

# THRIFTY OIL CO.

January 9, 2008

RECEIVED

0.83365

Ms. Mirtha Ninayahuar  
EBMUD-Mail Slot #702  
Source Control Division  
P.O. Box 24055  
Oakland, CA 92623-1055

2:07 pm, Jan 22, 2008

Alameda County  
Environmental Health

RE: **Thrifty Oil Co. Station #049**  
3400 San Pablo Avenue, Oakland, CA 94612

Subject: **Semi-Annual Groundwater Treatment Report**  
**(July through December 2007)**  
Discharge Permit #502-44452

Dear Ms. Ninayahuar:

Presented herein is the *Semi-Annual Groundwater Treatment Report (July through December 2007)* prepared by Equipoise Corporation (Equipoise) dated January 4, 2008 for the Wastewater Discharge Permit #502-44452 issued for the groundwater treatment system at the above-referenced site. This report presents the operational and discharge sampling data for the months of July through December 2007.

Should you have any questions regarding this report, please contact Simon Tregurtha at 562 921-3581, Ext. 260, or myself at Ext. 390.

#### Certification Statement

I certify under the penalty of law that this document and all attachments are prepared under my direction in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those person directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,



Chris Panaitescu  
General Manager  
Environmental Affairs

cc BP West Coast  
file



13116 Imperial Hwy, Santa Fe Springs, CA 90670-0138 • Ph: (562)921-3581

January 4, 2008

Ms. Mirtha Ninayahuar  
EBMUD-Mail Slot #702  
Source Control Division  
P.O. Box 24055  
Oakland, CA 92623-1055

RE: **Thrifty Oil Co. Station #049**  
3400 San Pablo Avenue, Oakland, CA 94612  
**Semi-Annual Groundwater Treatment Report**  
**(June 1, 2007 through December 21, 2007)**  
Discharge Permit #502-44452

Dear Ms. Ninayahuar:

This report presents the information required by the Compliance Reporting Conditions of East Bay Municipal Utility District's (EBMUD) Wastewater Discharge Permit #502-44452. This report contains data collected during the period of June 1, 2007 through December 21, 2007, and includes the data recorded during the system operations as well as the results of analytical laboratory testing of the groundwater discharge samples collected from the system.

### **System Operation**

The previous groundwater treatment system was started in April 1991 and extracted groundwater from well RW-1 using aboveground double-diaphragm pump. Extracted water was treated using three canisters of granular activated carbon adsorbers and then discharged into the sewer under the above referenced discharge permit. Approximately 1,445,088 gallons of water were processed by the groundwater treatment system between April 1991 and February 14, 2003 when the system was shut down for upgrades.

With the approval of Alameda County Health Care Services, Thrifty contracted Advanced GeoEnvironmental (AGE) of Stockton to perform system upgrade and overhaul of the former remediation system. The system upgrade included replacing the former groundwater extraction wells and overhauling/replacing major system components. The upgraded system extracts from new wells RW-1R, MW-2R, and MW-4R using submersible pneumatic pumps. The extracted water is treated using three canisters of granular activated carbon adsorbers arranged in series before being discharged into the sewer. After system testing, the upgraded remediation system was started by AGE on June 18, 2004.

System operations and maintenance (O&M) duties were assumed by Earth Management Company (EMC) on January 12, 2005; EMC conducted O&M during the current reporting period.

The system operated continuously except when it was turned off for the following time interval for quarterly groundwater sampling events and for a carbon change-out:

- July 17 through July 20, 2007 (3<sup>rd</sup> Quarter 2007),
- September 5 through September 17, 2007 for a carbon change-out, and
- October 16 through October 19, 2007 (4<sup>th</sup> Quarter 2007).

### **ORANGE COUNTY OFFICE**

1401 N. El Camino Real, Suite 107  
San Clemente, California 92677 • USA  
Phone: 949.366.0275  
Facsimile: 949.366.0281

### **CORPORATE OFFICE**

26395 Jefferson Avenue, Suite A  
Murrieta, California • USA  
Phone: 951.696.7217  
Facsimile: 951.696.9527

January 4, 2008  
Ms. Mirtha Ninayahuar  
Page 2 of 2

EQUIPOISE CORPORATION

During the current reporting period, approximately 91,960 gallons of water were processed by the groundwater treatment unit. As of December 21, 2007, a total of approximately 1,722,696 gallons of water have been treated and discharged by the groundwater treatment system.

#### System Water Sampling

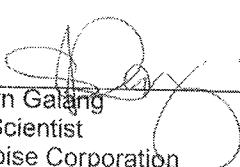
As required by the permit, outlet water samples for the upgraded groundwater treatment system were collected on a quarterly basis. In addition to the required samples, water samples were also collected from the intermediate and inlet of the treatment system.

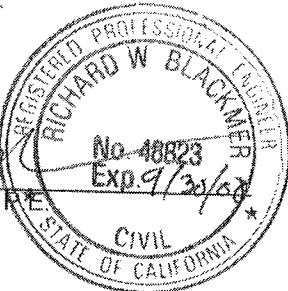
EMC collected outlet grab samples, labeled PSP-1, for the current reporting period on August 21, 2007, and November 20, 2007. The samples were analyzed by Associated Laboratories for benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8021B; and for total petroleum hydrocarbons as gasoline (TPHg) by EPA Method 8015B. The results of the samples collected during this period were in compliance with the requirements of the Wastewater Discharge Permit. Table 1 presents the historical data as well as the sample results during this reporting period. Copies of the analytical laboratory reports from this reporting period are contained in Appendix A.

Should you have any questions regarding this report, please contact the undersigned at 949 366-0266.

Prepared by:

*for*

  
Kathryn Galang  
Staff Scientist  
Equipoise Corporation

  
  
Richard W. Blackmer, P.E.  
Principal Engineer  
Equipoise Corporation

## ***TABLES***

















**TABLE 1**  
**GROUNDWATER REMEDIATION SYSTEM MONITORING PROGRAM**  
 Thrifty Oil Co. Station No 049, OAKLAND, CA

Date	Totalizer (gallons)	Total/Cum. Discharge (gallons)	Flow (gal/day)	OUTLET/EFFLUENT (ug/L)					INLET/INFLUENT (ug/L)				
				TPH-g	B	T	E	X	TPH-g	B	T	E	X
01/27/06	6,731.2	1,553,967	0	Restarted system	-	-	-	-	-	-	-	-	-
01/31/06	6,842.3	1,554,078	28	-	-	-	-	-	-	-	-	-	-
02/01/06	-	-	-	-	<0.70	<0.67	<0.65	<2.0	Outlet sampling results from EBMUD (sample collected by EBMUD inspector)				
02/01/06	6,903.0	1,554,138	61	-	<0.17	<0.22	<0.14	<0.38	Split-sample results during EBMUD inspection & sampling				
02/01/06	0.0	1,554,138	-	Changed battery for flow meter (reset to 0.0 gallons)					-	-	-	-	-
02/07/06	308	1,554,447	51	-	-	-	-	-	-	-	-	-	-
02/21/06	978	1,555,116	48	-	-	-	-	-	-	-	-	-	-
02/24/06	1,268	1,555,406	97	-	-	-	-	-	-	-	-	-	-
02/24/06	10	1,555,406	-	Replaced flow meter with nonresettable analog type, start with 10					-	-	-	-	-
02/28/06	978	1,556,374	242	-	-	-	-	-	-	-	-	-	-
03/07/06	3,254	1,558,650	325	-	-	-	-	-	-	-	-	-	-
03/14/06	4,672	1,560,068	203	-	-	-	-	-	-	-	-	-	-
03/21/06	6,793	1,562,189	303	-	-	-	-	-	-	-	-	-	-
03/28/06	8,214	1,563,610	203	-	-	-	-	-	-	-	-	-	-
04/04/06	12,513	1,567,909	614	<5.6	<0.32	<0.1	<0.24	<0.3	2,580	15	5.0	<0.24	193
04/11/06	15,720	1,571,116	458	-	-	-	-	-	-	-	-	-	-
04/18/06	21,010	1,576,406	756	System was turned off for QWS					-	-	-	-	-
04/21/06	21,030	1,576,426	7	Restarted system					-	-	-	-	-
04/25/06	22,410	1,577,806	345	-	-	-	-	-	-	-	-	-	-
04/26/06	23,010	1,578,406	600	Turned off system for carbon change					-	-	-	-	-
05/02/06	23,030	1,578,426	3	Restarted after carbon change					-	-	-	-	-
05/09/06	27,710	1,583,106	669	-	-	-	-	-	-	-	-	-	-
05/17/06	28,900	1,584,296	149	-	-	-	-	-	-	-	-	-	-
05/23/06	31,430	1,586,826	422	<5.6	<0.32	<0.1	<0.24	<0.3	1,020,000	3,330	111,000	7,440	38,400
05/31/06	37,710	1,593,106	785	-	-	-	-	-	-	-	-	-	<630
06/09/06	39,890	1,595,286	242	-	-	-	-	-	71,000	520	16,300	820	6,840
06/13/06	40,460	1,595,856	143	-	-	-	-	-	-	-	-	-	-
06/21/06	41,240	1,596,636	98	-	-	-	-	-	-	-	-	-	-
06/27/06	42,360	1,597,756	187	-	-	-	-	-	-	-	-	-	-
07/11/06	46,380	1,601,776	287	<5.6	<0.32	<0.10	<0.24	<0.30	8070	18	385	73	1530
07/18/06	47,270	1,602,666	127	System was turned off for QWS					-	-	-	-	-
07/25/06	47,280	1,602,676	1	Restarted system					-	-	-	-	-
08/01/06	47,860	1,603,256	83	-	-	-	-	-	-	-	-	-	-
08/18/06	50,000	1,605,396	126	-	-	-	-	-	-	-	-	-	-
08/22/06	50,060	1,605,456	15	-	-	-	-	-	-	-	-	-	-



