

**1R - 263**

# **REPORTS**

**DATE:**

**1/14/2003**



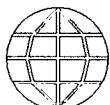
Tipperary  
CORPORATION

**Tipperary Corporation  
Annual Report  
Bagley Field  
Monitor Well Sampling Results**

**RECEIVED**

**FEB 13 2003**

**ENVIRONMENTAL BUREAU  
OIL CONSERVATION DIVISION**



**Whole Earth Environmental  
19606 San Gabriel  
Houston, Tx. 77084**



**Executive Summary  
Tipperary Corporation  
Bagley Field  
2002 Water Sampling Results**

**Activity Summary**

We began the year bailing and sampling the Bagley Field monitor wells using a new Grunfos pump and having made extensive revisions to our decontamination procedures. The changes allowed us not only to pump approximately twice the volumes from each well than our previous methods but also have a greater confidence in the actual results obtained.

**Iva Com**

The BTEX concentrations within the recovery well are up approximately 5% from last year but down over 90% from the initial sampling period of four years ago. We estimate that the present oil / water cut within the recovery well is 3% based on visual examination of the fluids within the collection tank. The outlying wells continue to show essentially non-detect levels. The windmill and, collection and storage equipment all appear to be in good working order.

**Mable Com**

The BTEX concentrations within the recovery well are down approximately 5% from the previous year and over 50% from the initial sampling period of four years ago. We estimate that the present oil / water cut within the recovery well is 5% based on visual examination of the fluids within the collection tank.

Monitor well # 3 continues to show a significant amount of DNAPL within the well bore. We estimate the hydrocarbon fraction to be 85% of the volumes collected. The BTEX segment of the contaminant stream makes up approximately .01% of the total volume.

Monitor well # 4 continues to show essentially non-detect BTEX concentrations.

A new delineation monitor well (# 35) was drilled and developed during the second quarter of the year. Two rounds of sampling show non-detect BTEX concentrations.

**Bell**

Monitor well # **6** (nearest the pit), finished the year with two consecutive quarters of acceptable results after nineteen consecutive quarters of benzene concentrations in excess of standards.

Monitor well # **13** now has eleven consecutive quarters of acceptable results.

Monitor well # **14** shows a slight increase in benzene concentrations over the previous year but the overall BTEX concentrations are down approximately 78% over the initial 1998 results.

Monitor well # **25** now has thirteen consecutive quarters of acceptable results.

A new delineation monitor well (# **36**) was drilled and developed during the second quarter of the year. The initial sample results showed non-detectable BTEX concentrations followed by a benzene concentration of 28 ppm. The most recent sampling conducted in late December and not included within this report are back to less than 1 ppm. The October results are most likely the result of cross contamination.

**NBF**

The well nearest the pit (# **8**) remains clean.

Monitor well # **15** contains approximately 20% free product and continues to show increased BTEX elevations. Prior to the introduction of the Grunfos, this bore was especially difficult to bail due to the amount of built up sediment in the bore. Aggressive bailing resulted in a migration of the contaminant plume within the well and hence, dramatic increases in the contaminant concentrations.

Monitor well # **16** remains in excess of standards but within normal limits. The BTEX concentrations have dropped 53% over the previous year and 43% over the initial reporting period.

Monitor well # **26** remained within standards for three consecutive quarters and then increased dramatically in October. Results for December of 2002 (not included within this report) dropped back to non-detect concentrations indicating once again a probable cross contamination problem with the equipment.

A new delineation monitor well (# **37**) was drilled and developed during the second quarter of the year and shows two consecutive quarters of non-detectable BTEX concentrations.

**Sohio # 1**

The three wells nearest the pit all contain free product and sulfides within the bores. We estimate the amount to be between 5-10% of fluid volume. The BTEX concentrations within the well nearest the pit (# **10**) shows an increase of 85% over last years averages.

Monitor well # **17** again showed an increase in BTEX levels of 39% over the previous year and 154% over the initial sampling.

Monitor well # **18** again showed an increase in BTEX levels of 85% over the previous year and 455% over the initial sampling.

Monitor wells # **28** and # **29** fluctuate between non-detectable and minor BTEX concentrations.

The newest well, # **40** had a single spike in October. The newest readings, taken in December and not included within this report, show acceptable concentrations.

#### **Sohio A**

Monitor well # **11** (nearest the pit) shows a decline in overall BTEX concentrations of 41% over the previous years results and a marginal decline over the initial concentrations.

Monitor well # **19** continues to have ever increasing BTEX concentrations within the bore indicating that the main plume is traveling in a more westerly direction than the topography of the area would predict.

Monitor well # **20** has shown four consecutive quarters of acceptable results.

Monitor Well # **27** continues to display rather erratic readings – up one quarter and down the next. I believe that the June reading of non-detect BTEX was actually the results from well # **39** which was skipped in the June sampling round.

Well # **39** was skipped in both June and October due to an error of omission in our quarterly work plan for the Bagley Field Sampling Project. It was sampled in December and recorded a benzene concentration of .057 ppm. If the second quarter sampling results are again higher than WQCC standards, we will drill and complete yet another well in an attempt to delineate the plume spread.

#### **G.S. State**

The recovery well appears to be in good mechanical shape as does the collection and storage equipment. Observation of the storage tank indicates an oil / water cut ratio of approximately 93%.

Monitor well # **12** (nearest the pit) contains approximately 15% free product. BTEX concentrations continue to increase – possibly due to the drawdown created by additional bailing.

Monitor well # **21** shows a continuing decline in BTEX concentrations. Three of the past four quarter's results show acceptable concentrations.

Monitor well # **22** shows a continuing decline in BTEX concentrations. The last two quarter's results show acceptable concentrations for the first time ever.

Monitor well # **29** has shown four consecutive quarters of acceptable results.

The newest well, # **38** had significant development problems precluding us from effectively sampling it in the third quarter. We re-developed the bore and now have an effective 9.9' of water column. The December results (not included within this report) also show non-detect BTEX concentrations.

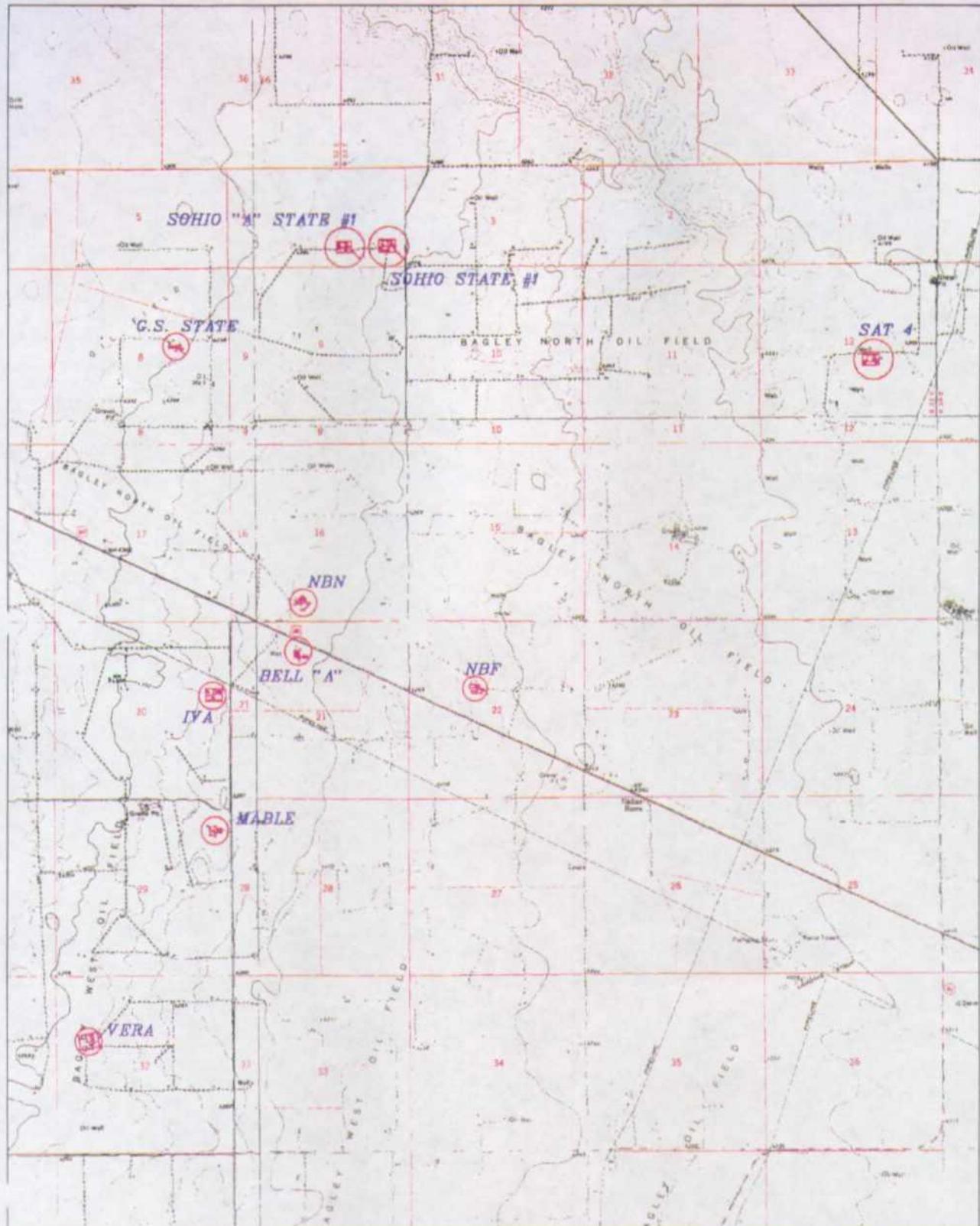
**Collier # 1**

The source well remains an open bore awaiting artificial lift equipment. BTEX concentrations within the bore have remained stable over four consecutive quarters.

Monitor wells # **33 & 34** remain marginally over WQCC standards.

