1R - 262

REPORTS

DATE:

3/23/2004

Tipperary CORPORATION

633 Seventeenth Street
Suite 1550
Denver, Colorado 80202-3622

March 23, 2004

VIA OVERNIGHT MAIL

Mr. Roger C. Anderson
New Mexico Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87505

RE: Progress Report for Year 2003
Bagley Field
Pit Closure Project
Lea County, NM

Dear Mr. Anderson:

Please find enclosed the 2003 results from our monitor wells in the subject project area. This report summarizes the results from water samples taken on January 4, April 17, June 20, and October 30, 2003. These results represent 25 quarters of monitoring. In general, we are continuing to observe decreasing levels of BTEX in the monitor wells.

The Executive Summary section contains a general discussion and the following data:

- Map of pit reclamation locations.
- Survey coordinates of ten new monitor well locations.
- Cross reference listing of revised monitor well numbers.

A summary of investigation work and results to date for each pit closure site is included. The following data is presented for each site:

- Well site plat with monitor well locations.
- Ground water potentiometric map for each sampling event with the direction and magnitude of the hydraulic gradient.
- Table of ground water recovery volumes (where applicable).
- Well bailing log for each well.
- Summary table and chart of water quality results for each well.
- Geologic/lithologic log and well construction diagram for each well.

A CD is enclosed and contains all of the laboratory analytical and quality assurance information for 2003. We will continue to sample the project quarterly and report the results to your office on an annual basis. If you have any questions, please call me at (303) 293-9379.

Very truly yours,

Tipperary Oil & Gas Corporation

Larry G. Sugano
Vice President - Engineering

Enclosures

cc: NMOCD Hobbs Office
Whole Earth Environmental

Tipperary Oil & Gas Corporation
Bagley Field
2003 Annual Report

Executive Summary

The 2003 Bagley Field monitor well survey project was especially busy. In addition to the installation of ten additional wells within the field, we made great strides in perfecting our bailing procedures to minimize any potential for cross contamination. Each well now has its own dedicated bailer used to obtain water samples after pumping an average of ten well volumes from each bore. New decontamination procedures and equipment blank analyses were instituted to insure the accuracy of the reported results.

We believe that all sites have been completely delineated. The outer ring of wells on each site have BTEX concentrations falling within NMOCD standards. A table of monitor well number revisions is attached for your reference. A table listing the surveyed locations of all recently installed monitor wells is attached. The following sections present the investigation work and results to date for each of the sites.

WHOLE EARTH ENVIROMENTAL, INC.

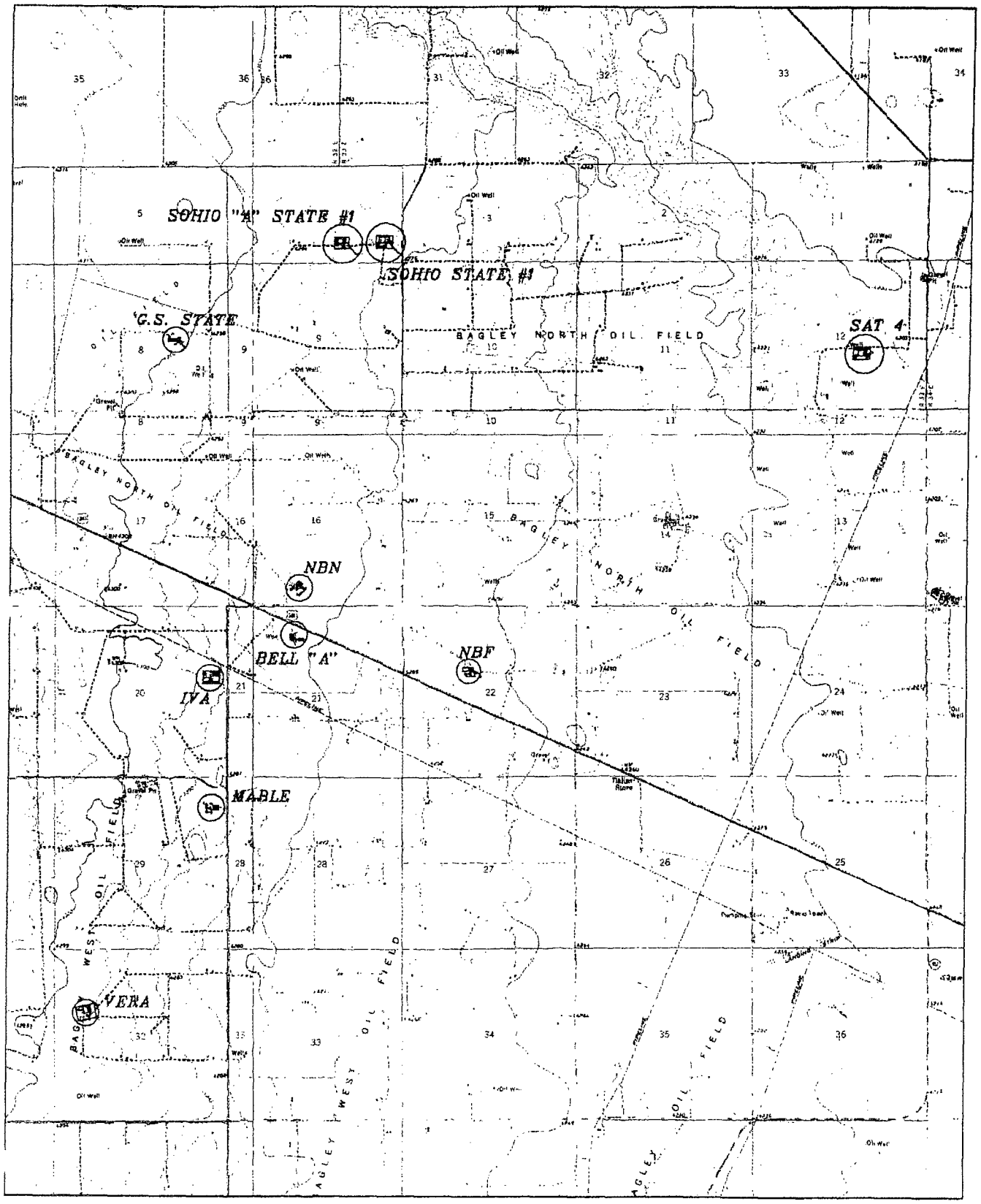


EXHIBIT 9

BASIN SURVEYS P.O. BOX 1786–HOBBS, NEW MEXICO	W.O. Number: 9352	Drawn By: K. GOAD
	Date: 10–21–99	Disk: KJG #122 – WE9352.DWG

WHOLEEARTH

SOHIO STATE 1

WELL	LATITUDE	LONGITUDE	ELEVATION
MW4	N 33 23' 22.56781"	W 103 36' 38.95930"	4282.71
MW8	N 33 23' 17.11074"	W 103 36' 42.59112"	4280.10

