

PORT OF OAKLAND

June 28, 2000

Mr. Barney Chan
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

Subject: **Groundwater Monitoring Report, Ninth Avenue Terminal, Oakland**

Dear Mr. Chan:

Please find enclosed the results of the annual groundwater monitoring event performed in December 1999, and the quarterly groundwater monitoring event performed in April 2000, for the above-referenced site.

If you have any questions, please contact me at (510) 627-1184.

Sincerely,

Douglas P. Herman
Associate Port Environmental Scientist

encl: Noted

cc (w/o encl): Jeriann Alexander

(w/ encl): Diane Mims



Subsurface Consultants, Inc.

June 15, 2000
SCI 133.009

Mr. Douglas Herman
Environmental Health & Safety Compliance Department
Port of Oakland
530 Water Street, Second Floor
Oakland, CA 94607-2064

Groundwater Monitoring Program Report

December 1999 Annual Event

April 2000 Quarterly Event

Ninth Avenue Terminal

Oakland, California

Dear Mr. Herman:

This report presents the results of the annual groundwater monitoring event conducted in December 1999 and the April 2000 Quarterly Event performed at the above-referenced site by Subsurface Consultants, Inc. (SCI). The location of the site is shown on Plate 1. Previous site characterization studies indicate that petroleum hydrocarbons as well as other potentially hazardous chemicals and metals have impacted soil and groundwater at the Ninth Avenue Terminal site. Monitoring is being performed on a quarterly basis in general accordance with the monitoring plan presented in SCI's March 29, 1999 Groundwater Monitoring Report, as amended by Alameda County Health Care Services Agency (ACHCSA) in their letter dated April 16, 1999. The current groundwater monitoring program is outlined in the attached Table 1.

MONITORING ACTIVITIES

Prior to sampling, the depth to water was measured from below the top of the casing in all site wells with an electric well sounder. A summary of groundwater measurements is presented in Table 2. Selected wells were checked for the presence of free product, using a steel tape coated with petroleum sensitive paste. Free product was detected in wells MW-4 and MW-6 during both events. The "oil filled manhole" was also checked for the presence of free product; a sheen was observed during both events. Free product was removed from the wells using disposable bailers and placed in 55-gallon drums, which are stored, on-site. Due to the presence of free product, the impacted wells were not purged or sampled during either event.

Mr. Douglas Herman
Port of Oakland
June 15, 2000
SCI 133.009
Page 2

All equipment used during each event was decontaminated between each use. Disposable bailers were used for purging and sampling and were decontaminated and discarded after each use. The pH, specific conductivity, temperature, TDS and dissolved oxygen of the purged water were measured after each well volume was removed. The wells were considered purged when these environmental parameters had stabilized. A Well Sampling Form was completed for each well sampled during the events. Water generated during purging was placed into 55-gallon steel drums, which are stored on-site. Well Sampling Forms are included in Appendix A.

Groundwater samples were retained in glass and polyethylene containers pre-cleaned by the supplier in accordance with EPA protocol. The filled sample containers were placed in cooled chests and remained refrigerated until delivery to the analytical laboratory.

ANALYTICAL TESTING

Chain-of-Custody forms accompanied the samples to the laboratory. The chemical testing program for each event is outlined in Table 1. The monitoring program also includes a combination of field and laboratory testing for environmental parameters to assist in trend analysis.

Analytical testing was performed by Curtis & Tompkins, Ltd., a State of California Department of Health Services certified analytical laboratory who has provided all previous analytical services. Analytical results are presented in Tables 3 through 9. These tables are comprehensive as they present all groundwater data generated for site wells to date. Analytical test reports and chain-of-custody forms are included in Appendix B.

DISCUSSION

Groundwater Elevation and Flow Patterns

The approximate groundwater elevation contours for the December 1999 and April 2000 events are presented on Plates 2 and 3. Groundwater elevation contour patterns have remained relatively consistent since 1996. In general, groundwater elevations tend to be higher in the central portion of the site with flow radiating outward toward the shorelines of Clinton Basin and Brooklyn Basin. The bulkhead wall extending along the southeastern and southwestern portions of the site appears to act as an inhibitor to the flow of groundwater beneath the site. The contours also indicate that groundwater migrates to the open shorelines around the bulkhead wall.

In general, groundwater elevations in April 2000 were higher than measurements taken in December 1999. The most significant changes in groundwater elevation not related to tidal influence, occurred in and around well SCIMW-10; groundwater was measured at 5.98 feet above mean sea level (MSL) in December 1999 and 8.48 feet MSL in April 2000. Groundwater elevations remained near the ground surface at wells SCIMW-21 and SCIMW-25 during both

Mr. Douglas Herman
Port of Oakland
June 15, 2000
SCI 133.009
Page 3

events. Well SCIMW-21 is located near the north corner of Building H229 and is near a storm drain inlet. As such, its elevated water level may suggest stormdrain system leakage into the surrounding subsurface area. Well SCIMW-25 is situated in the area of the former depressed trackage between buildings H213 and H314. This area appears to be a primary surface water collection point.

Wells located along the Clinton and Brooklyn Basin shorelines are tidally influenced, while interior wells and those adjacent to the concrete bulkhead are not. Groundwater level measurements were obtained from tidally influenced wells first to minimize the potential discrepancies in elevation during the event.

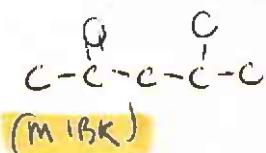
Monitoring and Chemical Data

The data generated to date suggests that impacts resulting from petroleum hydrocarbons are widespread at the site, with concentrations in specific source areas remaining relatively high. Chemical and metal impacts resulting from other previous site activities appear localized to their respective area of use. Specific results of interest for each of the events are outlined below.

December 1999 Chemical Results

- TEH as diesel was non-detect in wells SCIMW-5 through SCIMW-22, and SCIMW-30 and SCIMW-35. The concentrations of TEH in the other wells ranged from 56 ppb to a high concentration of 7,400 ppb at SCIMW-2.
- Chlorinated pesticide analyses were conducted on samples collected from wells SCIMW-6, SCIMW-7, SCIMW-23 and SCIMW-33. Well SCIMW-33 contained 1.7 parts per billion (ppb) of DDE¹. No detectable concentrations of chlorinated pesticides have been measured from samples collected from wells SCIMW-6 and SCIMW-23 during the previous four sampling events. No chlorinated pesticides have been detected from samples collected from well SCIMW-7 for the last three sampling events.
- Wells SCIMW-7, SCIMW-22, SCIMW-30, SCIMW-31D, SCIMW-32 and SCIMW-33 were tested for VOCs. Well SCIMW-7 contained concentrations of acetone (35 ppb), 2-Butanone (MEK @ 31 ppb), chloroethane (890 ppb), cis-1,1 dichloroethane (1,1 DCA @ 580 ppb), cis-1,2 dichloroethane (1,2 DCA @ 6.2 ppb), cis 1,2 chloroethene (79 ppb), cis 1,2 dichloroethene (2,900 ppb), trans 1,2 DCE (120 ppb), 4-Methyl-2-Pentanone (17 ppb), 1,1,1-Trichloroethane (1,500 ppb), trichloroethene (250 ppb) and vinyl chloride (390 ppb). Carbon disulfide (16 ppb) was detected in well SCIMW-30. Chlorobenzene (160 ppb) was detected in well SCIMW-33. No detectable concentrations of VOCs were measured in the other wells.

¹ DDE= Dichlorodiphenyl Dichloroethene



Mr. Douglas Herman
Port of Oakland
June 15, 2000
SCI 133.009
Page 4

- A filtered sample from well SCIMW-24 was tested for PNAs. Naphthalene was detected at 45 ppb. Filtered samples from wells SCIMW-2, SCIMW-6, SCIMW-11, and SCIMW-28 were submitted for heavy metal analyses. Barium concentrations varied in these wells from 11 ppb to 330 ppb. Well SCIMW-2 also contained arsenic (6.6 ppb) and zinc (24 ppb), and well SCIMW-6 also contained copper (23 ppb), lead (4.3 ppb) and zinc (92 ppb).
- Lead analyses were also conducted on samples from wells SCIMW-20, SCIMW-24 and SCIMW-34. These wells were all non-detect for lead (less than 3 ppb). Lead has not been detected in samples from these wells during the last three events

April 2000 Chemical Results

- TVH as gasoline was detected in wells SCIMW-24 and SCIMW-34 at concentrations of 4,500 ppb and 57 ppb respectively. Benzene concentrations in these wells were 1,700 ppb and 8.6 ppb, respectively.
- TEH-d was detected in the sample from well SCIMW-23 at 250 ppb.
- Lead was detected in the sample from well SCIMW-24 (8.3 ppb). Lead has not been detected in the sample from well SCIMW-34 during the last three events

Table 8 includes historic data for cyanide, nitrate and phosphorous. No samples were analyzed for these compounds during either event and none are anticipated for future events. These data are presented herein to keep the entirety of analytical data for the monitoring wells intact.

ECOLOGICAL RESULTS

Table 3 presents ecological parameter test results of groundwater for the selected wells purged during each event. These parameters include field measurements of pH, Eh, TDS, temperature and DO. Selected wells also had groundwater samples submitted for laboratory analysis of TDS and dissolved organic carbon (DOC).

RECOMMENDED MODIFICATIONS TO THE SAMPLING PROGRAM

Based on a review of analytical data generated to date, SCI recommends the following modifications to the sampling program. These proposed modifications are also shown in Table 10. Monitoring of selected wells will be conducted on either a semiannual or annual basis and water level measurements, checking for the presence of free product, and removal of any accumulated free product will continue on a semianual basis.

What about E&P removal besides wells + smelters?

Mr. Douglas Herman
Port of Oakland
June 15, 2000
SCI 133.009
Page 5

- **Abandonment of Wells:** MW-1, SCIMW-5, SCIMW-11, SCIMW-14, SCIMW-17, SCIMW-20, SCIMW-25 and SCIMW-35 should be abandoned as sufficient data has been collected to develop an understanding of groundwater flow and quality issues in the area of these wells.
- **Water Level Only:** Wells MW-7, SCIMW-4, SCIMW-6, SCIMW-12 SCIMW-16, SCIMW-19, SCIMW-27 and SCIMW-32. Biological parameters will no longer be recorded in these wells.
- **TVH:** Reduce testing frequency from quarterly to semi-annually for wells SCIMW-24 and SCIMW-34. Discontinue testing of wells MW-6 and SCIMW-11. A
NO
- **TEH as Diesel and Motor Oil:** Reduce sampling frequency from quarterly to semi-annually for wells SCIMW-23, SCIMW-24 and SCIMW-34. Decrease sampling of SCIMW-2 from quarterly to annually. Discontinue sampling of wells MW-6, SCIMW-6, SCIMW-11, SCIMW-12, SCIMW-16, SCIMW-19, SCIMW-27 and SCIMW-32.
- **Solvents:** Discontinue testing of wells: SCIMW-22 and SCIMW-32.
- **PNAs:** Reduce frequency of testing from semi-annually to annually for well SCIMW-24.
- **Pesticides:** Discontinue testing of pesticides in well SCIMW-6 and SCIMW-23.
- **Lead:** Discontinue testing of wells SCIMW-20, SCIMW-24 and SCIMW-34.
- **Heavy Metals:** Discontinue testing of wells SCIMW-6 and SCIMW-11. (a)
water only
- **Biological Parameters (pH, Eh and DO):** Will be decreased to a semiannual or annual basis depending on the sampling program for each well.
- **Biological Parameters (TDS and DOC):** Discontinue laboratory analysis. OK
issued soon
- **MTBE:** In response to ACHCSA's May 11, 2000 letter, requesting MTBE analysis, the monitoring program will be amended to add MTBE analysis for samples from wells MW-3, MW-4, MW-5, SCIMW-21, SCIMW-26, SCIMW-29, SCIMW-34. The samples will be analyzed initially using EPA Method 8240; any detectable MTBE concentrations will be confirmed using EPA Method 8260 (Appendix D). If MTBE is not detected above normal detection limits, it will be eliminated from the monitoring program. OK

Mr. Douglas Herman
Port of Oakland
June 15, 2000
SCI 133.009
Page 6

WASTE DISPOSAL ACTIVITES

On May 5, 2000, a representative from Performance Excavators, oversaw the removal of seven drums containing purge water and/or product from groundwater monitoring activities conducted at the site. These drums were transported under a Uniform Hazardous Waste Manifest to an appropriate disposal facility (Appendix C). One empty drum was transported to a recycler.

ONGOING MONITORING

The next groundwater monitoring event as proposed herein will be the annual event scheduled to occur in the fall of 2000. SCI will implement changes to the groundwater monitoring program recommended in this report upon approval by the ACHCSA, at that time.

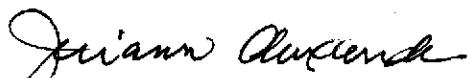
If you have any questions, please call either of the undersigned at (925) 299-7960.

Yours very truly,

Subsurface Consultants, Inc.



Emily Silverman
Staff Geologist



Jeriann Alexander
Civil Engineer 40469 (exp. 3/31/03)
Registered Environmental Assessor 03130 (exp. 7/31/00)

ES: JNA: rm\133.009\qtr1299.doc

6 copies submitted

Mr. Douglas Herman
Port of Oakland
June 15, 2000
SCI 133.009
Page 7

Tables: Table 1 - Groundwater Monitoring Program
Table 2 - Summary of Groundwater Elevation Data
Table 3 - Ecological Parameter Results in Groundwater
Table 4 - Petroleum Hydrocarbon, BTEX, Pesticide and PCB Concentrations in Groundwater
Table 5 - Volatile Organic Concentrations in Groundwater
Table 6 - Semi-Volatile Organic Concentrations in Groundwater
Table 7 - Polynuclear Aromatic Concentrations in Groundwater
Table 8 - Heavy Metal Concentrations in Groundwater
Table 9 - Cyanide, Nitrate and Phosphorus Concentrations in Groundwater
Table 10 – Proposed Modifications to Groundwater Monitoring Program

Illustrations: Plate 1 - Vicinity Map
Plate 2 - Groundwater Surface Elevation Contours: December 1999 Event
Plate 3 - Groundwater Surface Elevation Contours: April 2000

Appendices: A - Well Sampling Forms
B - Analytical Test Reports and Chain-of-Custody Records
C - Uniform Hazardous Waste Manifest
D – ACHCSA Letter, May 11, 2000

T
Groundwater Monitoring Program
Ninth Avenue Terminal, Port of Oakland
November 1999

Subsurface Consultants, Inc.

Monitoring Well ID	TVH/BTEX (EPA 8015m/8020)	TEHd, mo (8015m; w/ silica gel clean-up)	VOCs (EPA 8260/8240 list)	PNAs (EPA 8270; Not Filtered)	PNAs (EPA 8270; Filtered)	Pesticides (EPA 8080)	PCBs (EPA 8080)	Heavy Metals Filtered (EPA 6010/7000; Filtered)	Lead (EPA 6010/ 7000; Filtered)	pH	Eh	TDS	Dissolved Organic Carbon (EPA 9060)	Dissolved Oxygen	Water Levels	Free Product Removal
MW-1		A								A				A	Q	
MW-2		A								A				A	Q	
MW-3		A								A				A	Q	
MW-4	A	A								A				A	Q	Q
MW-5	SA (No TVH)	SA								SA				SA	Q	
MW-6	SA	SA								SA				SA	Q	Q
MW-7															Q	
SCIMW-1		A								A				A	Q	
SCIMW-2		Q						SA		Q	Q	Q	Q	Q	Q	
SCIMW-3		A								A				A	Q	
SCIMW-4		A								A				A	Q	
SCIMW-5		SA								Q				Q	Q	
SCIMW-6		SA				SA		SA		Q	Q	Q	Q	Q	Q	
SCIMW-7		A	SA			SA				SA				SA	Q	
SCIMW-8		A								A				A	Q	
SCIMW-9		A								A				A	Q	
SCIMW-10		A								A				A	Q	
SCIMW-11		SA						SA		Q	Q	Q	Q	Q	Q	
SCIMW-12		SA								Q	Q	Q	Q	Q	Q	
SCIMW-13		A								A				A	Q	
SCIMW-14		SA								Q	Q	Q	Q	Q	Q	
SCIMW-15		SA								SA				SA	Q	
SCIMW-16		A								A				A	Q	
SCIMW-17		A								A				A	Q	
SCIMW-18		A								A				A	Q	
SCIMW-19		A								A				A	Q	
SCIMW-20		A							A		A			A	Q	
SCIMW-21		A								A	A			A	Q	
SCIMW-22		A	SA								SA			SA	Q	

T
Groundwater Monitoring Program
Ninth Avenue Terminal, Port of Oakland
November 1999

Subsurface Consultants, Inc.

Monitoring Well ID	TVH/ BTEX (EPA 8015m/ 8020)	TEHd, mo (8015m; w/ silica gel clean-up)	VOCs (EPA 8260/ 8240 list)	PNAs (EPA 8270; Not Filtered)	PNAs (EPA 8270; Filtered)	Pesticides (EPA 8080)	PCBs (EPA 8080)	Heavy Metals Filtered (EPA 6010/ 7000; Filtered)	Lead (EPA 6010/ 7000; Filtered)	pH	Eh	TDS	Dissolved Organic Carbon (EPA 9060)	Dissolved Oxygen	Water Levels	Free Product Removal
SCIMW-23		Q				SA				Q	Q	Q	Q	Q	Q	
SCIMW-24	Q	Q			SA				Q	Q	Q	Q	Q	Q	Q	
SCIMW-25															Q	
SCIMW-26	A										A			A	Q	
SCIMW-27	A										A			A	Q	
SCIMW-28	A							SA			SA			SA	Q	
SCIMW-29															Q	
SCIMW-30	A	SA									SA			SA	Q	
SCIMW-31D		SA									SA			SA	Q	
SCIMW-32	A	SA									SA			SA	Q	
SCIMW-33	A	SA				A					SA			SA	Q	
SCIMW-34	Q	Q							Q	Q	Q	Q	Q	Q	Q	
SCIMW-35		SA									Q			Q	Q	

Notes:

Q = Quarterly - conducted each quarter (September 1998, December 1998, March 1999, May 1999, August 1999 and December 1999)

SA = Semi-Annually - conducted during the first and third quarterly events (September 1998, March 1999, December 1999)

A = Annually - conducted during the first quarter only (September 1998 and December 1999)

TVH = Total Volatile Hydrocarbons

BTEX = Benzene, Toluene, Ethylbenzene and total Xylenes

TEH = Total Extractable Hydrocarbons

VOCs = Volatile Organic Compounds

SVOCs = Semi-Volatile Organic Compounds

PCBs = Polychlorinated Biphenyls

TDS = Total Dissolved Solids

Obtain one duplicate VOC sample semi-annually for QA/QC

Revised 11/99 in response to 4/16/99 ACHCSA letter.

TABLE 2
SUMMARY OF GROUNDWATER ELEVATION DATA
NINTH AVENUE TERMINAL STUDY AREA

DATE	GROUND WATER DEPTH (FEET)	GROUND WATER ELEVATION (FEET)	PRODUCT THICKNESS (INCHES)	DATE	GROUND WATER DEPTH (FEET)	GROUND WATER ELEVATION (FEET)	PRODUCT THICKNESS (INCHES)
------	------------------------------	-------------------------------------	----------------------------------	------	---------------------------------	--	----------------------------------

MW-1	TOC Elevation = 9.99						
9/20/93	5.20	4.79	none	2/28/1997	4.00	5.99	none
12/1/93	5.15	4.84	none	3/26/1997	4.80	5.19	none
3/31/94	4.09	5.90	none	5/5/1997	5.02	4.97	none
6/2/94	4.82	5.17	none	6/27/1997	5.12	4.87	none
9/30/94	5.63	4.36	none	7/23/1997	5.20	4.79	none
12/22/94	5.00	4.99	none	8/25/1997	5.20	4.79	none
4/10/95	4.94	5.05	none	9/25/1997	5.28	4.71	none
7/24/95	5.02	4.97	none	10/30/1997	5.40	4.59	none
11/10/95	5.52	4.47	none	12/3/1997	5.07	4.92	none
2/20/96	4.49	5.50	none	12/30/1997	5.13	4.86	none
5/23/96	5.04	4.95	none	1/28/1998	4.95	5.04	none
6/28/96	5.13	4.86	none	3/11/1998	4.75	5.24	none
7/29/96	5.21	4.78	none	3/30/1998	4.82	5.17	none
9/3/96	5.37	4.62	none	4/27/1998	4.92	5.07	none
9/9/96	5.65	4.34	none	6/1/1998	4.97	5.02	none
9/18/96	5.35	4.64	none	6/26/1998	5.05	4.94	none
9/23/96	5.36	4.63	none	9/17/1998	5.31	4.68	none
9/30/96	5.39	4.60	none	12/7/1998	5.23	4.76	none
10/28/96	5.09	4.90	none	5/4/1999	5.21	4.78	none
12/2/96	4.80	5.19	none	8/25/1999	7.11	2.88	none
12/30/96	4.25	5.74	none	11/29/1999	5.40	4.59	none
1/16/97	4.37	5.62	none	4/4/2000	5.30	4.69	none

MW-2	TOC Elevation = 10.32						
9/20/93	4.40	5.92	none	2/28/1997	3.88	6.44	none
12/1/93	4.75	5.57	none	3/26/1997	3.83	6.49	none
3/31/94	5.01	5.31	none	5/5/1997	3.85	6.47	none
6/2/94	4.61	5.71	none	6/27/1997	3.77	6.55	none
9/30/94	4.93	5.39	none	7/23/1997	3.88	6.44	none
12/22/94	4.43	5.89	none	8/25/1997	3.88	6.44	none
4/10/95	4.03	6.29	none	9/25/1997	3.95	6.37	none
7/24/95	4.41	5.91	none	10/30/1997	5.32	5.00	none
11/10/95	4.59	5.73	none	12/3/1997	4.98	5.34	none
2/20/96	3.81	6.51	none	12/30/1997	4.95	5.37	none
5/23/96	4.41	5.91	none	1/28/1998	4.96	5.36	none
6/28/96	3.81	6.51	none	3/11/1998	5.02	5.30	none
7/29/96	3.81	6.51	none	3/30/1998	4.45	5.87	none
9/3/96	3.98	6.34	none	4/27/1998	4.62	5.70	none
9/9/96	4.00	6.32	none	6/1/1998	5.15	5.17	none
9/18/96	4.08	6.24	none	6/26/1998	4.77	5.55	none
9/23/96	4.08	6.24	none	9/17/1998	5.03	5.29	none
9/30/96	4.08	6.24	none	12/7/1998	4.96	5.36	none
10/28/96	4.34	5.98	none	5/3/1999	4.85	5.47	none
12/2/96	4.30	6.02	none	8/25/1999	5.01	5.31	none
12/30/96	3.92	6.40	none	11/29/1999	5.05	5.27	none
1/16/97	3.99	6.33	none	4/4/2000	4.81	5.51	none

TABLE 2
SUMMARY OF GROUNDWATER ELEVATION DATA
NINTH AVENUE TERMINAL STUDY AREA

DATE	GROUND WATER DEPTH (FEET)	GROUND WATER ELEVATION (FEET)	PRODUCT THICKNESS (INCHES)	DATE	GROUND WATER DEPTH (FEET)	GROUND WATER ELEVATION (FEET)	PRODUCT THICKNESS (INCHES)
MW-3 TOC Elevation = 10.18							
9/20/93	15.20	-5.02+	none	3/26/1997	4.76	5.42	none
12/1/93	5.70	4.48	none	5/5/1997	4.69	5.49	none
3/31/94	4.23	5.95	none	6/27/1997	4.51	5.67	none
6/2/94	3.86	6.32	none	7/23/1997	4.58	5.60	none
9/30/94	5.44	4.74	none	8/25/1997	4.62	5.56	none
12/22/94	4.87	5.31	none	9/25/1997	4.53	5.65	none
4/10/95	7.64	2.54+	none	10/30/1997	4.70	5.48	none
7/24/95	3.62	6.56	none	12/3/1997	4.10	6.08	none
11/10/95	5.11	5.07	none	12/30/1997	4.59	5.59	none
2/20/96	4.14	6.04	none	1/28/1998	4.59	5.59	none
5/23/96	4.49	5.69	none	3/11/1998	4.48	5.70	none
6/28/96	—	—	—	3/30/1998	4.31	5.87	none
7/29/96	4.64	5.54	none	4/27/1998	4.26	5.92	none
9/3/96	4.48	5.70	none	6/1/1998	3.92	6.26	none
9/18/96	6.42	3.76+	none	6/26/1998	—	—	—
9/23/96	6.06	4.12	none	9/17/1998	4.35	5.83	none
9/30/96	5.18	5.00	none	12/7/1998	3.56	6.62	none
10/28/96	4.83	5.35	none	5/4/1999	4.45	5.73	none
12/2/96	4.84	5.34	none	8/25/1999	6.34	3.84	none
12/30/96	4.84	5.34	none	11/29/1999	4.74	5.44	none
1/16/97	4.73	5.45	none	4/4/2000	4.51	5.67	none
3/5/97	4.69	5.49	none				
MW-4 TOC Elevation = 11.98							
9/20/93	5.80	6.18	8.04	2/28/1997	3.78	8.20	trace
12/1/93	4.10	7.88	trace	3/26/1997	3.90	8.08	trace
3/31/94	4.20	7.78	6.96	5/5/1997	3.92	8.06	0.13
6/2/94	3.88	8.10	6.00	6/27/1997	4.11	7.87	0.50
9/30/94	5.80	6.18	12.00	7/23/1997	4.30	7.68	trace
12/22/94	3.47	8.51	10.08	8/25/1997	3.55	8.43	trace
4/10/95	3.80	8.18	0.00	9/25/1997	3.91	8.07	trace
5/16/95	3.07	8.91	NA	10/30/1997	4.98	7.00	0.13
7/24/95	3.65	8.33	0.00	12/3/1997	3.60	8.38	0.50
11/10/95	NA	NA	0.00	12/30/1997	3.52	8.46	trace
2/20/96	NA	NA	NA	1/28/1998	3.02	8.96	0.63
5/23/96	2.96	9.02	0.00	3/11/1998	3.28	8.70	trace
6/28/96	3.93	8.05	2.38	3/30/1998	3.29	8.69	trace
7/29/96	5.09	6.89	0.50	4/27/1998	3.55	8.43	0.25
9/3/96	4.65	7.33	0.25	6/1/1998	3.02	8.96	0.19
9/9/96	5.15	6.83	0.50	6/26/1998	3.75	8.23	trace
9/18/96	5.45	6.53	0.13	9/17/1998	4.45	7.53	0.25
9/23/96	4.80	7.18	0.38	12/7/1998	3.35	8.63	0.38
9/30/96	4.88	7.10	0.06	5/4/1999		Well Inaccessible	
10/28/96	5.12	6.86	0.25	8/25/1999	4.65	7.33	0.85
12/2/96	3.22	8.76	2.00	11/29/1999	5.17	6.81	0.38
12/30/96	2.94	9.04	0.25	4/4/2000	No Measurements Taken		trace
1/16/97	3.22	8.76	trace				

TABLE 2
SUMMARY OF GROUNDWATER ELEVATION DATA
NINTH AVENUE TERMINAL STUDY AREA

DATE	GROUND WATER DEPTH (FEET)	GROUND WATER ELEVATION (FEET)	PRODUCT THICKNESS (INCHES)	DATE	GROUND WATER DEPTH (FEET)	GROUND WATER ELEVATION (FEET)	PRODUCT THICKNESS (INCHES)
MW-5 TOC Elevation = 11.84							
4/10/95	4.64	7.20	none	6/27/1997	5.45	6.39	none
7/24/95	5.24	6.60	none	7/23/1997	5.39	6.45	none
11/10/95	5.38	6.46	none	8/25/1997	5.18	6.66	none
2/20/96	2.69	9.15	none	9/25/1997	5.40	6.44	none
5/23/96	2.67	9.17	none	10/30/1997	5.45	6.39	none
6/28/96	5.29	6.55	none	12/3/1997	2.42	9.42	none
7/29/96	5.35	6.49	none	12/30/1997	5.04	6.80	none
9/3/96	5.44	6.40	none	1/28/1998	2.79	9.05	none
9/9/96	5.45	6.39	none	3/11/1998	4.54	7.30	none
9/18/96	5.51	6.33	none	3/30/1998	4.60	7.24	none
9/23/96	5.51	6.33	none	4/27/1998	5.18	6.66	none
9/30/96	5.49	6.35	none	6/1/1998	3.17	8.67	none
10/28/96	5.56	6.28	none	6/26/1998	5.31	6.53	none
12/2/96	4.64	7.20	none	9/17/1998	5.44	6.40	none
12/30/96	2.42	9.42	none	12/7/1998	3.79	8.05	none
1/16/97	3.46	8.38	none	5/3/1999	5.25	6.59	none
2/28/97	5.14	6.70	none	8/25/1999	5.46	6.38	none
3/26/97	5.28	6.56	none	11/29/1999	5.31	6.53	none
5/5/97	5.39	6.45	none	4/4/2000	5.28	6.56	none
MW-6 TOC Elevation = 11.86							
4/10/95	4.12	7.74	12.00	6/27/1997	4.82	7.04	0.50
7/24/95	5.19	6.67	13.20	7/23/1997	—	—	—
11/10/95	NA	NA	NA	8/25/1997	4.50	7.36	trace
2/20/96	NA	NA	NA	9/25/1997	3.94	7.92	7.25
5/23/96	NA	NA	4.50	10/30/1997	5.06	6.80	2.00
6/28/96	4.89	6.97	3.00	12/3/1997	4.88	6.98	7.00
7/29/96	5.00	6.86	1.00	12/30/1997	4.53	7.33+	0.25
9/3/96	5.19	6.67	0.50	1/28/1998	4.47	7.39	0.38
9/9/96	5.29	6.57	trace	3/11/1998	4.35	7.51	trace
9/18/96	5.34	6.52	trace	3/30/1998	4.45	7.41	trace
9/23/96	5.17	6.69	0.13	4/27/1998	4.83	7.03	2.00
9/30/96	5.10	6.76	0.13	6/1/1998	4.54	7.32	1.50
10/28/96	5.23	6.63	0.13	6/26/1998	5.02	6.84	3.00
12/2/96	3.96	7.90	1.00	9/17/1998	5.24	6.62	4.00
12/30/96	4.55	7.31	0.33	12/7/1998	3.83	8.03	1.75
1/16/97	4.23	7.63	trace	5/4/1999	4.65	7.21	0.50
2/28/97	4.54	7.32	0.50	8/25/1999	5.25	6.61	1.15
3/26/97	4.54	7.32	trace	11/29/1999	4.88	6.98	0.67
5/5/97	4.82	7.04	0.50	4/4/2000	No Measurements Taken	—	trace

TABLE 2
SUMMARY OF GROUNDWATER ELEVATION DATA
NINTH AVENUE TERMINAL STUDY AREA

DATE	GROUND WATER DEPTH (FEET)	GROUND WATER ELEVATION (FEET)	PRODUCT THICKNESS (INCHES)	DATE	GROUND WATER DEPTH (FEET)	GROUND WATER ELEVATION (FEET)	PRODUCT THICKNESS (INCHES)
MW-7 TOC Elevation = 10.13							
4/10/95	4.41	5.72	none	6/27/1997	3.71	6.42	none
7/24/95	3.72	6.41	none	7/23/1997	—	—	—
11/10/95	4.78	5.35	none	8/25/1997	3.73	6.40	none
2/20/96	4.13	6.00	none	9/25/1997	3.75	6.38	none
5/23/96	4.69	5.44	none	10/30/1997	3.88	6.25	none
6/28/96	3.81	6.32	none	12/3/1997	3.58	6.55	none
7/29/96	4.32	5.81	none	12/30/1997	3.67	6.46	none
9/3/96	4.65	5.48	none	1/28/1998	3.48	6.65	none
9/9/96	4.79	5.34	none	3/11/1998	3.64	6.49	none
9/18/96	4.45	5.68	none	3/30/1998	3.65	6.48	none
9/23/96	4.28	5.85	none	4/27/1998	3.26	6.87	none
9/30/96	4.18	5.95	none	6/1/1998	3.67	6.46	none
10/28/96	4.48	5.65	none	6/26/1998	3.63	6.50	none
12/2/96	4.88	5.25	none	9/17/1998	3.75	6.38	none
12/30/96	3.62	6.51	none	12/7/1998	3.82	6.31	none
1/16/97	3.65	6.48	none	5/3/1999	3.67	6.46	none
2/28/97	3.71	6.42	none	8/25/1999	3.80	6.33	none
3/26/97	3.71	6.42	none	11/29/1999	4.00	6.13	none
5/5/97	3.80	6.33	none	4/4/2000	3.67	6.46	none
SCIMW-1 TOC Elevation = 10.37							
5/23/96	5.28	5.09	none	8/25/1997	5.41	4.96	none
6/28/96	5.75	4.62	none	9/25/1997	5.60	4.77	none
7/29/96	5.81	4.56	none	10/30/1997	5.79	4.58	none
9/3/96	5.98	4.39	none	12/3/1997	4.80	5.57	none
9/9/96	6.04	4.33	none	12/30/1997	4.94	5.43	none
9/18/96	6.04	4.33	none	1/28/1998	4.59	5.78	none
9/23/96	6.07	4.30	none	3/11/1998	4.70	5.67	none
9/30/96	6.00	4.37	none	3/30/1998	4.62	5.75	none
10/28/96	6.10	4.27	none	4/27/1998	4.84	5.53	none
12/2/96	5.52	4.85	none	6/1/1998	4.61	5.76	none
12/30/96	4.66	5.71	none	6/26/1998	4.94	5.43	none
1/16/97	5.08	5.29	none	9/17/1998	5.35	5.02	none
2/28/97	5.38	4.99	none	12/7/1998	4.81	5.56	none
3/26/97	5.54	4.83	none	5/4/1999	5.16	5.21	none
5/5/97	5.86	4.51	none	8/25/1999	5.85	4.52	none
6/27/97	5.76	4.61	none	11/29/1999	5.81	4.56	none
7/23/97	5.59	4.78	none	4/4/2000	5.10	5.27	none
SCIMW-2 TOC Elevation = 9.92							
Tidally Influenced							
5/23/96	5.88	4.04	none	8/25/1997	5.90	4.02	none
6/28/96	7.33	2.59	none	9/25/1997	3.81	6.11	none
7/29/96	7.43	2.49	none	10/30/1997	3.32	6.60	none
9/3/96	6.54	3.38	none	12/3/1997	3.54	6.38	none
9/9/96	4.67	5.25	none	12/30/1997	3.60	6.32	none
9/18/96	6.50	3.42	none	1/28/1998	2.42	7.50	none
9/23/96	3.78	6.14	none	3/11/1998	3.33	6.59	none
9/30/96	6.18	3.74	none	3/30/1998	7.08	2.84	none
10/28/96	3.72	6.20	none	4/27/1998	7.36	2.56	none
12/2/96	6.60	3.32	none	6/1/1998	5.78	4.14	none
12/30/96	4.57	5.35	none	6/26/1998	7.02	2.90	none
1/16/97	6.10	3.82	none	9/17/1998	5.85	4.07	none
2/28/97	7.04	2.88	none	12/7/1998	6.40	3.52	none
3/26/97	6.59	3.33	none	5/3/1999	5.40	4.52	none
5/5/97	7.03	2.89	none	8/25/1999	6.92	3.00	none
6/27/97	6.50	3.42	none	11/29/1999	6.07	3.85	none
7/23/97	7.23	2.69	none	4/4/2000	7.09	2.83	none

TABLE 2
SUMMARY OF GROUNDWATER ELEVATION DATA
NINTH AVENUE TERMINAL STUDY AREA

DATE	GROUND WATER DEPTH (FEET)	GROUND WATER ELEVATION (FEET)	PRODUCT THICKNESS (INCHES)	DATE	GROUND WATER DEPTH (FEET)	GROUND WATER ELEVATION (FEET)	PRODUCT THICKNESS (INCHES)
------	------------------------------	-------------------------------------	----------------------------------	------	---------------------------------	--	----------------------------------

SCIMW-3	TOC Elevation = 11.87						
5/23/96	4.65	7.22	none	8/25/1997	5.10	6.77	none
6/28/96	4.86	7.01	none	9/25/1997	5.14	6.73	none
7/29/96	5.03	6.84	none	10/30/1997	5.55	6.32	none
9/3/96	5.20	6.67	none	12/3/1997	5.30	6.57	none
9/9/96	5.28	6.59	none	12/30/1997	5.13	6.74	none
9/18/96	5.24	6.63	none	1/28/1998	4.71	7.16	none
9/23/96	5.26	6.61	none	3/11/1998	—	—	—
9/30/96	5.31	6.56	none	3/30/1998	4.13	7.74	none
10/17/96	5.43	6.44	none	4/27/1998	4.02	7.85	none
10/28/96	5.58	6.29	none	6/1/1998	4.30	7.57	none
12/2/96	5.78	6.09	none	6/26/1998	4.11	7.76	none
12/30/96	5.49	6.38	none	9/17/1998	7.58	4.29	none
1/16/97	5.41	6.46	none	12/7/1998	5.56	6.31	none
2/28/97	5.27	6.60	none	5/3/1999	4.92	6.95	none
3/26/97	4.98	6.89	none	8/25/1999	5.30	6.57	none
5/5/97	4.93	6.94	none	11/29/1999	5.70	6.17	none
6/27/97	4.83	7.04	none	4/4/2000	4.87	7.00	none
7/23/97	4.94	6.93	none				

SCIMW-4	TOC Elevation = 10.03						
9/9/96	4.53	5.50	none	10/30/1997	4.03	6.00	none
9/18/96	4.54	5.49	none	12/3/1997	2.25	7.78	none
9/23/96	4.32	5.71	none	12/30/1997	2.77	7.26	none
9/30/96	4.37	5.66	none	1/28/1998	2.95	7.08	none
10/28/96	3.75	6.28	none	3/11/1998	1.95	8.08	none
12/2/96	2.09	7.94	none	3/30/1998	2.13	7.90	none
12/30/96	1.00	9.03	none	4/27/1998	2.45	7.58	none
1/16/97	1.60	8.43	none	6/1/1998	2.03	8.00	none
2/28/97	2.16	7.87	none	6/26/1998	2.95	7.08	none
3/26/97	2.68	7.35	none	9/17/1998	3.83	6.20	none
5/5/97	3.21	6.82	none	12/7/1998	1.95	8.08	none
6/27/97	3.13	6.90	none	5/4/1999	2.65	7.38	none
7/23/97	3.65	6.38	none	8/25/1999	3.75	6.28	none
8/25/97	3.41	6.62	none	11/29/1999	3.21	6.82	none
9/25/97	3.90	6.13	none	4/4/2000	2.71	7.32	none

SCIMW-5	TOC Elevation = 10.19						
9/9/96	5.56	4.63	none	10/30/1997	4.37	5.82	none
9/18/96	4.68	5.51	none	12/3/1997	4.21	5.98	none
9/23/96	4.42	5.77	none	12/30/1997	4.20	5.99	none
9/30/96	4.44	5.75	none	1/28/1998	2.55	7.64	none
10/28/96	4.40	5.79	none	3/11/1998	4.38	5.81	none
12/2/96	4.95	5.24	none	3/30/1998	3.95	6.24	none
12/30/96	4.21	5.98	none	4/27/1998	3.86	6.33	none
1/16/97	4.07	6.12	none	6/1/1998	4.66	5.53	none
2/28/97	4.74	5.45	none	6/26/1998	3.90	6.29	none
3/26/97	4.53	5.66	none	9/17/1998	4.41	5.78	none
5/5/97	4.49	5.70	none	12/7/1998	4.55	5.64	none
6/27/97	4.63	5.56	none	5/3/1999	4.93	5.26	none
7/23/97	4.74	5.45	none	8/25/1999	4.48	5.71	none
8/25/97	4.40	5.79	none	11/29/1999	4.45	5.74	none
9/25/97	4.26	5.93	none	4/4/2000	6.65	3.54	none

TABLE 2
SUMMARY OF GROUNDWATER ELEVATION DATA
NINTH AVENUE TERMINAL STUDY AREA

DATE	GROUND WATER DEPTH (FEET)	GROUND WATER ELEVATION (FEET)	PRODUCT THICKNESS (INCHES)	DATE	GROUND WATER DEPTH (FEET)	GROUND WATER ELEVATION (FEET)	PRODUCT THICKNESS (INCHES)
SCIMW-6 TOC Elevation = 10.55							
9/9/96	5.86	4.69	none	10/30/1997	5.37	5.18	none
9/18/96	6.54	4.01	none	12/3/1997	5.29	5.26	none
9/23/96	5.47	5.08	none	12/30/1997	5.42	5.13	none
9/30/96	6.44	4.11	none	1/28/1998	3.56	6.99	none
10/28/96	5.93	4.62	none	3/1/1998	5.11	5.44	none
12/2/96	7.04	3.51	none	3/30/1998	6.46	4.09	none
12/30/96	5.60	4.95	none	4/27/1998	6.64	3.91	none
1/16/97	5.87	4.68	none	6/1/1998	6.04	4.51	none
2/28/97	7.00	3.55	none	6/26/1998	6.23	4.32	none
3/26/97	6.54	4.01	none	9/17/1998	6.17	4.38	none
5/5/97	6.72	3.83	none	12/7/1998	6.64	3.91	none
6/27/97	6.65	3.90	none	5/3/1999	6.16	4.39	none
7/23/97	6.60	3.95	none	8/25/1999	6.56	3.99	none
8/25/97	6.15	4.40	none	11/25/1999	6.55	4.00	none
9/25/97	5.11	5.44	none	4/4/2000	6.87	3.68	none
Tidally Influenced							
SCIMW-7 TOC Elevation = 12.26							
9/9/96	8.95	3.31+	none	10/30/1997	5.30	6.96	none
9/18/96	6.87	5.39	none	12/3/1997	4.85	7.41	none
9/23/96	6.95	5.31	none	12/30/1997	4.83	7.43	none
9/30/96	7.04	5.22	none	1/28/1998	4.65	7.61	none
10/28/96	7.40	4.86	none	3/1/1998	4.72	7.54	none
12/2/96	4.95	7.31	none	3/30/1998	4.77	7.49	none
12/30/96	4.73	7.53	none	4/27/1998	4.85	7.41	none
1/16/97	4.94	7.32	none	6/1/1998	4.70	7.56	none
2/28/97	4.85	7.41	none	6/26/1998	4.97	7.29	none
3/26/97	4.94	7.32	none	9/17/1998	6.52	5.74	none
5/5/97	5.13	7.13	none	12/7/1998	4.52	7.74	none
6/27/97	5.86	6.40	none	5/3/1999	4.86	7.40	none
7/23/97	6.25	6.01	none	8/25/1999	5.42	6.84	none
8/25/97	5.94	6.32	none	11/29/1999	6.70	5.56	none
9/25/97	5.93	6.33	none	4/4/2000	3.48	8.78	none
SCIMW-8 TOC Elevation = 12.81							
9/9/96	5.70	7.11	none	10/30/1997	5.61	7.20	none
9/18/96	5.81	7.00	none	12/3/1997	5.09	7.72	none
9/23/96	5.79	7.02	none	12/30/1997	4.19	8.62	none
9/30/96	5.89	6.92	none	1/28/1998	—	—	—
10/17/96	5.95	6.86	none	3/1/1998	—	—	—
10/28/96	6.13	6.68	none	3/30/1998	—	—	—
12/2/96	5.39	7.42	none	4/27/1998	5.06	7.75	none
12/30/96	4.98	7.83	none	6/1/1998	4.18	8.63	none
1/16/97	5.11	7.70	none	6/26/1998	5.17	7.64	none
2/28/97	5.42	7.39	none	9/17/1998	5.56	7.25	none
3/26/97	5.39	7.42	none	12/7/1998	5.17	7.64	none
5/5/97	5.40	7.41	none	5/3/1999	5.13	7.68	none
6/27/97	5.45	7.36	none	8/25/1999	6.95	5.86	none
7/23/97	—	—	—	11/29/1999	5.45	7.36	none
8/25/97	5.21	7.60	none	4/4/2000	5.10	7.71	none
9/25/97	5.49	7.32	none				

TABLE 2
SUMMARY OF GROUNDWATER ELEVATION DATA
NINTH AVENUE TERMINAL STUDY AREA

DATE	GROUND WATER DEPTH (FEET)	GROUND WATER ELEVATION (FEET)	PRODUCT THICKNESS (INCHES)	DATE	GROUND WATER DEPTH (FEET)	GROUND WATER ELEVATION (FEET)	PRODUCT THICKNESS (INCHES)
SCIMW-9 TOC Elevation = 11.32							
9/9/96	4.92	6.40	none	10/30/1997	4.90	6.42	none
9/18/96	4.94	6.38	none	12/3/1997	—	—	—
9/23/96	4.94	6.38	none	12/30/1997	4.60	6.72	none
9/30/96	4.92	6.40	none	1/28/1998	4.40	6.92	none
10/17/96	4.97	6.35	none	3/11/1998	4.11	7.21	none
10/28/96	5.07	6.25	none	3/30/1998	4.38	6.94	none
12/2/96	4.71	6.61	none	4/27/1998	4.35	6.97	none
12/30/96	4.51	6.81	none	6/1/1998	4.08	7.24	none
1/16/97	4.66	6.66	none	6/26/1998	4.42	6.90	none
3/26/97	4.60	6.72	none	9/17/1998	4.68	6.64	none
5/5/97	4.65	6.67	none	12/7/1998	4.52	6.80	none
6/27/97	4.71	6.61	none	5/3/1999	4.51	6.81	none
7/23/97	4.77	6.55	none	8/25/1999	4.72	6.60	none
8/25/97	4.72	6.60	none	11/29/1999	4.63	6.69	none
9/25/97	—	—	—	4/4/2000	4.25	7.07	none
SCIMW-10 TOC Elevation = 12.56							
9/9/96	4.61	7.95	none	10/30/1997	6.60	5.96	none
9/18/96	4.87	7.69	none	12/3/1997	—	—	—
9/23/96	4.81	7.75	none	12/30/1997	6.10	6.46	none
9/30/96	4.91	7.65	none	1/28/1998	4.97	7.59	none
10/17/96	5.03	7.53	none	3/11/1998	—	—	—
10/28/96	5.31	7.25	none	3/30/1998	5.36	7.20	none
12/2/96	5.15	7.41	none	4/27/1998	5.21	7.35	none
12/30/96	4.60	7.96	none	6/1/1998	5.18	7.38	none
1/16/97	4.69	7.87	none	6/26/1998	5.17	7.39	none
2/28/97	4.47	8.09	none	9/17/1998	4.92	7.64	none
3/26/97	4.33	8.23	none	12/7/1998	6.07	6.49	none
5/5/97	4.21	8.35	none	5/3/1999	5.25	7.31	none
6/27/97	5.71	6.85	none	8/25/1999	6.65	5.91	trace
7/23/97	5.96	6.60	none	11/29/1999	6.58	5.98	none
8/25/97	6.07	6.49	none	4/4/2000	4.08	8.48	none
9/25/97	5.90	6.66	none				
SCIMW-11 TOC Elevation = 9.49							
Tidally Influenced							
9/9/96	5.66	3.83	none	10/30/1997	3.81	5.68	none
9/18/96	6.39	3.10	none	12/3/1997	4.85	4.64	none
9/23/96	4.12	5.37	none	12/30/1997	1.63	7.86	none
9/30/96	6.24	3.25	none	1/28/1998	3.64	5.85	none
10/28/96	5.46	4.03	none	3/11/1998	3.37	6.12	none
12/2/96	6.03	3.46	none	3/30/1998	7.02	2.47	none
12/30/96	3.56	5.93	none	4/27/1998	7.33	2.16	none
1/16/97	5.17	4.32	none	6/1/1998	—	—	—
2/28/97	6.60	2.89	none	6/26/1998	—	—	—
3/26/97	6.85	2.64	none	9/23/1998	4.77	4.72	none
5/5/97	6.94	2.55	none	12/7/1998	6.17	3.32	none
6/27/97	5.94	3.55	none	5/3/1999	6.01	3.48	none
7/23/97	7.18	2.31	none	8/25/1999	4.31	5.18	none
8/25/97	5.04	4.45	none	11/29/1999	5.42	4.07	none
9/25/97	3.31	6.18	none	4/4/2000	7.00	2.49	none

TABLE 2
SUMMARY OF GROUNDWATER ELEVATION DATA
NINTH AVENUE TERMINAL STUDY AREA

DATE	GROUND WATER DEPTH (FEET)	GROUND WATER ELEVATION (FEET)	PRODUCT THICKNESS (INCHES)	DATE	GROUND WATER DEPTH (FEET)	GROUND WATER ELEVATION (FEET)	PRODUCT THICKNESS (INCHES)
SCIMW-12 TOC Elevation = 10.94							
9/9/96	6.85	4.09	none	10/30/1997	5.24	5.70	none
9/18/96	7.24	3.70	none	12/3/1997	6.53	4.41	none
9/23/96	5.59	5.35	none	12/30/1997	2.90	8.04	none
9/30/96	7.26	3.68	none	1/28/1998	5.11	5.83	none
10/28/96	7.00	3.94	none	3/11/1998	4.83	6.11	none
12/2/96	7.31	3.63	none	3/30/1998	7.22	3.72	none
12/30/96	5.12	5.82	none	4/27/1998	7.23	3.71	none
1/16/97	6.41	4.53	none	6/1/1998	7.00	3.94	none
2/28/97	7.19	3.75	none	6/1/1998	7.20	3.74	none
3/26/97	7.24	3.70	none	9/17/1998	6.80	4.14	none
5/5/97	7.26	3.68	none	12/7/1998	7.21	3.73	none
6/27/97	7.09	3.85	none	5/3/1999	7.19	3.75	none
7/23/97	7.24	3.70	none	8/25/1999	6.91	4.03	none
8/25/97	6.61	4.33	none	11/29/1999	6.91	4.03	none
9/25/97	4.69	6.25	none	4/4/2000	6.41	4.53	none
Tidally Influenced							
SCIMW-13 TOC Elevation = 12.56							
9/9/96	5.35	7.21	none	10/30/1997	5.75	6.81	none
9/18/96	5.47	7.09	none	12/3/1997	5.55	7.01	none
9/23/96	5.51	7.05	none	12/30/1997	5.43	7.13	none
9/30/96	4.94	7.62	none	1/28/1998	5.08	7.48	none
10/17/96	5.70	6.86	none	3/11/1998	4.46	8.10	none
10/28/96	5.86	6.70	none	3/30/1998	4.42	8.14	none
12/2/96	5.91	6.65	none	4/27/1998	4.22	8.34	none
12/30/96	5.70	6.86	none	6/1/1998	4.24	8.32	none
1/16/97	5.63	6.93	none	6/26/1998	4.25	8.31	none
2/28/97	5.31	7.25	none	9/17/1998	5.14	7.42	none
3/26/97	5.14	7.42	trace	12/7/1998	5.78	6.78	none
5/5/97	4.99	7.57	none	5/3/1999	4.61	7.95	none
6/27/97	4.92	7.64	none	8/25/1999	5.32	7.24	none
7/23/97	--	--	--	11/29/1999	5.83	6.73	none
8/25/97	--	--	--	4/4/2000	4.84	7.72	none
9/25/97	5.14	7.42	none				
SCIMW-14 TOC Elevation = 13.64							
9/9/96	8.28	5.36	none	10/30/1997	8.17	5.47	none
9/18/96	8.50	5.14	none	12/3/1997	7.58	6.06	none
9/23/96	8.18	5.46	none	12/30/1997	7.52	6.12	none
9/30/96	8.41	5.23	none	1/28/1998	7.19	6.45	none
10/28/96	8.43	5.21	none	3/11/1998	7.21	6.43	none
12/2/96	8.56	5.08	none	3/30/1998	7.41	6.23	none
12/30/96	7.89	5.75	none	4/27/1998	7.99	5.65	none
1/16/97	8.00	5.64	none	6/1/1998	7.59	6.05	none
2/28/97	8.48	5.16	none	6/26/1998	8.07	5.57	none
3/26/97	8.34	5.30	none	9/17/1998	8.16	5.48	none
5/5/97	8.30	5.34	none	12/7/1998	7.73	5.91	none
6/27/97	8.20	5.44	none	5/3/1999	7.64	6.00	none
7/23/97	8.30	5.34	none	8/25/1999	7.95	5.69	none
8/25/97	8.09	5.55	none	11/29/1999	8.34	5.30	none
9/25/97	7.81	5.83	none	4/4/2000	8.03	5.61	none

TABLE 2
SUMMARY OF GROUNDWATER ELEVATION DATA
NINTH AVENUE TERMINAL STUDY AREA

DATE	GROUND WATER DEPTH (FEET)	GROUND WATER ELEVATION (FEET)	PRODUCT THICKNESS (INCHES)	DATE	GROUND WATER DEPTH (FEET)	GROUND WATER ELEVATION (FEET)	PRODUCT THICKNESS (INCHES)
SCIMW-15 TOC Elevation = 13.45							
9/9/96	8.60	4.85	none	10/30/1997	--	--	--
9/18/96	8.61	4.84	none	12/3/1997	8.21	5.24	none
9/23/96	8.62	4.83	none	12/30/1997	8.23	5.22	none
9/30/96	8.51	4.94	none	1/28/1998	8.14	5.31	none
10/28/96	8.72	4.73	none	3/11/1998	--	--	--
12/2/96	8.91	4.54	none	3/30/1998	--	--	--
12/30/96	8.36	5.09	none	4/27/1998	--	--	--
1/16/97	8.44	5.01	none	6/1/1998	8.11	5.34	none
2/28/97	8.54	4.91	none	6/26/1998	8.00	5.45	none
3/26/97	8.57	4.88	none	9/17/1998	8.28	5.17	none
5/5/97	8.73	4.72	none	12/7/1998	8.63	4.82	none
6/27/97	8.42	5.03	none	5/3/1999	8.30	5.15	none
7/23/97	8.28	5.17	none	8/25/1999	8.75	4.70	none
8/25/97	8.31	5.14	none	11/29/1999	8.74	4.71	none
9/25/97	8.32	5.13	none	4/4/2000	8.28	5.17	none
SCIMW-16 TOC Elevation = 10.40							
9/9/96	3.59	6.81	none	10/30/1997	3.19	7.21	none
9/18/96	3.46	6.94	none	12/3/1997	3.22	7.18	none
9/23/96	3.44	6.96	none	12/30/1997	--	--	--
9/30/96	3.44	6.96	none	1/28/1998	--	--	--
10/28/96	4.39	6.01	none	3/11/1998	3.23	7.17	none
12/2/96	3.64	6.76	none	3/30/1998	3.24	7.16	none
12/30/96	3.19	7.21	none	4/27/1998	3.26	7.14	none
1/16/97	3.37	7.03	none	6/1/1998	3.10	7.30	none
2/28/97	3.47	6.93	none	6/26/1998	3.07	7.33	none
3/26/97	3.39	7.01	none	9/17/1998	3.36	7.04	none
5/5/97	3.27	7.13	none	12/7/1998	3.83	6.57	none
6/27/97	3.27	7.13	none	5/3/1999	3.72	6.68	none
7/23/97	3.39	7.01	none	8/25/1999	5.65	4.75	none
8/25/97	3.11	7.29	none	11/29/1999	3.74	6.66	none
9/25/97	3.35	7.05	none	4/4/2000	3.75	6.65	none
SCIMW-17 TOC Elevation = 10.14							
9/9/96	3.59	6.55	none	10/30/1997	3.17	6.97	none
9/18/96	2.83	7.31	none	12/3/1997	4.94	5.20+	none
9/23/96	2.96	7.18	none	12/30/1997	2.67	7.47	none
9/30/96	3.00	7.14	none	1/28/1998	2.25	7.89	none
10/28/96	3.04	7.10	none	3/11/1998	2.25	7.89	none
12/2/96	2.86	7.28	none	3/30/1998	2.35	7.79	none
12/30/96	0.18	9.96	none	4/27/1998	2.36	7.78	none
1/16/97	2.47	7.67	none	6/1/1998	2.27	7.87	none
2/28/97	2.63	7.51	none	6/26/1998	4.51	5.63	none
3/26/97	2.51	7.63	none	9/17/1998	3.20	6.94	none
5/5/97	2.63	7.51	none	12/7/1998	3.66	6.48	none
6/27/97	1.87	8.27	none	5/3/1999	3.02	7.12	none
7/23/97	5.61	4.53+	none	8/25/1999	4.95	5.19	none
8/25/97	3.65	6.49	none	11/29/1999	3.49	6.65	none
9/25/97	5.50	4.64+	none	4/4/2000	3.45	6.69	none