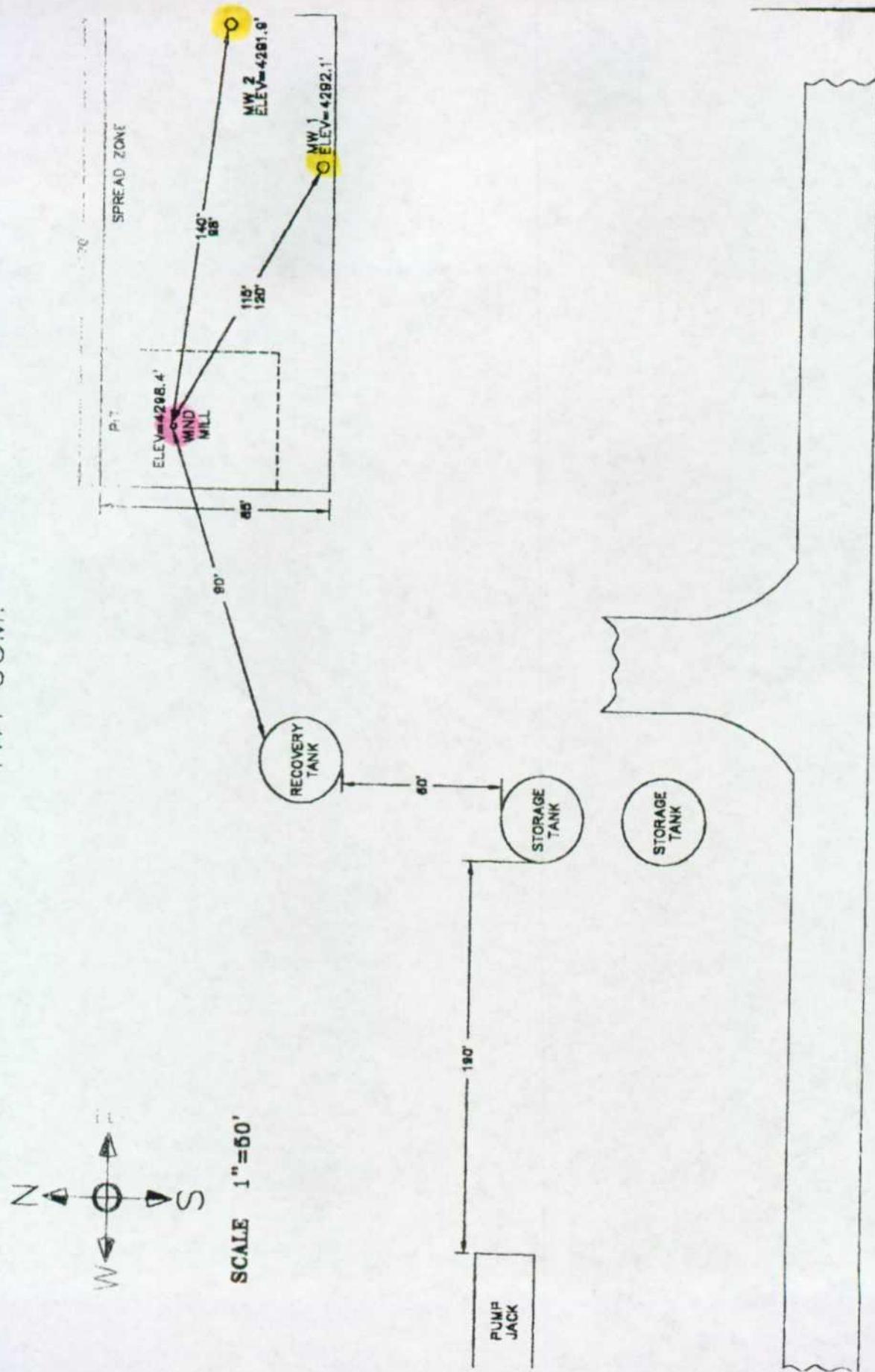
The BTEX concentrations within monitor well # **35** have reached non-detectable concentrations.

# WHOLE EARTH ENVIRONMENTAL, INC.



*Tipperary Corporation*  
**Tatum Bagley Field**  
**Monitor Well Gradient Chart**

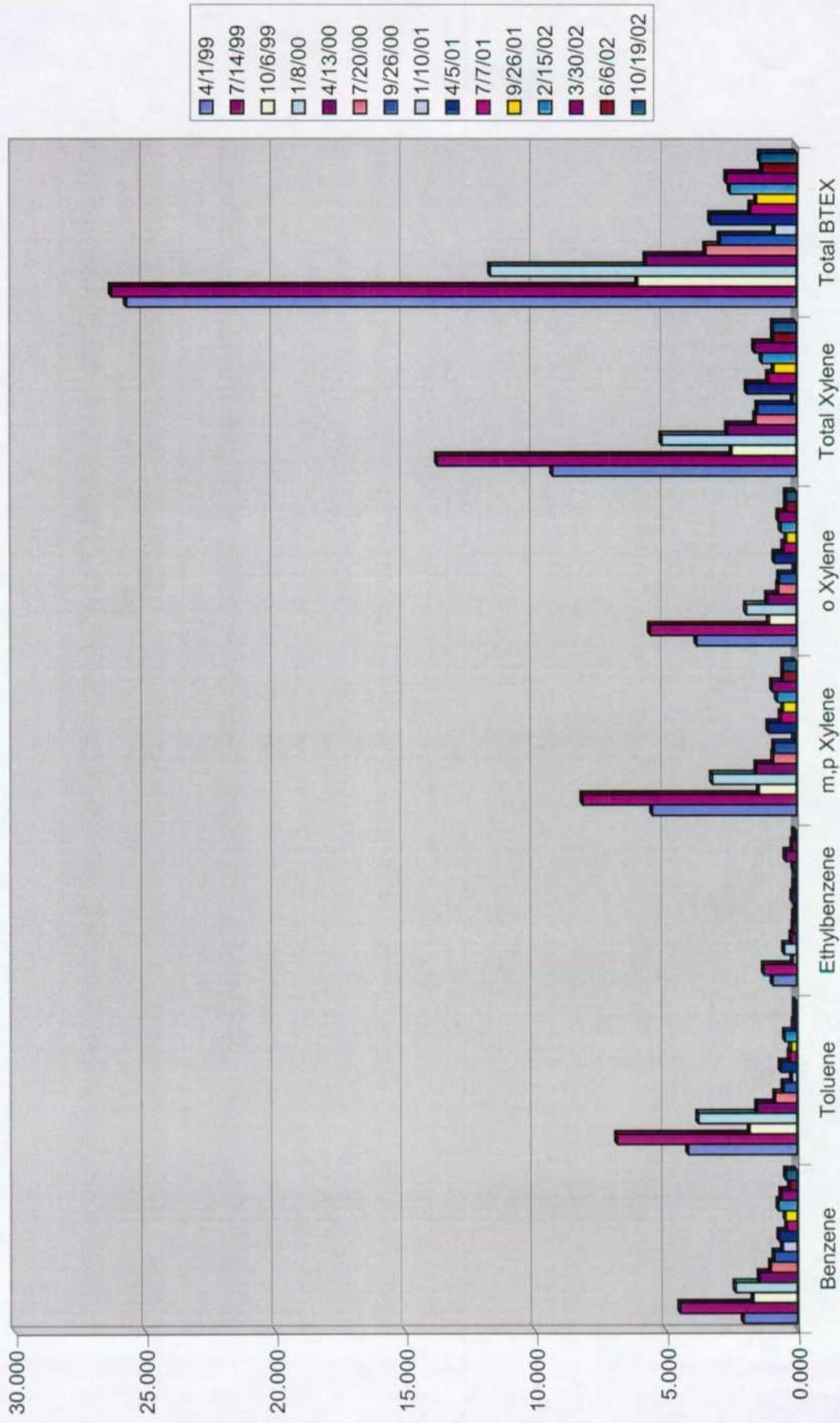
<b>Well Name</b>	<b>Well No.</b>	<b>Surface Elevation</b>	<b>Water Elevation</b>	<b>Distance to Pit Center (Ft.)</b>	<b>Gradient (Ft. / Ft.)</b>	<b>Gradient (Ft. / 100Ft.)</b>
Iva COM	Source Well	4,298.42	4,246.42			
	1	4,292.10	4,237.20	115	0.080174	8.02
	2	4,291.93	4,238.93	140	0.053500	5.35
Mable COM	Source Well	4,290.55	4,238.55			
	3	4,287.22	4,235.22	148	0.022500	2.25
	4	4,287.86	4,235.46	160	0.019313	1.93
	35			348		
Bell State	6	4,281.12	4,230.12	93	0.021183	2.12
	13	4,280.84	4,233.04	51	0.044118	4.41
	14	4,280.80	4,232.50	47	0.048723	4.87
	25	4,280.37	4,232.97	154	0.017662	1.77
	36			345		
NBF	8	4,259.41	4,211.41	165	0.045152	4.52
	15	4,259.68	4,212.68	198	0.036263	3.63
	16	4,259.06	4,211.96	247	0.031579	3.16
	26	4,258.04	4,215.04	387	0.022791	2.28
	37			298		
Sohio A	11	4,285.88	4,235.88	115	0.011835	0.83
	19	4,285.97	4,237.27	164	0.005305	0.53
	20	4,285.96	4,236.46	151	0.005822	0.58
	27	4,285.61	4,245.61	264	0.004659	0.47
	31	4,283.54	4,246.09	624	0.005288	0.53
	39			944		
Sohio # 1	10	4,283.63	4,233.63	110	0.016273	1.63
	17	4,283.31	4,233.91	262	0.000805	0.81
	18	4,283.59	4,234.99	176	0.010398	1.04
	28	4,283.21	4,236.96	552	0.004004	0.40
	30	4,281.13	4,235.82	776	0.005528	0.55
	40			1,006		
G.S. State	Source Well	4,307.00	4,259.00			
	12	4,303.27	4,255.27	52	0.071731	7.17
	21	4,303.08	4,255.08	151	0.025960	2.60
	22	4,302.77	4,255.27	148	0.025203	2.52
	29	4,303.20	4,254.14	295	0.016475	1.65
	38			351		
Collier	Source Well	4292.10	4249.3			
	33	4284.00	4240.40	400	0.109000	10.90
	34	4281.20	4239.00	640	0.065937	6.59
	35	4280.80	4237.40	919	0.047225	4.72



Iva Source Well

Lab. #	<b>17428</b>	<b>18590</b>	<b>20605</b>	<b>22774</b>	<b>25164</b>	<b>28464</b>	<b>31494</b>	<b>36195</b>	<b>38917</b>	<b>0101098-01</b>	<b>0101642-01</b>	<b>0202619-01</b>	<b>0001112-02</b>	<b>0203577-01</b>	<b>0204815-01</b>
Sample Date	4/1/99	7/14/99	10/6/99	1/8/00	4/13/00	7/20/00	9/26/00	1/10/01	4/5/01	7/7/01	9/26/01	2/15/02	3/30/02	6/6/02	10/19/02
Benzene	2.050	4.460	<b>1.670</b>	<b>2.350</b>	<b>1.430</b>	<b>1.000</b>	<b>0.865</b>	<b>0.533</b>	<b>0.666</b>	<b>0.371</b>	<b>0.430</b>	<b>0.701</b>	<b>0.593</b>	<b>0.257</b>	<b>0.411</b>
Toluene	4.150	6.850	1.800	3.760	1.510	0.815	<b>0.495</b>	0.168	<b>0.599</b>	0.252	0.204	0.437	0.096	0.048	0.043
Ethylbenzene	0.902	1.240	0.126	0.458	<b>0.176</b>	<b>0.104</b>	<b>0.080</b>	<b>0.015</b>	<b>0.141</b>	<b>0.075</b>	<b>0.048</b>	<b>0.102</b>	<b>0.403</b>	<b>0.142</b>	<b>0.080</b>
m,p Xylene	5.500	8.160	1.420	3.210	1.520	0.866	0.833	0.067	1.050	0.577	0.486	0.723	0.913	0.488	0.487
o Xylene	3.800	5.570	1.030	1.910	1.100	0.676	0.636	0.044	0.824	0.474	0.359	0.579	0.670	0.376	0.380
Total Xylene	<b>9.300</b>	<b>13.730</b>	<b>2.450</b>	<b>5.120</b>	<b>2.620</b>	<b>1.542</b>	<b>1.469</b>	<b>0.111</b>	<b>1.874</b>	<b>1.051</b>	<b>0.845</b>	<b>1.302</b>	<b>1.583</b>	<b>0.864</b>	<b>0.867</b>
Total BTEX	25.702	26.280	6.046	11.688	5.736	3.461	2.909	0.827	3.280	1.749	1.527	2.542	2.675	1.311	1.401

