



GETTLER-RYAN INC.

TRANSMITTAL

April 4, 2001
G-R #: 180233

TO: Mr. David B. De Witt
Tosco Marketing Company
2000 Crow Canyon Place, Suite 400
San Ramon, California 94583

CC: Mr. Douglas Lee
Gettler-Ryan, Inc.
Dublin, California

FROM: Deanna L. Harding
Project Coordinator
Gettler-Ryan Inc.
6747 Sierra Court, Suite J
Dublin, California 94568

RE: **Tosco (76) SS #0018**
6201 Claremont Boulevard
Oakland, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	March 26, 2001	Groundwater Monitoring and Sampling Report First Quarter - Event of February 9, 2001

COMMENTS:

This report is being sent to you for your review/comment, prior to being distributed on your behalf. If no comments are received by **April 16, 2001**, this report will be distributed to the following:

cc: Mr. Don Huang, Alameda County Health Care Service Division, 1131 Harbor Bay Pkwy., Ste. 250,
Alameda, CA 94502

Enclosure

trans/0018-dbd



GETTLER-RYAN INC.

March 26, 2001
G-R Job #180264

Mr. David B. De Witt
Tosco Marketing Company
2000 Crow Canyon Place, Suite 400
San Ramon, California 94583

RE: First Quarter Event of February 9, 2001
Groundwater Monitoring & Sampling Report
Tosco (76) Service Station #0018
6201 Claremont Avenue
Oakland, California

Dear Mr. De Witt:

This report documents the most recent groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R) at the referenced site. All field work was conducted in accordance with G-R Standard Operating Procedure - Groundwater Sampling (attached).

Static groundwater levels were measured and all wells were checked for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were not present in the wells. Static water level data and groundwater elevations are summarized in Table 1. A Potentiometric Map is included as Figure 1.

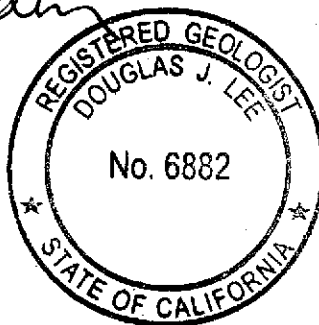
Groundwater samples were collected from the monitoring wells as specified by G-R Standard Operating Procedure - Groundwater Sampling (attached). The field data sheets are also attached. The samples were analyzed by Sequoia Analytical. Analytical results are summarized in Tables 1 and 2. A Concentration Map is included as Figure 2. The chain of custody document and laboratory analytical reports are also attached.

Sincerely,

Deanna L. Harding

Deanna L. Harding
Project Coordinator

FOR *Stephen J. Carter*
Stephen J. Carter
Senior Geologist, R.G. No. 5577



- Figure 1: Potentiometric Map
- Figure 2: Concentration Map
- Table 1: Groundwater Monitoring Data and Analytical Results
- Table 2: Groundwater Analytical Results - Oxygenate Compounds
- Attachments: Standard Operating Procedure - Groundwater Sampling
Field Data Sheets
Chain of Custody Document and Laboratory Analytical Reports