SOHIO A STATE 1

WELL	LATITUDE	LONGITUDE	ELEVATION
MW4	N 33 23' 22.80984"	W 103 36' 55.56751"	4285.06
MW6	N 33 23' 21.21826"	W 103 36' 54.49003"	4284.50
MW8	N 33 23' 16.75221"	W 103 36' 56.54969"	4283.84
MW10	N 33 23' 16.78983"	W 103 36' 49.48521"	4281.32
MW11	N 33 23' 14.05096"	W 103 36' 49.64146"	4280.55

COLLIER WELLS

WELL	LATITUDE	LONGITUDE	ELEVATION
MW1	N 33 22' 55.89915"	W 103 37' 14.87439"	4290.13
MW2	N 33 22' 56.31201"	W 103 37' 10.72284"	4286.90
MW5	N 33 22' 51.16167"	W 103 37' 15.53811"	4290.58

BELL A 1

WELL	LATITUDE	LONGITUDE	ELEVATION
MW6	N 33 21' 21.90236"	W 103 37' 14.63097"	4280.64

STATE NBF 1

WELL	LATITUDE	LONGITUDE	ELEVATION
MW6	N 33 21' 10.65698"	W 103 36' 08.88434"	4258.24

GS STATE 1

WELL	LATITUDE	LONGITUDE	ELEVATION
MW5	N 33 22' 50.08279"	W 103 37' 55.56043"	4302.52

HORIZONTAL DATUM NAD-83
VERTICAL DATUM NAVD-88

Tipperary - Bagley Field
Well Number Revisions

	Original No.	New No.
Iva COM	Source	Source
	1	1
	2	2
Mable	Source	Source
	3	1
	4	2
	35	3
Bell	6	1
	13	2
	14	3
	25	4
	36	5
	41	6
NBF	8	1
	15	2
	16	3
	26	4
	37	5
	42	6
GS	Source	Source
	12	1
	22	2
	21	3
	29	4
	38	5
Collier	Source	Source
	37	1
	36	2
	32	3
	33	4
	35	5
	34	6

	Original No.	New No.
Sohio 1	10	1
	17	2
	18	3
	East	4
	28	5
	30	6
	40	7
		8
Sohio A	11	1
	20	2
	19	3
	44	4
	27	5
	45	6
	31	7
	46	8
	39	9
	47	10
		11

Tipperary Oil & Gas Corporation
Bagley Field
2003 Annual Report

G.S. STATE #1
Section 8G-T11S-R33E

The G.S. State #1 site consists of one recovery well and five monitor wells. The recovery well continues to show fluctuating BTEX concentrations over the monitoring period but is trending downward.

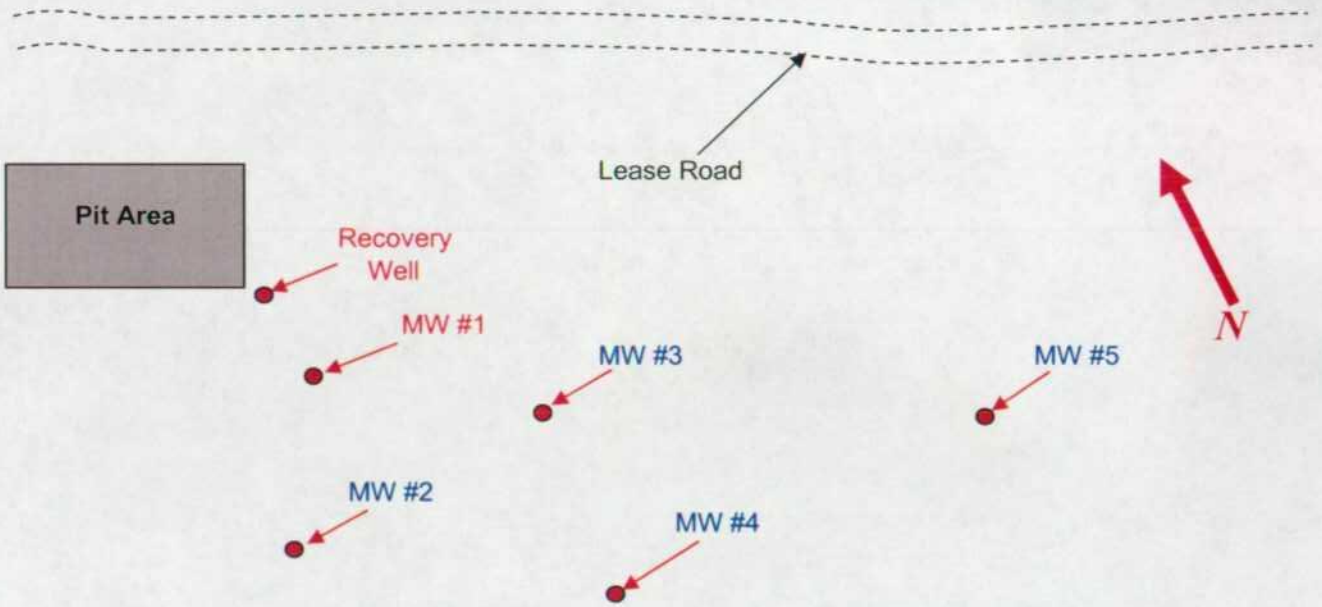
Monitor well no. 1 is now consistently showing 3-4" of free product within the bailer along with a black sulfide. The well has silted in rather badly resulting in a short water column. The lack of fluid volume prevents us from bailing significant amounts of fluid.