**TABLE 1**  
**GROUNDWATER REMEDIATION SYSTEM MONITORING PROGRAM**  
 Thrifty Oil Co. Station No 049, OAKLAND, CA

Date	Totalizer (gallons)	Total/Cum. Discharge (gallons)	Flow (gal/day)	OUTLET/WASTEWATER (ug/L)					INLET/WIFIUENT (ug/L)				
				TPH-g	B	T	E	X	TPH-g	B	T	E	X
04/20/07	69,940	1,625,336	-	Restarted system	-	-	-	-	-	-	-	-	-
04/26/07	70,130	1,625,526	32	-	-	-	-	-	-	-	-	-	-
05/02/07	-	-	-	-	<0.7	<0.67	<0.65	<1.3	Outlet sampling results from EBMUD (sample collected by EBMUD inspector)				
05/02/07	71,300	1,626,696	195	<5.6	<0.17	<0.22	<0.14	<0.38	Split-sample results during EBMUD inspection & sampling				
05/08/07	71,630	1,627,026	55	-	-	-	-	-	-	-	-	-	-
05/17/07	72,710	1,628,106	120	-	-	-	-	-	-	-	-	-	-
05/24/07	73,120	1,628,516	59	-	-	-	-	-	-	-	-	-	-
06/01/07	75,340	1,630,736	278	-	-	-	-	-	-	-	-	-	-
06/14/07	76,840	1,632,236	115	-	-	-	-	-	-	-	-	-	-
06/19/07	77,234	1,632,630	79	-	-	-	-	-	-	-	-	-	-
06/21/07	77,289	1,632,685	28	-	-	-	-	-	416,000	3,330	49,400	7,250	39,700
06/28/07	77,690	1,633,086	57	-	-	-	-	-	-	-	-	-	-
07/03/07	80,230	1,635,626	508	-	-	-	-	-	-	-	-	-	-
07/10/07	86,310	1,641,706	869	-	-	-	-	-	-	-	-	-	-
07/17/07	87,620	1,643,016	187	System was turned off for groundwater well sampling					-	-	-	-	-
07/20/07	87,620	1,643,016	-	Restarted system	-	-	-	-	-	-	-	-	-
07/24/07	87,930	1,643,326	78	-	-	-	-	-	-	-	-	-	-
07/31/07	88,260	1,643,656	47	-	-	-	-	-	-	-	-	-	-
08/07/07	88,930	1,644,326	96	-	-	-	-	-	-	-	-	-	-
08/14/07	89,620	1,645,016	99	-	-	-	-	-	-	-	-	-	-
08/21/07	91,200	1,646,596	226	54	<0.15	<0.12	<0.09	<0.26	-	-	-	-	-
08/30/07	92,300	1,647,696	122	-	-	-	-	-	-	-	-	-	-
09/05/07	92,720	1,648,116	70	Shut down for carbon change-out					-	-	-	-	-
09/11/07	92,720	1,648,116	-	-	-	-	-	-	-	-	-	-	-
09/17/07	92,760	1,648,156	7	Restart system after carbon change-out					-	-	-	-	-
09/24/07	100,590	1,655,986	1,119	-	-	-	-	-	-	-	-	-	-
10/02/07	109,100	1,664,496	1,064	-	-	-	-	-	-	-	-	-	-
10/10/07	118,640	1,674,036	1,193	-	-	-	-	-	-	-	-	-	-
10/16/07	124,630	1,680,026	998	Shut down for QWS					-	-	-	-	-
10/19/07	124,690	1,680,086	20	Restart system after QWS					-	-	-	-	-
10/23/07	124,860	1,680,256	43	-	-	-	-	-	-	-	-	-	-
10/30/07	127,680	1,683,076	403	-	-	-	-	-	-	-	-	-	-
11/20/07	139,850	1,695,246	580	<5.6	<0.15	<0.12	<0.09	<0.26	251	<0.18	<0.24	1.8 J	6.1
11/30/07	154,320	1,709,716	1,447	-	-	-	-	-	-	-	-	-	-
12/04/07	154,400	1,709,796	20	-	-	-	-	-	-	-	-	-	-

**TABLE 1**  
**GROUNDWATER REMEDIATION SYSTEM MONITORING PROGRAM**  
 Thrifty Oil Co. Station No 049, OAKLAND, CA

Date	Totalizer (gallons)	Total/Cum- Discharge (gallons)	Flow (gal/day)	OUTLET / EFFLUENT (ug/L)					INLET / INFLOW (ug/L)					
				TPH-g	B	T	E	X	TPH-g	B	T	E	X	MTBE
12/14/07	164,210	1,719,606	981	-	-	-	-	-	12,400	302	2,170	853	5,090	<1.9
12/21/07	167,300	1,722,696	441	-	-	-	-	-	-	-	-	-	-	-

<b>WD PERMIT LIMITS:</b>	<b>NE</b>	<b>5.0</b>	<b>5.0</b>	<b>5.0</b>	<b>5.0</b>
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**Note:**

< = less than laboratory detection level indicated

TPH is analyzed by EPA Method 8015 M

- = no sample / not analyzed

BTEX is analyzed by EPA Method 8021 or 8260

NE = Permit Limit not established

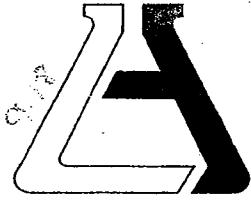
\*MTBE by 8021/8260

Total Hydrocarbons Removed = From 4/8/91 to 2/10/92, the influent TPHg is assumed to be 47,000 (3/9/92)

In February 2000, the total cumulative discharge amount was corrected to reflect all system maintenance and flowmeter changeouts since the startup of the system.

The total number may be different from previous versions of this table.

## ***APPENDIX A***



**ASSOCIATED LABORATORIES**  
806 North Batavia - Orange, California 92868 - 714/771-6900

FAX 714/538-1209

CLIENT Thrifty Oil Company (8871)

LAB REQUEST 196138 ✓

ATTN: Jeff Suryakusuma

13116 Imperial Hwy.

P.O. Box 2128

Santa Fe Springs, CA 90670

REPORTED 08/29/2007

PROJECT Station #049  
3400 San Pablo Ave., Oakland

RECEIVED 08/22/2007

SUBMITTER Client

COMMENTS

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods as indicated on the report. This cover letter is an integral part of the final report.

Order No.

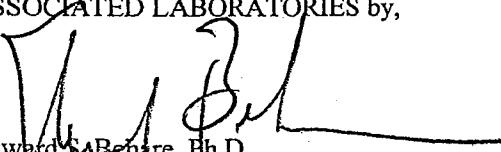
826282  
826283  
826284

Client Sample Identification

TOC#049 Int. 1  
TOC#049 Int. 2  
Laboratory Method Blank

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

  
Edward S. Benare, Ph.D.  
Vice President

*NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.*

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TESTING & CONSULTING  
Chemical  
Microbiological  
Environmental

Order #: 826282  
Matrix: WATER

Client Sample ID: TOC#049 Int. 1  
Date Sampled: 08/21/2007 Time Sampled: 11:20

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
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**8260B BTEX/MTBE Only**

Benzene	ND	1	1	0.18	ug/L	08/24/07 RP	
Di-isopropyl ether (DIPE)	ND	1	1.0	0.20	ug/L	08/24/07 RP	
Ethyl benzene	ND	1	5	0.21	ug/L	08/24/07 RP	
Ethyl-tertbutylether (ETBE)	ND	1	1.0	0.23	ug/L	08/24/07 RP	
Methyl-tert-butylether (MTBE)	4.9	1	1	0.19	ug/L	08/24/07 RP	
Tert-amylmethylether (TAME)	ND	1	1.0	0.19	ug/L	08/24/07 RP	
Tertiary butyl alcohol (TBA)	ND	1	10	10	ug/L	08/24/07 RP	
Toluene	1.2	J	1	5	0.24	ug/L	08/24/07 RP
Xylenes, total	9.6		1	5	0.45	ug/L	08/24/07 RP

**Surrogates**

		Units	Control Limits
Surr1 - Dibromofluoromethane	100	%	70 - 130
Surr2 - 1,2-Dichloroethane-d4	122	%	70 - 130
Surr3 - Toluene-d8	94	%	70 - 130
Surr4 - p-Bromofluorobenzene	98	%	70 - 130

**8015B - Gasoline**

Gasoline	83	1	50	5.6	ug/L	08/24/07 LT
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**Surrogates**

		Units	Control Limits
a,a,a-Trifluorotoluene	119	%	55 - 200

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor  
ND = Not detected below indicated MDL, J=Trace



Order #: 826283  
Matrix: WATER

Cler Sample ID: TOC#049 Int. 2  
Date Sampled: 08/21/2007 Time Sampled: 11:30

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8260B BTEX/MTBE Only</b>						
Benzene	ND	1	1	0.18	ug/L	08/26/07 RP
Di-isopropyl ether (DIPE)	ND	1	1.0	0.20	ug/L	08/26/07 RP
Ethyl benzene	ND	1	5	0.21	ug/L	08/26/07 RP
Ethyl-tertbutylether (ETBE)	ND	1	1.0	0.23	ug/L	08/26/07 RP
Methyl-tert-butylether (MTBE)	42	1	1	0.19	ug/L	08/26/07 RP
Tert-amylmethylether (TAME)	2.6	1	1.0	0.19	ug/L	08/26/07 RP
Tertiary butyl alcohol (TBA)	ND	1	10	10	ug/L	08/26/07 RP
Toluene	13	1	5	0.24	ug/L	08/26/07 RP
Xylenes, total	118	1	5	0.45	ug/L	08/26/07 RP
<b>Surrogates</b>						
Surr1 - Dibromofluoromethane	105			%	70 - 130	
Surr2 - 1,2-Dichloroethane-d4	112			%	70 - 130	
Surr3 - Toluene-d8	102			%	70 - 130	
Surr4 - p-Bromofluorobenzene	107			%	70 - 130	
<b>8015B - Gasoline</b>						
Gasoline	620	1	50	5.6	ug/L	08/24/07 LT
<b>Surrogates</b>						
a,a,a-Trifluorotoluene	132			%	55 - 200	

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor  
ND = Not detected below indicated MDL, J=Trace



Order #: 826284

Client Sample ID: Laboratory Method Blank

Matrix: WATER

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
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**8260B BTEX/MTBE Only**

Benzene	ND	1	1	0.18	ug/L	08/24/07 RP
Di-isopropyl ether (DIPE)	ND	1	1.0	0.20	ug/L	08/24/07 RP
Ethyl benzene	ND	1	5	0.21	ug/L	08/24/07 RP
Ethyl-tertbutylether (ETBE)	ND	1	1.0	0.23	ug/L	08/24/07 RP
Methyl-tert-butylether (MTBE)	ND	1	1	0.19	ug/L	08/24/07 RP
Tert-amylmethylether (TAME)	ND	1	1.0	0.19	ug/L	08/24/07 RP
Tertiary butyl alcohol (TBA)	ND	1	10	10	ug/L	08/24/07 RP
Toluene	ND	1	5	0.24	ug/L	08/24/07 RP
Xylenes, total	ND	1	5	0.45	ug/L	08/24/07 RP

**Surrogates**

		Units	Control Limits
Surr1 - Dibromofluoromethane	93	%	70 - 130
Surr2 - 1,2-Dichloroethane-d4	114	%	70 - 130
Surr3 - Toluene-d8	94	%	70 - 130
Surr4 - p-Bromofluorobenzene	93	%	70 - 130

**8015B - Gasoline**

Gasoline	ND	1	50	5.6	ug/L	08/23/07 LT
Surrogates				Units	Control Limits	
a,a,a-Trifluorotoluene	109			%	55 - 200	

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor  
 ND = Not detected below indicated MDL, J=Trace



**ASSOCIATED LABORATORIES  
LCS REPORT FORM**

QC Sample: G1-LCS&LCSD

Matrix: WATER

Prep. Date: August 23, 2007

Analysis Date 8/23/07-8/24/07

Lab ID#'s in Batch: LR 195920 , 195887 , 196138 , 196059 , 196060 , 196156 .