### Iva Source Well



Monitor Well # 1  
Iva COM  
Sampling Results

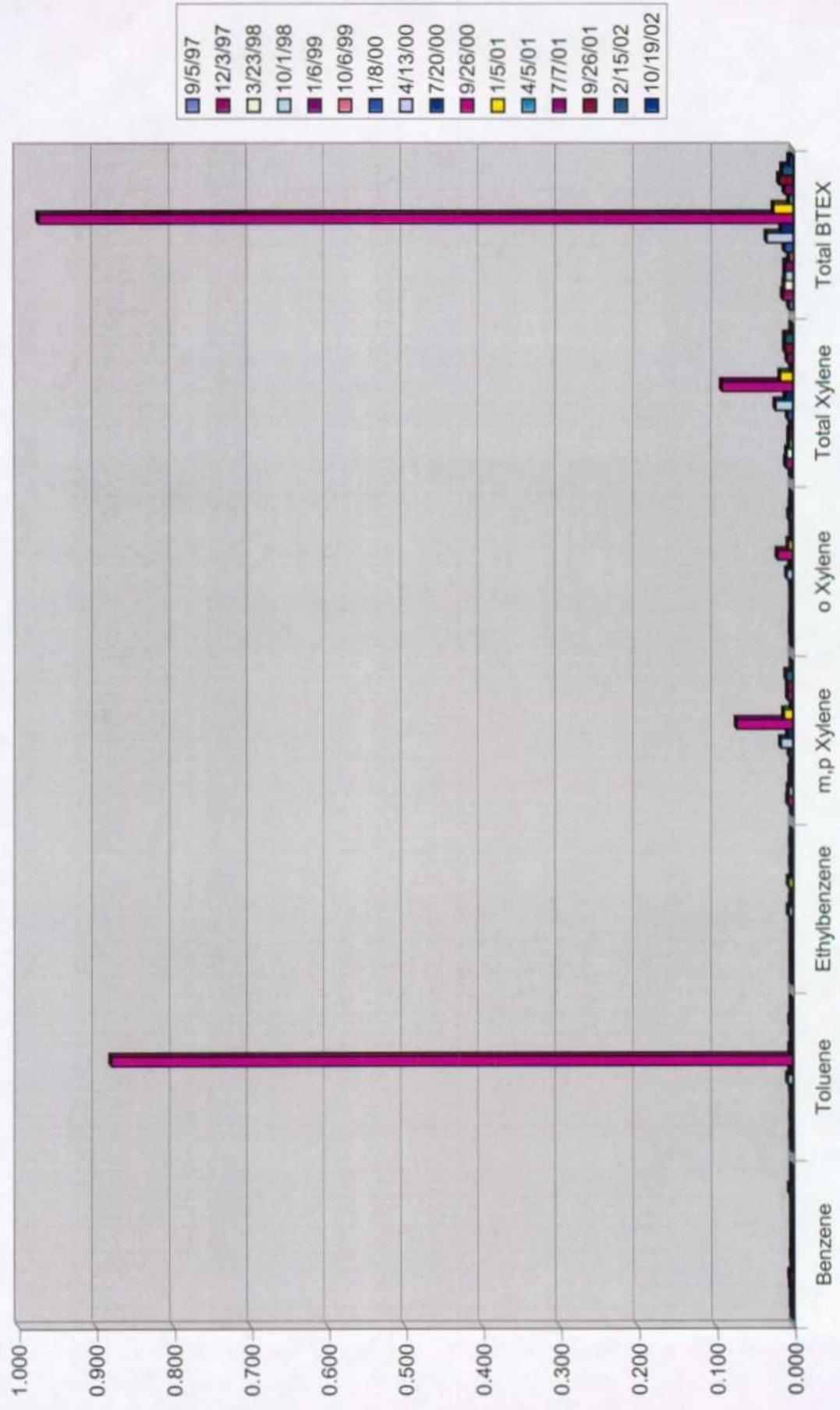
Lab. #	12475	13182	14057	14657	15590	16595	20597	22767	25165	28439	31503	36133	38918	0101098-02	0101642-02	0202619-02	0203001-02	0203577-02	0204815-02
Sample Date	9/5/97	12/3/97	3/23/98	6/25/98	10/1/98	1/6/99	10/6/99	1/6/99	4/13/00	7/20/00	9/26/00	1/5/01	4/5/05	7/7/01	9/26/01	2/15/02	3/30/02	6/6/02	10/19/02
Benzene	0.001	0.004	0.003	0.006	0.004	0.003	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.001	0.001
Toluene	0.001	0.003	0.003	0.005	0.004	0.004	0.001	0.002	0.006	0.001	0.003	0.004	0.004	0.001	0.001	0.001	0.001	0.001	0.001
Ethylbenzene	0.001	0.001	0.001	0.002	0.002	0.002	0.001	0.001	0.005	0.004	0.006	0.006	0.006	0.001	0.003	0.004	0.012	0.001	0.001
m,p Xylene	0.002	0.009	0.007	0.008	0.008	0.006	0.002	0.003	0.015	0.018	0.020	0.014	0.014	0.008	0.003	0.012	0.004	0.001	0.001
o Xylene	0.007	0.008	0.008	0.009	0.009	0.007	0.004	0.001	0.002	0.007	0.008	0.008	0.007	0.001	0.002	0.004	0.004	0.001	0.001
Total Xylene	0.009	0.017	0.015	0.017	0.013	0.006	0.002	0.005	0.022	0.026	0.028	0.021	0.002	0.010	0.004	0.016	0.008	0.002	0.002
Total BTEX	0.012	0.025	0.022	0.030	0.023	0.011	0.005	0.010	0.034	0.032	0.038	0.032	0.005	0.015	0.007	0.022	0.024	0.005	0.005



**Monitor Well # 2**  
**Iva COM**  
**Sampling Results**

Lab. #	12476	13183	14058	15605	16596	20606	22789	25166	28436	31504	36134	38919	0101098-03	0101642-03	0202619-03	0204815-03
Sample Date	9/5/97	12/3/97	3/23/98	10/1/98	1/6/99	10/6/99	1/8/00	4/13/00	7/20/00	9/26/00	1/5/01	4/5/01	7/7/01	9/26/01	2/15/02	10/19/02
Benzene	0.001	0.002	0.003	0.004	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.004	0.001	0.001	0.001	0.001
Toluene	0.001	0.002	0.001	0.002	0.001	0.001	0.001	0.002	0.006	0.003	0.003	0.001	0.001	0.001	0.001	0.001
Ethylbenzene	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.005	0.002	0.001	0.005	0.001	0.002	0.001	0.002	0.001
m,p Xylene	0.001	0.006	0.005	0.003	0.003	0.001	0.004	0.015	0.006	0.072	0.011	0.001	0.006	0.006	0.008	0.001
o Xylene	0.001	0.002	0.002	0.001	0.001	0.001	0.002	0.007	0.003	0.019	0.005	0.001	0.004	0.004	0.002	0.001
Total Xylene	0.002	0.008	0.007	0.004	0.004	0.002	0.006	0.022	0.009	0.091	0.016	0.002	0.007	0.010	0.010	0.002
Total BTEX	0.005	0.013	0.011	0.010	0.010	0.005	0.011	0.034	0.015	0.973	0.025	0.005	0.011	0.018	0.014	0.005

MW # 2





## **Exhibits**

This section contains copies of the four individual quarterly laboratory sampling results and all associated quality control information.

# ENVIRONMENTAL LAB OF I, LTD.

"Don't Treat Your Soil Like Dirt!"

WHOLE EARTH ENVIRONMENTAL  
 ATTN: MIKE GRIFFIN  
 19606 SAN GABRIEL  
 HOUSTON, TEXAS 77084  
 FAX: 281-646-8996

Sample Type: Water  
 Sample Condition: Intact/ Iced/ HCl/ -1.0 deg C  
 Project Name: Quarterly Sampling  
 Project #: None Given  
 Project Location: Tatum, NM

Sampling Date: 02/16/02  
 Receiving Date: 02/18/02  
 Analysis Date: 02/20/02

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
0202619-01	Iva Source Well	0.701	0.437	0.102	0.723	0.579
0202619-02	Iva MW 1	<0.001	0.001	0.004	0.012	0.004
0202619-03	Iva MW 2	<0.001	<0.001	0.002	0.008	0.002
0202619-04	Mable Source Well	0.486	0.418	0.149	1.14	0.801
0202619-05	Mable MW 3	<0.050	0.116	0.118	0.395	0.139
0202619-06	Mable MW 4	0.007	0.003	0.009	0.028	0.012
0202619-07	Bell MW 6	0.022	<0.001	0.005	0.008	0.002
0202619-08	Bell MW 13	<0.001	<0.001	0.002	0.006	0.002
0202619-09	Bell MW 14	0.378	0.003	0.005	0.023	0.004
0202619-10	Bell MW 25	<0.001	<0.001	0.002	0.008	0.003
0202619-11	NBF MW 8	0.001	<0.001	0.002	0.005	0.002
0202619-12	NBF MW 15	1.31	1.87	1.06	3.92	2.10
0202619-13	NBF MW 16	0.484	0.032	0.043	0.080	0.038
0202619-14	NBF MW 26	0.008	0.008	0.010	0.034	0.015
0202619-15	Sohio #1 MW 10	3.85	1.34	1.06	5.00	2.20
QUALITY CONTROL						
TRUE VALUE						
% INSTRUMENT ACCURACY						
SPIKED AMOUNT						
ORIGINAL SAMPLE						
SPIKE						
SPIKE DUP						
% EXTRACTION ACCURACY						
BLANK						
RPD						

METHODS: EPA SW 846-8021B ,5030

Raland K. Tuttle  
 Celey D. Keene  
 Raland K. Tuttle

Z-22-02  
 Date

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

MIKE GRIFFIN  
WHOLE EARTH  
19606 SAN GABRIEL  
HOUSTON, TX 77084

Order#: G0203001  
Project:  
Project Name: Quarterly Sampling  
Location: Tatum New Mexico

Lab ID: 0203001-01  
Sample ID: Iva Source Well

### 8021B/5030 BTEX

<u>Method</u> <u>Blank</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	<u>Sample</u> <u>Amount</u>	<u>Dilution</u> <u>Factor</u>	<u>Analyst</u>	<u>Method</u>
0001112-02		4/6/02 19:05	1	5	CK	8021B

Parameter	Result µg/L	RL
Benzene	593	5.00
Ethylbenzene	95.8	5.00
Toluene	403	5.00
p/m-Xylene	913	5.00
o-Xylene	670	5.00

Lab ID: 0203001-02  
Sample ID: Iva MW-1

### 8021B/5030 BTEX

<u>Method</u> <u>Blank</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	<u>Sample</u> <u>Amount</u>	<u>Dilution</u> <u>Factor</u>	<u>Analyst</u>	<u>Method</u>
0001112-02		4/6/02 21:38	1	1	CK	8021B

Parameter	Result µg/L	RL
Benzene	<1.00	1.00
Ethylbenzene	3.26	1.00
Toluene	1.00	1.00
p/m-Xylene	11.7	1.00
o-Xylene	4.37	1.00

DL = Diluted      N/A = Not

RL = Reporting Limit

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ENVIRONMENTAL LAB OF TEXAS I, LTD.      12600 West I-20 East, Odessa, TX 79765      Ph: 915-563-1800