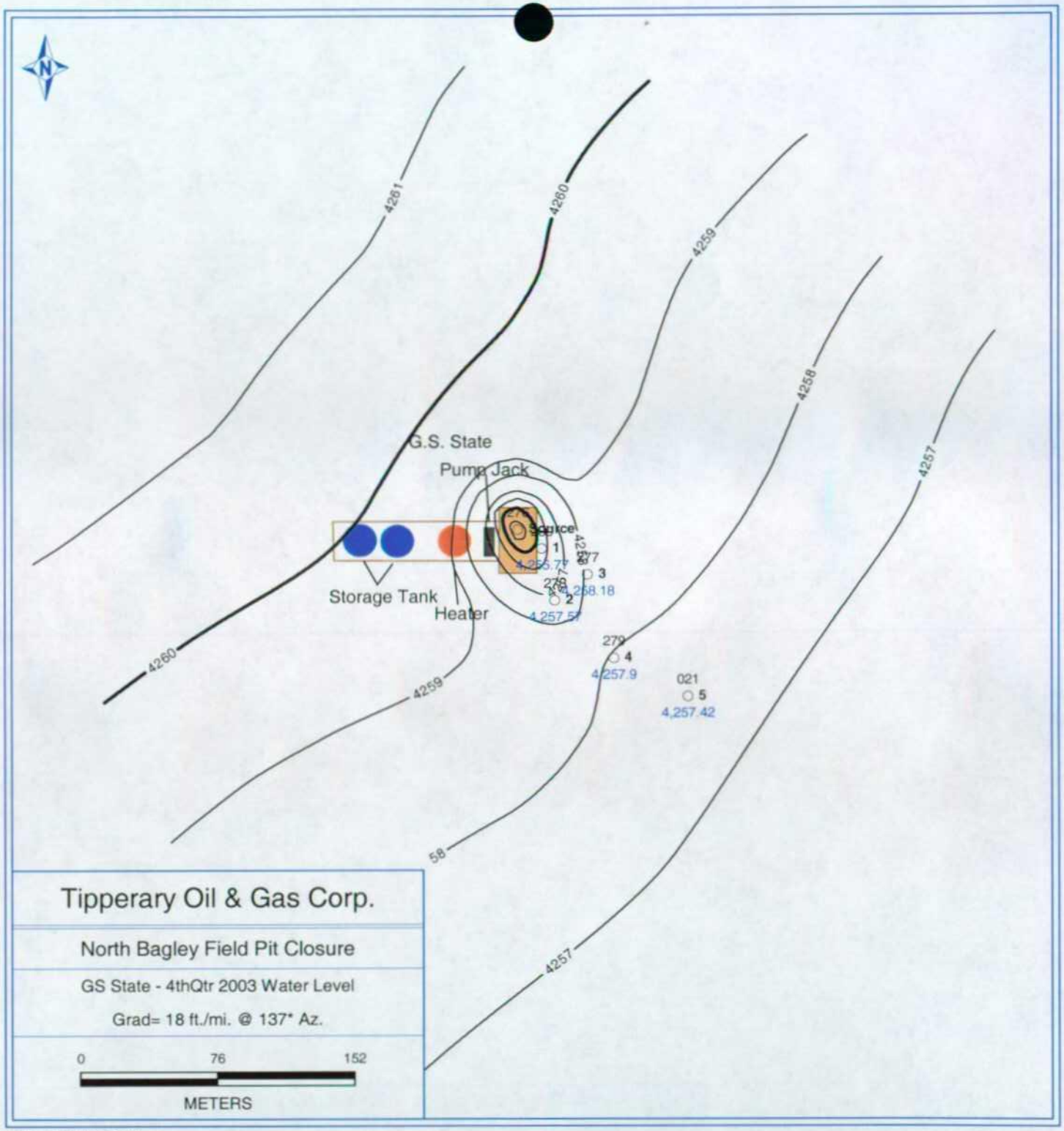
All other monitor wells show minor BTEX values – generally within NMOCD standards.

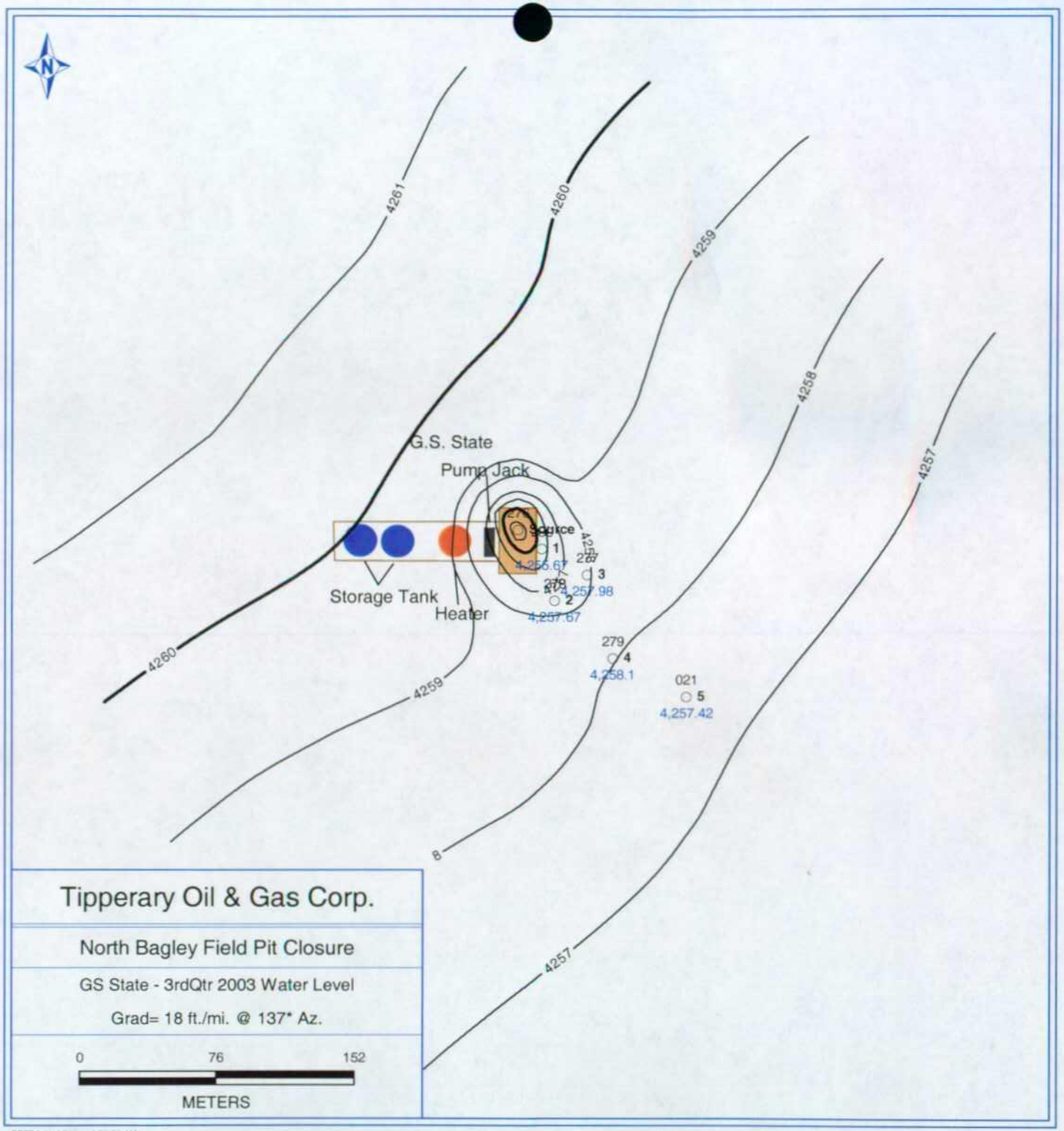
Please find the following data:

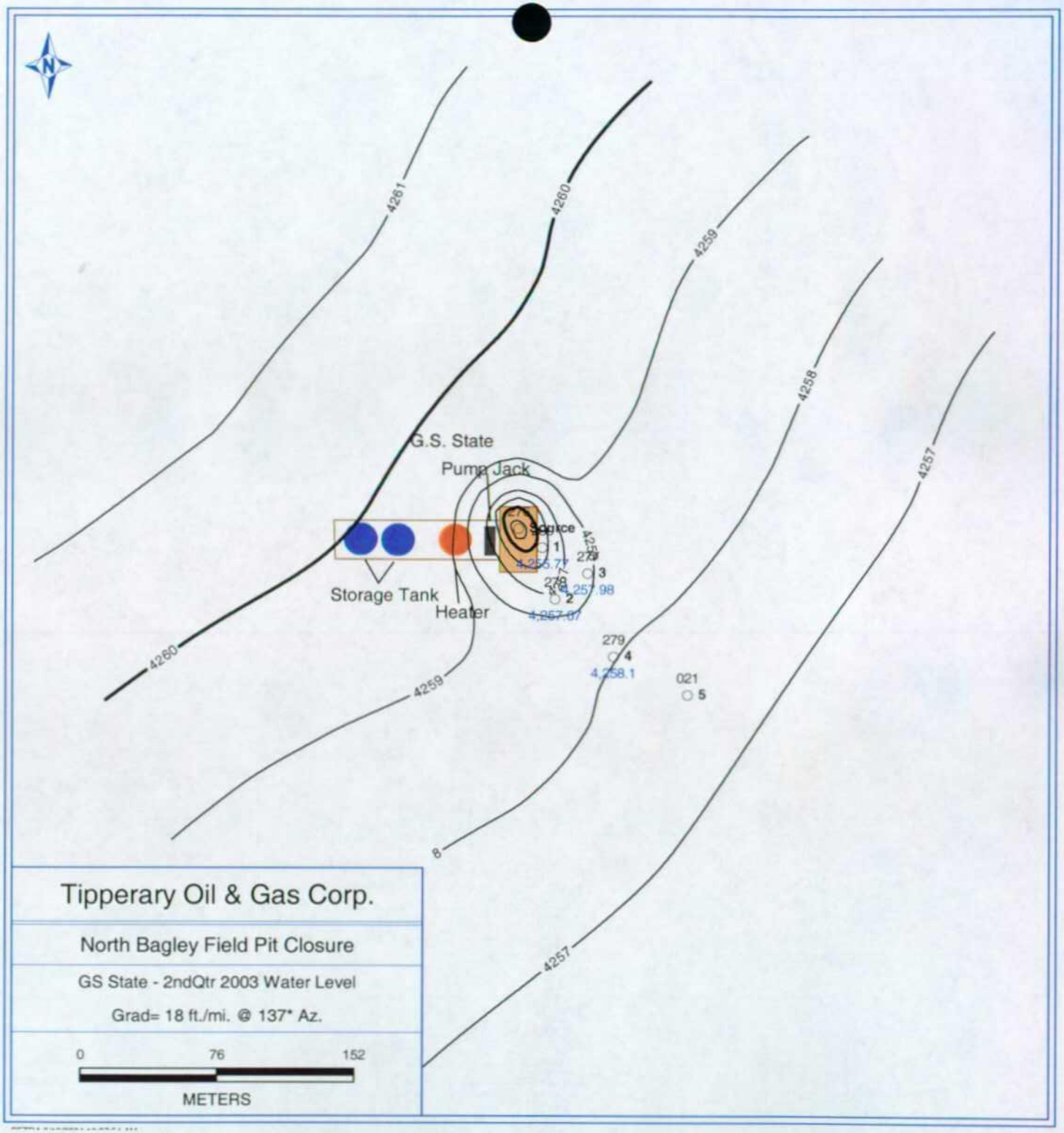
- Well-site plat with monitor well locations.
- Ground water potentiometric map for each sampling event with direction and magnitude of the hydraulic gradient.
- Table of ground water recovery volumes.
- Well bailing log for each well.
- Summary table and chart of ground water quality results for each well.
- Well completion diagram for each well.

Tipperary Corporation
G.S. State # 1
Monitor Well Locations




4261
4260
4259
4258
4257
G.S. State
Pump Jack
Storage Tank
Heater
Source
1
4,255.75
3
4,258.18
2
4,257.59
279
4
4,257.9
021
5
4,257.42
58
Tipperary Oil & Gas Corp.
North Bagley Field Pit Closure
GS State - 4thQtr 2003 Water Level
Grad= 18 ft./mi. @ 137° Az.
0
76
152
METERS


4261
4260
4259
4258
4257
G.S. State
Pump Jack
Storage Tank
Heater
1
4,256.67
3
4,257.98
2
4,257.67
279
4
4,258.1
021
5
4,257.42
8
Tipperary Oil & Gas Corp.
North Bagley Field Pit Closure
GS State - 3rdQtr 2003 Water Level
Grad= 18 ft./mi. @ 137* Az.
0
76
152
METERS



Tipperary Oil & Gas Corp.