**LAB CONTROLLED SPIKE / LAB CONTROLLED DUPLICATE RESULT**

Reporting Units =  $\mu\text{g/L}$

Test	Method	Method Blank	Spike Added	LCS Spike	LCSD Spk. Dup	%Rec LCS	%Rec LCSD	RPD
TPH	8015M-G	ND	500	432	448	86	90	4

\* Outside QC Limits

ND = Not Detected

LCS Result = Lab Control Sample Result

%REC-LCS & LCSD = Percent Recovery of LCS Spike & LCS Spike Duplicate

RPD = Relative Percent Difference of LCS Spike and LCS Spike Duplicate

%REC LIMITS = 70 - 130

RPD LIMITS = 30

**SURROGATE RECOVERY**

Sample No.	AAA-TFT
QC Limit	55-200
Method Blank	109
LCS	177
LCSD	178

AAA-TFT = *a,a,a*-Trifluorotoluene

## ASSOCIATED LABORATORIES

## QA / QC EPA Methods 8260 - GCMS # 3

Sample ID: MS/MSD Water Sample 196060-943

Date Prepared: August 23, 2007

Date Analyzed: August 24, 2007

Sample Matrix: Water

Units: µg/L

Lab ID#'s in Batch: 196150, 196060, 196081, 196138, 195857

Compound	Sample Conc.	Spike Added	Spike Res	Dup Res	Spike % Rec	Dup % Rec	RPD	QC RPD	Limits % Rec
1,1-Dichloroethene	0.00	50.0	59.50	58.60	119	117	2	22	59 - 172
MTBE	0.00	50.0	57.90	56.60	116	113	2	24	62 - 137
Benzene	0.00	50.0	45.00	44.30	90	89	2	24	62 - 137
Trichloroethene	0.00	50.0	47.70	46.70	95	93	2	21	66 - 142
Toluene	0.00	50.0	44.80	43.90	90	88	2	21	59 - 139
Chlorobenzene	0.00	50.0	46.60	45.50	93	91	2	21	60 - 133

Sample ID: LCS

Compound	Spike Added	Spike Res	Spike % Rec	Limits % Rec
1,1-Dichloroethene	50.0	52.40	105	59 - 172
MTBE	50.0	43.00	86	62 - 137
Benzene	50.0	43.70	87	62 - 137
Trichloroethene	50.0	47.40	95	66 - 142
Toluene	50.0	47.00	94	59 - 139
Chlorobenzene	50.0	46.10	92	60 - 133

\*=Outside QC limits due to high concentration in sample

If Sample Result &gt; 4 times Spike Added, then "NC"

## Surrogate Recovery

Compound	MB 1 % Rec	MB 2 % Rec		MS % Rec	MSD % Rec		LCS % Rec	Limits % Rec
Dibromofluoromethane	84	93		95	91		83	70 - 135
1,2-Dichloroethane-d4	109	114		120	114		110	70 - 135
Toluene-d8	96	94		95	93		95	70 - 135
p-Bromofluorobenzene	94	93		100	101		104	70 - 135

ASSOCIATED LABORATORIES

**QA / QC EPA Methods 8260 - GCMS # 4**

Sample ID: **MS/MSD Water Sample** 196223-751

Date Prepared: August 24, 2007

Date Analyzed: August 26, 2007

Sample Matrix: Water

Units:  $\mu\text{g/L}$

Lab ID#'s in Batch: 195750, 195857, 195862, 196060, 196138, 196059, 196182, 196223, 196116, 196263

Compound	Sample Conc.	Spike Added	Spike Res	Dup Res	Spike % Rec	Dup % Rec	RPD	QC RPD	Limits % Rec
1,1-Dichloroethene	0.00	50.0	55.50	57.50	111	115	4	22	59 - 172
MTBE*	141.00	50.0	233.00	240.00	184	198	3	24	62 - 137
Benzene	39.90	50.0	80.60	81.80	81	84	1	24	62 - 137
Trichloroethene	0.00	50.0	45.90	50.50	92	101	10	21	66 - 142
Toluene	4.70	50.0	49.60	52.90	90	96	6	21	59 - 139
Chlorobenzene	0.00	50.0	44.70	45.30	89	91	1	21	60 - 133

Sample ID: **LCS**

Compound	Spike Added	Spike Res	Spike % Rec	Limits % Rec
1,1-Dichloroethene	50.0	49.50	99	59 - 172
MTBE	50.0	35.40	71	62 - 137
Benzene	50.0	44.40	89	62 - 137
Trichloroethene	50.0	44.30	89	66 - 142
Toluene	50.0	45.80	92	59 - 139
Chlorobenzene	50.0	44.10	88	60 - 133

\*=Outside QC limits due to high concentration in sample

If Sample Result > 4 times Spike Added, then "NC"

**Surrogate Recovery**

Compound	MB 1 % Rec	MB 2 % Rec		MS % Rec	MSD % Rec		LCS % Rec	Limits % Rec
Dibromofluoromethane	104	108		106	110		102	70 - 135
1,2-Dichloroethane-d4	111	115		118	122		107	70 - 135
Toluene-d8	103	106		100	104		104	70 - 135
p-Bromofluorobenzene	98	99		92	102		96	70 - 135

# Chain of Custody Record

ASSOCIATED LABORATORIES

806 North Batavia • Orange, CA 92868  
Phone: (714) 771-6900 • Fax: (714) 538-1209

196138



Company **THRIFTY OIL CO** Phone **562/921-8581**  
Project Manager **JEFF GUYAKUSUMA** Fax **562(921-7540)**  
Project Name **SYSTEM WATER SAMPLES** Project # **049**  
Site Name and Address **3600 SAN PABLO AVE**  
**OAKLAND, CA 94612**

A.L. Job No.

Page **1** of **1**

							Analysis Requested			Test Instructions & Comments	
Sample ID	Lab ID	Date	Time	Matrix	Container Number/Size	Pres.	TRIPY (2015ml)	BSDEXY (2022ml)	OXYGENATED		
1 INT. 1		08-21-07	11:20	H2O	4-VDA	HCL	X	X	X		
2 INT. 2		08-21-07	11:30	H2O	4-VDA	HCL	X	X	X		
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											

## Sample Receipt - To Be Filled By Laboratory

Total Number of Containers	Properly Cooled Y/N/NA	Relinquished by Sampler: <i>E.M.C.</i>	1.	Relinquished by	2.	Relinquished by	3.		
Custody Seals Y/N/NA	Samples Intact Y/N/NA	Signature: <i>G. S. O.</i>		Signature:		Signature:			
Received in Good Condition Y/N	Samples Accepted Y/N	Printed Name: <i>Jerry R.</i>		Printed Name:		Printed Name:			
		Date: <i>08.21.07</i>	Time: <i>15:30</i>	Date:	Time:	Date:	Time:		
Turn Around Time				Received By: <i>G.S.O.</i>	1.	Received By: <i>FSL</i>	2.	Received By: <i>3.</i>	
<input checked="" type="checkbox"/> Normal	<input type="checkbox"/> Rush	<input type="checkbox"/> Same Day	<input type="checkbox"/> 48 hrs.	Signature:		Signature:		Signature:	
		<input type="checkbox"/> 24 hrs.	<input type="checkbox"/> 72 hrs.	Printed Name:	Printed Name:	Printed Name:	Printed Name:	Printed Name:	
				Date:	Time:	Date: <i>8/22/07</i>	Time: <i>10:15</i>	Date:	Time:



**ASSOCIATED LABORATORIES**  
806 North Batavia - Orange, California 92868 - 714/771-6900

FAX 714/538-1209

CLIENT Thrifty Oil Company (8871)

LAB REQUEST 196139

ATTN: Jeff Suryakusuma  
13116 Imperial Hwy.  
P.O. Box 2128  
Santa Fe Springs, CA 90670

REPORTED 08/30/2007

PROJECT Station #049  
3400 San Pablo Ave., Oakland

SUBMITTER Client

COMMENTS

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods as indicated on the report. This cover letter is an integral part of the final report.

Order No.

826285

826286

Client Sample Identification

TOC# 049 Outlet PSP 1

Laboratory Method Blank

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,



Edward S. Behare, Ph.D.  
Vice President

*NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.*

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TESTING & CONSULTING  
Chemical  
Microbiological  
Environmental

Order #: 826285  
Matrix: WATER

Client Sample ID: TOC# 049 Outlet PSP 1  
Date Sampled: 08/21/2007 Time Sampled: 11:00

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8021B BTEX</b>						
Benzene	ND	1	0.3	0.15	ug/L	08/24/07 LT
Ethyl benzene	ND	1	0.3	0.09	ug/L	08/24/07 LT
Toluene	ND	1	0.3	0.12	ug/L	08/24/07 LT
Xylene (total)	ND	1	0.6	0.26	ug/L	08/24/07 LT
<b>Surrogates</b>						
Trifluorotoluene (sur)	117				%	55 - 155
<b>8015B - Gasoline</b>						
Gasoline	54	1	50	5.6	ug/L	08/24/07 LT
<b>Surrogates</b>						
a,a,a-Trifluorotoluene	117				%	55 - 200

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor  
ND = Not detected below indicated MDL, J=Trace



Order #: 826286  
Matrix: WATER

Client Sample ID: Laboratory Method Blank

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8021B BTEX</b>						
Benzene	ND	1	0.3	0.15	ug/L	08/23/07 LT
Ethyl benzene	ND	1	0.3	0.09	ug/L	08/23/07 LT
Toluene	ND	1	0.3	0.12	ug/L	08/23/07 LT
Xylene (total)	ND	1	0.6	0.26	ug/L	08/23/07 LT
<b>Surrogates</b>						<b>Units</b>
Trifluorotoluene (sur)	109				%	55 - 155
<b>8015B - Gasoline</b>						
Gasoline	ND	1	50	5.6	ug/L	08/23/07 LT
<b>Surrogates</b>						<b>Units</b>
a,a,a-Trifluorotoluene	109				%	55 - 200

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor  
ND = Not detected below indicated MDL, J=Trace



**ASSOCIATED LABORATORIES  
LCS REPORT FORM**

QC Sample: G1-LCS&LCSD

Matrix: WATER

Prep. Date: August 23, 2007

Analysis Date 8/23/07-8/24/07

Lab ID#'s in Batch: LR 195920 , 195887 , 196138 , 196139, 196059 , 196060 , 196156 .

**LAB CONTROLLED SPIKE / LAB CONTROLLED DUPLICATE RESULT**

Reporting Units =  $\mu\text{g/L}$

Test	Method	Method Blank	Spike Added	LCS Spike	LCSD Spk. Dup	%Rec LCS	%Rec LCSD	RPD
TPH	8015M-G	ND	500	432	448	86	90	4

\* Outside QC Limits

ND = Not Detected

LCS Result = Lab Control Sample Result

%REC-LCS & LCSD = Percent Recovery of LCS Spike & LCS Spike Duplicate

RPD = Relative Percent Difference of LCS Spike and LCS Spike Duplicate

%REC LIMITS = 70 - 130
------------------------

RPD LIMITS = 30
-----------------

**SURROGATE RECOVERY**

Sample No.	AAA-TFT
QC Limit	55-200
Method Blank	109
LCS	177
LCSD	178

AAA-TFT = *a,a,a*-Trifluorotoluene

**ASSOCIATED LABORATORIES**  
**LCS REPORT FORM**

QC Sample: LCS/LCSD

Matrix: WATER

Prep. Date: Aug 23-07

Analysis Date: 8/23/07-8/24/07

Lab ID#'s in Batch: LR 196139 , 195920 , 196224 .