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

MIKE GRIFFIN  
WHOLE EARTH  
19606 SAN GABRIEL  
HOUSTON, TX 77084

Order#: G0203001  
Project:  
Project Name: Quarterly Sampling  
Location: Tatum New Mexico

Lab ID: 0203001-03  
Sample ID: Iva MW-2

**8021B/5030 BTEX**

<u>Method</u> <u>Blank</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	<u>Sample</u> <u>Amount</u>	<u>Dilution</u> <u>Factor</u>	<u>Analyst</u> CK	<u>Method</u>
0001112-02		4/6/02 22:00	1	1		8021B

Parameter	Result µg/L	RL
Benzene	<1.00	1.00
Ethylbenzene	2.15	1.00
Toluene	1.57	1.00
p/m-Xylene	8.02	1.00
o-Xylene	2.72	1.00

Lab ID: 0203001-04  
Sample ID: Mable Source Well

**8021B/5030 BTEX**

<u>Method</u> <u>Blank</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	<u>Sample</u> <u>Amount</u>	<u>Dilution</u> <u>Factor</u>	<u>Analyst</u> CK	<u>Method</u>
0001112-02		4/6/02 19:48	1	5		8021B

Parameter	Result µg/L	RL
Benzene	531	5.00
Ethylbenzene	156	5.00
Toluene	456	5.00
p/m-Xylene	1300	5.00
o-Xylene	909	5.00

DL = Diluted      N/A = Not

RL = Reporting Limit

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ENVIRONMENTAL LAB OF TEXAS I, LTD.      12600 West I-20 East, Odessa, TX 79765      Ph: 915-563-1800

# **ANALYTICAL REPORT**

**Prepared for:**

**MIKE GRIFFIN  
WHOLE EARTH  
19606 SAN GABRIEL  
HOUSTON, TX 77084**

**Project:**           Quarterly Sampling  
**Order#:**           G0203602  
**Report Date:**    07/01/2002

**Certificates**  
**US EPA Laboratory Code TX00158**

# ENVIRONMENTAL LAB OF TEXAS

## SAMPLE WORK LIST

WHOLE EARTH  
19606 SAN GABRIEL  
HOUSTON, TX 77084  
281-646-8996

Order#: G0203001  
Project:  
Project Name: Quarterly Sampling  
Location: Tatum New Mexico

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u>	<u>Date / Time</u>	<u>Container</u>	<u>Preservative</u>
			<u>Collected</u>	<u>Received</u>		
<b>0203001-01</b>	Iva Source Well	WATER	3/30/02	4/3/02 15:55	40 mL VOA	hcl/ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 c		
	8021B/5030 BTEX					
<b>0203001-02</b>	Iva MW-1	WATER	3/30/02	4/3/02 15:55	40 mL VOA	hcl/ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 c		
	8021B/5030 BTEX					
<b>0203001-03</b>	Iva MW-2	WATER	3/30/02	4/3/02 15:55	40 mL VOA	hcl/ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 c		
	8021B/5030 BTEX					
<b>0203001-04</b>	Mable Source Well	WATER	3/30/02	4/3/02 15:55	40 mL VOA	hcl/ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 c		
	8021B/5030 BTEX					
<b>0203001-05</b>	Mable MW-3	WATER	3/30/02	4/3/02 15:55	40 mL VOA	hcl/ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 c		
	8021B/5030 BTEX					
<b>0203001-06</b>	Mable MW-4	WATER	3/30/02	4/3/02 15:55	40 mL VOA	hcl/ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 c		
	8021B/5030 BTEX					
<b>0203001-07</b>	Bell MW-6	WATER	3/30/02	4/3/02 15:55	40 mL VOA	hcl/ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 c		
	8021B/5030 BTEX					
<b>0203001-08</b>	Bell MW-13	WATER	3/30/02	4/3/02 15:55	40 mL VOA	hcl/ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 c		
	8021B/5030 BTEX					

# ENVIRONMENTAL LAB OF TEXAS

## SAMPLE WORK LIST

WHOLE EARTH  
19606 SAN GABRIEL  
HOUSTON, TX 77084  
281-646-8996

Order#: G0203001  
Project:  
Project Name: Quarterly Sampling  
Location: Tatum New Mexico

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u>	<u>Date / Time</u>	<u>Container</u>	<u>Preservative</u>
			<u>Collected</u>	<u>Received</u>		
<b>0203001-17</b>	Sohio #1 MW 18	WATER	3/30/02	4/3/02 15:55	40 mL VOA	hcl/ice
			<u>Lab Testing:</u>	Rejected: No	Temp: 1.5 c	
				8021B/5030 BTEX		
<b>0203001-18</b>	Sohio #1 MW-28	WATER	3/30/02	4/3/02 15:55	40 mL VOA	hcl/ice
			<u>Lab Testing:</u>	Rejected: No	Temp: 1.5 c	
				8021B/5030 BTEX		
<b>0203001-19</b>	Sohio #1 MW-30	WATER	3/30/02	4/3/02 15:55	40 mL VOA	hcl/ice
			<u>Lab Testing:</u>	Rejected: No	Temp: 1.5 c	
				8021B/5030 BTEX		
<b>0203001-20</b>	Sohio "A" MW-11	WATER	3/30/02	4/3/02 15:55	40 mL VOA	hcl/ice
			<u>Lab Testing:</u>	Rejected: No	Temp: 1.5 c	
				8021B/5030 BTEX		
<b>0203001-21</b>	Sohio "A" MW-19	WATER	3/30/02	4/3/02 15:55	40 mL VOA	hcl/ice
			<u>Lab Testing:</u>	Rejected: No	Temp: 1.5 c	
				8021B/5030 BTEX		
<b>0203001-22</b>	Sohio "A" MW-20	WATER	3/30/02	4/3/02 15:55	40 mL VOA	hcl/ice
			<u>Lab Testing:</u>	Rejected: No	Temp: 1.5 c	
				8021B/5030 BTEX		
<b>0203001-23</b>	Sohio "A" MW-27	WATER	3/30/02	4/3/02 15:55	40 mL VOA	hcl/ice
			<u>Lab Testing:</u>	Rejected: No	Temp: 1.5 c	
				8021B/5030 BTEX		
<b>0203001-24</b>	Sohio "A" MW-31	WATER	3/30/02	4/3/02 15:55	40 mL VOA	hcl/ice
			<u>Lab Testing:</u>	Rejected: No	Temp: 1.5 c	
				8021B/5030 BTEX		

# ENVIRONMENTAL LAB OF TEXAS

## SAMPLE WORK LIST

WHOLE EARTH  
19606 SAN GABRIEL  
HOUSTON, TX 77084  
281-646-8996

Order#: G0203001  
Project:  
Project Name: Quarterly Sampling  
Location: Tatum New Mexico

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u>	<u>Date / Time</u>	<u>Container</u>	<u>Preservative</u>
			<u>Collected</u>	<u>Received</u>		
<b>0203001-25</b>	GS Source Well	WATER	3/30/02	4/3/02 15:55	40 mL VOA	hcl/ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 c		
	8021B/5030 BTEX					
<b>0203001-26</b>	GS MW-12	WATER	3/30/02	4/3/02 15:55	40 mL VOA	hcl/ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 c		
	8021B/5030 BTEX					
<b>0203001-27</b>	GS MW-21	WATER	3/30/02	4/3/02 15:55	40 mL VOA	hcl/ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 c		
	8021B/5030 BTEX					
<b>0203001-28</b>	GS MW-22	WATER	3/30/02	4/3/02 15:55	40 mL VOA	hcl/ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 c		
	8021B/5030 BTEX					
<b>0203001-29</b>	GS MW-29	WATER	3/30/02	4/3/02 15:55	40 mL VOA	hcl/ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 c		
	8021B/5030 BTEX					
<b>0203001-30</b>	Collier MW-Source	WATER	3/30/02	4/3/02 15:55	40 mL VOA	hcl/ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 c		
	8021B/5030 BTEX					

# Environmental Lab of Texas, Inc.

12600 West I-20 East  
Odessa, Texas 79763

Phone: 915-563-1800  
Fax: 915-563-1713

## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager:

Company Name Whole Earth Environmental, Inc.

Project Name: Quarterly Sampling

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

Company Address: 19606 San Gabriel

Project Loc: Tatum, New Mexico

City/State/Zip: Houston, Tx. 77084

PO #: \_\_\_\_\_

Telephone No: (800) 854-4358

Fax No: (281) 646-8986

Sampler Signature: \_\_\_\_\_

Email results

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	Preservative		Matrix	Analyze For:	RUSH/TAT Pre-Schedule			
				TCLP:	TOTAL:			CERCLA/RCRA			
020001-01	Iva Source Well	3/30/02		2	X						
02	Iva MW 1	3/30/02		2	X						
03	Iva MW 2	3/30/02		2	X						
04	Mable Source Well	3/30/02		2	X						
05	Mable MW 3	3/30/02		2	X						
06	Mable MW 4	3/30/02		2	X						
07	Bell MW 6	3/30/02		2	X						
08	Bell MW 13	3/30/02		2	X						
09	Bell MW 14	3/30/02		2	X						
10	Bell MW 25	3/30/02		2	X						

Special Instructions:

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by ELOT: \_\_\_\_\_

Date: 4-3-2 Time: 1555

Sample Containers intact? \_\_\_\_\_  
Temperature Upon Receipt: \_\_\_\_\_  
Laboratory Comments: \_\_\_\_\_

N

1,5 C

# Evironmental Lab of Texas, Inc.

12600 West I-20 East  
Odessa, Texas 79763

Phone: 915-563-1800  
Fax: 915-563-1713

Project Manager:

Company Name Whole Earth Environmental, Inc.

Project Name: Quarterly Sampling

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

Company Address: 19808 San Gabriel

Project Loc: Tatum, New Mexico

City/State/Zip: Houston, Tx. 77084

PO #: \_\_\_\_\_

Telephone No: (800) 854-4358

Fax No: (281) 646-8998

Sampler Signature: \_\_\_\_\_

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Other (Specify)	Water	Soil	Soilge	Soil	TPH A1B.1	TDS / CL / SAR / EC	TPH TX 1005/1006	TPH 6015M GRO/DRC	Meas: As Ag Ba Cd Cr Pb Mg Se	Volatile	Semivolatiles	BTEX 80216/2020	As Ag Ba Cd Cr Pb Mg Se	Analyze For:				
																			TOTAL	TCLP:			
0203201 - 1/	NBF MW 8	3/30/02		2	X	X																	
12	NBF MW 15	3/30/02		2	X	X																	
13	NBF MW 16	3/30/02		2	X	X																	
14	NBF MW 26	3/30/02		2	X	X																	
15	Sohio #1 MW 10	3/30/02		2	X	X																	
16	Sohio #1 MW 17	3/30/02		2	X	X																	
17	Sohio #1 MW 18	3/30/02		2	X	X																	
18	Sohio #1 MW 28	3/30/02		2	X	X																	
19	Sohio #1 MW 30	3/30/02		2	X	X																	
20	Sohio "A" MW 11	3/30/02		2	X	X																	

Special Instructions:

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Requisitioned by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by ELOT: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Sample Containers intact?  
Temperature Upon Receipt:  
Laboratory Comments:

Y N  
15°C

Date	Time	Date	Time
4-3-2	15:55	4-3-2	15:55

# Environmental Lab of Texas, Inc.

12600 West I-20 East  
Odessa, Texas 79763  
Phone: 915-563-1800  
Fax: 915-563-1713

## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager:

Company Name Whole Earth Environmental, Inc.