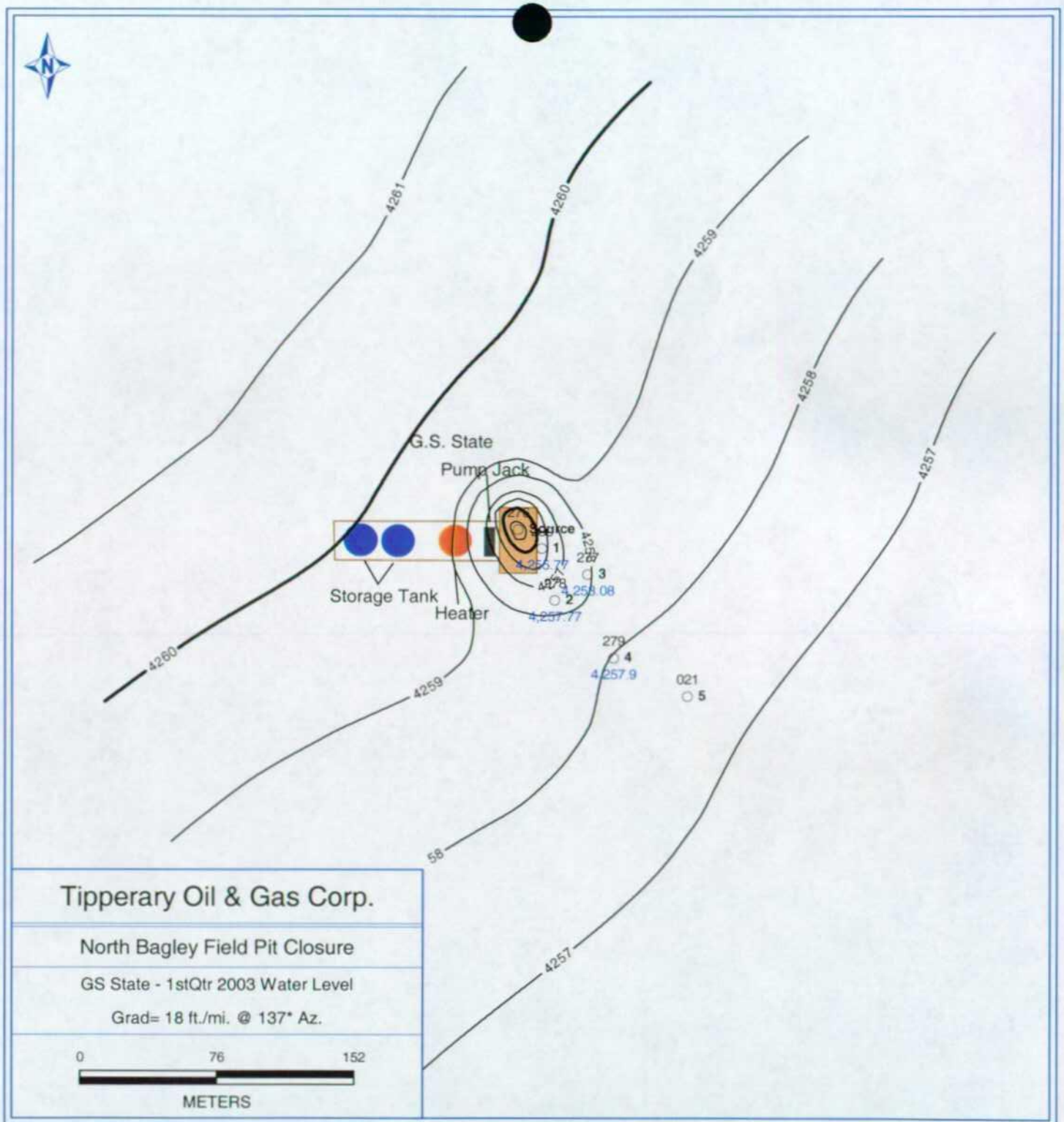
North Bagley Field Pit Closure

GS State - 2ndQtr 2003 Water Level

Grad= 18 ft./mi. @ 137° Az.

0 76 152

METERS


4261
4260
4259
4258
4257
G.S. State
Pump Jack
Storage Tank
Heater
1
2
3
4
5
4,256.77
4,258.08
4,257.77
4,257.9
279
021
58
Tipperary Oil & Gas Corp.
North Bagley Field Pit Closure
GS State - 1stQtr 2003 Water Level
Grad= 18 ft./mi. @ 137° Az.
0
76
152
METERS

Tipperary Corporation
GS State 1 Recovery Well
Section 8G-T11S-R33E
Lea County, NM

YEAR	ESTIMATED GROUND WATER RECOVERY (BBLS)	ESTIMATED PRODUCT RECOVERY (BBLS)
1997	80	0.5
1998	500	2.5
1999	500	2.5
2000	500	2.5
2001	500	2.5
2002	500	2.5
2003	500	2.5
TOTAL	3080	15.5

All fluids pumped into the Burro Disposal System.

GS

Monitor Well Bailing Log

GS Source

Lat: _____
Long. _____
Surf. Elev. 4307 Ft.

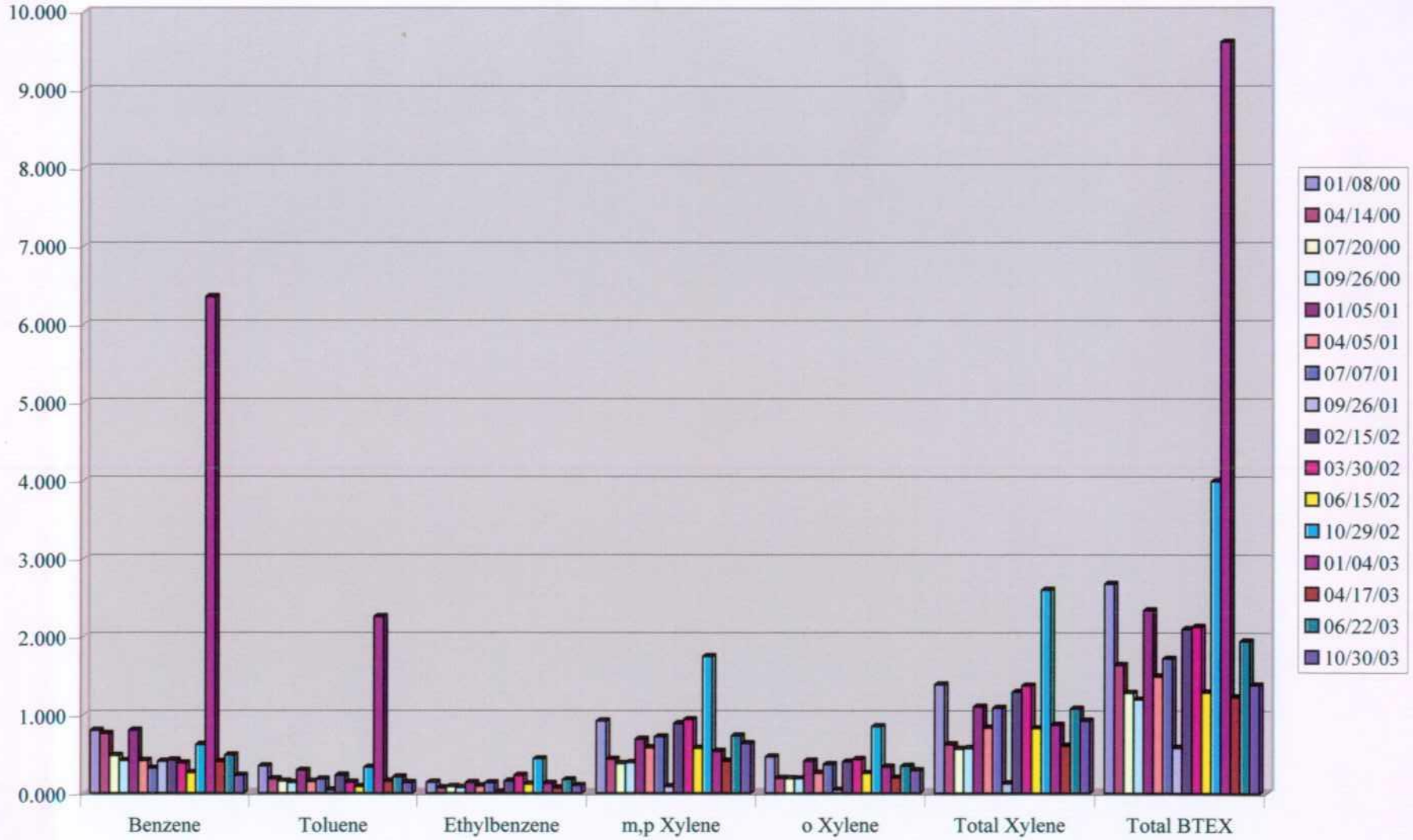
As Drilled		As Measured					
Date:	9/26/1997	Date:	12/28/02	4/12/03	6/12/03	10/25/03	
Top of Water	48.76 Ft.	Top of Water	NA	NA	NA	NA	Ft.
Bottom of Bore	64 Ft.	Bottom of Bore	NA	NA	NA	NA	Ft.
		LPNL Top	NA	NA	NA	NA	Ft.
		LPNL Bottom	NA	NA	NA	NA	Ft.
		DPNL Top	NA	NA	NA	NA	Ft.
		DPNL Bottom	NA	NA	NA	NA	Ft.
		Min. Bailing Vol.	NA	NA	NA	NA	Gal.
		Actual Bailing Vol.	NA	NA	NA	NA	Gal.