REPORTING UNITS =  $\mu\text{g}/\text{L}$

**LAB CONTROLLED SPIKE / LAB CONTROLLED DUPLICATE RESULT**

Test	Method	Sample Result	Spike Added	Matrix LCS	Matrix LCSD	%Rec LCS	%Rec LCSD	RPD
Benzene	8021	ND	20	21.5	20.7	108	104	4
Toluene	8021	ND	20	21.6	20.7	108	104	4
Ethylbenzene	8021	ND	20	22.5	22.2	113	111	1
Xylenes	8021	ND	60	73.0	70.2	122	117	4

ND = Not Detected

RPD = Relative Percent Difference of Matrix LCS and Matrix LCSD

%REC-LCS & LCSD = Percent Recovery of LCS & LCSD

**%REC LIMITS = 70 - 130**

**RPD LIMITS = 30**

**SURROGATE RECOVERY**

Sample No.	AAA-TFT
QC Limit	55-200
Method Blank	109
LCS	124
LCSD	123

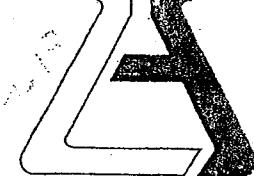
AAA-TFT = *a,a,a*-Trifluorotoluene

## Chain of Custody Record



Company	THIRTY OIL CO.		Phone	(562)921-3581		A.L. Job No.	196139		Page <u>1</u> of <u>1</u>
Project Manager			Fax	(562)921-7510		Analysis Requested			Test Instructions & Comments
Project Name	SYSTEM WATER SAMPLING		Project #	049					
Site Name and Address	3400 SAN PABLO AVE OAKLAND CA 94612								
Sample ID	Lab ID	Date	Time	Matrix	Container Number/Size	Pres.	TPHg (8015M)	STEX (8021A)	
1 OUTLET PSP		08-21-07	11:00	H <sub>2</sub> O	4-VOA	HCL	X	X	GRAB SAMPLE
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									

Sample Receipt - To Be Filled By Laboratory				Relinquished by <u>G. M. C.</u> 1.	Relinquished by _____ 2.	Relinquished by _____ 3.
Total Number of Containers		Properly Cooled Y / N / NA		Signature: <u>G. M. C.</u>	Signature:	Signature:
Custody Seals Y / N / NA		Samples Intact Y / N / NA		Printed Name: <u>JERIBET P-</u>	Printed Name:	Printed Name:
Received in Good Condition Y / N		Samples Accepted Y / N		Date: <u>08.21.07</u> Time: <u>15:30</u>	Date: _____ Time: _____	Date: _____ Time: _____
Turn Around Time				Received By: <u>G. S. O.</u> 1.	Received By: <u>JSL</u> 2.	Received By: _____ 3.
<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush <input type="checkbox"/> Same Day <input type="checkbox"/> 48 hrs. <input type="checkbox"/> 24 hrs. <input type="checkbox"/> 72 hrs.				Signature: _____	Signature: <u>JSL</u>	Signature: _____
				Printed Name: _____	Printed Name: <u>Joe Hunt</u>	Printed Name: _____
				Date: _____ Time: _____	Date: <u>8/22</u> Time: <u>10:15</u>	Date: _____ Time: _____



**ASSOCIATED LABORATORIES**  
806 North Batavia - Orange, California 92868 - 714/771-6900

FAX 714/538-1209

CLIENT Thrifty Oil Company (8871) LAB REQUEST 192560 ✓  
ATTN: Jeff Suryakusuma  
13116 Imperial Hwy.  
P.O. Box 2128  
Santa Fe Springs, CA 90670 REPORTED 07/02/2007  
RECEIVED 06/22/2007

PROJECT Station #049 ✓  
3400 San Pablo Ave., Oakland

SUBMITTER Client

COMMENTS

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods as indicated on the report. This cover letter is an integral part of the final report.

Order No.

809163  
809164  
809165  
809166

Client Sample Identification

TOC #049 Int-1  
TOC #049 Int-2  
TOC #049 Inlet  
Laboratory Method Blank

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Edward S. Beharre, Ph.D.  
Vice President

*NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.*

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TESTING & CONSULTING  
Chemical  
Microbiological  
Environmental

Order #: 809163  
Matrix: WATER

Client Sample ID: TOC #049 Int-1  
Date Sampled: 06/21/2007 Time Sampled: 13:00

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
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**8260B BTEX/MTBE Only**

Benzene	ND	1	1	0.18	ug/L	06/28/07 RP
Di-isopropyl ether (DIPE)	ND	1	1	0.20	ug/L	06/28/07 RP
Ethyl benzene	ND	1	5	0.21	ug/L	06/28/07 RP
Ethyl-tertbutylether (ETBE)	ND	1	1	0.23	ug/L	06/28/07 RP
Methyl-tert-butylether (MTBE)	ND	1	1	0.19	ug/L	06/28/07 RP
Tert-amylmethylether (TAME)	ND	1	1	0.19	ug/L	06/28/07 RP
Tertiary butyl alcohol (TBA)	ND	1	10	10	ug/L	06/28/07 RP
Toluene	ND	1	5	0.24	ug/L	06/28/07 RP
Xylenes, total	ND	1	5	0.45	ug/L	06/28/07 RP

**Surrogates**

		Units	Control Limits
Surr1 - Dibromofluoromethane	112	%	70 - 130
Surr2 - 1,2-Dichloroethane-d4	114	%	70 - 130
Surr3 - Toluene-d8	98	%	70 - 130
Surr4 - p-Bromofluorobenzene	91	%	70 - 130

**8015B - Gasoline**

Gasoline	ND	1	50	5.6	ug/L	06/27/07 LT
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**Surrogates**

		Units	Control Limits
a,a,a-Trifluorotoluene	100	%	55 - 200

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor  
ND = Not detected below indicated MDL, J=Trace



Order #: 809164  
Matrix: WATER

Client Sample ID: TOC #049 Int-2  
Date Submited: 06/21/2007 Time Sampled: 13:10

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
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**8260B BTEX/MTBE Only**

Benzene	543	100	100.0	0.18	ug/L	07/05/07 RP
Di-isopropyl ether (DIPE)	ND	10	10.0	0.20	ug/L	06/28/07 RP
Ethyl benzene	1570	100	500.0	0.21	ug/L	07/05/07 RP
Ethyl-tertbutylether (ETBE)	ND	10	10.0	0.23	ug/L	06/28/07 RP
Methyl-tert-butylether (MTBE)	52	10	10.0	0.19	ug/L	06/28/07 RP
Tert-amylmethylether (TAME)	ND	10	10.0	0.19	ug/L	06/28/07 RP
Tertiary butyl alcohol (TBA)	ND	10	100.0	10	ug/L	06/28/07 RP
Toluene	11300	100	500.0	0.24	ug/L	07/05/07 RP
Xylenes, total	7230	100	500.0	0.45	ug/L	07/05/07 RP

**Surrogates**

		Units	Control Limits
Surr1 - Dibromofluoromethane	104	%	70 - 130
Surr2 - 1,2-Dichloroethane-d4	111	%	70 - 130
Surr3 - Toluene-d8	102	%	70 - 130
Surr4 - p-Bromofluorobenzene	93	%	70 - 130

**8015B - Gasoline**

Gasoline	49800	40	2000.0	5.6	ug/L	07/05/07 LT
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**Surrogates**

		Units	Control Limits
a,a,a-Trifluorotoluene	110	%	55 - 200

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor  
ND = Not detected below indicated MDL, J=Trace



Order #: 809165  
Matrix: WATER

Client Sample ID: TOC #049 Inlet  
Date Sampled: 06/21/2007 Time Sampled: 13:20

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8260B BTEX/MTBE Only</b>						
Benzene	3330	100	100.0	0.18	ug/L	06/28/07 RP
Di-isopropyl ether (DIPE)	ND	100	100.0	0.20	ug/L	06/28/07 RP
Ethyl benzene	7250	100	500.0	0.21	ug/L	06/28/07 RP
Ethyl-tertbutylether (ETBE)	ND	100	100.0	0.23	ug/L	06/28/07 RP
Methyl-tert-butylether (MTBE)	ND	100	100.0	0.19	ug/L	06/28/07 RP
Tert-amylmethylether (TAME)	ND	100	100.0	0.19	ug/L	06/28/07 RP
Tertiary butyl alcohol (TBA)	ND	100	1000.0	10	ug/L	06/28/07 RP
Toluene	49400	200	1000.0	0.24	ug/L	06/29/07 RP
Xylenes, total	39700	100	500.0	0.45	ug/L	06/28/07 RP
<b>Surrogates</b>						<b>Units</b>
Surr1 - Dibromofluoromethane	109				%	70 - 130
Surr2 - 1,2-Dichloroethane-d4	111				%	70 - 130
Surr3 - Toluene-d8	102				%	70 - 130
Surr4 - p-Bromofluorobenzene	92				%	70 - 130
<b>8015B - Gasoline</b>						
Gasoline	416000	100	5000.0	5.6	ug/L	06/27/07 LT
<b>Surrogates</b>						<b>Units</b>
a,a,a-Trifluorotoluene	100				%	55 - 200

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor  
ND = Not detected below indicated MDL, J=Trace



Order #: 809166  
Matrix: WATER

Client Sample ID: Laboratory Method Blank

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
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**8260B BTEX/MTBE Only**

Benzene	ND	1	1	0.18	ug/L	06/28/07 RP
Di-isopropyl ether (DIPE)	ND	1	1	0.20	ug/L	06/28/07 RP
Ethyl benzene	ND	1	5	0.21	ug/L	06/28/07 RP
Ethyl-tertbutylether (ETBE)	ND	1	1	0.23	ug/L	06/28/07 RP
Methyl-tert-butylether (MTBE)	ND	1	1	0.19	ug/L	06/28/07 RP
Tert-amylmethylether (TAME)	ND	1	1	0.19	ug/L	06/28/07 RP
Tertiary butyl alcohol (TBA)	ND	1	10	10	ug/L	06/28/07 RP
Toluene	ND	1	5	0.24	ug/L	06/28/07 RP
Xylenes, total	ND	1	5	0.45	ug/L	06/28/07 RP

**Surrogates**

		Units	Control Limits
Surr1 - Dibromofluoromethane	111	%	70 - 130
Surr2 - 1,2-Dichloroethane-d4	111	%	70 - 130
Surr3 - Toluene-d8	101	%	70 - 130
Surr4 - p-Bromofluorobenzene	95	%	70 - 130

**8015B - Gasoline**

Gasoline	ND	1	50	5.6	ug/L	06/26/07 LT
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**Surrogates**

		Units	Control Limits
a,a,a-Trifluorotoluene	121	%	55 - 200

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor  
ND = Not detected below indicated MDL, J=Trace



**ASSOCIATED LABORATORIES  
LCS REPORT FORM**

QC Sample: G15-LCS&LCSD

Matrix: WATER

Prep. Date: June 26, 2007

Analysis Date 6/26/07-6/27/07

Lab ID#'s in Batch: 192650 , 192679 , 192560 , 192690 , 192661 , 192680 .