Phone: 915-563-1800  
Fax: 915-563-1713

Project Name: Quarterly Sampling

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

Company Address: 19606 San Gabriel

City/State/Zip: Houston, Tx. 77084

Telephone No.: (800) 854-4358

Sampler Signature:

Fax No.: (281) 646-8995

				Analyze For:		RUSH/TAT Pre-Schedule	
		TCLP	TOTAL	TCLP	TOTAL	TCLP	TOTAL
Sample # (Lab use only)	FIELD CODE	Date Sampled	No. of Containers	Other (Specify):	Other (Specify):	Other (Specify):	Other (Specify):
0203001~ 21	Sohio "A" MW 19	3/30/02	2	X	X	X	X
22	Sohio "A" MW 20	3/30/02	2	X	X	X	X
23	Sohio "A" MW 27	3/30/02	2	X	X	X	X
24	Sohio "A" MW 31	3/30/02	2	X	X	X	X
25	GS Source Well	3/30/02	2	X	X	X	X
26	GS MW 12	3/30/02	2	X	X	X	X
27	GS MW 21	3/30/02	2	X	X	X	X
28	GS MW 22	3/30/02	2	X	X	X	X
29	GS MW 29	3/30/02	2	X	X	X	X
30	Callier MW 50 source	3/30/02	2	X	X	X	X
Special Instructions:							
Relinquished by:	Date	Time	Received by:	Date	Time	Date	Time
<i>John J. Johnson</i>	4-3-02	3:55PM	<i>Jane McMurry</i>	4-3-2	1555		
Reinquished by:	Date	Time	Received by ELQ:	Date	Time		
<i>John J. Johnson</i>	4-3-02	3:55PM	<i>Jane McMurry</i>	4-3-2	1555		
Sample Containers intact? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N							
Temperature Upon Receipt: <input checked="" type="checkbox"/> 15°C							
Laboratory Comments:							

Relinquished by \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_ Received by \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

Reinquished by \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_ Received by ELQ: \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

MIKE GRIFFIN  
WHOLE EARTH  
19606 SAN GABRIEL  
HOUSTON, TX 77084

Order#: G0203602  
Project:  
Project Name: Quarterly Sampling  
Location: Tatum, New Mexico

Approval: Raland K. Tuttle 7-01-02  
Raland K. Tuttle, Lab Director, QA Officer Date  
Celey D. Keene, Org. Tech. Director  
Jeanne McMurrey, Inorg. Tech. Director  
Sandra Biezugbe, Lab Tech.  
Sara Molina, Lab Tech.

RL = Reporting Limit      N/A = Not Applicable

Page 3 of 3

ENVIRONMENTAL LAB OF TEXAS I, LTD.      12600 West I-20 East, Odessa, TX 79765      Ph: 915-563-1800

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

**8021B/5030 BTEX**

Order#: G0203602

<b>BLANK</b>		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L	WATER	0002050-02			<0.001		
Benzene-mg/L		0002051-02			<0.001		
Ethylbenzene-mg/L		0002050-02			<0.001		
Ethylbenzene-mg/L		0002051-02			<0.001		
Toluene-mg/L		0002050-02			<0.001		
Toluene-mg/L		0002051-02			<0.001		
p/m-Xylene-mg/L		0002050-02			<0.001		
p/m-Xylene-mg/L		0002051-02			<0.001		
o-Xylene-mg/L		0002050-02			<0.001		
o-Xylene-mg/L		0002051-02			<0.001		
<b>MS</b>		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L	WATER	0203602-19	0	0.1	0.099	99.%	
Benzene-mg/L		0203678-01	0	0.1	0.101	101.%	
Ethylbenzene-mg/L		0203602-19	0	0.1	0.095	95.%	
Ethylbenzene-mg/L		0203678-01	0	0.1	0.096	96.%	
Toluene-mg/L		0203602-19	0	0.1	0.093	93.%	
Toluene-mg/L		0203678-01	0	0.1	0.094	94.%	
p/m-Xylene-mg/L		0203602-19	0	0.2	0.193	96.5%	
p/m-Xylene-mg/L		0203678-01	0	0.2	0.196	98.%	
o-Xylene-mg/L		0203602-19	0	0.1	0.095	95.%	
o-Xylene-mg/L		0203678-01	0	0.1	0.096	96.%	
<b>MSD</b>		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L	WATER	0203602-19	0	0.1	0.101	101.%	2.%
Benzene-mg/L		0203678-01	0	0.1	0.097	97.%	4.%
Ethylbenzene-mg/L		0203602-19	0	0.1	0.096	96.%	1.%
Ethylbenzene-mg/L		0203678-01	0	0.1	0.093	93.%	3.2%
Toluene-mg/L		0203602-19	0	0.1	0.095	95.%	2.1%
Toluene-mg/L		0203678-01	0	0.1	0.091	91.%	3.2%
p/m-Xylene-mg/L		0203602-19	0	0.2	0.195	97.5%	1.%
p/m-Xylene-mg/L		0203678-01	0	0.2	0.188	94.%	4.2%
o-Xylene-mg/L		0203602-19	0	0.1	0.096	96.%	1.%
o-Xylene-mg/L		0203678-01	0	0.1	0.093	93.%	3.2%
<b>SRM</b>		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L	WATER	0002050-05		0.1	0.105	105.%	
Benzene-mg/L		0002051-05		0.1	0.105	105.%	
Ethylbenzene-mg/L		0002050-05		0.1	0.102	102.%	
Ethylbenzene-mg/L		0002051-05		0.1	0.102	102.%	
Toluene-mg/L		0002050-05		0.1	0.100	100.%	

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

SRM WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Toluene-mg/L	0002051-05		0.1	0.1	100.%	
p/m-Xylene-mg/L	0002050-05		0.2	0.205	102.5%	
p/m-Xylene-mg/L	0002051-05		0.2	0.205	102.5%	
o-Xylene-mg/L	0002050-05		0.1	0.101	101.%	
o-Xylene-mg/L	0002051-05		0.1	0.101	101.%	

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

### Anions

Order#: G0203602

<b>BLANK</b> WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Bicarbonate Alkalinity-mg/L	0002034-01			<2.00		
Carbonate Alkalinity-mg/L	0002035-01			<0.10		
Chloride-mg/L	0002037-01			<5.00		
Hydroxide Alkalinity-mg/L	0002036-01			<0.10		
SULFATE, 375.4-mg/L	0001999-01			<0.5		
<b>DUPLICATE</b> WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Bicarbonate Alkalinity-mg/L	0203605-21	340		342		0.6%
Carbonate Alkalinity-mg/L	0203605-21	0		<0.10		0.%
Hydroxide Alkalinity-mg/L	0203605-21	0		<0.10		0.%
<b>MS</b> WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/L	0203587-01	97.5	250	350	101.%	
<b>MSD</b> WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/L	0203587-01	97.5	250	346	99.4%	1.1%
<b>SRM</b> WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Bicarbonate Alkalinity-mg/L	0002034-04		0.05	0.0496	99.2%	
Carbonate Alkalinity-mg/L	0002035-04		0.05	0.0496	99.2%	
Chloride-mg/L	0002037-04		5000	5050	101.%	
Hydroxide Alkalinity-mg/L	0002036-04		0.05	0.0496	99.2%	
SULFATE, 375.4-mg/L	0001999-04		50	50.4	100.8%	

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

### Cations

Order#: G0203602

<b>BLANK</b> WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L	0002260-02			<0.010		
Magnesium-mg/L	0002260-02			0.010		
Potassium-mg/L	0002260-02			0.070		
Sodium-mg/L	0002260-02			0		
<b>CONTROL</b> WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L	0002260-03		10	9.70	97.%	
Magnesium-mg/L	0002260-03		5	5.2	104.%	
Potassium-mg/L	0002260-03		10	9.7	97.%	
Sodium-mg/L	0002260-03		5	5.5	110.%	
<b>DUPLICATE</b> WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L	0203579-01	86.4		88		1.8%
Magnesium-mg/L	0203579-01	25.6		25		2.4%
Potassium-mg/L	0203579-01	4.75		4.7		1.1%
Sodium-mg/L	0203579-01	97		97		0.%
<b>SRM</b> WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L	0002260-05		10	9.54	95.4%	
Magnesium-mg/L	0002260-05		5	5.0	100.%	
Potassium-mg/L	0002260-05		10	10	100.%	
Sodium-mg/L	0002260-05		5	5.2	104.%	

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

### Test Parameters

Order#: G0203602

BLANK WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L	0002045-01			<5.00		
DUPLICATE WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L	0203602-04	713		720		1.%

# **ANALYTICAL REPORT**

**Prepared for:**

**MIKE GRIFFIN  
WHOLE EARTH  
19606 SAN GABRIEL  
HOUSTON, TX 77084**

**Project:**      Quarterly Sampling

**PO#:**

**Order#:**      G0204815

**Report Date:**    10/30/2002

**Certificates**

**US EPA Laboratory Code TX00158**

# ENVIRONMENTAL LAB OF TEXAS

## SAMPLE WORK LIST

WHOLE EARTH  
19606 SAN GABRIEL  
HOUSTON, TX 77084  
281-646-8996

Order#: G0204815  
Project: None Given  
Project Name: Quarterly Sampling  
Location: Tatum, New Mexico

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time Collected</u>	<u>Date / Time Received</u>	<u>Container</u>	<u>Preservative</u>
0204815-01	Iva Source Well	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
	<u>Lab Testing:</u> 8021B/5030 BTEX		Rejected: No	Temp: 3 C		
0204815-02	Iva MW 1	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
	<u>Lab Testing:</u> 8021B/5030 BTEX		Rejected: No	Temp: 3 C		
0204815-03	Iva MW 2	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
	<u>Lab Testing:</u> 8021B/5030 BTEX		Rejected: No	Temp: 3 C		
0204815-04	Mable Source Well	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
	<u>Lab Testing:</u> 8021B/5030 BTEX		Rejected: No	Temp: 3 C		
0204815-05	Mable MW 3	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
	<u>Lab Testing:</u> 8021B/5030 BTEX		Rejected: No	Temp: 3 C		
0204815-06	Mable MW 4	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
	<u>Lab Testing:</u> 8021B/5030 BTEX		Rejected: No	Temp: 3 C		
0204815-08	Bell MW 6	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
	<u>Lab Testing:</u> 8021B/5030 BTEX		Rejected: No	Temp: 3 C		
0204815-09	Bell MW 13	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
	<u>Lab Testing:</u> 8021B/5030 BTEX		Rejected: No	Temp: 3 C		

# ENVIRONMENTAL LAB OF TEXAS

## SAMPLE WORK LIST

WHOLE EARTH  
19606 SAN GABRIEL  
HOUSTON, TX 77084  
281-646-8996

Order#: G0204815  
Project: None Given  
Project Name: Quarterly Sampling  
Location: Tatum, New Mexico

