.0	03/30/01	EPA 8021B

Surrogate	%REC	Limits	Dil Fac	Analyzed	Analysis
Trifluorotoluene (FID)	108	59-135	25.00	03/29/01	EPA 8015M
Bromofluorobenzene (FID)	98	60-140	25.00	03/29/01	EPA 8015M
Trifluorotoluene (PID)	102	56-142	100.0	03/30/01	EPA 8021B
Bromofluorobenzene (PID)	88	55-149	100.0	03/30/01	EPA 8021B

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	151036	Project#:	STANDARD
Client:	Clayton Group Services	Prep:	EPA 5030
Matrix:	Water	Received:	03/23/01
Units:	ug/L		

Field ID:	MW-3	Batch#:	62552
Type:	SAMPLE	Sampled:	03/22/01
Lab ID:	151036-003	Analyzed:	03/29/01
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	1,300	50	EPA 8015M
Benzene	98	0.50	EPA 8021B
Toluene	67	0.50	EPA 8021B
Ethylbenzene	51	0.50	EPA 8021B
m,p-Xylenes	81	0.50	EPA 8021B
o-Xylene	23	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	109	59-135	EPA 8015M
Bromofluorobenzene (FID)	99	60-140	EPA 8015M
Trifluorotoluene (PID)	107	56-142	EPA 8021B
Bromofluorobenzene (PID)	102	55-149	EPA 8021B

Field ID:	MW-4	Batch#:	62552
Type:	SAMPLE	Sampled:	03/22/01
Lab ID:	151036-004	Analyzed:	03/29/01
Diln Fac:	10.00		

Analyte	Result	RL	Analysis
Gasoline C7-C12	5,600	500	EPA 8015M
Benzene	1,100	5.0	EPA 8021B
Toluene	13	5.0	EPA 8021B
Ethylbenzene	310	5.0	EPA 8021B
m,p-Xylenes	280	5.0	EPA 8021B
o-Xylene	23	5.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	105	59-135	EPA 8015M
Bromofluorobenzene (FID)	97	60-140	EPA 8015M
Trifluorotoluene (PID)	107	56-142	EPA 8021B
Bromofluorobenzene (PID)	100	55-149	EPA 8021B

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd

Curtis & Tompkins Laboratories Analytical Report

Lab #:	151036	Project#:	STANDARD
Client:	Clayton Group Services	Prep:	EPA 5030
Matrix:	Water	Received:	03/23/01
Units:	ug/L		

Field ID:	MW-5	Batch#:	62552
Type:	SAMPLE	Sampled:	03/22/01
Lab ID:	151036-005	Analyzed:	03/29/01
Diln Fac:	10.00		

Analyte	Result	RL	Analysis
Gasoline C7-C12	6,200	500	EPA 8015M
Benzene	1,500	5.0	EPA 8021B
Toluene	360	5.0	EPA 8021B
Ethylbenzene	310	5.0	EPA 8021B
m,p-Xylenes	230	5.0	EPA 8021B
o-Xylene	58	5.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	104	59-135	EPA 8015M
Bromofluorobenzene (FID)	97	60-140	EPA 8015M
Trifluorotoluene (PID)	108	56-142	EPA 8021B
Bromofluorobenzene (PID)	101	55-149	EPA 8021B

Field ID:	MW-6	Batch#:	62552
Type:	SAMPLE	Sampled:	03/21/01
Lab ID:	151036-006	Analyzed:	03/29/01
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	820	50	EPA 8015M
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	1.4	0.50	EPA 8021B
m,p-Xylenes	0.52	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	127	59-135	EPA 8015M
Bromofluorobenzene (FID)	101	60-140	EPA 8015M
Trifluorotoluene (PID)	115	56-142	EPA 8021B
Bromofluorobenzene (PID)	102	55-149	EPA 8021B

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	151036	Project#:	STANDARD
Client:	Clayton Group Services	Prep:	EPA 5030
Matrix:	Water	Received:	03/23/01
Units:	ug/L		

Field ID:	MW-7	Batch#:	62514
Type:	SAMPLE	Sampled:	03/21/01
Lab ID:	151036-007	Analyzed:	03/29/01
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	160	50	EPA 8015M
Benzene	59	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	103	59-135	EPA 8015M
Bromofluorobenzene (FID)	98	60-140	EPA 8015M
Trifluorotoluene (PID)	103	56-142	EPA 8021B
Bromofluorobenzene (PID)	99	55-149	EPA 8021B