TABLE 2
SUMMARY OF GROUNDWATER ELEVATION DATA
NINTH AVENUE TERMINAL STUDY AREA

DATE	GROUND WATER DEPTH (FEET)	GROUND WATER ELEVATION (FEET)	PRODUCT THICKNESS (INCHES)	DATE	GROUND WATER DEPTH (FEET)	GROUND WATER ELEVATION (FEET)	PRODUCT THICKNESS (INCHES)
SCIMW-18 TOC Elevation = 10.81							
9/9/96	5.59	5.22+	none	10/30/1997	3.97	6.84	none
9/18/96	3.86	6.95	none	12/3/1997	3.85	6.96	none
9/23/96	3.82	6.99	none	12/30/1997	3.83	6.98	none
9/30/96	3.85	6.96	none	1/28/1998	3.57	7.24	none
10/17/96	4.00	6.81	none	3/1/1998	3.40	7.41	none
10/28/96	4.18	6.63	none	3/30/1998	3.36	7.45	none
12/2/96	4.06	6.75	none	4/27/1998	3.15	7.66	none
12/30/96	3.60	7.21	none	6/1/1998	3.09	7.72	none
1/16/97	3.83	6.98	none	6/26/1998	3.15	7.66	none
2/28/97	3.56	7.25	none	9/17/1998	3.58	7.23	none
3/26/97	4.70	6.11	none	12/7/1998	4.01	6.80	none
5/5/97	3.36	7.45	none	5/3/1999	3.25	7.56	none
6/27/97	3.17	7.64	none	8/25/1999	5.85	4.96	none
7/23/97	3.42	7.39	none	11/29/1999	4.14	6.67	none
8/25/97	3.49	7.32	none	4/4/2000	4.45	6.36	none
9/25/97	3.42	7.39	none				
SCIMW-19 TOC Elevation = 10.46							
9/9/96	4.30	6.16	none	10/30/1997	4.12	6.34	none
9/18/96	4.36	6.10	none	12/3/1997	3.11	7.35	none
9/23/96	4.32	6.14	none	12/30/1997	3.52	6.94	none
9/30/96	4.23	6.23	none	1/28/1998	2.91	7.55	none
10/28/96	4.45	6.01	none	3/11/1998	3.08	7.38	none
12/2/96	3.54	6.92	none	3/30/1998	3.16	7.30	none
12/30/96	2.59	7.87	none	4/27/1998	3.38	7.08	none
1/16/97	3.04	7.42	none	6/1/1998	3.00	7.46	none
2/28/97	3.69	6.77	none	6/26/1998	3.58	6.88	none
3/26/97	3.69	6.77	none	9/17/1998	4.08	6.38	none
5/5/97	3.82	6.64	none	12/7/1998	3.24	7.22	none
6/27/97	3.94	6.52	none	5/3/1999	3.54	6.92	none
7/23/97	3.89	6.57	none	8/25/1999	4.60	5.86	none
8/25/97	3.78	6.68	none	11/29/1999	4.00	6.46	none
9/25/97	4.02	6.44	none	4/4/2000	3.56	6.90	none
SCIMW-20 TOC Elevation = 9.11							
9/9/96	2.08	7.03	none	10/30/1997	2.02	7.09	none
9/18/96	2.27	6.84	none	12/3/1997	1.38	7.73	none
9/23/96	2.26	6.85	none	12/30/1997	1.61	7.50	none
9/30/96	2.34	6.77	none	1/28/1998	1.30	7.81	none
10/28/96	2.68	6.43	none	3/11/1998	1.35	7.76	none
12/2/96	1.45	7.66	none	3/30/1998	1.43	7.68	none
12/30/96	1.12	7.99	none	4/27/1998	1.51	7.60	none
1/16/97	1.44	7.67	none	6/1/1998	1.29	7.82	none
2/28/97	1.60	7.51	none	6/26/1998	1.76	7.35	none
3/26/97	1.54	7.57	none	9/17/1998	2.32	6.79	none
5/5/97	1.65	7.46	none	12/7/1998	1.71	7.40	none
6/27/97	1.92	7.19	none	5/3/1999	1.42	7.69	none
7/23/97	2.05	7.06	none	8/25/1999	2.19	6.92	none
8/25/97	1.62	7.49	none	11/29/1999	5.71	6.41	none
9/25/97	1.88	7.23	none	4/4/2000	1.52	7.59	none

TABLE 2
SUMMARY OF GROUNDWATER ELEVATION DATA
NINTH AVENUE TERMINAL STUDY AREA

DATE	GROUND WATER DEPTH (FEET)	GROUND WATER ELEVATION (FEET)	PRODUCT THICKNESS (INCHES)	DATE	GROUND WATER DEPTH (FEET)	GROUND WATER ELEVATION (FEET)	PRODUCT THICKNESS (INCHES)
SCIMW-21 TOC Elevation = 9.67							
5/5/97	2.23	7.44	none	3/30/1998	1.35	8.32	none
6/27/97	2.40	7.27	none	4/27/1998	1.41	8.26	none
7/23/97	2.75	6.92	none	6/1/1998	1.16	8.51	none
8/25/97	2.87	6.80	none	6/26/1998	1.76	7.91	none
9/25/97	3.00	6.67	none	9/17/1998	2.13	7.54	none
10/30/97	3.16	6.51	none	12/7/1998	1.71	7.96	none
12/3/97	2.21	7.46	none	5/3/1999	1.35	8.32	none
12/30/97	2.11	7.56	none	8/25/1999	1.35	8.32	none
1/28/98	1.67	8.00	none	11/29/1999	0.69	8.98	none
3/11/98	1.27	8.40	none	4/4/2000	0.50	9.17	none
SCIMW-22 TOC Elevation = 12.00							
5/5/97	3.78	8.22	none	3/30/1998	3.87	8.13	none
6/27/97	4.10	7.90	none	4/27/1998	4.21	7.79	none
7/23/97	4.34	7.66	none	6/1/1998	3.59	8.41	none
8/25/97	4.04	7.96	none	6/26/1998	4.21	7.79	none
9/25/97	4.31	7.69	none	9/17/1998	4.76	7.24	none
10/30/97	4.39	7.61	none	12/7/1998	3.93	8.07	none
12/3/97	4.05	7.95	none	5/3/1999	4.34	7.66	none
12/30/97	4.48	7.52	none	8/25/1999	5.71	6.29	none
1/28/98	4.03	7.97	none	11/29/1999	3.19	6.81	none
3/11/98	4.07	7.93	none	4/4/2000	4.50	7.50	none
SCIMW-23 TOC Elevation = 9.74							
5/5/97	4.19	5.55	none	3/30/1998	3.35	6.39	none
6/27/97	4.10	5.64	none	4/27/1998	--	--	--
7/23/97	4.43	5.31	none	6/1/1998	--	--	--
8/25/97	4.37	5.37	none	6/26/1998	--	--	--
9/25/97	--	--	--	9/17/1998	4.28	5.46	none
10/30/97	4.27	5.47	none	12/10/1998	3.35	6.39	none
12/3/97	3.24	6.50	none	5/3/1999	3.65	6.09	none
12/30/97	3.52	6.22	none	8/25/1999	4.35	5.39	none
1/28/98	3.02	6.72	none	11/29/1999	4.18	5.56	none
3/11/98	3.32	6.42	none	4/4/2000	6.95	2.79	none
SCIMW-24 TOC Elevation = 9.74							
5/5/97	5.30	4.44	none	3/30/1998	4.23	5.51	none
6/27/97	4.85	4.89	none	4/27/1998	4.55	5.19	none
7/23/97	4.79	4.95	none	6/1/1998	3.96	5.78	none
8/25/97	4.28	5.46	none	6/26/1998	4.21	5.53	none
9/25/97	4.45	5.29	none	9/17/1998	4.78	4.96	none
10/30/97	4.67	5.07	none	12/7/1998	3.95	5.79	none
12/3/97	3.63	6.11	none	5/3/1999	4.60	5.14	none
12/30/97	3.58	6.16	none	8/25/1999	5.15	4.59	0.50
1/28/98	3.58	6.16	none	11/29/1999	4.75	4.99	none
3/11/98	--	--	--	4/4/2000	4.69	5.05	none
SCIMW-25 TOC Elevation = 8.30							
5/5/97	1.00	7.30	none	3/30/1998	0.65	7.65	none
6/27/97	2.11	6.19	none	4/27/1998	0.73	7.57	none
7/23/97	1.94	6.36	none	6/1/1998	0.55	7.75	none
8/25/97	1.53	6.77	none	6/26/1998	0.75	7.55	none
9/25/97	1.46	6.84	none	9/17/1998	1.11	7.19	none
10/30/97	1.08	7.22	none	12/7/1998	0.86	7.44	none
12/3/97	0.87	7.43	none	5/3/1999	0.88	7.42	none
12/30/97	0.83	7.47	none	8/25/1999	1.23	7.07	none
1/28/98	0.70	7.60	none	11/29/1999	0.60	7.70	none
3/11/98	0.50	7.80	none	4/4/2000	0.42	7.88	none

TABLE 2
SUMMARY OF GROUNDWATER ELEVATION DATA
NINTH AVENUE TERMINAL STUDY AREA

DATE	GROUND WATER DEPTH (FEET)	GROUND WATER ELEVATION (FEET)	PRODUCT THICKNESS (INCHES)	DATE	GROUND WATER DEPTH (FEET)	GROUND WATER ELEVATION (FEET)	PRODUCT THICKNESS (INCHES)
SCIMW-26 TOC Elevation = 11.33							
5/5/97	3.18	8.15	none	3/30/1998	4.13	7.20	none
6/27/97	3.31	8.02	none	4/27/1998	3.93	7.40	none
7/23/97	3.46	7.87	none	6/1/1998	3.56	7.77	none
8/25/97	3.21	8.12	none	6/26/1998	3.65	7.68	none
9/25/97	3.42	7.91	none	9/17/1998	3.92	7.41	none
10/30/97	3.56	7.77	none	12/7/1998	3.25	8.08	none
12/3/97	2.55	8.78	none	5/3/1999	3.68	7.65	none
12/30/97	3.25	8.08	none	8/25/1999	3.61	7.72	none
1/28/98	2.93	8.40	none	11/29/1999	3.41	7.92	none
3/11/98	3.98	7.35	none	4/4/2000	3.90	7.43	none
SCIMW-27 TOC Elevation = 11.43							
5/5/97	4.98	6.45	none	3/30/1998	4.71	6.72	none
6/27/97	4.85	6.58	none	4/27/1998	4.53	6.90	none
7/23/97	4.80	6.63	none	6/1/1998	4.74	6.69	none
8/25/97	4.81	6.62	none	6/26/1998	4.74	6.69	none
9/25/97	4.85	6.58	none	9/17/1998	4.85	6.58	none
10/30/97	4.91	6.52	none	12/7/1998	4.77	6.66	none
12/3/97	4.74	6.69	none	5/4/1999	4.91	6.52	none
12/30/97	4.75	6.68	none	8/25/1999	4.95	6.48	none
1/28/98	4.37	7.06	none	11/29/1999	4.91	6.52	none
3/11/98	4.70	6.73	none	4/4/2000	3.78	7.65	none
SCIMW-28 TOC Elevation = 13.30							
5/5/97	4.96	8.34	none	3/30/1998	4.27	9.03	none
6/27/97	5.12	8.18	none	4/27/1998	4.41	8.89	none
7/23/97	—	—	—	6/1/1998	4.25	9.05	none
8/25/97	5.04	8.26	none	6/26/1998	4.70	8.60	none
9/25/97	5.23	8.07	none	9/17/1998	5.47	7.83	none
10/30/97	5.39	7.91	none	12/7/1998	4.64	8.66	none
12/3/97	4.47	8.83	none	5/3/1999	4.32	8.98	none
12/30/97	4.72	8.58	none	8/25/1999	5.44	7.86	none
1/28/98	4.16	9.14	none	11/29/1999	5.04	8.28	none
3/11/98	4.20	9.10	none	4/4/2000	3.56	9.74	none
SCIMW-29 TOC Elevation = 13.18							
5/15/97	5.70	7.48	none	3/30/1998	5.37	7.81	none
6/27/97	5.58	7.60	none	4/27/1998	5.48	7.70	none
7/23/97	5.63	7.55	none	6/1/1998	5.26	7.92	none
8/25/97	5.56	7.62	none	6/26/1998	5.50	7.68	none
9/25/97	5.61	7.57	none	9/17/1998	5.67	7.51	none
10/30/97	5.63	7.55	none	12/7/1998	5.24	7.94	none
12/3/97	5.23	7.95	none	5/3/1999	5.55	7.63	none
12/30/97	5.52	7.66	none	8/25/1999	5.95	7.23	none
1/28/98	5.29	7.89	none	11/29/1999	5.71	7.47	none
3/11/98	5.37	7.81	none	4/4/2000	5.59	7.59	none
SCIMW-30 TOC Elevation = 12.34							
10/30/97	4.81	7.53	none	12/7/1998	4.39	7.95	none
12/3/97	3.99	8.35	none	5/3/1999	4.45	7.89	none
12/30/97	4.26	8.08	none	8/25/1999	4.95	7.39	none
1/28/98	3.75	8.59	none	11/29/1999	4.40	7.94	none
3/11/98	3.81	8.53	none	4/4/2000		well not accessible	
3/30/98	4.21	8.13	none				
4/27/98	4.35	7.99	none				
6/1/98	4.15	8.19	none				
6/26/98	4.51	7.83	none				
9/17/98	4.71	7.63	none				

TABLE 2
SUMMARY OF GROUNDWATER ELEVATION DATA
NINTH AVENUE TERMINAL STUDY AREA

DATE	GROUND WATER DEPTH (FEET)	GROUND WATER ELEVATION (FEET)	PRODUCT THICKNESS (INCHES)	DATE	GROUND WATER DEPTH (FEET)	GROUND WATER ELEVATION (FEET)	PRODUCT THICKNESS (INCHES)
SCIMW-31D TOC Elevation = 11.92							
Extends into Merrit Sand Formation Below Estuarine Deposits. Displays Confined Aquifer Characteristics.							
10/30/97	7.69	4.23	none	12/7/1998	7.90	4.02	none
12/3/97	7.58	4.34	none	5/3/1999	7.91	4.01	none
12/30/97	7.47	4.45	none	8/25/1999	7.85	4.07	none
1/28/98	7.37	4.55	none	11/29/1999	7.79	4.13	none
3/11/98	7.20	4.72	none	4/4/2000		well not accessible	
3/30/98	7.35	4.57	none				
4/27/98	7.54	4.38	none				
6/1/98	7.57	4.35	none				
6/26/98	7.63	4.29	none				
9/17/98	7.58	4.34	none				
SCIMW-32 TOC Elevation = 12.75							
10/30/97	5.02	7.73	none	12/7/1998	4.51	8.24	none
12/3/97	4.50	8.25	none	5/3/1999	4.32	8.43	none
12/30/97	4.59	8.16	none	8/25/1999	7.80	4.95	none
1/28/98	—	—	—	11/29/1999	4.71	8.04	none
3/11/98	4.17	8.58	none	4/4/2000	4.65	8.10	none
3/30/98	4.39	8.36	none				
4/27/98	4.34	8.41	none				
6/1/98	4.33	8.42	none				
6/26/98	4.53	8.22	none				
9/17/98	5.04	7.71	none				
SCIMW-33 TOC Elevation = 11.47							
10/30/97	4.58	6.89	none	12/7/1998	4.21	7.26	none
12/3/97	4.11	7.36	none	5/3/1999	4.00	7.47	none
12/30/97	4.07	7.40	none	8/25/1999	4.60	6.87	none
1/28/98	4.03	7.44	none	11/29/1999	4.72	6.75	none
3/11/98	4.02	7.45	none	4/4/2000	5.00	6.47	none
3/30/98	4.00	7.47	none				
4/27/98	3.96	7.51	none				
6/1/98	3.86	7.61	none				
6/26/98	4.05	7.42	none				
9/17/98	4.32	7.15	none				
SCIMW-34 TOC Elevation = 10.93							
Tidally Influenced							
10/30/97	6.05	4.88	none	12/7/1998	6.02	4.91	none
12/3/97	5.48	5.45	none	5/3/1999	6.44	4.49	none
12/30/97	5.43	5.50	none	8/25/1999	6.86	4.07	none
1/28/98	5.30	5.63	none	11/29/1999	6.23	4.70	none
3/11/98	6.01	4.92	none	4/4/2000	5.43	5.50	none
3/30/98	5.82	5.11	none				
4/27/98	6.14	4.79	none				
6/1/98	6.05	4.88	none				
6/26/98	5.81	5.12	none				
9/17/98	6.06	4.87	none				
SCIMW-35 TOC Elevation = 10.10							
Tidally Influenced							
10/30/97	5.23	4.87	none	12/7/1998	4.95	5.15	none
12/3/97	4.06	6.04	none	5/3/1999	5.60	4.50	none
12/30/97	4.01	6.09	none	8/25/1999	5.95	4.15	none
1/28/98	4.30	5.80	none	11/29/1999	5.47	4.63	none
3/11/98	4.98	5.12	none	4/4/2000	5.55	4.55	none
3/30/98	4.90	5.20	none				
4/27/98	5.23	4.87	none				
6/1/98	5.01	5.09	none				
6/26/98	4.97	5.13	none				
9/17/98	5.36	4.74	none				

TABLE 2
SUMMARY OF GROUNDWATER ELEVATION DATA
NINTH AVENUE TERMINAL STUDY AREA

DATE	GROUND WATER DEPTH (FEET)	GROUND WATER ELEVATION (FEET)	PRODUCT THICKNESS (INCHES)	DATE	GROUND WATER DEPTH (FEET)	GROUND WATER ELEVATION (FEET)	PRODUCT THICKNESS (INCHES)
Oil Filled Manhole TOC Elevation = 12.39 Hydraulically Connected to Bay water. Tidally Influenced.							
12/30/96	6.22	6.17	trace	1/28/1998	6.00	6.39	trace
1/16/97	8.00	4.39	0.01	3/11/1998	5.92	6.47	trace
2/28/97	8.42	3.97	0.01	3/30/1998	8.33	4.06	trace
3/26/97	8.42	3.97	trace	4/27/1998	8.50	3.89	trace
5/5/97	8.51	3.88	0.06	6/1/1998	8.33	4.06	trace
6/27/97	8.42	3.97	trace	6/26/1998	8.42	3.97	trace
7/23/97	8.42	3.97	trace	9/17/1998	8.42	3.97	trace
8/25/97	7.67	4.72	trace	12/7/1998	8.33	4.06	trace
9/25/97	6.17	6.22	trace	5/2/1999	7.0 to 8.0	-	0.50
10/30/97	6.42	5.97	0.00	8/25/1999	-	-	4.50
12/3/97	8.08	4.31	trace	11/29/1999	-	-	trace
12/30/97	4.50	7.89	trace	4/4/2000	5.25	7.14	trace

Notes:

All elevations presented reference the Port of Oakland datum

- = Inaccessible

NA = Data not available

+ = Elevation is probably not static

TABLE 3
ECOLOGICAL PARAMETER RESULTS
IN GROUNDWATER
NINTH AVENUE TERMINAL STUDY AREA

SAMPLE DESIGNATION	CONSULTANT	SITE REF AREA	DATE SAMPLED	GROUNDWATER ELEVATION Port of Oak. Datum (FEET)	pH FIELD, BEFORE SAMPLING	pH LABORATORY	Eh FIELD, BEFORE PURGE (mV)	Eh FIELD, BEFORE SAMPLING (mV)	Eh LABORATORY (mV)	TDS FIELD, BEFORE PURGE (mg/L)	TDS LABORATORY (mg/L)	TEMPERATURE FIELD, BEFORE PURGE (°C)	TEMPERATURE FIELD, BEFORE SAMPLING (°C)	SALINITY FIELD, BEFORE PURGE (mg/L)	SALINITY FIELD, BEFORE SAMPLING (mg/L)	DISSOLVED ORGANIC CARBON (mg/L)	TOTAL ORGANIC CARBON (mg/L)	DISSOLVED OXYGEN FIELD, BEFORE PURGE (%)	DISSOLVED OXYGEN FIELD, BEFORE PURGE (mg/L)	DISSOLVED OXYGEN LABORATORY (mg/L)
MW-1	SCI	F	9/25/98	4.68	6.85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-1	SCI	F	12/3/99	4.59	6.73	-	-92.7	-101.2	-	7,831	-	20.03	19.56	-	-	-	-	3.58	--	
MW-2	SCI	F	9/23/98	5.29	6.74	-	-53.0	-	-	-	-	-	-	-	-	-	0.12	--		
MW-2	SCI	F	12/3/99	5.27	6.92	--	12463.0	22,352.0	-	8,800	-	20.41	19.15	-	-	-	-	3.39	--	
MW-3	SCI	F	9/29/98	5.83	7.51	--	-	-	-	-	-	-	-	-	-	-	-	-	--	
MW-3	SCI	F	12/3/99	5.44	7.14	-	-60.7	-174.9	-	6,931	-	19.32	18.22	-	-	-	-	2.24	--	
MW-5	SCI	F	9/23/98	6.40	6.75	-	-71.0	-	-	-	-	-	-	-	-	-	0.11	--		
MW-5	SCI	F	5/7/99	6.59	6.66	-	-18.5	-41.0	-	1,049	-	16.68	16.04	0.82	2.43	-	42.5	4.15	--	
MW-5	SCI	F	12/3/99	6.53	6.70	--	2656.0	29,057.0	--	2,095	-	18.44	17.97	-	-	-	-	2.65	--	
SCIMW-1	SCI	E/H	9/22/98	5.02	6.99	--	-129.0	-	-	-	-	-	-	-	-	-	0.26	--		
SCIMW-1	SCI	E/H	12/2/99	4.56	6.61	-	-89.1	-219.1	-	10,940	-	16.25	16.50	-	-	-	-	1.18	2.98	
SCIMW-2	SCI	N	9/18/98	4.07	7.13	5.8	43.0	-	-31.0	12,600	-	-	-	-	4.4	--	-	0.11	1.2	
SCIMW-2	SCI	N	12/10/98	3.52	6.95	6.6	96.6	41.5	63.0	6,180	-	-	-	-	5.4	--	-	1.59	2.6	
SCIMW-2	SCI	N	5/6/99	4.52	7.36	-	36.8	-11.0	-	8,082	4,710	15.53	16.41	7.16	9.02	9.9	--	48	4.62	--
SCIMW-2	SCI	N	8/26/99	3.00	7.17	-	16.1	-74.6	-	12,192	12,300	-	-	-	4.7	--	-	1.91	--	
SCIMW-2	SCI	N	12/2/99	3.85	6.97	--	-39.5	-100.3	-	6,366	9,390	17.67	18.61	-	4.9	--	-	3.05	--	
MW-2	SCI	N	4/6/00	2.83	6.63	-	190.6	164.5	-	6,998	8,040	15.67	16.75	-	-	5.7	--	4.51	--	
SCIMW-3	SCI	I/J	9/18/98	4.29	6.81	-	-154.0	-	-	-	-	-	-	-	-	-	-	0.11	--	
SCIMW-3	SCI	I/J	11/30/99	6.17	6.62	-	-44.5	-111.0	-	7,234	-	21.07	21.15	-	-	-	-	5.38	--	
SCIMW-4	SCI	L	9/22/98	6.20	6.83	-	-127.0	--	-	-	-	-	-	-	-	-	-	0.23	--	
SCIMW-4	SCI	L	12/3/99	6.82	6.79	--	-131.8	-128.7	-	5,022	-	19.21	21.33	-	-	-	-	0.78	--	
SCIMW-5	SCI	M	9/17/98	5.78	6.75	--	-	--	-	-	-	-	-	-	-	-	-	-	--	
SCIMW-5	SCI	M	12/17/98	5.64	6.81	--	130.6	-	--	-	-	-	-	-	-	-	-	2.41	--	
SCIMW-5	SCI	M	5/6/99	5.26	6.65	--	330.6	-36.9	-	16,030	-	15.72	15.95	15.02	20.59	-	6.91	0.63	--	
SCIMW-5	SCI	M	8/26/99	4.48	7.79	-	198.5	-89.9	-	20,569	-	--	-	-	-	-	-	2.73	--	
SCIMW-5	SCI	M	12/2/99	5.74	6.80	--	47.7	25.1	-	23,170	-	16.98	16.34	-	-	-	-	5.22	--	
SCIMW-5	SCI	M	4/6/00	3.54	6.60	--	459.0	367.2	-	18,280	-	15.99	15.69	-	-	-	-	2.89	--	
SCIMW-6	SCI	C	9/23/98	4.38	7.02	6.2	270.0	-	223.0	-	--	-	-	-	-	<1.0	-	4.10	2.6	
SCIMW-6	SCI	C	12/10/98	3.91	7.19	6.7	42.0	125.0	189.0	21,600	-	-	-	-	<1.0	-	7.46	4.3		
SCIMW-6	SCI	C	5/6/99	4.39	7.27	-	56.6	200.0	-	16,630	17,700	14.77	14.86	15.6	14.27	1.9	-	59.4	5.52	
SCIMW-6	SCI	C	8/26/99	6.56	7.11	--	140.6	176.4	-	23,244	23,500	--	--	--	<1.0	-	-	6.44	--	
SCIMW-6	SCI	C	12/2/99	4.00	7.02	--	23.7	18.9	-	22,360	26,800	15.38	17.44	-	-	1.2	-	7.49	--	
SCIMW-6	SCI	C	4/6/00	3.68	6.78	--	280.2	270.9	-	17,940	18,900	14.91	15.73	-	-	<1.0	-	5.12	--	
MW-7	SCI	P/Q	9/17/98	5.74	6.78	--	-155.0	--	--	-	-	-	-	-	-	-	0.10	--		
MW-7	SCI	P/Q	5/6/99	7.40	6.58	--	-82.9	-108.4	-	12,500	-	16.80	17.20	10.9	15.15	-	93.2	8.54	--	
SCIMW-7	SCI	P/Q	12/1/99	5.56	6.68	--	-45.7	-84.5	-	12,730	-	18.48	18.46	--	-	-	-	4.03	--	

TABLE 3
ECOLOGICAL PARAMETER RESULTS
IN GROUNDWATER
NINTH AVENUE TERMINAL STUDY AREA

SAMPLE DESIGNATION	CONSULTANT	SITE REF AREA	DATE SAMPLED	GROUNDWATER ELEVATION Port of Oak. Datum (FEET)	pH FIELD, BEFORE SAMPLING	pH LABORATORY	Eh FIELD, BEFORE PURGE (mV)	Eh FIELD, BEFORE SAMPLING (mV)	Eh LABORATORY (mV)	TDS FIELD, BEFORE PURGE (mg/L)	TDS LABORATORY (mg/L)	TEMPERATURE FIELD, BEFORE PURGE (°C)	TEMPERATURE FIELD, BEFORE SAMPLING (°C)	SALINITY FIELD, BEFORE PURGE (mg/L)	SALINITY FIELD, BEFORE SAMPLING (mg/L)	DISSOLVED ORGANIC CARBON (mg/L)	TOTAL ORGANIC CARBON (mg/L)	DISSOLVED OXYGEN FIELD, BEFORE PURGE (%)	DISSOLVED OXYGEN FIELD, BEFORE PURGE (mg/L)	DISSOLVED OXYGEN LABORATORY (mg/L)
SCIMW-8	SCI	I	9/18/98	7.25	6.70	--	-146.0	--	--	--	--	--	--	--	--	--	--	0.15	--	
SCIMW-8	SCI	I	11/30/99	7.36	6.50	--	-79.4	-115.0	--	4,298	--	20.62	19.32	--	--	--	--	2.41	--	
SCIMW-9	SCI	I	9/21/98	6.64	6.57	--	-127.0	--	--	--	--	--	--	--	--	--	0.15	--		
SCIMW-9	SCI	I	12/1/99	6.69	7.14	--	-99.4	-192.1	--	7,050	--	20.81	21.47	--	--	--	--	1.16	--	
SCIMW-10	SCI	J	9/18/98	7.64	6.92	--	-257.0	--	--	--	--	--	--	--	--	--	0.08	--		
SCIMW-10	SCI	J	12/1/99	5.98	7.02	--	-129.4	-204.5	--	16,210	--	21.39	21.10	--	--	--	--	2.70	--	
SCIMW-11	SCI	N	9/23/98	4.72	7.01	6.5	-158.0	--	123.0	7,260	--	--	--	--	--	6.3	--	0.17	3.5	
SCIMW-11	SCI	N	12/10/98	3.32	7.12	6.8	-55.4	-123.8	-29.0	7,600	--	--	--	--	7.3	--	--	1.47	3.3	
SCIMW-11	SCI	N	5/6/99	3.48	7.21	--	358.1	39.8	--	4,511	3,880	17.81	17.63	3.84	3.41	12	6.5	27.6	2.59	--
SCIMW-11	SCI	N	8/26/99	4.31	7.28	--	143.5	139.9	--	21,644	6,530	--	--	--	6.5	--	--	4.49	--	
SCIMW-11	SCI	N	12/1/99	4.07	6.52	--	286.4	-56.1	--	9,560	7,850	17.52	18.37	--	--	5.1	--	5.53	--	
SCIMW-11	SCI	N	4/6/00	2.49	6.74	--	312.5	-87.5	--	5,980	5,280	16.74	16.99	--	--	11.0	--	3.89	--	
SCIMW-12	SCI	O	9/18/98	4.14	7.13	6.0	25.0	--	132.0	24,700	--	--	--	--	<1.0	--	--	4.19	5	
SCIMW-12	SCI	O	12/11/98	3.73	7.10	6.5	52.6	47.5	252.0	27,300	--	--	--	--	<1.0	--	--	--	5.4	
SCIMW-12	SCI	O	12/11/98	3.73	7.10	6.5	52.6	47.5	252.0	27,300	--	--	--	--	<1.0	--	--	--	5.4	
SCIMW-12	SCI	O	8/26/99	6.91	7.29	--	149.4	140.1	--	22,904	19,800	--	--	--	<1.0	--	--	4.78	--	
SCIMW-12	SCI	O	9/18/98	7.42	6.78	--	-280.0	--	--	--	--	--	--	--	--	--	--	0.10	--	
SCIMW-12	SCI	O	5/7/99	3.75	7.09	--	320.1	373.9	--	19,060	23,900	16.12	15.93	18.16	15.27	2.4	--	92.8	8.25	--
SCIMW-12	SCI	O	11/30/99	4.03	6.33	--	417.0	387.9	--	25,160	27,400	16.37	16.79	--	--	<1.0	--	--	6.89	--
SCIMW-12	SCI	O	4/6/00	4.53	6.77	--	337.4	305.1	--	18,430	19,800	15.97	16.22	--	--	1.6	--	--	5.95	--
SCIMW-13	SCI	J	9/18/98	7.42	6.78	--	-280.00	--	--	--	--	--	--	--	--	--	--	0.1	--	
SCIMW-13	SCI	J	12/1/99	6.73	6.87	--	-82.6	-236.6	--	11,320	--	20.83	21.45	--	--	--	--	--	2.95	--
SCIMW-14	SCI	IJ	9/18/98	5.48	6.75	6.1	-116.0	--	140.0	3,190	--	--	--	--	23	--	--	0.18	2.7	
SCIMW-14	SCI	IJ	12/11/98	5.91	7.00	6.8	42.3	-81.1	100.0	5,600	--	--	--	--	14	--	--	--	4.2	
SCIMW-14	SCI	IJ	5/7/99	6.00	7.04	--	385.9	-87.2	--	1,779	1,970	17.50	16.30	--	--	--	70.9	--	--	
SCIMW-14	SCI	IJ	8/26/99	7.95	7.19	--	-59.2	-77.6	--	13,657	2,930	--	--	--	16	--	--	1.82	--	
SCIMW-14	SCI	IJ	11/30/99	5.30	6.40	--	321.0	-73.8	--	3,090	1,290	19.41	18.86	--	--	13	--	--	7.17	--
SCIMW-14	SCI	IJ	4/6/00	5.61	7.00	--	132.3	-24.2	--	630	1,080	16.05	16.47	--	--	8.4	--	--	3.36	--
SCIMW-15	SCI	IJ	9/21/98	5.17	6.79	--	-147.0	--	--	--	--	--	--	--	--	--	--	25.10	--	
SCIMW-15	SCI	IJ	5/4/99	5.15	7.00	--	-102.2	-103.8	--	3,948	--	17.70	17.30	--	--	--	25.1	--	--	
SCIMW-15	SCI	IJ	11/30/99	4.71	6.39	--	-111.9	-86.4	--	7,120	6,170	20.86	19.68	--	--	23	--	--	0.78	--
SCIMW-16	SCI	R	9/21/98	7.04	5.46	--	-160.0	--	--	--	--	--	--	--	--	--	--	0.11	--	
SCIMW-16	SCI	R	5/4/99	6.68	6.90	--	-105.2	-145.1	--	18,200	--	19.80	13.40	--	--	--	49.7	--	--	
SCIMW-16	SCI	R	11/30/99	6.66	6.95	--	-103.4	-148.8	--	22,360	--	20.76	19.52	--	--	--	--	2.88	--	
SCIMW-17	SCI	R	9/21/98	6.94	5.13	--	-122.0	--	--	--	--	--	--	--	--	--	--	0.14	--	
SCIMW-17	SCI	R	12/1/99	6.65	7.09	--	-124.6	-135.1	--	5,810	--	19.71	20.93	--	--	--	--	3.10	--	

TABLE 3
ECOLOGICAL PARAMETER RESULTS
IN GROUNDWATER
NINTH AVENUE TERMINAL STUDY AREA

SAMPLE DESIGNATION	CONSULTANT	SITE REF AREA	DATE SAMPLED	GROUNDWATER ELEVATION Port of Oak. Datum (FEET)	pH FIELD, BEFORE SAMPLING	pH LABORATORY	Eh FIELD, BEFORE PURGE (mV)	Eh FIELD, BEFORE SAMPLING (mV)	Eh LABORATORY (mV)	TDS FIELD, BEFORE PURGE (mg/L)	TDS LABORATORY (mg/L)	TEMPERATURE FIELD, BEFORE PURGE (°C)	TEMPERATURE FIELD, BEFORE SAMPLING (°C)	SALINITY FIELD, BEFORE PURGE (mg/L)	SALINITY FIELD, BEFORE SAMPLING (mg/L)	DISSOLVED ORGANIC CARBON (mg/L)	TOTAL ORGANIC CARBON (mg/L)	DISSOLVED OXYGEN FIELD, BEFORE PURGE (%)	DISSOLVED OXYGEN FIELD, BEFORE PURGE (mg/L)	DISSOLVED OXYGEN LABORATORY (mg/L)
SCIMW-18	SCI	L	9/24/98	7.23	6.67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SCIMW-18	SCI	L	12/1/99	6.67	6.99	-	-138.2	-141.4	-	13,670	-	20.14	20.75	-	-	-	-	-	2.07	-
SCIMW-19	SCI	R	9/18/98	6.38	6.79	-	-138.0	-	-	-	-	-	-	-	-	-	-	0.14	-	
SCIMW-19	SCI	R	12/2/99	6.46	6.93	-	102.1	-99.0	-	5,070	-	19.53	20.85	-	-	-	-	-	3.91	-
SCIMW-20	SCI	H/Q	9/21/98	6.79	6.85	-	-86.0	--	-	-	-	-	-	-	-	-	-	0.16	-	
SCIMW-20	SCI	H/Q	12/2/99	6.41	6.81	-	76.6	-123.3	-	6,160	-	15.86	18.30	-	-	-	-	-	5.39	-
SCIMW-21	SCI	D	5/6/97	7.44	--	6.9	--	-	-	-	-	-	-	-	-	-	-	-	-	
SCIMW-21	SCI	D	9/22/98	7.54	6.91	6.9	228.0	--	-	-	-	-	-	-	-	-	-	0.18	-	
SCIMW-21	SCI	D	12/3/99	8.98	6.79	-	68.3	-117.0	-	890	-	14.13	17.59	-	-	-	-	-	2.49	-
SCIMW-22	SCI	P	5/6/97	8.22	-	6.8	-	-	-	-	-	-	-	-	-	-	-	-	-	
SCIMW-22	SCI	P	9/22/98	7.24	6.58	-	-138.0	--	-	-	-	-	-	-	-	-	-	0.15	-	
SCIMW-22	SCI	P	5/5/99	7.66	6.81	-	-102.2	-107.1	-	13,217	-	17.79	17.00	-	-	-	-	31.5	-	
SCIMW-22	SCI	P	12/2/99	6.81	6.77	-	-40.0	-125.7	-	17,110	-	19.79	21.05	-	-	-	-	-	3.09	-
SCIMW-23	SCI	B	5/6/97	5.55	-	6.8	-	-	-	-	-	-	-	-	-	-	-	-	-	
SCIMW-23	SCI	B	9/24/98	5.46	6.83	6.1	-	-	-50.0	9,940	-	-	-	-	-	8.3	-	-	1.2	
SCIMW-23	SCI	B	12/11/98	6.39	6.74	6.4	-63.0	40.0	29.0	-	-	-	-	-	-	-	-	1.66	3.3	
SCIMW-23	SCI	B	5/6/99	6.09	6.57	-	-43.3	-60.4	-	4,660	210	18.15	17.63	3.96	7.61	11	11	72.7	6.76	-
SCIMW-23	SCI	B	8/26/99	4.35	6.46	-	-89.1	-85.3	-	7,653	7,490	-	-	-	-	11	-	-	1.79	-
SCIMW-23	SCI	B	12/3/99	5.56	6.41	-	-95.4	-136.6	-	10,680	11,200	19.21	20.35	-	-	13	-	-	0.62	-
SCIMW-23	SCI	B	4/6/00	2.79	6.7	-	28.0	-92.1	-	6,809	1,970	18.81	17.08	-	-	13	-	-	3.13	-
SCIMW-24	SCI	N	9/18/98	4.96	6.38	6.3	-158.0	-	-52.0	1,850	-	-	-	-	-	29	-	-	0.13	1.9
SCIMW-24	SCI	N	12/11/98	5.79	6.80	6.6	117.3	-100.6	-21.0	13,200	-	-	-	-	-	27	-	-	1.18	3.7
SCIMW-24	SCI	N	5/6/99	5.14	6.92	-	-87.2	-81.2	-	1,134	1,090	19.19	18.65	0.88	0.87	23	-	72	6.67	-
SCIMW-24	SCI	N	12/1/99	4.99	6.28	-	-47.0	-59.8	-	2,586	2,370	20.60	20.02	-	-	19	-	-	5.09	-
SCIMW-24	SCI	N	4/6/00	5.05	6.83	-	-92.1	-97.6	-	1,781	-	18.84	18.07	-	-	33	-	-	1.60	-
SCIMW-26	SCI	H	9/22/98	7.41	6.54	-	-94.0	-	-	-	-	-	-	-	-	-	-	0.11	-	
SCIMW-26	SCI	H	12/2/99	7.92	6.74	-	-175.4	-163.2	-	11,240	-	18.53	17.75	-	-	-	-	-	2.53	-
SCIMW-27	SCI	E/H	9/22/98	6.58	6.85	-	-52.0	-	-	-	-	-	-	18	-	-	-	0.11	-	
SCIMW-27	SCI	E/H	12/2/99	6.52	6.75	-	-19.0	-97.0	-	11,180	-	15.61	17.34	-	-	-	-	-	4.29	-
SCIMW-28	SCI	Q	9/23/98	7.83	6.85	-	-	-	-	-	-	-	17	-	-	-	-	-	-	
SCIMW-28	SCI	Q	5/6/99	8.98	6.75	-	-55.9	-77.6	-	460	-	14.36	15.70	0.35	8.5	17	-	82.3	8.47	-
SCIMW-28	SCI	Q	12/2/99	8.26	6.53	-	91.1	-60.1	-	219	-	15.23	16.99	-	-	-	-	-	3.51	-
SCIMW-30	SCI	P	9/21/98	7.63	6.58	-	-132.0	-	-	-	-	-	16.99	-	-	-	-	-	0.12	-
SCIMW-30	SCI	P	5/5/99	7.89	6.30	-	-3.9	-109.1	-	4,777	-	18.60	18.50	-	-	-	-	32.3	-	-
SCIMW-30	SCI	P	12/2/99	7.94	7.03	-	-89.9	-139.0	-	14,410	-	19.53	19.66	-	-	-	-	-	1.71	-
SCIMW-31D	SCI	P	9/21/98	4.34	5.07	-	-20.0	-	-	-	-	-	19.66	-	-	-	-	-	0.18	-

TABLE 3
ECOLOGICAL PARAMETER RESULTS
IN GROUNDWATER
NINTH AVENUE TERMINAL STUDY AREA

SAMPLE DESIGNATION	CONSULTANT	SITE REF AREA	DATE SAMPLED	GROUNDWATER ELEVATION Port of Oak. Datum (FEET)	pH FIELD, BEFORE SAMPLING	pH LABORATORY	Eh FIELD, BEFORE PURGE (mV)	Eh FIELD, BEFORE SAMPLING (mV)	Eh LABORATOY (mV)	TDS FIELD, BEFORE PURGE (mg/L)	TDS LABORATOY (mg/L)	TEMPERATURE FIELD, BEFORE PURGE (°C)	TEMPERATURE FIELD, BEFORE SAMPLING (°C)	SALINITY FIELD, BEFORE PURGE (mg/L)	SALINITY FIELD, BEFORE SAMPLING (mg/L)	DISSOLVED ORGANIC CARBON (mg/L)	TOTAL ORGANIC CARBON (mg/L)	DISSOLVED OXYGEN FIELD, BEFORE PURGE (%)	DISSOLVED OXYGEN FIELD, BEFORE PURGE (mg/L)	DISSOLVED OXYGEN LABORATORY (mg/L)
SCIMW-31D	SCI	P	5/5/99	4.01	6.51	-	302.7	55.3	-	12,370	-	19.89	19.90	-	-	-	109.4	-	-	
SCIMW-31D	SCI	P	12/1/99	4.13	6.36	-	80.7	50.1	-	15,780	-	20.00	19.12	-	-	-	-	5.73	-	
SCIMW-32	SCI	I/P	9/21/98	7.71	5.11	-	-101.0	-	-	-	-	-	19.12	-	-	-	-	0.09	-	
SCIMW-32	SCI	I/P	5/5/99	8.43	6.24	-	-44.2	-88.4	-	2,839	-	20.56	19.08	-	-	-	94.6	-	-	
SCIMW-32	SCI	I/P	12/1/99	8.04	7.03	-	-13.3	-79.8	-	3,847	-	21.68	21.45	-	-	-	-	3.82	-	
SCIMW-33	SCI	I/J	9/21/98	7.15	4.98	-	-194.0	-	-	-	-	-	21.45	-	-	-	-	0.09	-	
SCIMW-33	SCI	I/J	5/5/99	7.47	6.60	-	-72.9	-88.4	-	3,355	-	19.80	19.11	-	-	-	35.3	-	-	
SCIMW-33	SCI	I/J	12/1/99	6.75	6.81	-	-58.8	-113.2	-	6,845	-	19.94	22.11	-	-	-	-	3.67	-	
SCIMW-34	SCI	R	9/24/98	4.87	6.87	6.3	-	-	-15.0	15,000	-	-	22.11	-	-	12	-	-	3.3	
SCIMW-34	SCI	R	12/11/98	4.91	6.78	6.5	-110.2	-60.9	118.0	6,520	-	-	-	-	-	11	-	-	2.33	
SCIMW-34	SCI	R	5/5/99	4.49	6.82	-	-52.3	-43.3	-	6,775	15,500	15.57	14.75	-	-	4.9	-	46.1	-	
SCIMW-34	SCI	R	8/26/99	6.86	6.63	-	29.4	8.6	-	13,905	11,400	-	-	-	-	5.7	-	-	1.36	
SCIMW-34	SCI	R	12/2/99	4.70	6.91	-	174.8	23.0	-	11,810	14,400	17.46	17.16	-	-	7.2	-	-	4.35	
SCIMW-34	SCI	R	4/6/00	5.50	6.97	-	202.4	194.9	-	12,510	14,400	14.61	14.53	-	-	6.0	-	-	3.87	
SCIMW-35	SCI	R	9/23/98	4.74	6.76	-	125.0	-	-	-	-	-	-	-	-	-	-	3.06		
SCIMW-35	SCI	R	12/11/98	5.15	6.88	-	41.0	-7.1	-	-	-	-	-	-	-	-	-	1.80		
SCIMW-35	SCI	R	5/5/99	4.50	6.76	-	83.0	64.0	-	2,382	-	16.06	15.70	-	-	-	-	147.6	-	
SCIMW-35	SCI	R	8/26/99	5.95	6.98	-	96.6	3.3	-	9,283	-	-	-	-	-	-	-	2.61		
SCIMW-35	SCI	R	12/2/99	4.63	6.55	-	166.9	111.5	-	10,250	-	18.39	18.56	-	-	-	-	4.52	-	
SCIMW-35	SCI	R	4/6/00	4.55	6.87	-	309.5	263.4	-	6,123	-	15.57	16.03	-	-	-	-	2.86	-	

Notes:

Eh = Redox potential or oxidizing-reduction potential

TDS = Total Dissolved Solids

mV = millivolts

mg/L = milligrams per Liter

Groundwater elevation measurements presented are those collected on the first day of sampling for the event and may not be the same as the date sampled.

TABLE 4
PETROLEUM HYDROCARBON, BTEX, PESTICIDE AND PCB
CONCENTRATIONS IN GROUNDWATER
NINTH AVENUE TERMINAL STUDY AREA

Subsurface Consultants, Inc.

SAMPLE DESIGNATION	CONSULTANT	SITE REF AREA	DATE SAMPLED	GROUNDWATER ELEVATION Port of Oak, Datum (FEET)	OIL & GREASE (µg/L)	TVH as GAS (µg/L)	TEH as DIESEL (µg/L)	TEH as MOTOR OIL (µg/L)	BENZENE (µg/L)	ETHYL-BENZENE (µg/L)	TOLUENE (µg/L)	TOTAL XYLENES (µg/L)	4,4'-DDD (µg/L)	4,4'-DDE (µg/L)	4,4'-DDT (µg/L)	OTHER HERBS/PESTS (µg/L)	AROCLOR-1260 (µg/L)	OTHER PCBs (µg/L)
MW-1	Uribe	F	4/4/94	5.90	-	<50	510	-	<0.50	<0.50	<0.50	<0.50	-	-	-	-	-	-
MW-1	Uribe	F	10/3/94	4.36	-	-	390y	-	<0.4	<0.3	<0.3	<0.4	-	-	-	-	-	-
MW-1	Clayton	F	4/10/95	5.05	-	<50	330	-	<0.4	<0.3	<0.3	<0.4	-	-	-	-	-	-
MW-1	Clayton	F	7/24/95	4.97	-	<50	230	-	<0.4	<0.3	<0.3	<0.4	-	-	-	-	-	-
MW-1	Clayton	F	11/10/95	4.47	-	<50	430	-	<0.4	<0.3	<0.3	<0.4	-	-	-	-	-	-
MW-1	Clayton/SCI	F	2/20/96	5.50	-	<50	590yh	-	<0.5	<0.5	<0.5	<1	-	-	-	-	-	-
MW-1	SCI	F	5/24/96	4.95	-	<50	870yh	630y	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
MW-1	SCI	F	9/6/96	4.34	-	<50	850yh	490yl	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
MW-1	SCI	F	12/5/96	5.19	-	<50	4,500yhl	2,100yl	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
MW-1	SCI	F	9/25/98	4.68	-	-	<47	<280	-	-	-	-	-	-	-	-	-	-
MW-1	SCI	F	12/3/99	4.59	-	-	<50	<300	-	-	-	-	-	-	-	-	-	-
MW-2	Uribe	F	4/4/94	5.31	-	<50	1800	-	<0.50	<0.50	<0.50	<0.50	-	-	-	-	-	-
MW-2	Uribe	F	10/5/94	5.39	-	-	1,200y	-	<0.4	<0.3	<0.3	<0.4	-	-	-	-	-	-
MW-2	Clayton	F	4/10/95	6.29	-	<50	550	-	<0.4	<0.3	<0.3	<0.4	-	-	-	-	-	-
MW-2	Clayton	F	7/24/95	5.91	-	70	960	-	<0.4	<0.3	<0.3	<0.4	-	-	-	-	-	-
MW-2	Clayton	F	11/10/95	5.73	-	<50	920	-	<0.4	<0.3	<0.3	<0.4	-	-	-	-	-	-
MW-2	Clayton/SCI	F	2/20/96	6.51	-	<50	1,700h	-	<0.5	<0.5	<0.5	<1	-	-	-	-	-	-
MW-2	SCI	F	5/24/96	5.91	-	<50	2,800yh	1,200y	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
MW-2	SCI	F	9/5/96	6.34	-	58z	2,900	760yl	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
MW-2	SCI	F	12/4/96	6.02	-	<50	1,600y	1,000yl	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
MW-2	SCI	F	9/23/98	5.29	-	-	80yl	<300	-	-	-	-	-	-	-	-	-	-
MW-2	SCI	F	12/3/99	5.27	-	-	<50	<300	-	-	-	-	-	-	-	-	-	-
MW-3	Uribe	F	4/4/94	5.95	-	<50	690	-	<0.50	<0.50	<0.50	<0.50	-	-	-	-	-	-
MW-3	Uribe	F	10/4/94	4.74	-	-	480y	-	<0.4	<0.3	<0.3	<0.4	-	-	-	-	-	-
MW-3	Clayton	F	4/10/95	2.54	-	<50	830	-	<0.4	<0.3	<0.3	<0.4	-	-	-	-	-	-
MW-3	Clayton	F	7/24/95	6.56	-	<50	460	-	<0.4	<0.3	<0.3	<0.4	-	-	-	-	-	-
MW-3	Clayton	F	11/10/95	5.07	-	<50	2,100	-	<0.4	<0.3	0.7	<0.4	-	-	-	-	-	-

TABLE 4
PETROLEUM HYDROCARBON, BTEX, PESTICIDE AND PCB
CONCENTRATIONS IN GROUNDWATER
NINTH AVENUE TERMINAL STUDY AREA

Subsurface Consultants, Inc.

SAMPLE DESIGNATION	CONSULTANT	SITE REF AREA	DATE SAMPLED	GROUNDWATER ELEVATION Port of Oak. Datum (FEET)	OIL & GREASE (µg/L)	TVH as GAS (µg/L)	TEH as DIESEL (µg/L)	TEH as MOTOR OIL (µg/L)	BENZENE (µg/L)	ETHYL-BENZENE (µg/L)	TOLUENE (µg/L)	TOTAL XYLENES (µg/L)	4,4'-DDD (µg/L)	4,4'-DDE (µg/L)	4,4'-DDT (µg/L)	OTHER HERBS/PESTS (µg/L)	AROCLOR-1260 (µg/L)	OTHER PCBs (µg/L)
MW-3	Clayton/SCI	F	2/20/96	6.04	--	<50	620h	--	<0.5	<0.5	<0.5	<1	--	--	--	--	--	
MW-3	SCI	F	5/24/96	5.69	--	<50	1,100y	550y	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	
MW-3	SCI	F	9/18/96	3.76	--	<50	1,500	890yl	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	
MW-3	SCI	F	12/13/96	5.34	--	<50	580	<250	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	
MW-3	SCI	F	9/29/98	5.83	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	SCI	F	12/3/99	5.44	--	--	<50	<300	--	--	--	--	--	--	--	--	--	
MW-4	Clayton	F	9/20/93 (b)	6.18	--	<50	1300	--	140	40	110	235	--	--	--	--	--	
MW-4	Clayton	F	12/1/93 (b)	7.88	--	<50	32,000	--	71	20	41	150	--	--	--	--	--	
MW-4	Uribe	F	4/4/94 (b)	7.78	--	6,200	410,000	--	140	47	20	310	--	--	--	--	--	
MW-4	Clayton	F	4/10/95	8.18	FREE PRODUCT -- NOT SAMPLED													
MW-4	Clayton	F	7/24/95	8.33 (b)	--	2,400	21,000	--	140	34	74	40	--	--	--	--	--	
MW-4	SCI	F	5/24/96	9.02 (b)	--	690y	37,000	2,800yl	44	18	<2.5	7.7	--	--	--	--	--	
MW-4	SCI	F	9/4/96	7.33 (b)	--	1,000h	240,000	26,000yl	100	5.2	<0.5	7.2	--	--	--	--	--	
MW-4	SCI	F	12/3/96	8.76 (b)	--	1,500yh	13,000	2,000yl	120	33	0.9	22	--	--	--	--	--	
MW-4	SCI	F	12/30/96	9.04	FREE PRODUCT -- NOT SAMPLED													
MW-4	SCI	F	1/16/97	8.76	FREE PRODUCT -- NOT SAMPLED													
MW-4	SCI	F	5/5/97	8.06	FREE PRODUCT -- NOT SAMPLED													
MW-4	SCI	F	9/17/98	7.53	FREE PRODUCT -- NOT SAMPLED													
MW-4	SCI	F	8/25/99	7.33	FREE PRODUCT -- NOT SAMPLED													
MW-4	SCI	F	12/3/99	6.81	FREE PRODUCT -- NOT SAMPLED													
MW-5	Clayton	F	4/10/95	7.20	--	1,100	6,200	--	3.1	2.9	<0.3	11.3	--	--	--	--	--	
MW-5	Clayton	F	7/24/95	6.60	--	720	4,800	--	3.1	0.6	0.5	0.7	--	--	--	--	--	
MW-5	Clayton	F	11/10/95	6.46	--	260	3,700	--	0.8	0.6	0.5	1.9	--	--	--	--	--	
MW-5	Clayton/SCI	F	2/20/96	9.15	--	150y	440h	--	<0.5	<0.5	<0.5	<1	--	--	--	--	--	
MW-5	SCI	F	5/24/96	9.17	--	82y	4,600yh	1,900y	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	
MW-5	SCI	F	9/4/96	6.40	--	<50	7,700yh	1,900yl	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	
MW-5	SCI	F	12/3/96	7.20	--	140yh	13,000	1,900yl	1.5	<0.5	<0.5	2.6	--	--	--	--	--	

TABLE 4
PETROLEUM HYDROCARBON, BTEX, PESTICIDE AND PCB
CONCENTRATIONS IN GROUNDWATER
NINTH AVENUE TERMINAL STUDY AREA

Subsurface Consultants, Inc.