Comments

Source Well
G.S. State # 1

Lab. #	Sample Date	Benzene	Toluene	Ethylbenzene	m,p Xylene	o Xylene	Total Xylene	Total BTEX
22782	01/08/00	0.804	0.348	0.139	0.925	0.464	1.389	2.680
25146	04/14/00	0.763	0.184	0.068	0.434	0.189	0.623	1.638
28461	07/20/00	0.481	0.153	0.083	0.378	0.188	0.566	1.283
31496	09/26/00	0.415	0.136	0.070	0.391	0.185	0.576	1.197
36160	01/05/01	0.805	0.292	0.136	0.692	0.414	1.106	2.339
38941	04/05/01	0.417	0.148	0.091	0.582	0.254	0.836	1.492
0101098-25	07/07/01	0.318	0.180	0.133	0.722	0.368	1.090	1.721
0101642-24	09/26/01	0.406	0.038	0.014	0.083	0.040	0.123	0.581
0202619-25	02/15/02	0.422	0.229	0.155	0.892	0.402	1.294	2.100
0203001-25	03/30/02	0.386	0.138	0.230	0.942	0.433	1.375	2.129
0203602-26	06/15/02	0.262	0.082	0.116	0.576	0.253	0.829	1.289
0204815-29	10/29/02	0.621	0.331	0.441	1.750	0.852	2.602	3.995
0205349-29	01/04/03	6.360	2.260	0.126	0.537	0.335	0.872	9.618
0306249-30	04/17/03	0.403	0.152	0.068	0.411	0.195	0.606	1.229
0306756-01	06/22/03	0.487	0.206	0.172	0.734	0.346	1.080	1.945
0307790-14	10/30/03	0.227	0.134	0.098	0.636	0.290	0.926	1.385

G.S. Source Well

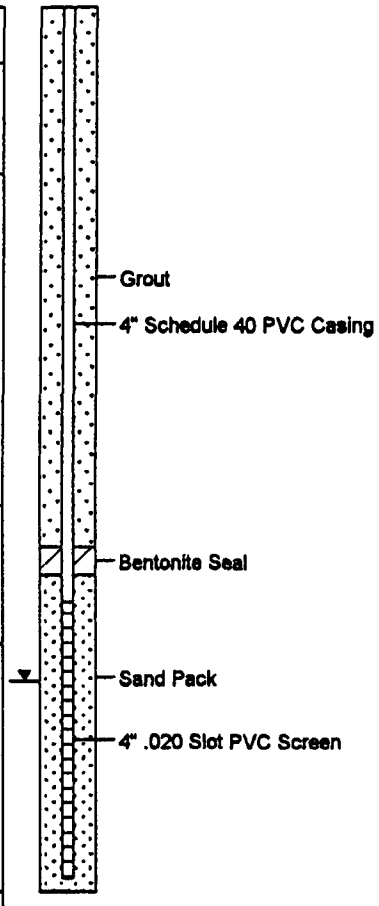


Atkins Engineering Associates, Inc. P.O. Box 3156 Roswell, New Mexico 88202	LOG OF BORING G.S. State 4" Recovery Well (Page 1 of 1)
Tipperary Corp. (Whole Earth Environmental) 633 17th Street Denver, CO 80202 Job #97260	Date Completed : September 26, 1997 Drill Start : 8:00 a.m. Drill End : 1:00 p.m. Boring Location : G.S. State, Sec. 8; Center of Pit Site Location : 14 miles W. of Tatum Auger Type : Hollow Stem Logged By : Mort Bates

Depth in feet	GRAPHIC	USCS	DESCRIPTION
0			Caliche Rock w/Silty Clay, Brown, Stiff, Damp, Back fill
5			Caliche Rock w/Silty Clay, Gray, Stiff, Damp
10			
15		CL	Silty Clay w/some Caliche, Gray, Stiff, Dry
20			
25			
30			
35			
40		CL	Sandy Clay, Tan, Stiff, Moist
45			
50		CL	Silty Sandy Clay, Tan, Loose, Wet to Saturated WL = 48.76 ft.
55			
60			
65			TD = 64 ft. Developed well for 1 1/2 hours. Well cleared up and pumped clear for 1/2 hour.
70			
75			
80			
85			
90			

Well: Recovery Well

Elev.:



10-01-199... \geo45\tipperary\97260w.bor

GS

Monitor Well Bailing Log

GS MW #1

Lat: _____
Long. _____
Surf. Elev. _____ Ft.

As Drilled		As Measured					
Date:	8/29/1997	Date:	12/28/02	4/12/03	6/12/03	10/25/03	
Top of Water	Ft.	Top of Water	47.50	47.50	47.60	47.50	Ft.
Bottom of Bore	58 Ft.	Bottom of Bore	52.30	52.00	52.60	52.90	Ft.
		Bore Volumn	0.77	0.73	0.81	0.87	Gal.
		LPNL Top	47.50	47.50	47.60	47.50	Ft.
		LPNL Bottom	?	?	?	47.90	Ft.
		DPNL Top	NA	NA	NA	NA	Ft.
		DPNL Bottom	NA	NA	NA	NA	Ft.
		Min. Bailing Vol.	2.32	2.18	2.42	2.61	Gal.
		Actual Bailing Vol.	15.00	20.00	20.00	10.00	Gal.