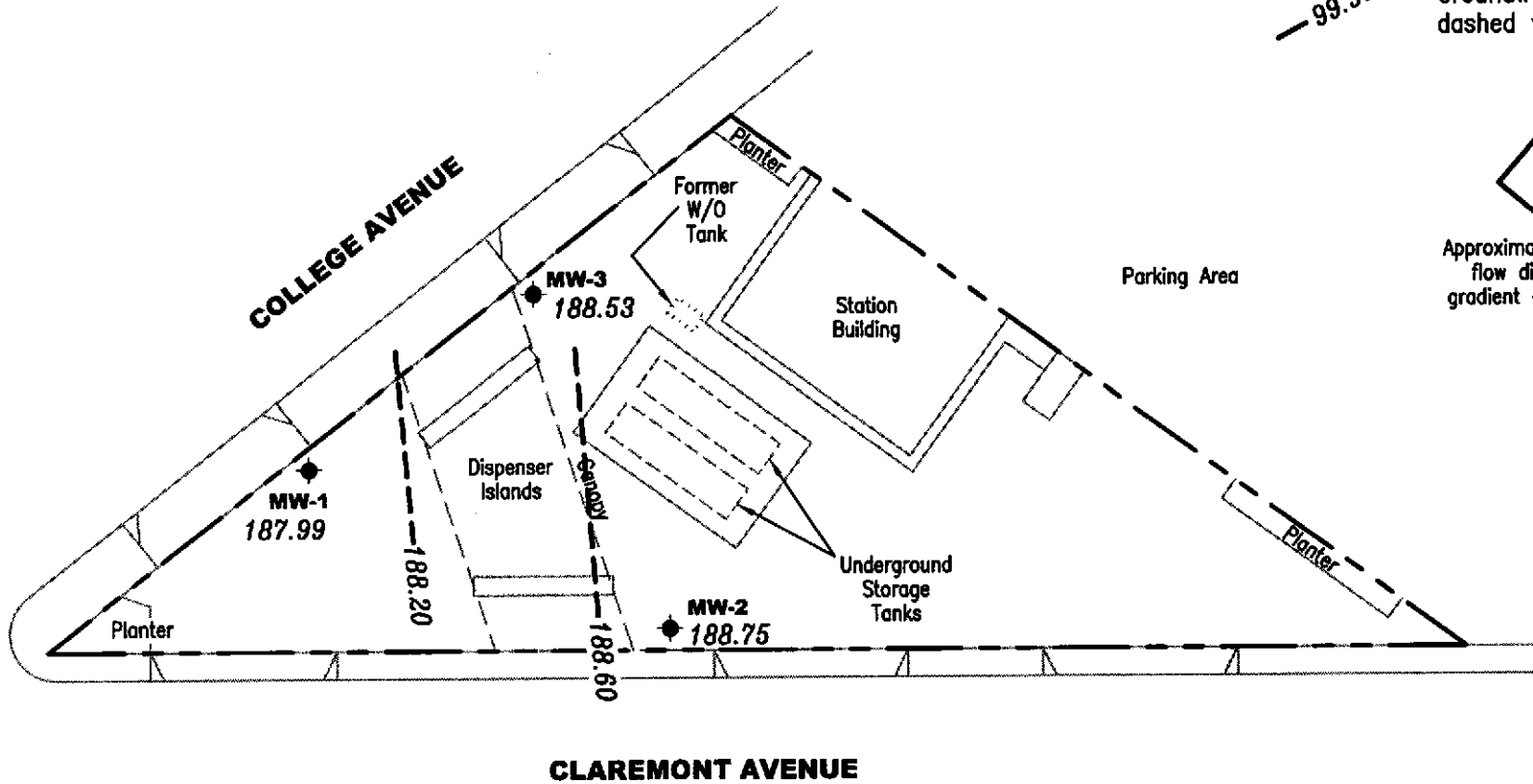
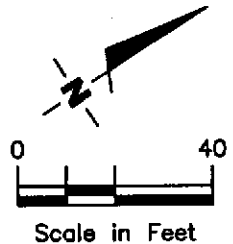
0018-qml

EXPLANATION

- ◆ Groundwater monitoring well
- 99.99 Groundwater elevation in feet referenced to Mean Sea Level (MSL)
- - 99.99 - - Groundwater elevation contour, dashed where inferred.



Approximate groundwater flow direction at a gradient of 0.01 Ft./Ft.



GETTLER - RYAN INC.
 6747 Sierra Ct., Suite J
 Dublin, CA 94568 (925) 551-7555

POTENTIOMETRIC MAP
 Tosco (76) Service Station #0018
 6201 Claremont Avenue
 Oakland, California