SAMPLE DESIGNATION	CONSULTANT	SITE REF AREA	DATE SAMPLED	GROUNDWATER ELEVATION Port of Oak. Datum (FEET)	OIL & GREASE (µg/L)	TVH as GAS (µg/L)	TEH as DIESEL (µg/L)	TEH as MOTOR OIL (µg/L)	BENZENE	ETHYL-BENZENE (µg/L)	TOLUENE (µg/L)	TOTAL XYLENES (µg/L)	4,4'-DDD (µg/L)	4,4'-DDE (µg/L)	4,4'-DDT (µg/L)	OTHER HERBS/PESTS (µg/L)	AROCLO-1260 (µg/L)	OTHER PCBs (µg/L)
MW-5	SCI	F	1/20/97	8.38	—	<50	9,400	1,500yl	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	—
MW-5	SCI	F/H	5/6/97	6.45	<5,000	<50	8,800	2,500yl	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	—
MW-5	SCI	F/H	9/23/98	6.40	—	<50	170l	<300	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	—
MW-5	SCI	F/H	5/7/99	6.59	—	<50	660	<300	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	—
MW-5	SCI	F/H	12/3/99	6.53	—	—	490yh	<300	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	—
MW-6	Clayton	F	4/10/95	7.74 (b)	—	1,300	10,000	—	4.4	0.7	<0.3	0.8	—	—	—	—	—	—
MW-6	SCI	F	7/24/95	6.67	FREE PRODUCT - NOT SAMPLED													
MW-6	SCI	F	5/24/96	7.71 (b)	—	280,000yh	240,000	5,500yl	<250	<250	<250	<250	—	—	—	—	—	—
MW-6	SCI	F	9/5/96	6.67 (b)	89,000	200h	50,000	3,200yl	5.3	<5.0	<5.0	<5.0	—	—	—	—	<1.0	ND
MW-6	SCI	F	12/4/96	7.90 (b)	—	4,700yh	140,000	7,300yl	19	<10	11	<10	—	—	—	—	—	—
MW-6	SCI	F	1/16/97	7.63	FREE PRODUCT - NOT SAMPLED													
MW-6	SCI	F/H	5/6/97	7.04 (b)	330,000	440yh	620,000	24,000yl	2.4	<0.5	0.51	0.61	—	—	—	—	—	—
MW-6	SCI	F	9/25/97	7.97	FREE PRODUCT - NOT SAMPLED													
MW-6	SCI	F	5/4/99	7.21	FREE PRODUCT - NOT SAMPLED													
MW-6	SCI	F	12/3/99	6.98	FREE PRODUCT - NOT SAMPLED													
MW-7	Clayton	M	4/10/95	5.72	—	<50	370	—	<0.4	<0.3	<0.3	<0.4	—	—	—	—	—	—
MW-7	Clayton	M	7/24/95	6.41	—	<50	260	—	<0.4	<0.3	<0.3	<0.4	—	—	—	—	—	—
MW-7	Clayton	M	11/10/95	5.35	—	<50	270	—	<0.4	<0.3	<0.3	<0.4	—	—	—	—	—	—
MW-7	Clayton/SCI	M	2/20/96	6.00	—	<50	6,100	—	<0.5	<0.5	<0.5	<1	—	—	—	—	—	—
MW-7	SCI	M	5/24/96	5.44	—	<50	750yh	750y	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	—
MW-7	SCI	M	9/5/96	5.48	<5,000	<50	480yh	310yl	<5.0	<5.0	<5.0	<5.0	—	—	—	—	<1.0	ND
MW-7	SCI	M	12/4/96	5.25	—	<50	340y	<240	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	—
MW-7	SCI	M	1/17/97	6.48	—	<50	200	<250	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	—
SCIMW-1	SCI	E/H	5/24/96	5.09	<5,000	<50	560yh	280y	<5.0	<5.0	<5.0	<5.0	<0.09	<0.09	<0.09	ND	<0.5	ND
SCIMW-1	SCI	E/H	9/6/96	4.39	<5,000	<50	870yh	<250	<5.0	<5.0	<5.0	<5.0	—	—	—	—	<1.0	ND
SCIMW-1	SCI	E/H	1/22/97	5.29	—	<50	520yh	<250	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	—
SCIMW-1	SCI	E/H	9/22/98	5.02	—	—	<50	<300	—	—	—	—	—	—	—	—	—	—

TABLE 4
PETROLEUM HYDROCARBON, BTEX, PESTICIDE AND PCB
CONCENTRATIONS IN GROUNDWATER
NINTH AVENUE TERMINAL STUDY AREA

Subsurface Consultants, Inc.

SAMPLE DESIGNATION	CONSULTANT	SITE REF AREA	DATE SAMPLED	GROUNDWATER ELEVATION Port of Oak. Datum (FEET)	OIL & GREASE (µg/L)	TVH as GAS (µg/L)	TEH as DIESEL (µg/L)	TEH as MOTOR OIL (µg/L)	BENZENE (µg/L)	ETHYL-BENZENE (µg/L)	TOLUENE (µg/L)	TOTAL XYLENES (µg/L)	4,4'-DDD (µg/L)	4,4'-DDE (µg/L)	4,4'-DDT (µg/L)	OTHER HERBS/PESTS (µg/L)	AROCLOR-1260 (µg/L)	OTHER PCBs (µg/L)
SCIMW-1	SCI	E/H	12/2/99	4.56	-	-	<50	<300	-	-	-	-	-	-	-	-	-	
SCIMW-2	SCI	N	5/23/96	4.04	5,600	-	2,600 ^l	360 ^{yl}	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	
SCIMW-2	SCI	N	9/4/96	3.38	8,000	<50	5,100	770 ^{yl}	<5.0	<5.0	<5.0	<5.0	-	-	-	-	<1.0	
SCIMW-2	SCI	N	1/17/97	3.82	-	95 ^y	13,000 ^l	2,400 ^{yl}	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	
SCIMW-2	SCI	N	9/18/98	4.07	-	-	31,000 ^h	5,400 ^{yl}	-	-	-	-	-	-	-	-	-	
SCIMW-2	SCI	N	12/28/98	3.52	-	-	5,400 ^h	930 ^{yl}	-	-	-	-	-	-	-	-	-	
SCIMW-2	SCI	N	5/7/99	4.52	-	-	10,000	1,600 ^{yl}	-	-	-	-	-	-	-	-	-	
SCIMW-2	SCI	N	8/26/99	3.00	-	-	13,000	1,600	-	-	-	-	-	-	-	-	-	
SCIMW-2	SCI	N	12/2/99	3.85	-	-	7,400 ^h	860 ^{yl}	-	-	-	-	-	-	-	-	-	
SCIMW-2	SCI	N	4/6/00	2.83	-	-	220	<300	-	-	-	-	-	-	-	-	-	
SCIMW-3	SCI	I/J	5/23/96	7.22	<5,000	-	8,000 ^{yh}	7,400 ^y	<5.0	<5.0	<5.0	<5.0	-	-	-	-	<1.0	
SCIMW-3	SCI	I/J	9/5/96	6.67	<5,000	<50	8,800 ^{yh}	4,400 ^{yl}	<5.0	<5.0	<5.0	<5.0	-	-	-	-	<1.0	
SCIMW-3	SCI	I/J	1/20/97	6.46	-	<50	7,500 ^{yh}	5,200 ^y	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	
SCIMW-3	SCI	I/J	9/18/98	4.29	-	-	75 ^{yh}	<300	-	-	-	-	-	-	-	-	-	
SCIMW-3	SCI	I/J	11/30/99	6.17	-	-	<50	<300	-	-	-	-	-	-	-	-	-	
SCIMW-4	SCI	L	8/26/96	5.50	<5,000	<50	630 ^{yh}	670 ^{yl}	<5.0	<5.0	<5.0	<5.0	-	-	-	-	<1.0	
SCIMW-4	SCI	L	1/22/97	8.43	-	<50	530 ^{yh}	990 ^{yl}	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	
SCIMW-4	SCI	L	9/23/98	6.20	-	-	<50	<300	-	-	-	-	-	-	-	-	-	
SCIMW-4	SCI	L	12/3/99	6.82	-	-	56 ^{yh}	<300	-	-	-	-	-	-	-	-	-	
SCIMW-5	SCI	M	9/3/96	4.63	<5,000	<50	<50	<250	<5.0	<5.0	<5.0	<5.0	-	-	-	-	<1.0	
SCIMW-5	SCI	M	1/20/97	6.12	-	<50	<50	<250	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	
SCIMW-5	SCI	M	9/23/98	5.78	-	-	70 ^y	<300	-	-	-	-	-	-	-	-	-	
SCIMW-5	SCI	M	12/17/98	5.64	-	-	<50	<300	-	-	-	-	-	-	-	-	-	
SCIMW-5	SCI	M	5/10/99	5.26	-	-	<50	<300	-	-	-	-	-	-	-	-	-	
SCIMW-5	SCI	M	12/2/99	5.74	-	-	<50	<300	-	-	-	-	-	-	-	-	-	
SCIMW-6	SCI	C	8/28/96	4.69	<5,000	<50	150 ^{yh}	260 ^{yl}	<5.0	<5.0	<5.0	<5.0	-	-	-	-	<1.0	
SCIMW-6	SCI	C	1/22/97	4.68	-	<50	<50	<250	<0.5	<0.5	<0.5	<0.5	<0.09	<0.09	<0.09	ND	<0.5	

TABLE 4
PETROLEUM HYDROCARBON, BTEX, PESTICIDE AND PCB
CONCENTRATIONS IN GROUNDWATER
NINTH AVENUE TERMINAL STUDY AREA

Subsurface Consultants, Inc.

SAMPLE DESIGNATION	CONSULTANT	SITE REF AREA	DATE SAMPLED	GROUNDWATER ELEVATION Port of Oak. Datum (FEET)	OIL & GREASE ($\mu\text{g/L}$)	TVH as GAS ($\mu\text{g/L}$)	TEH as DIESEL ($\mu\text{g/L}$)	TEH as MOTOR OIL ($\mu\text{g/L}$)	BENZENE ($\mu\text{g/L}$)	ETHYL-BENZENE ($\mu\text{g/L}$)	TOLUENE ($\mu\text{g/L}$)	TOTAL XYLENES ($\mu\text{g/L}$)	4,4'-DDD ($\mu\text{g/L}$)	4,4'-DDE ($\mu\text{g/L}$)	4,4'-DDT ($\mu\text{g/L}$)	OTHER HERBS/PESTS ($\mu\text{g/L}$)	AROCLOR-1260 ($\mu\text{g/L}$)	OTHER PCBs ($\mu\text{g/L}$)
SCIMW-6	SCI	C	9/23/98	4.38	--	--	<50	<300	--	--	--	--	<0.09	<0.09	<0.09	ND	<0.5	ND
SCIMW-6	SCI	C	12/10/98 (a)	3.91	--	--	<47	<280	--	--	--	--	<0.1	<0.1	<0.1	ND	<0.5	ND
SCIMW-6	SCI	C	5/6/99	4.39	--	--	<50	<300	--	--	--	--	--	--	--	--	--	--
SCIMW-6	SCI	C	12/2/99	4.00	--	--	<50	<300	--	--	--	--	<0.1	<0.1	<0.5	ND	<0.5	ND
SCIMW-7	SCI	P/Q	9/6/96	3.31+	<5,000	540	6,100y	1,900y	5,300	<1,300	<1,300	<1,300	--	--	--	--	<1.0	ND
SCIMW-7	SCI	P/Q	1/20/97	7.32	--	6,900z	11,000y	7,500y	8,600	<25	7,200	103	--	--	--	--	--	--
SCIMW-7	SCI	P/Q	10/20/97	6.96	<5,000	9,100y	6,100yh	2,500y	5,100	15	3,800	134	0.78	0.32	<0.094	**	<0.47	ND
SCIMW-7	SCI	P/Q	9/22/98	5.74	--	--	<50	<300	1,100	<250	480	<250	<0.1	<0.1	<0.1	ND	<0.5	ND
SCIMW-7	SCI	P/Q	5/6/99	7.40	--	--	--	--	--	--	--	--	<1.0	<1.0	<1.0	ND	<4.8	ND
SCIMW-7	SCI	P/Q	12/2/99	5.56	--	--	<50	<300	690	<5.0	280	7.3	<9.4	<9.4	<9.4	ND	<47	ND
SCIMW-8	SCI	I	8/26/96	7.11	<5,000	<50	1,200yh	1,400y	<5.0	<5.0	<5.0	<5.0	--	--	--	--	<1.0	ND
SCIMW-8	SCI	I	1/21/97	7.70	--	<50	860yh	830y	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
SCIMW-8	SCI	I	9/18/98	7.25	--	--	<50	<300	--	--	--	--	--	--	--	--	--	--
SCIMW-8	SCI	I	11/30/99	7.36	--	--	<50	<300	--	--	--	--	--	--	--	--	--	--
SCIMW-9	SCI	I	8/26/96	6.40	5,000	<50	1,800yh	1,100y	<5.0	<5.0	<5.0	<5.0	--	--	--	--	<1.0	ND
SCIMW-9	SCI	I	1/23/97	6.66	--	<50	1,900yh	2,300	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
SCIMW-9	SCI	I	9/22/98	6.64	--	--	95yh	600yh	--	--	--	--	--	--	--	--	--	--
SCIMW-9	SCI	I	12/1/99	6.69	--	--	<50	480	--	--	--	--	--	--	--	--	--	--
SCIMW-10	SCI	J	8/26/96	7.95	<5,000	<50	1,100yh	1,200y	<5.0	<5.0	<5.0	<5.0	--	--	--	--	<1.0	ND
SCIMW-10	SCI	J	1/23/97	7.87	--	<50	1,400yh	2,500	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
SCIMW-10	SCI	J	9/18/98	7.64	--	--	<50	<300	--	--	--	--	--	--	--	--	--	--
SCIMW-10	SCI	J	12/1/99	5.98	--	--	<50	<300	--	--	--	--	--	--	--	--	--	--
SCIMW-11	SCI	N	8/28/96	3.83	<5,000	<50	400y	<250	<5.0	<5.0	<5.0	<5.0	--	--	--	--	<1.0	ND
SCIMW-11	SCI	N	1/17/97	4.32	--	<50	180	<250	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
SCIMW-11	SCI	N	9/23/98	4.72	--	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
SCIMW-11	SCI	N	12/10/98	3.32	--	51	<59	<350	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
SCIMW-11	SCI	N	5/6/99	3.48	--	--	<50	<300	--	--	--	--	--	--	--	--	--	--

TABLE 4
PETROLEUM HYDROCARBON, BTEX, PESTICIDE AND PCB
CONCENTRATIONS IN GROUNDWATER
NINTH AVENUE TERMINAL STUDY AREA

Subsurface Consultants, Inc.

SAMPLE DESIGNATION	CONSULTANT	SITE REF AREA	DATE SAMPLED	GROUNDWATER ELEVATION Port of Oak. Datum (FEET)	OIL & GREASE (µg/L)	TVH as GAS (µg/L)	TEH as DIESEL (µg/L)	TEH as MOTOR OIL (µg/L)	BENZENE	ETHYL-BENZENE (µg/L)	TOLUENE (µg/L)	TOTAL XYLEMES (µg/L)	4,4'-DDD (µg/L)	4,4'-DDE (µg/L)	4,4'-DDT (µg/L)	OTHER HERBS/PESTS (µg/L)	AROCLOR-1260 (µg/L)	OTHER PCBs (µg/L)
SCIMW-11	SCI	N	12/1/99	4.07	-	110	<50	<300	0.86	<0.5	<0.5	<0.5	-	-	-	-	-	-
SCIMW-12	SCI	O	8/29/96	4.09	<5,000	<50	<50	<250	<5.0	<5.0	<5.0	<5.0	-	-	-	-	<1.0	ND
SCIMW-12	SCI	O	1/17/97	4.53	-	<50	<50	<250	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
SCIMW-12	SCI	O	9/18/98	4.14	-	-	<50	<300	-	-	-	-	-	-	-	-	-	-
SCIMW-12	SCI	O	12/11/98	3.73	-	-	<50	<300	-	-	-	-	-	-	-	-	-	-
SCIMW-12	SCI	O	5/6/99	3.75	-	-	<50	<300	-	-	-	-	-	-	-	-	-	-
SCIMW-12	SCI	O	11/30/99	4.03	-	-	<50	<300	-	-	-	-	-	-	-	-	-	-
SCIMW-13	SCI	J	1/23/97	6.93	-	<50	3,400yh	3,900	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
SCIMW-13	SCI	J	9/18/98	7.42	-	-	<50	<300	-	-	-	-	-	-	-	-	-	-
SCIMW-13	SCI	J	12/1/99	6.73	-	-	<50	<300	-	-	-	-	-	-	-	-	-	-
SCIMW-14	SCI	I/J	8/29/96	5.36	6,000	<50	2,200yh	1,400yl	<5.0	<5.0	<5.0	<5.0	-	-	-	-	<1.0	ND
SCIMW-14	SCI	I/J	1/21/97	5.64	-	<50	570yh	420yl	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
SCIMW-14	SCI	I/J	9/18/98	5.48	-	-	<50	<300	-	-	-	-	-	-	-	-	-	-
SCIMW-14	SCI	I/J	5/4/99	6.00	-	-	<50	<300	-	-	-	-	-	-	-	-	-	-
SCIMW-14	SCI	I/J	11/30/99	5.30	-	-	<50	<300	-	-	-	-	-	-	-	-	-	-
SCIMW-15	SCI	I/J	8/29/96	4.85	<5,000	<50	2,100yh	1,600yl	<5.0	<5.0	<5.0	<5.0	-	-	-	-	<1.0	ND
SCIMW-15	SCI	I/J	1/17/97	5.01	-	<50	2,500h	1,600yl	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
SCIMW-15	SCI	I/J	9/21/98	5.17	-	-	<50	<300	-	-	-	-	-	-	-	-	-	-
SCIMW-15	SCI	I/J	5/4/99	5.15	-	-	75yh	<300	-	-	-	-	-	-	-	-	-	-
SCIMW-15	SCI	I/J	11/30/99	4.71	-	-	<50	<300	-	-	-	-	-	-	-	-	-	-
SCIMW-16	SCI	R	8/30/96	6.81	<5,000	<50	180	<250	<5.0	<5.0	<5.0	<5.0	-	-	-	-	<1.0	ND
SCIMW-16	SCI	R	1/22/97	7.03	-	<50	290yh	<250	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
SCIMW-16	SCI	R	9/22/98	7.04	-	-	<50	<300	-	-	-	-	-	-	-	-	-	-
SCIMW-16	SCI	R	5/4/99	6.68	-	-	<50	<300	-	-	-	-	-	-	-	-	-	-
SCIMW-16	SCI	R	11/30/99	6.66	-	-	<50	<300	-	-	-	-	-	-	-	-	-	-
SCIMW-17	SCI	R	8/29/96	6.55	<5,000	<50	190yh	<250	<5.0	<5.0	<5.0	<5.0	-	-	-	-	<1.0	ND
SCIMW-17	SCI	R	1/22/97	7.67	-	<50	330yh	500yl	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-

TABLE 4
PETROLEUM HYDROCARBON, BTEX, PESTICIDE AND PCB
CONCENTRATIONS IN GROUNDWATER
NINTH AVENUE TERMINAL STUDY AREA

Subsurface Consultants, Inc.

SAMPLE DESIGNATION	CONSULTANT	SITE REF AREA	DATE SAMPLED	GROUNDWATER ELEVATION Port of Oak. Datum (FEET)	OIL & GREASE (µg/L)	TVH as GAS (µg/L)	TEH as DIESEL (µg/L)	TEH as MOTOR OIL (µg/L)	BENZENE (µg/L)	ETHYL-BENZENE (µg/L)	TOLUENE (µg/L)	TOTAL XYLEMES (µg/L)	4,4'-DDD (µg/L)	4,4'-DDE (µg/L)	4,4'-DDT (µg/L)	OTHER HERBS/PESTS (µg/L)	AROCLO-1260 (µg/L)	OTHER PCBs (µg/L)
SCIMW-17	SCI	R	9/21/98	6.94	-	-	<50	<300	-	-	-	-	-	-	-	-	-	
SCIMW-17	SCI	R	12/1/99	6.65	-	-	<50	<300	-	-	-	-	-	-	-	-	-	
SCIMW-18	SCI	L	9/6/96	5.22+	<5,000	<50	2,200yh	1,600yl	<5.0	<5.0	<5.0	<5.0	-	-	-	<1.0	ND	
SCIMW-18	SCI	L	1/20/97	6.98	-	-	<50	1,900yh	1,900y	<0.5	<0.5	<0.5	<0.5	-	-	-	-	
SCIMW-18	SCI	L	9/24/98	7.23	-	-	<50	<300	-	-	-	-	-	-	-	-	-	
SCIMW-18	SCI	L	12/1/99	6.67	-	-	<50	<300	-	-	-	-	-	-	-	-	-	
SCIMW-19	SCI	R	8/30/96	6.16	<5,000	<50	180	<250	<5.0	<5.0	<5.0	<5.0	-	-	-	<1.0	ND	
SCIMW-19	SCI	R	1/21/97	7.42	-	<50	150yh	<250	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	
SCIMW-19	SCI	R	9/18/98	6.38	-	-	-	-	-	-	-	-	-	-	-	-	-	
SCIMW-19	SCI	R	12/2/99	6.46	-	-	<50	<300	-	-	-	-	-	-	-	-	-	
SCIMW-20	SCI	H/Q	9/3/96	7.03	<5,000	<50	330y	<250	<5.0	<5.0	<5.0	<5.0	-	-	-	<1.0	ND	
SCIMW-20	SCI	H/Q	1/20/97	7.67	-	<50	340yh	290y	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	
SCIMW-20	SCI	H/Q	9/22/98	6.79	-	-	<50	<300	-	-	-	-	-	-	-	-	-	
SCIMW-20	SCI	H/Q	12/2/99	3.40	-	-	<50	<300	-	-	-	-	-	-	-	-	-	
SCIMW-21	SCI	D	5/6/97	7.44	<5,000	<50	670h	860yhl	<0.5	<0.5	<0.5	<0.5	<0.094	<0.094	<0.094	ND	<0.47	ND
SCIMW-21	SCI	D	9/23/98	7.54	-	-	<50	<300	-	-	-	-	-	-	-	-	-	
SCIMW-21	SCI	D	12/3/99	8.98	-	-	<50	<300	-	-	-	-	-	-	-	-	-	
SCIMW-22	SCI	P	5/6/97	8.22	<5,000	<50	1,400yh	2,300hl	<0.5	<0.5	<0.5	<0.5	0.12	<0.094	<0.094	ND	<0.47	ND
SCIMW-22	SCI	P	10/20/97	7.61	<5,000	<50	1,500yh	2,700yhl	<0.5	<0.5	<0.5	<0.5	<0.094	<0.094	<0.094	ND	<0.47	ND
SCIMW-22	SCI	P	9/22/98	7.24	-	-	<50	<300	<5.0	<5.0	<5.0	<5.0	-	-	-	-	-	-
SCIMW-22	SCI	P	5/5/99	7.66	-	-	<50	<300	-	-	-	-	-	-	-	-	-	
SCIMW-22	SCI	P	12/2/99	6.81	-	-	<50	<300	<5.0	<5.0	<5.0	<5.0	-	-	-	-	-	
SCIMW-23	SCI	B	5/6/97	5.55	10,000	-	1,400	1,200yl	-	-	-	-	<0.094	<0.094	<0.094	***	<0.47	ND
SCIMW-23	SCI	B	9/24/98	5.46	-	-	680y	<300	-	-	-	-	<0.09	<0.09	<0.09	ND	<0.5	ND
SCIMW-23	SCI	B	12/11/98	6.39	-	-	260yh	<300	-	-	-	-	<0.1	<0.1	<0.1	ND	<0.5	ND
SCIMW-23	SCI	B	5/7/99	6.09	-	-	660y	<300	-	-	-	-	-	-	-	-	-	
SCIMW-23	SCI	B	8/26/99	4.35	-	-	120y	<300	-	-	-	-	-	-	-	-	-	

TABLE 4
PETROLEUM HYDROCARBON, BTEX, PESTICIDE AND PCB
CONCENTRATIONS IN GROUNDWATER
NINTH AVENUE TERMINAL STUDY AREA

Subsurface Consultants, Inc.

SAMPLE DESIGNATION	CONSULTANT	SITE REF AREA	DATE SAMPLED	GROUNDWATER ELEVATION Port of Oak. Datum (FEET)	OIL & GREASE (µg/L)	TVH as GAS (µg/L)	TEH as DIESEL (µg/L)	TEH as MOTOR OIL (µg/L)	BENZENE (µg/L)	ETHYL-BENZENE (µg/L)	TOLUENE (µg/L)	TOTAL XYLENES (µg/L)	4,4'-DDD (µg/L)	4,4'-DDE (µg/L)	4,4'-DDT (µg/L)	OTHER HERBS/PESTS (µg/L)	AROCLOR-1260 (µg/L)	OTHER PCBs (µg/L)
SCIMW-23	SCI	B	12/3/99	5.56	-	-	74yh	<300	-	-	-	-	<0.1	<0.1	<0.1	ND	<0.5	ND
SCIMW-23	SCI	B	4/6/00	2.79	-	-	250	<300	-	-	-	-	-	-	-	-	-	-
SCIMW-24	SCI	N	5/6/97	4.44	<5,000	5,000	2,700l	2,100l	720	220	37	120	<0.094	<0.094	<0.094	ND	<0.47	ND
SCIMW-24	SCI	N	9/18/98	4.96	-	7,100	330yl	<300	950	99	53	98	-	-	-	-	-	-
SCIMW-24	SCI	N	12/11/98	5.79	-	8,300	800yl	<300	1,200	180	56	111	-	-	-	-	-	-
SCIMW-24	SCI	N	5/6/99	5.14	-	6,700	1,900yl	660yl	1,100	120	31	89	-	-	-	-	-	-
SCIMW-24	SCI	N	8/25/99	4.59	FREE PRODUCT - NOT SAMPLED													
SCIMW-24	SCI	N	12/1/99	4.99	-	7,000	960yl	<300	860	25	35	53.6	-	-	-	-	-	-
SCIMW-24	SCI	N	4/6/00	5.05	-	4,500	2,600yl	2,100	1,700	87	41	81	-	-	-	-	-	-
SCIMW-25	SCI	H	5/7/97	7.30	<5,000	<50	100	<300	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
SCIMW-26	SCI	H	5/6/97	8.15	<5,000	<50	140	<300	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
SCIMW-26	SCI	H	9/22/98	7.41	-	-	<50	<300	-	-	-	-	-	-	-	-	-	-
SCIMW-26	SCI	H	12/2/99	7.92	-	-	<50	<300	-	-	-	-	-	-	-	-	-	-
SCIMW-27	SCI	E/H	5/6/97	6.45	<5,000	<50	3,400	1,800yl	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
SCIMW-27	SCI	E/H	9/22/98	6.58	-	-	<50	<300	-	-	-	-	-	-	-	-	-	-
SCIMW-27	SCI	E/H	11/29/99	6.52	-	-	<50	<300	-	-	-	-	-	-	-	-	-	-
SCIMW-28	SCI	Q	5/7/97	8.34	<5,000	<50	180	<300	<0.5	<0.5	<0.5	<0.5	<0.094	<0.094	<0.094	ND	<0.47	ND
SCIMW-28	SCI	Q	9/25/98	7.83	-	-	<47	<280	-	-	-	-	-	-	-	-	-	<0.47
SCIMW-28	SCI	Q	12/2/99	8.26	-	-	<50	<300	-	-	-	-	-	-	-	-	-	-
SCIMW-29	SCI	H	5/20/97	7.48	<5,000	<50	150	<300	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-
SCIMW-30	SCI	P	10/20/97	7.53	<5,000	<50	530yh	830yhl	<0.5	<0.5	<0.5	<0.5	<0.094	<0.094	<0.094	ND	<0.47	ND
SCIMW-30	SCI	P	9/23/98	7.63	-	-	60y	<300	<5.0	<5.0	<5.0	<5.0	-	-	-	-	-	-
SCIMW-30	SCI	P	5/5/99	7.89	-	-	<50	<300	-	-	-	-	-	-	-	-	-	-
SCIMW-30	SCI	P	12/2/99	7.94	-	-	<50	<300	<5.0	<5.0	<5.0	<5.0	-	-	-	-	-	-
SCIMW-31D	SCI	P	10/20/97	4.23	-<5,000	<50	170y	<300	<0.5	<0.5	<0.5	<0.5	<0.094	<0.094	<0.094	ND	<0.47	ND
SCIMW-31D	SCI	P	9/21/98	4.34	-	-	-	-	<5.0	<5.0	<5.0	<5.0	-	-	-	-	-	-
SCIMW-32	SCI	I/P	10/20/97	7.73	<5,000	<50	1,000yh	990yl	<0.5	<0.5	<0.5	<0.5	<0.094	<0.094	<0.094	ND	<0.47	ND

TABLE 4
PETROLEUM HYDROCARBON, BTEX, PESTICIDE AND PCB
CONCENTRATIONS IN GROUNDWATER
NINTH AVENUE TERMINAL STUDY AREA

Subsurface Consultants, Inc.

SAMPLE DESIGNATION	CONSULTANT	SITE REF AREA	DATE SAMPLED	GROUNDWATER ELEVATION Port of Oak. Datum (FEET)	OIL & GREASE ($\mu\text{g/L}$)	TVH as GAS ($\mu\text{g/L}$)	TEH as DIESEL ($\mu\text{g/L}$)	TEH as MOTOR OIL ($\mu\text{g/L}$)	BENZENE ($\mu\text{g/L}$)	ETHYL-BENZENE ($\mu\text{g/L}$)	TOLUENE ($\mu\text{g/L}$)	TOTAL XYLENES ($\mu\text{g/L}$)	4,4'-DDD ($\mu\text{g/L}$)	4,4'-DDE ($\mu\text{g/L}$)	4,4'-DDT ($\mu\text{g/L}$)	OTHER HERBS/PESTS ($\mu\text{g/L}$)	AROCLOR-1260 ($\mu\text{g/L}$)	OTHER PCBs ($\mu\text{g/L}$)
SCIMW-32	SCI	I/P	9/21/98	7.71	--	--	<50	<300	<5.0	<5.0	<5.0	<5.0	--	--	--	--	--	
SCIMW-32	SCI	I/P	12/2/99	8.04	--	--	<50	<300	--	--	--	--	--	--	--	--	--	
SCIMW-33	SCI	I/J	10/20/97	6.89	<5,000	780	5,700yh	1,600yhl	3.2	12	<0.5	30.7	1.8	0.3	0.11	ND	<0.47	ND
SCIMW-33	SCI	I/J	9/21/98	7.15	--	--	210yl	<300	<10	<10	<10	<10	2.0	0.2	<0.09	ND	<0.5	ND
SCIMW-33	SCI	I/J	5/5/99	7.47	--	--	1,100h	<300	<10	<10	<10	<10	18.0	7.8	<4.9	ND	<24	ND
SCIMW-33	SCI	I/J	12/1/99	6.75	--	<50	87	<300	--	--	--	--	1.7	<1.0	<1.0	ND	<5.1	ND
SCIMW-34	SCI	R	10/20/97	4.88	<5,000	<50	5,200yh	3,600yhl	<0.5	<0.5	<0.5	<0.5	<0.094	<0.094	<0.094	ND	<0.47	ND
SCIMW-34	SCI	R	9/24/98	4.87	--	92	61y	<300	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
SCIMW-34	SCI	R	12/11/98	4.91	--	290	60ylh	<300	150	28	1.0	6.5	--	--	--	--	--	--
SCIMW-34	SCI	R	5/5/99	4.49	--	91	<50	<300	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
SCIMW-34	SCI	R	8/26/99	6.86	--	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
SCIMW-34	SCI	R	12/2/99	4.70	--	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
SCIMW-34	SCI	R	4/6/00	5.50	--	57	<50	<300	8.6	0.84	<0.5	<0.5	--	--	--	--	--	--
SCIMW-35	SCI	R	10/20/97	4.87	<5,000	<50	99yh	<300	<0.5	<0.5	<0.5	<0.5	<0.094	<0.094	<0.094	ND	<0.47	ND
SCIMW-35	SCI	R	9/23/98	4.74	--	--	<50	<300	--	--	--	--	--	--	--	--	--	--
SCIMW-35	SCI	R	12/11/98	5.15	--	--	<50	<300	--	--	--	--	--	--	--	--	--	--
SCIMW-35	SCI	R	5/4/99	4.50	--	--	<50	<300	--	--	--	--	--	--	--	--	--	--
SCIMW-35	SCI	R	12/2/99	4.63	--	--	<50	<300	--	--	--	--	--	--	--	--	--	--
XA Dup of SCIMW-16	SCI	R	8/30/96	6.81	--	--	--	--	<5.0	<5.0	<5.0	<5.0	--	--	--	--	--	--
XB Dup of SCIMW-3	SCI	I/J	9/5/96	6.67	--	--	--	--	<5.0	<5.0	<5.0	<5.0	--	--	--	--	--	--

TVH = Total Volatile Hydrocarbons

$\mu\text{g/L}$ = micrograms per liter or parts per billion

-- = Not tested

TEH = Total Extractable Hydrocarbons

y = Sample exhibits fuel pattern which does not resemble std

<50 = Comp. not detected at or above stated reporting limit

DDD = Dichlorodiphenyl dichloroethane

h = heavier hydrocarbons than indicated standard

ND = Not detected

DDE = Dichlorodiphenyl dichloroethene

l = lighter hydrocarbons than indicated standard

+ = Groundwater level may not be stabilized

DDT = Dichlorodiphenyl trichloroethene

z = Sample exhibits unknown single peak or peaks

Groundwater measurements presented are those collected on the first day of

PCBs = Polychlorinated Biphenyls

J = estimated value

sampling for the event and may not be the same as the date sampled.

*** = Also detected 0.05ug/L Heptachlor epoxide B

(a) Additional sample was collected on Dec 28, 1998 for the TEH analysis.

(b) These wells contained free product at time of sampling.

TABLE 5
VOLATILE ORGANIC CONCENTRATIONS
IN GROUNDWATER
NINTH AVENUE TERMINAL STUDY AREA

SAMPLE DESIGNATION	CONSULTANT	SITE REF AREA	DATE SAMPLED	GROUNDWATER ELEVATION Port of Oak. Datum (FEET)	ACETONE ($\mu\text{g/L}$)	MEK or 2-BUTAN-ONE ($\mu\text{g/L}$)	CARBON DISULFIDE ($\mu\text{g/L}$)	CHLOROBENZENE ($\mu\text{g/L}$)	CHLOROETHANE ($\mu\text{g/L}$)	1,1-DI-CHLOROETHANE ($\mu\text{g/L}$)	1,2-DI-CHLOROETHANE ($\mu\text{g/L}$)	1,1-DI-CHLOROETHENE ($\mu\text{g/L}$)	cis-1,2-DI-CHLOROETHENE ($\mu\text{g/L}$)	trans-1,2-DI-CHLOROETHENE ($\mu\text{g/L}$)	4-METHYL-2-PENTANONE ($\mu\text{g/L}$)	1,1,1-TRICHLOROETHANE ($\mu\text{g/L}$)	TRICHLOROETHENE ($\mu\text{g/L}$)	VINYL CHLORIDE ($\mu\text{g/L}$)	OTHER 8240s EXCL. BTEX*
MW-5	SCI	F	1/20/97	8.38	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
MW-5	SCI	F/H	5/6/97	6.45	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
MW-6	SCI	F	9/5/96	6.67	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
MW-6	SCI	F/H	5/6/97	7.04	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
MW-7	SCI	M	9/5/96	5.48	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
MW-7	SCI	M	1/17/97	6.48	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-1	SCI	E/H	5/24/96	5.09	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-1	SCI	E/H	9/6/96	4.39	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-1	SCI	E/H	1/22/97	5.29	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-2	SCI	N	9/4/96	3.38	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-2	SCI	N	1/17/97	3.82	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-3	SCI	I/J	5/23/96	7.22	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-3	SCI	I/J	9/5/96	6.67	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
XB Dup of SCIMW-3	SCI	I/J	9/5/96	6.67	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-3	SCI	I/J	1/20/97	6.46	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-4	SCI	L	8/26/96	5.50	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-4	SCI	L	1/22/97	8.43	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-5	SCI	M	9/3/96	4.63	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-5	SCI	M	1/20/97	6.12	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-6	SCI	C	8/28/96	4.69	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-6	SCI	C	1/22/97	4.68	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-7	SCI	P/Q	9/6/96	3.31+	<5,000	<2,500	<1,300	<1,300	2,400J	8,100	<1,300	<1,300	27,000	<1,300	<2,500	10,000	7,900	8,900	ND
SCIMW-7	SCI	P/Q	1/20/97	7.32	<13,000	<6,300	<3,100	<3,100	6,300	13,000	<3,100	<3,100	91,000	<3,100	<6,300	53,000	32,000	5,600J	ND
SCIMW-7	SCI	P/Q	10/20/97	6.96	<1,000	250J	<250	<250	4,000	6,800	<250	330	60,000	920	<500	12,000	2,900	7,400	ND
SCIMW-7	SCI	P/Q	9/22/98	5.74	<1,000	<500	<250	<250	1,400	1,700	<250	<250	5,000	180J	<500	1,600	<250	2,400	ND
SCIMW-7	SCI	P/Q	5/6/99	7.40	<100	<50	<25	<25	570	<25	<25	<25	160	34	<50	<25	160	ND	
SCIMW-7	SCI	P/Q	12/2/99	5.56	35	31	<5.0	<5.0	890	580	6.2	79	2,900	120	17	1,500	250	390	ND
SCIMW-8	SCI	I	8/26/96	7.11	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND	

TABLE 5
VOLATILE ORGANIC CONCENTRATIONS
IN GROUNDWATER
NINTH AVENUE TERMINAL STUDY AREA

Subsurface Consultants, Inc.

SAMPLE DESIGNATION	CONSULTANT	SITE REF AREA	DATE SAMPLED	GROUNDWATER ELEVATION Port of Oak. Datum (FEET)	ACETONE (µg/L)	MEK or 2-BUTAN-ONE (µg/L)	CARBON DISULFIDE (µg/L)	CHLOROBENZENE (µg/L)	CHLOROETHANE (µg/L)	1,1-DI-CHLOROETHANE (µg/L)	1,2-DI-CHLOROETHANE (µg/L)	1,1-DI-CHLOROETHENE (µg/L)	cis-1,2-DI-CHLOROETHENE (µg/L)	trans-1,2-DI-CHLOROETHENE (µg/L)	4-METHYL-2-PENTANONE (µg/L)	1,1,1-TRICHLOROETHANE (µg/L)	TRICHLOROETHENE (µg/L)	VINYL CHLORIDE (µg/L)	OTHER 8240s EXCL. BTEX*
SCIMW-8	SCI	I	1/21/97	7.70	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-9	SCI	I	8/29/96	6.40	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-9	SCI	I	1/23/97	6.66	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-10	SCI	J	8/26/96	7.95	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-10	SCI	J	1/23/97	7.87	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-11	SCI	N	8/28/96	3.83	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-11	SCI	N	1/17/97	4.32	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-12	SCI	O	8/29/96	4.09	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-12	SCI	O	1/17/97	4.53	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-13	SCI	J	8/29/96	7.21	<20	<10	<5.0	<5.0	<10	6.7	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-13	SCI	J	1/23/97	6.93	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-14	SCI	I/J	8/29/96	5.36	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-14	SCI	I/J	1/21/97	5.64	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-15	SCI	I/J	8/29/96	4.85	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-15	SCI	I/J	1/17/97	5.01	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-16	SCI	R	8/30/96	6.81	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
X.A. Dup of SCIMW-16	SCI	R	8/30/96	6.81	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-16	SCI	R	1/22/97	7.03	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-17	SCI	R	8/29/96	6.55	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-17	SCI	R	1/22/97	7.67	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-18	SCI	L	9/6/96	5.22+	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-18	SCI	L	1/20/97	6.98	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-19	SCI	R	8/30/96	6.16	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-19	SCI	R	1/21/97	7.42	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-20	SCI	H/Q	9/3/96	7.03	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-20	SCI	H/Q	1/20/97	7.67	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-22	SCI	P	5/6/97	8.22	<100	<50	<25	<25	<50	<25	<25	<25	<25	<25	<50	<25	<25	<50	ND

TABLE 5
VOLATILE ORGANIC CONCENTRATIONS
IN GROUNDWATER
NINTH AVENUE TERMINAL STUDY AREA

SAMPLE DESIGNATION	CONSULTANT	SITE REF AREA	DATE SAMPLED	GROUNDWATER ELEVATION Port of Oak. Datum (FEET)	ACETONE ($\mu\text{g/L}$)	MEK or 2-BUTAN-ONE ($\mu\text{g/L}$)	CARBON DISULFIDE ($\mu\text{g/L}$)	CHLOROBENZENE ($\mu\text{g/L}$)	CHLOROETHANE ($\mu\text{g/L}$)	1,1-DI-CHLOROETHANE ($\mu\text{g/L}$)	1,2-DI-CHLOROETHANE ($\mu\text{g/L}$)	1,1-DI-CHLOROETHENE ($\mu\text{g/L}$)	cis-1,2-DI-CHLOROETHENE ($\mu\text{g/L}$)	trans-1,2-DI-CHLOROETHENE ($\mu\text{g/L}$)	4-METHYL-2-PENTANONE ($\mu\text{g/L}$)	1,1,1-TRICHLOROETHANE ($\mu\text{g/L}$)	TRICHLOROETHENE ($\mu\text{g/L}$)	VINYL CHLORIDE ($\mu\text{g/L}$)	OTHER 8240s EXCL. BTEX*
SCIMW-22	SCI	P	10/20/97	7.61	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-22	SCI	P	9/23/98	7.24	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-22	SCI	P	5/5/99	7.66	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-22	SCI	P	12/2/99	6.81	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-24	SCI	N	5/6/97	4.44	<100	<50	<25	<25	<50	<25	<25	<25	<25	<25	<50	<25	<25	<50	ND
SCIMW-25	SCI	H	5/7/97	7.30	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	3.5J	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-26	SCI	H	5/6/97	8.15	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-27	SCI	E/H	5/6/97	6.45	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-29	SCI	H	5/20/97	7.48	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-30	SCI	P	10/20/97	7.53	27	5.7J	25	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-30	SCI	P	9/23/98	7.63	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-30	SCI	P	5/5/99	7.89	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-30	SCI	P	12/2/99	7.94	<20	<10	16	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-31D	SCI	P	10/20/97	4.23	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-31D	SCI	P	9/21/98	4.34	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-31D	SCI	P	5/5/99	4.01	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-31D	SCI	P	12/1/99	4.13	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-32	SCI	I/P	10/20/97	7.73	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-32	SCI	I/P	9/21/98	7.71	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-32	SCI	I/P	5/5/99	8.43	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND

TABLE 5
VOLATILE ORGANIC CONCENTRATIONS
IN GROUNDWATER
NINTH AVENUE TERMINAL STUDY AREA

Subsurface Consultants, Inc.

SAMPLE DESIGNATION	CONSULTANT	SITE REF AREA	DATE SAMPLED	GROUNDWATER ELEVATION Port of Oak. Datum (FEET)	ACETONE ($\mu\text{g/L}$)	MEK or 2-BUTAN-ONE ($\mu\text{g/L}$)	CARBON DISULFIDE ($\mu\text{g/L}$)	CHLOROBENZENE ($\mu\text{g/L}$)	CHLOROETHANE ($\mu\text{g/L}$)	1,1-DI-CHLOROETHANE ($\mu\text{g/L}$)	1,2-DI-CHLOROETHANE ($\mu\text{g/L}$)	1,1-DI-CHLOROETHENE ($\mu\text{g/L}$)	cis-1,2-DI-CHLOROETHENE ($\mu\text{g/L}$)	trans-1,2-DI-CHLOROETHENE ($\mu\text{g/L}$)	4-METHYL-2-PENTANONE ($\mu\text{g/L}$)	1,1,1-TRI-CHLOROETHANE ($\mu\text{g/L}$)	TRICHLOROETHENE ($\mu\text{g/L}$)	VINYL CHLORIDE ($\mu\text{g/L}$)	OTHER 8240s EXCL. BTEX*
SCIMW-32	SCI	I/P	12/1/99	8.04	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-33	SCI	I/J	10/20/97	6.89	<50	<25	<13	310	<25	<13	<13	<13	<13	<13	<25	<13	<13	<25	ND
SCIMW-33	SCI	I/J	9/21/98	7.15	<40	<20	<10	260	<20	<10	<10	<10	<10	<10	<20	<10	<10	<20	ND
SCIMW-33	SCI	I/J	5/5/99	7.47	<40	<20	<10	290	<20	<10	<10	<10	<10	<10	<20	<10	<10	<20	ND
SCIMW-33	SCI	I/J	12/1/99	6.75	<20	<10	<5.0	160	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-34	SCI	R	10/20/97	4.88	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND
SCIMW-35	SCI	R	10/20/97	4.87	<20	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	ND

* = BTEX presented in Table 5

MEK = Methyl ethyl ketone

$\mu\text{g/L}$ = micrograms per liter or parts per billion

<10 = Compound not detected at or above stated reporting limit

ND = Not detected

J = Estimated value

+ = Groundwater level may not be stabilized

Groundwater measurements presented are those collected on the first day of sampling for the event and may not be the same as the date sampled.

TABLE 6
SEMI-VOLATILE ORGANIC CONCENTRATIONS (except PNA's)
IN GROUNDWATER
NINTH AVENUE TERMINAL STUDY AREA

SAMPLE DESIGNATION	CONSULTANT	DESCRIPTION	SITE REF AREA	DATE SAMPLED	GROUNDWATER ELEVATION Port of Oak. Datum (FEET)	BENZOIC ACID (µg/L)	BENZYL ALCOHOL (µg/L)	1,2-DI-CHLOROBENZENE (µg/L)	1,4-DI-CHLOROBENZENE (µg/L)	2,4-DIMETHYL-PHENOL (µg/L)	DI-N-OCTYL-PHTHALATE (µg/L)	BIS(2-ETHYLHEXYL)PHTHALATE (µg/L)	2-METHYL-PHENOL (µg/L)	4-METHYL-PHENOL (µg/L)	PENTA-CHLOROPHENOL (µg/L)	PHENOL (µg/L)	OTHER 8270s	
MW-5	SCI	Filtered	F	1/20/97	8.38	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
MW-6	SCI	Filtered	F	9/5/96	6.67	<2400	<470	<470	<470	<470	<470	<470	<470	<470	<470	<470	ND	
MW-7	SCI	Filtered	M	9/5/96	5.48	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
MW-7	SCI	Filtered	M	1/17/97	6.48	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-1	SCI	Filtered	E/H	5/24/96	5.09	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-1	SCI	Filtered	E/H	9/6/96	4.39	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-1	SCI	Filtered	E/H	1/22/97	5.29	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-2	SCI	Filtered	N	5/23/96	4.04	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-2	SCI	Filtered	N	9/4/96	3.38	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-2	SCI	Filtered	N	1/17/97	3.82	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-3	SCI	Filtered	I/J	5/23/96	7.22	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-3	SCI	Filtered	I/J	9/5/96	6.67	<47	<9.4	<9.4	<9.4	<9.4	<9.4	5.5J	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-3	SCI	Filtered	I/J	1/20/97	6.46	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-3	SCI	Filtered	I/J	9/18/98	4.29	-	-	-	-	-	-	-	-	-	-	-	-	
SCIMW-4	SCI	Filtered	L	8/26/96	5.50	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-4	SCI	Filtered	L	1/22/97	8.43	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-5	SCI	Filtered	M	9/3/96	4.63	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-5	SCI	Filtered	M	1/20/97	6.12	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-6	SCI	Filtered	C	8/28/96	4.69	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-6	SCI	Filtered	C	1/22/97	4.68	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-7	SCI	Filtered	P/Q	9/6/96	3.31+	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	4.7J	<9.4	<9.4	ND
SCIMW-7	SCI	Filtered	P/Q	1/20/97	7.32	280	11J	<19	<19	40	<19	<19	55	110	<19	27	ND	
SCIMW-8	SCI	Filtered	I	8/26/96	7.11	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-8	SCI	Filtered	I	1/21/97	7.70	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-9	SCI	Filtered	I	8/29/96	6.40	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-9	SCI	Filtered	I	1/23/97	6.66	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-9	SCI	Filtered	I	9/22/98	6.64	<48	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	<9.7	NL	<9.7	<9.7	ND
SCIMW-10	SCI	Filtered	J	8/26/96	7.95	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	

TABLE 6
SEMI-VOLATILE ORGANIC CONCENTRATIONS (except PNA's)
IN GROUNDWATER
NINTH AVENUE TERMINAL STUDY AREA

SAMPLE DESIGNATION	CONSULTANT	DESCRIPTION	SITE REF AREA	DATE SAMPLED	GROUNDWATER ELEVATION Port of Oak. Datum (FEET)	BENZOIC ACID (µg/L)	BENZYL ALCOHOL (µg/L)	1,2-DI-CHLOROBENZENE (µg/L)	1,4-DI-CHLOROBENZENE (µg/L)	2,4-DI-METHYL-PHENOL (µg/L)	DI-N-OCTYL-PHTHALATE (µg/L)	BIS(2-ETHYLHEXYL)PHTHALATE (µg/L)	2-METHYL-PHENOL (µg/L)	4-METHYL-PHENOL (µg/L)	PENTA-CHLOROPHENOL (µg/L)	PHENOL (µg/L)	OTHER 8270s	
SCIMW-10	SCI	Filtered	J	1/23/97	7.87	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-11	SCI	Filtered	N	8/28/96	3.83	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-11	SCI	Filtered	N	1/17/97	4.32	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-12	SCI	Filtered	O	8/29/96	4.09	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-12	SCI	Filtered	O	1/17/97	4.53	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-13	SCI	Filtered	J	8/29/96	7.21	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-13	SCI	Filtered	J	1/23/97	6.93	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-14	SCI	Filtered	I/J	8/29/96	5.36	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-14	SCI	Filtered	I/J	1/21/97	5.64	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-15	SCI	Filtered	I/J	8/29/96	4.85	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-15	SCI	Filtered	I/J	1/17/97	5.01	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND	
SCIMW-15	SCI	Filtered	I/J	9/21/98	5.17	<48	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	NL	<9.5	<9.5	ND
SCIMW-16	SCI	Filtered	R	8/30/96	6.81	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND
SCIMW-16	SCI	Filtered	R	1/22/97	7.03	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND
SCIMW-17	SCI	Filtered	R	8/29/96	6.55	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND
SCIMW-17	SCI	Filtered	R	1/22/97	7.67	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND
SCIMW-18	SCI	Filtered	L	9/6/96	5.22+	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND
SCIMW-18	SCI	Filtered	L	1/20/97	6.98	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND
SCIMW-19	SCI	Filtered	R	8/30/96	6.16	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND
SCIMW-19	SCI	Filtered	R	1/21/97	7.42	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	11	<9.4	<9.4	<9.4	ND
SCIMW-20	SCI	Filtered	H/Q	9/3/96	7.03	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND
SCIMW-20	SCI	Filtered	H/Q	1/20/97	7.67	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND
SCIMW-22	SCI	Filtered	P	5/6/97	8.22	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND
SCIMW-24	SCI	Filtered	N	5/6/97	4.44	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	14	ND
SCIMW-34	SCI	Filtered	R	10/20/97	4.88	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND
SCIMW-35	SCI	Unfiltered	R	10/20/97	4.87	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	ND

µg/L = micrograms per liter or parts per billion

<25 = Compound not detected at or above stated reporting limit
NL = Not listed on analytical test report

ND = Not detected

+ = Groundwater level may not be stabilized
-- = Not tested

J = Estimated value

e = Sample extracted 3 days after prescribed holding time
* = Naphthalene detected at 45 µg/L

Groundwater measurements presented are those collected on the first day of sampling for the event and may not be the same as the date sampled.

TABLE 7
POLYNUCLEAR AROMATIC CONCENTRATION
IN GROUNDWATER
NINTH AVENUE TERMINAL STUDY AREA

Subsurface Consultants, Inc.

TABLE 7
POLYNUCLEAR AROMATIC CONCENTRATIONS
IN GROUNDWATER
NINTH AVENUE TERMINAL STUDY AREA

Notes:

a: 2-Methylnaphthalene detected at 410J µg/L in MW-6

b: 2-Methylnaphthalene detected at 6.01 $\mu\text{g/L}$ in SCIMW-2
c: 2-Methyl-1-naphthol detected at 1.21 $\mu\text{g/L}$ in SCIMW-2

c: 2-Methylnaphthalene detected at 24 µg/L in SCIM

$\mu\text{g/L}$ = micrograms
L = Liters and milliliters

J = Estimated value

Groundwater measurements presented are those collected on the first day of sampling for the event and may not be the same as the data sampled.

TABLE 8
HEAVY METAL CONCENTRATIONS IN GROUNDWATER
NINTH AVENUE TERMINAL STUDY AREA

Subsurface Consultants, Inc.