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time Collected</u>	<u>Date / Time Received</u>	<u>Container</u>	<u>Preservative</u>
<b>0204815-10</b>	Bell MW 14	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
		<u>Lab Testing:</u>	Rejected: No	Temp: 3 C		
			8021B/5030 BTEX			
<b>0204815-11</b>	Bell MW 25	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
		<u>Lab Testing:</u>	Rejected: No	Temp: 3 C		
			8021B/5030 BTEX			
<b>0204815-12</b>	Bell MW 36	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
		<u>Lab Testing:</u>	Rejected: No	Temp: 3 C		
			8021B/5030 BTEX			
<b>0204815-13</b>	NBF MW 8	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
		<u>Lab Testing:</u>	Rejected: No	Temp: 3 C		
			8021B/5030 BTEX			
<b>0204815-14</b>	NBF MW 15	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
		<u>Lab Testing:</u>	Rejected: No	Temp: 3 C		
			8021B/5030 BTEX			
<b>0204815-15</b>	NBF MW 16	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
		<u>Lab Testing:</u>	Rejected: No	Temp: 3 C		
			8021B/5030 BTEX			
<b>0204815-16</b>	NBF MW 26	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
		<u>Lab Testing:</u>	Rejected: No	Temp: 3 C		
			8021B/5030 BTEX			
<b>0204815-17</b>	NBF MW 37	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
		<u>Lab Testing:</u>	Rejected: No	Temp: 3 C		
			8021B/5030 BTEX			

# ENVIRONMENTAL LAB OF TEXAS

## SAMPLE WORK LIST

WHOLE EARTH  
19606 SAN GABRIEL  
HOUSTON, TX 77084  
281-646-8996

Order#: G0204815  
Project: None Given  
Project Name: Quarterly Sampling  
Location: Tatum, New Mexico

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time Collected</u>	<u>Date / Time Received</u>	<u>Container</u>	<u>Preservative</u>
<b>0204815-18</b>	Sohio #1 MW 10	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
		<u>Lab Testing:</u>	Rejected: No	Temp: 3 C		
			8021B/5030 BTEX			
<b>0204815-19</b>	Sohio #1 MW 17	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
		<u>Lab Testing:</u>	Rejected: No	Temp: 3 C		
			8021B/5030 BTEX			
<b>0204815-20</b>	Sohio #1 MW 18	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
		<u>Lab Testing:</u>	Rejected: No	Temp: 3 C		
			8021B/5030 BTEX			
<b>0204815-21</b>	Sohio #1 MW 28	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
		<u>Lab Testing:</u>	Rejected: No	Temp: 3 C		
			8021B/5030 BTEX			
<b>0204815-22</b>	Sohio #1 MW 30	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
		<u>Lab Testing:</u>	Rejected: No	Temp: 3 C		
			8021B/5030 BTEX			
<b>0204815-23</b>	Sohio #1 MW 40	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
		<u>Lab Testing:</u>	Rejected: No	Temp: 3 C		
			8021B/5030 BTEX			
<b>0204815-24</b>	Sohio "A" MW 11	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
		<u>Lab Testing:</u>	Rejected: No	Temp: 3 C		
			8021B/5030 BTEX			
<b>0204815-25</b>	Sohio "A" MW 19	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
		<u>Lab Testing:</u>	Rejected: No	Temp: 3 C		
			8021B/5030 BTEX			

# ENVIRONMENTAL LAB OF TEXAS

## SAMPLE WORK LIST

WHOLE EARTH  
19606 SAN GABRIEL  
HOUSTON, TX 77084  
281-646-8996

Order#: G0204815  
Project: None Given  
Project Name: Quarterly Sampling  
Location: Tatum, New Mexico

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time Collected</u>	<u>Date / Time Received</u>	<u>Container</u>	<u>Preservative</u>
<b>0204815-26</b>	Sohio "A" MW 20	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
	<u>Lab Testing:</u> 8021B/5030 BTEX		Rejected: No	Temp: 3 C		
<b>0204815-27</b>	Sohio "A" MW 27	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
	<u>Lab Testing:</u> 8021B/5030 BTEX		Rejected: No	Temp: 3 C		
<b>0204815-28</b>	Sohio "A" MW 31	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
	<u>Lab Testing:</u> 8021B/5030 BTEX		Rejected: No	Temp: 3 C		
<b>0204815-29</b>	GS Source Well	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
	<u>Lab Testing:</u> 8021B/5030 BTEX		Rejected: No	Temp: 3 C		
<b>0204815-30</b>	GS MW 12	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
	<u>Lab Testing:</u> 8021B/5030 BTEX		Rejected: No	Temp: 3 C		

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

MIKE GRIFFIN  
WHOLE EARTH  
19606 SAN GABRIEL  
HOUSTON, TX 77084

Order#: G0204815  
Project: None Given  
Project Name: Quarterly Sampling  
Location: Tatum, New Mexico

Lab ID: 0204815-01  
Sample ID: Iva Source Well

### 8021B/5030 BTEX

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		10/28/02 13:50	1	1	CK	8021B
0003551-02						

Parameter	Result mg/L	RL	
Benzene	0.411	0.001	
Ethylbenzene	0.043	0.001	
Toluene	0.080	0.001	
p/m-Xylene	0.487	0.001	
o-Xylene	0.380	0.001	

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	110%	80	120
Bromofluorobenzene	105%	80	120

Lab ID: 0204815-02  
Sample ID: Iva MW 1

### 8021B/5030 BTEX

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		10/28/02 14:12	1	1	CK	8021B
0003551-02						

Parameter	Result mg/L	RL	
Benzene	<0.001	0.001	
Ethylbenzene	0.002	0.001	
Toluene	<0.001	0.001	
p/m-Xylene	0.004	0.001	
o-Xylene	0.002	0.001	

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	91%	80	120
Bromofluorobenzene	90%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

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# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

MIKE GRIFFIN  
WHOLE EARTH  
19606 SAN GABRIEL  
HOUSTON, TX 77084

Order#: G0204815  
Project: None Given  
Project Name: Quarterly Sampling  
Location: Tatum, New Mexico

Lab ID: 0204815-03  
Sample ID: Iva MW 2

### 8021B/5030 BTEX

<u>Method Blank</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
0003551-02		10/28/02 14:40	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	<0.001	0.001
Ethylbenzene	0.001	0.001
Toluene	<0.001	0.001
p/m-Xylene	0.003	0.001
o-Xylene	0.001	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	85%	80	120
Bromofluorobenzene	88%	80	120

Lab ID: 0204815-04  
Sample ID: Mable Source Well

### 8021B/5030 BTEX

<u>Method Blank</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
0003551-02		10/28/02 15:02	1	5	CK	8021B

Parameter	Result mg/L	RL
Benzene	0.272	0.005
Ethylbenzene	0.093	0.005
Toluene	0.216	0.005
p/m-Xylene	0.878	0.005
o-Xylene	0.649	0.005

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	109%	80	120
Bromofluorobenzene	96%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

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# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

MIKE GRIFFIN  
WHOLE EARTH  
19606 SAN GABRIEL  
HOUSTON, TX 77084

Order#: G0204815  
Project: None Given  
Project Name: Quarterly Sampling  
Location: Tatum, New Mexico

Lab ID: 0204815-05  
Sample ID: Mable MW 3

### 8021B/5030 BTEX

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample Amount	Dilution Factor	Analyst	Method
0003551-02		10/28/02 15:24	1	10	CK	8021B

Parameter	Result mg/L	RL	
Benzene	0.622	0.010	
Ethylbenzene	1.38	0.010	
Toluene	1.76	0.010	
p/m-Xylene	5.58	0.010	
o-Xylene	1.23	0.010	

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	1560%	80	120
Bromofluorobenzene	186%	80	120

Lab ID: 0204815-06  
Sample ID: Mable MW 4

### 8021B/5030 BTEX

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample Amount	Dilution Factor	Analyst	Method
0003551-02		10/28/02 16:02	1	1	CK	8021B

Parameter	Result mg/L	RL	
Benzene	0.002	0.001	
Ethylbenzene	0.004	0.001	
Toluene	0.001	0.001	
p/m-Xylene	0.007	0.001	
o-Xylene	0.004	0.001	

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	102%	80	120
Bromofluorobenzene	98%	80	120

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

MIKE GRIFFIN  
WHOLE EARTH  
19606 SAN GABRIEL  
HOUSTON, TX 77084

Order#: G0204815  
Project: None Given  
Project Name: Quarterly Sampling  
Location: Tatum, New Mexico

Lab ID: 0204815-08  
Sample ID: Bell MW 6

### 8021B/5030 BTEX

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample Amount	Dilution Factor	Analyst	Method
0003551-02		10/28/02 16:24	1	1	CK	8021B

Parameter	Result mg/L	RL	
Benzene	0.008	0.001	
Ethylbenzene	0.002	0.001	
Toluene	<0.001	0.001	
p/m-Xylene	0.002	0.001	
o-Xylene	<0.001	0.001	

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	92%	80	120
Bromofluorobenzene	95%	80	120

Lab ID: 0204815-09  
Sample ID: Bell MW 13

### 8021B/5030 BTEX

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample Amount	Dilution Factor	Analyst	Method
0003551-02		10/28/02 16:47	1	1	CK	8021B

Parameter	Result mg/L	RL	
Benzene	<0.001	0.001	
Ethylbenzene	<0.001	0.001	
Toluene	<0.001	0.001	
p/m-Xylene	0.003	0.001	
o-Xylene	<0.001	0.001	

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	97%	80	120
Bromofluorobenzene	98%	80	120

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

MIKE GRIFFIN  
WHOLE EARTH  
19606 SAN GABRIEL  
HOUSTON, TX 77084

Order#: G0204815  
Project: None Given  
Project Name: Quarterly Sampling  
Location: Tatum, New Mexico

Lab ID: 0204815-10  
Sample ID: Bell MW 14

### 8021B/5030 BTEX

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		10/28/02 17:09	1	1	CK	8021B
0003551-02						

Parameter	Result mg/L	RL	
Benzene	0.031	0.001	
Ethylbenzene	0.001	0.001	
Toluene	<0.001	0.001	
p/m-Xylene	0.002	0.001	
o-Xylene	<0.001	0.001	

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	89%	80	120
Bromofluorobenzene	88%	80	120

Lab ID: 0204815-11  
Sample ID: Bell MW 25

### 8021B/5030 BTEX

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		10/28/02 20:27	1	1	CK	8021B
0003563-02						

Parameter	Result mg/L	RL	
Benzene	0.001	0.001	
Ethylbenzene	0.003	0.001	
Toluene	0.004	0.001	
p/m-Xylene	0.008	0.001	
o-Xylene	0.001	0.001	

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	110%	80	120
Bromofluorobenzene	102%	80	120

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

MIKE GRIFFIN  
WHOLE EARTH  
19606 SAN GABRIEL  
HOUSTON, TX 77084

Order#: G0204815  
Project: None Given  
Project Name: Quarterly Sampling  
Location: Tatum, New Mexico

Lab ID: 0204815-12  
Sample ID: Bell MW 36

### 8021B/5030 BTEX

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample Amount	Dilution Factor	Analyst	Method
0003563-02		10/29/02 9:19	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	0.028	0.001
Ethylbenzene	0.024	0.001
Toluene	0.030	0.001
p/m-Xylene	0.117	0.001
o-Xylene	0.053	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	122%	80	120
Bromofluorobenzene	100%	80	120

Lab ID: 0204815-13  
Sample ID: NBF MW 8

### 8021B/5030 BTEX

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample Amount	Dilution Factor	Analyst	Method
0003563-02		10/29/02 9:41	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	0.018	0.001
Ethylbenzene	0.009	0.001
Toluene	0.046	0.001
p/m-Xylene	0.034	0.001
o-Xylene	0.020	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	97%	80	120
Bromofluorobenzene	95%	80	120