FIGURE
1

PROJECT NUMBER
 180264

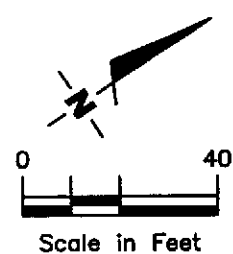
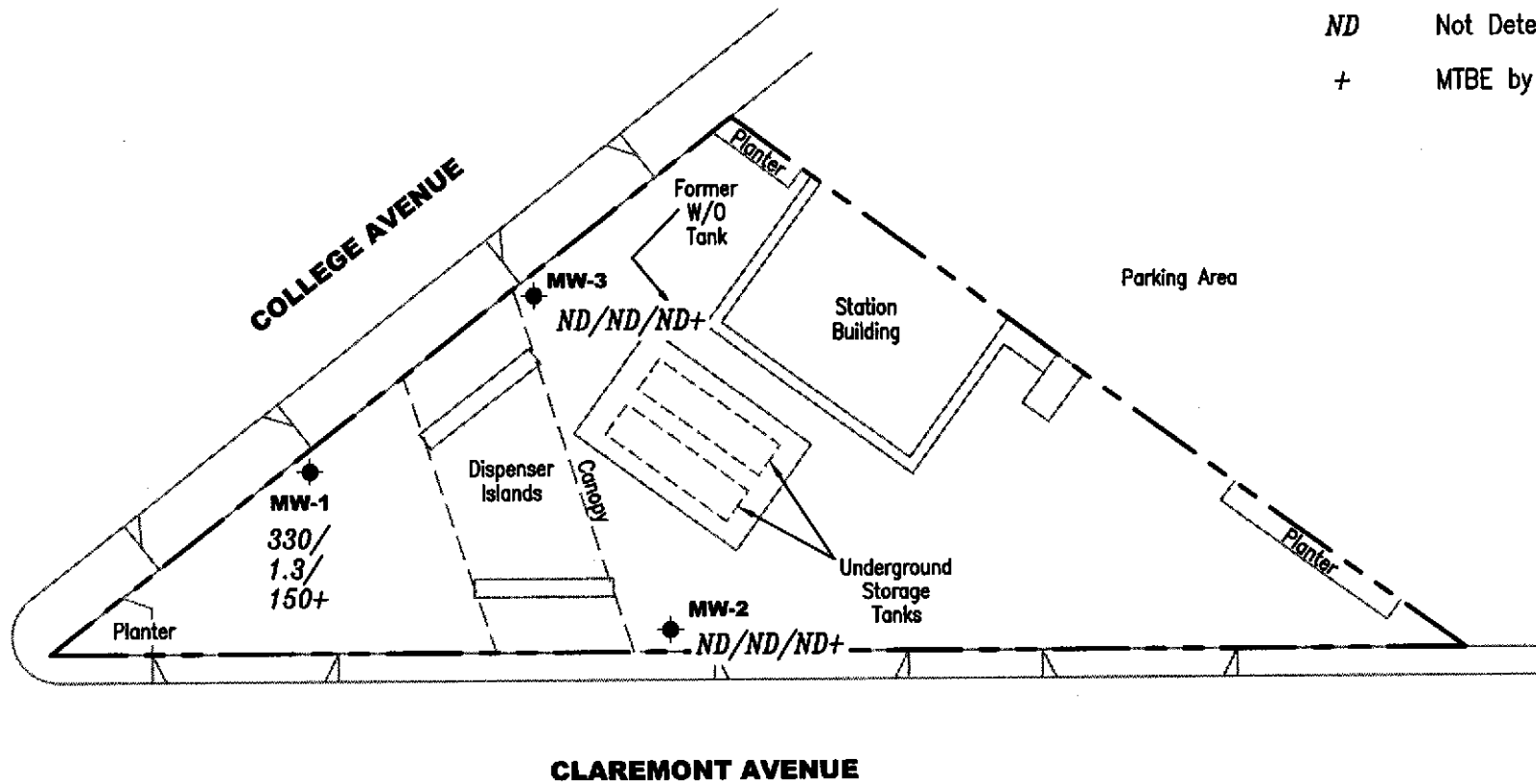
REVIEWED BY

DATE
 February 9, 2001

REVISED DATE

EXPLANATION

- ◆ Groundwater monitoring well
- A/B/C TPH(G) (Total Petroleum Hydrocarbons as Gasoline)/ Benzene/MTBE concentrations in ppb
- ND Not Detected
- + MTBE by EPA Method 8260



GETTLER - RYAN INC.
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CONCENTRATION MAP
 Tosco (76) Service Station #0018
 6201 Claremont Avenue
 Oakland, California

FIGURE
2

PROJECT NUMBER 180264 REVIEWED BY DATE February 9, 2001 REVISED DATE

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (76) Service Station #0018
 6201 Claremont Avenue
 Oakland, California

WELL ID/ TOC*	DATE	DTW (ft.)	S.I. (ft. bgs)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-1										
208.15	08/24/00	18.55	10.0-30.0	189.60	120 ¹	0.67	ND	0.86	1.4	54/54 ²
	11/16/00	20.30		187.85	169 ³	ND	1.20	1.74	0.629	68.6/97.7 ²
	02/09/01	20.16		187.99	330 ³	1.3	ND	1.0	4.6	140/150 ²
MW-2										
210.27	08/24/00	19.69	10.0-30.0	190.58	ND	ND	ND	ND	ND	ND/ND ²
	11/16/00	21.61		188.66	ND	ND	ND	ND	ND	ND/ND ²
	02/09/01	21.52		188.75	ND	ND	ND	ND	ND	ND/ND ²
MW-3										
208.98	08/24/00	18.68	10.0-30.0	190.30	ND	ND	ND	ND	ND	4.7/2.3 ²
	11/16/00	20.56		188.42	ND	ND	ND	ND	ND	ND/ND ²
	02/09/01	20.45		188.53	ND	ND	ND	ND	ND	ND/ND ²
Trip Blank										
TB-LB	08/24/00	--	--	--	ND	ND	ND	ND	ND	ND
	11/16/00	--		--	ND	ND	ND	ND	ND	ND
	02/09/01	--		--	ND	ND	ND	ND	ND	ND

Table 1
Groundwater Monitoring Data and Analytical Results
Tosco (76) Service Station #0018
6201 Claremont Avenue
Oakland, California

EXPLANATIONS:

TOC = Top of Casing

DTW = Depth to Water

(ft.) = Feet

S.I. = Screen Interval

(ft. bgs) = Feet Below Ground Surface

GWE = Groundwater Elevation

(msl) = Mean seal level

TPH-G = Total Petroleum Hydrocarbons as Gasoline

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylenes

MTBE = Methyl tertiary butyl ether

(ppb) = Parts per billion

ND = Not Detected

-- = Not Measured/Not Analyzed

* TOC elevations have been surveyed relative to msl, per the city of Oakland benchmark; a cut square in the top of curb, at the curb return at the northeast corner of College Avenue and Miles Avenue. (Benchmark Elevation = 179.075 feet, msl).