SAMPLE DESIGNATION	CONSULTANT	DESCRIPTION	SITE REF AREA	SAMPLED	GROUNDWATER ELEVATION Port of Oak. Datum (feet)	ANTIMONY (µg/L)	ARSENIC (µg/L)	BARIUM (µg/L)	BERYLLIUM (µg/L)	CADMIUM (µg/L)	TOTAL CHROMIUM VI (µg/L)	CHROMIUM VI (µg/L)	COBALT (µg/L)	COPPER (µg/L)	LEAD (µg/L)	MERCURY (µg/L)	MOLYBDENUM (µg/L)	NICKEL (µg/L)	POTASSIUM (µg/L)	SELENIUM (µg/L)	SILVER (µg/L)	THALIUM (µg/L)	VANADIUM (µg/L)	ZINC (µg/L)
MW-5	SCI	Filtered	F	1/20/97	8.38	<60	10	49	<2.0	<2.0	<10	-	<20	<10	<3.0	<0.20	<20	<20	-	6.5	<5.0	<5.0	<10	26
MW-5	SCI	Filtered	F/H	5/6/97	6.45	-	-	-	-	-	-	50	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	SCI	Filtered	F	9/5/96	6.67	<60	8.9	420	<2.0	<2.0	<10	-	<20	<10	3.5	<0.20	<20	<20	-	27	<5.0	<5.0	<10	<20
MW-6	SCI	Filtered	F/H	5/6/97	7.04	-	-	-	-	-	-	20	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	SCI	Filtered	M	9/5/96	5.48	<60	10	78	<2.0	<2.0	<10	-	<20	<10	<3.0	<0.20	<20	<20	-	20	<5.0	<5.0	<10	<20
MW-7	SCI	Filtered	M	1/17/97	6.48	<60	12	44	<2.0	<2.0	<10	-	<20	<10	<3.0	<0.20	<20	<20	-	23	<5.0	<5.0	<10	<20
SCIMW-1	SCI	Unfiltered	E/H	5/24/96	5.09	<60	45	1,000	2.8	2.3	63	-	<20	1,800	2,300	<0.20	<20	68	-	7.8	<5.0	<5.0	62	1,000
SCIMW-1	SCI	Filtered	E/H	5/24/96	5.09	<60	<5.0	170	2.0	<2.0	<10	-	<20	<10	<3.0	<0.20	<20	<20	-	8.3	<5.0	<5.0	<10	<20
SCIMW-1	SCI	Filtered	E/H	9/6/96	4.39	<60	<5.0	150	<2.0	<2.0	<10	-	<20	<10	<3.0	<0.20	<20	<20	-	17	<5.0	<5.0	<10	<20
SCIMW-1	SCI	Filtered	E/H	1/22/97	5.29	<60	<5.0	170	<2.0	<2.0	<10	-	<20	<10	<3.0	<0.20	<20	<20	-	33	<5.0	<5.0	<10	210
SCIMW-2	SCI	Unfiltered	N	5/23/96	4.04	<60	14	90	<2.0	<2.0	12	-	<20	<10	2,300	0.64	<20	<20	-	14	<5.0	<5.0	<10	38
SCIMW-2	SCI	Filtered	N	5/23/96	4.04	<60	11	490	<2.0	<2.0	<10	-	<20	69	62	<0.20	<20	<20	-	22	<5.0	<5.0	<10	110
MW-2	SCI	Filtered	N	9/4/96	3.38	<60	15	320	<2.0	<2.0	<10	-	<20	<10	<3.0	<0.20	<20	<20	-	<5.0	<5.0	<10	<20	
SCIMW-2	SCI	Filtered	N	1/17/97	3.82	<60	6.6	340	<2.0	<2.0	<10	-	<20	<10	<3.0	<0.20	<20	<20	-	<5.0	<5.0	<10	<20	
SCIMW-2	SCI	Filtered	N	9/18/98	4.07	<60	5.0	430	<2.0	<5.0	<10	-	<20	<10	<3.0	<0.20	<20	<20	-	10	<5.0	<5.0	<10	<20
SCIMW-2	SCI	Filtered	N	12/10/98	3.52	<60	9.6	-	<2.0	<5.0	<10	-	<20	<10	<3.0	<0.20	<20	<20	-	<5.0	<5.0	<10	49	
SCIMW-2	SCI	Filtered	N	5/7/99	4.52	<60	11.0	900	<2.0	<5.0	<10	-	<20	<10	<3.0	<0.20	<20	<20	-	9.5	<5.0	<5.0	<10	24
SCIMW-2	SCI	Filtered	N	8/26/99	3.00	<60	6.8	300	<2.0	<5.0	<10	-	<20	<10	<3.0	<0.20	<20	<20	-	<5.0	<5.0	<10	<20	
SCIMW-2	SCI	Filtered	N	12/2/99	3.85	<60	6.6	330	<2.0	<5.0	<10	-	<20	<10	<3.0	<0.20	<20	<20	-	<5.0	<5.0	<10	24	
SCIMW-3	SCI	Unfiltered	I/J	5/23/96	7.22	<60	<5.0	<10	<2.0	<2.0	<10	-	58	<10	<3.0	<0.20	<20	<20	-	<5.0	<5.0	<10	<20	
SCIMW-3	SCI	Filtered	I/J	5/23/96	7.22	<60	<5.0	42	<2.0	<2.0	<10	-	<20	<10	<3.0	<0.20	<20	<20	-	8.2	<5.0	<5.0	<10	<20
SCIMW-3	SCI	Filtered	I/J	9/5/96	6.67	<60	8.5	170	<2.0	<2.0	<10	-	<20	<10	4.6	<0.20	<20	<20	-	31	<5.0	<5.0	<10	<20
SCIMW-3	SCI	Filtered	I/J	1/20/97	6.46	<60	23	110	<2.0	<2.0	<10	-	<20	<10	<3.0	<0.20	<20	<20	-	31	<5.0	<5.0	<10	<20
SCIMW-4	SCI	Filtered	L	8/26/96	5.50	<60	12	37	<2.0	<2.0	<10	-	<20	<10	<3.0	<0.20	<20	<20	-	22	<5.0	<5.0	<10	<20
SCIMW-4	SCI	Filtered	L	1/22/97	8.43	<60	6.6	16	<2.0	<2.0	<10	-	<20	<10	<3.0	<0.20	<20	<20	-	25	<5.0	<5.0	<10	<20
SCIMW-5	SCI	Filtered	M	9/3/96	4.63	<60	<5.0	290	2.0	2.0	<10	-	<20	<10	<3.0	0.23	<20	<20	-	<5.0	<5.0	<10	<20	
MW-5	SCI	Filtered	M	1/20/97	6.12	<60	<5.0	62	2.7	<2.0	<10	-	<20	<10	<3.0	<0.20	<20	<20	-	<5.0	<5.0	<10	<25	
SCIMW-6	SCI	Filtered	C	8/28/96	4.69	<60	<5.0	100	2.1	<2.0	<10	-	<20	59	<3.0	<0.20	<20	<20	-	<5.0	<5.0	<10	240	

TABLE 8
HEAVY METAL CONCENTRATIONS IN GROUNDWATER
NINTH AVENUE TERMINAL STUDY AREA

Subsurface Consultants, Inc.

SAMPLE DESIGNATION	CONSULTANT	DESCRIPTION	SITE REF AREA	SAMPLED	GROUNDWATER ELEVATION Port of Oak. Datum (feet)	ANTIMONY (µg/L)	ARSENIC (µg/L)	BARIUM (µg/L)	BERYLLIUM (µg/L)	CADMIUM (µg/L)	TOTAL CHROMIUM (µg/L)	CHROMIUM VI (µg/L)	COBALT (µg/L)	COPPER (µg/L)	LEAD (µg/L)	MERCURY (µg/L)	MOLYBDENUM (µg/L)	NICKEL (µg/L)	POTASSIUM (µg/L)	SELENIUM (µg/L)	SILVER (µg/L)	THALLIUM (µg/L)	VANADIUM (µg/L)	ZINC (µg/L)
SCIMW-16	SCI	Filtered	R	8/30/96	6.81	<60	14	300	3.1	<2.0	<10	--	<20	<10	<3.0	<0.20	<20	<20	--	40	<5.0	<5.0	12	<20
SCIMW-16	SCI	Filtered	R	1/22/97	7.03	<60	14	220	3.6	<2.0	<10	--	<20	<10	<3.0	<0.20	<20	<20	--	22	<5.0	<5.0	26	<20
SCIMW-17	SCI	Filtered	R	8/29/96	6.55	<60	17	960	<2.0	<2.0	<10	--	<20	<10	<3.0	<0.20	<20	<20	--	18	<5.0	<5.0	<10	<20
SCIMW-17	SCI	Filtered	R	1/22/97	7.67	<60	<5.0	270	<2.0	<2.0	<10	--	<20	<10	<3.0	<0.20	<20	<20	--	15	<5.0	<5.0	<10	<20
SCIMW-18	SCI	Filtered	L	9/6/96	5.22+	<60	20	160	<2.0	<2.0	<10	--	<20	<10	<3.0	<0.20	<20	26	--	22	<5.0	<5.0	19	<20
SCIMW-18	SCI	Filtered	L	1/20/97	6.98	<60	21	250	<2.0	<2.0	<10	--	<20	<10	<3.0	<0.20	<20	<20	--	38	<5.0	<5.0	<10	<20
SCIMW-19	SCI	Filtered	R	8/30/96	6.16	<60	32	140	<2.0	<2.0	<10	--	<20	<10	6.2	<0.20	<20	<20	--	32	<5.0	<5.0	11	<20
SCIMW-19	SCI	Filtered	R	1/21/97	7.42	<60	23	150	<2.0	<2.0	<10	--	<20	<10	<3.0	<0.20	<20	22	--	24	<5.0	<5.0	<10	<20
SCIMW-20	SCI	Filtered	H/Q	9/3/96	7.03	<60	9.5	930	<2.0	<2.0	<10	--	<20	<10	<3.0	<0.24	<20	<20	--	20	<5.0	<5.0	<10	<20
SCIMW-20	SCI	Filtered	H/Q	1/20/97	7.67	<60	6.8	1,600	<2.0	<2.0	<10	--	<20	<10	<3.0	<0.20	<20	<20	--	18	<5.0	<5.0	<10	41
SCIMW-20	SCI	Filtered	H/Q	10/7/98	6.79	--	--	--	--	--	--	--	--	--	<3.0	--	--	--	--	--	--	--	--	--
SCIMW-20	SCI	Filtered	H/Q	12/2/99	3.40	--	--	--	--	--	--	--	--	--	<3.0	--	--	--	--	--	--	--	--	--
SCIMW-21	SCI	Filtered	D	5/6/97	7.44	--	--	--	--	--	--	--	--	--	7.2	--	--	--	110,000	--	--	--	--	--
SCIMW-22	SCI	Filtered	P	5/6/97	8.22	--	--	--	--	--	--	70	--	--	--	--	--	--	170,000	--	--	--	--	--
SCIMW-23	SCI	Filtered	B	5/6/97	5.55	<60	22	56	<2.0	<5.0	<10	80	<20	<10	<3.0	<0.20	<20	<20	16,000	20	<5.0	<5.0	<10	25
SCIMW-24	SCI	Filtered	N	5/6/97	4.44	--	--	--	--	--	--	160	--	--	6.3	--	--	--	--	--	--	--	--	--
SCIMW-24	SCI	Filtered	N	9/18/98	4.96	--	--	--	--	--	--	--	--	--	<3.0	--	--	--	--	--	--	--	--	--
SCIMW-24	SCI	Filtered	N	12/11/98	5.79	--	--	--	--	--	--	--	--	--	<3.0	--	--	--	--	--	--	--	--	--
SCIMW-24	SCI	Filtered	N	5/6/99	5.14	--	--	--	--	--	--	--	--	--	<3.0	--	--	--	--	--	--	--	--	--
SCIMW-24	SCI	Filtered	N	12/1/99	4.99	--	--	--	--	--	--	--	--	--	<3.0	--	--	--	--	--	--	--	--	--
SCIMW-24	SCI	Filtered	N	4/6/00	5.05	--	--	--	--	--	--	--	--	--	8.3	--	--	--	--	--	--	--	--	--
SCIMW-25	SCI	Filtered	H	5/7/97	7.30	<60	9.2	56	<2.0	<5.0	<10	60	<20	<10	<3.0	0.26	<20	28	--	14	<5.0	<5.0	<10	<20
SCIMW-26	SCI	Filtered	H	5/6/97	8.15	<60	20	2,900	<2.0	<5.0	<10	140	<20	<10	<3.0	<0.20	<20	<20	--	15	<5.0	<5.0	<10	<20
SCIMW-27	SCI	Filtered	E/H	5/6/97	6.45	<60	10	480	<2.0	<5.0	<10	60	<20	<10	<3.0	<0.20	<20	<20	--	21	<5.0	<5.0	<10	<20
SCIMW-28	SCI	Filtered	Q	5/7/97	8.34	--	--	--	--	--	--	90	--	--	6.9	--	--	--	--	--	--	--	--	--
SCIMW-28	SCI	Filtered	Q	9/25/98	7.83	<60	15	96	2.6	<5.0	<10	--	<20	13	4.1	<0.20	<20	<20	--	<5.0	<5.0	<5.0	11	260
SCIMW-28	SCI	Filtered	Q	5/6/99	8.98	<60	25	19	<2.0	<5.0	<10	--	<20	<10	<3.0	<0.20	<20	<20	--	12	<5.0	<5.0	<5.0	<20
SCIMW-28	SCI	Filtered	Q	12/2/99	8.26	<60	<5.0	11	<2.0	<5.0	<10	--	<20	<10	<3.0	<0.20	<20	<20	--	<5.0	<5.0	<5.0	<10.0	<20

TABLE 8
HEAVY METAL CONCENTRATIONS IN GROUNDWATER
NINTH AVENUE TERMINAL STUDY AREA

Subsurface Consultants, Inc.

SAMPLE DESIGNATION	CONSULTANT	DESCRIPTION	SITE REF AREA	SAMPLED	GROUNDWATER ELEVATION Port of Oak. Datum (feet)	ANTIMONY ($\mu\text{g/L}$)	ARSENIC ($\mu\text{g/L}$)	BARIUM ($\mu\text{g/L}$)	BERYLLIUM ($\mu\text{g/L}$)	CADMIUM ($\mu\text{g/L}$)	TOTAL CHROMIUM ($\mu\text{g/L}$)	CHROMIUM VI ($\mu\text{g/L}$)	COBALT ($\mu\text{g/L}$)	COPPER ($\mu\text{g/L}$)	LEAD ($\mu\text{g/L}$)	MERCURY ($\mu\text{g/L}$)	MOLYBDENUM ($\mu\text{g/L}$)	NICKEL ($\mu\text{g/L}$)	POTASSIUM ($\mu\text{g/L}$)	SELENIUM ($\mu\text{g/L}$)	SILVER ($\mu\text{g/L}$)	THALLIUM ($\mu\text{g/L}$)	VANADIUM ($\mu\text{g/L}$)	ZINC ($\mu\text{g/L}$)
SCIMW-6	SCI	Filtered	C	1/22/97	4.68	<60	<5.0	30	<2.0	<2.0	<10	--	<20	20	<3.0	<0.20	<20	<20	--	<5.0	<5.0	<10	72	
SCIMW-6	SCI	Filtered	C	9/23/98	4.38	<60	<5.0	73	2.5	<5.0	<10	--	<20	290	<3.0	<0.20	<20	<20	--	<5.0	<5.0	<10	80	
SCIMW-6	SCI	Filtered	C	12/10/98	3.91	<60	<5.0	48	<2.0	<5.0	<10	--	<20	75	<3.0	<0.20	<20	<20	--	<5.0	<5.0	<10	74	
SCIMW-6	SCI	Filtered	C	5/6/99	4.39	<60	<5.0	30	<2.0	<5.0	<10	--	<20	21	<3.0	<0.20	<20	<20	--	<5.0	<5.0	<10	63	
SCIMW-6	SCI	Filtered	C	8/26/99	6.56	<60	<5.0	43	<2.0	<5.0	<10	--	<20	26	4.3	<0.20	<20	<20	--	<5.0	<5.0	<10	110	
SCIMW-6	SCI	Filtered	C	12/2/99	4.00	<60	<5.0	33	<2.0	<5.0	<10	--	<20	23	<3.0	<0.20	<20	<20	--	<5.0	<5.0	<10	92	
SCIMW-7	SCI	Filtered	P/Q	9/6/96	3.31+	<60	24	290	<2.0	<2.0	<10	--	<20	13	<3.0	0.52	<20	29	--	18	<5.0	<5.0	12	<20
SCIMW-7	SCI	Filtered	P/Q	1/20/97	7.32	<60	19	430	<2.0	<2.0	<10	--	<20	<10	<3.0	<0.20	<20	83	--	18	<5.0	<5.0	<10	<20
SCIMW-8	SCI	Filtered	I	8/26/96	7.11	<60	8.9	72	<2.0	<2.0	<10	--	<20	<10	<3.0	<0.20	<20	23	--	43	<5.0	<5.0	<10	21
SCIMW-8	SCI	Filtered	I	1/21/97	7.70	<60	23	57	<2.0	<2.0	<10	--	<20	<10	<3.0	<0.20	<20	<20	--	10	<5.0	<5.0	<10	22
SCIMW-9	SCI	Filtered	I	8/29/96	6.40	<60	21	61	<2.0	<2.0	<10	--	<20	<10	<3.0	<0.20	<20	<20	--	37	<5.0	<5.0	<10	<20
SCIMW-9	SCI	Filtered	I	1/23/97	6.66	<60	16	89	<2.0	<2.0	<10	--	<20	<10	<3.0	<0.20	<20	49	--	40	<5.0	<5.0	<10	150
SCIMW-10	SCI	Filtered	J	8/26/96	7.95	<60	15	55	<2.0	<2.0	<10	--	<20	<10	<3.0	<0.20	<20	<20	--	42	<5.0	<5.0	<10	<20
SCIMW-10	SCI	Filtered	J	1/23/97	7.87	<60	24	49	2.3	<2.0	<10	--	<20	<10	<3.0	<0.20	<20	<20	--	48	<5.0	<5.0	<10	<20
SCIMW-11	SCI	Filtered	N	8/28/96	3.83	<60	<5.0	210	<2.0	<2.0	<10	--	<20	<10	<3.0	0.62	<20	<20	--	16	<5.0	<5.0	<10	<20
SCIMW-11	SCI	Filtered	N	1/17/97	4.32	<60	6.2	300	<2.0	<2.0	<10	--	<20	<10	<3.0	<0.20	<20	<20	--	6.6	<5.0	<5.0	<10	<20
SCIMW-11	SCI	Filtered	N	9/23/98	4.72	<60	<5.0	180	<2.0	<5.0	<10	--	<20	<10	<3.0	<0.20	<20	<20	--	<5.0	<5.0	<10	<20	
SCIMW-11	SCI	Filtered	N	12/10/98	3.32	<60	<5.0	250	<2.0	<5.0	<10	--	<20	<10	<3.0	<0.20	<20	<20	--	<5.0	<5.0	<10	<20	
SCIMW-11	SCI	Filtered	N	5/6/99	3.48	<60	<5.0	94	<2.0	<5.0	<10	--	<20	<10	<3.0	<0.20	<20	<20	--	<5.0	<5.0	<10	<20	
SCIMW-11	SCI	Filtered	N	12/1/99	4.07	<60	<5.0	180	<2.0	<5.0	<10	--	<20	<10	<3.0	<0.20	<20	<20	--	8.8	<5.0	<5.0	<10	<20
SCIMW-12	SCI	Filtered	O	8/29/96	4.09	<60	5.1	64	2.5	<2.0	<10	--	<20	<10	<3.0	<0.20	<20	<20	--	<5.0	<5.0	<10	<20	
SCIMW-12	SCI	Filtered	O	1/17/97	4.53	<60	<5.0	28	2.7	<2.0	<10	--	<20	<10	<3.0	<0.20	<20	<20	--	<5.0	<5.0	<10	<20	
SCIMW-13	SCI	Filtered	J	8/29/96	7.21	<60	20	33	<2.0	<2.0	<10	--	<20	<10	3.2	<0.20	<20	<20	--	43	<5.0	<5.0	<10	<20
SCIMW-13	SCI	Filtered	J	1/23/97	6.93	<60	19	21	<2.0	2.1	<10	--	<20	<10	3.7	<0.20	<20	<20	--	40	<5.0	<5.0	<10	<20
SCIMW-14	SCI	Filtered	I/J	8/29/96	5.36	<60	9.7	130	<2.0	<2.0	<10	--	<20	<10	5.3	<0.20	<20	<20	--	34	<5.0	<5.0	<10	<20
SCIMW-14	SCI	Filtered	I/J	1/21/97	5.64	<60	<5.0	15	<2.0	<2.0	<10	--	<20	<10	<3.0	<0.20	<20	<20	--	<5.0	<5.0	<10	<20	
SCIMW-15	SCI	Filtered	I/J	8/29/96	4.85	<60	16	570	<2.0	<2.0	<10	--	<20	<10	3.2	<0.20	<20	<20	--	40	<5.0	<5.0	<10	<20
SCIMW-15	SCI	Filtered	I/J	1/17/97	5.01	<60	13	550	<2.0	<2.0	<10	--	<20	<10	5.5	<0.20	<20	<20	--	33	<5.0	<5.0	<10	<20

TABLE 8
HEAVY METAL CONCENTRATIONS IN GROUNDWATER
NINTH AVENUE TERMINAL STUDY AREA

Subsurface Consultants, Inc.

SAMPLE DESIGNATION	CONSULTANT	DESCRIPTION	SITE REF AREA	SAMPLED	GROUNDWATER ELEVATION Port of Oak. Datum (feet)	ANTIMONY (µg/L)	ARSENIC (µg/L)	BARIUM (µg/L)	BERYLLIUM (µg/L)	CADMUM (µg/L)	TOTAL CHROMIUM VI (µg/L)	CHROMIUM VI (µg/L)	COBALT (µg/L)	COPPER (µg/L)	LEAD (µg/L)	MERCURY (µg/L)	MOLYBDENUM (µg/L)	NICKEL (µg/L)	POTASSIUM (µg/L)	SELENIUM (µg/L)	SILVER (µg/L)	THALIUM (µg/L)	VANADIUM (µg/L)	ZINC (µg/L)
SCIMW-29	SCI	Filtered	H	5/20/97	7.48	<60	<5.0	160	<2.0	<5.0	<10	<10	<20	12	<3.0	<0.20	<20	<20	—	34	<5.0	<5.0	<10	50
SCIMW-34	SCI	Filtered	H	9/24/98	4.87	—	—	—	—	—	—	—	—	—	<3.0	—	—	—	—	—	—	—	—	—
SCIMW-34	SCI	Filtered	H	12/11/98	4.91	—	—	—	—	—	—	—	—	—	<3.0	—	—	—	—	—	—	—	—	—
SCIMW-34	SCI	Filtered	H	5/6/99	4.49	—	—	—	—	—	—	—	—	—	<3.0	—	—	—	—	—	—	—	—	—
SCIMW-34	SCI	Filtered	H	8/26/99	6.86	—	—	—	—	—	—	—	—	—	<3.0	—	—	—	—	—	—	—	—	—
SCIMW-34	SCI	Filtered	H	12/2/99	4.70	—	—	—	—	—	—	—	—	—	<3.0	—	—	—	—	—	—	—	—	—
SCIMW-34	SCI	Filtered	H	4/6/00	5.50	—	—	—	—	—	—	—	—	—	<3.0	—	—	—	—	—	—	—	—	—

µg/L = micrograms per liter or parts per billion

<60 = Compound not detected at or above stated reporting limit

— = Not tested

+ = Groundwater level may not be stabilized

Groundwater measurements presented are those collected on the first day of sampling

for the event and may not be the same as the date sampled.

Subsurface Consultants, Inc.

TABLE 9
CYANIDE, NITRATE AND PHOSPHORUS CONCENTRATIONS
IN GROUNDWATER
NINTH AVENUE TERMINAL STUDY AREA

SAMPLE DESIGNATION	CONSULTANT	SITE REF AREA	DATE SAMPLED	GROUNDWATER ELEVATION Port of Oak. Datum (FEET)	CYANIDE ($\mu\text{g/L}$)	NITRATE/NITRITE-N ($\mu\text{g/L}$)	TOTAL PHOSPHORUS ($\mu\text{g/L}$)
MW-5	SCI	F/H	5/6/97	6.45	<10	-	--
MW-6	SCI	F/H	5/6/97	7.04	<10	-	--
SCIMW-21	SCI	D	5/6/97	7.44	-	<50	1,100
SCIMW-22	SCI	P	5/6/97	8.22	<10	<50	4,000
SCIMW-23	SCI	B	5/6/97	5.55	<10	<50	9,300
SCIMW-24	SCI	N	5/6/97	4.44	20	-	-
SCIMW-25	SCI	H	5/7/97	7.30	<10	-	-
SCIMW-26	SCI	H	5/6/97	8.15	<10	-	-
SCIMW-27	SCI	E/H	5/6/97	6.45	<10	-	-
SCIMW-28	SCI	Q	5/7/97	8.34	<10	-	-
SCIMW-29	SCI	H	5/20/97	7.48	<10	-	-

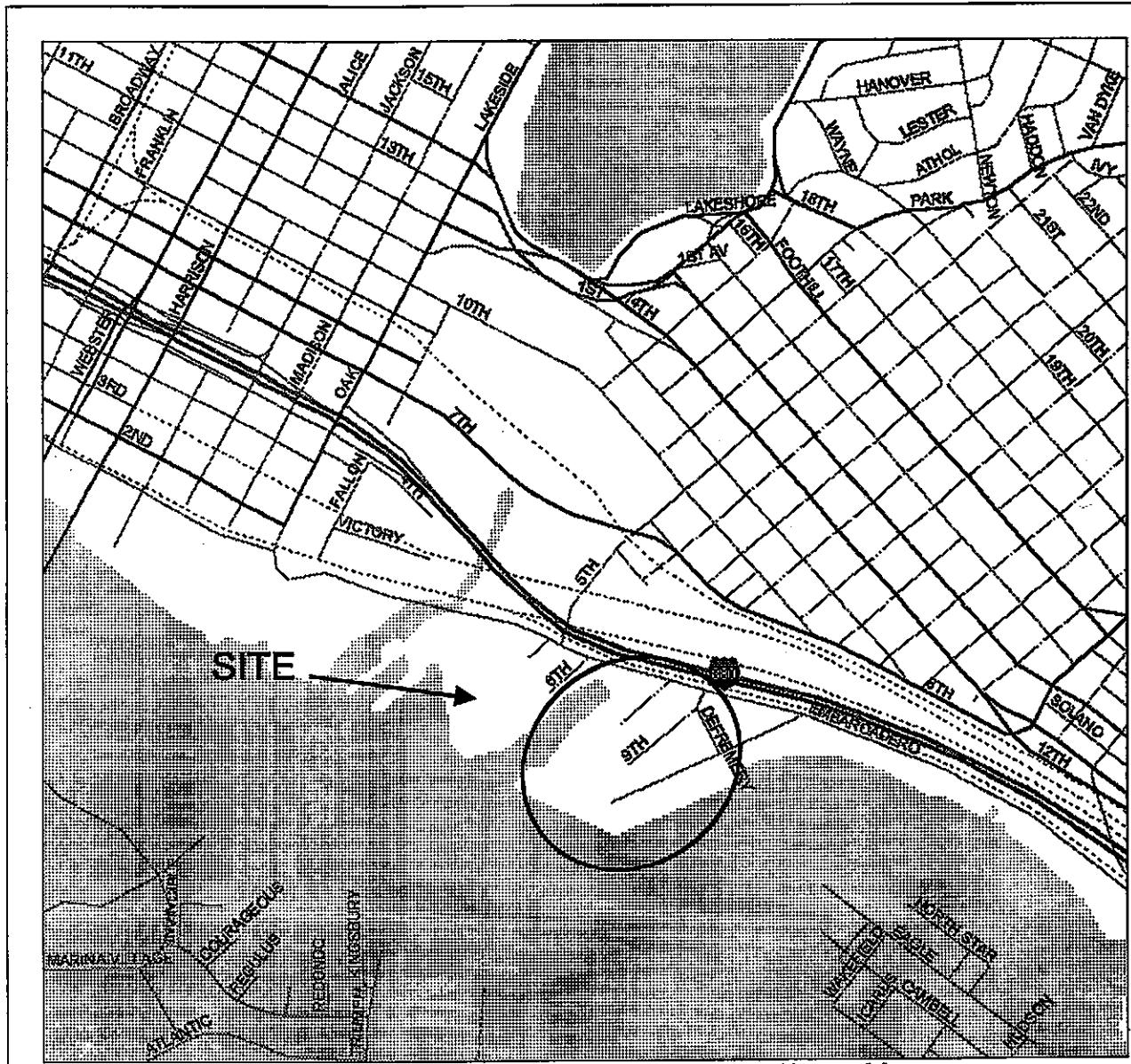
Notes:

$\mu\text{g/L}$ = micrograms per liter or parts per billion

- = Not tested

<10 = Compound not detected at or above stated reporting limit

Groundwater measurements presented are those collected on the first day of sampling for the event and may not be the same as the date sampled.



APPROXIMATE SCALE (feet)

0 1,400 2,800

SITE VICINITY MAP



Subsurface Consultants, Inc.
Geotechnical & Environmental Engineers

NINTH AVENUE TERMINAL STUDY AREA
OAKLAND, CALIFORNIA

JOB NUMBER
133.009

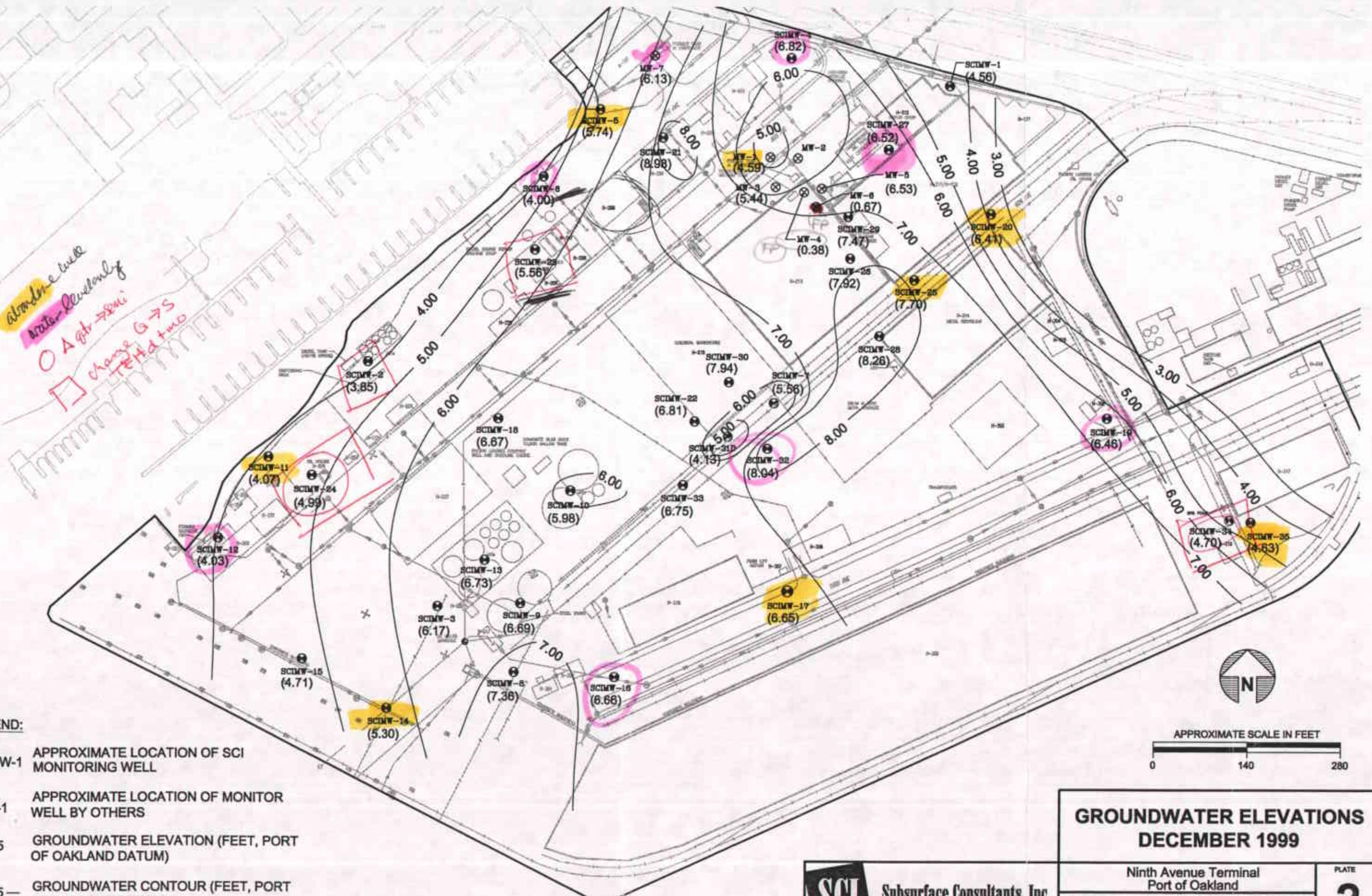
DATE
6/00

APPROVED
[Signature]

PLATE

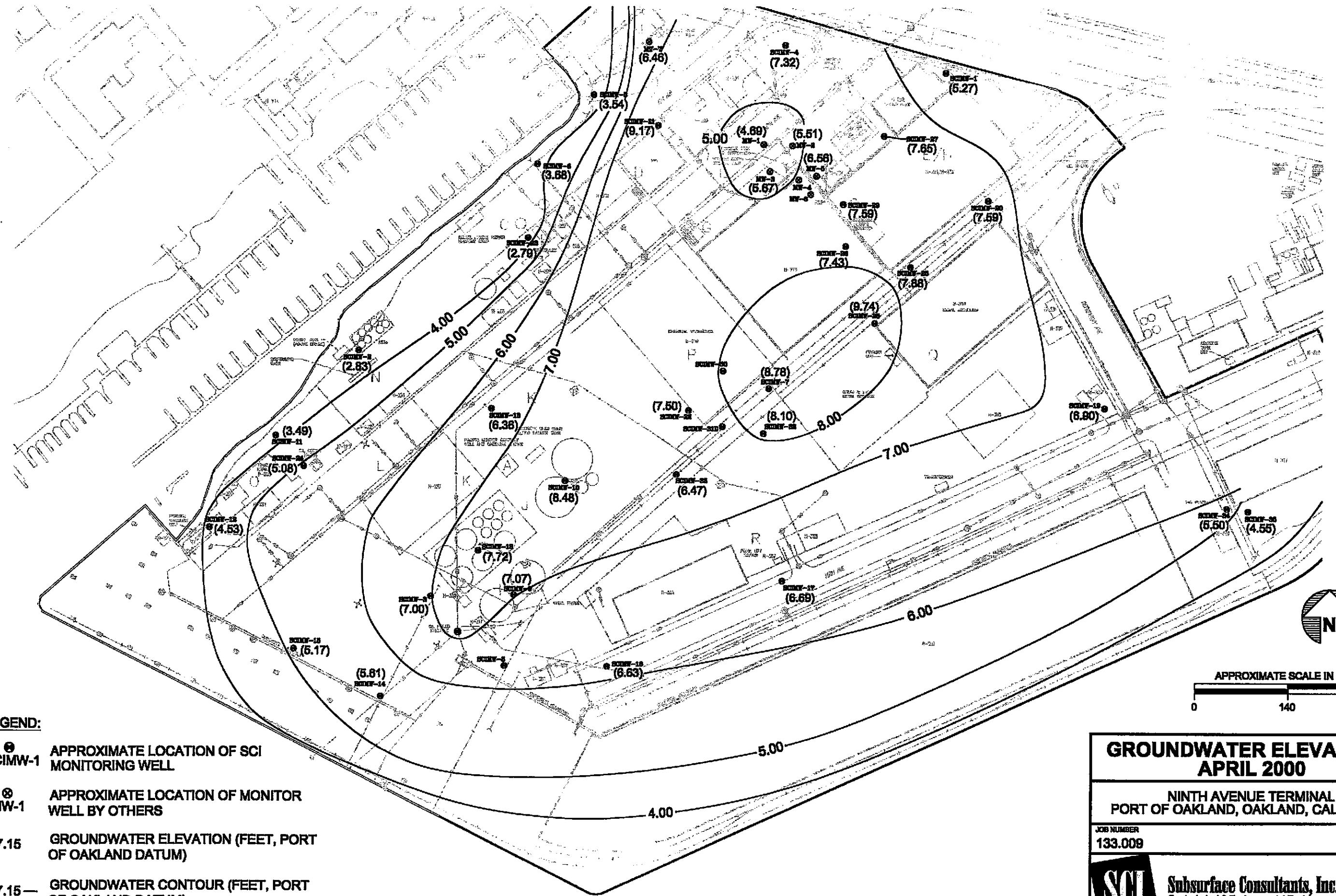
1

Above line well
 water level only
 O Δ ab → semi
 change G → S
 TET + two



Subsurface Consultants, Inc.
Geotechnical & Environmental Engineers

133.009.01.DW93



APPENDIX A:
WELL SAMPLING FORMS

GROUNDWATER DEPTHS

Project Name: KOT / 9th Avenue Terminal

Job No.: 133.009

Measured by: Stu / Emily

Well	Date	Time	Groundwater Depth (feet)	Comments
------	------	------	--------------------------	----------

SCIMW12 SC042	11/29/99	935	6.91	No odor.
SCIMW11		945	5.42	No odor
SCIMW14		955	4.75	Strong hydrocarbon odor Sheen, tape & paste No f/p
SCIMW15		1005	8.74	No odor
SCIMW14		1015	8.34	No odor
SCIMW13		1020	5.70	No odor
SCIMW-1		1030		Sheen; no free product; slight odor
SCIMW8		1040	5.45	H ₂ S odor.
SCIMW13		1050	5.83	H ₂ S & slight hydrocarbon odor
SCIMW9		1053	4.63	strong H ₂ S odor
SCIMW18		1100	4.14	slight H ₂ S odor
SCIMW-10		1110	6.58	strong H ₂ S odor; well under pressure
SCIMW-16		1115	3.74	strong H ₂ S odor; missing 1 bolt
SCIMW-17		1130	3.49	No odor, under pressure
SCIMW-34		1140	6.23	Weird odor, sweet
SCIMW-35		1150	5.47	" " ?
SCIMW19		1200	4.00	No odor
SCIMW30		1202	7.79	under pressure; no odor
SCIMW32		1205	4.71	No odor.
SCIMW7		1210	6.70	No odor.
SCIMW28		1220	5.04	No odor
SCIMW20		1230	2.70	Strange odor, under pressure
SCIMW25		1240	0.60	Slight sheen; no odor.
SCIMW29		1255	5.71	No odor.
SCIMW1		1310	5.81	No odor

GROUNDWATER DEPTHS

Project Name: KOT / 9th Ave

Job No.: 133.009

Measured by: Siv Emily

Well	Date	Time	Groundwater Depth (feet)	Comments
------	------	------	--------------------------	----------

Note
Tip 10th
of ft

Subsurface Consultants

FIELD REPORT

Sheet 1 of 3

PROJECT: 9th Ave / KOT JOB NO: 133.009

REPORT NO.

1

PERSONNEL PRESENT: Stu Dalie & Emily Silverman DATE: 11/29/99

HOURS - From: 8:00 To: 4:00 From: 8 To: 4:00 TOTAL HRS: 8 - Stu
8 - Emily

EQUIPMENT IN USE: Wellseawder, personal truck / Tape & paste

TYPE OF SERVICES PROVIDED: Exploration Field Density Testing
 Site Meeting Construction Observation H₂S levels

8:30 mobilize from office to site

9:00 Arrive on site; go into KOT Office and gave them a card.

9:35 SCIMW 12 6.91 No odor

9:45 SCIMW 11 5.42 No odor

9:55 SCIMW 24 4.75 strong hydrogen odor; sheer ^{tape and paste} no free product

10:05 SCIMW 15 8.74 No odor

10:15 SCIMW 14 8.34 No odor

10:20 SCIMW 13 5.70 No odor

10:30 inspect the "oil filled manhole" slight sheer; no odor

or free product.

10:40 SCIMW 16 8 5.45 H₂S odor

10:50 SCIMW ~~17~~ 3³⁸ 5.83 H₂S & slight hydrocarbon odor.

10:53 SCIMW ~~19~~ 4.63 Strong H₂S odor

11:00 SCIMW ~~18~~ 4.14 Slight H₂S odor

11:10 SCIMW 10 6.58 Strong H₂S odor; well under pressure

SCIMW 16 3.74 Strong H₂S odor; missing 1 bolt.

Prepared by: EP

Reviewed by: _____

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
JOB NO.: 133.009
SAMPLED BY: Stuart Dalie/ Emily Silverman
DATE: 12/3/99
WEATHER: sunny, clear

WELL NO.: mw-3
CASING DIAMETER: 2"
WELL MATERIAL: _____
TOC ELEVATION: _____

TOTAL DEPTH OF CASING (BTOC): 19,82 FEET

CALCULATED PURGE VOLUME: 7.42 gallons
(feet of water * casing dia² * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOC): 4.43 FEET

FEET OF WATER IN WELL: 15.17 FEET

FREE PRODUCT: Yes or No

PURGE METHOD: Disposable Baile

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

FIELD MEASUREMENTS

DEPTH TO GROUNDWATER WHEN 80% RECOVERED:

-719

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOG):

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE

10 MII

2 None
LITER Amber

ANALYSES.

TET - cl no 18015 m w/ silica gel clean-up

MISC FIELD OBSERVATIONS: Dung pile well dry; size approx 4 gallons
removed.
Strong H2S odor green to black w/ suspended
particles

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking

JOB NO.: 133.009

SAMPLED BY: Stuart Dalie/ Emily Silverman

DATE: 12/13/99

WEATHER: Scenicly Clear

WELL NO.: 1330-5

CASING DIAMETER 2"

WELL MATERIAL:

TOC ELEVATION:

TOTAL DEPTH OF CASING (BTOC): 21.35 FEET

CALCULATED PURGE VOLUME: 6.8 gallons
(feet of water * casing dia² * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOC): 7.30 FEET

FEET OF WATER IN WELL: 14.15 FEET

PURGE METHOD: Disposable Bailer
inches

FREE PRODUCT: Yes or No

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED:

YSI 6810-P

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY ($\mu\text{MHOS}/\text{CM}$)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	1115	6.11	15.44	26057.0	2,095	-70.3	7.65	N.C. Odor
1	1118	6.14	15.53	4351.0	3,244	-78.4	6.95	lt grey clear
2	1120	6.14	15.73	10510.0	7,748	-78.1	5.65	turbid, greyish green
3	1132	6.72	16.53	186073.0	10,944	-82.1	5.75	Slight H ₂ S
7	1137	6.70	17.93	26057.0	14,960	-85.3	4.37	slight grey

DEPTH TO GROUNDWATER WHEN 80% RECOVERED: 10.15

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC):

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE

3 / HCl
40 ML

2 / None
LITER Amber L.

OTHER

OTHER

ANALYSES:

BTEX (SO15 m w/ Selica Gel Cleanups)
Test of mo w/ Selica Gel Cleanup.

MISC FIELD OBSERVATIONS:

An eyish green, cloudy slightly H₂S odor
slight sheen.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Stuart Dalie/ Emily Silverman
 DATE: 12/12/99
 WEATHER: Cool ptry cloudy

WELL NO.: SC1maw-1
 CASING DIAMETER: 2"
 WELL MATERIAL:
 TOC ELEVATION:
 =

TOTAL DEPTH OF CASING (BTOP): 17.80 FEET

CALCULATED PURGE VOLUME: 5.8 gallons
 (feet of water * casing dia² * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOP): 5.81 FEET

FEET OF WATER IN WELL: 11.99 FEET

FREE PRODUCT: Yes or No

PURGE METHOD: Disposable Baile
inches

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED: VSI 810-D

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY (μ MHOS/CM)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	6.61	16.25	14.024.0	10.94	-89.1	1.18	no odors	
2	6.61	16.18	141.36.0	11.14	-73.2	4.21	strong H2S	
4	6.60	15.60	20.046.0	16.10	-110.7	11.37	strong odor	
6	6.82	16.150	25.951.0	20.17	-219.1	2.48	dark, turbid	

DEPTH TO GROUNDWATER WHEN 80% RECOVERED:

8.2'

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOP):

7.8 (1/2 hr recharge)

SAMPLING METHOD: Disposable Baile

CONTAINERS / PRESERVATIVE: / 40 ML

2 Andre
LITERS

/ OTHER

/ OTHER

ANALYSES:

-TEIT, d, no (K015 m) w/ Silica gel ince

SC FIELD OBSERVATIONS:

well is planter, located at rock above well
for future reference

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Stuart Dalie/ Emily Silverman
 DATE: 12/2/99
 WEATHER: Clear

WELL NO.: SC1muv-2
 CASING DIAMETER: 2"
 WELL MATERIAL: -
 TOC ELEVATION: -

TOTAL DEPTH OF CASING (BTOC): 14.10 FEET

CALCULATED PURGE VOLUME: 3.5 gallons
 (feet of water * casing dia² * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOC): 7.02 FEET

FEET OF WATER IN WELL: 7.08 FEET

PURGE METHOD: Disposable Bailer
 inches

FREE PRODUCT: Yes or No - Shear

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED: VSI 60-12

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY (μ MHOES/CM)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	6.39	17.47	8845.0	6.3680	-39.6	3.05		hydrocarbon odor
1	6.39	17.69	123.41.0	9.281	-73.0	5.37		shear, cloudy hydrocarbons
2	6.55	18.55	141.92.0	10.53	-104.1	2.80		shear, grayish - oil
3.5	6.97	18.61	14,195.0	10.51	-100.3	5.49	"	"

DEPTH TO GROUNDWATER WHEN 80% RECOVERED:

8.5' (overnight recharge)
 (7.76) →

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC):

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE

2 X 10A + 504

40 ML

2 A liters

LITER

OTHER

2 plastic bags

OTHER

ANALYSES:

Teh d, no (8015m) w/ Silica gel cleanup
Heavy metals (Cd10/TOTO)
TDS (1600)
DOC (2060)

MISC FIELD OBSERVATIONS:

Slight shear, hydrocarbon odor, also
note high side.

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Stuart Dalie/ Emily Silverman
 DATE: 2/3/99
 WEATHER: Clear cool

WELL NO.: Scimon-4
 CASING DIAMETER: 2"
 WELL MATERIAL: -
 TOC ELEVATION: -

TOTAL DEPTH OF CASING (BTOP): 19.75 FEET

CALCULATED PURGE VOLUME: 5.15 gallons
 (feet of water * casing dia² * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOP): 9.23 FEET

FEET OF WATER IN WELL: 10.52 FEET

PURGE METHOD: Disposable Bailer
 inches

FREE PRODUCT: Yes No

MEASUREMENT METHOD:

Nsi 610-D

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED:

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY ($\mu\text{MHOS}/\text{CM}$)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color,...)
0	11:07	6.67	19.21	6873.0	5.012	-131.8	.78	no odor
1	11:05	6.51	18.56	6381.0	4.771	-119.3	5.75	grey, It's Soapy, territorial
3	11:10	6.67	20.50	97246.0	1.505	-125.2	3.70	" " very fit
5	11:15	6.79	21.33	11,916.0	8.332	-128.7	2.95	black "
							" "	"

DEPTH TO GROUNDWATER WHEN 80% RECOVERED:

11.3'

(Inst recharged)

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOP):

10.5

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE

40 ML

2 Amber Jars

LITER

1

1

OTHER

OTHER

ANALYSES: TEFL, dy, no (80/15m) w/ slice gal rinses

N/A

MISC FIELD OBSERVATIONS:

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking

JOB NO.: 133.009

SAMPLED BY: Stuart Dalie/ Emily Silverman

DATE: 12/2/99

WEATHER: clear cool

WELL NO.: SC1maw-5

CASING DIAMETER 2"

WELL MATERIAL: -

TOC ELEVATION: -

TOTAL DEPTH OF CASING (BTOP): 17.45 FEET

CALCULATED PURGE VOLUME: 6.6 gallons
(feet of water * casing dia² * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOP): 11.45 FEET

FEET OF WATER IN WELL: 13.5 FEET

PURGE METHOD:

Disposable Bailer

inches

FREE PRODUCT: Yes or No

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED: VSI 610-2

FIELD MEASUREMENTS								
GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY ($\mu\text{MHOS}/\text{CM}$)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	6.47	16.98	20.24	1.0	23.17	47.7	5.22	no odor
1	6.85	16.75	30.66	8.0	23.67	23.5	1.78	some
3	6.87	16.56	30.49	11.0	23.66	25.2	1.77	brushed but no oil
5	6.82	16.40	30.32	0.0	23.67	25.1	1.70	" " 1
7	6.80	16.34	20.15	8.0	23.71	25.1	1.64	" " 1

DEPTH TO GROUNDWATER WHEN 80% RECOVERED: 7.15

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOP): (6.75')

(over night recharge)

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE /
40 ML

2 Auto tubes
LITER

/
OTHER

/
OTHER

ANALYSES:

Teh d, no (80%) oil Silica gel cleanup

MISC FIELD OBSERVATIONS:

High TDS, high conductivity
also high salt density sample
low dry reading

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Stuart Dalie/ Emily Silverman
 DATE: 12/30/99 12/1/99
 WEATHER: Cloudy cool on off rain sunny & clear

WELL NO.: Skunk - 7
 CASING DIAMETER: 2"
 WELL MATERIAL: —
 TOC ELEVATION: —

TOTAL DEPTH OF CASING (BTOP): 18.02 FEET

CALCULATED PURGE VOLUME: 5.60 gallons
 (feet of water * casing dia² * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOP): 6.58 FEET

FEET OF WATER IN WELL: 11.44 FEET

PURGE METHOD: Disposable Bailer
 inches

FREE PRODUCT: Yes or No Yes

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED:

FIELD MEASUREMENTS								
GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY ($\mu\text{MHOS}/\text{CM}$)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	1545	6.40	18.48	17406.00	12.73	-45.7	4.03	hydrocarbon
2	1552	6.41	18.63	18473.0	13.59	-60.8	5.0	odorous/gray turbid
4	1554	6.46	18.37	230674.0	16.68	-76.7	4.31	
6.5	1600	6.68	18.46	28963.0	21.51	-84.5	3.32	Bailed dry Black sediment

DEPTH TO GROUNDWATER WHEN 80% RECOVERED: 8.86

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOP): 7.75' (overight reading)

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE 3 / HCl
 40 ML

4 / None
 Amber LITER

1
 OTHER

1
 OTHER

ANALYSES: TEHD mo 8015 w/ silica gel cleanup
VOCs (8260/18240)
Pesticides (EPA 8080)

MISC FIELD OBSERVATIONS: Strong hydrocarbon odor.
Bailed dry (5gals removed) Black sediment at bottom.
Will sample on 12/2/99.

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Stuart Dalie/ Emily Silverman
 DATE: 11/30/99
 WEATHER: Cloudy, cool, on-off rain

WELL NO.: SC1MLW-8
 CASING DIAMETER 2"
 WELL MATERIAL:
 TOC ELEVATION:

TOTAL DEPTH OF CASING (BTOP): 17.90 FEET

CALCULATED PURGE VOLUME: 6117 gallons
 (feet of water * casing dia² * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOP): 5.29 FEET

FEET OF WATER IN WELL: 12.61 FEET

PURGE METHOD: Disposable Bailer
 inches

FREE PRODUCT: Yes or No

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED:

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY ($\mu\text{MHOS}/\text{CM}$)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	1420	6.22	20.62	6044.00	4,298	-79.4	2.41	No odor.
2	1425	6.34	19.23	4058.00	4,337	-73.5	5.50	Clean w/greenish tinge.
4	1428	6.39	19.47	8430	5,978	-86.4	5.04	greenish gray, turb.
6	1430	6.30	19.32	13125.00	9,280	-115.0	3.71	greenish gray H ₂ S odor, turb.

DEPTH TO GROUNDWATER WHEN 80% RECOVERED:

7.812

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOP):

6.25

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE

40 ML

2 / None

LITER 2 AC

OTHER

OTHER

ANALYSES:

TEHD MO (SOI5m w/ silica gel cleanup)

MISC FIELD OBSERVATIONS:

sunny, greenish gray

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Stuart Dalie/ Emily Silverman
 DATE: 12/1/99
 WEATHER: Cool clear

WELL NO.: SCIMW-9
 CASING DIAMETER: 2"
 WELL MATERIAL: /
 TOC ELEVATION: /

TOTAL DEPTH OF CASING (BTOC): 18.18 FEETCALCULATED PURGE VOLUME: 6.7 gallons
(feet of water * casing dia² * .0408 * # of Volumes)DEPTH TO GROUNDWATER (BTOC): 4.40 FEETFEET OF WATER IN WELL: 13.78 FEETFREE PRODUCT: Yes or NoPURGE METHOD: Disposable Bailer
inches

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED: YSI-610 D

FIELD MEASUREMENTS								
GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY (μ MHOS/CM)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	11 20	6.31	20.81	10,028.0	7.05	-99.4	1.16	No odor
1	11 30	6.26	19.99	9,983.0	7.47	-100.1	4.08	brown turbid
3	11 35	6.81	21.35	15,684.0	11.03	-155.1	3.03	dark brown turbid
5	11 40	6.87	20.47	20,352.0	14.10	-190.1	2.85	Very turbid
7	11 45	7.14	21.47	21,700.0	16.07	-142.1	4.19	dark reddish brown

DEPTH TO GROUNDWATER WHEN 80% RECOVERED: 7.16'ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC): 7.00' ($1/2$ recharge.)SAMPLING METHOD: Disposable BailerCONTAINERS / PRESERVATIVE /
40 ML2 Amber
LITER 5//

OTHER

OTHER

ANALYSES: TEH d, m, (SO15 m) w/ silica

MISC FIELD OBSERVATIONS: Drain to bry
5 West 25' at
SCIMW-9
Water dripping
at depth w/ Tape
1-2" - free product
globbs on Tape,
Tape Pix!

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Stuart Dalie/ Emily Silverman
 DATE: 12/10/99
 WEATHER: Cloudy, cool, overcast

WELL NO.: SC1MW-1C
 CASING DIAMETER 2"
 WELL MATERIAL: -
 TOC ELEVATION: -

TOTAL DEPTH OF CASING (BTOC): 18.10 FEET

CALCULATED PURGE VOLUME: 5,50 gallons
 (feet of water * casing dia² * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOC): 6.95 FEET

FEET OF WATER IN WELL: 11.15 FEET

PURGE METHOD: Disposable Bailer
 inches

FREE PRODUCT: Yes or No No

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED: YSI 610-D

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY ($\mu\text{MHOS}/\text{CM}$)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	1233	6.37	21.39	23256.00	116.21	-124.4	2.70	Strong H ₂ S odor
1.5	1242	6.71	21.31	21815.0	15.64	-123.4	5.38	yellowish green, not ro
3.5	1244	6.99	18.92	24505.0	17.00	-176.0	3.60	Brownish gray, no ro
5.5	1247	7.02	21.10	26814	18.75	-704.5	3.39	dk gray
								H ₂ S Odor.

DEPTH TO GROUNDWATER WHEN 80% RECOVERED: 9.18

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC): 9.00

(45 min recharge)

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE /
 40 ML

2 / Amber
 LITERS

/
 OTHER

/
 OTHER

ANALYSES:

TEH done, (80% m) w/ silica gel clean-up

MISC FIELD OBSERVATIONS:

Strong H₂S odor.