**LAB CONTROLLED SPIKE / LAB CONTROLLED DUPLICATE RESULT**

Reporting Units =  $\mu\text{g/L}$

Test	Method	Method Blank	Spike Added	LCS Spike	LCSD Spk. Dup	%Rec LCS	%Rec LCSD	RPD
TPH	8015M-G	ND	500	576	571	115	114	1

ND = Not Detected

LCS Result = Lab Control Sample Result

%REC LIMITS = 70 - 130
------------------------

%REC-LCS & LCSD = Percent Recovery of LCS Spike & LCS Spike Duplicate

RPD LIMITS = 30
-----------------

RPD = Relative Percent Difference of LCS Spike and LCS Spike Duplicate

**SURROGATE RECOVERY**

Sample No.	AAA-TFT
QC Limit	55-200
Method Blank	121
LCS	200
LCSD	195

AAA-TFT = *a,a,a*-Trifluorotoluene

# ASSOCIATED LABORATORIES

## QA / QC EPA Methods 8260 GCMS # 4

Sample ID: LCS/LCSD Water Sample

Date Prepared: June 29, 2007

Date Analyzed: June 29, 2007

Sample Matrix: Water

Units: µg/L

Lab ID#'s in Batch: 192807, 192560

Compound	True Value	LCS Res	LCSD Res	LCS % Rec	LCSD % Rec	RPD	QC RPD	Limits % Rec
1,1-Dichloroethene	50.0	53.10	56.80	106	114	7	22	59 - 172
MTBE	50.0	44.20	49.70	88	99	12	24	62 - 137
Benzene	50.0	43.80	50.20	88	100	14	24	62 - 137
Trichloroethene	50.0	43.30	46.50	87	93	7	21	66 - 142
Toluene	50.0	43.70	45.30	87	91	4	21	59 - 139
Chlorobenzene	50.0	40.50	43.70	81	87	8	21	60 - 133

## Surrogate Recovery

Compound	MB1 % Rec	MB 2 % Rec		LCS % Rec	LCSD % Rec	Limits % Rec
Dibromofluoromethane	107			104	108	70 - 135
1,2-Dichloroethane-d4	107			106	116	70 - 135
Toluene-d8	99			101	99	70 - 135
p-Bromofluorobenzene	94			91	90	70 - 135

**ASSOCIATED LABORATORIES**

**QA / QC EPA Methods 8260 - GCMS # 4**

Sample ID: **MS/MSD Water Sample** 192560-163

Date Prepared: June 28, 2007

Date Analyzed: June 28, 2007

Sample Matrix: Water

Units:  $\mu\text{g/L}$

Lab ID#'s in Batch: 192816, 192560, 192708, 192807, 192743

Compound	Sample Conc.	Spike Added	Spike Res	Dup Res	Spike % Rec	Dup % Rec	RPD	QC RPD	Limits % Rec
1,1-Dichloroethene	0.00	50.0	56.20	60.10	112	120	7	22	59 - 172
MTBE	0.00	50.0	52.20	48.10	104	96	8	24	62 - 137
Benzene	0.00	50.0	51.10	51.80	102	104	1	24	62 - 137
Trichloroethene	0.00	50.0	48.90	52.70	98	105	7	21	66 - 142
Toluene	0.00	50.0	48.30	50.90	97	102	5	21	59 - 139
Chlorobenzene	0.00	50.0	47.00	47.40	94	95	1	21	60 - 133

Sample ID: **LCS**

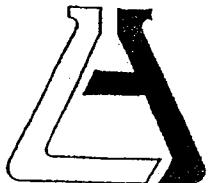
Compound	Spike Added	Spike Res	Spike % Rec	Limits % Rec
1,1-Dichloroethene	50.0	62.10	124	59 - 172
MTBE	50.0	53.50	107	62 - 137
Benzene	50.0	49.60	99	62 - 137
Trichloroethene	50.0	51.90	104	66 - 142
Toluene	50.0	49.70	99	59 - 139
Chlorobenzene	50.0	45.50	91	60 - 133

\*=Outside QC limits due to high concentration in sample

If Sample Result > 4 times Spike Added, then "NC"

**Surrogate Recovery**

Compound	MB 1 % Rec	MB 2 % Rec		MS % Rec	MSD % Rec		LCS % Rec	Limits % Rec
Dibromofluoromethane	111	112		109	119		113	70 - 135
1,2-Dichloroethane-d4	111	116		116	118		113	70 - 135
Toluene-d8	101	101		101	102		102	70 - 135
p-Bromofluorobenzene	95	96		88	89		95	70 - 135



## ASSOCIATED LABORATORIES

806 North Batavia - Orange, California 92868 - 714-771-6900

FAX 714-538-1209

### SAMPLE ACCEPTANCE CHECKLIST

#### Section 1

Client: HIV/Flu  
Date Received: 6-22-07  
Sample(s) received in cooler: Yes

Project: \_\_\_\_\_

No (Skip Section 2)

#### Section 2

Was the cooler packed with:  Ice  Ice Packs  Bubble Wrap  Styrofoam  
 Paper  None  Other \_\_\_\_\_

Cooler or box temperature: \_\_\_\_\_

(Acceptance range is 2 to 6 Deg. C.) 3.4

#### Section 3

	YES	NO	N/A
Was a COC received?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were custody seals present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If Yes - were they intact?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were all samples sealed in plastic bags?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did all samples arrive intact? If no, indicate below.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did all bottle labels agree with COC? (ID, dates and times)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were correct containers used for the tests required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Was a sufficient amount of sample sent for tests indicated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No head space in VOA vials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Were the correct preservatives used?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Were the samples scanned for presence of radioactivity?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Was total residual chlorine measured (Fish Bioassay samples only)? *	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

\*: If the answer is no, please inform Fish Bioassay Dept. immediately.

#### Section 4

Explanations/Comments


#### Section 5

Was Project Manager notified of discrepancies: Y / N N/A

Completed By: M. Shewell

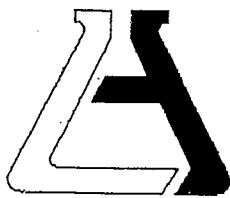
Date: 6-22-07

# Chain of Custody Record

Company	THIRTY OIL CO.		Phone	(562) 922-8581	A.L. Job No.	192560 ✓			
Project Manager	JOSH DURRAT-KOSUMA		Fax	(562) 922-7540					
Project Name	SYSTEM WATER SAMPLING		Project #						
Site Name and Address	3400 SULY PABLO AVE		OAKLAND, CA 94622						

Sample ID	Lab ID	Date	Time	Matrix	Container Number/Size	Pres.	Analysis Requested			Test Instructions & Comments
1 INT-1		06.21.07	13:00	H <sub>2</sub> O	4-VOA	HCl	X	X	X	ANALYSIS REQUIRED
2 INT-2		06.21.07	13:10	H <sub>2</sub> O	4-VOA	HCl	X	X	X	POLY COMPOUNDS OF POLY(ALKYL AROMATIC)
3 INT-3		06.21.07	13:20	H <sub>2</sub> O	4-VOA	HCl	X	X	X	ALKYL GAS ORGANIC BY EPA METHOD 8260B
4										1-TETRAHYDROQUATANOL
5										2-MTPR
6										3-DPPR
7										4-PGPR
8										5-DAMP
9										
10										
11										
12										
13										
14										
15										

Sample Receipt - To Be Filled By Laboratory			Relinquished by Sampler:	EMC	1.	Relinquished by	2.	Relinquished by	3.
Total Number of Containers		Properly Cooled Y / N / NA	Signature:	<i>[Signature]</i>		Signature:		Signature:	
Custody Seals Y / N / NA		Samples Intact Y / N / NA	Printed Name:	<i>[Printed Name]</i>		Printed Name:		Printed Name:	
Received in Good Condition Y / N		Samples Accepted Y / N	Date:	<i>06.21.07</i>	Time:	<i>16:00</i>	Date:	Time:	Date:
Turn Around Time			Received By:	G.S.O.	1.	Received By:	2.	Received By:	3.
<input checked="" type="checkbox"/> Normal	<input type="checkbox"/> Rush	<input type="checkbox"/> Same Day	Signature:	<i>[Signature]</i>		Signature:		Signature:	
		<input type="checkbox"/> 48 hrs.	Printed Name:	<i>[Printed Name]</i>		Printed Name:		Printed Name:	
		<input type="checkbox"/> 72 hrs.	Date:	<i>6/22/07</i>	Time:	<i>946</i>	Date:	Time:	Date:



**ASSOCIATED LABORATORIES**  
806 North Batavia - Orange, California 92868 - 714/771-6900

1-82471

gs  
ST

DEC 04 2007  
SSHO49

ENVIRONMENTAL  
EX-74538-1209

CLIENT Thrifty Oil Company (8871)

ATTN: Jeff Suryakusuma  
13116 Imperial Hwy.  
P.O. Box 2128  
Santa Fe Springs, CA 90670

LAB REQUEST 201558

PROJECT Station #049  
3400 San Pablo Ave., Oakland

REPORTED 12/03/2007

SUBMITTER Client

RECEIVED 11/21/2007

#### COMMENTS

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods as indicated on the report. This cover letter is an integral part of the final report.

#### Order No.

850544  
850545

#### Client Sample Identification

TOC #049 Outlet PSP1  
Laboratory Method Blank

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Edward S. Benare, Ph.D.  
Vice President

*NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.*

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TESTING & CONSULTING  
Chemical  
Microbiological  
Environmental

Order #: 850544  
Matrix: WATER

Client Sample ID TOC #049 Outlet PSP1  
Date Sampled: 11/20/2007 Time Sampled: 13:00

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8021B BTEX</b>						
Benzene	ND	1	0.3	0.15	ug/L	11/28/07 LT
Ethyl benzene	ND	1	0.3	0.09	ug/L	11/28/07 LT
Toluene	ND	1	0.3	0.12	ug/L	11/28/07 LT
Xylene (total)	ND	1	0.6	0.26	ug/L	11/28/07 LT
<b>Surrogates</b>						
Trifluorotoluene (sur)	80			%		55 - 155
<b>8015B - Gasoline</b>						
Gasoline	ND	1	50	5.6	ug/L	11/28/07 LT
<b>Surrogates</b>						
a,a,a-Trifluorotoluene	80			%		55 - 200

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor  
ND = Not detected below indicated MDL, J=Trace



Order #: 850545  
Matrix: WATER

Client Sample ID: Laboratory Method Blank

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8021B BTEX</b>						
Benzene	ND	1	0.3	0.15	ug/L	11/28/07 LT
Ethyl benzene	ND	1	0.3	0.09	ug/L	11/28/07 LT
Toluene	ND	1	0.3	0.12	ug/L	11/28/07 LT
Xylene (total)	ND	1	0.6	0.26	ug/L	11/28/07 LT
<b>Surrogates</b>						
Trifluorotoluene (sur)	80				Units %	Control Limits 55 - 155
<b>8015B - Gasoline</b>						
Gasoline	ND	1	50	5.6	ug/L	11/28/07 LT
<b>Surrogates</b>						
a,a,a-Trifluorotoluene	80				Units %	Control Limits 55 - 200

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor  
ND = Not detected below indicated MDL, J=Trace

**ASSOCIATED LABORATORIES**

Analytical Results Report  
Lab Request 201558 results, page 2 of 2

A

**ASSOCIATED LABORATORIES**  
**LCS REPORT FORM**

QC Sample: G1-LCS&LCSD

Matrix: WATER

Prep. Date: November 28, 2007

Analysis Date 11/28/07-11/29/07

Lab ID#'s in Batch: 201556, 201558, 201560, 201722, 201554, 201540, 201694, 201710, 201562.