¹ Laboratory report indicates gasoline C6-C12.

² MTBE by EPA Method 8260.

³ Laboratory report indicates unidentified hydrocarbons C6-C12.

Table 2
Groundwater Analytical Results - Oxygenate Compounds
 Tosco (76) Service Station #0018
 6201 Claremont Avenue
 Oakland, California

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)
MW-1	08/24/00	ND	ND	54	ND	ND	ND	--	--
	11/16/00	ND	ND	97.7	ND	ND	ND	--	--
	02/09/01	ND	ND	150	ND	ND	ND	ND	ND
MW-2	08/24/00	ND	ND	ND	ND	ND	ND	--	--
	11/16/00	ND	ND	ND	ND	ND	ND	--	--
	02/09/01	ND	ND	ND	ND	ND	ND	ND	ND
MW-3	08/24/00	ND	ND	2.3	ND	ND	ND	--	--
	11/16/00	ND	ND	ND	ND	ND	ND	--	--
	02/09/01	ND	ND	ND	ND	ND	ND	ND	ND

EXPLANATIONS:

TBA = Tertiary butyl alcohol
 MTBE = Methyl tertiary butyl ether
 DIPE = Di-isopropyl ether
 ETBE = Ethyl tertiary butyl ether
 TAME = Tertiary amyl methyl ether
 1,2-DCA = 1,2-Dichloroethane
 EDB = Ethylene Dibromide
 (ppb) = Parts per billion
 ND = Not Detected
 -- = Not Analyzed

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan Inc. field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. Prior to sample collection, the type of analysis to be performed is determined. Loss prevention of volatile compounds is controlled and sample preservation for subsequent analysis is maintained.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, static water level measurements are collected with the interface probe and are also recorded in the field notes.

After water levels are collected and prior to sampling, temperature, pH and electrical conductivity are measured. If purging is to occur, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or polyvinyl chloride bailers. The measurements are taken a minimum of three times during the purging. Purging continues until these parameters stabilize.

Groundwater samples are collected using disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used when possible. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4°C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. For sampling sets greater than 20 samples, 5% trip blanks are included. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

As requested by Tosco Marketing Company, the purge water and decontamination water generated during sampling activities is transported to Tosco - San Francisco Area Refinery, located in Rodeo, California.

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/
Facility # 0018
Address: 6201 Claremont Blvd.
City: Oakland, CA.

Job#: 180264
Date: 2-9-01
Sampler: Joe

Well ID MW-1 Well Condition: O.K.

Well Diameter 2 in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)
Total Depth 30.03 ft
Depth to Water 20.16 ft

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66
	6" = 1.50	12" = 5.80	

9.87 X VF 0.17 = 1.68 X 3 (case volume) = Estimated Purge Volume: 5.5 (gal.)

Purge Equipment: Disposable Bailer
Bailer
Stack
Suction
Grundfos
Other: _____

Sampling Equipment: Disposable Bailer
Bailer
Pressure Bailer
Grab Sample
Other: _____

Starting Time: 9:44 Weather Conditions: cloudy/rainy
Sampling Time: 10:10 AM Water Color: clear Odor: none
Purging Flow Rate: 0.5 gpm Sediment Description: none
Did well de-water? _____ If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm} \times 10^2$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>9:53</u>	<u>1.5</u>	<u>7.70</u>	<u>10.31</u>	<u>65.1</u>	_____	_____	_____
<u>9:58</u>	<u>3</u>	<u>7.54</u>	<u>10.32</u>	<u>64.6</u>	_____	_____	_____
<u>10:02</u>	<u>5.5</u>	<u>7.56</u>	<u>10.39</u>	<u>64.4</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-1</u>	<u>350A</u>	<u>Y</u>	<u>HCL</u>	<u>Seq.</u>	<u>TPH, BTEX, MTBE</u>
	<u>250A</u>	<u>Y</u>	<u>"</u>	<u>"</u>	<u>(6) O&G, V2 PCK/EDS 478260</u>

COMMENTS: _____

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/
Facility # 0018
Address: 6201 Claremont Blvd.
City: Oakland, CA.

Job#: 180264
Date: 2-9-01
Sampler: Joe

Well ID MW-2

Well Condition: OK

Well Diameter 2 in.

Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)

Total Depth 30.06 ft.

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66
	6" = 1.50	12" = 5.80	

Depth to Water 21.52 ft.

8.54 X VF 0.17 = 1.45 X 3 (case volume) = Estimated Purge Volume: 4.5 (gal.)

Purge Equipment: ~~Disposable Bailer~~
Bailer
Stack
Suction
Grundfos
Other: _____

Sampling Equipment: ~~Disposable Bailer~~
Bailer
Pressure Bailer
Grab Sample
Other: _____

Starting Time: 9:10

Weather Conditions: cloudy/rainy

Sampling Time: 9:37 A.M.