Comments

12-28 Free Prod in Bore

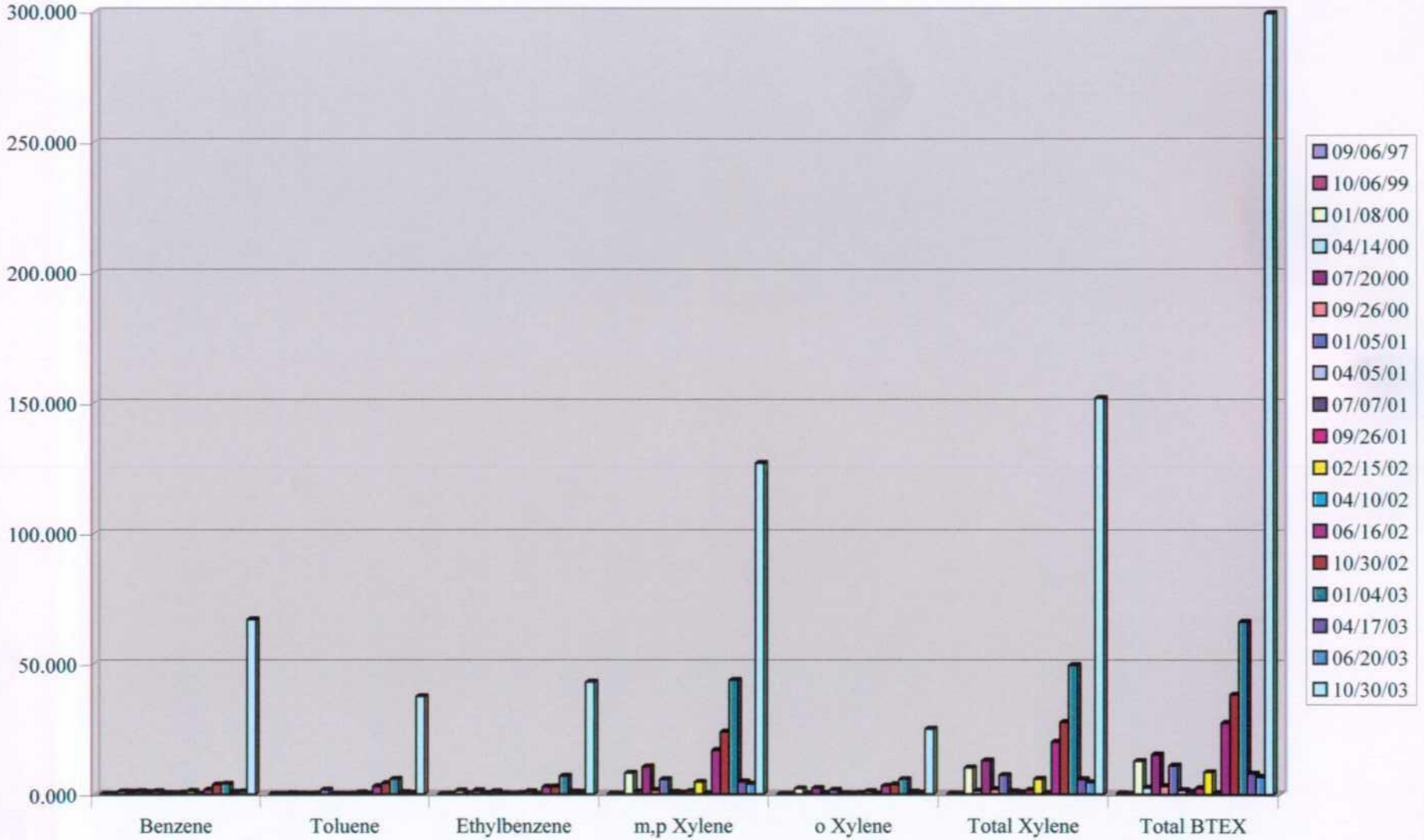
6-12 Installed Bailer

10-25 4" free product in bailer

Monitor Well # 1
G.S. State # 1

Lab. #	Sample Date	Benzene	Toluene	Ethylbenzene	m,p Xylene	o Xylene	Total Xylene	Total BTEX
12478	09/06/97	0.092	0.010	0.015	0.082	0.002	0.084	0.285
20625	10/06/99	0.008	0.007	0.006	0.024	0.007	0.031	0.052
22764	01/08/00	1.030	0.336	1.240	8.030	2.090	10.120	12.726
25147	04/14/00	0.871	0.162	0.246	0.932	0.261	1.193	2.472
28462	07/20/00	1.090	0.025	1.370	10.500	2.280	12.780	15.265
31518	09/26/00	0.820	0.066	0.354	1.480	0.365	1.845	3.085
36169	01/05/01	1.070	1.710	0.945	5.660	1.580	7.240	10.965
38942	04/05/01	0.394	0.022	0.180	0.767	0.200	0.967	1.563
0101098-26	07/07/01	0.350	0.026	0.010	0.483	0.150	0.633	1.019
0101642-26	09/26/01	0.553	0.078	0.267	1.120	0.309	1.429	2.327
0202619-26	02/15/02	1.200	0.612	0.968	4.620	1.090	5.710	8.490
0203001-26	04/10/02	0.031	0.072	0.051	0.234	0.071	0.305	0.459
0203602-27	06/16/02	1.660	3.020	2.690	16.800	3.160	19.960	27.330
0204815-30	10/30/02	3.650	4.160	2.790	23.900	3.680	27.580	38.180
0205349-30	01/04/03	3.950	5.780	6.930	43.700	5.680	49.380	66.040
0306249-31	04/17/03	0.819	0.668	0.847	4.760	0.903	5.663	7.997
0306733-35	06/20/03	1.030	0.431	0.771	3.890	0.554	4.444	6.676
0307790-15	10/30/03	66.900	37.400	43.000	127.000	24.900	151.900	299.200

G.S. MW #1


300.000
250.000
200.000
150.000
100.000
50.000
0.000
Benzene
Toluene
Ethylbenzene
m,p Xylene
o Xylene
Total Xylene
Total BTEX
09/06/97
10/06/99
01/08/00
04/14/00
07/20/00
09/26/00
01/05/01
04/05/01
07/07/01
09/26/01
02/15/02
04/10/02
06/16/02
10/30/02
01/04/03
04/17/03
06/20/03
10/30/03

Atkins Engineering Associates, Inc.
2904 W. 2nd St., Roswell, NM 88202-3156

LOG OF BORING Sohio A, State #1 MW-1

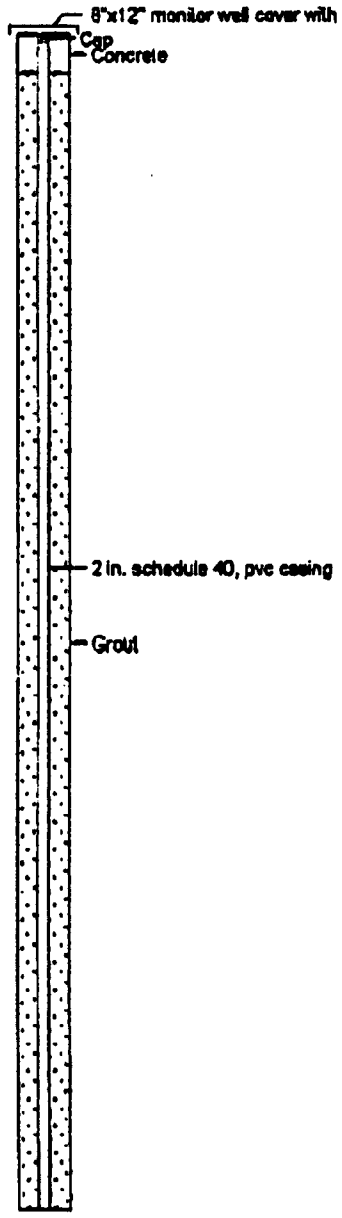
(Page 1 of 2)