**LAB CONTROLLED SPIKE / LAB CONTROLLED DUPLICATE RESULT**

Reporting Units =  $\mu\text{g/L}$

Test	Method	Method Blank	Spike Added	LCS Spike	LCSD Spk. Dup	%Rec LCS	%Rec LCSD	RPD
TPH	8015M-G	ND	500	451	449	90	90	0

ND = Not Detected

LCS Result = Lab Control Sample Result

%REC-LCS & LCSD = Percent Recovery of LCS Spike & LCS Spike Duplicate

RPD = Relative Percent Difference of LCS Spike and LCS Spike Duplicate

**%REC LIMITS = 70 - 130**

**RPD LIMITS = 30**

**SURROGATE RECOVERY**

Sample No.	AAA-TFT
QC Limit	55-200
Method Blank	80
LCS	176
LCSD	171

AAA-TFT = *a,a,a*-Trifluorotoluene

**ASSOCIATED LABORATORIES**  
**LCS REPORT FORM**

QC Sample: LCS/LCSD  
 Matrix: WATER  
 Prep. Date: Nov 28-07  
 Analysis Date: 11/28/07-11/29/07  
 Lab ID#'s in Batch: 201542, 201556, 201558, 201560.

REPORTING UNITS =  $\mu\text{g}/\text{L}$

**LAB CONTROLLED SPIKE / LAB CONTROLLED DUPLICATE RESULT**

Test	Method	Sample Result	Spike Added	Matrix LCS	Matrix LCSD	%Rec LCS	%Rec LCSD	RPD
Benzene	8021	ND	20	16.7	16.8	84	84	1
Toluene	8021	ND	20	16.8	16.8	84	84	0
Ethylbenzene	8021	ND	20	16.6	16.7	83	84	1
Xylenes	8021	ND	60	52.0	51.1	87	85	2

ND = Not Detected

RPD = Relative Percent Difference of Matrix LCS and Matrix LCSD

%REC-LCS & LCSD = Percent Recovery of LCS & LCSD

**%REC LIMITS = 70 - 130**

**RPD LIMITS = 30**

**SURROGATE RECOVERY**

Sample No.	AAA-TFT
QC Limit	55-200
Method Blank	80
LCS	88
LCSD	89

AAA-TFT = *a,a,a*-Trifluorotoluene

# Chain of Custody Record

## ASSOCIATED LABORATORIES

806 North Batavia • Orange, CA 92868  
Phone: (714) 771-6900 • Fax: (714) 538-1209



Company	THREEY OIL CO.		Phone	(562) 921-3681		A.L. Job No.	201558		Page	1 of 1
Project Manager	JEFF SURI AKUSUMA		Fax	(562) 921-7560						
Project Name	SYSTEM WATER SAMPLING		Project #	049						
Site Name and Address	3400 SAN PABLO AVE OAKLAND, CA. 94612									
Sample ID	Lab ID	Date	Time	Matrix	Container Number/Size	Pres.	Analysis Requested	Test Instructions & Comments		
1 OUTLET PDR		11.20.07	13:00 H <sub>2</sub> O	4-VOA	HCl	X Y		PDRAB SAMPLER		
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										

Sample Receipt - To Be Filled By Laboratory			Relinquished by Sampler:	G.M.C.	Relinquished by	2.	Relinquished by	3.
Total Number of Containers	Properly Cooled Y / N / NA	Signature:	<i>[Signature]</i>	Signature:		Signature:		Signature:
Custody Seals Y / N / NA	Samples Intact Y / N / NA	Printed Name:	<i>SURIBAUMA P</i>	Printed Name:		Printed Name:		Printed Name:
Received in Good Condition Y / N	Samples Accepted Y / N	Date:	<i>11.20.07</i>	Time:	<i>16:00</i>	Date:	Time:	Date:
Turn Around Time			Received By:	G.S.O.	Received By:	<i>J.S. Lab</i>	Received By:	<i>J.S. Lab</i>
<input checked="" type="checkbox"/> Normal	<input type="checkbox"/> Rush	<input type="checkbox"/> Same Day	<input type="checkbox"/> 48 hrs.	<input type="checkbox"/> 72 hrs.	Signature:	<i>[Signature]</i>	Signature:	<i>[Signature]</i>
					Printed Name:	<i>[Signature]</i>	Printed Name:	<i>[Signature]</i>
					Date:	<i>11/21</i>	Time:	<i>10:30</i>



**ASSOCIATED LABORATORIES**  
806 North Batavia - Orange, California 92868 - 714/771-6900

1-82478

RECEIVED

DEC 05 2007 JS ST

SG#049

**ENVIRONMENTAL**  
FAX 714/538-1209

CLIENT Thrifty Oil Company (8871)

LAB REQUEST 201557

ATTN: Jeff Suryakusuma

13116 Imperial Hwy.

P.O. Box 2128

Santa Fe Springs, CA 90670

REPORTED 12/04/2007

PROJECT Station #049  
3400 San Pablo Ave., Oakland

RECEIVED 11/21/2007

SUBMITTER Client

**COMMENTS**

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods as indicated on the report. This cover letter is an integral part of the final report.

Order No.

850534  
850535  
850536  
850537  
850538  
850539  
850540  
850541

Client Sample Identification

TOC #049 Int-1  
TOC #049 Int-2  
TOC #049 Int-3  
TOC #049 Inlet  
TOC #049 MW-4R  
TOC #049 MW-2R  
TOC #049 RW-1R  
Laboratory Method Blank

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Edward S. Bonarek, Ph.D.  
Vice President

*BS*  
*Edward S. Bonarek, Ph.D.*  
*Vice President*

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.

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TESTING & CONSULTING  
Chemical  
Microbiological  
Environmental

Order #: 850534  
Matrix: WATER

Client Sample ID: TOC #049 Int-1  
Date Sampled: 11/20/2007 Time Sampled: 13:10

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
8260B BTEX/MTBE Only						
Benzene	ND	1	1	0.18	ug/L	11/27/07 RP
Di-isopropyl ether (DIPE)	ND	1	1	0.29	ug/L	11/27/07 RP
Ethyl benzene	ND	1	5	0.21	ug/L	11/27/07 RP
Ethyl-tertbutylether (ETBE)	ND	1	1	0.17	ug/L	11/27/07 RP
Methyl-tertbutylether (MTBE)	ND	1	1	0.18	ug/L	11/27/07 RP
Tert-amylmethylether (TAME)	ND	1	1	0.28	ug/L	11/27/07 RP
Tertiary butyl alcohol (TBA)	ND	1	10	10	ug/L	11/27/07 RP
Toluene	ND	1	5	0.24	ug/L	11/27/07 RP
Xylenes, total	ND	1	5	0.45	ug/L	11/27/07 RP
Surrogates						
Surr1 - Dibromofluoromethane	95				Units	Control Limits
Surr2 - 1,2-Dichloroethane-d4	103				%	70 - 130
Surr3 - Toluene-d8	98				%	70 - 130
Surr4 - p-Bromofluorobenzene	109				%	70 - 130
8015B - Gasoline						
Gasoline	ND	1	50	5.6	ug/L	11/29/07 LT
Surrogates						
a,a,a-Trifluorotoluene	109				Units	Control Limits
					%	55 - 200

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor  
ND = Not detected below indicated MDL, J=Trace



Order #: 850535  
Matrix: WATER

Client Sample ID: TOC #049 Int-2  
Date Sampled: 11/20/2007 Time Sampled: 13:20

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
8260B BTEX/MTBE Only						
Benzene	ND	1	1	0.18	ug/L	11/27/07 RP
Di-isopropyl ether (DIPE)	ND	1	1	0.29	ug/L	11/27/07 RP
Ethyl benzene	ND	1	5	0.21	ug/L	11/27/07 RP
Ethyl-tertbutylether (ETBE)	ND	1	1	0.17	ug/L	11/27/07 RP
Methyl-tertbutylether (MTBE)	ND	1	1	0.18	ug/L	11/27/07 RP
Tert-amylmethylether (TAME)	ND	1	1	0.28	ug/L	11/27/07 RP
Tertiary butyl alcohol (TBA)	ND	1	10	10	ug/L	11/27/07 RP
Toluene	ND	1	5	0.24	ug/L	11/27/07 RP
Xylenes, total	ND	1	5	0.45	ug/L	11/27/07 RP
Surrogates				Units	Control Limits	
Surr1 - Dibromofluoromethane	94			%	70 - 130	
Surr2 - 1,2-Dichloroethane-d4	101			%	70 - 130	
Surr3 - Toluene-d8	99			%	70 - 130	
Surr4 - p-Bromofluorobenzene	110			%	70 - 130	
8015B - Gasoline						
Gasoline	ND	1	50	5.6	ug/L	11/29/07 LT
Surrogates				Units	Control Limits	
a,a,a-Trifluorotoluene	105			%	55 - 200	

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor  
ND = Not detected below indicated MDL, I=Trace



Order #: 850536  
Matrix: WATER

Client Sample ID: TOC #049 Int-3

Date Sampled: 11/20/2007 Time Sampled: 13:30

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst	
<b>8260B BTEX/MTBE Only</b>							
Benzene	ND	1	1	0.18	ug/L	11/27/07 RP	
Di-isopropyl ether (DIPE)	ND	1	1	0.29	ug/L	11/27/07 RP	
Ethyl benzene	ND	1	5	0.21	ug/L	11/27/07 RP	
Ethyl-tertbutylether (ETBE)	ND	1	1	0.17	ug/L	11/27/07 RP	
Methyl-tertbutylether (MTBE)	71	1	1	0.18	ug/L	11/27/07 RP	
Tert-amylmethylether (TAME)	6.5	1	1	0.28	ug/L	11/27/07 RP	
Tertiary butyl alcohol (TBA)	54	1	10	10	ug/L	11/27/07 RP	
Toluene	ND	1	5	0.24	ug/L	11/27/07 RP	
Xylenes, total	2.6	J	1	5	0.45	ug/L	11/27/07 RP
<b>Surrogates</b>							
Surr1 - Dibromofluoromethane	97				%	70 - 130	
Surr2 - 1,2-Dichloroethane-d4	103				%	70 - 130	
Surr3 - Toluene-d8	99				%	70 - 130	
Surr4 - p-Bromofluorobenzene	110				%	70 - 130	
<b>8015B - Gasoline</b>							
Gasoline	103	1	50	5.6	ug/L	11/29/07 LT	
<b>Surrogates</b>							
a,a,a-Trifluorotoluene	123				%	55 - 200	

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor  
ND = Not detected below indicated MDL, J=Trace