Water Color: clear Odor: none

Purging Flow Rate: 0.5 gpm.

Sediment Description: none

Did well de-water? _____

If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm} \times 10^3$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>9:20</u>	<u>1</u>	<u>7.57</u>	<u>1316</u>	<u>65.0</u>	_____	_____	_____
<u>9:24</u>	<u>3</u>	<u>7.28</u>	<u>12.57</u>	<u>64.9</u>	_____	_____	_____
<u>9:27</u>	<u>4.5</u>	<u>7.20</u>	<u>12.51</u>	<u>65.1</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-2</u>	<u>300A</u>	<u>Y</u>	<u>HCL</u>	<u>Seq.</u>	<u>TPHC, BTGK, MTOE</u>
	<u>200A</u>	<u>Y</u>	<u>"</u>	<u>"</u>	<u>(6) OR 4, 1/2 DCA/EPB 498260</u>

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/
Facility # 0018
Address: 6201 Claremont Blvd.
City: Oakland, CA.

Job#: 180264
Date: 2-9-01
Sampler: Soe

Well ID: MW-3
Well Diameter: 2 in.
Total Depth: 29.98 ft
Depth to Water: 20.45 ft

Well Condition: OK
Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)
Volume Factor (VF) 2" = 0.17 3" = 0.38 4" = 0.66
6" = 1.50 12" = 5.80

9.53 x VF 0.17 = 1.62 x 3 (case volume) = Estimated Purge Volume: 5 (gal.)

Purge Equipment: ~~Disposable Bailer~~
~~Bailer~~
Stack
Suction
Grundfos
Other: _____

Sampling Equipment: ~~Disposable Bailer~~
~~Bailer~~
Pressure Bailer
Grab Sample
Other: _____

Starting Time: 8:36
Sampling Time: 9:05 A.M.
Purging Flow Rate: 0.5 gpm
Did well de-water? _____

Weather Conditions: cloudy/rainy
Water Color: clear Odor: none
Sediment Description: none
If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm} \times 10^4$	Temperature F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>8:46</u>	<u>1.5</u>	<u>8.06</u>	<u>9.64</u>	<u>65.2</u>	_____	_____	_____
<u>8:49</u>	<u>3</u>	<u>7.63</u>	<u>9.80</u>	<u>65.0</u>	_____	_____	_____
<u>8:53</u>	<u>5</u>	<u>7.60</u>	<u>9.89</u>	<u>64.6</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-3</u>	<u>350A</u>	<u>Y</u>	<u>HCL</u>	<u>Seq.</u>	<u>TRHC, BTGA, MTGE</u>
	<u>250A</u>	<u>Y</u>	<u>"</u>	<u>"</u>	<u>(6) 0x4, 42 DCA/EPB 478260</u>

COMMENTS: _____



Sequoia Analytical

404 N. Wiget Lane
Walnut Creek, CA 94598
(925) 988-9600
FAX (925) 988-9673
www.sequoialabs.com

26 February, 2001

Deanna L. Harding
Gettler Ryan, Inc. - Dublin
6747 Sierra Court Suite J
Dublin, CA 94568

RE: Tosco
Sequoia Report W102329

Enclosed are the results of analyses for samples received by the laboratory on 12-Feb-01 16:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Charlie Westwater
Project Manager

CA ELAP Certificate #1271





Gettler Ryan, Inc. - Dublin
6747 Sierra Court Suite J
Dublin CA, 94568

Project: Tosco
Project Number: Tosco # 0018
Project Manager: Deanna L. Harding

Reported:
26-Feb-01 08:22

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-LB	W102329-01	Water	09-Feb-01 00:00	12-Feb-01 16:45
MW-1	W102329-02	Water	09-Feb-01 10:10	12-Feb-01 16:45
MW-2	W102329-03	Water	09-Feb-01 09:37	12-Feb-01 16:45
MW-3	W102329-04	Water	09-Feb-01 09:00	12-Feb-01 16:45

Sequoia Analytical - Walnut Creek

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Charlie Westwater, Project Manager