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
JOB NO.: 133.009
SAMPLED BY: Stuart Dalie/ Emily Silverman
DATE: 12 / 1 / 99
WEATHER: Clear & cool

WELL NO.: SCIMW-11
CASING DIAMETER: 2"
WELL MATERIAL: _____
TOC ELEVATION: _____

TOTAL DEPTH OF CASING (BTOC): 15.94 FEET

CALCULATED PURGE VOLUME: 5.48 gallons
(feet of water * casing dia² * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOC): 3.72 FEET

FEET OF WATER IN WELL: 12.22 FEET

FREE PRODUCT: Yes or No

MEASUREMENT METHOD: Ysi 610-2 TAPE & PASTE
EQUIPMENT USED:

ELECTRONIC SOUNDER

OTHER

FIELD MEASUREMENTS

DEPTH TO GROUNDWATER WHEN 80% RECOVERED:

C. 164

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC):

5184

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE

40 ML

ANALYSES:

MISC FIELD OBSERVATIONS: Tide is in at start of boating; NO odor
suspended particles (organic?)

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking

JOB NO.: 133.009

WELL NO.: SCIMW-12

SAMPLED BY: Stuart Dalie/ Emily Silverman

CASING DIAMETER: 2"

DATE: 11/13/99

WELL MATERIAL: /

WEATHER: Cloudy, cool, on-off rain

TOC ELEVATION: /

TOTAL DEPTH OF CASING (BTOC): 17.60 FEET

CALCULATED PURGE VOLUME: 5.14 gallons
(feet of water * casing dia² * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOC): 14.07.09 FEET

FEET OF WATER IN WELL: 10.51 FEET

PURGE METHOD: Disposable Bailer
inches

FREE PRODUCT: Yes or No Yes

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED:

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY ($\mu\text{MHOS}/\text{CM}$)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	11:30	6.37	16.37	32,393.0	25.16	417.0	6.59	No odor
1	11:33	6.16	16.38	32,606.0	25.14	371.4	7.04	Olive brown, slightly turbid
2	11:35	6.12	16.45	31,633.0	24.54	395.0	6.47	Brown, very turbid,
3	11:45	6.49	16.58	32,220.0	24.94	392.2	7.01	Brown, turbid, no odor
4	11:50	6.57	16.73	31,610.0	24.44	378.3	6.27	Olive brown, turbid, no odor
5	12:00	6.37	16.74	31,433	24.33	387.9	6.21	'some'

DEPTH TO GROUNDWATER WHEN 80% RECOVERED:

9.2

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC):

9.2 (15 min recharge)

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE: 2 / VOA w/ H₂SO₄
40 ML

2 / Alkaline
LITER

1 /
OTHER

1 /
OTHER

ANALYSES:

TEH, cl, mg (8015 m) w/ silica gel rinse

TDS (160.1)

Dissolved Organic Carbon (9040)

MISC FIELD OBSERVATIONS: rainy, stopped, tide is down since yesterday, no odors

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Stuart Dalie/ Emily Silverman
 DATE: 12/1/99
 WEATHER: Sunny, cool

WELL NO.: SC1MW-13
 CASING DIAMETER: 2"
 WELL MATERIAL:
 TOC ELEVATION:

TOTAL DEPTH OF CASING (BTOP): 161.42 FEET

CALCULATED PURGE VOLUME: 6,165 gallons
 (feet of water * casing dia² * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOP): 5.84 FEET

FEET OF WATER IN WELL: 13.58 FEET

FREE PRODUCT: Yes or No Yes

PURGE METHOD: Disposable Bailer
 inches

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED:

VSI 60-D

GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY (µMHOS/CM)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	1028	6.52	20.83	110102	11.32	-582.4	2.95	strong H ₂ S odor
1	1032	6.55	20.55	143223	10.51	-741.4	5.34	slight green
2	1034	6.71	21.42	164669	11.52	-174.8	1.80	dk gray
3	1036	6.85	20.02	17194	11.98	-700.3	3.21	slight green
4	1040	6.87	21.45	19102	13.32	-236.6	4.53	dk gray to black

DEPTH TO GROUNDWATER WHEN 80% RECOVERED:

8.56

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOP):

8.5 (1/2 hr recharge)

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE /
40 ML

2 / None
Amber LITER

/
OTHER

/
OTHER

ANALYSES: TEH'd, no (8015m w/ surface gel cleanup)

MISC FIELD OBSERVATIONS: water is dark gray to black with a strong H₂S odor. And a slight green.

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Stuart Dalie/ Emily Silverman
 DATE: 11/30/99
 WEATHER: Cloudy, cool, on-off rain

WELL NO. SCMW-14
 CASING DIAMETER 2"
 WELL MATERIAL: -
 TOC ELEVATION: -

TOTAL DEPTH OF CASING (BTOP): 18.00 FEET

CALCULATED PURGE VOLUME: 5.00 gallons
 (feet of water * casing dia² * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOP): 7.79 FEET

FEET OF WATER IN WELL: 10.21 FEET

PURGE METHOD: Disposable Bailer
 inches

FREE PRODUCT: Yes or No Yes

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED:

VSI 610-D

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY ($\mu\text{MHOS}/\text{CM}$)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	1305	6.49	19.71	424.00	0.309	321	7.17	Slight H ₂ S Odor.
1	1307	6.62	18.71	622.00	0.459	296.9	6.41	Clear w/ slight green tinge
2	1309	6.62	19.16	1743.00	0.910	160.90	4.83	Cloudy
3	1311	6.64	19.16	1444.00	1.066	91.2	6.04	Cloudy
4	1314	6.33	19.17	3565.00	2.616	-19.1	5.04	Cloudy, Slight H ₂ S
5	1316	6.40	19.86	4343.00	3.183	-73.8	4.63	Cloudy; green tinge

DEPTH TO GROUNDWATER WHEN 80% RECOVERED:

9.83

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOP):

9.83 (recharge after 45 min)

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE 2 / H₂SO₄
 40 ML

1 / None
 LITER

2 / None
 OTHER AL

1
 OTHER

ANALYSES:

TEH-a mo 8015 m w/ silica gel cleanup
TDS (EPA 160.1)
DOC (EPA 9060)

MISC FIELD OBSERVATIONS: water is slightly cloudy w/ green tinge
slight H₂S odor
weather is windy, not raining.

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Stuart Dalie/ Emily Silverman
 DATE: 11/30/99
 WEATHER: Cloudy, cool, on-off rain

WELL NO.: SC1mw-15
 CASING DIAMETER 2"
 WELL MATERIAL: -
 TOC ELEVATION: -

TOTAL DEPTH OF CASING (BTOP): 15.58 FEET

CALCULATED PURGE VOLUME: 3.34 gallons
 (feet of water * casing dia² * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOP): 8.75 FEET

FEET OF WATER IN WELL: 6.83 FEET

PURGE METHOD: Disposable Bailer
 inches

FREE PRODUCT: Yes or No

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED: Scawler, bailer, YSI 610-D

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY ($\mu\text{MHOS}/\text{CM}$)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	1220	6.68	20.86	10,016.0	7.12	-111.9	6.78	H ₂ S odor
1.5	1230	6.50	19.79	8,304.0	5.98	-78.1	3.48	olive green "
2.5	1240	6.41	20.04	8,123.0	5.85	-87.8	4.54	grey H ₂ S, turbid
3.5	1250	6.39	19.08	7,919.0	5.73	-86.4	4.77	grey turbid H ₂ S odor

DEPTH TO GROUNDWATER WHEN 80% RECOVERED: 10.18

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOP): 8.87 (w/stant recharge)

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE 2/ VCA H₂SO₄
 40 ML

2/1L Amber

LITER

OTHER

1/1L poly.

OTHER

ANALYSES:

TEH d, no (8015 ml) w/ silica gel nose
TDS (160.)
DOC (9060)

MISC FIELD OBSERVATIONS: cold, H₂S odor, grey, turbid

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Stuart Dalie/ Emily Silverman
 DATE: 11/30/99
 WEATHER: Cloudy, cool, on-off rain; windy

WELL NO.: SC1MW-16
 CASING DIAMETER 2"
 WELL MATERIAL:
 TOC ELEVATION:

TOTAL DEPTH OF CASING (BTOC): 18.10 FEET CALCULATED PURGE VOLUME: 7.08 gallons
 (feet of water * casing dia² * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOC): 3.61 FEET

FEET OF WATER IN WELL: 14.49 FEET

PURGE METHOD: Disposable Bailer
 inches

FREE PRODUCT: Yes or No

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED:

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY ($\mu\text{MHOS}/\text{CM}$)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	1440	6.71	20.74	31644	22.36	-103.4	2.54	H ₂ S odor.
2	1444	6.80	21.14	31994	22.40	-126.0	3.19	0.4 suspended particulate
4.0	1449	6.93	21.22	32242	22.44	-150.4	3.44	greyish
6.0	1452	6.58	21.53	331064	22.47	-145.2	3.44	black very turbid
7.0	1454	6.95	19.52	33483.00	23.51	-148.4	4.39	greyish green
								Strong H ₂ S

DEPTH TO GROUNDWATER WHEN 80% RECOVERED:

6.51

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC):

6.44

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE

40 ML

2 / None

LITER 24L

OTHER

OTHER

ANALYSES:

TEHd, me
SO₄ in
w/ Silica Gel Clean up

MISC FIELD OBSERVATIONS: suspended particles in clear water w/ green hinge

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Stuart Dalie/ Emily Silverman
 DATE: 11/20/99 12/1/99
 WEATHER: Cloudy, cool, dry

WELL NO.: SCLM6-17
 CASING DIAMETER 2"
 WELL MATERIAL: =
 TOC ELEVATION: =

TOTAL DEPTH OF CASING (BTOP): 18.40 FEETCALCULATED PURGE VOLUME: 7.2 gallons
(feet of water * casing dia² * .0408 * # of Volumes)DEPTH TO GROUNDWATER (BTOP): 3.20 FEETFEET OF WATER IN WELL: 5.26 FEETFREE PRODUCT: Yes or NoPURGE METHOD: Disposable Bailer
inches

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED: VSI-610-D

FIELD MEASUREMENTS								
GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY ($\mu\text{MHOS}/\text{CM}$)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	13:12	6.83	19.71	8060.0	5.81	-124.6	3.10	No odor
1	13:17	7.18	19.94	8038	5.78	-137.3	4.63	Clear water
3	13:20	7.10	20.60	8994.0	6.38	-140.8	2.93	clear, no odor
5	13:25	7.08	20.48	9'999.0	7.02	-137.1	3.56	" "
7.5	13:28	7.09	20.93	9'994.0	6.47	-135.1	2.05	" "

DEPTH TO GROUNDWATER WHEN 80% RECOVERED: 6.3'ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOP): 6.3SAMPLING METHOD: Disposable BailerCONTAINERS / PRESERVATIVE /
40 ML2/ Amber
LITERS/
OTHER/
OTHERANALYSES: TEH or, mo (80:5 m) w/ silica gel clean-upMISC FIELD OBSERVATIONS: clear vs odor

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Stuart Dalie/ Emily Silverman
 DATE: 12/1/99
 WEATHER: cool clear

WELL NO.: SCI MW-18
 CASING DIAMETER 2"
 WELL MATERIAL: /
 TOC ELEVATION: /

TOTAL DEPTH OF CASING (BTOC): 188.47 FEET

CALCULATED PURGE VOLUME: 7.00 gallons
 (feet of water * casing dia² * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOC): 4.16 FEET

FEET OF WATER IN WELL: 14.31 FEET

PURGE METHOD: Disposable Bailer
 inches

FREE PRODUCT: Yes or No

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED: YSI-610-D

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY ($\mu\text{MHOS}/\text{CM}$)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	1210	6.35	20.14	19,759.0	13.67	-138.2	2.07	Slight H ₂ S odor
1	1215	6.66	20.11	17,175.0	12.81	-141.2	4.18	yellowish tint water
3	1220	6.88	20.09	24,658.0	17.43	-141.8	4.74	slight Hydrocarbon odors
5	1225	6.58	21.37	21,116.0	14.75	-147.4	2.74	Same, yellow tint
7	1230	6.99	20.75	23,777.0	16.94	-141.4	3.86	L

DEPTH TO GROUNDWATER WHEN 80% RECOVERED:

7' even (15 min recharged)

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC):

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE /
 40 ML

2/ Amber
 LITERS

/
 OTHER

/
 OTHER

ANALYSES:

TEH d, no (SO15 m) w/ silica gel cleanup

MISC FIELD OBSERVATIONS:

/ slight hydrocarbon odor after 3+ gal recovered.

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Stuart Dalie/ Emily Silverman
 DATE: 12/2/99
 WEATHER: Rainy, cool

WELL NO.: SCIM-0-19
 CASING DIAMETER: 2"
 WELL MATERIAL:
 TOC ELEVATION:

TOTAL DEPTH OF CASING (BTOP): 18.50 FEET

CALCULATED PURGE VOLUME: 7.0 gallons
 (feet of water * casing dia² * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOP): 11.00 FEET

FEET OF WATER IN WELL: 14.50 FEET

PURGE METHOD: Disposable Bailer
 inches

FREE PRODUCT: Yes or No No

MEASUREMENT METHOD:

VSI 610-D

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY (µMHOS/CM)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	10:00	6.96	17.53	6487.0	5107	102.1	-5.11	no odor
1	10:05	6.69	17.7	8047.0	6177	-171.6	4.81	
2	10:07	6.85	17.90	8949.0	64112	-67.8	5.68	Grey; turbid
3	10:10	6.91	20.26	8405.0	6331	-76.5	4.76	Grey; clarity
7	10:13	6.93	20.85	13029.0	9214	-99.6	4.81	Turbid grey

DEPTH TO GROUNDWATER WHEN 80% RECOVERED: 7.0

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOP): 7.0 (the fast recharge) - 15 min

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE 1/4
 40 ML

1/4 Amber
 LITER

1/4
 OTHER

1/4
 OTHER

ANALYSES: TEHd mo (8015m w/ 13.0cm of sand)

MISC FIELD OBSERVATIONS: rainy; clear w/ grey tint became cloudy
and turbid after 15 min.

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Stuart Dalie/ Emily Silverman
 DATE: 12/12/99
 WEATHER: Cloudy cool

WELL NO.: SST-VM-21
 CASING DIAMETER: 2"
 WELL MATERIAL: —
 TOC ELEVATION: —

TOTAL DEPTH OF CASING (BTOC): 17.90 FEET

CALCULATED PURGE VOLUME: 7.86 gallons
 (feet of water * casing dia² * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOC): 1.84 FEET

FEET OF WATER IN WELL: 16.06 FEET

PURGE METHOD: Disposable Bailer
 inches

FREE PRODUCT: Yes or No

MEASUREMENT METHOD:
 EQUIPMENT USED:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

181 600-D

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY ($\mu\text{MHOS}/\text{CM}$)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	12:00	6.12	15.86	79,55.0	6.16	76.6	5.39	no color
2	12:04	6.44	16.84	8170.0	6.28	-20.5	5.31	clean water
4	12:10	6.40	18.01	10,833.0	8.10	-50.5	4.69	gravel + silt, slight odor
6	12:15	6.58	18.67	13,497.0	10.01	-62.2	4.46	some odor
8	12:20	6.61	18.71	17,122.0	12.79	-123.2	2.39	some

DEPTH TO GROUNDWATER WHEN 80% RECOVERED:

5.1'

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC):

4.95"

10 min recharge

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE

40 ML

2 XL Ankars

LITER

1 L peley

OTHER

ANALYSES:

TEH of no (8005m) w/ silica gel rinse

Metals lead (1010/700)

MISC FIELD OBSERVATIONS:

Soil in the air top create runoff ditch
open well, no infiltration from surface

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Stuart Dalie/ Emily Silverman
 DATE: 12/13/99
 WEATHER: Cool Clear

WELL NO.: SC1/MW-21
 CASING DIAMETER 2"
 WELL MATERIAL:
 TOC ELEVATION:

TOTAL DEPTH OF CASING (BTOP): 18.00 FEET

CALCULATED PURGE VOLUME: 8.24 gallons
 (feet of water * casing dia² * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOP): 1.15 FEET

FEET OF WATER IN WELL: 16.85 FEET

FREE PRODUCT: Yes or No

PURGE METHOD: Disposable Bailer
 inches

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED: YSI-610 D

GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY ($\mu\text{MHOS}/\text{CM}$)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	10:10	6.49	14.13	1036.00	.890	68.3	2.49	No odor
2	10:15	6.39	15.18	1195.00	1.960	-51.2	5.49	H2S odor gray clear
4	10:25	6.39	16.73	4041.00	3.151	-85.5	3.88	" "
6	10:30	6.55	17.15	9'674.00	6.531	-103.4	5.06	" "
8	10:35	6.79	17.59	13,130.00	9.910	-117.0	3.97	" "

DEPTH TO GROUNDWATER WHEN 80% RECOVERED:

4.52'

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOP):

4.52'

(15 min delay)

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE /
 40 ML

2/Another
 LITER'S

/
 OTHER

/
 OTHER

ANALYSES:

TEH dmo (50.5m) w/ site gal. use

MISC FIELD OBSERVATIONS: ✓

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Stuart Dalie/ Emily Silverman
 DATE: 12/2/199
 WEATHER: Clear cool

WELL NO.: SC1MW-22
 CASING DIAMETER: 2"
 WELL MATERIAL: _____
 TOC ELEVATION: -

TOTAL DEPTH OF CASING (BTOC): 14.22 FEET

CALCULATED PURGE VOLUME:
 (feet of water * casing dia² * .0408 * # of Volumes) 2.3 4.5 gallons

DEPTH TO GROUNDWATER (BTOC): 4.83 FEET

FEET OF WATER IN WELL: 9.37 FEET

PURGE METHOD: Disposable Bailer
 inches

FREE PRODUCT: Yes or No Yes

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED: XSI 610 D

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY ($\mu\text{MHOS}/\text{CM}$)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	14.30	6.22	19.79	23,891.0	17.11	-40.0	3.09	Slight H ₂ S odor
1	14.40	6.55	19.15	29,400.0	17.45	-91.7	4.14	black string H ₂ S, turbid
2	14.45	6.76	20.16	25,168.0	17.71	-111.6	3.42	same
3	14.50	6.77	21.05	27,260.0	18.71	-125.7	2.92	same

DEPTH TO GROUNDWATER WHEN 80% RECOVERED: 6.71'

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC): 5' (instant recharge)

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE

3 XBA Heli

40 ML

2 A Liter

LITER

OTHER

OTHER

ANALYSES:

TEA of no (805 m) w/ 5' gel rise
VOE's (3200/8240 ft)

MISC FIELD OBSERVATIONS:

purge 160' in well box (st) submerged
open well pressure

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Stuart Dalie/ Emily Silverman
 DATE: 12/3/99
 WEATHER: Clear cool

WELL NO.: SE1MW-23
 CASING DIAMETER: 2"
 WELL MATERIAL: /
 TOC ELEVATION: _____

TOTAL DEPTH OF CASING (BTOP): 17.4 FEET

CALCULATED PURGE VOLUME: 10.43 gallons
 (feet of water * casing dia² * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOP): 4.25 FEET

FEET OF WATER IN WELL: 13.15 FEET

PURGE METHOD: Disposable Bailer
 inches

FREE PRODUCT: Yes or No

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED: VSI 610-D

FIELD MEASUREMENTS								
GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY ($\mu\text{MHOS}/\text{CM}$)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	8:40	5.95	19.21	14,272.0	10.40	-95.4	3.42	Slight hydrocarbon
2	9:42	6.32	19.86	14,500.0	10.52	-124.8	1.15	
4	9:46	6.37	20.27	14,831.0	10.59	-131.5	0.74	slightly turbid, color
6	9:50	6.40	20.13	14,935.0	10.65	-135.5	0.65	greenish, turbid, color
8	9:55	6.41	20.35	15,002.0	10.68	-136.6	0.62	greenish, turbid, color

DEPTH TO GROUNDWATER WHEN 80% RECOVERED: 7'

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOP): 7' (1/2 hr recharge)

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE: 2/ 16A 1/2 SEC

40 ML

4 Airtite

LITER'S

2/ Paley 1/2

OTHER

ANALYSES:

Tell d, no (605m) w/ silica gel ring
TDS (160.1)
DOe (9060)
Pesticides (8280)

MISC FIELD OBSERVATIONS:

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Stuart Dalie/ Emily Silverman
 DATE: 12/1/99
 WEATHER: Sunny and clear.

WELL NO.: SCMW-24
 CASING DIAMETER: 2"
 WELL MATERIAL:
 TOC ELEVATION:

TOTAL DEPTH OF CASING (BTOC): 17.50 FEET

CALCULATED PURGE VOLUME: 6.24 gallons
 (feet of water * casing dia² * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOC): 4.75 FEET

FEET OF WATER IN WELL: 12.75 FEET

PURGE METHOD: Disposable Bailer
 inches

FREE PRODUCT: Yes or No

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED:

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY ($\mu\text{MHOS/CM}$)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	845	6.17	20.40	36140.00	2,584	-47.0	5.09	
2	847	6.23	19.45	3513.08	2,599	-52.5	5.88	blackish - gray
4	950	6.31	19.51	3570.08	2,633	-20.7	5.67	very turbid.
6	957	6.28	20.02	3507.00	2,503	-59.8	6.31	

DEPTH TO GROUNDWATER WHEN 80% RECOVERED: 7.3

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC): 4.89

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE

3 / HCl

40 ML

3 / None

Amb. LITER

2 / None

OTHER
poly Liter

2 / H₂SO₄

OTHER

40 ml

ANALYSES:

TDS EPA 160.1
DOC EPA 9060)
Total Rad. DO/DO / TGC
TNH/TBTEX 80/15 m/8020
DNA Filtered 8270

MISC FIELD OBSERVATIONS: Very strong hydrocarbon odor w/sheen
blackish gray turbid w/sheen.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking

JOB NO.: 133.009

SAMPLED BY: Stuart Dalie/ Emily Silverman

DATE: 1/21/99

WEATHER: Sunny

WELL NO.: SCIMCO-26

CASING DIAMETER: 2"

WELL MATERIAL:

TOC ELEVATION:

TOTAL DEPTH OF CASING (BTOC): 1810 FEET

CALCULATED PURGE VOLUME: 7 gallons

DEPTH TO GROUNDWATER (BTOC): 3.89 FEET

(feet of water * casing dia² * # of Volumes)

FEET OF WATER IN WELL: 14.21 FEET

PURGE METHOD:

FREE PRODUCT: Yes or No

inches

Disposable Bailer

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED:

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY (µMHOS/CM)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	1542	6.54	18.53	15174.0	11.24	-178.4	2.52	
1	1546	6.55	17.50	14448.0	10.91	-157.0	5.42	slight H2S odor
3	1551	6.62	18.22	13445	10.78	-165.4	4.68	bt. gray slightly turbid
5	1555	6.64	17.83	14364.0	10.96	-158.1	5.25	
7	16:00	6.74	17.75	14905.0	11.17	-163.2	4.74	Cloudy

DEPTH TO GROUNDWATER WHEN 80% RECOVERED: 6.73

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC): 5.2

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE: 1
40 ML2 / Nalgene
LITER Ammonium1
OTHER1
OTHER

ANALYSES: TEH'd mo 8015m w/ Silica gel. Cleanups.

MISC FIELD OBSERVATIONS:

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Stuart Dalie/ Emily Silverman
 DATE: 12/ 2/99
 WEATHER:

WELL NO.: SCIWU-27
 CASING DIAMETER: 2"
 WELL MATERIAL:
 TOC ELEVATION:

TOTAL DEPTH OF CASING (BTOP): 17.74 FEET

CALCULATED PURGE VOLUME: 4.45 gallons
 (feet of water * casing dia² * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOP): 4.88 FEET

FEET OF WATER IN WELL: 12.94 FEET

PURGE METHOD: Disposable Bailer
 inches

FREE PRODUCT: Yes or No

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED:

YSI 610-D

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY ($\mu\text{MHOS}/\text{CM}$)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	1330	6.45	15.6	14458.0	11.18	-19.0	4.29	No odor.
1	1335	6.71	16.20	13878.0	10.84	-4643	5.84	greenish gray
3	1340	6.72	16.89	15986.0	12.20	-840	4.59	It's Odor
5	1345	6.75	17.34	19178.0	14.54	-970	4.49	greenish brown (suspended particles)

DEPTH TO GROUNDWATER WHEN 80% RECOVERED:

7.4' bgs

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOP):

6' (15 min recharge)

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE

40 ML

2 / Amber

LITER S

1

1

OTHER

OTHER

ANALYSES:

TRH dye (80/15 m) w/ Silica gel rings

MISC FIELD OBSERVATIONS:

N/A

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Stuart Dalie/ Emily Silverman
 DATE: 12/2/99
 WEATHER: rainy

WELL NO.: SCI MW-28
 CASING DIAMETER: 2"
 WELL MATERIAL: /
 TOC ELEVATION: /

TOTAL DEPTH OF CASING (BTOP): 19.80 FEET

CALCULATED PURGE VOLUME: 74.3 gallons
 (feet of water * casing dia² * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOP): 4.74 FEET

FEET OF WATER IN WELL: 15.06 FEET

FREE PRODUCT: Yes or No S PURGE METHOD: Disposable Bailer

inches

MEASUREMENT METHOD: TAPE & PASTE
 EQUIPMENT USED: VSL 610-D

ELECTRONIC SOUNDER

OTHER

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY (µMHOS/CM)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	10:30	6.07	15.23	276.00	.219	91.1	3.51	no odor
1	10:35	6.17	15.42	274.00	0.212	90.7	3.32	1/2 S odor, gray
3	10:40	6.11	16.07	485.00	.380	20.3	2.83	gray turbid, 1/2 s odor
5	10:45	6.30	16.52	1,877.00	1.456	-25.3	3.87	gray H/S odor
7	10:50	6.53	16.99	4,070.00	3.132	-60.1	3.25	yellowish brown 1/2 s odor, turbid

DEPTH TO GROUNDWATER WHEN 80% RECOVERED: 7.8'

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOP): 7.0' (10 min recharge)

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE: /
 40 ML

2 1/2 Ambers

LITER

/
 OTHER

1 L/poly

OTHER

ANALYSES:

TEST d, no 16015 m w/ silica gel cleanup)

Heavy metals (6070/2000)

MISC FIELD OBSERVATIONS:

New cement in top 1' bgs since yesterday.
Sump above gravel poly tank and drain with float, see photo graphs & sketch.

- heavy shear on Shady H2O pooling west in scrap yard above SCI mw-28

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Stuart Dalie/ Emily Silverman
 DATE: 12/12/99
 WEATHER: clear cool

WELL NO.: SC1MW-30
 CASING DIAMETER: 2"
 WELL MATERIAL: -
 TOC ELEVATION: -

TOTAL DEPTH OF CASING (BTOC): 18.49 FEET

CALCULATED PURGE VOLUME: 6.90 gallons
 (feet of water * casing dia² * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOC): 11.36 FEET

FEET OF WATER IN WELL: 14.11 FEET

PURGE METHOD: Disposable Bailer
 inches

FREE PRODUCT: Yes or No

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED:

VSI 610-D

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY ($\mu\text{MHOS}/\text{CM}$)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	1459	6.64	19.53	19702	14.41	-89.9	1.71	no odor
1	1500	6.93	19.96	20021.0	14.41	-94.7	2.48	black particles
3	1505	6.45	20.54	20523.0	14.42	-111.2	3.46	black strong H2S
5	1515	6.44	20.23	21953.0	15.24	-120.0	4.65	black suspended
7	1520	7.03	19.66	21731.0*	15.74	-139.0	5.73	black particles H2S/HClO

DEPTH TO GROUNDWATER WHEN 80% RECOVERED:

7.29

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC):

6.5'

(inserted retractor)

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE 3 vials w/ HCl

40 ML

2/1L Autans

LITER

OTHER

OTHER

ANALYSES:

-TEH d, no 8015 m/ w/ silica gel
WC's / 8260/ 8240 (st)

MISC FIELD OBSERVATIONS:

w/s slight H2S odor

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Stuart Dalie/ Emily Silverman
 DATE: 12/1/99
 WEATHER: Clear cool

WELL NO.: SCIMW31-D
 CASING DIAMETER 2"
 WELL MATERIAL: /
 TOC ELEVATION: /

TOTAL DEPTH OF CASING (BTOP): 17.8 FEET

CALCULATED PURGE VOLUME: 20.5 gallons
 (feet of water * casing dia² * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOP): 7.91 FEET

FEET OF WATER IN WELL: 41.87 FEET

PURGE METHOD: Disposable Bailer
 inches

FREE PRODUCT: Yes or No

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED: VSI-610-D

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY ($\mu\text{MHOS}/\text{CM}$)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	1445	6.48	20.03	22320	15.78	-26.17	5.73	No odor
5	1455	6.62	19.12	21806.00	15.96	-24.5	5.94	No odor clear
10	1505	6.60	19.87	22786.0	16.27	-26.1	2.44	No odor clear
15	1510	7.15	19.49	22780.0	16.59	-13.3	3.54	No odor clear
20	1525	6.36	19.12	21876.0	15.98	56.1	4.27	No odor cloudy

DEPTH TO GROUNDWATER WHEN 80% RECOVERED:

11.3'

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOP):

8.75' instant

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE

3/16A w/ HCl
40 ML

1

LITER

1

1

OTHER

ANALYSES:

NCS (8200/8240)st

MISC FIELD OBSERVATIONS:

water clear / dry well

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Stuart Dalie/ Emily Silverman
 DATE: 12/1/199
 WEATHER: Sunny

WELL NO.: SCIMLU-32
 CASING DIAMETER: 2"
 WELL MATERIAL: /
 TOC ELEVATION: /

TOTAL DEPTH OF CASING (BTOP): 19.84 FEET

CALCULATED PURGE VOLUME: 7.5 gallons
 (feet of water * casing dia² * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOP): 4.60 FEET

FEET OF WATER IN WELL: 15.24 FEET

PURGE METHOD: Disposable Bailer
 inches

FREE PRODUCT: Yes or No Yes

MEASUREMENT METHOD: VSI 610 TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED:

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY (μ MHOS/CM)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	1447	6.45	26.8	55659	5.847	-1313	2.46	odorless
1.5	14532	6.45	26.71	34488	4.601	-49.6	5.35	greenish tint
3.0	14532	6.84	21.26	7064	4.89	-64.7	4.19	"no odor"
4.5	1506	6.90	21.35	9753	5.438	-69.8	4.22	No odor
7.5	1510	7.63	21.48	9790	6.749	-79.8	3.82	No odor greenish brown

DEPTH TO GROUNDWATER WHEN 80% RECOVERED: 7.65

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOP): 5.5' (constant recharge)

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE 2/1 HCl
 40 ML

2/ None
 LITER Amber

OTHER

OTHER

ANALYSES:

Test - d m 8015 w/ silica gel clean up
VOCs EPA (8260/8240)

MISC FIELD OBSERVATIONS: Water w/ greenish tint no odor

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Stuart Dalie/ Emily Silverman
 DATE: 12/1/99
 WEATHER: sunny breezy

WELL NO.: Scimw-33
 CASING DIAMETER: 2"
 WELL MATERIAL: /
 TOC ELEVATION: /

TOTAL DEPTH OF CASING (BTOP): 16.1 FEET

CALCULATED PURGE VOLUME: 5.4 gallons
 (feet of water * casing dia² * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOP): 4.39 FEET

FEET OF WATER IN WELL: 11.71 FEET

PURGE METHOD: Disposable Bailer
 inches

FREE PRODUCT: Yes or No Yes

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED: YSI 60-D

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY (µMHOS/CM)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	1342	6.50	19.94	9714.6	16.845	-58.8	3.42	
1	1345	6.58	20.53	8754.0	6.250	-16.4	7.53	clear, strong odor
3	1347	6.75	21.96	10525.0	7.211	-94.3	3.27	greenish grey
5	1350	6.81	22.44	14283.00	9.910	-113.2	4.19	greenish grey

DEPTH TO GROUNDWATER WHEN 80% RECOVERED: 10.15

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOP): 10.0

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE 3/ HCl
 40 ML

4 / None
 LITER Amber

/
 OTHER

/
 OTHER

ANALYSES: TEH-d mo 80/5m w/ silica gel
VOCs (B260/8240)
Pesticides (SU80)

MISC FIELD OBSERVATIONS: greenish grey tint, not turbid

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Stuart Dalie/ Emily Silverman
 DATE: 12-1-99
 WEATHER: cool cloudy

WELL NO.: SC 1111-34
 CASING DIAMETER: 2"
 WELL MATERIAL: -
 TOC ELEVATION: -

TOTAL DEPTH OF CASING (BTOC): 6.59' FEET
 DEPTH TO GROUNDWATER (BTOC): 14.75' FEET

CALCULATED PURGE VOLUME: 3.9 gallons
 (feet of water * casing dia² * .0408 * # of Volumes)

FEET OF WATER IN WELL: 8.16 FEET

PURGE METHOD: Disposable Bailer
 inches

FREE PRODUCT: Yes or No

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED:

VSI-60 D

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY ($\mu\text{MHOS}/\text{CM}$)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	9:50	6.81	17.46	15,562.0	11.81	174.8	4.35	no odor
1	9:55	6.62	17.16	16,707.0	12.80	103.6	4.79	Clear no odor
2	9:00	6.97	16.63	16,120.0	12.70	48.1	5.51	Clear
3	9:05	6.96	17.45	13,703.0	14.25	22.4	5.77	
4	9:10	6.91	17.16	20307.0	15.43	23.0	5.42	Dryish smell, twi. H2S odor
.								
.								
.								

DEPTH TO GROUNDWATER WHEN 80% RECOVERED:

8.25'

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC):

7.25' (2 1/2 hr recharge)

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE

2/ VOA H₂SO₄

3 40 ML VOA HCl

OTHER

2/ Amber liters

LITER

2 L Poly's

OTHER

ANALYSES:

TVH/ISTEX (8015 m/8020)

3 Vat HCl

TEH d, mg (8015 m w/ Silica gel rings)

2 A Liters

Level (810/7000; 1L poly)

TDS (100.1)

1L poly

DOC (9060)

2 Vat H₂SO₄

MISC FIELD OBSERVATIONS:

Very high tide, raining.

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking

JOB NO.: 133.009

SAMPLED BY: Stuart Dalie/ Emily Silverman

DATE: 12/2/99

WEATHER: cold, cloudy, misty

WELL NO.: SC1MW-35

CASING DIAMETER: 2"

WELL MATERIAL: /

TOC ELEVATION: =

TOTAL DEPTH OF CASING (BTOP): 5.57 FEET 

DEPTH TO GROUNDWATER (BTOP): 11.00 FEET 

FEET OF WATER IN WELL: 5.75 FEET

FREE PRODUCT: Yes or No 

CALCULATED PURGE VOLUME: 2.5 gallons
(feet of water * casing dia² * .0408 * # of Volumes)

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED: VS1-60 

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY ($\mu\text{MHOS}/\text{CM}$)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	9:20	5.47	14.37	13782.0	10.25	166.9	4.52	No odor
1	9:25	6.48	18.17	13582.0	10.35	177.8	6.11	Clear, No odor
2	9:30	6.60	18.35	15649.0	11.74	135.4	4.94	Cloudy
2.5	9:35	6.55	18.50	15984.0	11.83	111.5	4.71	Cloudy

DEPTH TO GROUNDWATER WHEN 80% RECOVERED: 6.4'

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOP): 6.5- / 6.6 (5 min reading)

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE /
 40 ML

2 1/2 liters
 LITER

/ OTHER

/ OTHER

ANALYSES:

TEA d, mo (8015 m w/ silicon gel clean up)

MISC FIELD OBSERVATIONS:

High tide, raining

GROUNDWATER DEPTHS

Project Name: 9th Avenue Terminal - Port of Oakland

Job No.: 133.009

Measured by: Emily Silverman

Well	Date	Time	Groundwater Depth (feet)	Comments
"Oil Filled Manhole"	4-Apr-00	12:55	5.20	Thick sheen, some lead.
Stormdrain (located next to SCIMW-9)	4-Apr-00	12:50	4.89	Thick sheen of free product ~1/4" thick
MW-1	4-Apr-00	1:54	5.30	
MW-2	4-Apr-00	2:01	4.81	Strong HC odor - no FP
MW-3	4-Apr-00	1:44	4.51	Slight HC odor
MW-4	4-Apr-00			
MW-5	4-Apr-00	3:05	5.28	Strong HC No FP (bailed)
MW-6	4-Apr-00	3:30	3.12	
MW-7	4-Apr-00	10:03	3.67	No odor.
SCIMW-1	4-Apr-00	10:30	5.10	No odor
SCIMW-2	4-Apr-00	9:20	7.09	No odor
SCIMW-3	4-Apr-00	12:35	4.87	Strong HC odor
SCIMW-4	4-Apr-00	10:10	2.71	No odor
SCIMW-5	4-Apr-00	9:45	6.45	Slight odor
SCIMW-6	4-Apr-00	9:35	6.87	No odor
SCIMW-7	4-Apr-00	12:23	3.48	No odor (need a well cap)
SCIMW-8	4-Apr-00	12:09	12.00	5.10 Slight HC odor
SCIMW-9	4-Apr-00	12:21	4.25	HC odor
SCIMW-10	4-Apr-00	12:31	4.08	Strong HC odor, slight sheen
SCIMW-11	4-Apr-00	8:33	7.00	No odor
SCIMW-12	4-Apr-00	8:25	6.41	Slight HC odor.
SCIMW-13	4-Apr-00	12:44	4.84	
SCIMW-14	4-Apr-00	9:00	8.03	Water over well cap. Bailed before tagged.
SCIMW-15	4-Apr-00	8:55	8.28	" " Slight odor
SCIMW-16	4-Apr-00	12:02	3.75	
SCIMW-17	4-Apr-00	10:43	3.45	Strong HC odor
SCIMW-18	4-Apr-00	1:00	4.45	Strong HC odor
SCIMW-19	4-Apr-00	11:46	3.36	water over well cap. Slight HC odor.
SCIMW-20	4-Apr-00	11:10	1.52	Slight sheen
SCIMW-21	4-Apr-00	9:50	0.50	
SCIMW-22	4-Apr-00	1:15	4.50	No odor. Well cap might not have been secured.
SCIMW-23	4-Apr-00	9:55	6.95	No odor
SCIMW-24	4-Apr-00	8:45	4.69	Strong HC odor - Sheen
SCIMW-25	4-Apr-00	10:45	0.42	No Odor
SCIMW-26	4-Apr-00	2:34	3.90	
SCIMW-27	4-Apr-00	10:25	3.78	Slight HC odor
SCIMW-28	4-Apr-00	11:46	3.54	Slight HC odor
SCIMW-29	4-Apr-00	11:00	5.59	
SCIMW-30	4-Apr-00			
SCIMW-31	4-Apr-00			
SCIMW-32	4-Apr-00	1:35	4.65	No odor.
SCIMW-33	4-Apr-00	12:40	5.00	Slight HC odor
SCIMW-34	4-Apr-00	11:20	5.45	No Odor
SCIMW-35	4-Apr-00	11:30	5.55	Slight solvent odor.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Stuart Baker Emily Silverman
 DATE: 4-1997 4/5 - 4/6/00
 WEATHER: Cloudy, cool, on-off rain. Sunny

WELL NO.: SCIMW-2
 WELL CASING DIAMETER: 2"
 WELL MATERIAL:
 TOC ELEVATION: 10.37

TOTAL DEPTH OF CASING (BTOP): 14.60 FEET
 DEPTH TO GROUNDWATER (BTOP): 5.63 FEET
 FEET OF WATER IN WELL: 8.97 FEET
 FREE PRODUCT: Yes or No _____

CALCULATED PURGE VOLUME: 4,414 gallons
 (feet of water * casing dia² * .0408 * # of Volumes)

PURGE METHOD: hand bail inches

MEASUREMENT METHOD: TAPE & PASTE ELECTRONIC SOUNDER OTHER
 EQUIPMENT USED:

FIELD MEASUREMENTS								
GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY (μ MHOS/CM)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	103	6.63	15.67	1000	6,998	190.4	7.16	Clean
1	108	6.70	16.02	8,003	7,239	142.1	2.20	Yellowish
2	114	6.72	16.29	9,76	8,00	159.7	3.56	slight HC color
3	114	6.74	16.34	9,91	8,26	161.0	4.25	green
4	115	6.80	16.75	10.52	8,078	164.5	4.15	dark grey

DEPTH TO GROUNDWATER WHEN 80% RECOVERED: 7.43

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOP): 6.93'

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE: 2 L H₂SO₄ 2 L / none
 40 ML LITER

1 L / none /
 OTHER OTHER

ANALYSES: TEH-Cl₂mo (8015 m w silica gel cleanup)
 TDS (EPA 160.0)
 Dissolved organic carbon (9060)

MISC FIELD OBSERVATIONS: Slight sheen
 Slight HC odor.
 VERY turbid at time of sample.

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
JOB NO.: 133.009
SAMPLED BY: Stuart Dalic/ Emily Silverman WER
DATE: 9/16/90
WEATHER: Cloudy, cool, on-off rain Sunny

WELL NO.:

DIAMETER:

MATERIAL:

LEVATION.

SCIMU-5

TOTAL DEPTH OF CASING (BTOS): 17.93 FEET

CALCULATED PURGE VOLUME: _____ gallons
(feet of water * casing dia² * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOC) 4,40 FEET

FEET OF WATER IN WELL: 13.53 FEET

PURGE METHOD:

FREE PRODUCT: Yes or No

inches

hand ball

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED:

DEPTH TO GROUNDWATER WHEN 80% RECOVERED:

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (ETOQ):

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE _____

OTHER

ANALYSES:

None

MISC FIELD OBSERVATIONS: Tickle is in at time of purges

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking

JOB NO.: 133.009

WELL NO.: Scumw-6

SAMPLED BY: Scott Dale/ Emily Silverman

WELL CASING DIAMETER: 2"

DATE: 4/15/00 / 4/6/00

WELL MATERIAL:

WEATHER: Cloudy, cool, on-off rain Sunny

TOC ELEVATION: 10.55

TOTAL DEPTH OF CASING (BTOP): 19.09 FEET

CALCULATED PURGE VOLUME: 6.25 gallons
(feet of water * casing dia² * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOP): 6.31 FEET

FEET OF WATER IN WELL: 12.78 FEET

PURGE METHOD: hand bail inches

FREE PRODUCT: Yes or No

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED:

FIELD MEASUREMENTS								
GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY (µMHOS/CM)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color,...)
0	1225	6.56	14.91	22.17	17.94	250.2	5.12	Slight H2S Odor
2	1230	6.41	14.86	21.83	17.160	247.5	5.26	Clear
4	1235	6.43	14.96	21.84	17.160	246.0	5.39	Slight yellow tint
6	1240	6.55	15.06	21.97	17.71	261.0	4.93	Yellowish
7	1245	6.78	15.73	21.59	17.39	270.4	5.23	

DEPTH TO GROUNDWATER WHEN 80% RECOVERED: 14.04

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOP): 6.42

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE: 2 / H₂SO₄
40 ML1 L / None
LITER

OTHER

OTHER

ANALYSES: TDS (EPA 160.1)
DOC (EPA 9060)

MISC FIELD OBSERVATIONS: overnight recharge

WELL SAMPLING FORMPROJECT NAME: 9th Avenue Terminal / Keep on TruckingJOB NO.: 133.009WELL NO.: SCJ4W-11SAMPLED BY: Stuart Eche / Emily SilvermanWELL CASING DIAMETER: 2"DATE: unrecd 4/5/00 - 4/6/00

WELL MATERIAL:

WEATHER: Cloudy, cool, on-off rain
slimyTOC ELEVATION: 9.49TOTAL DEPTH OF CASING (BTOP): 15.80 FEETCALCULATED PURGE VOLUME: 4,56 gallons
(feet of water * casing dia² * .0408 * # of Volumes)DEPTH TO GROUNDWATER (BTOP): 6.48 FEETFEET OF WATER IN WELL: 9.32 FEET

PURGE METHOD:

FREE PRODUCT: Yes or No

inches

hand bail

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED:

FIELD MEASUREMENTS								
GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY ($\mu\text{MHOS}/\text{CM}$)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	1022	6.83	16.74	7.77	5.98	312.5	3.89	
1	1033	6.78	16.89	7.70	6.021	-25.6	4.41	brown lots of algae
2	1040	6.71	16.88	7.70	5.951	-92.2	3.86	
5	1045	6.74	16.71	7.711	5.941	-87.5	4.15	slightly brown

DEPTH TO GROUNDWATER WHEN 80% RECOVERED:

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOP): 8.35SAMPLING METHOD: Disposable BailerCONTAINERS / PRESERVATIVE 2 / H₂SO₄
40 ML1 / None
LITER
OTHER
OTHERANALYSES: TDS (EPA 160.1)Dissolved Organic Carbon (EPA 9060)MISC FIELD OBSERVATIONS: Very cloudy, stronger odor as bailed
Slight H₂S odorOvernight recharge
Low tide @ sampling

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Steve Delie / Emily Silverman
 DATE: 4/5/99 9:45
 WEATHER: Cloudy, cool, on-off rain Sunny

WELL NO.: SC1MW-12
 WELL CASING DIAMETER: 2"
 WELL MATERIAL: _____
 TOC ELEVATION: 10.94

TOTAL DEPTH OF CASING (BTOP): 17.80 FEET
 DEPTH TO GROUNDWATER (BTOP): 7.20 FEET
 FEET OF WATER IN WELL: 10.60 FEET
 FREE PRODUCT: Yes or No

CALCULATED PURGE VOLUME: 5.2 gallons
 (feet of water * casing dia² * .0408 * # of Volumes)
.1632

PURGE METHOD: hand bail inches

MEASUREMENT METHOD: TAPE & PASTE ELECTRONIC SOUNDER OTHER
 EQUIPMENT USED: _____

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY ($\mu\text{MHOS}/\text{CM}$)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	4/5/99	6.79	15.97	22.36	18.43	337.4	5.95	
2	10:17	6.73	15.99	22.30	17.68	368.2	5.21	brownish
4	10:14	6.82	15.75	19.03	15.11	342.0	5.28	
6	10:17	6.77	16.22	21.23	16.81	305.1	5.31	H ₂ S odor

DEPTH TO GROUNDWATER WHEN 80% RECOVERED: 9.32

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOP): 7.24

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE 2 / H₂SO₄ 40 ML 1 / Poly LITER

_____ / OTHER

_____ / OTHER

ANALYSES: TDS (EPA 160.1)
Dissolved Organic Carbon (EPA 9060)

MISC FIELD OBSERVATIONS: Very cloudy, stronger odor as bailed
Overnight recharge
Low tide at time of sampling

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Steve Balic / Emily Silverman
 DATE: 1-199 4/5/00 - 4/6/00
 WEATHER: Cloudy, cool, on-off rain

WELL NO.: SC1MW-23
 WELL CASING DIAMETER: 2"
 WELL MATERIAL: TOC
 TOC ELEVATION: 9.74

TOTAL DEPTH OF CASING (BTOP): 17.27 FEET
 DEPTH TO GROUNDWATER (BTOP): 3.65 FEET
 FEET OF WATER IN WELL: 13.62 FEET
 FREE PRODUCT: Yes or No

CALCULATED PURGE VOLUME: 5.5 gallons
 (feet of water * casing dia² * .0408 * # of Volumes)

PURGE METHOD: hand bail inches

MEASUREMENT METHOD: TAPE & PASTE ELECTRONIC SOUNDER OTHER
 EQUIPMENT USED:

FIELD MEASUREMENTS								
GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY ($\mu\text{MHOS}/\text{CM}$)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	130	6.48	17.81	9.2266	60.809	28.0	3.13	Clear
1	135	6.49	17.85	9.378	71.132	1.0	4.03	Slight H2S odor
3	140	6.50	17.24	10.74	83.72	2.09	2.46	Oily sheen grey
5	148	6.63	17.17	11.615	5.766	-70.4	4.17	H2S odor.
10	155	6.70	17.08	8.2741	60.043	-92.1	5.69	milky

DEPTH TO GROUNDWATER WHEN 80% RECOVERED: 6.38

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOP): 3.50

SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE 2 H₂SO₄ 1L / None
40 ML LITER
24L / None OTHER

ANALYSES: TEH-d, mo (8015 m w/ Silica gel clean up)
TDS (EPA 160.1)
Dissolved Organic Carbon (EPA 90700)

MISC FIELD OBSERVATIONS: Clear at time of sample..

WELL SAMPLING FORM

PROJECT NAME: 9th Avenue Terminal / Keep on Trucking
 JOB NO.: 133.009
 SAMPLED BY: Stuart Dalie/ Emily Silverman
 DATE: 11/19/99
 WEATHER: Cloudy, cool, on-off rain Sunny

WELL NO.: SCIMW-34
 WELL CASING DIAMETER: 2"
 WELL MATERIAL: TOC
 TOC ELEVATION: 16.93

TOTAL DEPTH OF CASING (BTOPC): 14.90 FEETCALCULATED PURGE VOLUME: 21.15 gallons
(feet of water * casing dia² * .0408 * # of Volumes)DEPTH TO GROUNDWATER (BTOPC): 6.41 FEETFEET OF WATER IN WELL: BTOPC 8.49 FEETPURGE METHOD: hand bailFREE PRODUCT: Yes or No inches

MEASUREMENT METHOD:

TAPE & PASTE

ELECTRONIC SOUNDER

OTHER

EQUIPMENT USED:

FIELD MEASUREMENTS								
GALLONS REMOVED	TIME	pH	TEMP (C)	CONDUCTIVITY ($\mu\text{MHOS}/\text{CM}$)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	1050	6.77	14.60	12,62	10.23	202.4	3.89	
1.5	1055	6.83	14.69	12,57	10.20	218.2	5.58	Clear no color
2.3.0	1100	6.73	14.42	13,69	11.39	192.8	5.26	greenish tinge
4.0	1105	6.71	14.53	15.44	12.51	194.9	4.62	

DEPTH TO GROUNDWATER WHEN 80% RECOVERED: 8.40 13.02ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOPC): 16.32'SAMPLING METHOD: Disposable Bailer

CONTAINERS / PRESERVATIVE 3/ HCl 1/
40 ML Poly LITER
7/ H₂SO₄ 2/ AL
OTHER OTHER

ANALYSES: TVH / BTEX 825
TECH 2 mo
Lead
TDS
DOC

MISC FIELD OBSERVATIONS: slight HC Odor

**APPENDIX B:
ANALYTICAL TEST REPORTS
AND
CHAIN-OF-CUSTODY RECORDS**



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900, Fax (510) 486-0532

65

A N A L Y T I C A L R E P O R T

Prepared for:

Subsurface Consultants
3736 Mt. Diablo Blvd.
Suite 200
Lafayette, CA 94549

Date: 09-DEC-99
Lab Job Number: 142763
Project ID: 133.009
Location: KOT/9th Ave.Terminus

Reviewed by: 

Reviewed by: 

This package may be reproduced only in its entirety.



Laboratory Number: **142763**
Client: **Subsurface Consultants, Inc.**
Project Name: **9th Ave./KOT**

Receipt Date: **11/30/99**

CASE NARRATIVE

This hardcopy data package contains sample results and batch QC results for six water samples received from the above referenced project. The samples were received cold and intact.

Total Extractable Hydrocarbons: No analytical problems were encountered.

General Chemistry: The matrix spike recoveries for dissolved organic carbon were outside acceptance limits. The associated laboratory control sample recovery was acceptable for all target elements. No other analytical problems were encountered.

CHAIN OF CUSTODY FORM

PROJECT NAME: 9 Ave

JOB NUMBER: 133-0051

JOB NUMBER: 101 PROJECT CONTACT: Ted Alexander

SAMPLED BY: Stu | Emily

LAB: CST

LAB: Stevens

TURNAROUND: Stuckarel

REQUESTED BY: STU/ Ewink

CHAIN OF CUSTODY RECORD

CHAIN OF CUSTODY RECORD				COMMENTS & NOTES:
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME	801sm white gel rinse motor oil
<i>Endo</i>	11/30/99 4:07	<i>John Bennett</i>	11/30/99 1:30	
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME	
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME	
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME	
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME	



Subsurface Consultants, Inc.
171 - 12th Street, Suite 202, Oakland, CA 94607
(510) 268-0461 - FAX: (510) 268-0137
3736 Mt. Diablo Blvd., Ste. 200, Lafayette, CA 94549
(925) 299-7960 - (925) 299-7970

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
 Project#: 133.009
 Location: KOT/9th Ave.Terminal

Analysis Method: EPA 8015M
 Prep Method: EPA 3520

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
142763-001	SCIMW-12	52374	11/30/99	12/01/99	12/02/99	
142763-002	SCIMW-15	52374	11/30/99	12/01/99	12/02/99	
142763-003	SCIMW-14	52374	11/30/99	12/01/99	12/02/99	
142763-004	SCIMW-3	52374	11/30/99	12/01/99	12/02/99	

Matrix: Water

Analyte	Units	142763-001	142763-002	142763-003	142763-004
Diln Fac:		1	1	1	1
Diesel C10-C24	ug/L	<50	<50	<50	<50
Motor Oil C24-C36	ug/L	<300	<300	<300	<300
Surrogate					
Hexacosane	%REC	79	75	72	79

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.009
Location: KOT/9th Ave.Terminal

Analysis Method: EPA 8015M
Prep Method: EPA 3520

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
142763-005	SCIMW-8	52374	11/30/99	12/01/99	12/02/99	
142763-006	SCIMW-16	52374	11/30/99	12/01/99	12/02/99	

Matrix: Water

Analyte	Units	142763-005	142763-006
Diln Fac:		1	1
Diesel C10-C24	ug/L	<50	<50
Motor Oil C24-C36	ug/L	<300	<300
Surrogate			
Hexacosane	%REC	83	81



TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.009
Location: KOT/9th Ave.Terminal

Analysis Method: EPA 8015M
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 52374
Units: ug/L
Diln Fac: 1

Prep Date: 12/01/99
Analysis Date: 12/03/99

MB Lab ID: QC102609

Analyte	Result	
Diesel C10-C24	<50	
Motor Oil C24-C36	<300	
Surrogate	%Rec	Recovery Limits
Hexacosane	102	58-128

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
 Project#: 133.009
 Location: KOT/9th Ave.Terminal

Analysis Method: EPA 8015M
 Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
 Batch#: 52374
 Units: ug/L
 Diln Fac: 1

Prep Date: 12/01/99
 Analysis Date: 12/02/99

BS Lab ID: QC102610

Analyte	Spike Added	BS	%Rec #	Limits
Diesel C10-C24	2475	1508	61	50-114
Surrogate	%Rec		Limits	
Hexacosane	74		58-128	

BSD Lab ID: QC102611

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Diesel C10-C24	2475	1821	74	50-114	19	25
Surrogate	%Rec		Limits			
Hexacosane	87		58-128			

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits



Curtis & Tompkins, Ltd.