**ENVIRONMENTAL LAB OF TEXAS**  
**ANALYTICAL REPORT**

MIKE GRIFFIN  
 WHOLE EARTH  
 19606 SAN GABRIEL  
 HOUSTON, TX 77084

Order#: G0204815  
 Project: None Given  
 Project Name: Quarterly Sampling  
 Location: Tatum, New Mexico

Lab ID: 0204815-14  
 Sample ID: NBF MW 15

**8021B/5030 BTEX**

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample Amount	Dilution Factor	Analyst	Method
0003563-02		10/29/02 10:03	1	100	CK	8021B

Parameter	Result mg/L	RL
Benzene	1.93	0.100
Ethylbenzene	0.569	0.100
Toluene	2.28	0.100
p/m-Xylene	2.21	0.100
o-Xylene	1.22	0.100

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	99%	80	120
Bromofluorobenzene	96%	80	120

Lab ID: 0204815-15  
 Sample ID: NBF MW 16

**8021B/5030 BTEX**

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample Amount	Dilution Factor	Analyst	Method
0003563-02		10/29/02 10:25	1	5	CK	8021B

Parameter	Result mg/L	RL
Benzene	0.308	0.005
Ethylbenzene	0.038	0.005
Toluene	0.013	0.005
p/m-Xylene	0.021	0.005
o-Xylene	0.008	0.005

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	97%	80	120
Bromofluorobenzene	93%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

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# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

MIKE GRIFFIN  
WHOLE EARTH  
19606 SAN GABRIEL  
HOUSTON, TX 77084

Order#: G0204815  
Project: None Given  
Project Name: Quarterly Sampling  
Location: Tatum, New Mexico

Lab ID: 0204815-16  
Sample ID: NBF MW 26

### 8021B/5030 BTEX

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		10/29/02 10:47	1	1	CK	8021B
0003563-02						

Parameter	Result mg/L	RL	
Benzene	<0.001	0.001	
Ethylbenzene	<0.001	0.001	
Toluene	<0.001	0.001	
p/m-Xylene	<0.001	0.001	
o-Xylene	<0.001	0.001	

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	91%	80	120
Bromofluorobenzene	92%	80	120

Lab ID: 0204815-17  
Sample ID: NBF MW 37

### 8021B/5030 BTEX

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		10/29/02 11:09	1	1	CK	8021B
0003563-02						

Parameter	Result mg/L	RL	
Benzene	<0.001	0.001	
Ethylbenzene	<0.001	0.001	
Toluene	<0.001	0.001	
p/m-Xylene	<0.001	0.001	
o-Xylene	<0.001	0.001	

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	91%	80	120
Bromofluorobenzene	92%	80	120

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# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

MIKE GRIFFIN  
WHOLE EARTH  
19606 SAN GABRIEL  
HOUSTON, TX 77084

Order#: G0204815  
Project: None Given  
Project Name: Quarterly Sampling  
Location: Tatum, New Mexico

Lab ID: 0204815-18  
Sample ID: Sohio #1 MW 10

### 8021B/5030 BTEX

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
0003563-02		10/29/02 11:31	1	10	CK	8021B

Parameter	Result mg/L	RL	
Benzene	0.471	0.010	
Ethylbenzene	0.087	0.010	
Toluene	0.099	0.010	
p/m-Xylene	0.327	0.010	
o-Xylene	0.158	0.010	

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	108%	80	120
Bromofluorobenzene	94%	80	120

Lab ID: 0204815-19  
Sample ID: Sohio #1 MW 17

### 8021B/5030 BTEX

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
0003563-02		10/29/02 11:53	1	10	CK	8021B

Parameter	Result mg/L	RL	
Benzene	0.830	0.010	
Ethylbenzene	0.081	0.010	
Toluene	<0.010	0.010	
p/m-Xylene	0.332	0.010	
o-Xylene	0.015	0.010	

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	97%	80	120
Bromofluorobenzene	94%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

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# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

MIKE GRIFFIN  
WHOLE EARTH  
19606 SAN GABRIEL  
HOUSTON, TX 77084

Order#: G0204815  
Project: None Given  
Project Name: Quarterly Sampling  
Location: Tatum, New Mexico

Lab ID: 0204815-20  
Sample ID: Sohio #1 MW 18

### 8021B/5030 BTEX

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		10/29/02 12:15	1	100	CK	8021B
0003563-02						

Parameter	Result mg/L	RL	
Benzene	1.45	0.100	
Ethylbenzene	0.317	0.100	
Toluene	0.920	0.100	
p/m-Xylene	1.81	0.100	
o-Xylene	0.994	0.100	

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	92%	80	120
Bromofluorobenzene	86%	80	120

Lab ID: 0204815-21  
Sample ID: Sohio #1 MW 28

### 8021B/5030 BTEX

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		10/29/02 12:37	1	1	CK	8021B
0003563-02						

Parameter	Result mg/L	RL	
Benzene	0.143	0.001	
Ethylbenzene	0.014	0.001	
Toluene	0.104	0.001	
p/m-Xylene	0.160	0.001	
o-Xylene	0.163	0.001	

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	114%	80	120
Bromofluorobenzene	95%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

Page 10 of 15

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

MIKE GRIFFIN  
WHOLE EARTH  
19606 SAN GABRIEL  
HOUSTON, TX 77084

Order#: G0204815  
Project: None Given  
Project Name: Quarterly Sampling  
Location: Tatum, New Mexico

Lab ID: 0204815-22  
Sample ID: Sohio #1 MW 30

### **8021B/5030 BTEX**

<u>Method Blank</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
0003563-02		10/29/02 12:59	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	0.042	0.001
Ethylbenzene	0.030	0.001
Toluene	0.065	0.001
p/m-Xylene	0.170	0.001
o-Xylene	0.083	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	124%	80	120
Bromofluorobenzene	92%	80	120

Lab ID: 0204815-23  
Sample ID: Sohio #1 MW 40

### **8021B/5030 BTEX**

<u>Method Blank</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
0003563-02		10/29/02 13:21	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	0.020	0.001
Ethylbenzene	0.021	0.001
Toluene	0.037	0.001
p/m-Xylene	0.122	0.001
o-Xylene	0.057	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	108%	80	120
Bromofluorobenzene	92%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

Page 11 of 15

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

MIKE GRIFFIN  
WHOLE EARTH  
19606 SAN GABRIEL  
HOUSTON, TX 77084

Order#: G0204815  
Project: None Given  
Project Name: Quarterly Sampling  
Location: Tatum, New Mexico

Lab ID: 0204815-24  
Sample ID: Sohio "A" MW 11

### 8021B/5030 BTEX

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		10/29/02 13:44	1	1	CK	8021B
0003563-02						

Parameter	Result mg/L	RL
Benzene	0.020	0.001
Ethylbenzene	0.007	0.001
Toluene	0.002	0.001
p/m-Xylene	0.034	0.001
o-Xylene	0.009	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	97%	80	120
Bromofluorobenzene	91%	80	120

Lab ID: 0204815-25  
Sample ID: Sohio "A" MW 19

### 8021B/5030 BTEX

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		10/29/02 14:57	1	1	CK	8021B
0003563-02						

Parameter	Result mg/L	RL
Benzene	0.368	0.001
Ethylbenzene	0.007	0.001
Toluene	0.002	0.001
p/m-Xylene	0.036	0.001
o-Xylene	0.008	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	99%	80	120
Bromofluorobenzene	91%	80	120

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

MIKE GRIFFIN  
WHOLE EARTH  
19606 SAN GABRIEL  
HOUSTON, TX 77084

Order#: G0204815  
Project: None Given  
Project Name: Quarterly Sampling  
Location: Tatum, New Mexico

Lab ID: 0204815-26  
Sample ID: Sohio "A" MW 20

### 8021B/5030 BTEX

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		10/29/02 15:19	1	1	CK	8021B
0003563-02						

Parameter	Result mg/L	RL
Benzene	0.004	0.001
Ethylbenzene	0.008	0.001
Toluene	0.002	0.001
p/m-Xylene	0.039	0.001
o-Xylene	0.009	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	93%	80	120
Bromofluorobenzene	85%	80	120

Lab ID: 0204815-27  
Sample ID: Sohio "A" MW 27

### 8021B/5030 BTEX

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		10/29/02 15:41	1	1	CK	8021B
0003563-02						

Parameter	Result mg/L	RL
Benzene	0.178	0.001
Ethylbenzene	0.011	0.001
Toluene	0.003	0.001
p/m-Xylene	0.056	0.001
o-Xylene	0.013	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	109%	80	120
Bromofluorobenzene	94%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

Page 13 of 15

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

MIKE GRIFFIN  
WHOLE EARTH  
19606 SAN GABRIEL  
HOUSTON, TX 77084

Order#: G0204815  
Project: None Given  
Project Name: Quarterly Sampling  
Location: Tatum, New Mexico

Lab ID: 0204815-28  
Sample ID: Sohio "A" MW 31

### 8021B/5030 BTEX

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		10/29/02 16:03	1	1	CK	8021B
0003563-02						

Parameter	Result mg/L	RL
Benzene	0.322	0.001
Ethylbenzene	0.011	0.001
Toluene	0.004	0.001
p/m-Xylene	0.068	0.001
o-Xylene	0.018	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	120%	80	120
Bromofluorobenzene	97%	80	120

Lab ID: 0204815-29  
Sample ID: GS Source Well

### 8021B/5030 BTEX

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		10/29/02 16:25	1	5	CK	8021B
0003563-02						

Parameter	Result mg/L	RL
Benzene	0.621	0.005
Ethylbenzene	0.331	0.005
Toluene	0.441	0.005
p/m-Xylene	1.75	0.005
o-Xylene	0.852	0.005

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	480%	80	120
Bromofluorobenzene	121%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

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# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

MIKE GRIFFIN  
WHOLE EARTH  
19606 SAN GABRIEL  
HOUSTON, TX 77084

Order#: G0204815  
Project: None Given  
Project Name: Quarterly Sampling  
Location: Tatum, New Mexico

Lab ID: 0204815-30  
Sample ID: GS MW 12

### *8021B/5030 BTEX*

<u>Method</u> <u>Blank</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
0003563-02		10/30/02 9:21	1	1000	CK	8021B

Parameter	Result mg/L	RL
Benzene	3.65	1.00
Ethylbenzene	4.16	1.00
Toluene	2.79	1.00
p/m-Xylene	23.9	1.00
o-Xylene	3.68	1.00

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	140%	80	120
Bromofluorobenzene	105%	80	120

Approval: *Raland K. Tuttle* 10-31-02  
 Raland K. Tuttle, Lab Director, QA Officer      Date  
 Celey D. Keene, Org. Tech. Director  
 Jeanne McMurrey, Inorg. Tech. Director  
 Sandra Biezugbe, Lab Tech.  
 Sara Molina, Lab Tech.

# CASE NARRATIVE

## ENVIRONMENTAL LAB OF TEXAS

Prepared for:

WHOLE EARTH  
19606 SAN GABRIEL  
HOUSTON, TX 77084

Order#: G0204815

Project: Quarterly Sampling

The following samples were received as indicated below and on the attached Chain of Custody record. All analyses were performed within the holding time and with acceptable quality control results unless otherwise noted.