Page 1 of 10





Gettler Ryan, Inc. - Dublin
6747 Sierra Court Suite J
Dublin CA, 94568

Project: Tosco
Project Number: Tosco # 0018
Project Manager: Deanna L. Harding

Reported:
26-Feb-01 08:22

**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT
Sequoia Analytical - Walnut Creek**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TB-LB (W102329-01) Water Sampled: 09-Feb-01 00:00 Received: 12-Feb-01 16:45									
Purgeable Hydrocarbons	ND	50	ug/l	1	1B16002	16-Feb-01	16-Feb-01	EPA 8015M/8020	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	CC-3
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	CC-3
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	CC-3
<i>Surrogate: a,a,a-Trifluorotoluene</i>		102 %	70-130		"	"	"	"	
MW-1 (W102329-02) Water Sampled: 09-Feb-01 10:10 Received: 12-Feb-01 16:45									
Purgeable Hydrocarbons	330	50	ug/l	1	1B20005	17-Feb-01	17-Feb-01	EPA 8015M/8020	
Benzene	1.3	0.50	"	"	"	"	"	"	CC-3
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	1.0	0.50	"	"	"	"	"	"	
Xylenes (total)	4.6	0.50	"	"	"	"	"	"	CC-3
Methyl tert-butyl ether	140	2.5	"	"	"	"	"	"	CC-3
<i>Surrogate: a,a,a-Trifluorotoluene</i>		102 %	70-130		"	"	"	"	
MW-2 (W102329-03) Water Sampled: 09-Feb-01 09:37 Received: 12-Feb-01 16:45									
Purgeable Hydrocarbons	ND	50	ug/l	1	1B20004	17-Feb-01	17-Feb-01	EPA 8015M/8020	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	CC-3
<i>Surrogate: a,a,a-Trifluorotoluene</i>		100 %	70-130		"	"	"	"	





Gettler Ryan, Inc. - Dublin
6747 Sierra Court Suite J
Dublin CA, 94568

Project: Tosco
Project Number: Tosco # 0018
Project Manager: Deanna L. Harding

Reported:
26-Feb-01 08:22

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT
Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (W102329-04) Water Sampled: 09-Feb-01 09:00 Received: 12-Feb-01 16:45									
Purgeable Hydrocarbons	ND	50	ug/l	1	1B20004	17-Feb-01	17-Feb-01	EPA 8015M/8020	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	CC-3
Surrogate: <i>a,a,a</i> -Trifluorotoluene		102 %		70-130	"	"	"	"	





Gettler Ryan, Inc. - Dublin
6747 Sierra Court Suite J
Dublin CA, 94568

Project: Tosco
Project Number: Tosco # 0018
Project Manager: Deanna L. Harding

Reported:
26-Feb-01 08:22

Volatile Organic Compounds by EPA Method 8260B Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (W102329-02) Water Sampled: 09-Feb-01 10:10 Received: 12-Feb-01 16:45									
Ethanol	ND	500	ug/l	1	1B14009	15-Feb-01	15-Feb-01	EPA 8260B	
tert-Butyl alcohol	ND	50	"	"	"	"	"	"	
Methyl tert-butyl ether	150	2.0	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	2.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.0	"	"	"	"	"	"	
Ethylene dibromide	ND	2.0	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		117 %	50-150	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %	50-150	"	"	"	"	"	
MW-2 (W102329-03) Water Sampled: 09-Feb-01 09:37 Received: 12-Feb-01 16:45									
Ethanol	ND	500	ug/l	1	1B14009	15-Feb-01	15-Feb-01	EPA 8260B	
tert-Butyl alcohol	ND	50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	2.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.0	"	"	"	"	"	"	
Ethylene dibromide	ND	2.0	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		112 %	50-150	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %	50-150	"	"	"	"	"	
MW-3 (W102329-04) Water Sampled: 09-Feb-01 09:00 Received: 12-Feb-01 16:45									
Ethanol	ND	500	ug/l	1	1B14009	15-Feb-01	15-Feb-01	EPA 8260B	
tert-Butyl alcohol	ND	50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	2.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.0	"	"	"	"	"	"	
Ethylene dibromide	ND	2.0	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		118 %	50-150	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		109 %	50-150	"	"	"	"	"	





Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J Dublin CA, 94568	Project: Tosco Project Number: Tosco # 0018 Project Manager: Deanna L. Harding	Reported: 26-Feb-01 08:22
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Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD	RPD Limit	Notes
Batch 1B16002 - EPA 5030B [P/T]										
Blank (1B16002-BLK1) Prepared & Analyzed: 16-Feb-01										
Purgeable Hydrocarbons	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	2.5	"							
<i>Surrogate: a, a, a-Trifluorotoluene</i>	33.3		"	30.0		111	70-130			
LCS (1B16002-BS1) Prepared & Analyzed: 16-Feb-01										
Benzene	24.0	0.50	ug/l	20.0		120	70-130			
Toluene	20.1	0.50	"	20.0		101	70-130			
Ethylbenzene	22.0	0.50	"	20.0		110	70-130			
Xylenes (total)	60.0	0.50	"	60.0		100	70-130			
<i>Surrogate: a, a, a-Trifluorotoluene</i>	39.2		"	30.0		131	70-130			S-03
Matrix Spike (1B16002-MS1) Source: W102201-19RE1 Prepared & Analyzed: 16-Feb-01										
Benzene	23.2	0.50	ug/l	20.0	ND	116	70-130			
Toluene	19.2	0.50	"	20.0	ND	96.0	70-130			
Ethylbenzene	20.6	0.50	"	20.0	ND	103	70-130			
Xylenes (total)	55.9	0.50	"	60.0	ND	93.2	70-130			
<i>Surrogate: a, a, a-Trifluorotoluene</i>	34.4		"	30.0		115	70-130			
Matrix Spike Dup (1B16002-MSD1) Source: W102201-19RE1 Prepared & Analyzed: 16-Feb-01										
Benzene	22.3	0.50	ug/l	20.0	ND	111	70-130	3.96	20	
Toluene	18.0	0.50	"	20.0	ND	90.0	70-130	6.45	20	
Ethylbenzene	18.7	0.50	"	20.0	ND	93.5	70-130	9.67	20	
Xylenes (total)	51.5	0.50	"	60.0	ND	85.8	70-130	8.19	20	
<i>Surrogate: a, a, a-Trifluorotoluene</i>	32.5		"	30.0		108	70-130			