Dissolved Organic Carbon (DOC)

Lab #:	142763	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 415.2
Project#:	133.009		
Analyte:	Dissolved Organic Carbon	Batch#:	52452
Matrix:	Water	Sampled:	30-NOV-1999
Units:	mg/L	Received:	30-NOV-1999
Diln Fac:	1.000	Analyzed:	06-DEC-1999

Field ID	Type	Lab ID	Result	RL
SCIMW-12	SAMPLE	142763-001	ND	1.0
SCIMW-15	SAMPLE	142763-002	23	1.0
SCIMW-14	SAMPLE	142763-003	13	1.0
	BLANK	QC102884	ND	1.0

ND = Not Detected

RL = Reporting Limit

Page 1 of 1

Dissolved Organic Carbon (DOC)

Lab #:	142763	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 415.2
Project#:	133.009		
Analyte:	Dissolved Organic Carbon	Diln Fac:	1.000
Field ID:	SCIMW-12	Batch#:	52452
MSS Lab ID:	142763-001	Sampled:	30-NOV-1999
Matrix:	Water	Received:	30-NOV-1999
Units:	mg/L	Analyzed:	06-DEC-1999

Type	Lab ID	MSS Result	Spiked	Result	%RSC	Limits	RPD	Lim
LCS	QC102885		10.00	9.600	96	80-120		
MS	QC102886	<1.000	10.00	5.800	58 *	75-125		
MSD	QC102887		10.00	5.400	54 *	75-125	7	35

Value outside QC limits

RPD= Relative Percent Difference

Page 1 of 1



Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	142763	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 160.1
Project#:	133.009	Prep Method:	METHOD
Analyte:	Total Dissolved Solids	Sampled:	30-NOV-1999
Matrix:	Water	Received:	30-NOV-1999
Units:	mg/L	Prepared:	30-NOV-1999
Batch#:	52344	Analyzed:	01-DEC-1999

Field ID	Type	Lab ID	Result	RL	Dil. Fac.
SCIMW-12	SAMPLE	142763-001	27,400	100	10.00
SCIMW-15	SAMPLE	142763-002	6,170	25	2.500
SCIMW-14	SAMPLE	142763-003	1,290	10	1.000
	BLANK	QC102482	ND	10	1.000

ND = Not Detected

RL = Reporting Limit

Page 1 of 1



Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	142763	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 160.1
Project#:	133.009	Prep Method:	METHOD
Analyte:	Total Dissolved Solids	Diln Fac:	1.000
Field ID:	SCIMW-14	Batch#:	52344
Type:	SDUP	Sampled:	30-NOV-1999
MSS Lab ID:	142763-003	Received:	30-NOV-1999
Lab ID:	QC102483	Prepared:	30-NOV-1999
Matrix:	Water	Analyzed:	01-DEC-1999
Units:	mg/L		

MSS Result	Result	RL	RPD	Lim
1,294	1,276	10	1	25

R= Reporting Limit

RPD= Relative Percent Difference

Page 1 of 1



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900, Fax (510) 486-0532

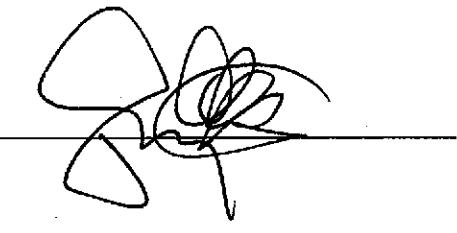
A N A L Y T I C A L R E P O R T

Prepared for:

Subsurface Consultants
3736 Mt. Diablo Blvd.
Suite 200
Lafayette, CA 94549

Date: 02-FEB-00
Lab Job Number: 142781
Project ID: 133.009
Location: KOT/9th Ave.Terminus

Reviewed by: 

Reviewed by: 

This package may be reproduced only in its entirety.



Curtis & Tompkins, Ltd.

Laboratory Number: 142781

Receipt Date: 12/01/99

Client: Subsurface Consultants, Inc.

Project Name: 9th Ave. Terminals

CASE NARRATIVE

This hardcopy data package contains sample results and batch QC results for ten water samples received from the above referenced project. The samples were received cold and intact.

Total Volatile Hydrocarbons: The trifluorotoluene and bromofluorobenzene surrogate recoveries for sample SCIMW-24 (142781-002), and the bromofluorobenzene surrogate recoveries for the matrix spikes, were outside acceptance limits due to coelution of the surrogate peaks with hydrocarbon peaks. No other analytical problems were encountered.

BTXE: No analytical problems were encountered.

Total Extractable Hydrocarbons: The hexacosane surrogate was not spiked into the blank spike sample. The analyte recovery was acceptable for the blank spike. No other analytical problems were encountered.

Volatile Organic Compounds: No analytical problems were encountered.

Pesticides/PCBs: No analytical problems were encountered.

Polyaromatic Hydrocarbons: No analytical problems were encountered.

Metals: No analytical problems were encountered.

General Chemistry: The matrix spike recoveries for dissolved organic carbon were outside acceptance limits. The associated laboratory control sample recovery was acceptable. No other analytical problems were encountered.

CHAIN OF CUSTODY FORM

PROJECT NAME: 9th Ave Terminal's

JOB NUMBER: 133.009

PROJECT CONTACT: Seri Alexander

SAMPLED BY: STU / Emily

LAB: CAT

TURNAROUND: Standard

REQUESTED BY: Stu / Emily

PAGE 1

145-101

101

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX				CONTAINERS				METHOD PRESERVED				SAMPLING DATE				NOTES	
		WATER	SOIL	WASTE	AIR	VIAL	LITER	PINT	TUBE	HCL	H ₂ SO ₄	HNO ₃	ICE	NONE	MONTH	DAY	YEAR	TIME	
1	SCIMW-11	X				X	X			X	X	X	X		120199	09	15		X TVH/BTEX (8015m/8020)
2	SCIMW-24	X				X	X			X	X	X	X		120199	10	05		X EPA metal (8015m) @
3	SCIMW-13	X				X						X			120199	12	00		X Heavy metals (8015m) / Zinc
4	SCIMW-9	X				X						X			120199	12	45		X TDS (160,1)
5	SCIMW-15	X				X						X			120199	13	15		X DDC (9010C)
6	SCIMW-10	X				X						X			120199	14	00		X DCA filtered (8270)
7	SCIMW-17	X				X						X			120199	13	50		X Lead (8260/8290) +
8	SCIMW-33	X				XX				X		XX			120199	15	15		X VOCs (8260/8290) +
9	SCIMW-31D	X				X						X			120199	15	25		X Residues 8080
10	SCIMW-32	X				XX				X		XX			120199	15	25		X
	SCIMW-7	X				XX													

CHAIN OF CUSTODY RECORD				COMMENTS & NOTES:	
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME	\$ 8015m w/silica gel clean-up Please fix and filter in lab	
Emily DiMenna 12/1 4:44		Cisa Barnells	12/1/99 4:50		
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME		
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME		
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME		
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME		


Subsurface Consultants, Inc.
 171 - 12th Street, Suite 202, Oakland, CA 94607
 (510) 268-0461 - FAX: (510) 268-0137
 3736 Mt. Diablo Blvd., Ste. 200, Lafayette, CA 94549
 (925) 299-7960 - (925) 299-7970

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
 Project#: 133.009
 Location: KOT/9th Ave.Terminus

Analysis Method: EPA 8015M
 Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
142781-001	SCIMW-11	52400	12/01/99	12/03/99	12/03/99	
142781-002	SCIMW-24	52400	12/01/99	12/03/99	12/03/99	

Matrix: Water

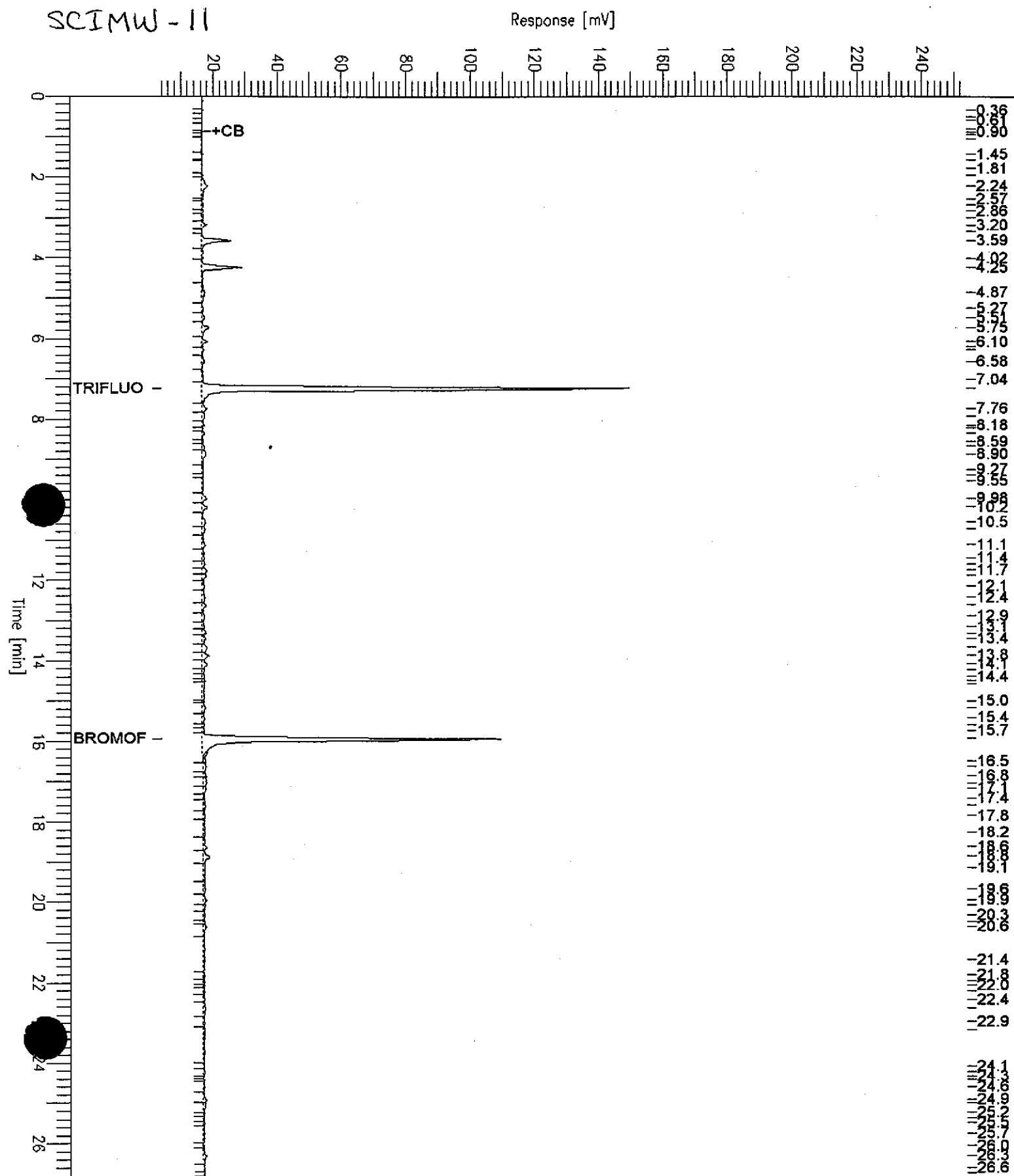
Analyte	Units	142781-001	142781-002
Diln Fac:		1	1
Gasoline C7-C12	ug/L	110	7000
Surrogate			
Trifluorotoluene	%REC	119	160 *
Bromofluorobenzene	%REC	144	402 *

* Values outside of QC limits

GC19 TVH 'X' Data File (FID)

Sample Name : 142781-001,52400
 FileName : G:\GC19\DATA\336X029.raw
 Method : TVHBTXE
 Start Time : 0.00 min End Time : 26.80 min
 Scale Factor: -1.0 Plot Offset: 4 mV

Sample #: e1 Page 1 of 1
 Date : 12/3/99 02:39 PM
 Time of Injection: 12/3/99 02:11 PM
 Low Point : 3.90 mV High Point : 253.90 mV
 Plot Scale: 250.0 mV

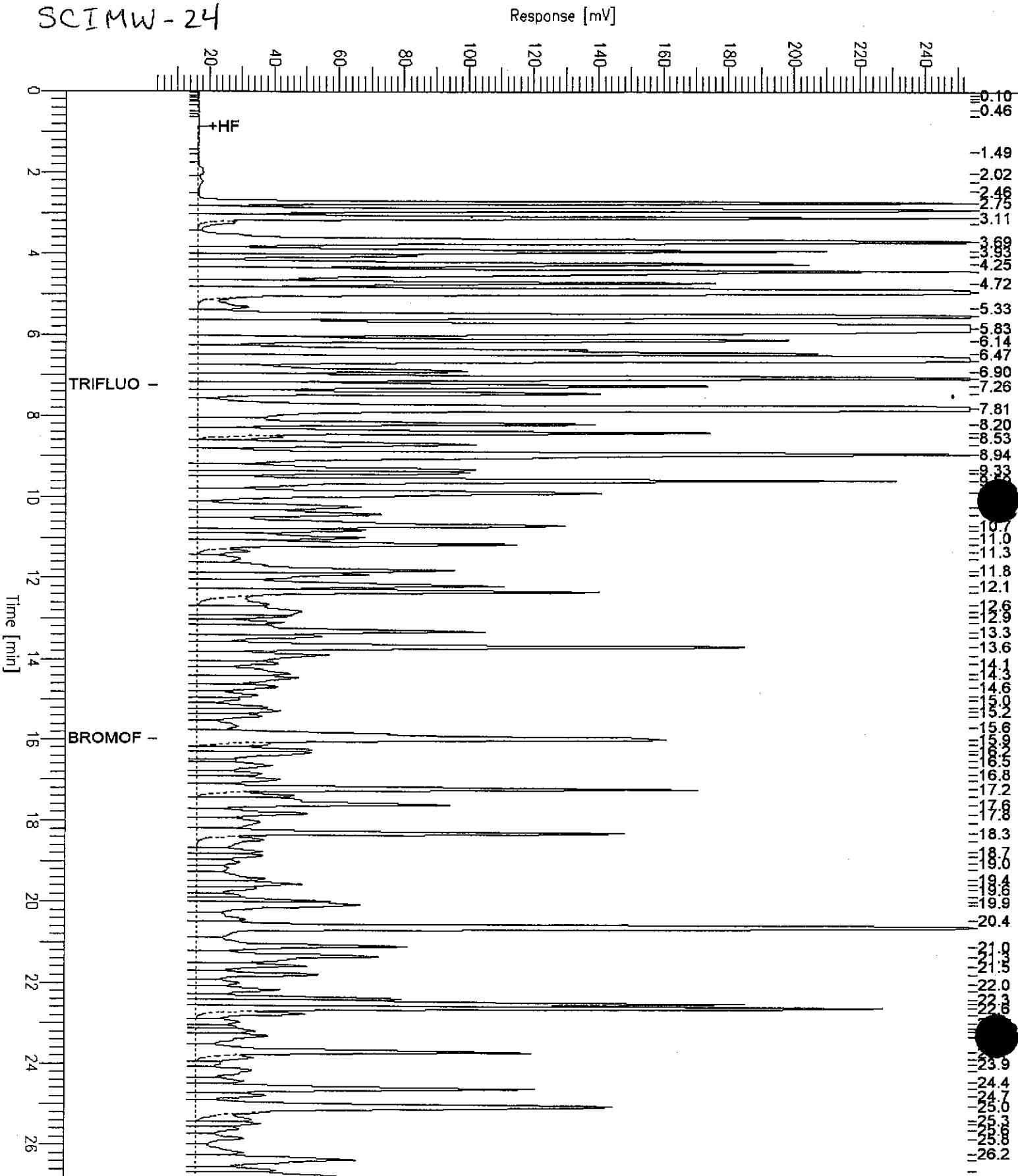


GC19 TVH 'X' Data File (FID)

Sample Name : 142781-002,52400
FileName : G:\GC19\DATA\J336X030.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.80 min
Scale Factor: -1.0 Plot Offset: 4 mV

Sample #: g7 Page 1 of 1
Date : 12/3/99 04:55 PM
Time of Injection: 12/3/99 02:52 PM
Low Point : 3.91 mV High Point : 253.91 mV
Plot Scale: 250.0 mV

SCIMW - 24

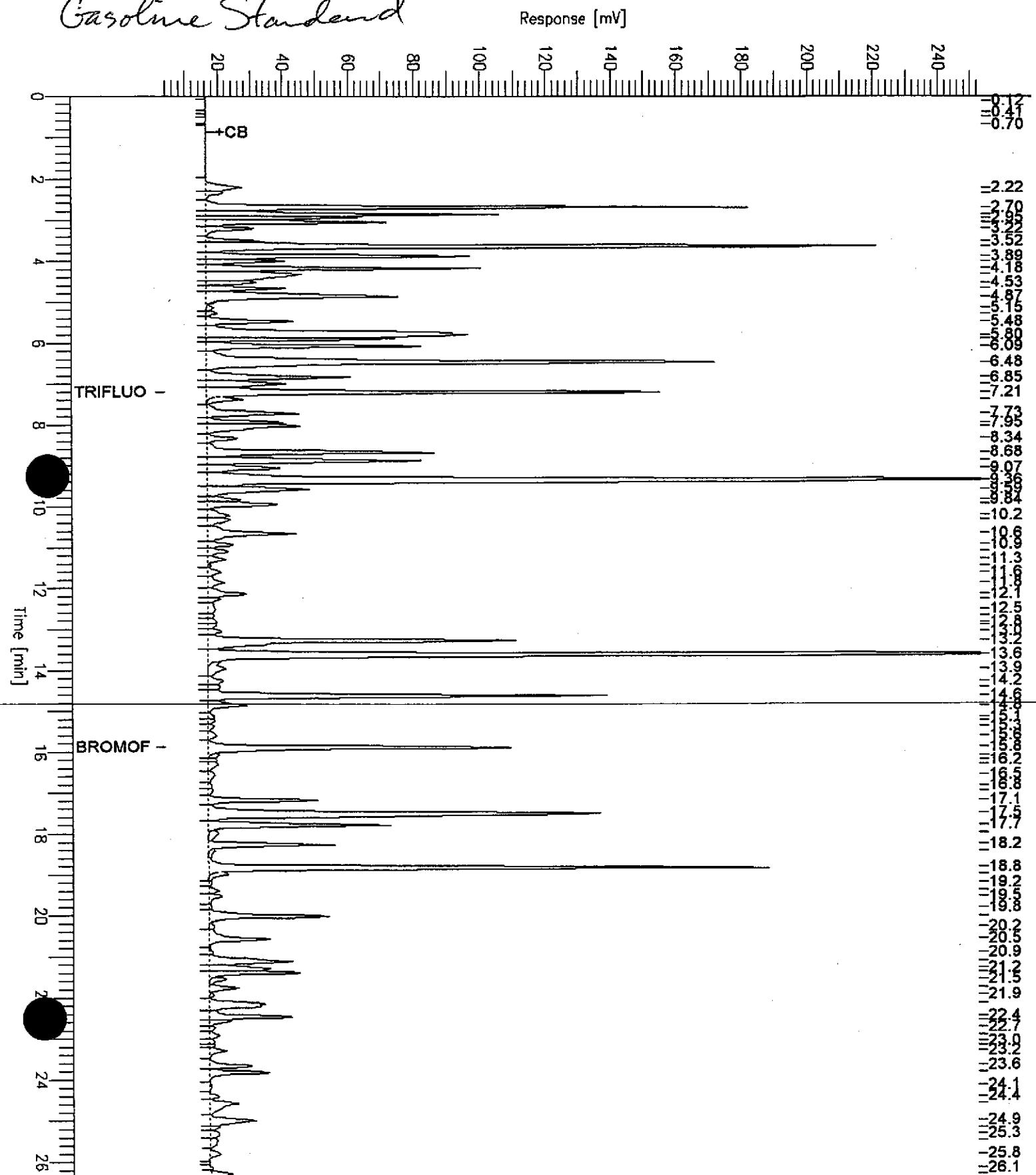


GC19 TVH 'X' Data File (FID)

Sample Name : ccv/lcs,qc102704,99ws8283,52400
 File : G:\GC19\DATA\336X001.raw
 Method : TVHBTXE
 Start Time : 0.00 min End Time : 26.80 min
 Scale Factor: -1.0 Plot Offset: 4 mV

Sample #: 336xy,gas Page 1 of 1
 Date : 12/2/99 07:23 PM
 Time of Injection: 12/2/99 06:55 PM
 Low Point : 3.72 mV High Point : 253.72 mV
 Plot Scale: 250.0 mV

Gasoline Standard





TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants	Analysis Method: EPA 8015M
Project#: 133.009	Prep Method: EPA 5030
Location: KOT/9th Ave.Terminus	

METHOD BLANK

Matrix: Water	Prep Date: 12/02/99
Batch#: 52400	Analysis Date: 12/02/99
Units: ug/L	
Diln Fac: 1	

MB Lab ID: QC102703

Analyte	Result	
Gasoline C7-C12	<50	
Surrogate	%Rec	Recovery Limits
Trifluorotoluene	112	53-150
Bromofluorobenzene	121	53-149



TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.009
Location: KOT/9th Ave.Terminal

Analysis Method: EPA 8015M
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water Prep Date: 12/02/99
Batch#: 52400 Analysis Date: 12/02/99
Units: ug/L
Diln Fac: 1

LCS Lab ID: QC102704

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline C7-C12	2043	2000	102	77-117
Surrogate	%Rec	Limits		
Trifluorotoluene	118	53-150		
Bromofluorobenzene	138	53-149		

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 1 outside limits



TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants Analysis Method: EPA 8015M
 Project#: 133.009 Prep Method: EPA 5030
 Location: KOT/9th Ave.Terminus

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ	Sample Date: 11/30/99
Lab ID: 142791-001	Received Date: 12/02/99
Matrix: Water	Prep Date: 12/02/99
Batch#: 52400	Analysis Date: 12/02/99
Units: ug/L	
Diln Fac: 1	

MS Lab ID: QC102706

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline C7-C12	2000	<50	2174	109	69-131
Surrogate					
Trifluorotoluene	128	53-150			
Bromofluorobenzene	157*	53-149			

MSD Lab ID: QC102707

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline C7-C12	2000	2221	111	69-131	2	13
Surrogate						
Trifluorotoluene	122	53-150				
Bromofluorobenzene	151*	53-149				

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits

BTXE

Client: Subsurface Consultants
Project#: 133.009
Location: KOT/9th Ave.Terminus

Analysis Method: EPA 8021B
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
142781-001	SCIMW-11	52400	12/01/99	12/03/99	12/03/99	
142781-002	SCIMW-24	52438	12/01/99	12/05/99	12/05/99	

Matrix: Water

Analyte	Units	142781-001	142781-002
Diln Fac:		1	5
Benzene	ug/L	0.86	860
Toluene	ug/L	<0.5	25
Ethylbenzene	ug/L	<0.5	35
m,p-Xylenes	ug/L	<0.5	49
o-Xylene	ug/L	<0.5	4.6
Surrogate			
Trifluorotoluene	%REC	112	127
Bromofluorobenzene	%REC	124	107

ct**BTXE**

Client: Subsurface Consultants
Project#: 133.009
Location: KOT/9th Ave.Terminal

Analysis Method: EPA 8021B
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 52400
Units: ug/L
Diln Fac: 1

Prep Date: 12/02/99
Analysis Date: 12/02/99

MB Lab ID: QC102703

Analyte	Result	
Benzene	<0.5	
Toluene	<0.5	
Ethylbenzene	<0.5	
m,p-Xylenes	<0.5	
o-Xylene	<0.5	
Surrogate	%Rec	Recovery Limits
Trifluorotoluene	109	51-143
Bromofluorobenzene	117	37-146



BTXE

Client: Subsurface Consultants
Project#: 133.009
Location: KOT/9th Ave.Terminal

Analysis Method: EPA 8021B
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 52438
Units: ug/L
Diln Fac: 1

Prep Date: 12/04/99
Analysis Date: 12/04/99

MB Lab ID: QC102839

Analyte	Result	
Benzene	<0.5	
Toluene	<0.5	
Ethylbenzene	<0.5	
m,p-Xylenes	<0.5	
o-Xylene	<0.5	
Surrogate	%Rec	Recovery Limits
Trifluorotoluene	103	51-143
Bromofluorobenzene	99	37-146

Lab #: 142781

BATCH QC REPORT

Page

ct

BTXE

Client: Subsurface Consultants
 Project#: 133.009
 Location: KOT/9th Ave.Terminal

Analysis Method: EPA 8021B
 Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
 Batch#: 52400
 Units: ug/L
 Diln Fac: 1

Prep Date: 12/02/99
 Analysis Date: 12/02/99

LCS Lab ID: QC102705

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	19.71	20	99	65-111
Toluene	21.77	20	109	76-117
Ethylbenzene	22.72	20	114	71-121
m,p-Xylenes	44.28	40	111	80-123
o-Xylene	22.14	20	111	75-127
Surrogate	%Rec			Limits
Trifluorotoluene	105			51-143
Bromofluorobenzene	112			37-146

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

BTXE

Client: Subsurface Consultants
 Project#: 133.009
 Location: KOT/9th Ave.Terminal

Analysis Method: EPA 8021B
 Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
 Batch#: 52438
 Units: ug/L
 Diln Fac: 1

Prep Date: 12/04/99
 Analysis Date: 12/04/99

LCS Lab ID: QC102840

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	19.4	20	97	65-111
Toluene	20.8	20	104	76-117
Ethylbenzene	22.14	20	111	71-121
m,p-Xylenes	44.19	40	110	80-123
o-Xylene	22.74	20	114	75-127
Surrogate	%Rec		Limits	
Trifluorotoluene	104		51-143	
Bromofluorobenzene	100		37-146	

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits



BTXE

Client: Subsurface Consultants
 Project#: 133.009
 Location: KOT/9th Ave.Terminal

Analysis Method: EPA 8021B
 Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
 Lab ID: 142786-003
 Matrix: Water
 Batch#: 52438
 Units: ug/L
 Diln Fac: 1

Sample Date: 12/01/99
 Received Date: 12/01/99
 Prep Date: 12/04/99
 Analysis Date: 12/04/99

MS Lab ID: QC102843

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Benzene	20	<0.5	20.25	101	55-122
Toluene	20	<0.5	21.82	109	63-139
Ethylbenzene	20	<0.5	23	115	61-137
m,p-Xylenes	40	<0.5	46.42	116	57-148
o-Xylene	20	<0.5	24.7	124	70-141
Surrogate	%Rec		Limits		
Trifluorotoluene	110		51-143		
Bromofluorobenzene	113		37-146		

MSD Lab ID: QC102844

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Benzene	20	20.14	101	55-122	1	10
Toluene	20	21.83	109	63-139	0	10
Ethylbenzene	20	23.13	116	61-137	1	10
m,p-Xylenes	40	46.76	117	57-148	1	10
o-Xylene	20	24.48	122	70-141	1	10
Surrogate	%Rec		Limits			
Trifluorotoluene	111		51-143			
Bromofluorobenzene	113		37-146			

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
 Project#: 133.009
 Location: KOT/9th Ave.Terminus

Analysis Method: EPA 8015M
 Prep Method: EPA 3520

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
142781-001	SCIMW-11	52433	12/01/99	12/03/99	12/07/99	
142781-002	SCIMW-24	52433	12/01/99	12/03/99	12/07/99	
142781-003	SCIMW-13	52433	12/01/99	12/03/99	12/07/99	
142781-004	SCIMW-9	52433	12/01/99	12/03/99	12/07/99	

Matrix: Water

Analyte	Units	142781-001	142781-002	142781-003	142781-004
Diln Fac:		1	1	1	1
Diesel C10-C24	ug/L	<50	960 YL	<50	<50
Motor Oil C24-C36	ug/L	<300	<300	<300	480
Surrogate					
Hexacosane	%REC	89	84	85	80

Y: Sample exhibits fuel pattern which does not resemble standard

L: Lighter hydrocarbons contributed to the quantitation

Chromatogram

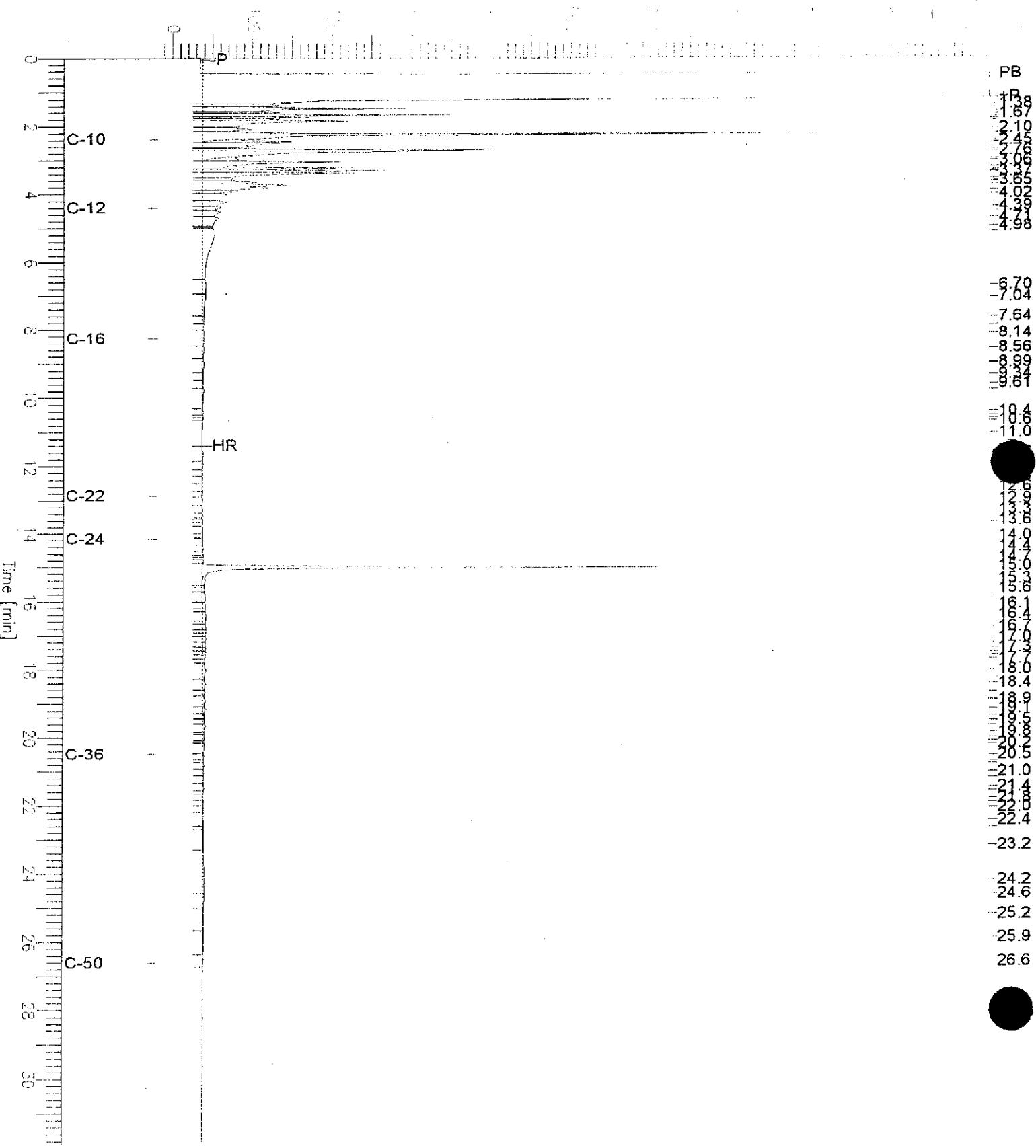
Sample Name : 142781-002sg, 52433
FileName : G:\VGC15\CHB\340B027.RAW
Method : BTEH292.MTH
Start Time : 0.00 min End Time : 31.90 min
Scale Factor: 0.0 Plot Offset: -18 mV

Sample #: 52433 Date : 12/07/1999 03:43 PM
Time of Injection: 12/07/1999 02:51 PM
Low Point : -16.32 mV High Point : 1024.00 mV
Plot Scale: 1042.3 mV

Page 1 of 1

SCIMW-24

Response [mV]

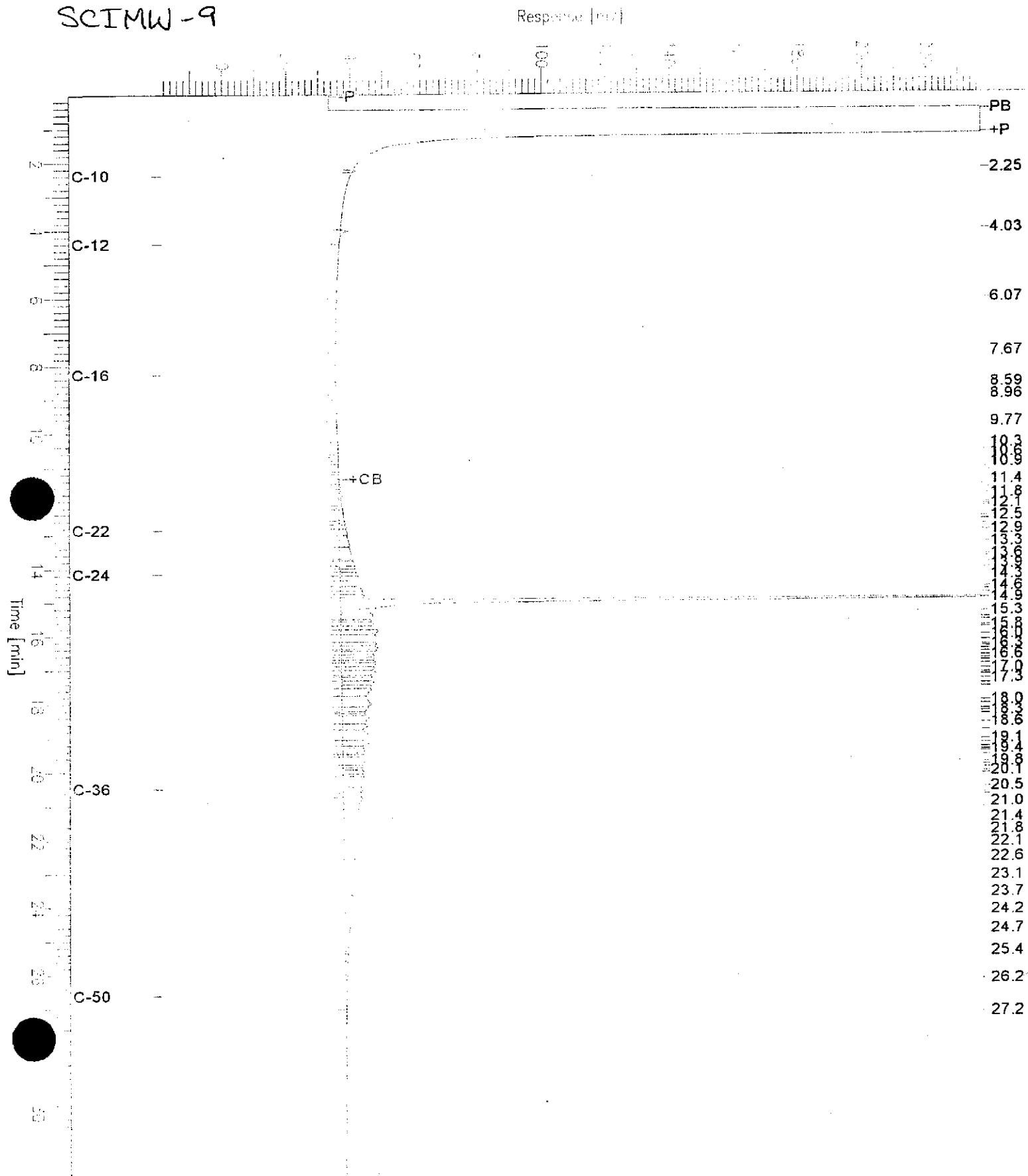


Chromatogram

Sample Name : 142781-004sg, 524.83
File Name : G:\NGC15\XCHB\340B027.RAW
Method : BTEH292.MTH
Time : 0.01 min End :
Scale Factor: 0.6 Pick

Wingspan or tail: Date: _____
Date of last flight: _____ Time of last flight: _____
How much fuel was used: _____ How much fuel will be
Pilot Name: _____

SCIMW - 9





TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.009
Location: KOT/9th Ave.Terminal

Analysis Method: EPA 8015M
Prep Method: EPA 3520

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
142781-005	SCIMW-18	52433	12/01/99	12/03/99	12/07/99	
142781-006	SCIMW-10	52433	12/01/99	12/03/99	12/07/99	
142781-007	SCIMW-17	52433	12/01/99	12/03/99	12/07/99	
142781-008	SCIMW-33	52433	12/01/99	12/03/99	12/07/99	

Matrix: Water

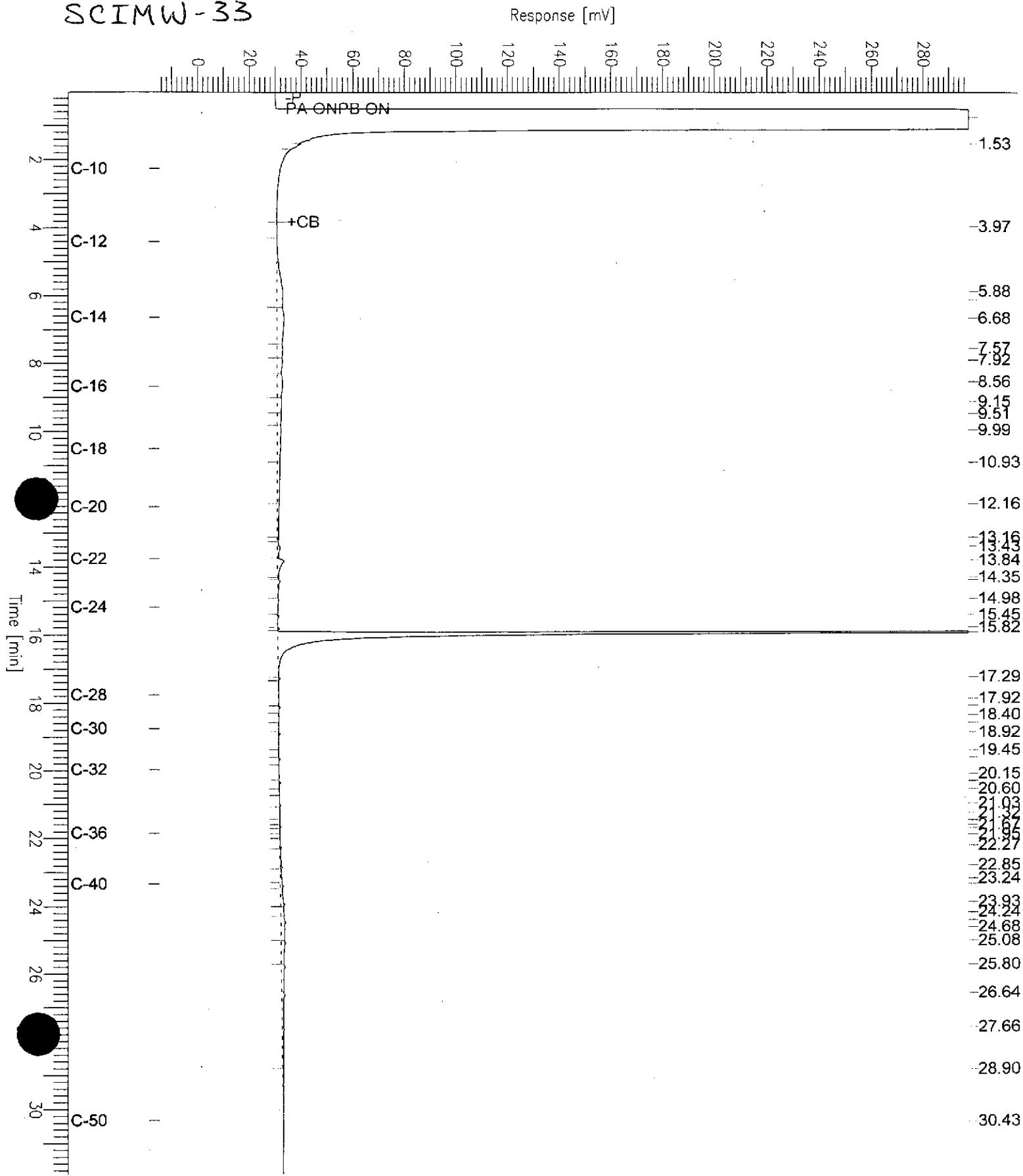
Analyte	Units	142781-005	142781-006	142781-007	142781-008
Diln Fac:		1	1	1	1
Diesel C10-C24	ug/L	<50	<50	<50	87
Motor Oil C24-C36	ug/L	<300	<300	<300	<300
Surrogate					
Hexacosane	%REC	89	88	104	104

Chromatogram

Sample Name : 142781-008,52433
FileName : G:\GC13\CHB\340B013.RAW
Method : BTEH336.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: -15 mV

Sample #: 52433 Page 1 of 1
Date : 12/07/1999 01:42 PM
Time of Injection: 12/07/1999 12:57 PM
Low Point : -14.80 mV High Point : 297.67 mV
Plot Scale: 312.5 mV

SCIMW-33





Curtis & Tompkins, Ltd.
Page 3 of 3

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.009
Location: KOT/9th Ave.Terminus

Analysis Method: EPA 8015M
Prep Method: EPA 3520

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
142781-010	SCIMW-32	52433	12/01/99	12/03/99	12/07/99	

Matrix: Water

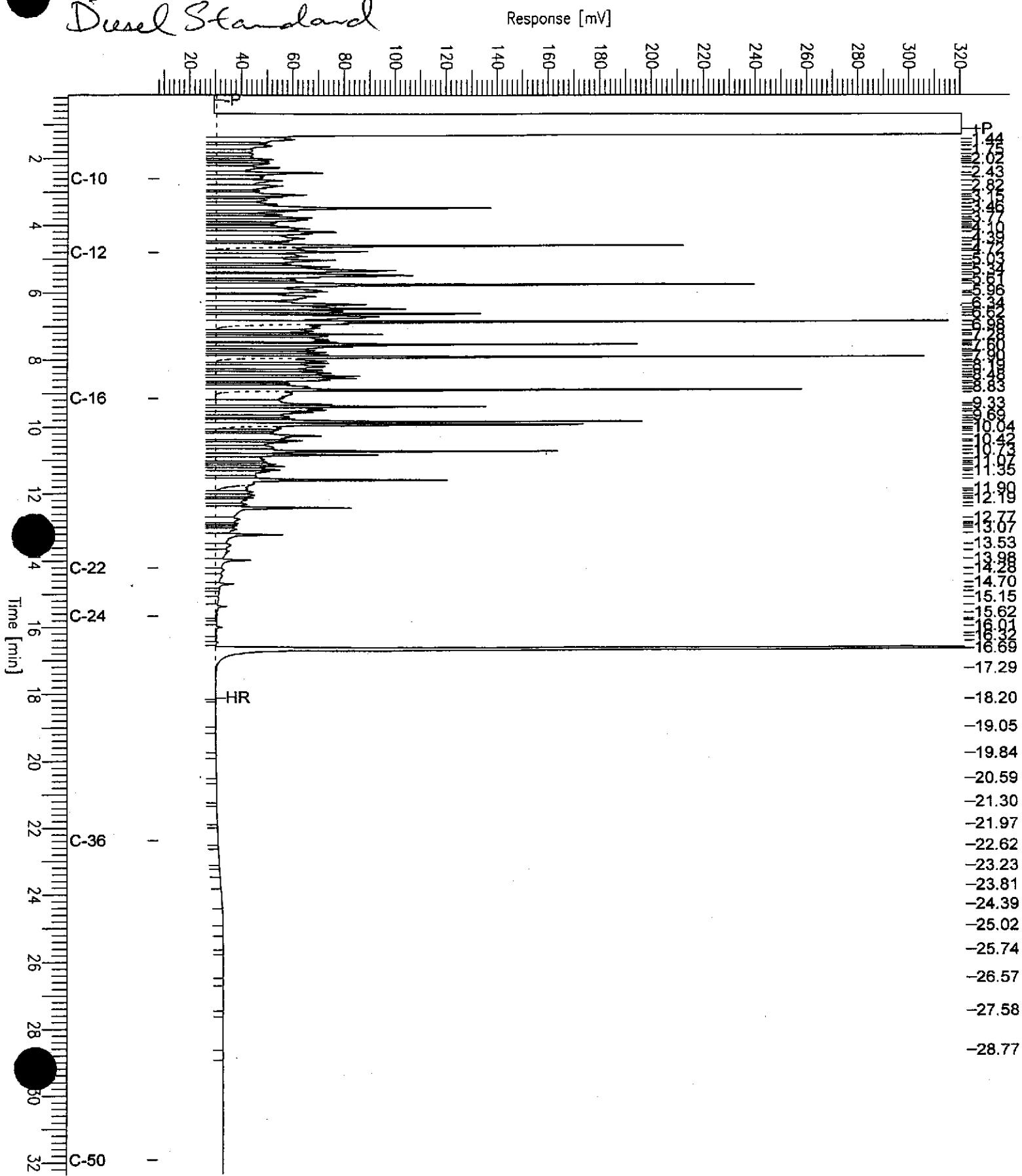
Analyte	Units	142781-010
Diln Fac:		1
Diesel C10-C24	ug/L	<50
Motor Oil C24-C36	ug/L	<300
Surrogate		
Hexacosane	%REC	109

Chromatogram

Sample Name : x_ccv_99ws8511.dsl
FileName : G:\GC11\CHA\344A001.RAW
Method : ATEH336.MTH
Start Time : 0.12 min End Time : 32.36 min
Scale Factor: 0.0 Plot Offset: 8 mV

Sample #: 500mg/l Page 1 of 1
Date : 12/10/99 05:59 PM
Time of Injection: 12/10/99 04:30 PM
Low Point : 7.86 mV High Point : 320.58 mV
Plot Scale: 312.7 mV

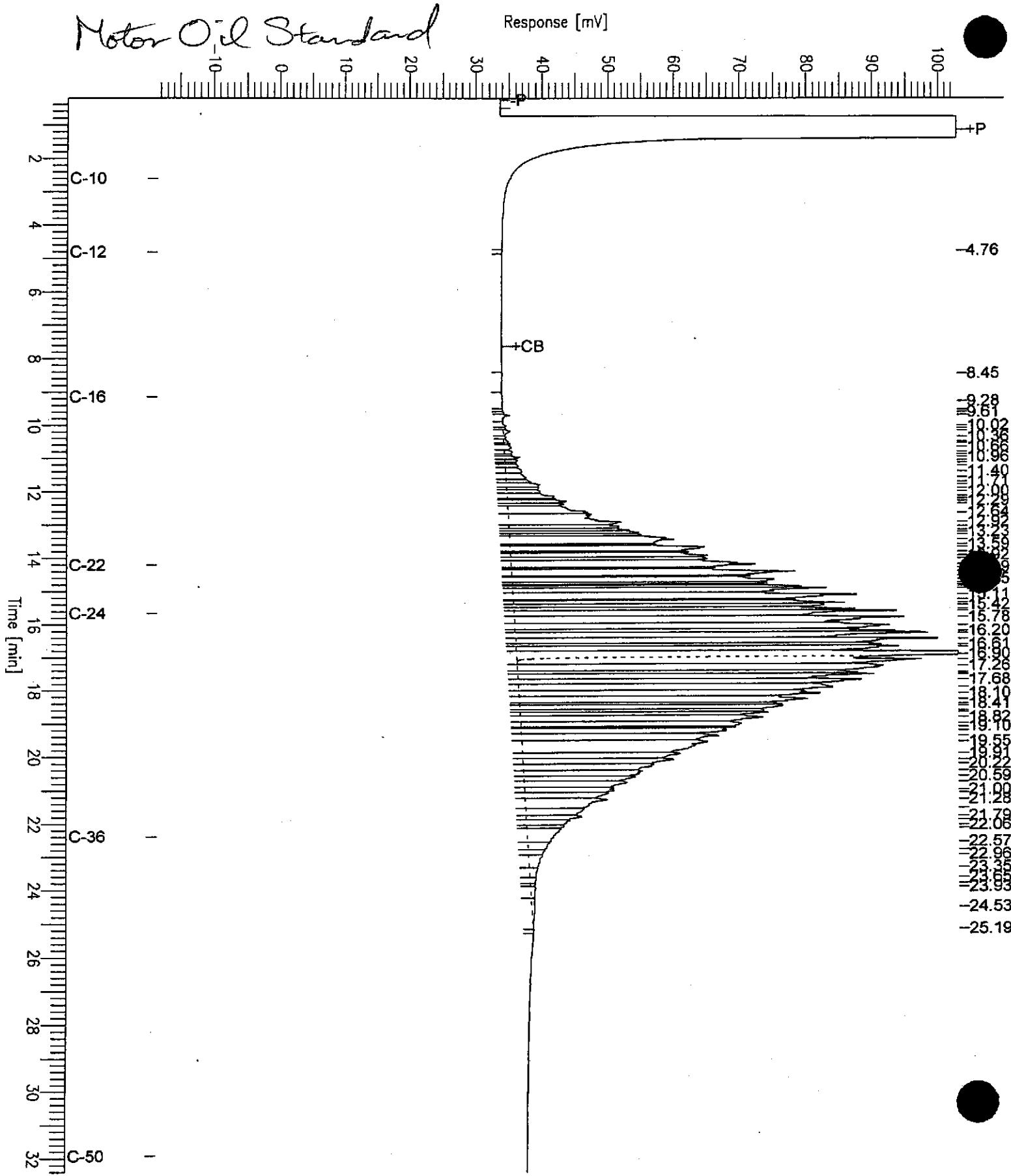
Diesel Standard



Sample Name : ccv_99ws8455.mo
FileName : G:\GC11\CHA\339A004.RAW
Method : ATERH336.MTH
Start Time : 0.21 min End Time : 32.41 min
Scale Factor: 0.0 Plot Offset: -19 mV

Sample #: 500mg/1 Page 1 of 1
Date : 12/6/99 09:50 AM
Time of Injection: 12/6/99 01:03 AM
Low Point : -18.51 mV High Point : 102.78 mV
Plot Scale: 121.3 mV

Motor Oil Standard





TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.009
Location: KOT/9th Ave.Terminus

Analysis Method: EPA 8015M
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 52433
Units: ug/L
Diln Fac: 1

Prep Date: 12/03/99
Analysis Date: 12/07/99

MB Lab ID: QC102824

Analyte	Result	
Diesel C10-C24	<50	
Motor Oil C24-C36	<300	
Surrogate	%Rec	Recovery Limits
Hexacosane	88	58-128

Lab #: 142781

BATCH QC REPORT

Curtis & Tompkins, Ltd.
Page 1 of 1

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
 Project#: 133.009
 Location: KOT/9th Ave.Terminal

Analysis Method: EPA 8015M
 Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
 Batch#: 52433
 Units: ug/L
 Diln Fac: 1

Prep Date: 12/03/99
 Analysis Date: 12/10/99

BS Lab ID: QC102825

Analyte	Spike Added	BS	%Rec #	Limits
Diesel C10-C24	2475	2124	86	50-114
Surrogate	%Rec		Limits	
Hexacosane	1*		58-128	

BSD Lab ID: QC102826

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Diesel C10-C24	2475	1784	72	50-114	17	25
Surrogate	%Rec		Limits			
Hexacosane	88		58-128			

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits



Purgeable Organics by GC/MS

Lab #:	142781	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 8260B
Project#:	133.009	Prep Method:	EPA 5030
Field ID:	SCIMW-33	Batch#:	52419
Lab ID:	142781-008	Sampled:	01-DEC-1999
Matrix:	Water	Received:	01-DEC-1999
Units:	ug/L	Analyzed:	04-DEC-1999
Diln Fac:	1.000		

Analyses	Result	RL
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
benzene	ND	5.0
chloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	160	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
c-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0

Surrogate	SREC	Limits
1,2-Dichloroethane-d4	109	76-127
Toluene-d8	103	90-109
Bromofluorobenzene	94	82-118

ND = Not Detected
 RL = Reporting Limit
 Page 1 of 1

Purgeable Organics by GC/MS

Lab #:	142781	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 8260B
Project#:	133.009	Prep Method:	EPA 5030
Field ID:	SCIMW-31D	Batch#:	52419
Lab ID:	142781-009	Sampled:	01-DEC-1999
Matrix:	Water	Received:	01-DEC-1999
Units:	ug/L	Analyzed:	04-DEC-1999
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
c-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0

Surrogate	SPEC	Limits
1,2-Dichloroethane-d4	113	76-127
Toluene-d8	102	90-109
Bromofluorobenzene	95	82-118

ND = Not Detected

RL = Reporting Limit

Page 1 of 1



Purgeable Organics by GC/MS

Lab #:	142781	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 8260B
Project#:	133.009	Prep Method:	EPA 5030
Field ID:	SCIMW-32	Batch#:	52419
Lab ID:	142781-010	Sampled:	01-DEC-1999
Matrix:	Water	Received:	01-DEC-1999
Units:	ug/L	Analyzed:	04-DEC-1999
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Toluene	ND	5.0
Chloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0

Surrogate	REC	Lim/Int
1,2-Dichloroethane-d4	109	76-127
Toluene-d8	103	90-109
Bromofluorobenzene	94	82-118

Purgeable Organics by GC/MS

Lab #:	142781	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 8260B
Project#:	133.009	Prep Method:	EPA 5030
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC102775	Batch#:	52419
Matrix:	Water	Analyzed:	03-DEC-1999
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloroproppane	ND	5.0
Bromodichloromethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0

Surrogate	REC	Limits
1,2-Dichloroethane-d4	108	76-127
Toluene-d8	98	90-109
Bromofluorobenzene	96	82-118

ND = Not Detected

RL = Reporting Limit

Page 1 of 1



Purgeable Organics by GC/MS

Lab #:	142781	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 8260B
Project#:	133.009	Prep Method:	EPA 5030
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC102776	Batch#:	52419
Matrix:	Water	Analyzed:	03-DEC-1999
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Chloroethene	ND	5.0
-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0

Surrogate	REC	Limits
1,2-Dichloroethane-d4	109	76-127
Toluene-d8	101	90-109
Bromofluorobenzene	95	82-118

ND = Not Detected

RL = Reporting Limit

Page 1 of 1

Purgeable Organics by GC/MS

Lab #:	142781	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 8260B
Project#:	133.009	Prep Method:	EPA 5030
Matrix:	Water	Batch#:	52419
Units:	ug/L	Analyzed:	03-DEC-1999
Diln Fac:	1.000		

Type: BS Lab ID: QC102773

Analyte	Spiked	Result	SREC	Limits
1,1-Dichloroethene	50.00	47.14	94	64-139
Benzene	50.00	45.64	91	71-127
Trichloroethene	50.00	46.90	94	72-129
Toluene	50.00	45.58	91	73-129
Chlorobenzene	50.00	46.26	93	77-126

Surrogate	SREC	Limits
1,2-Dichloroethane-d4	111	76-127
Toluene-d8	99	90-109
Bromofluorobenzene	96	82-118

Type: BSD Lab ID: QC102774

Analyte	Spiked	Result	SREC	Limits	RPD	Lim
1,1-Dichloroethene	50.00	46.68	93	64-139	1	13
Benzene	50.00	45.42	91	71-127	0	10
Trichloroethene	50.00	48.40	97	72-129	3	10
Toluene	50.00	46.52	93	73-129	2	10
Chlorobenzene	50.00	46.79	94	77-126	1	10

Surrogate	SREC	Limits
1,2-Dichloroethane-d4	108	76-127
Toluene-d8	99	90-109
Bromofluorobenzene	97	82-118

Pesticides & PCBs by GC/ECD

Lab #:	142781	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Prep:	EPA 3520
Project#:	133.009	Analysis:	EPA 8082
Field ID:	SCIMW-33	Batch#:	52436
Lab ID:	142781-008	Sampled:	12/01/99
Matrix:	Water	Received:	12/01/99
Units:	ug/L	Prepared:	12/03/99
Diln Fac:	10.00	Analyzed:	01/06/00

Analyte	Result	RL
alpha-BHC	ND	0.5
beta-BHC	ND	0.5
gamma-BHC	ND	0.5
delta-BHC	ND	0.5
Heptachlor	ND	0.5
Aldrin	ND	0.5
Heptachlor epoxide B	ND	0.5
Heptachlor epoxide A	ND	0.5
Endosulfan I	ND	0.5
Dieldrin	ND	1.0
4,4'-DDE	ND	1.0
Epin	ND	1.0
Endosulfan II	ND	1.0
Endosulfan sulfate	ND	1.0
4,4'-DDD	1.7	1.0
Endrin aldehyde	ND	1.0
4,4'-DDT	ND	1.0
Chlordane	ND	5.1
Methoxychlor	ND	5.1
Toxaphene	ND	10
Aroclor-1016	ND	5.1
Aroclor-1221	ND	10
Aroclor-1232	ND	5.1
Aroclor-1242	ND	5.1
Aroclor-1248	ND	5.1
Aroclor-1254	ND	5.1
Aroclor-1260	ND	5.1

Surrogate	REC	RL
TCMX	DO	25-140
Decachlorobiphenyl	DO	15-147

DO = Diluted Out

ND = Not Detected

RL = Reporting Limit

Page 1 of 1



Curtis & Tompkins, Ltd.