Field ID:	MW-8	Batch#:	62552
Type:	SAMPLE	Sampled:	03/21/01
Lab ID:	151036-008	Analyzed:	03/29/01
Diln Fac:	5.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	3,500	250	EPA 8015M
Benzene	530	2.5	EPA 8021B
Toluene	ND	2.5	EPA 8021B
Ethylbenzene	21	2.5	EPA 8021B
m,p-Xylenes	ND	2.5	EPA 8021B
o-Xylene	ND	2.5	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	138 *	59-135	EPA 8015M
Bromofluorobenzene (FID)	98	60-140	EPA 8015M
Trifluorotoluene (PID)	132	56-142	EPA 8021B
Bromofluorobenzene (PID)	101	55-149	EPA 8021B

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd

Purgeable Halocarbons by GC/MS

Lab #:	151036	Prep:	EPA 5030
Client:	Clayton Group Services	Analysis:	EPA 8260B
Project#:	STANDARD		
Field ID:	MW-1	Batch#:	62555
Lab ID:	151036-001	Sampled:	03/21/01
Matrix:	Water	Received:	03/23/01
Units:	ug/L	Analyzed:	03/29/01
Diln Fac:	5.000		

Analyte	Result	RL
Chloromethane	ND	5.0
Vinyl Chloride	ND	2.5
Bromomethane	ND	5.0
Chloroethane	ND	5.0
Trichlorofluoromethane	ND	2.5
Freon 113	ND	5.0
1,1-Dichloroethene	ND	2.5
Methylene Chloride	ND	100
trans-1,2-Dichloroethene	ND	2.5
1,1-Dichloroethane	ND	2.5
cis-1,2-Dichloroethene	ND	2.5
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	2.5
Carbon Tetrachloride	ND	2.5
1,2-Dichloroethane	ND	2.5
Trichloroethene	ND	2.5
1,2-Dichloropropane	ND	2.5
Bromodichloromethane	ND	2.5
cis-1,3-Dichloropropene	ND	2.5
trans-1,3-Dichloropropene	ND	2.5
1,1,2-Trichloroethane	ND	2.5
Tetrachloroethene	ND	2.5
Dibromochloromethane	ND	2.5
Chlorobenzene	ND	2.5
Bromoform	ND	2.5
1,1,2,2-Tetrachloroethane	ND	2.5
1,3-Dichlorobenzene	ND	2.5
1,4-Dichlorobenzene	ND	2.5
1,2-Dichlorobenzene	ND	2.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	87	78-123
Toluene-d8	96	80-110
Bromofluorobenzene	95	80-115

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Halocarbons by GC/MS

Lab #:	151036	Prep:	EPA 5030
Client:	Clayton Group Services	Analysis:	EPA 8260B
Project#:	STANDARD		
Field ID:	MW-2	Batch#:	62555
Lab ID:	151036-002	Sampled:	03/23/01
Matrix:	Water	Received:	03/23/01
Units:	ug/L	Analyzed:	03/30/01
Diln Fac:	25.00		

Analyte	Result	RL
Chloromethane	ND	25
Vinyl Chloride	ND	13
Bromomethane	ND	25
Chloroethane	ND	25
Trichlorofluoromethane	ND	13
Freon 113	ND	25
1,1-Dichloroethene	ND	13
Methylene Chloride	ND	500
trans-1,2-Dichloroethene	ND	13
1,1-Dichloroethane	ND	13
cis-1,2-Dichloroethene	ND	13
Chloroform	ND	25
1,1,1-Trichloroethane	ND	13
Carbon Tetrachloride	ND	13
1,2-Dichloroethane	14	13
Trichloroethene	ND	13
1,2-Dichloropropane	ND	13
Bromodichloromethane	ND	13
cis-1,3-Dichloropropene	ND	13
trans-1,3-Dichloropropene	ND	13
1,1,2-Trichloroethane	ND	13
Tetrachloroethene	ND	13
Dibromochloromethane	ND	13
Chlorobenzene	ND	13
Bromoform	ND	13
1,1,2,2-Tetrachloroethane	ND	13
1,3-Dichlorobenzene	ND	13
1,4-Dichlorobenzene	ND	13
1,2-Dichlorobenzene	ND	13