Sequoia Analytical - Walnut Creek The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.





Gettler Ryan, Inc. - Dublin
6747 Sierra Court Suite J
Dublin CA, 94568

Project: Tosco
Project Number: Tosco # 0018
Project Manager: Deanna L. Harding

Reported:
26-Feb-01 08:22

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control
Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1B20004 - EPA 5030B [P/T]

Blank (1B20004-BLK1)

Prepared & Analyzed: 17-Feb-01

Purgeable Hydrocarbons	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	2.5	"							
<i>Surrogate: a, a, a-Trifluorotoluene</i>	30.8		"	30.0		103	70-130			

LCS (1B20004-BS1)

Prepared & Analyzed: 17-Feb-01

Benzene	18.4	0.50	ug/l	20.0		92.0	70-130			
Toluene	19.1	0.50	"	20.0		95.5	70-130			
Ethylbenzene	19.8	0.50	"	20.0		99.0	70-130			
Xylenes (total)	59.0	0.50	"	60.0		98.3	70-130			
<i>Surrogate: a, a, a-Trifluorotoluene</i>	32.5		"	30.0		108	70-130			

Matrix Spike (1B20004-MS1)

Source: W102330-05

Prepared & Analyzed: 17-Feb-01

Benzene	17.5	0.50	ug/l	20.0	ND	87.5	70-130			
Toluene	18.3	0.50	"	20.0	ND	91.5	70-130			
Ethylbenzene	19.2	0.50	"	20.0	ND	96.0	70-130			
Xylenes (total)	57.8	0.50	"	60.0	ND	96.3	70-130			
<i>Surrogate: a, a, a-Trifluorotoluene</i>	30.4		"	30.0		101	70-130			

Matrix Spike Dup (1B20004-MSD1)

Source: W102330-05

Prepared & Analyzed: 17-Feb-01

Benzene	15.4	0.50	ug/l	20.0	ND	77.0	70-130	12.8	20	
Toluene	20.4	0.50	"	20.0	ND	102	70-130	10.9	20	
Ethylbenzene	17.1	0.50	"	20.0	ND	85.5	70-130	11.6	20	
Xylenes (total)	51.1	0.50	"	60.0	ND	85.2	70-130	12.3	20	
<i>Surrogate: a, a, a-Trifluorotoluene</i>	29.3		"	30.0		97.7	70-130			





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Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control
Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1B20005 - EPA 5030B [P/T]										
Blank (1B20005-BLK1) Prepared & Analyzed: 17-Feb-01										
Purgeable Hydrocarbons	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	2.5	"							
<i>Surrogate: a, a, a-Trifluorotoluene</i>	30.9		"	30.0		103	70-130			
LCS (1B20005-BS1) Prepared & Analyzed: 17-Feb-01										
Benzene	19.9	0.50	ug/l	20.0		99.5	70-130			
Toluene	17.1	0.50	"	20.0		85.5	70-130			
Ethylbenzene	18.4	0.50	"	20.0		92.0	70-130			
Xylenes (total)	50.1	0.50	"	60.0		83.5	70-130			
<i>Surrogate: a, a, a-Trifluorotoluene</i>	30.4		"	30.0		101	70-130			
Matrix Spike (1B20005-MS1) Source: W102361-03 Prepared & Analyzed: 17-Feb-01										
Benzene	19.4	0.50	ug/l	20.0	ND	97.0	70-130			
Toluene	16.8	0.50	"	20.0	ND	84.0	70-130			
Ethylbenzene	17.6	0.50	"	20.0	ND	88.0	70-130			
Xylenes (total)	48.6	0.50	"	60.0	ND	81.0	70-130			
<i>Surrogate: a, a, a-Trifluorotoluene</i>	30.1		"	30.0		100	70-130			
Matrix Spike Dup (1B20005-MSD1) Source: W102361-03 Prepared & Analyzed: 17-Feb-01										
Benzene	19.8	0.50	ug/l	20.0	ND	99.0	70-130	2.04	20	
Toluene	17.5	0.50	"	20.0	ND	87.5	70-130	4.08	20	
Ethylbenzene	18.4	0.50	"	20.0	ND	92.0	70-130	4.44	20	
Xylenes (total)	48.7	0.50	"	60.0	ND	81.2	70-130	0.206	20	
<i>Surrogate: a, a, a-Trifluorotoluene</i>	31.0		"	30.0		103	70-130			