Pesticides & PCBs by GC/ECD

Lab #:	142781	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Prep:	EPA 3520
Project#:	133.009	Analysis:	EPA 8082
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC102833	Batch#:	52436
Matrix:	Water	Prepared:	12/03/99
Units:	ug/L	Analyzed:	12/10/99

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide B	ND	0.05
Heptachlor epoxide A	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
Endrin aldehyde	ND	0.1
4,4'-DDT	ND	0.1
Chlordane	ND	0.5
Methoxychlor	ND	0.5
Toxaphene	ND	1.0
Aroclor-1016	ND	0.5
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.5
Aroclor-1242	ND	0.5
Aroclor-1248	ND	0.5
Aroclor-1254	ND	0.5
Aroclor-1260	ND	0.5

Surrogate	REC	Limits
TCMX	79	25-140
Decachlorobiphenyl	45	15-147

ND = Not Detected

RL = Reporting Limit

Page 1 of 1

Pesticides & PCBs by GC/ECD

Lab #:	142781	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Prep:	EPA 3520
Project#:	133.009	Analysis:	EPA 8082
Matrix:	Water	Batch#:	52436
Units:	ug/L	Prepared:	12/03/99
Diln Fac:	1.000	Analyzed:	12/10/99

Type: BS Lab ID: QC102834

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.5000	0.5200	104	63-117
Heptachlor	0.5000	0.4600	92	59-105
Aldrin	0.5000	0.4400	88	50-112
Dieldrin	0.5000	0.4900	98	62-117
Endrin	0.5000	0.5600	112	63-112
4,4'-DDT	0.5000	0.5600	112	56-113

Surrogate	%REC	Limits
TCMX	73	25-140
Decachlorobiphenyl	57	15-147

Type: BSD Lab ID: QC102835

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.5000	0.5800	116	63-117	11	20
Heptachlor	0.5000	0.4600	92	59-105	0	19
Aldrin	0.5000	0.4200	84	50-112	5	18
Dieldrin	0.5000	0.4700	94	62-117	4	15
Endrin	0.5000	0.5400	108	63-112	4	17
4,4'-DDT	0.5000	0.5400	108	56-113	4	15

Surrogate	%REC	Limits
TCMX	70	25-140
Decachlorobiphenyl	57	15-147

RPD= Relative Percent Difference

Page 1 of 1



Curtis & Tompkins, Ltd.

PNA's by GC/MS

Lab #:	142781	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 8270B
Project#:	133.009	Prep Method:	3520
Field ID:	SCIMW-24	Batch#:	52435
Lab ID:	142781-002	Sampled:	01-DEC-1999
Matrix:	Filtrate	Received:	01-DEC-1999
Units:	ug/L	Prepared:	03-DEC-1999
Diln Fac:	1.000	Analyzed:	07-DEC-1999

Analyte	Result	RL
Naphthalene	45	10
Acenaphthylene	ND	10
Acenaphthene	ND	10
Fluorene	ND	10
Phenanthrene	ND	10
Anthracene	ND	10
Fluoranthene	ND	10
Pyrene	ND	10
Benzo(a)anthracene	ND	10
Chrysene	ND	10
Benzo(b,k)fluoranthene	ND	10
Benzo(a)pyrene	ND	10
Indeno(1,2,3-cd)pyrene	ND	10
Dibenz(a,h)anthracene	ND	10
Benzo(g,h,i)perylene	ND	10

Surrogate	REC	Limits
Nitrobenzene-d5	58	24-128
2-Fluorobiphenyl	68	35-116
Terphenyl-d14	35	16-139

ND = Not Detected

RL = Reporting Limit

Page 1 of 1



Curtis & Tompkins, Ltd.

PNA's by GC/MS

Lab #:	142781	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 8270B
Project#:	133.009	Prep Method:	3520
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC102830	Batch#:	52435
Matrix:	Water	Prepared:	03-DEC-1999
Units:	ug/L	Analyzed:	07-DEC-1999

Analyte	Result	RL
Naphthalene	ND	10
Acenaphthylene	ND	10
Acenaphthene	ND	10
Fluorene	ND	10
Phenanthrene	ND	10
Anthracene	ND	10
Fluoranthene	ND	10
Pyrene	ND	10
Benzo(a)anthracene	ND	10
Chrysene	ND	10
Benzo(b,k)fluoranthene	ND	10
Benzo(a)pyrene	ND	10
Benzo(1,2,3-cd)pyrene	ND	10
Bibenz(a,h)anthracene	ND	10
Benzo(g,h,i)perylene	ND	10

Surrogate	#REC	Limits
Nitrobenzene-d5	60	24-128
2-Fluorobiphenyl	57	35-116
Terphenyl-d14	66	16-139

ND = Not Detected

RL = Reporting Limit

Page 1 of 1



Curtis & Tompkins, Ltd.

PNA's by GC/MS

Lab #:	142781	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 8270B
Project#:	133.009	Prep Method:	3520
Matrix:	Water	Batch#:	52435
Units:	ug/L	Prepared:	03-DEC-1999
Diln Fac:	1.000	Analyzed:	07-DEC-1999

Type: BS Lab ID: QC102831

Analyte	Spiked	Result	%REC	Limits
Acenaphthene	50.00	28.75	57	43-110
Pyrene	50.00	31.49	63	35-107

Surrogate	%REC	Limits
Nitrobenzene-d5	58	24-128
2-Fluorobiphenyl	60	35-116
Terphenyl-d14	68	16-139

Type: BSD Lab ID: QC102832

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Acenaphthene	50.00	33.59	67	43-110	16	26
Pyrene	50.00	36.90	74	35-107	16	27

Surrogate	%REC	Limits
Nitrobenzene-d5	67	24-128
2-Fluorobiphenyl	72	35-116
Terphenyl-d14	79	16-139



Curtis & Tompkins, Ltd.

SAMPLE ID: SCIMW-11
LAB ID: 142781-001
CLIENT: Subsurface Consultants
PROJECT ID: 133.009
LOCATION: KOT/9th Ave.Terminal
MATRIX: Filtrate

DATE SAMPLED: 12/01/99
DATE RECEIVED: 12/01/99
DATE REPORTED: 01/11/00

California TITLE 22 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	52458	EPA 6010B	12/07/99
Arsenic	ND	5.0	1	52458	EPA 6010B	12/07/99
Barium	180	10	1	52458	EPA 6010B	12/07/99
Beryllium	ND	2.0	1	52458	EPA 6010B	12/07/99
Cadmium	ND	5.0	1	52458	EPA 6010B	12/07/99
Chromium (total)	ND	10	1	52458	EPA 6010B	12/07/99
Cobalt	ND	20	1	52458	EPA 6010B	12/07/99
Copper	ND	10	1	52458	EPA 6010B	12/07/99
Lead	ND	3.0	1	52458	EPA 6010B	12/07/99
Mercury	ND	0.20	1	52482	EPA 7470	12/07/99
Molybdenum	ND	20	1	52458	EPA 6010B	12/07/99
Nickel	ND	20	1	52458	EPA 6010B	12/07/99
Selenium	8.8	5.0	1	52458	EPA 6010B	12/07/99
Silver	ND	5.0	1	52458	EPA 6010B	12/07/99
Thallium	ND	5.0	1	52458	EPA 6010B	12/07/99
Vanadium	ND	10	1	52458	EPA 6010B	12/07/99
Zinc	ND	20	1	52458	EPA 6010B	12/07/99

ND = Not detected at or above reporting limit



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

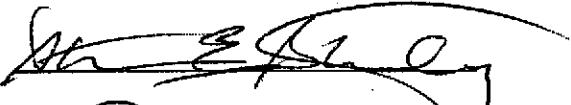
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900, Fax (510) 486-0532

A N A L Y T I C A L R E P O R T

Prepared for:

Subsurface Consultants
3736 Mt. Diablo Blvd.
Suite 200
Lafayette, CA 94549

Date: 17-DEC-99
Lab Job Number: 142816
Project ID: 133.009
Location: KOT/9th Ave.Terminus

Reviewed by: 

Reviewed by: 

This package may be reproduced only in its entirety.



Curtis & Tompkins, Ltd.

Laboratory Number: 142816

Receipt Date: 12/03/99

Client: Subsurface Consultants, Inc.

Project Name: KOT/9th Ave. Terminal

CASE NARRATIVE

This hardcopy data package contains sample results and batch QC results for eleven water samples received from the above referenced project. The samples were received cold and intact.

Total Volatile Hydrocarbons/BTXE: No analytical problems were encountered.

Total Extractable Hydrocarbons: No analytical problems were encountered.

Volatile Organic Compounds: No analytical problems were encountered.

Metals: No analytical problems were encountered.

General Chemistry: The matrix spike recoveries for dissolved organic carbon were outside acceptance limits. The associated laboratory control sample recovery was acceptable. No other analytical problems were encountered.

CHAIN OF CUSTODY FORM

PROJECT NAME: KOT / 9th Ave Terminal 133.009

JOB NUMBER: 133.009

PROJECT CONTACT: Jen Alexander

SAMPLED BY: SFE / Emily

LAB: CST

TURNAROUND: 5 business days

REQUESTED BY: Site / Emily

PAGE

ANALYSIS REQUESTED

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX			CONTAINERS			METHOD PRESERVED			SAMPLING DATE				NOTES				
		WATER	SOIL	WASTE	AIR	VOA	LITER	PINT	TUBE	HOL	H ₂ SO ₄	HNO ₃	ICE	NONE	MONTH	DAY	YEAR	TIME	
1	SCIMW-7	X				X	X			X	X	X	X	X	120	299	03	15	XX
2	SCIMW-34	X				X	X			X	X	X	X	X	120	299	04	33	X
3	SCIMW-35	X				X						X	X	X	120	299	04	35	X
4	SCIMW-19	X				X									120	299	10	30	X
5	SCIMW-28	X				X									120	299			X
6	SCIMW-20	X				X									120	299	12	30	X
7	SCIMW-1	X				X									120	299	13	15	X
8	SCIMW-27	X				X									120	299	14	00	X
9	SCIMW-22	X				X									120	299	14	50	X
10	SCIMW-30	X				X									120	299	15	25	X
11	SCIMW-26	X				X									120	299	16	05	X

CHAIN OF CUSTODY RECORD			
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Emily Mireles 12/3 8:55		Dasa Kamell	12/02/99 9:15
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME

COMMENTS & NOTES:
W/ silica gel clean-up

Please fix } filter
Please fix } filter



Subsurface Consultants, Inc.
171 - 12th Street, Suite 202, Oakland, CA 94607
(510) 268-0461 - FAX: (510) 268-0137
3736 Mt. Diablo Blvd., Ste. 200, Lafayette, CA 94549
(925) 299-7960 - (925) 299-7970

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.009
Location: KOT/9th Ave.Terminus

Analysis Method: EPA 8015M
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
142816-002	SCIMW-34	52427	12/02/99	12/04/99	12/04/99	

Matrix: Water

Analyte	Units	142816-002
Diln Fac:		1
Gasoline C7-C12	ug/L	<50
Surrogate		
Trifluorotoluene	%REC	102
Bromofluorobenzene	%REC	107



TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 133.009
Location: KOT/9th Ave.Terminus

Analysis Method: EPA 8015M
Prep Method: EPA 5030

METHOD: BLANK

Matrix: Water
Batch#: 52427
Units: ug/L
Diln Fac: 1

Prep Date: 12/03/99
Analysis Date: 12/03/99

MB Lab ID: QC102798

Analyte	Result	
Gasoline C7-C12	<50	
Surrogate	%Rec	Recovery Limits
Trifluorotoluene	101	53-150
Bromofluorobenzene	104	53-149



TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
 Project#: 133.009
 Location: KOT/9th Ave.Terminus

Analysis Method: EPA 8015M
 Prep Method: EPA 5030

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
 Batch#: 52427
 Units: ug/L
 Diln Fac: 1

Prep Date: 12/03/99
 Analysis Date: 12/03/99

BS Lab ID: QC102800

Analyte	Spike Added	BS	%Rec #	Limits
Gasoline C7-C12	2000	2263	113	77-117
<hr/>				
Surrogate	%Rec		Limits	
Trifluorotoluene	102		53-150	
Bromofluorobenzene	112		53-149	

BSD Lab ID: QC102801

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Gasoline C7-C12	2000	2216	111	77-117	2	10
<hr/>						
Surrogate	%Rec		Limits			
Trifluorotoluene	102		53-150			
Bromofluorobenzene	111		53-149			

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits

BTXE

Client: Subsurface Consultants
Project#: 133.009
Location: KOT/9th Ave.Terminus

Analysis Method: EPA 8021B
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
142816-002	SCIMW-34	52427	12/02/99	12/04/99	12/04/99	

Matrix: Water

Analyte	Units	142816-002
Diln Fac:		1
Benzene	ug/L	<0.5
Toluene	ug/L	<0.5
Ethylbenzene	ug/L	<0.5
m,p-Xylenes	ug/L	<0.5
o-Xylene	ug/L	<0.5
Surrogate		
Trifluorotoluene	%REC	97
Bromofluorobenzene	%REC	97



BTXE

Client: Subsurface Consultants
Project#: 133.009
Location: KOT/9th Ave.Terminus

Analysis Method: EPA 8021B
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 52427
Units: ug/L
Diln Fac: 1

Prep Date: 12/03/99
Analysis Date: 12/03/99

MB Lab ID: QC102798

Analyte	Result	
Benzene	<0.5	
Toluene	<0.5	
Ethylbenzene	<0.5	
m,p-Xylenes	<0.5	
o-Xylene	<0.5	
Surrogate	%Rec	Recovery Limits
Trifluorotoluene	95	51-143
Bromofluorobenzene	93	37-146



BTXE

Client: Subsurface Consultants
 Project#: 133.009
 Location: KOT/9th Ave.Terminus

Analysis Method: EPA 8021B
 Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
 Batch#: 52427
 Units: ug/L
 Diln Fac: 1

Prep Date: 12/03/99
 Analysis Date: 12/03/99

LCS Lab ID: QC102809

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	17.89	20	89	65-111
Toluene	19.05	20	95	76-117
Ethylbenzene	20.54	20	103	71-121
m,p-Xylenes	41.86	40	105	80-123
o-Xylene	21.26	20	106	75-127
Surrogate	%Rec			Limits
Trifluorotoluene	96			51-143
Bromofluorobenzene	91			37-146

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

BTXE

Client: Subsurface Consultants
 Project#: 133.009
 Location: KOT/9th Ave.Terminus

Analysis Method: EPA 8021B
 Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
 Lab ID: 142800-005
 Matrix: Water
 Batch#: 52427
 Units: ug/L
 Diln Fac: 1

Sample Date: 12/01/99
 Received Date: 12/02/99
 Prep Date: 12/03/99
 Analysis Date: 12/03/99

MS Lab ID: QC102802

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Benzene	20	<0.5	17.98	90	55-122
Toluene	20	<0.5	19.46	97	63-139
Ethylbenzene	20	<0.5	20.58	103	61-137
m,p-Xylenes	40	0.68	42.67	105	57-148
o-Xylene	20	<0.5	21.54	108	70-141
Surrogate	%Rec		Limits		
Trifluorotoluene	96		51-143		
Bromofluorobenzene	95		37-146		

MSD Lab ID: QC102803

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Benzene	20	17.9	90	55-122	0	10
Toluene	20	19.15	96	63-139	2	10
Ethylbenzene	20	20.46	102	61-137	1	10
m,p-Xylenes	40	42.29	104	57-148	1	10
o-Xylene	20	21.44	107	70-141	0	10
Surrogate	%Rec		Limits			
Trifluorotoluene	96		51-143			
Bromofluorobenzene	95		37-146			

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
 Project#: 133.009
 Location: KOT/9th Ave.Terminal

Analysis Method: EPA 8015M
 Prep Method: EPA 3520

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
142816-001	SCIMW-7	52465	12/02/99	12/06/99	12/08/99	
142816-002	SCIMW-34	52465	12/02/99	12/06/99	12/08/99	
142816-003	SCIMW-35	52465	12/02/99	12/06/99	12/08/99	
142816-004	SCIMW-19	52465	12/02/99	12/06/99	12/08/99	

Matrix: Water

Analyte	Units	142816-001	142816-002	142816-003	142816-004
Diln Fac:		1	1	1	1
Diesel C10-C24	ug/L	<50	<50	<50	<50
Motor Oil C24-C36	ug/L	<300	<300	<300	<300
Surrogate					
Hexacosane	%REC	95	89	77	81

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
 Project#: 133.009
 Location: KOT/9th Ave.Terminal

Analysis Method: EPA 8015M
 Prep Method: EPA 3520

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
142816-005	SCIMW-28	52465	12/02/99	12/06/99	12/08/99	
142816-006	SCIMW-20	52465	12/02/99	12/06/99	12/08/99	
142816-007	SCIMW-1	52465	12/02/99	12/06/99	12/08/99	
142816-008	SCIMW-27	52465	12/02/99	12/06/99	12/08/99	

Matrix: Water

Analyte	Units	142816-005	142816-006	142816-007	142816-008
Diln Fac:		1	1	1	1
Diesel C10-C24	ug/L	<50	<50	<50	<50
Motor Oil C24-C36	ug/L	<300	<300	<300	<300
Surrogate					
Hexacosane	%REC	75	67	76	68

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
 Project#: 133.009
 Location: KOT/9th Ave.Terminal

Analysis Method: EPA 8015M
 Prep Method: EPA 3520

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
142816-009	SCIMW-22	52465	12/02/99	12/06/99	12/08/99	
142816-010	SCIMW-30	52465	12/02/99	12/06/99	12/08/99	
142816-011	SCIMW-26	52465	12/02/99	12/06/99	12/08/99	

Matrix: Water

Analyte	Units	142816-009	142816-010	142816-011
Diln Fac:		1	1	1
Diesel C10-C24	ug/L	<50	<50	<50
Motor Oil C24-C36	ug/L	<300	<300	<300
Surrogate				
Hexacosane	%REC	80	65	79

Lab #: 142816

BATCH QC REPORT



Curtis & Taggins, Ltd.

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 133.009
Location: KOT/9th Ave.Terminal

Analysis Method: EPA 8015M
Prep Method: EPA 3520

METHOD: BLANK

Matrix: Water
Batch#: 52465
Units: ug/L
Diln Fac: 1

Prep Date: 12/06/99
Analysis Date: 12/08/99

MB Lab ID: QC102947

Analyte	Result	
Diesel C10-C24	<50	
Motor Oil C24-C36	<300	
Surrogate	%Rec	Recovery Limits
Hexacosane	86	58-128

Lab #: 142816

BATCH QC REPORT



Curtis & Fegnolds, dfd.l

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
 Project#: 133.009
 Location: KOT/9th Ave.Terminal

Analysis Method: EPA 8015M
 Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
 Batch#: 52465
 Units: ug/L
 Diln Fac: 1

Prep Date: 12/06/99
 Analysis Date: 12/07/99

BS Lab ID: QC102948

Analyte	Spike Added	BS	%Rec #	Limits
Diesel C10-C24	2475	1753	71	50-114
Surrogate	%Rec		Limits	
Hexacosane	94		58-128	

BSD Lab ID: QC102949

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Diesel C10-C24	2475	1595	64	50-114	9	25
Surrogate	%Rec		Limits			
Hexacosane	83		58-128			

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits



Purgeable Organics by GC/MS

Lab #:	142816	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 8260B
Project#:	133.009	Prep Method:	EPA 5030
Field ID:	SCIMW-7	Sampled:	02-DEC-1999
Lab ID:	142816-001	Received:	03-DEC-1999
Matrix:	Water	Analyzed:	06-DEC-1999
Units:	ug/L		

Analysis	Result	RL	Diln	Bac	Batch#
Freon 12	ND	10	1.000	52441	
Chloromethane	ND	10	1.000	52441	
Vinyl Chloride	390	200	20.00	52445	
Bromomethane	ND	10	1.000	52441	
Chloroethane	890	200	20.00	52445	
Trichlorofluoromethane	ND	5.0	1.000	52441	
Acetone	35	20	1.000	52441	
Freon 113	ND	5.0	1.000	52441	
1,1-Dichloroethene	79	5.0	1.000	52441	
Methylene Chloride	ND	20	1.000	52441	
Carbon Disulfide	ND	5.0	1.000	52441	
MTBE	ND	5.0	1.000	52441	
trans-1,2-Dichloroethene	120	5.0	1.000	52441	
Vinyl Acetate	ND	50	1.000	52441	
1,1-Dichloroethane	580	100	20.00	52445	
2-Butanone	31	10	1.000	52441	
cis-1,2-Dichloroethene	2,900	100	20.00	52445	
2,2-Dichloropropane	ND	5.0	1.000	52441	
Chloroform	ND	5.0	1.000	52441	
Bromochloromethane	ND	10	1.000	52441	
1,1,1-Trichloroethane	1,500	100	20.00	52445	
1,1-Dichloropropene	ND	5.0	1.000	52441	
Carbon Tetrachloride	ND	100	20.00	52445	
1,2-Dichloroethane	6.2	5.0	1.000	52441	
Benzene	690	100	20.00	52445	
Trichloroethene	250	100	20.00	52445	
1,2-Dichloropropane	ND	5.0	1.000	52441	
Bromodichloromethane	ND	5.0	1.000	52441	
Dibromomethane	ND	5.0	1.000	52441	
4-Methyl-2-Pentanone	17	10	1.000	52441	
cis-1,3-Dichloropropene	ND	5.0	1.000	52441	
Toluene	280	100	20.00	52445	
trans-1,3-Dichloropropene	ND	5.0	1.000	52441	
1,1,2-Trichloroethane	ND	5.0	1.000	52441	
2-Hexanone	ND	10	1.000	52441	
1,3-Dichloropropane	ND	5.0	1.000	52441	
Tetrachloroethene	ND	5.0	1.000	52441	
Dibromochloromethane	ND	5.0	1.000	52441	

ND = Not Detected

RL = Reporting Limit

Page 1 of 2



Purgeable Organics by GC/MS

Lab #:	142816	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 8260B
Project#:	133.009	Prep Method:	EPA 5030
Field ID:	SCIMW-7	Sampled:	02-DEC-1999
Lab ID:	142816-001	Received:	03-DEC-1999
Matrix:	Water	Analyzed:	06-DEC-1999
Units:	ug/L		

Analyte	Result	RI	Diln Fac	Batch#
1,2-Dibromoethane	ND	5.0	1.000	52441
Chlorobenzene	ND	5.0	1.000	52441
1,1,1,2-Tetrachloroethane	ND	5.0	1.000	52441
Ethylbenzene	ND	5.0	1.000	52441
m,p-Xylenes	ND	5.0	1.000	52441
o-Xylene	7.3	5.0	1.000	52441
Styrene	ND	5.0	1.000	52441
Bromoform	ND	5.0	1.000	52441
Isopropylbenzene	ND	5.0	1.000	52441
1,1,2,2-Tetrachloroethane	ND	5.0	1.000	52441
1,2,3-Trichloropropane	ND	5.0	1.000	52441
Propylbenzene	ND	5.0	1.000	52441
Amobenzene	ND	5.0	1.000	52441
1,3,5-Trimethylbenzene	ND	5.0	1.000	52441
2-Chlorotoluene	ND	5.0	1.000	52441
4-Chlorotoluene	ND	5.0	1.000	52441
tert-Butylbenzene	ND	5.0	1.000	52441
1,2,4-Trimethylbenzene	ND	5.0	1.000	52441
sec-Butylbenzene	ND	5.0	1.000	52441
para-Isopropyl Toluene	ND	5.0	1.000	52441
1,3-Dichlorobenzene	ND	5.0	1.000	52441
1,4-Dichlorobenzene	ND	5.0	1.000	52441
n-Butylbenzene	ND	5.0	1.000	52441
1,2-Dichlorobenzene	ND	5.0	1.000	52441
1,2-Dibromo-3-Chloropropane	ND	5.0	1.000	52441
1,2,4-Trichlorobenzene	ND	5.0	1.000	52441
Hexachlorobutadiene	ND	5.0	1.000	52441
Naphthalene	ND	5.0	1.000	52441
1,2,3-Trichlorobenzene	ND	5.0	1.000	52441

Surrogate	#REC	Limits	Diln Fac	Batch#
Dibromofluoromethane	103	81-121	1.000	52441
1,2-Dichloroethane-d4	95	76-127	1.000	52441
Toluene-d8	99	90-109	1.000	52441
Bromofluorobenzene	101	82-118	1.000	52441

ND = Not Detected

RL = Reporting Limit

Page 2 of 2



Purgeable Organics by GC/MS

Lab #:	142816	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 8260B
Project#:	133.009	Prep Method:	EPA 5030
Field ID:	SCIMW-22	Batch#:	52441
Lab ID:	142816-009	Sampled:	02-DEC-1999
Matrix:	Water	Received:	03-DEC-1999
Units:	ug/L	Analyzed:	06-DEC-1999
Diln Fac:	1.000		

Analyses	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromoform	ND	10
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND = Not Detected

RL = Reporting Limit

Page 1 of 2



Purgeable Organics by GC/MS

Lab #:	142816	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 8260B
Project#:	133.009	Prep Method:	EPA 5030
Field ID:	SCIMW-22	Batch#:	52441
Lab ID:	142816-009	Sampled:	02-DEC-1999
Matrix:	Water	Received:	03-DEC-1999
Units:	ug/L	Analyzed:	06-DEC-1999
Diln Fac:	1.000		

Analyte	Result	RI
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	REC	Limits
Dibromofluoromethane	106	81-121
1,2-Dichloroethane-d4	98	76-127
Toluene-d8	98	90-109
Bromofluorobenzene	102	82-118

ND = Not Detected

RL = Reporting Limit

Page 2 of 2



Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	142816	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 8260B
Project#:	133.009	Prep Method:	EPA 5030
Field ID:	SCIMW-30	Batch#:	52441
Lab ID:	142816-010	Sampled:	02-DEC-1999
Matrix:	Water	Received:	03-DEC-1999
Units:	ug/L	Analyzed:	06-DEC-1999
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	16	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	10
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND = Not Detected

RL = Reporting Limit

Page 1 of 2



Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	142816	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 8260B
Project#:	133.009	Prep Method:	EPA 5030
Field ID:	SCIMW-30	Batch#:	52441
Lab ID:	142816-010	Sampled:	02-DEC-1999
Matrix:	Water	Received:	03-DEC-1999
Units:	ug/L	Analyzed:	06-DEC-1999
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,2,2-Tetrachloroethane	ND	5.0
1,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	REC	Limits
Dibromofluoromethane	108	81-121
1,2-Dichloroethane-d4	97	76-127
Toluene-d8	99	90-109
Bromofluorobenzene	100	82-118

ND = Not Detected

RL = Reporting Limit

Page 2 of 2

**Purgeable Organics by GC/MS**

Lab #:	142816	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 8260B
Project#:	133.009	Prep Method:	EPA 5030
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC102854	Batch#:	52441
Matrix:	Water	Analyzed:	05-DEC-1999
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	10
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0

ND = Not Detected

RL = Reporting Limit

Page 1 of 2



Purgeable Organics by GC/MS

Lab #:	142816	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 8260B
Project#:	133.009	Prep Method:	EPA 5030
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC102854	Batch#:	52441
Matrix:	Water	Analyzed:	05-DEC-1999
Units:	ug/L		

Analyte	Result	RL
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Mobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	REC	Limits
Dibromofluoromethane	109	81-121
1,2-Dichloroethane-d4	97	76-127
Toluene-d8	98	90-109
Bromofluorobenzene	102	82-118

ND = Not Detected

RL = Reporting Limit

Page 2 of 2



Purgeable Organics by GC/MS

Lab #:	142816	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 8260B
Project#:	133.009	Prep Method:	EPA 5030
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC102862	Batch#:	52445
Matrix:	Water	Analyzed:	06-DEC-1999
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	10
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0

ND = Not Detected

RL = Reporting Limit

Page 1 of 2



Purgeable Organics by GC/MS

Lab #:	142816	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 8260B
Project#:	133.009	Prep Method:	EPA 5030
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC102862	Batch#:	52445
Matrix:	Water	Analyzed:	06-DEC-1999
Units:	ug/L		

Analyte	Result	RL
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Mobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	TREC	Limits
Dibromofluoromethane	110	81-121
1,2-Dichloroethane-d4	95	76-127
Toluene-d8	97	90-109
Bromofluorobenzene	109	82-118

ND = Not Detected

RL = Reporting Limit

Page 2 of 2



Purgeable Organics by GC/MS

Lab #:	142816	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 8260B
Project#:	133.009	Prep Method:	EPA 5030
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC102863	Batch#:	52445
Matrix:	Water	Analyzed:	06-DEC-1999
Units:	ug/L		

Analysts	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromoform	ND	10
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0

ND = Not Detected

RL = Reporting Limit

Page 1 of 2



Purgeable Organics by GC/MS

Lab #:	142816	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 8260B
Project#:	133.009	Prep Method:	EPA 5030
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC102863	Batch#:	52445
Matrix:	Water	Analyzed:	06-DEC-1999
Units:	ug/L		

Analyte	Result	RL
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Mobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	REC	Limits
Dibromofluoromethane	109 ^o	81-121
1,2-Dichloroethane-d4	94	76-127
Toluene-d8	97	90-109
Bromofluorobenzene	105	82-118

ND = Not Detected

RL = Reporting Limit

Page 2 of 2



Purgeable Organics by GC/MS

Lab #:	142816	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 8260B
Project#:	133.009	Prep Method:	EPA 5030
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC102861	Batch#:	52445
Matrix:	Water	Analyzed:	06-DEC-1999
Units:	ug/L		

Analyst:	Spiked	Result	TREC	Limits
1,1-Dichloroethene	50.00	49.63	99	64-139
Benzene	50.00	47.98	96	71-127
Trichloroethene	50.00	50.29	101	72-129
Toluene	50.00	47.77	96	73-129
Chlorobenzene	50.00	51.06	102	77-126

Surrogate	TREC	Limits
Dibromofluoromethane	108	81-121
1,2-Dichloroethane-d4	94	76-127
Toluene-d8	96	90-109
Bromofluorobenzene	99	82-118



Purgeable Organics by GC/MS

Lab #:	142816	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 8260B
Project#:	133.009	Prep Method:	EPA 5030
Matrix:	Water	Batch#:	52441
Units:	ug/L	Analyzed:	05-DEC-1999
Diln Fac:	1.000		

Type: BS Lab ID: QC102852

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	50.58	101	64-139
Benzene	50.00	49.11	98	71-127
Trichloroethene	50.00	50.99	102	72-129
Toluene	50.00	47.99	96	73-129
Chlorobenzene	50.00	51.36	103	77-126

Surrogate	%REC	Limits
Dibromofluoromethane	108	81-121
1,2-Dichloroethane-d4	95	76-127
Toluene-d8	96	90-109
Bromofluorobenzene	98	82-118

Type: BSD Lab ID: QC102853

Analyte	Spiked	Result	%REC	Limits	RPD	Lab
1,1-Dichloroethene	50.00	45.63	91	64-139	10	13
Benzene	50.00	44.59	89	71-127	10	10
Trichloroethene	50.00	46.26	93	72-129	10	10
Toluene	50.00	43.90	88	73-129	9	10
Chlorobenzene	50.00	46.57	93	77-126	10	10

Surrogate	%REC	Limits
Dibromofluoromethane	108	81-121
1,2-Dichloroethane-d4	96	76-127
Toluene-d8	96	90-109
Bromofluorobenzene	99	82-118

RPD= Relative Percent Difference

Page 1 of 1



Purgeable Organics by GC/MS

Lab #:	142816	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 8260B
Project#:	133.009	Prep Method:	EPA 5030
Field ID:	ZZZZZZZZZ	Batch#:	52445
MSS Lab ID:	142812-001	Sampled:	01-DEC-1999
Matrix:	Water	Received:	03-DEC-1999
Units:	ug/L	Analyzed:	06-DEC-1999
Diln Fac:	1.000		

Type: MS Lab ID: QC102873

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<1.000	50.00	47.73	95	59-144
Benzene	<1.000	50.00	45.81	92	67-128
Trichloroethene	8.584	50.00	56.06	95	61-136
Toluene	<1.000	50.00	45.97	92	72-126
Chlorobenzene	<1.000	50.00	49.31	99	78-122

Surrogate	%REC	Limits
Dibromofluoromethane	110	81-121
1,2-Dichloroethane-d4	95	76-127
Toluene-d8	97	90-109
Bromofluorobenzene	98	82-118

Type: MSD Lab ID: QC102874

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	50.00	49.25	99	59-144	3	13
Benzene	50.00	47.20	94	67-128	3	10
Trichloroethene	50.00	57.89	99	61-136	3	10
Toluene	50.00	48.55	97	72-126	5	10
Chlorobenzene	50.00	51.46	103	78-122	4	10

Surrogate	%REC	Limits
Dibromofluoromethane	109	81-121
1,2-Dichloroethane-d4	94	76-127
Toluene-d8	97	90-109
Bromofluorobenzene	98	82-118



Curtis & Tompkins, Ltd.

SAMPLE ID: SCIMW-28
LAB ID: 142816-005
CLIENT: Subsurface Consultants
PROJECT ID: 133.009
LOCATION: KOT/9th Ave.Terminus
MATRIX: Filtrate

DATE SAMPLED: 12/02/99
DATE RECEIVED: 12/03/99
DATE REPORTED: 12/15/99

California TITLE 22 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	52458	EPA 6010B	12/07/99
Arsenic	ND	5.0	1	52458	EPA 6010B	12/07/99
Barium	11	10	1	52458	EPA 6010B	12/07/99
Beryllium	ND	2.0	1	52458	EPA 6010B	12/07/99
Cadmium	ND	5.0	1	52458	EPA 6010B	12/07/99
Chromium (total)	ND	10	1	52458	EPA 6010B	12/07/99
Cobalt	ND	20	1	52458	EPA 6010B	12/07/99
Copper	ND	10	1	52458	EPA 6010B	12/07/99
Lead	ND	3.0	1	52458	EPA 6010B	12/07/99
Mercury	ND	0.20	1	52482	EPA 7470	12/07/99
Molybdenum	ND	20	1	52458	EPA 6010B	12/07/99
Nickel	ND	20	1	52458	EPA 6010B	12/07/99
Selenium	ND	5.0	1	52458	EPA 6010B	12/07/99
Silver	ND	5.0	1	52458	EPA 6010B	12/07/99
Thallium	ND	5.0	1	52458	EPA 6010B	12/07/99
Vanadium	ND	10	1	52458	EPA 6010B	12/07/99
Zinc	ND	20	1	52458	EPA 6010B	12/07/99

ND = Not detected at or above reporting limit

CLIENT: Subsurface Consultants
PROJECT ID: 133.009
LOCATION: KOT/9th Ave.Terminus
MATRIX: Filtrate

DATE REPORTED: 12/15/99

Metals Analytical Report

Lead

Sample ID	Lab ID	Sample Date	Receive Date	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
SCIMW-34	142816-002	12/02/99	12/03/99	ND	3.0	1	52458	EPA 6010B	12/07/99
SCIMW-20	142816-006	12/02/99	12/03/99	ND	3.0	1	52458	EPA 6010B	12/07/99

ND = Not detected at or above reporting limit



Curtis & Tompkins, Ltd



Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 142816

DATE REPORTED: 12/15/99

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	ug/L	1	52458	EPA 6010B	12/07/99
Arsenic	ND	5	ug/L	1	52458	EPA 6010B	12/07/99
Barium	ND	10	ug/L	1	52458	EPA 6010B	12/07/99
Beryllium	ND	2	ug/L	1	52458	EPA 6010B	12/07/99
Cadmium	ND	5	ug/L	1	52458	EPA 6010B	12/07/99
Chromium (total)	ND	10	ug/L	1	52458	EPA 6010B	12/07/99
Cobalt	ND	20	ug/L	1	52458	EPA 6010B	12/07/99
Copper	ND	10	ug/L	1	52458	EPA 6010B	12/07/99
Lead	ND	3	ug/L	1	52458	EPA 6010B	12/07/99
Mercury	ND	0.2	ug/L	1	52482	EPA 7470	12/07/99
Mercury	ND	2	ug/L	1	52482	EPA 7470	12/07/99
Molybdenum	ND	20	ug/L	1	52458	EPA 6010B	12/07/99
Nickel	ND	20	ug/L	1	52458	EPA 6010B	12/07/99
Selenium	ND	5	ug/L	1	52458	EPA 6010B	12/07/99
Silver	ND	5	ug/L	1	52458	EPA 6010B	12/07/99
Thallium	ND	5	ug/L	1	52458	EPA 6010B	12/07/99
Vanadium	ND	10	ug/L	1	52458	EPA 6010B	12/07/99
Zinc	ND	20	ug/L	1	52458	EPA 6010B	12/07/99

ND = Not Detected at or above reporting limit



Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 142816

DATE REPORTED: 12/15/99

BATCH QC REPORT
BLANK SPIKE / BLANK SPIKE DUPLICATE

Compound	Spike Amount	BS Result	BSD Result	Units	BS% Rec.	BSD% Rec.	Rec. Rec.	RPD Limits	RPD % Limit	QC Batch	Method	Analysis Date
Antimony	500	486	512	ug/L	97	102	80-120	5	20	52458	EPA 6010B	12/07/99
Arsenic	2000	2090	2090	ug/L	105	105	80-120	0	20	52458	EPA 6010B	12/07/99
Barium	2000	2220	2230	ug/L	111	112	80-120	0	20	52458	EPA 6010B	12/07/99
Beryllium	50	52.5	52.7	ug/L	105	105	80-120	0	20	52458	EPA 6010B	12/07/99
Cadmium	50	52.7	52.8	ug/L	105	106	80-120	0	20	52458	EPA 6010B	12/07/99
Chromium (total)	200	212	214	ug/L	106	107	80-120	1	20	52458	EPA 6010B	12/07/99
Cobalt	500	518	522	ug/L	104	104	80-120	1	20	52458	EPA 6010B	12/07/99
Copper	250	261	264	ug/L	104	106	80-120	1	20	52458	EPA 6010B	12/07/99
Lead	500	508	511	ug/L	102	102	80-120	1	20	52458	EPA 6010B	12/07/99
Mercury	5	4.911	4.871	ug/L	98	97	80-120	1	20	52482	EPA 7470	12/07/99
Molybdenum	400	408	412	ug/L	102	103	80-120	1	20	52458	EPA 6010B	12/07/99
Nickel	500	541	543	ug/L	108	109	80-120	0	20	52458	EPA 6010B	12/07/99
Selenium	2000	2110	2100	ug/L	106	105	80-120	1	20	52458	EPA 6010B	12/07/99
Silver	100	106	107	ug/L	106	107	80-120	1	20	52458	EPA 6010B	12/07/99
Thallium	2000	2100	2110	ug/L	105	106	80-120	1	20	52458	EPA 6010B	12/07/99
Vanadium	500	515	520	ug/L	103	104	80-120	1	20	52458	EPA 6010B	12/07/99
Zinc	500	537	537	ug/L	107	107	80-120	0	20	52458	EPA 6010B	12/07/99



Curtis & Tompkins, Ltd.

DATE REPORTED: 12/15/99

CLIENT: Subsurface Consultants
JOB NUMBER: 142816

BATCH QC REPORT
SAMPLE DUPLICATE

Compound	Sample	Sample Result	Duplicate Result	Units	RPD %	RPD Limit	QC Batch	Method	Analysis Date
Antimony	142781-001	<60.000	<60.000	ug/L	NC	20	52458	EPA 6010B	12/07/99
Arsenic	142781-001	<5.000	<5.000	ug/L	NC	20	52458	EPA 6010B	12/07/99
Barium	142781-001	177	175	ug/L	1	20	52458	EPA 6010B	12/07/99
Beryllium	142781-001	<2.000	<2.000	ug/L	NC	20	52458	EPA 6010B	12/07/99
Cadmium	142781-001	<5.000	<5.000	ug/L	NC	20	52458	EPA 6010B	12/07/99
Chromium (total)	142781-001	<10.000	<10.000	ug/L	NC	20	52458	EPA 6010B	12/07/99
Cobalt	142781-001	<20.000	<20.000	ug/L	NC	20	52458	EPA 6010B	12/07/99
Copper	142781-001	<10.000	<10.000	ug/L	NC	20	52458	EPA 6010B	12/07/99
Lead	142781-001	<3.000	<3.000	ug/L	NC	20	52458	EPA 6010B	12/07/99
Mercury	142722-001	<0.200	<0.200	ug/L	NC	20	52482	EPA 7470	12/07/99
Mercury	142827-002	<0.200	<0.200	ug/L	NC	20	52482	EPA 7470	12/07/99
Mercury	142789-001	<2.000	<2.000	ug/L	NC	20	52482	EPA 7470	12/07/99
Molybdenum	142781-001	<20.000	<20.000	ug/L	NC	20	52458	EPA 6010B	12/07/99
Nickel	142781-001	<20.000	<20.000	ug/L	NC	20	52458	EPA 6010B	12/07/99
Selenium	142781-001	8.82	<5.000	ug/L	NC	20	52458	EPA 6010B	12/07/99
Silver	142781-001	<5.000	<5.000	ug/L	NC	20	52458	EPA 6010B	12/07/99
Thallium	142781-001	<5.000	<5.000	ug/L	NC	20	52458	EPA 6010B	12/07/99
Vanadium	142781-001	<10.000	<10.000	ug/L	NC	20	52458	EPA 6010B	12/07/99
Zinc	142781-001	<20.000	<20.000	ug/L	NC	20	52458	EPA 6010B	12/07/99

NC = Not Calculable



Curtis & Tompkins, Ltd.
DATE REPORTED: 12/15/99

CLIENT: Subsurface Consultants
JOB NUMBER: 142816

BATCH QC REPORT
SAMPLE SPIKE

Compound	Spike Amount	Sample	Sample Result	Spike Result	Units	Percent Rec.	Rec. Limit	QC Batch	Method	Analysis Date
Antimony	500	142781-001	<60.000	479	ug/L	96	65-135	52458	EPA 6010B	12/07/99
Arsenic	2000	142781-001	<5.000	2050	ug/L	103	65-135	52458	EPA 6010B	12/07/99
Barium	2000	142781-001	177	1870	ug/L	85	65-135	52458	EPA 6010B	12/07/99
Beryllium	50	142781-001	<2.000	43.8	ug/L	88	65-135	52458	EPA 6010B	12/07/99
Cadmium	50	142781-001	<5.000	40.4	ug/L	81	65-135	52458	EPA 6010B	12/07/99
Chromium (total)	200	142781-001	<10.000	165	ug/L	83	65-135	52458	EPA 6010B	12/07/99
Cobalt	500	142781-001	<20.000	408	ug/L	82	65-135	52458	EPA 6010B	12/07/99
Copper	250	142781-001	<10.000	227	ug/L	91	65-135	52458	EPA 6010B	12/07/99
Lead	500	142781-001	<3.000	407	ug/L	81	65-135	52458	EPA 6010B	12/07/99
Mercury	5	142827-002	<0.200	4.425	ug/L	89	65-135	52482	EPA 7470	12/07/99
Mercury	5	142722-001	<0.200	5.031	ug/L	101	65-135	52482	EPA 7470	12/07/99
Mercury	50	142789-001	<2.000	52.53	ug/L	105	65-135	52482	EPA 7470	12/07/99
Molybdenum	400	142781-001	<20.000	348	ug/L	87	65-135	52458	EPA 6010B	12/07/99
Nickel	500	142781-001	<20.000	404	ug/L	81	65-135	52458	EPA 6010B	12/07/99
Selenium	2000	142781-001	8.82	2260	ug/L	113	65-135	52458	EPA 6010B	12/07/
Silver	100	142781-001	<5.000	98.9	ug/L	99	65-135	52458	EPA 6010B	12/07/
Thallium	2000	142781-001	<5.000	1770	ug/L	89	65-135	52458	EPA 6010B	12/07/99
Vanadium	500	142781-001	<10.000	422	ug/L	84	65-135	52458	EPA 6010B	12/07/99
Zinc	500	142781-001	<20.000	506	ug/L	101	65-135	52458	EPA 6010B	12/07/99

Dissolved Organic Carbon (DOC)

Lab #:	142816	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 415.2
Project#:	133.009		
Analyte:	Dissolved Organic Carbon	Batch#:	52452
Field ID:	SCIMW-34	Sampled:	02-DEC-1999
Matrix:	Water	Received:	03-DEC-1999
Units:	mg/L	Analyzed:	06-DEC-1999
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	142816-002	7.2	1.0
BLANK	QC102884	ND	1.0

N = Not Detected

RL = Reporting Limit

Page 1 of 1



Curtis & Tompkins, Ltd.

Dissolved Organic Carbon (DOC)

Lab #:	142816	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 415.2
Project#:	133.009		
Analyte:	Dissolved Organic Carbon	Diln Fac:	1.000
Field ID:	SCIMW-12	Batch#:	52452
MSS Lab ID:	142763-001	Sampled:	30-NOV-1999
Matrix:	Water	Received:	30-NOV-1999
Units:	mg/L	Analyzed:	06-DEC-1999

Type	Lab ID	MSS	Result	Spiked	Result	TREC	Limits	RPD	Lim
LCS	QC102885		10.00		9.600	96	80-120		
MS	QC102886	<1.000	10.00		5.800	58 *	75-125		
MSD	QC102887		10.00		5.400	54 *	75-125	7	35

* = Value outside QC limits

RPD= Relative Percent Difference

Page 1 of 1

Total Dissolved Solids (TDS)

Lab #:	142816	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 160.1
Project#:	133.009	Prep Method:	METHOD
Analyte:	Total Dissolved Solids	Sampled:	02-DEC-1999
Field ID:	SCIMW-34	Received:	03-DEC-1999
Matrix:	Water	Prepared:	06-DEC-1999
Units:	mg/L	Analyzed:	08-DEC-1999
Batch#:	52453		

Type	Lab ID	Result	RL	Diln Fac
SAMPLE	142816-002	14,400	50	5.000
BLANK	QC102888	ND	10	1.000

ND = Not Detected

RL = Reporting Limit

Page 1 of 1



Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	142816	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis Method:	EPA 160.1
Project#:	133.009	Prep Method:	METHOD
Analyte:	Total Dissolved Solids	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	52453
Type:	SDUP	Sampled:	19-NOV-1999
MSS Lab ID:	142651-005	Received:	19-NOV-1999
Lab ID:	QC102889	Prepared:	06-DEC-1999
Matrix:	Water	Analyzed:	08-DEC-1999
Units:	mg/L		

MSS Result	Result	RL	RPD	LIM
324.0	330.0	10	2	25

RL = Reporting Limit

RPD= Relative Percent Difference

Page 1 of 1



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

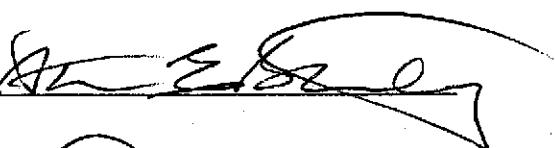
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900, Fax (510) 486-0532

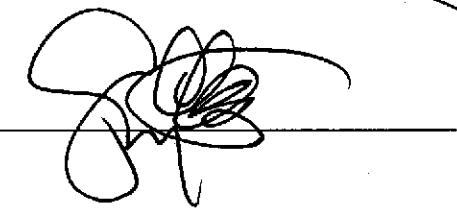
A N A L Y T I C A L R E P O R T

Prepared for:

Subsurface Consultants
3736 Mt. Diablo Blvd.
Suite 200
Lafayette, CA 94549

Date: 06-MAR-00
Lab Job Number: 143821
Project ID: 133.009
Location: KOT/9th Ave.Terminus

Reviewed by: 

Reviewed by: 

This package may be reproduced only in its entirety.



Curtis & Tompkins, Ltd.

Laboratory Number: **143821**

Receipt Date: **02/08/00**

Client: **Subsurface Consultants, Inc.**

Project Name: **9th Ave. Terminals**

CASE NARRATIVE

This hardcopy data package contains sample results and batch QC results for one water sample received from the above referenced project. The sample was received cold and intact.

Organochlorine Pesticides/PCBs: Sample SCIMW-7 (143821-001) was diluted 100-fold due to the presence of non-target compounds. No target compounds were detected in the sample at this dilution. No other analytical problems were encountered.

CHAIN OF CUSTODY FORM

PROJECT NAME: 9th Ave. Terminals

JOB NUMBER: 133.679

PROJECT CONTACT: Jeri Alexander

SAMPLED BY: ES

LAB: CET

TURNAROUND: Standard

REQUESTED BY: E Silverman

CHAIN OF CUSTODY RECORD				COMMENTS & NOTES:
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME	<i>Received Chilled NB.</i>
<i>Emily J. M.</i>	2/9/00 15:10	<i>David Donald</i>	02/09/00 3:10	
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME	
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME	
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME	
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME	



Subsurface Consultants, Inc.
171 - 12th Street, Suite 202, Oakland, CA 94607
(510) 268-0461 - FAX: (510) 268-0137
3736 Mt. Diablo Blvd., Ste. 200, Lafayette, CA 94549
(925) 299-7960 - (925) 299-7970



Curtis & Tompkins, Ltd.

Pesticides by GC/ECD

Lab #:	143821	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Prep:	EPA 3520
Project#:	133.009		
Field ID:	SCIMW-7	Batch#:	53707
Lab ID:	143821-001	Sampled:	02/08/00
Matrix:	Water	Received:	02/08/00
Units:	ug/L	Prepared:	02/10/00
Diln Fac:	100.0	Analyzed:	02/16/00

Analyte	Result	RL	Analysis
alpha-BHC	ND	4.7	EPA 8081A
beta-BHC	ND	4.7	EPA 8081A
gamma-BHC	ND	4.7	EPA 8081A
delta-BHC	ND	4.7	EPA 8081A
Heptachlor	ND	4.7	EPA 8081A
Aldrin	ND	4.7	EPA 8081A
Heptachlor epoxide B	ND	4.7	EPA 8081A
Heptachlor epoxide A	ND	4.7	EPA 8081A
Endosulfan I	ND	4.7	EPA 8081A
Dieldrin	ND	9.4	EPA 8081A
4,4'-DDE	ND	9.4	EPA 8081A
Endrin	ND	9.4	EPA 8081A
Endosulfan II	ND	9.4	EPA 8081A
Endosulfan sulfate	ND	9.4	EPA 8081A
4,4'-DDD	ND	9.4	EPA 8081A
Endrin aldehyde	ND	9.4	EPA 8081A
4,4'-DDT	ND	9.4	EPA 8081A
Chlordane	ND	47	EPA 8081A
Methoxychlor	ND	47	EPA 8081A
Toxaphene	ND	94	EPA 8081A
Aroclor-1016	ND	47	EPA 8082
Aroclor-1221	ND	94	EPA 8082
Aroclor-1232	ND	47	EPA 8082
Aroclor-1242	ND	47	EPA 8082
Aroclor-1248	ND	47	EPA 8082
Aroclor-1254	ND	47	EPA 8082
Aroclor-1260	ND	47	EPA 8082

Surrogate	#REC	Lim/PG	Analysis
TCMX	DO	27-116	EPA 8081A
Decachlorobiphenyl	DO	15-110	EPA 8081A

DO = Diluted Out

ND = Not Detected

RL = Reporting Limit

Page 1 of 1

Pesticides by GC/ECD

Lab #:	143821	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Prep:	EPA 3520
Project#:	133.009		
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC107656	Batch#:	53707
Matrix:	Water	Prepared:	02/10/00
Units:	ug/L	Analyzed:	02/14/00

Analyte	Result	RL	Analysis
alpha-BHC	ND	0.05	EPA 8081A
beta-BHC	ND	0.05	EPA 8081A
gamma-BHC	ND	0.05	EPA 8081A
delta-BHC	ND	0.05	EPA 8081A
Heptachlor	ND	0.05	EPA 8081A
Aldrin	ND	0.05	EPA 8081A
Heptachlor epoxide B	ND	0.05	EPA 8081A
Heptachlor epoxide A	ND	0.05	EPA 8081A
Endosulfan I	ND	0.05	EPA 8081A
Dieldrin	ND	0.1	EPA 8081A
4,4'-DDE	ND	0.1	EPA 8081A
Endrin	ND	0.1	EPA 8081A
Endosulfan II	ND	0.1	EPA 8081A
Endosulfan sulfate	ND	0.1	EPA 8081A
4,4'-DDD	ND	0.1	EPA 8081A
Endrin aldehyde	ND	0.1	EPA 8081A
4,4'-DDT	ND	0.1	EPA 8081A
Chlordane	ND	0.5	EPA 8081A
Methoxychlor	ND	0.5	EPA 8081A
Toxaphene	ND	1.0	EPA 8081A
Aroclor-1016	ND	0.5	EPA 8082
Aroclor-1221	ND	1.0	EPA 8082
Aroclor-1232	ND	0.5	EPA 8082
Aroclor-1242	ND	0.5	EPA 8082
Aroclor-1248	ND	0.5	EPA 8082
Aroclor-1254	ND	0.5	EPA 8082
Aroclor-1260	ND	0.5	EPA 8082

Surrogate	REC	Limits	Analysis
TCMX	72	27-116	EPA 8081A
Decachlorobiphenyl	65	15-110	EPA 8081A

ND = Not Detected

RL = Reporting Limit

Page 1 of 1



Curtis & Tompkins, Ltd.