SAMPLE ID	LAB ID	MATRIX	Date Collected	Date Received
Iva Source Well	0204815-01	WATER	10/19/2002	10/21/2002
Iva MW 1	0204815-02	WATER	10/19/2002	10/21/2002
Iva MW 2	0204815-03	WATER	10/19/2002	10/21/2002
Mable Source Well	0204815-04	WATER	10/19/2002	10/21/2002
Mable MW 3	0204815-05	WATER	10/19/2002	10/21/2002
Mable MW 4	0204815-06	WATER	10/19/2002	10/21/2002
Bell MW 6	0204815-08	WATER	10/19/2002	10/21/2002
Bell MW 13	0204815-09	WATER	10/19/2002	10/21/2002
Bell MW 14	0204815-10	WATER	10/19/2002	10/21/2002
Bell MW 25	0204815-11	WATER	10/19/2002	10/21/2002
Bell MW 36	0204815-12	WATER	10/19/2002	10/21/2002
NBF MW 8	0204815-13	WATER	10/19/2002	10/21/2002
NBF MW 15	0204815-14	WATER	10/19/2002	10/21/2002
NBF MW 16	0204815-15	WATER	10/19/2002	10/21/2002
NBF MW 26	0204815-16	WATER	10/19/2002	10/21/2002
NBF MW 37	0204815-17	WATER	10/19/2002	10/21/2002
Sohio #1 MW 10	0204815-18	WATER	10/19/2002	10/21/2002
Sohio #1 MW 17	0204815-19	WATER	10/19/2002	10/21/2002
Sohio #1 MW 18	0204815-20	WATER	10/19/2002	10/21/2002
Sohio #1 MW 28	0204815-21	WATER	10/19/2002	10/21/2002
Sohio #1 MW 30	0204815-22	WATER	10/19/2002	10/21/2002
Sohio #1 MW 40	0204815-23	WATER	10/19/2002	10/21/2002
Sohio "A" MW 11	0204815-24	WATER	10/19/2002	10/21/2002
Sohio "A" MW 19	0204815-25	WATER	10/19/2002	10/21/2002
Sohio "A" MW 20	0204815-26	WATER	10/19/2002	10/21/2002
Sohio "A" MW 27	0204815-27	WATER	10/19/2002	10/21/2002
Sohio "A" MW 31	0204815-28	WATER	10/19/2002	10/21/2002
GS Source Well	0204815-29	WATER	10/19/2002	10/21/2002

# CASE NARRATIVE

## ENVIRONMENTAL LAB OF TEXAS

**Prepared for:**

WHOLE EARTH  
19606 SAN GABRIEL  
HOUSTON, TX 77084

**Order#:** G0204815

**Project:** Quarterly Sampling

The following samples were received as indicated below and on the attached Chain of Custody record. All analyses were performed within the holding time and with acceptable quality control results unless otherwise noted.

GS MW 12	0204815-30	WATER	10/19/2002	10/21/2002
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**Surrogate recoveries are outside control limits due to matrix interference from coeluting compounds.**

The enclosed results of analyses are representative of the samples as received by the laboratory. Environmental Lab of Texas makes no representations or certifications as to the methods of sample collection, sample identification, or transportation handling procedures used prior to our receipt of samples. To the best of my knowledge, the information contained in this report is accurate and complete.

Approved By: Ralan K. Jantz Date: 10-31-02  
Environmental Lab of Texas I, Ltd.

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

**8021B/5030 BTEX**

Order#: G0204815

<b>BLANK</b>	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L		0003551-02			<0.001		
Benzene-mg/L		0003563-02			<0.001		
Ethylbenzene-mg/L		0003551-02			<0.001		
Ethylbenzene-mg/L		0003563-02			<0.001		
Toluene-mg/L		0003551-02			<0.001		
Toluene-mg/L		0003563-02			<0.001		
p/m-Xylene-mg/L		0003551-02			<0.001		
p/m-Xylene-mg/L		0003563-02			<0.001		
o-Xylene-mg/L		0003551-02			<0.001		
o-Xylene-mg/L		0003563-02			<0.001		
<b>MS</b>	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L		0204813-01	0	0.1	0.097	97.%	
Benzene-mg/L		0204815-16	0	0.1	0.090	90.%	
Ethylbenzene-mg/L		0204813-01	0	0.1	0.102	102.%	
Ethylbenzene-mg/L		0204815-16	0	0.1	0.094	94.%	
Toluene-mg/L		0204813-01	0	0.1	0.097	97.%	
Toluene-mg/L		0204815-16	0	0.1	0.092	92.%	
-Xylene-mg/L		0204813-01	0	0.2	0.216	108.%	
p/m-Xylene-mg/L		0204815-16	0	0.2	0.201	100.5%	
o-Xylene-mg/L		0204813-01	0	0.1	0.104	104.%	
o-Xylene-mg/L		0204815-16	0	0.1	0.096	96.%	
<b>MSD</b>	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L		0204813-01	0	0.1	0.091	91.%	6.4%
Benzene-mg/L		0204815-16	0	0.1	0.090	90.%	0.%
Ethylbenzene-mg/L		0204813-01	0	0.1	0.094	94.%	8.2%
Ethylbenzene-mg/L		0204815-16	0	0.1	0.095	95.%	1.1%
Toluene-mg/L		0204813-01	0	0.1	0.092	92.%	5.3%
Toluene-mg/L		0204815-16	0	0.1	0.094	94.%	2.2%
p/m-Xylene-mg/L		0204813-01	0	0.2	0.202	101.%	6.7%
p/m-Xylene-mg/L		0204815-16	0	0.2	0.202	101.%	0.5%
o-Xylene-mg/L		0204813-01	0	0.1	0.098	98.%	5.9%
o-Xylene-mg/L		0204815-16	0	0.1	0.096	96.%	0.%
<b>SRM</b>	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L		0003551-05		0.1	0.098	98.%	
Benzene-mg/L		0003563-05		0.1	0.091	91.%	
Ethylbenzene-mg/L		0003551-05		0.1	0.102	102.%	
Ethylbenzene-mg/L		0003563-05		0.1	0.096	96.%	
Toluene-mg/L		0003551-05		0.1	0.100	100.%	

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0204815

SRM WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Toluene-mg/L	0003563-05		0.1	0.092	92.%	
p/m-Xylene-mg/L	0003551-05		0.2	0.216	108.%	
p/m-Xylene-mg/L	0003563-05		0.2	0.212	106.%	
o-Xylene-mg/L	0003551-05		0.1	0.105	105.%	
o-Xylene-mg/L	0003563-05		0.1	0.100	100.%	

# Environmental Lab of Texas, Inc.

12600 West I-20 East  
Odessa, Texas 79763  
Phone: 915-563-1800  
Fax: 915-563-1713

## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager:

Company Name Whole Earth Environmental, Inc.

Company Address: 19606 San Gabriel

City/State/Zip: Houston, Tx. 77084

Telephone No.: (800) 854-4358

Sampler Signature:

Fax No.: (281) 646-8996

Project Name: Quarterly Sampling

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

Project Loc: Tatum, New Mexico

PO #:

FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Other (Specify):	Soil	Water	Sludge	None	HNO <sub>3</sub>	HCl	NaOH	H <sub>2</sub> SO <sub>4</sub>	Other (Specify)	TOTAL:	TCP/Project:	Analyze For:	RUSH TAT (Pre-Schedule)	Standard TAT	
Iva Source Well	10/19/02	6:00 AM	2	X	X	X	X												
Iva MW 1	10/19/02	6:00 AM	2	X	X	X	X												
Iva MW 2	10/19/02	6:00 AM	2	X	X	X	X												
Mable Source Well	10/19/02	6:00 AM	2	X	X	X	X												
Mable MW 3	10/19/02	6:00 AM	2	X	X	X	X												
Mable MW 4	10/19/02	6:00 AM	2	X	X	X	X												
Iva MW-35	Missing Sample		3	X	X	X	X												
Bell MW 6	10/19/02	6:00 AM	2	X	X	X	X												
Bell MW 13	10/19/02	6:00 AM	2	X	X	X	X												
Bell MW 14	10/19/02	6:00 AM	2	X	X	X	X												

Special Instructions:

Relinquished by: 	Date 10/21/02	Time 12:45	Received by: _____
Relinquished by: _____	Date _____	Time _____	Date _____

\* Missing Sample Iva MW 35

# Environmental Lab of Texas, Inc.

12600 West I-20 East  
Odessa, Texas 79763  
Phone: 915-563-1800  
Fax: 915-563-1713

## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager:

Company Name Whole Earth Environmental, Inc.

Company Address: 19806 San Gabriel

City/State/Zip: Houston, Tx. 77084

Telephone No: (800) 864-4368

Fax No: (281) 646-8998

Sampler Signature:

Project Name: Quarterly Sampling

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

Project Loc: Tatum, New Mexico

PO #: \_\_\_\_\_

Sample ID	Date Sampled	Time Sampled	No. of Containers	HNO <sub>3</sub>	HCl	NaOH	H <sub>2</sub> SO <sub>4</sub>	None	Water	Studge	Soil	Other (Specify):	TPH 41B.1	TPH TX 1005/1006	TPH 8015M GRO/DRO	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatile	Semivolatiles	Chlorides	Cations/Anions/TDS	RUSH TAT (Pre-Schedule)	Standard TAT			
Bell MW 25	6/6/02	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Bell MW 36	6/6/02	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
NBF MW 8	6/6/02	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
NBF MW 15	6/6/02	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
NBF MW 16	6/6/02	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
NBF MW 26	6/6/02	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
NBF MW 37	6/6/02	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Sohio #1 MW 10	6/7/02	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Sohio #1 MW 17	6/7/02	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Sohio #1 MW 18	6/7/02	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Sohio #1 MW 28	6/7/02	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Special Instructions:

Relinquished by: 	Date: 10/2/02	Time: 12:45	Received by:	Date: _____	Time: _____
Relinquished by: 	Date: _____	Time: _____			

# Environmental Lab of Texas, Inc.

12600 West I-20 East  
Odessa, Texas 79763

Phone: 915-563-1800  
Fax: 915-563-1713

## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager:

Company Name Whole Earth Environmental, Inc.

Project Name: Quarterly Sampling

Telephone No: (800) 854-4358

Project Loc: Tatum, New Mexico

Project #:

PO #:

Fax No: (281) 646-8996

Sampler Signature:

FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Other (Specify)	Soil	Water	NaOH	HNO <sub>3</sub>	HCl	H <sub>2</sub> SO <sub>4</sub>	None	Other (Specify)	TPH 41B.1	TPH 8015M GRO/DRO	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatile	Semivolatiles	Chlorides	Cations/Anions, TDS	Standard TAT	RUSH TAT (Pre-Schedule)		
Sohio # 1 MW 30	6/7/02	2	X	X																			
Sohio # 1 MW 40	6/7/02	3	X	X																			
Sohio "A" MW 11	6/7/02	2	X	X																			
Sohio "A" MW 19	6/7/02	2	X	X																			
Sohio "A" MW 20	6/7/02	2	X	X																			
Sohio "A" MW 27	6/7/02	2	X	X																			
Sohio "A" MW 31	6/7/02	2	X	X																			
Sohio "A" MW 39	6/7/02	2	X	X																			
GS Source Well	6/7/02	2	X	X																			
GS MW 12	6/7/02	2	X	X																			

Special Instructions:

Relinquished by: 	Date 10/21/02	Time 12:45	Received by: 	Date Time	Date Time
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