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Reported:
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**Volatile Organic Compounds by EPA Method 8260B - Quality Control
Sequoia Analytical - Walnut Creek**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1B14009 - EPA 5030B [P/T]

Blank (1B14009-BLK1)

Prepared & Analyzed: 14-Feb-01

Ethanol	ND	500	ug/l							
tert-Butyl alcohol	ND	50	"							
Methyl tert-butyl ether	ND	2.0	"							
Di-isopropyl ether	ND	2.0	"							
Ethyl tert-butyl ether	ND	2.0	"							
tert-Amyl methyl ether	ND	2.0	"							
1,2-Dichloroethane	ND	2.0	"							
Ethylene dibromide	ND	2.0	"							
<i>Surrogate: Dibromofluoromethane</i>	55.7		"	50.0		111	50-150			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	51.8		"	50.0		104	50-150			

Blank (1B14009-BLK2)

Prepared & Analyzed: 15-Feb-01

Ethanol	ND	500	ug/l							
tert-Butyl alcohol	ND	50	"							
Methyl tert-butyl ether	ND	2.0	"							
Di-isopropyl ether	ND	2.0	"							
Ethyl tert-butyl ether	ND	2.0	"							
tert-Amyl methyl ether	ND	2.0	"							
1,2-Dichloroethane	ND	2.0	"							
Ethylene dibromide	ND	2.0	"							
<i>Surrogate: Dibromofluoromethane</i>	54.8		"	50.0		110	50-150			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	49.8		"	50.0		99.6	50-150			

Blank (1B14009-BLK3)

Prepared & Analyzed: 21-Feb-01

Ethanol	ND	500	ug/l							
tert-Butyl alcohol	ND	50	"							
Methyl tert-butyl ether	ND	2.0	"							
Di-isopropyl ether	ND	2.0	"							
Ethyl tert-butyl ether	ND	2.0	"							
tert-Amyl methyl ether	ND	2.0	"							
1,2-Dichloroethane	ND	2.0	"							
Ethylene dibromide	ND	2.0	"							
<i>Surrogate: Dibromofluoromethane</i>	46.0		"	50.0		92.0	50-150			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.0		"	50.0		100	50-150			





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Reported:
26-Feb-01 08:22

**Volatile Organic Compounds by EPA Method 8260B - Quality Control
Sequoia Analytical - Walnut Creek**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1B14009 - EPA 5030B [P/T]										
LCS (1B14009-BS1)				Prepared & Analyzed: 14-Feb-01						
Methyl tert-butyl ether	58.0	2.0	ug/l	50.0		116	70-130			
Surrogate: Dibromofluoromethane	56.1		"	50.0		112	50-150			
Surrogate: 1,2-Dichloroethane-d4	51.1		"	50.0		102	50-150			
LCS (1B14009-BS2)				Prepared & Analyzed: 15-Feb-01						
Methyl tert-butyl ether	54.7	2.0	ug/l	50.0		109	70-130			
Surrogate: Dibromofluoromethane	55.8		"	50.0		112	50-150			
Surrogate: 1,2-Dichloroethane-d4	49.6		"	50.0		99.2	50-150			
LCS (1B14009-BS3)				Prepared & Analyzed: 21-Feb-01						
Methyl tert-butyl ether	46.5	2.0	ug/l	50.0		93.0	70-130			
Surrogate: Dibromofluoromethane	47.0		"	50.0		94.0	50-150			
Surrogate: 1,2-Dichloroethane-d4	49.0		"	50.0		98.0	50-150			
Matrix Spike (1B14009-MS1)				Source: W102289-05		Prepared & Analyzed: 14-Feb-01				
Methyl tert-butyl ether	50.6	2.0	ug/l	50.0	ND	101	60-150			
Surrogate: Dibromofluoromethane	58.0		"	50.0		116	50-150			
Surrogate: 1,2-Dichloroethane-d4	52.0		"	50.0		104	50-150			
Matrix Spike Dup (1B14009-MSD1)				Source: W102289-05		Prepared & Analyzed: 14-Feb-01				
Methyl tert-butyl ether	61.3	2.0	ug/l	50.0	ND	123	60-150	19.1	25	
Surrogate: Dibromofluoromethane	58.0		"	50.0		116	50-150			
Surrogate: 1,2-Dichloroethane-d4	51.1		"	50.0		102	50-150			





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Notes and Definitions

- CC-3 Continuing Calibration indicates that the quantitative result for this analyte includes a greater than 15% degree of uncertainty. The value as reported is within method acceptance.
- P-03 Chromatogram Pattern: Unidentified Hydrocarbons C6-C12
- S-03 The surrogate recovery for this sample is outside of established control limits. Review of associated QC indicates the recovery for this surrogate does not represent an out-of-control condition.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