Order #: 850537  
Matrix: WATER

Client Sample ID: TOC #049 Inlet

Date Sampled: 11/20/2007 Time Sampled: 13:40

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
8260B BTEX/MTBE Only						
Benzene	ND	1	1	0.18	ug/L	11/29/07 RP
Di-isopropyl ether (DIPE)	ND	1	1	0.29	ug/L	11/29/07 RP
Ethyl benzene	1.8	J	1	0.21	ug/L	11/29/07 RP
Ethyl-tertbutylether (ETBE)	ND	1	1	0.17	ug/L	11/29/07 RP
Methyl-tertbutylether (MTBE)	138	1	1	0.18	ug/L	11/29/07 RP
Tert-amylmethylether (TAME)	ND	1	1	0.28	ug/L	11/29/07 RP
Tertiary butyl alcohol (TBA)	80	1	10	10	ug/L	11/29/07 RP
Toluene	ND	1	5	0.24	ug/L	11/29/07 RP
Xylenes, total	6.1	1	5	0.45	ug/L	11/29/07 RP
Surrogates						
Surr1 - Dibromofluoromethane	104			%	70 - 130	
Surr2 - 1,2-Dichloroethane-d4	109			%	70 - 130	
Surr3 - Toluene-d8	98			%	70 - 130	
Surr4 - p-Bromofluorobenzene	106			%	70 - 130	
8015B - Gasoline						
Gasoline	251	1	50	5.6	ug/L	11/29/07 LT
Surrogates						
a,a,a-Trifluorotoluene	156			%	55 - 200	

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor  
ND = Not detected below indicated MDL, J=Trace



Order #: 850538  
Matrix: WATER

Client Sample ID: TOC #049 MW-4R  
Date Sampled: 11/20/2007 Time Sampled: 13:50

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
8260B BTEX/MTBE Only						
Benzene	1.2	1	1	0.18	ug/L	11/29/07 RP
Di-isopropyl ether (DIPE)	ND	1	1	0.29	ug/L	11/29/07 RP
Ethyl benzene	9.6	1	5	0.21	ug/L	11/29/07 RP
Ethyl-tertbutylether (ETBE)	ND	1	1	0.17	ug/L	11/29/07 RP
Methyl-tertbutylether (MTBE)	78	1	1	0.18	ug/L	11/29/07 RP
Tert-amylmethylether (TAME)	ND	1	1	0.28	ug/L	11/29/07 RP
Tertiary butyl alcohol (TBA)	38	1	10	10	ug/L	11/29/07 RP
Toluene	ND	1	5	0.24	ug/L	11/29/07 RP
Xylenes, total	25	1	5	0.45	ug/L	11/29/07 RP
Surrogates						
Sur1 - Dibromofluoromethane	103				Units	Control Limits
Sur2 - 1,2-Dichloroethane-d4	103				%	70 - 130
Sur3 - Toluene-d8	102				%	70 - 130
Sur4 - p-Bromofluorobenzene	104				%	70 - 130
8015B - Gasoline						
Gasoline	894	1	50	5.6	ug/L	11/29/07 LT
Surrogates						
a,a,a-Trifluorotoluene	143				Units	Control Limits
					%	55 - 200

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor  
ND = Not detected below indicated MDL, J=Trace



ASSOCIATED LABORATORIES

Analytical Results Report  
Lab Request 201557 results, page 5 of 8

Order #: 850539  
Matrix: WATER

Client Sample ID: TOC #049 MW-2R  
Date Sampled: 11/20/2007 Time Sampled: 14:00

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
8260B BTEX/MTBE Only						
Benzene	ND	10	10.0	0.18	ug/L	11/28/07 RP
Di-isopropyl ether (DIPE)	ND	10	10.0	0.29	ug/L	11/28/07 RP
Ethyl benzene	ND	10	50.0	0.21	ug/L	11/28/07 RP
Ethyl-tertbutylether (ETBE)	ND	10	10.0	0.17	ug/L	11/28/07 RP
Methyl-tertbutylether (MTBE)	285	10	10.0	0.18	ug/L	11/28/07 RP
Tert-amylmethylether (TAME)	22	10	10.0	0.28	ug/L	11/28/07 RP
Tertiary butyl alcohol (TBA)	126	10	100.0	10	ug/L	11/28/07 RP
Toluene	ND	10	50.0	0.24	ug/L	11/28/07 RP
Xylenes, total	ND	10	50.0	0.45	ug/L	11/28/07 RP
Surrogates						
Surr1 - Dibromofluoromethane	97			%	70 - 130	
Surr2 - 1,2-Dichloroethane-d4	99			%	70 - 130	
Surr3 - Toluene-d8	99			%	70 - 130	
Surr4 - p-Bromofluorobenzene	106			%	70 - 130	
8015B - Gasoline						
Gasoline	249	1	50	5.6	ug/L	11/29/07 LT
Surrogates						
a,a,a-Trifluorotoluene	182			%	55 - 200	

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor  
ND = Not detected below indicated MDL, J=Trace



Order #: 850540  
Matrix: WATER

Client Sample ID: TOC #049 RW-1R  
Date Sampled: 11/20/2007 Time Sampled: 14:10

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
8260B BTEX/MTBE Only						
Benzene	ND	1	1	0.18	ug/L	11/29/07 RP
Di-isopropyl ether (DIPE)	ND	1	1	0.29	ug/L	11/29/07 RP
Ethyl benzene	ND	1	5	0.21	ug/L	11/29/07 RP
Ethyl-tertbutylether (ETBE)	ND	1	1	0.17	ug/L	11/29/07 RP
Methyl-tertbutylether (MTBE)	58	1	1	0.18	ug/L	11/29/07 RP
Tert-amylmethylether (TAME)	2.6	1	1	0.28	ug/L	11/29/07 RP
Tertiary butyl alcohol (TBA)	79	1	10	10	ug/L	11/29/07 RP
Toluene	ND	1	5	0.24	ug/L	11/29/07 RP
Xylenes, total	ND	1	5	0.45	ug/L	11/29/07 RP
Surrogates						
Surr1 - Dibromofluoromethane	101			%	70 - 130	
Surr2 - 1,2-Dichloroethane-d4	102			%	70 - 130	
Surr3 - Toluene-d8	99			%	70 - 130	
Surr4 - p-Bromofluorobenzene	106			%	70 - 130	
8015B - Gasoline						
Gasoline	59	1	50	5.6	ug/L	11/29/07 LT
Surrogates						
a,a,a-Trifluorotoluene	108			%	55 - 200	

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor  
ND = Not detected below indicated MDL, J=Trace



Order #: 850541  
Matrix: WATER

Client Sample ID: Laboratory Method Blank

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8260B BTEX/MTBE Only</b>						
Benzene	ND	1	1	0.18	ug/L	11/27/07 RP
Di-isopropyl ether (Dipe)	ND	1	1	0.29	ug/L	11/27/07 RP
Ethyl benzene	ND	1	5	0.21	ug/L	11/27/07 RP
Ethyl-tertbutylether (ETBE)	ND	1	1	0.17	ug/L	11/27/07 RP
Methyl-tertbutylether (MTBE)	ND	1	1	0.18	ug/L	11/27/07 RP
Tert-amylmethylether (TAME)	ND	1	1	0.28	ug/L	11/27/07 RP
Tertiary butyl alcohol (TBA)	ND	1	10	10	ug/L	11/27/07 RP
Toluene	ND	1	5	0.24	ug/L	11/27/07 RP
Xylenes, total	ND	1	5	0.45	ug/L	11/27/07 RP
<b>Surrogates</b>						
Surr1 - Dibromofluoromethane	95				Units	Control Limits
Surr2 - 1,2-Dichloroethane-d4	100				%	70 - 130
Surr3 - Toluene-d8	99				%	70 - 130
Surr4 - p-Bromofluorobenzene	112				%	70 - 130
<b>8015B - Gasoline</b>						
Gasoline	ND	1	50	5.6	ug/L	11/28/07 LT
<b>Surrogates</b>						
a,a,a-Trifluorotoluene	84				Units	Control Limits
					%	55 - 200

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor  
ND = Not detected below indicated MDL, T=Trace

**ASSOCIATED LABORATORIES**

Analytical Results Report  
Lab Request 201557 results, page 8 of 8



# Chain of Custody Record

## ASSOCIATED LABORATORIES

806 North Batavia • Orange, CA 92868

Phone: (714) 771-6900 • Fax: (714) 538-1209



Page 1 of 1

Company	THIRTY OIL CO	Phone	(562) 921-3581
Project Manager	JEFF SURIYAKUSUMA	Fax	(562) 921-7510
Project Name	SYSTEM WATER SAMPLER	Print#	049
Site Name and Address	3400 SAN DABLO AVE OAKLAND CA 94612		

A.L. Job No.

201567

### Analysis Requested

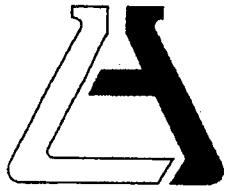
### Test Instructions & Comments

Sample ID	Lab ID	Date	Time	Matrix	Container Number/Size	Pres.	TPH (10PPM) BTEX(821B)	OXY/GBZ(MP)	TOX
1 INT-1		11-20-07	13:40	H <sub>2</sub> O	4-VOR	HCl	X	X	X
2 INT-2			13:20					X	X
3 INT-3			13:20					X	X
4 INT-4			13:40					X	X
5 MW-HR			13:50					X	X
6 MW-2R			14:00					X	X
7 MW-1R			14:10	V	V	V	X	X	X
8							X	X	X
9									
10									
11									
12									
13									
14									
15									

PANALYSIS REQUIRED  
FOR OXYGENATED  
COMPOUNDS USED IN  
OR. GASOLINE BY  
EPA METHOD 8280B  
1-TERTIARY BUTYL  
2-MTBE  
3-APPE  
4-ETBE  
5-TAME

### Sample Receipt - To Be Filled By Laboratory

Total Number of Containers	Properly Cooled Y / N / NA	Relinquished by Sampler: <i>E.M.C.</i>	Relinquished by Signature:	Relinquished by Signature:	Relinquished by Signature:
Custody Seals Y / N / NA	Samples Intact Y / N / NA	Printed Name: <i>Sheldene R.</i>	Printed Name:	Printed Name:	Printed Name:
Received in Good Condition Y / N	Samples Accepted Y / N	Date: 11-20-07 Time: 16:00	Date:	Date:	Date:
Turn Around Time		Received By: G.S.O.	Received By: <i>ASlab</i>	Received By: <i>Joe Hynes</i>	Received By: <i>ASlab</i>
<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush <input type="checkbox"/> Same Day <input type="checkbox"/> 48 hrs. <input type="checkbox"/> 72 hrs.		Signature:	Signature:	Signature:	Signature:
		Printed Name:	Printed Name:	Printed Name:	Printed Name:
		Date: 11/21 Time: 16:30	Date: 11/21 Time: 16:30	Date: 11/21 Time: 16:30	Date: 11/21 Time: 16:30



**ASSOCIATED LABORATORIES**  
806 North Batavia - Orange, California 92868 - 714/771-6900

**FAX 714/538-1209**

CLIENT Thrifty Oil Company (8871) LAB REQUEST 203527  
ATTN: Jeff Suryakusuma  
13116 Imperial Hwy.  
P.O. Box 2128  
Santa Fe Springs, CA 90670 REPORTED 01/03/2008  
RECEIVED 12/19/2007

PROJECT Station #049  
3400 San Pablo Ave., Oakland

SUBMITTER Client

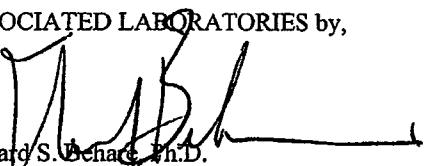
**COMMENTS**

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods as indicated on the report. This cover letter is an integral part of the final report.