Pesticides by GC/ECD

Lab #:	143821	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Prep:	EPA 3520
Project#:	133.009	Analysis:	EPA 8081A
Matrix:	Water	Batch#:	53707
Units:	ug/L	Prepared:	02/10/00
Diln Fac:	1.000	Analyzed:	02/16/00

Type: BS Lab ID: QC107657

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.5000	0.3176	64	42-140
Heptachlor	0.5000	0.2997	60	34-132
Aldrin	0.5000	0.2606	52	36-123
Dieldrin	0.5000	0.3262	65	44-119
Endrin	0.5000	0.3559	71	48-137
4,4'-DDT	0.5000	0.3434	69	39-127

Surrogate	%REC	Limits
TCMX	58	27-116
Decachlorobiphenyl	56	15-110

Type: BSD Lab ID: QC107658

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.5000	0.3359	67	42-140	6	28
Heptachlor	0.5000	0.3142	63	34-132	5	29
Aldrin	0.5000	0.2789	56	36-123	7	25
Dieldrin	0.5000	0.3457	69	44-119	6	25
Endrin	0.5000	0.3861	77	48-137	8	28
4,4'-DDT	0.5000	0.3682	74	39-127	7	33

Surrogate	%REC	Limits
TCMX	61	27-116
Decachlorobiphenyl	58	15-110

RPD= Relative Percent Difference

Page 1 of 1



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710. Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

Subsurface Consultants
3736 Mt. Diablo Blvd.
Suite 200
Lafayette, CA 94549

Date: 21-APR-00
Lab Job Number: 144899
Project ID: 133.009
Location: KOT/9th Ave.Terminus

Reviewed by: Angie Deery

Reviewed by: Treva Morris

This package may be reproduced only in its entirety.

CHAIN OF CUSTODY FORM

PROJECT NAME: 9th Avenue Terminals / Port of Oakland

JOB NUMBER: 133,009

PROJECT CONTACT: J. Alexander

SAMPLED BY: E. Silverman

LAB: Curtis C Tempkins

TURNAROUND: Standard

REQUESTED BY: *Emily S.*

REQUESTED BY: Emily Silverman

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX			CONTAINERS			METHOD PRESERVED		SAMPLING DATE				NOTES					
		WATER	SOIL	WASTE	AIR	VOA	LITER	PINT	TUBE	HCL	H ₂ SO ₄	HNO ₃	ICE	NONE	MONTH	DAY	YEAR	TIME	
1	SCIMW-12	X				X	X				X	X	X		0406000920				TVH/BSTX (E)
2	SCIMW-11	X				X	X				X	X			0406000945				TEHD (EPD) 10/10/94
3	SCIMW-24	X				X	X			X	X	X			0406004900				X X X X
4	SCIMW-14	X				X	X				X	X			0406001030				X X
5	SCIMW-34	X				X	X			X	X	X			0406001145				X X X X
6	SCIMW-2	X				X	X				X	Y			0406001220				X X
7	SCIMW-23	X				X	X				V	X			0406001245				X X
8	SCIMW-6	X				X	X			X	X				04060000110				X X

CHAIN OF CUSTODY RECORD			
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
<i>Tommy Johnson</i>	4/12/03 3:23	<i>R. Ben Hilt</i>	4/12/03 3:23
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME

Gasoline by GC/FID CA LUFT

Lab #:	144899	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Prep:	EPA 5030
Project#:	133.009	Analysis:	EPA 8015M
Matrix:	Water	Sampled:	04/06/00
Units:	ug/L	Received:	04/06/00
Batch#:	55022	Analyzed:	04/10/00

Field ID: SCIMW-24 Lab ID: 144899-003
 Type: SAMPLE Diln Fac: 5.000

Analyte	Result	RL
Gasoline C7-C12	4,500	250

Surrogate	%RBC	Limits
Trifluorotoluene (FID)	98	59-135
Bromofluorobenzene (FID)	94	60-140

Field ID: SCIMW-34 Lab ID: 144899-005
 Type: SAMPLE Diln Fac: 1.000

Analyte	Result	RL
Gasoline C7-C12	57	50

Surrogate	%RBC	Limits
Trifluorotoluene (FID)	94	59-135
Bromofluorobenzene (FID)	90	60-140

Type: BLANK Diln Fac: 1.000
 Lab ID: QC112527

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%RBC	Limits
Trifluorotoluene (FID)	91	59-135
Bromofluorobenzene (FID)	84	60-140

ND = Not Detected

RL = Reporting Limit

Page 1 of 1

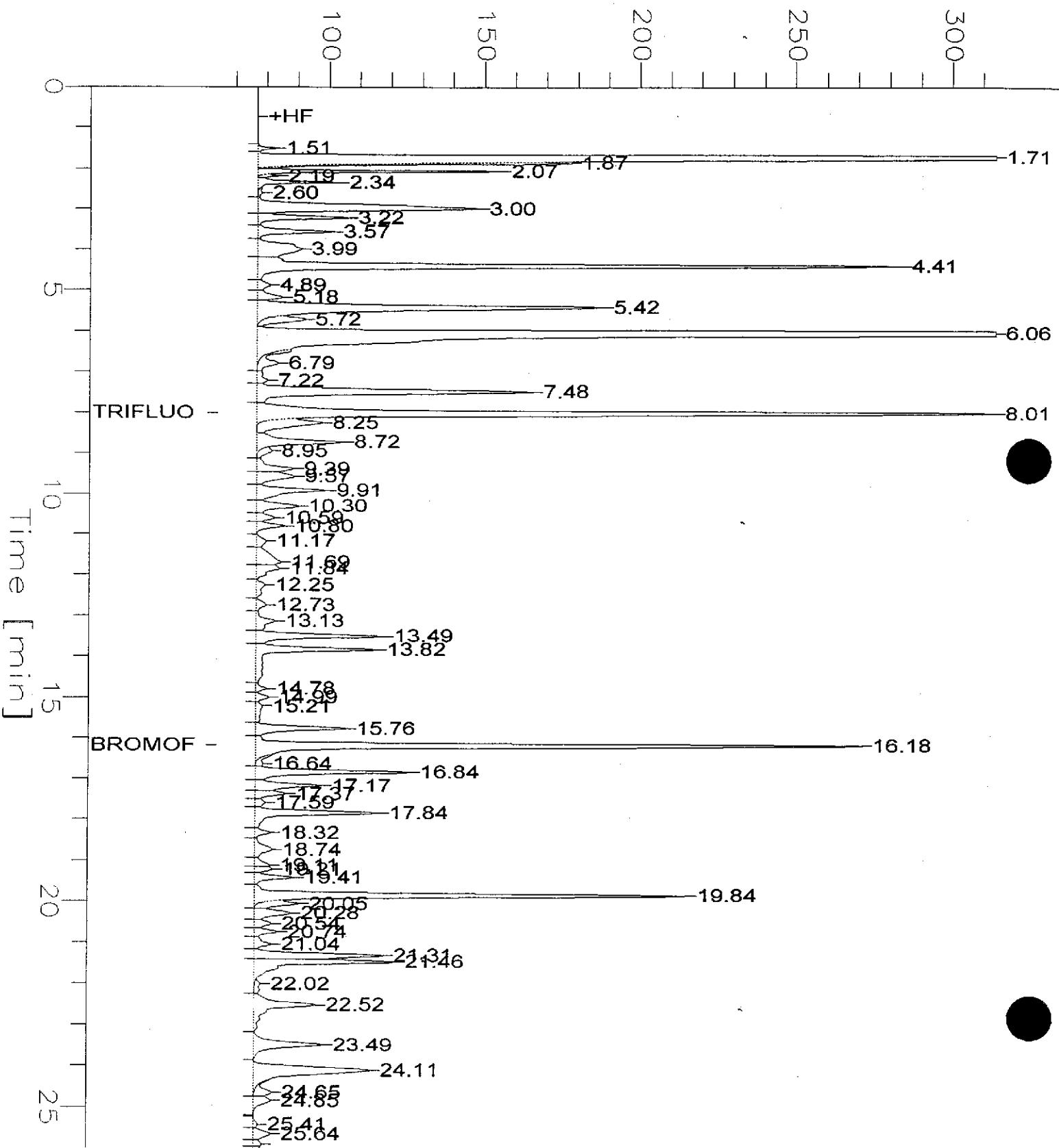
GC04 TVH 'J' Data File Rtx1FID

Sample Name : 144899-003,55022
FileName : G:\GC04\DATA\101J009.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: -1.0 Plot Offset: 64 mV

Sample #: Page 1 of 1
Date : 4/11/00 08:38 PM
Time of Injection: 4/10/00 10:11 PM
Low Point : 64.21 mV High Point : 314.21 mV
Plot Scale: 250.0 mV

SCIMW-24

Response [mV]



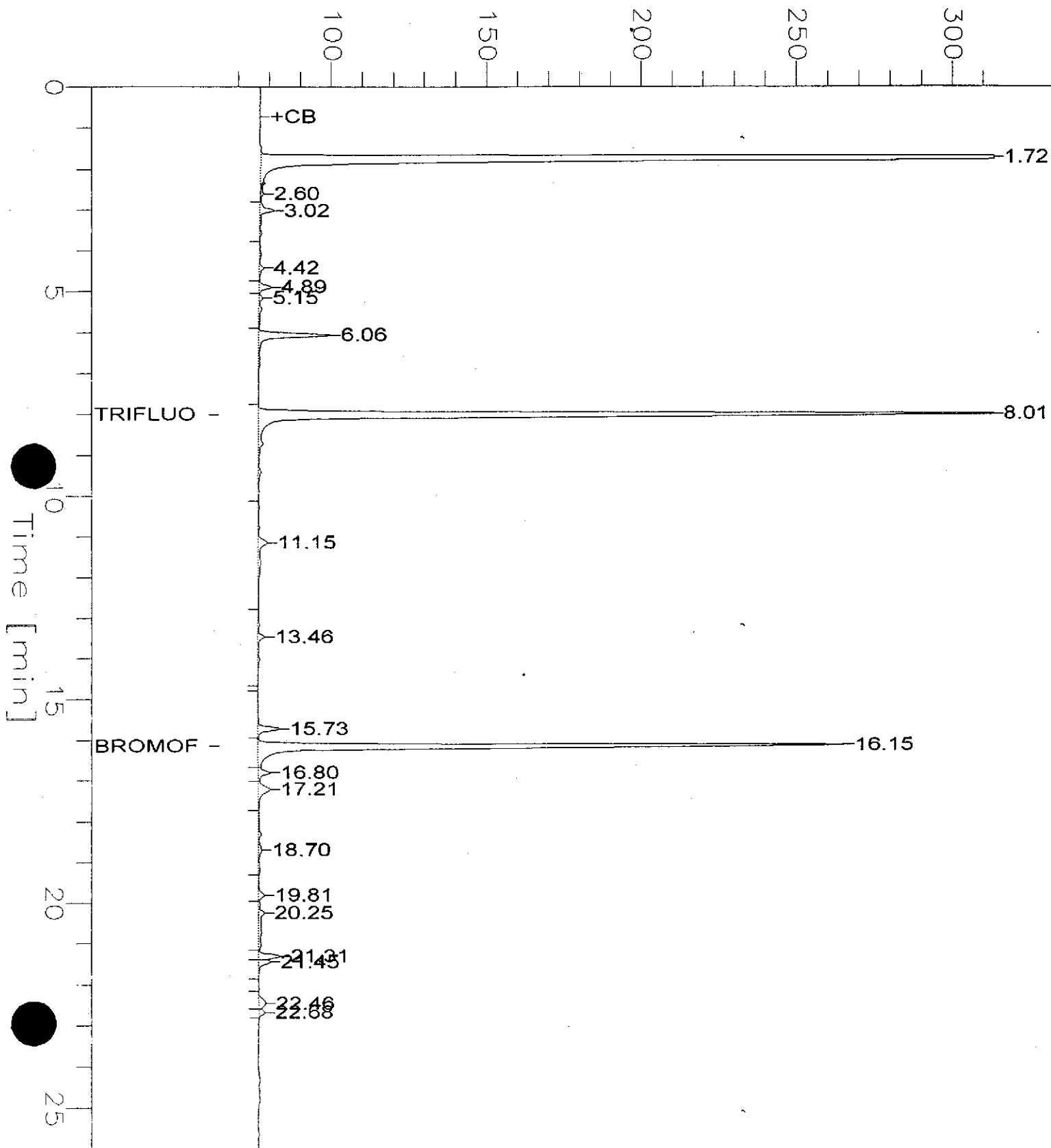
GC04 TVH 'J' Data File Rtx1FID

Sample Name : MSS_144899-005, 55022
FileName : G:\GC04\DATA\101J006.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Factor: -1.0 Plot Offset: 64 mV

Sample #: Page 1 of 1
Date : 4/10/00 08:53 PM
Time of Injection: 4/10/00 08:27 PM
Low Point : 63.54 mV High Point : 313.54 mV
Plot Scale: 250.0 mV

SCIMW-34

Response [mV]



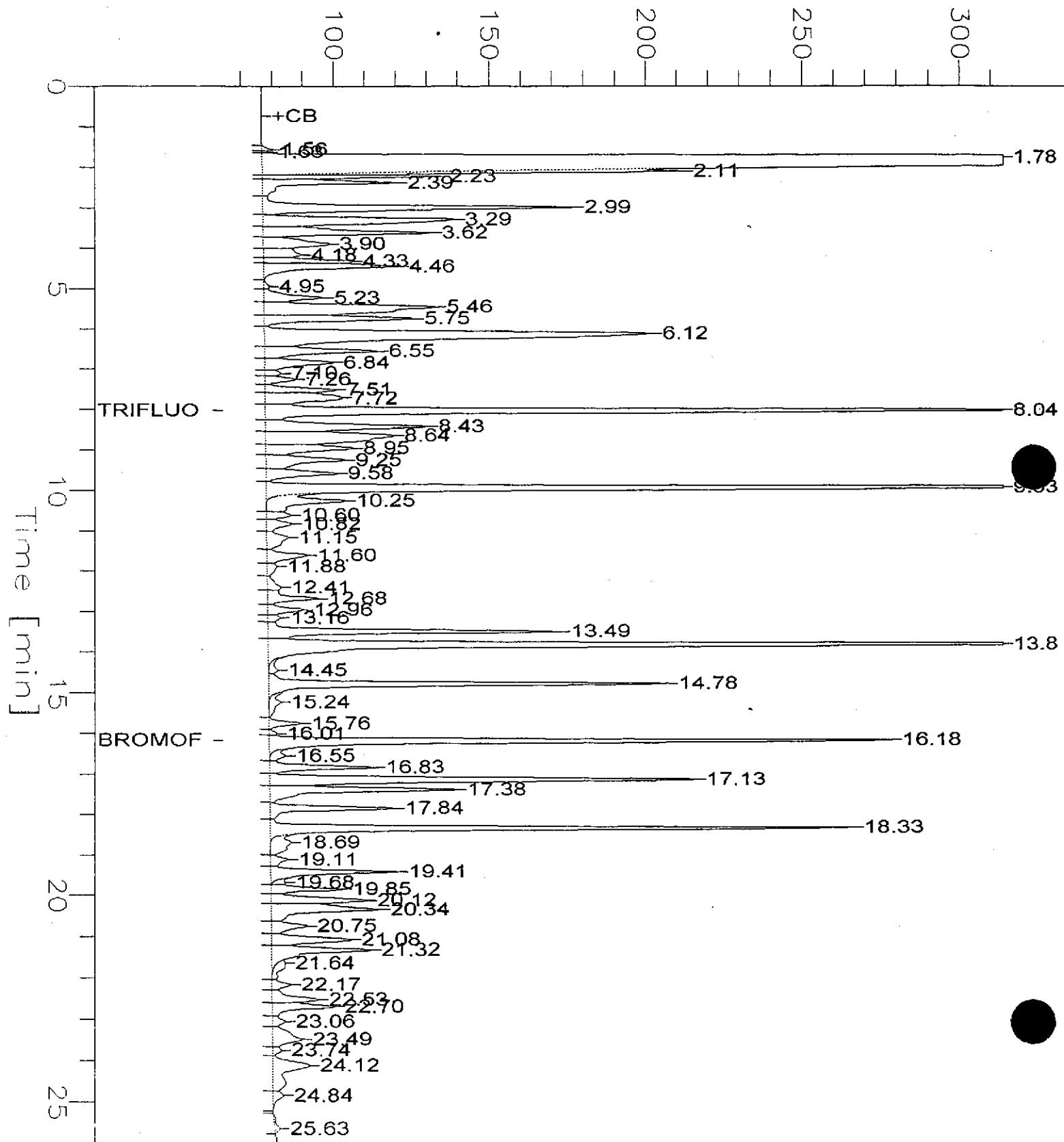
GC04 TVH 'J' Data File Rtx1FID

Sample Name : CCV/LCS,QC112525,55022,00WS8880,5/5000
FileName : G:\GC04\DATA\101J003.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: -1.0 Plot Offset: 64 mV

Sample #: GAS Page 1 of 1
Date : 4/10/00 07:06 PM
Time of Injection: 4/10/00 06:39 PM
Low Point : 64.05 mV High Point : 314.05 mV
Plot Scale: 250.0 mV

Gasoline Standard

Response [mV]



Gasoline by GC/FID CA LUFT

Lab #:	144899	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Prep:	EPA 5030
Project#:	133.009	Analysis:	EPA 8015M
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC112525	Batch#:	55022
Matrix:	Water	Analyzed:	04/10/00
Units:	ug/L		

Analyte	Spiked	Reptile	SPEC	Limits
Gasoline C7-C12	2,000	1,961	98	73-121

Surrogate	SPEC	Limits
Trifluorotoluene (FID)	96	59-135
Bromofluorobenzene (FID)	97	60-140



Curtis & Tompkins, Ltd.

Gasoline by GC/FID CA LUFT

Lab #:	144899	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Prep:	EPA 5030
Project#:	133.009	Analysis:	EPA 8015M
Field ID:	SCIMW-34	Batch#:	55022
MSS Lab ID:	144899-005	Sampled:	04/06/00
Matrix:	Water	Received:	04/06/00
Units:	ug/L	Analyzed:	04/10/00
Diln Fac:	1,000		

Type: MS Lab ID: QC112528

Analyte	MSS Result	Spiked	Result	RTQ	Minutes
Gasoline C7-C12	56.65	2,000	1,875	91	65-131

Surrogate	% REC	limits
Trifluorotoluene (FID)	95	59-135
Bromofluorobenzene (FID)	100	60-140

Type : MSD Lab ID : OC112529

Analyte	Spotted	Result	S/N	Bin(s)	RSD	lim
Gasoline C7-C12	2,000	1,936	94	65-131	3	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	94	59-135
Bromofluorobenzene (FID)	95	60-140

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	144899	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Prep:	EPA 5030
Project#:	133.009	Analysis:	EPA 8021B
Matrix:	Water	Sampled:	04/06/00
Units:	ug/L	Received:	04/06/00

Field ID: SCIMW-24 Diln Fac: 10.00
 Type: SAMPLE Batch#: 55096
 Lab ID: 144899-003 Analyzed: 04/13/00

Analyte	Result	RL
Benzene	1,700	5.0
Toluene	41	5.0
Ethylbenzene	87	5.0
m,p-Xylenes	81	5.0
o-Xylene	7.4	5.0

Surrogate	REC	Limits
Trifluorotoluene (PID)	106	56-142
Bromofluorobenzene (PID)	120	55-149

Field ID: SCIMW-34 Diln Fac: 1.000
 Type: SAMPLE Batch#: 55022
 Lab ID: 144899-005 Analyzed: 04/10/00

Analyte	Result	RL
Benzene	8.6	0.50
Toluene	ND	0.50
Ethylbenzene	0.84	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	REC	Limits
Trifluorotoluene (PID)	98	56-142
Bromofluorobenzene (PID)	97	55-149

ND = Not Detected

RL = Reporting Limit

Page 1 of 2



Curtis & Tompkins, Ltd.

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	144899	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Prep:	EPA 5030
Project#:	133.009	Analysis:	EPA 8021B
Matrix:	Water	Sampled:	04/06/00
Units:	ug/L	Received:	04/06/00

Type: BLANK Batch#: 55022
Lab ID: QC112527 Analyzed: 04/10/00
Diln Fac: 1.000

Analyte	Result	RL
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Trifluorotoluene (PID)	97	56-142
Bromofluorobenzene (PID)	92	55-149

Type: BLANK Batch#: 55096
Lab ID: QC112804 Analyzed: 04/13/00
Diln Fac: 1.000

Analyte	Result	RL
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Trifluorotoluene (PID)	85	56-142
Bromofluorobenzene (PID)	91	55-149

ND = Not Detected

RL = Reporting Limit

Page 2 of 2

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	144899	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Prep:	EPA 5030
Project#:	133.009	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC112526	Batch#:	55022
Matrix:	Water	Analyzed:	04/10/00
Units:	ug/L		

Analyte	Spiked	Result	SRM	Limits
Benzene	20.00	19.06	95	67-117
Toluene	20.00	21.33	107	69-117
Ethylbenzene	20.00	22.14	111	68-124
m,p-Xylenes	40.00	43.27	108	70-125
o-Xylene	20.00	22.45	112	65-129

Surrogate	SRM	Limits
Trifluorotoluene (PID)	101	56-142
Bromofluorobenzene (PID)	101	55-149



Curtis & Tompkins, Ltd.

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	144899	Location:	KOT/9th Ave Terminal
Client:	Subsurface Consultants	Prep:	EPA 5030
Project#:	133.009	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	55096
Units:	ug/L	Analyzed:	04/13/00
Diln Fac:	1.000		

Type: BS Lab ID: QC112802

Analyte	Spiked	Result	%REC	Limits
Benzene	20.00	15.97	80	67-117
Toluene	20.00	18.05	90	69-117
Ethylbenzene	20.00	18.84	94	68-124
m,p-Xylenes	40.00	38.90	97	70-125
o-Xylene	20.00	19.01	95	65-129

Surrogate	%REC	Limits
Trifluorotoluene (PID)	90	56-142
Bromofluorobenzene (PID)	93	55-149

Type: BSD Lab ID: QC112803

Analyte	Spiked	Result	%REC	Limits	RPD	Spk
Benzene	20.00	15.64	78	67-117	2	20
Toluene	20.00	17.75	89	69-117	2	20
Ethylbenzene	20.00	18.68	93	68-124	1	20
m,p-Xylenes	40.00	38.48	96	70-125	1	20
o-Xylene	20.00	18.64	93	65-129	2	20

Surrogate	%REC	Limits
Trifluorotoluene (PID)	83	56-142
Bromofluorobenzene (PID)	88	55-149



Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	144899	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Prep:	EPA 3520
Project#:	133.009	Analysis:	EPA 8015M
Matrix:	Water	Sampled:	04/06/00
Units:	ug/L	Received:	04/06/00
Diln Fac:	1.000	Prepared:	04/07/00
Batch#:	54993	Analyzed:	04/12/00

Field ID: SCIMW-24 Lab ID: 144899-003
Type: SAMPLE

Analyte	Result	RL
Diesel C10-C24	2,600 L Y	50
Motor Oil C24-C36	2,100	300

Surrogate	SPEC	Limits
Hexacosane	87	44-121

Field ID: SCIMW-34 Lab ID: 144899-005
Type: SAMPLE

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	SPEC	Limits
Hexacosane	77	44-121

Field ID: SCIMW-2 Lab ID: 144899-006
Type: SAMPLE

Analyte	Result	RL
Diesel C10-C24	220	50
Motor Oil C24-C36	ND	300

Surrogate	SPEC	Limits
Hexacosane	81	44-121

L = Lighter hydrocarbons contributed to the quantitation
Y = Sample exhibits fuel pattern which does not resemble standard
ND = Not Detected
RL = Reporting Limit
Page 1 of 2

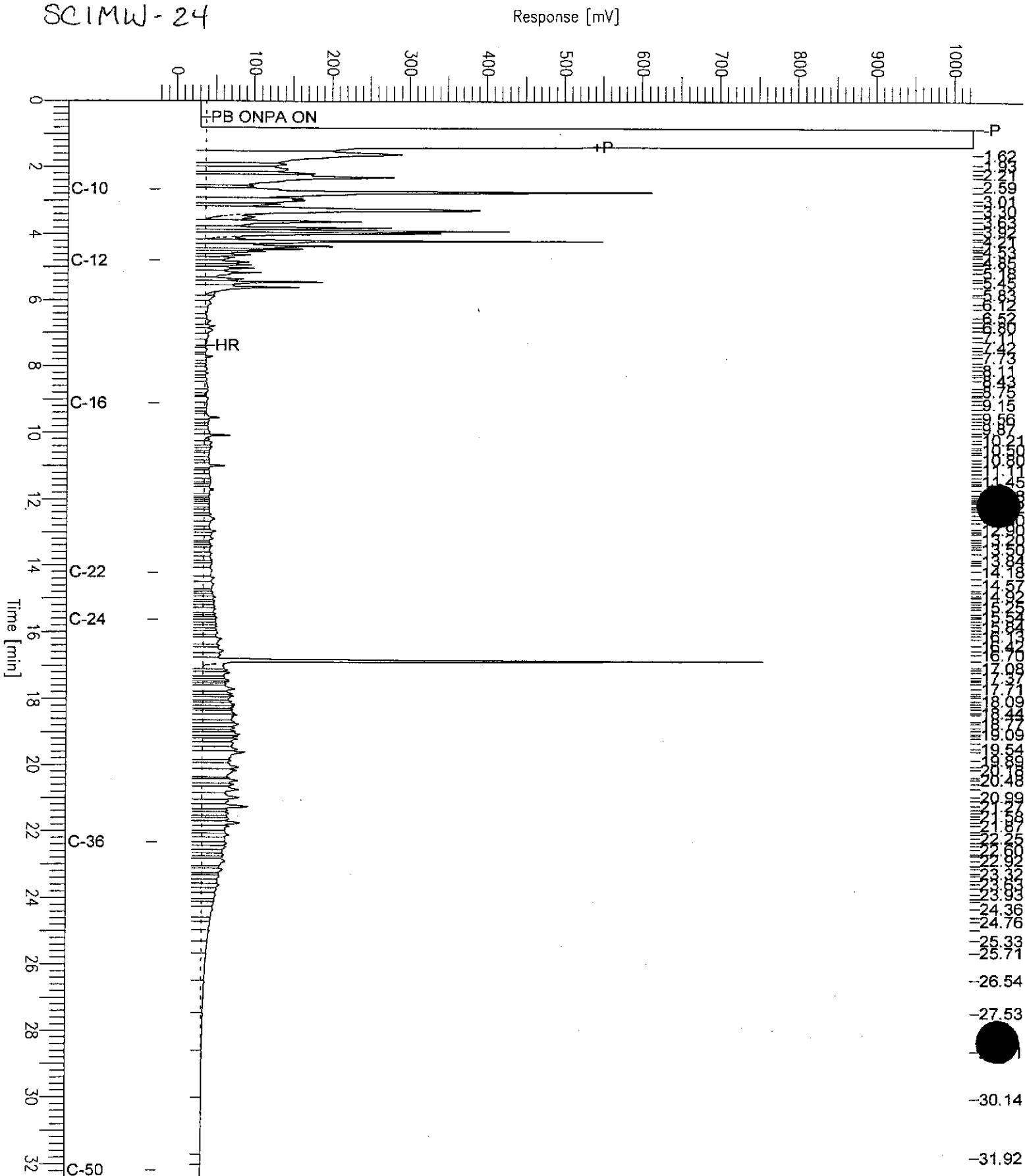
Chromatogram

Sample Name : 144899-003sg,54993
FileName : G:\GC11\CHA\101A061.RAW
Method : ATEH094.MTH
Start Time : 0.00 min End Time : 32.42 min
Scale Factor: 0.0 Plot Offset: -22 mV

Sample #: 54993 Date : 4/12/00 04:25 PM
Time of Injection: 4/12/00 01:49 PM
Low Point : -22.03 mV High Point : 1024.00 mV
Plot Scale: 1046.0 mV

Page 1 of 1

SC1MW-24

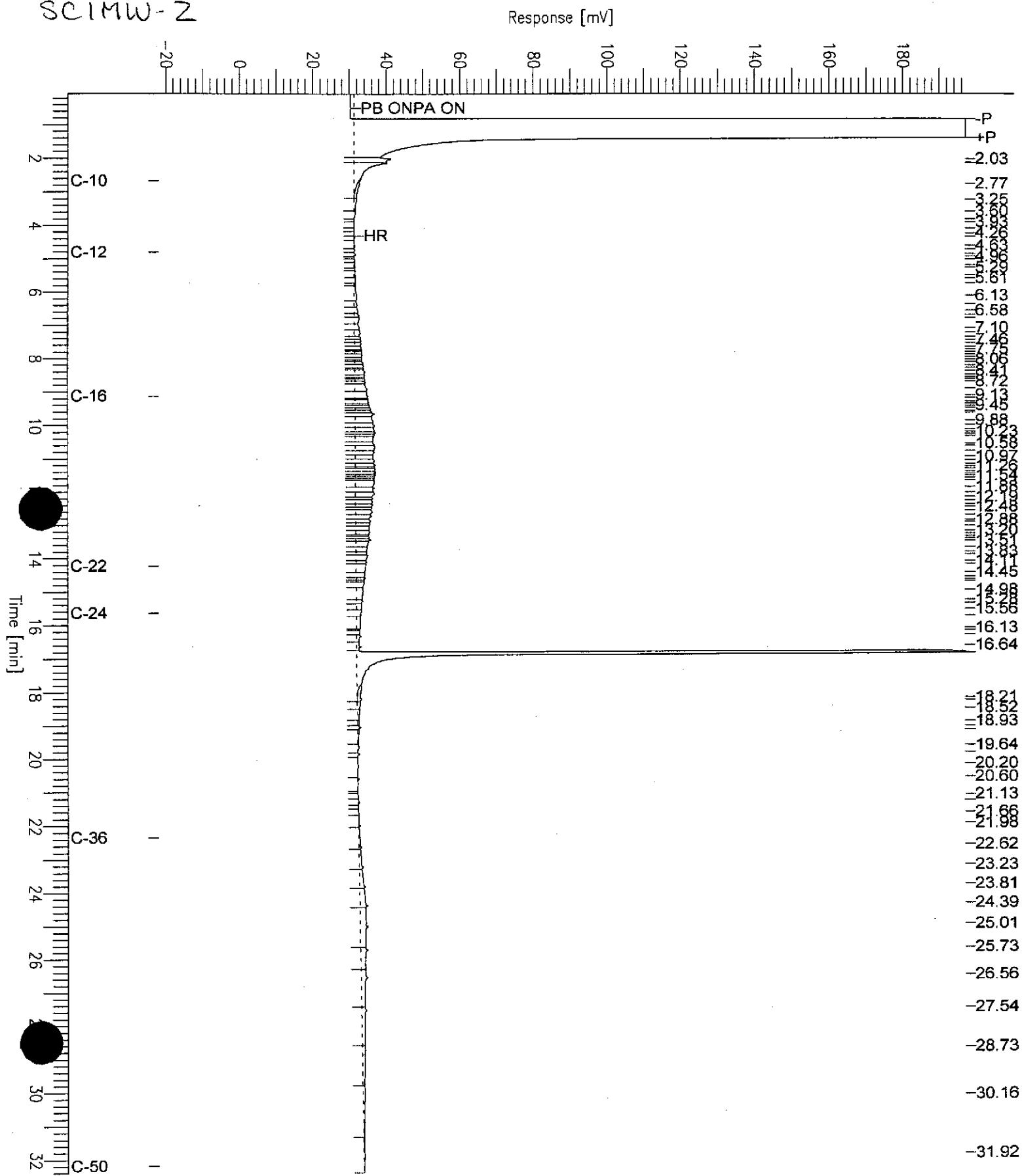


Chromatogram

Sample Name : 144899-006sg,54993
FileName : G:\GC11\CHA\101A063.RAW
Method : ATEH094.MTH
Start Time : 0.07 min End Time : 32.41 min
Sensitivity factor: 0.0 Plot Offset: -22 mV

Sample #: 54993 Page 1 of 1
Date : 4/12/00 04:22 PM
Time of Injection: 4/12/00 03:10 PM
Low Point : -21.98 mV High Point : 197.11 mV
Plot Scale: 219.1 mV

SC1MW-Z





Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	144899	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Prep:	EPA 3520
Project#:	133.009	Analysis:	EPA 8015M
Matrix:	Water	Sampled:	04/06/00
Units:	ug/L	Received:	04/06/00
Diln Fac:	1.000	Prepared:	04/07/00
Batch#:	54993	Analyzed:	04/12/00

Field ID: SCIMW-23 Lab ID: 144899-007
Type: SAMPLE

Analyte	Result	RL
Diesel C10-C24	250	50
Motor Oil C24-C36	ND	300

Surrogate	ERFC	Limits
Hexacosane	63	44-121

Type: BLANK Lab ID: QC112402

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	ERFC	Limits
Hexacosane	70	44-121

L = Lighter hydrocarbons contributed to the quantitation

Y = Sample exhibits fuel pattern which does not resemble standard

ND = Not Detected

RL = Reporting Limit

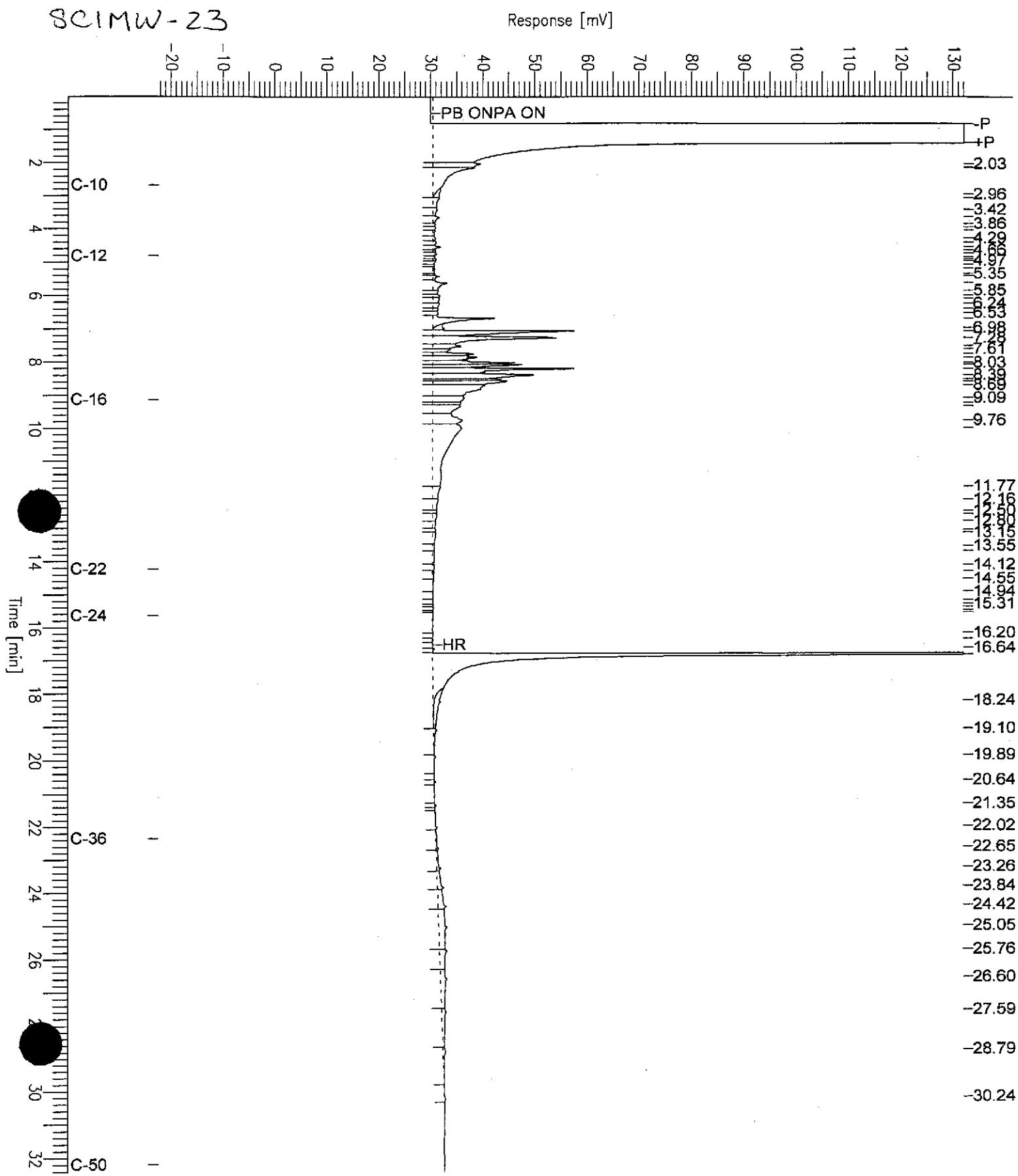
Page 2 of 2

Chromatogram

Sample Name : 144899-007sg,54993
FileName : G:\GC11\CHA\101A072.RAW
Method : ATEH094.MTH
Start Time : 0.01 min End Time : 32.41 min
Scale Factor: 0.0 Plot Offset: -22 mV

Sample #: 54993 Page 1 of 1
Date : 4/13/00 11:43 AM
Time of Injection: 4/12/00 09:29 PM
Low Point : -22.34 mV High Point : 132.11 mV
Plot Scale: 154.4 mV

SCIMW-23

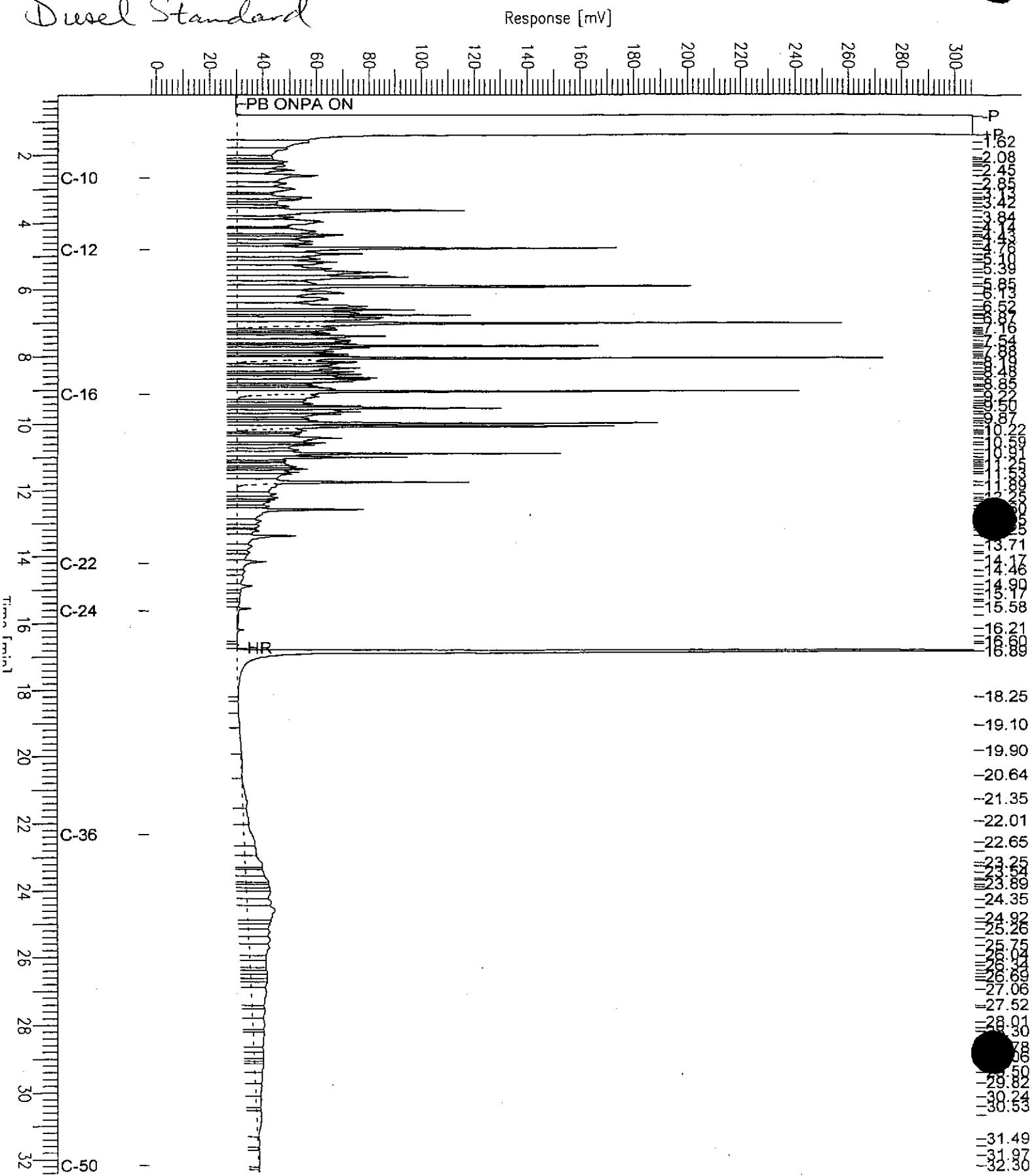


Chromatogram

Sample Name : ccv_00ws8987.ds1
File Name : G:\GC11\CHA\101A002.RAW
Method : ATEH094.MTH
Start Time : 0.21 min End Time : 32.41 min
Scale Factor: 0.0 Plot Offset: -3 mV

Sample #: 500mg/l Page 1 of 1
Date : 4/10/00 05:11 PM
Time of Injection: 4/10/00 03:12 PM
Low Point : -2.64 mV High Point : 306.38 mV
Plot Scale: 309.0 mV

Diesel Standard

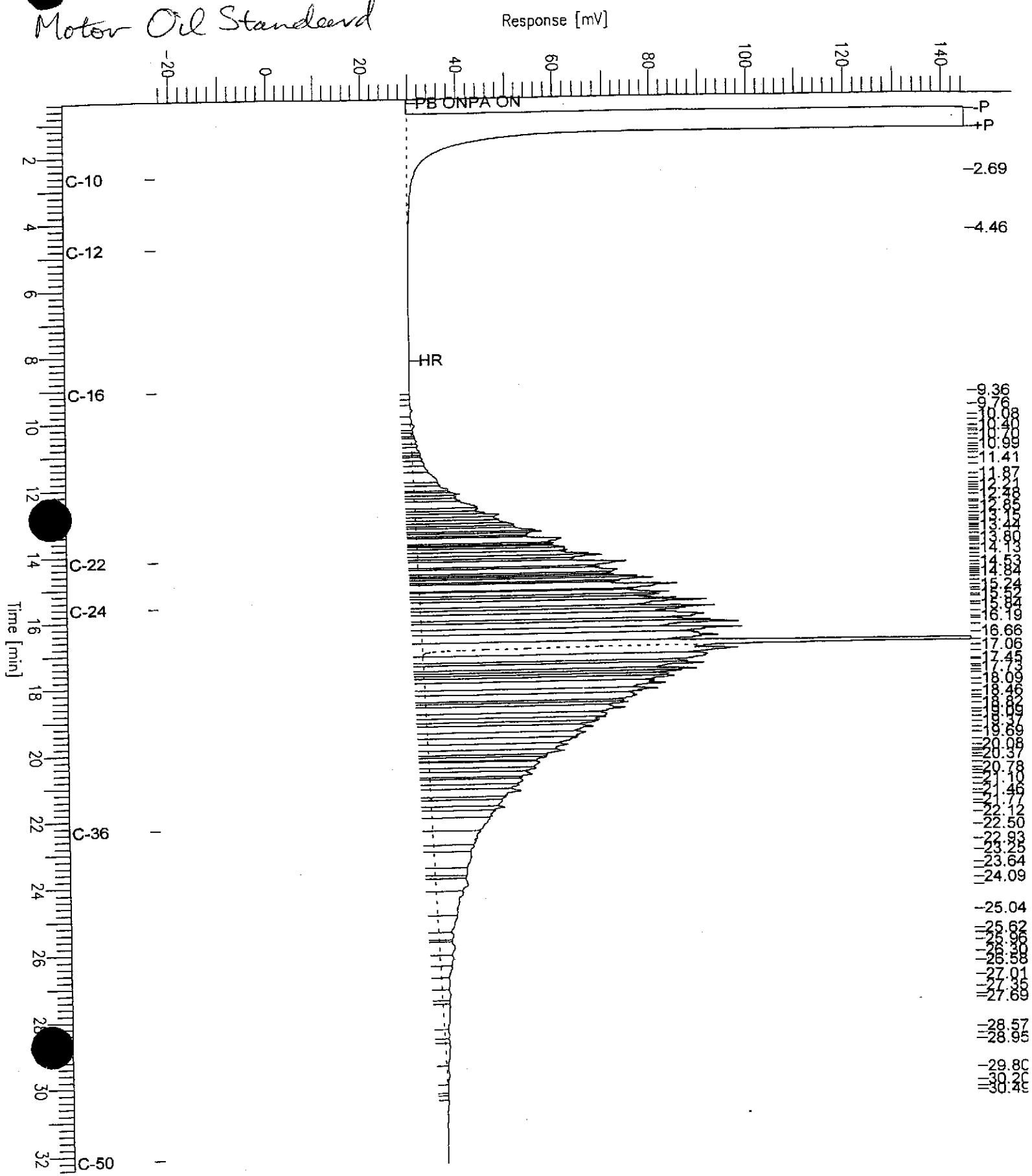


Chromatogram

Sample Name : ccv_00ws8990.mo
FileName : G:\GC11\CHA\101A003.RAW
Method : ATEH094.MTH
Start Time : 0.37 min End Time : 32.41 min
Scalator: 0.0 Plot Offset: -23 mV

Sample #: 500mg/1 Page 1 of 1
Date : 4/10/00 05:20 PM
Time of Injection: 4/10/00 03:53 PM
Low Point : -22.69 mV High Point : 144.49 mV
Plot Scale: 167.2 mV

Motor Oil Standard





Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	144899	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Prep:	EPA 3520
Project#:	133.009	Analysis:	EPA 8015M
Matrix:	Water	Batch#:	54993
Units:	ug/L	Prepared:	04/07/00
Diln Fac:	1.000	Analyzed:	04/12/00

Type: BS Lab ID: QC112403

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,475	1,537	62	45-110

Surrogate	%REC	Limits
Hexacosane	87	44-121

Type: BSD Lab ID: QC112404

Analyte	Spiked	Result	%REC	Limits	RPD
Diesel C10-C24	2,475	1,618	65	45-110	5

Surrogate	%REC	Limits
Hexacosane	82	44-121

RPD= Relative Percent Difference

Page 1 of 1



Curtis & Tompkins, Ltd.

Lead

Lab #:	144899	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Prep:	METHOD
Project#:	133.009	Analysis:	EPA 6010B
Analyte:	Lead	Sampled:	04/06/00
Matrix:	Filtrate	Received:	04/06/00
Units:	ug/L	Prepared:	04/10/00
Diln Fac:	1.000	Analyzed:	04/12/00
Batch#:	55037		

Field ID	Type	Lab ID	Result	RL
SCIMW-24	SAMPLE	144899-003	8.3	3.0
SCIMW-34	SAMPLE	144899-005	ND	3.0
	BLANK	QC112578	ND	3.0

N = Not Detected

RL = Reporting Limit

Page 1 of 1



Curtis & Tompkins, Ltd.

Lead

Lab #:	144899	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Prep:	METHOD
Project#:	133.009	Analysis:	EPA 6010B
Analyte:	Lead	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	55037
MSS Lab ID:	144853-001	Sampled:	04/04/00
Matrix:	Filtrate	Received:	04/05/00
Units:	ug/L	Prepared:	04/10/00

Type	Lab ID	MSS Result	Spiked	Result	RL	#REC	Limits	RPD	Lim Analyzed
BS	QC112579		100.0	102.0	102	78-120			04/12/00
BSD	QC112580		100.0	95.22	95	78-120	11	20	04/11/00
SDUP	QC112581	<3.000		<3.000	3.0		NC	29	04/12/00
SSPIKE	QC112582	1.300	100.0	100.0	99	66-128			04/12/00

NC = Not Calculated

RL = Reporting Limit

RPD= Relative Percent Difference

Page 1 of 1

Dissolved Organic Carbon (DOC)

Lab #:	144899	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis:	EPA 415.2
Project#:	133.009		
Analyte:	Dissolved Organic Carbon	Batch#:	55105
Matrix:	Water	Sampled:	04/06/00
Units:	mg/L	Received:	04/06/00
Diln Fac:	1.000	Analyzed:	04/13/00

Field ID	Type	Lab ID	Result	RL
SCIMW-12	SAMPLE	144899-001	1.6	1.0
SCIMW-11	SAMPLE	144899-002	11	1.0
SCIMW-24	SAMPLE	144899-003	33	1.0
SCIMW-14	SAMPLE	144899-004	8.4	1.0
SCIMW-34	SAMPLE	144899-005	6.0	1.0
SCIMW-2	SAMPLE	144899-006	5.7	1.0
SCIMW-23	SAMPLE	144899-007	13	1.0
SCIMW-6	SAMPLE	144899-008	ND	1.0
	BLANK	QC112846	ND	1.0

ND = Not Detected

RL = Reporting Limit

Page 1 of 1

Dissolved Organic Carbon (DOC)

Lab #:	144899	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Analysis:	EPA 415.2
Project#:	133.009		
Analyte:	Dissolved Organic Carbon	Diln Fac:	1.000
Field ID:	SCIMW-12	Batch#:	55105
MSS Lab ID:	144899-001	Sampled:	04/06/00
Matrix:	Water	Received:	04/06/00
Units:	mg/L	Analyzed:	04/13/00

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC112847		10.00	10.80	108	80-110		
MS	QC112848	1.550	10.00	6.470	49	40-150		
MSD	QC112849		10.00	6.350	48	40-150	2	20

RPD= Relative Percent Difference

Page 1 of 1



Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	144899	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Prep:	METHOD
Project#:	133.009	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Sampled:	04/06/00
Matrix:	Water	Received:	04/06/00
Units:	mg/L	Prepared:	04/07/00
Batch#:	54985	Analyzed:	04/11/00

Field ID	Type	Lab ID	Result	RL	Diln Fac
SCIMW-12	SAMPLE	144899-001	19,800	100	10.00
SCIMW-11	SAMPLE	144899-002	5,280	20	2.000
SCIMW-24	SAMPLE	144899-003	1,270	10	1.000
SCIMW-14	SAMPLE	144899-004	1,080	10	1.000
SCIMW-34	SAMPLE	144899-005	14,400	50	5.000
SCIMW-2	SAMPLE	144899-006	8,040	33	3.330
SCIMW-23	SAMPLE	144899-007	1,970	10	1.000
SCIMW-6	SAMPLE	144899-008	18,900	100	10.00
	BLANK	QC112371	ND	10	1.000



Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	144899	Location:	KOT/9th Ave.Terminal
Client:	Subsurface Consultants	Prep:	METHOD
Project#:	133.009	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Batch#:	54985
Field ID:	SCIMW-14	Sampled:	04/06/00
MSS Lab ID:	144899-004	Received:	04/06/00
Matrix:	Water	Prepared:	04/07/00
Units:	mg/L	Analyzed:	04/11/00
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	RL	%RBC	Limits	RPD	Lim
BS	QC112372		1,000	976.0		98	80-120		
BSD	QC112373		1,000	1,004		100	80-120	3	20
SDUP	QC112374	1,076		1,072	10			0	20
MS	QC112375	1,076	1,000	2,064		99	70-130		

RL = Reporting Limit

RPD= Relative Percent Difference

Page 1 of 1

APPENDIX C:
UNIFORM HAZARDOUS
WASTE MANIFEST

State of California Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-99)
Please print or type. Form designed for use on elite (12-pitch) typewriter.

See Instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. CAL00031343803180	Manifest Document No. 99003180	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address PORT OF OAKLAND 530 WATER STREET OAKLAND, CA 94604-						
4. Generator's Phone (510) 272-1134						
5. Transporter 1 Company Name ALLWASTE TRANSPORTATION AND Removal, INC.		6. US EPA ID Number CAR000052803				
7. Transporter 2 Company Name		8. US EPA ID Number				
9. Designated Facility Name and Site Address BURLINGTON ENVIRONMENTAL, INC. 20245 77TH AV. SOUTH KENT, WA 98032-		10. US EPA ID Number WA0991281767				
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers No. Type	13. Total Quantity	14. Unit Wt/Vol	15. Waste Number	
a. NON-RCRA HAZARDOUS WASTE Legend (Pins - water for hydrocarbons)		407-D M020010		P	State	
b.		0	10	P	State	
c.		0	10	P	State	
d.		0	10	P	State	
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.						
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.						
Printed/Typed Name JEREMY L. RUGG		BEHALF OF PORT OF OAKLAND	Signature JEREMY L. Rugg	Month 05	Day 05	Year 2010
Printed/Typed Name David Dell'Osso		Signature David Dell'Osso		Month 05	Day 05	Year 2010
Printed/Typed Name		Signature		Month	Day	Year
19. Discrepancy Indication Space						
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.		Printed/Typed Name	Signature	Month	Day	Year

DO NOT WRITE BELOW THIS LINE.

APPENDIX D:
ACHSCA LETTER
MAY 11, 2000

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



May 11, 2000
StID #s 3335, 6894, 6895, 225, 5067

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

Mr. Doug Herman
Port of Oakland Environmental
530 Water St.
Oakland CA 94607-2064

Re: Analysis for MTBE at Ninth Ave. Terminal Site, Oakland CA 94606

Dear Mr. Herman:

In 1997, the Legislature added a provision to chapter 6.75 of division 20 of the Health and Safety Code requiring the testing for MTBE before the Regional Board or local agency can issue a closure letter. On March 26, 1999 Governor Gray Davis signed Executive Order D-5-99 requiring the SWRCB to prioritize MTBE impacted sites to maximize the effort toward resource protection and cleanup. Our office has been requested to classify all MTBE sites and insure that all sites be monitored for MTBE.

Therefore, our office requests that on your next monitoring events for the wells within the location of Buildings H-204, H-209, H-211, H-317 (The Marine Terminal building) and H-213, the Keep on Trucking building, please analyze these wells for MTBE. Please confirm any detectable MTBE concentrations by EPA Method 8260 or an equivalent GC/MS method. Please include these results with your normal semi-annual or quarterly monitoring results. If MTBE is not detected above normal detection limits, it can be eliminated from your monitoring schedule.

Please confirm which wells will be analyzed for MTBE (in addition to their normal analytes) by submitting a list of wells and schedule of their analysis.

You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

A handwritten signature in black ink.

Barney M. Chan
Hazardous Materials Specialist

C: B. Chan, files

Ms. M. Heffes Esq., Port of Oakland Legal, 530 Water St., Oakland CA 94607-2064

✓ Ms. J. Alexander, SCI, 3736 Mt. Diablo Blvd., Suite 200, Lafayette, CA 94549-3659

Mtbe9thAve