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	92	78-123
Toluene-d8	96	80-110
Bromofluorobenzene	101	80-115

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	151036	Prep:	EPA 5030
Client:	Clayton Group Services	Analysis:	EPA 8260B
Project#:	STANDARD		
Field ID:	MW-3	Batch#:	62630
Lab ID:	151036-003	Sampled:	03/22/01
Matrix:	Water	Received:	03/23/01
Units:	ug/L	Analyzed:	04/02/01
Dil Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	0.5
Freon 113	ND	1.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	2.3	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	93	78-123
Toluene-d8	96	80-110
Bromofluorobenzene	97	80-115

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	151036	Prep:	EPA 5030
Client:	Clayton Group Services	Analysis:	EPA 8260B
Project#:	STANDARD		
Field ID:	MW-5	Batch#:	62555
Lab ID:	151036-005	Sampled:	03/22/01
Matrix:	Water	Received:	03/23/01
Units:	ug/L	Analyzed:	03/29/01
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	0.5
Freon 113	ND	1.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	3.3	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	93	78-123
Toluene-d8	96	80-110
Bromofluorobenzene	98	80-115

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd., Analytical Laboratories. Since 1878
2323 Fifth Street. Berkeley. CA 94710. Phone (510) 486-0900

il 13, 2001

Mike Krzeminski
Clayton Group Services
6920 Koll Center Parkway
Suite 216
Pleasanton, CA 94566

Subject: Volatile Organics Misquantitation

Dear Mr. Krzeminski:

As I mentioned earlier this afternoon, 1,1,1-Trichloroethane was misidentified in the initial calibration analyzed on March 21 on one of the GC/MS volatiles instruments. All of the data processed under this calibration has been reprocessed and the report for the following sample has been revised:

Report#	Project	Samples Received	Samples Affected
151036		3/23/01	MW-8

For this sample only the TCA result has changed. The TCA result went from 100ug/L to 'Not Detected' The revised report for this samples is attached.

Please accept my sincere apologies for any problems this error may cause for you. Call me at (510)-486-0925 x 110 if you have any questions or need further information.

Sincerely,

Teresa Morrison
Quality Assurance Director

Curtis & Tompkins, Ltd

Volatile Halocarbons by GC/MS

Lab #:	151036	Prep:	EPA 5030
Client:	Clayton Group Services	Analysis:	EPA 8260B
Project#:	STANDARD		
Field ID:	MW-8	Batch#:	62555
Lab ID:	151036-008	Sampled:	03/21/01
Matrix:	Water	Received:	03/23/01
Units:	ug/L	Analyzed:	03/30/01
Dil'n Fac:	7.143		

Analyte	Result	RL
Chloromethane	ND	7.1
Vinyl Chloride	58	3.6
Bromomethane	ND	7.1
Chloroethane	ND	7.1
Trichlorofluoromethane	ND	3.6
Freon 113	ND	7.1
1,1-Dichloroethene	ND	3.6
Methylene Chloride	ND	140
trans-1,2-Dichloroethene	39	3.6
1,1-Dichloroethane	ND	3.6
cis-1,2-Dichloroethene	760	3.6
Chloroform	ND	7.1
1,1,1-Trichloroethane	ND	3.6
Carbon Tetrachloride	ND	3.6
1,2-Dichloroethane	ND	3.6
Trichloroethene	32	3.6
1,2-Dichloropropane	ND	3.6
Bromodichloromethane	ND	3.6
cis-1,3-Dichloropropene	ND	3.6
trans-1,3-Dichloropropene	ND	3.6
1,1,2-Trichloroethane	ND	3.6
Tetrachloroethene	ND	3.6
Dibromochloromethane	ND	3.6
Chlorobenzene	ND	3.6
Bromoform	ND	3.6
1,1,2,2-Tetrachloroethane	ND	3.6
1,3-Dichlorobenzene	ND	3.6
1,4-Dichlorobenzene	ND	3.6
1,2-Dichlorobenzene	ND	3.6

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	88	78-123
Toluene-d8	95	80-110
Bromofluorobenzene	100	80-115

ND= Not Detected
RL= Reporting Limit
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Revised 4/12/01