<u>Order No.</u>	<u>Client Sample Identification</u>
858809	TOC#049 INT-1
858810	TOC#049 INT-2
858811	TOC#049 INT-3
858812	TOC#049 INLET
858813	Laboratory Method Blank

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

  
Edward S. Dechert, Ph.D.  
Vice President

*NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.*

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**TESTING & CONSULTING**  
*Chemical  
Microbiological  
Environmental*

Order #: 858809  
Matrix: WATER

Client Sample ID: TOC#049 INT-1  
Date Sampled: 12/14/2007 Time Sampled: 10:00

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8260B BTEX/MTBE Only</b>						
Benzene	ND	1	1	0.18	ug/L	12/26/07 YL
Di-isopropyl ether (DIPE)	ND	1	1.0	0.20	ug/L	12/26/07 YL
Ethyl benzene	ND	1	5	0.21	ug/L	12/26/07 YL
Ethyl-tertbutylether (ETBE)	ND	1	1.0	0.23	ug/L	12/26/07 YL
Methyl-tert-butylether (MTBE)	ND	1	1	0.19	ug/L	12/26/07 YL
Tert-amylmethylether (TAME)	ND	1	1.0	0.19	ug/L	12/26/07 YL
Tertiary butyl alcohol (TBA)	33	1	10	10	ug/L	12/26/07 YL
Toluene	ND	1	5	0.24	ug/L	12/26/07 YL
Xylenes, total	ND	1	5	0.45	ug/L	12/26/07 YL
<b>Surrogates</b>						
Surr1 - Dibromofluoromethane	105			%		70 - 130
Surr2 - 1,2-Dichloroethane-d4	103			%		70 - 130
Surr3 - Toluene-d8	98			%		70 - 130
Surr4 - p-Bromofluorobenzene	106			%		70 - 130
<b>8015M - Gasoline</b>						
Gasoline	ND	1	50	5.6	ug/L	12/27/07 LD
<b>Surrogates</b>						
a,a,a-Trifluorotoluene	63			%		55 - 200

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor  
ND = Not detected below indicated MDL, J=Trace



Order #: 858810

Matrix: WATER

Client Sample ID: TOC#049 INT-2

Date Sampled: 12/14/2007 Time Sampled: 10:10

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8260B BTEX/MTBE Only</b>						
Benzene	ND	1	1	0.18	ug/L	12/26/07 YL
Di-isopropyl ether (DIPE)	ND	1	1.0	0.20	ug/L	12/26/07 YL
Ethyl benzene	ND	1	5	0.21	ug/L	12/26/07 YL
Ethyl-tertbutylether (ETBE)	ND	1	1.0	0.23	ug/L	12/26/07 YL
Methyl-tert-butylether (MTBE)	9.0	1	1	0.19	ug/L	12/26/07 YL
Tert-amylmethylether (TAME)	ND	1	1.0	0.19	ug/L	12/26/07 YL
Tertiary butyl alcohol (TBA)	ND	1	10	10	ug/L	12/26/07 YL
Toluene	ND	1	5	0.24	ug/L	12/26/07 YL
Xylenes, total	ND	1	5	0.45	ug/L	12/26/07 YL
<b>Surrogates</b>						<b>Units</b>
Surr1 - Dibromofluoromethane	106				%	70 - 130
Surr2 - 1,2-Dichloroethane-d4	103				%	70 - 130
Surr3 - Toluene-d8	97				%	70 - 130
Surr4 - p-Bromofluorobenzene	104				%	70 - 130
<b>8015M - Gasoline</b>						
Gasoline	ND	1	50	5.6	ug/L	12/27/07 LD
<b>Surrogates</b>						<b>Units</b>
a,a,a-Trifluorotoluene	62				%	55 - 200

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor

ND = Not detected below indicated MDL, J=Trace



Order #: 858811  
Matrix: WATER

Client Sample ID: TOC#049 INT-3  
Date Sampled: 12/14/2007 Time Sampled: 10:20

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8260B BTEX/MTBE Only</b>						
Benzene	55	1	1	0.18	ug/L	12/26/07 YL
Di-isopropyl ether (DIPE)	ND	1	1.0	0.20	ug/L	12/26/07 YL
Ethyl benzene	31	1	5	0.21	ug/L	12/26/07 YL
Ethyl-tertbutylether (ETBE)	ND	1	1.0	0.23	ug/L	12/26/07 YL
Methyl-tert-butylether (MTBE)	7.0	1	1	0.19	ug/L	12/26/07 YL
Tert-amylmethylether (TAME)	ND	1	1.0	0.19	ug/L	12/26/07 YL
Tertiary butyl alcohol (TBA)	108	1	10	10	ug/L	12/26/07 YL
Toluene	232	1	5	0.24	ug/L	12/26/07 YL
Xylenes, total	155	1	5	0.45	ug/L	12/26/07 YL
<b>Surrogates</b>						<b>Units</b>
Surr1 - Dibromofluoromethane	104				%	70 - 130
Surr2 - 1,2-Dichloroethane-d4	98				%	70 - 130
Surr3 - Toluene-d8	92				%	70 - 130
Surr4 - p-Bromofluorobenzene	103				%	70 - 130
<b>8015M - Gasoline</b>						
Gasoline	1120	1	50	5.6	ug/L	12/27/07 LD
<b>Surrogates</b>						<b>Units</b>
a,a,a-Trifluorotoluene	65				%	55 - 200

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor  
ND = Not detected below indicated MDL, J=Trace



Order #: 858812

Matrix: WATER

Client Sample ID: TOC#049 INLET

Date Sampled: 12/14/2007 Time Sampled: 10:30

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8260B BTEX/MTBE Only</b>						
Benzene	302	10	10.0	0.18	ug/L	12/26/07 YL
Di-isopropyl ether (DIPE)	ND	10	10.0	0.20	ug/L	12/26/07 YL
Ethyl benzene	853	10	50.0	0.21	ug/L	12/26/07 YL
Ethyl-tertbutylether (ETBE)	ND	10	10.0	0.23	ug/L	12/26/07 YL
Methyl-tert-butylether (MTBE)	ND	10	10.0	0.19	ug/L	12/26/07 YL
Tert-amylmethylether (TAME)	ND	10	10.0	0.19	ug/L	12/26/07 YL
Tertiary butyl alcohol (TBA)	97	J 10	100.0	10	ug/L	12/26/07 YL
Toluene	2170	10	50.0	0.24	ug/L	12/26/07 YL
Xylenes, total	5090	10	50.0	0.45	ug/L	12/26/07 YL
<b>Surrogates</b>						
Surr1 - Dibromofluoromethane	106			%		70 - 130
Surr2 - 1,2-Dichloroethane-d4	102			%		70 - 130
Surr3 - Toluene-d8	92			%		70 - 130
Surr4 - p-Bromofluorobenzene	100			%		70 - 130
<b>8015M - Gasoline</b>						
Gasoline	12400	5	250.0	5.6	ug/L	12/29/07 LD
<b>Surrogates</b>						
a,a,a-Trifluorotoluene	132			%		55 - 200

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor

ND = Not detected below indicated MDL, J=Trace



Order #: 858813

Client Sample ID: Laboratory Method Blank

Matrix: WATER

Analyte	Result	DF	PQL	MDL	Units	Date/Analyst
<b>8260B BTEX/MTBE Only</b>						
Benzene	ND	1	1	0.18	ug/L	12/26/07 YL
Di-isopropyl ether (DIPE)	ND	1	1.0	0.20	ug/L	12/26/07 YL
Ethyl benzene	ND	1	5	0.21	ug/L	12/26/07 YL
Ethyl-tertbutylether (ETBE)	ND	1	1.0	0.23	ug/L	12/26/07 YL
Methyl-tert-butylether (MTBE)	ND	1	1	0.19	ug/L	12/26/07 YL
Tert-amylmethylether (TAME)	ND	1	1.0	0.19	ug/L	12/26/07 YL
Tertiary butyl alcohol (TBA)	ND	1	10	10	ug/L	12/26/07 YL
Toluene	ND	1	5	0.24	ug/L	12/26/07 YL
Xylenes, total	ND	1	5	0.45	ug/L	12/26/07 YL
<b>Surrogates</b>						<b>Units</b>
Sur1 - Dibromofluoromethane	108				%	70 - 130
Surr2 - 1,2-Dichloroethane-d4	120				%	70 - 130
Surr3 - Toluene-d8	95				%	70 - 130
Surr4 - p-Bromofluorobenzene	107				%	70 - 130
<b>8015M - Gasoline</b>						
Gasoline	ND	1	50	5.6	ug/L	12/27/07 LD
<b>Surrogates</b>						<b>Units</b>
a,a,a-Trifluorotoluene	95				%	55 - 200

PQL = Practical Quantitation Limit, MDL = Method detection limit, DF = Dilution Factor

ND = Not detected below indicated MDL, J=Trace



# Chain of Custody Record

## ASSOCIATED LABORATORIES

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Phone: (714) 771-6900 • Fax: (714) 538-1209



Company: THIDITY OIL CO Phone: 562/921-3581  
 Project Manager: JEFF SURIYAKUSUMA Fax: 562/921-7510  
 Project Name: SYSTEM WATER SAMPLING Project #: 049  
 Site Name and Address: 3400 5TH PABLO AVE OAKLAND CA 94612

A.L. Job No.

203527

Page 1 of 1

Analysis Requested							Test Instructions & Comments		
Sample ID	Lab ID	Date	Time	Matrix	Container Number/Size	Pres.			
1 INT-1		12.14.07	10:00	H <sub>2</sub> O	4-UVA	16L	X	X	
2 INT-2			10:10				X	X	
3 INT-3			10:20				X	X	
4 INT-4			10:30				X	X	
5							X	X	
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									

Sample Receipt - To Be Filled By Laboratory				Relinquished by 1. Sampler: EMC. Signature: <i>[Signature]</i>	Relinquished by 2. Signature:	Relinquished by 3. Signature:			
Total Number of Containers	Property Cooled Y / N / NA	Samples Intact Y / N / NA	Samples Accepted Y / N	Printed Name: <i>Jeff Suryakusuma</i>	Printed Name:	Printed Name:			
Custody Seals Y / N / NA				Date: 12-13-07 Time: 16:00	Date:	Date:			
Received in Good Condition Y / N				Received By: G.S.O.	Received By: ASL.	Received By:			
Turn Around Time				Signature:	Signature:	Signature:			
				Printed Name:	Printed Name:	Printed Name:			
				Date: 12/14 Time: 12:00	Date: 12/14 Time: 12:00	Date: 12/14 Time: 12:00			
<input checked="" type="checkbox"/> Normal		<input type="checkbox"/> Rush		<input type="checkbox"/> Same Day	<input type="checkbox"/> 48 hrs.	<input type="checkbox"/> 24 hrs.	<input type="checkbox"/> 72 hrs.		