Tipperary Oil and Gas Corporation
633 17th St.
Denver, CO 80202
c/o Whole Earth Environmental

Date	: August 29, 1997	Site Location	: 17 mi. W of Tatum, NM
Drill Start	: 0940	Auger Type	: Hollow Stem
Drill End	: 1130	Logged By	: Mori Bales
Boring Location	: Sohio A State #1, Sec. 4, SE Corner of Pit		

Depth in feet	GRAPHIC	USCS	DESCRIPTION
0		CL	Silty Clay, w/caliche, tan, stiff, dry
5			
10			Caliche Rock, clayey, tan, stiff, damp
15			
20		CL	Caliche Clay, sandy, tan, stiff, damp
25			
30			

Well: MW-1
Elev.:



08-03-1997 c:\impdocs~1\wes\topper~1\wells.tor

GS

Monitor Well Bailing Log

GS MW #2

Lat:	N33^0 22.87242'
Long.	W103^0 37.86456'
Surf. Elev.	4302.77 Ft.

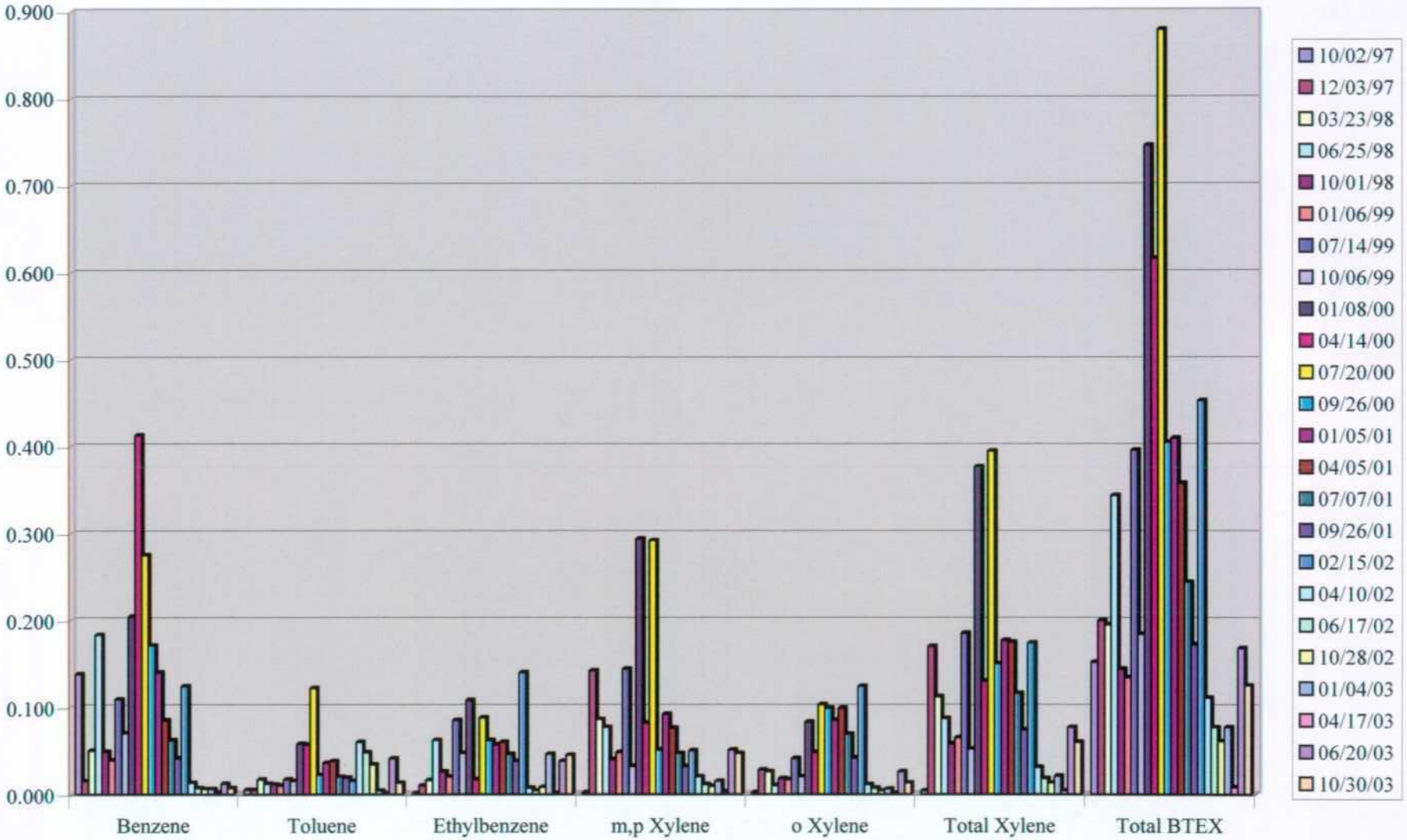
As Drilled			As Measured					
Date:	9/26/1997		Date:	12/28/02	4/12/03	6/12/03	10/25/03	
Top of Water	48	Ft.	Top of Water	45.00	45.10	45.10	45.20	Ft.
Bottom of Bore	59	Ft.	Bottom of Bore	55.70	55.70	55.90	56.30	Ft.
			Bore Volumn	1.73	1.71	1.74	1.79	Gal.
			LPNL Top	NA	NA	NA	NA	Ft.
			LPNL Bottom	NA	NA	NA	NA	Ft.
			DPNL Top	NA	NA	NA	NA	Ft.
			DPNL Bottom	NA	NA	NA	NA	Ft.
			Min. Bailing Vol.	5.18	5.13	5.23	5.37	Gal.
			Actual Bailing Vol.	20.00	20.00	15.00	10.00	Gal.

Comments

Monitor Well # 2
G.S. State # 1
Sampling Results

Lab. #	Sample Date	Benzene	Toluene	Ethylbenzene	m,p Xylene	o Xylene	Total Xylene	Total BTEX
12722	10/02/97	0.138	0.005	0.001	0.002	0.002	0.004	0.152
13134	12/03/97	0.015	0.005	0.010	0.142	0.028	0.170	0.200
14056	03/23/98	0.050	0.017	0.016	0.086	0.026	0.112	0.195
14676	06/25/98	0.183	0.012	0.062	0.077	0.010	0.087	0.344
15611	10/01/98	0.049	0.011	0.026	0.040	0.018	0.058	0.144
16592	01/06/99	0.039	0.010	0.020	0.048	0.017	0.065	0.134
18611	07/14/99	0.109	0.017	0.085	0.144	0.041	0.185	0.396
20623	10/06/99	0.070	0.015	0.047	0.032	0.020	0.052	0.184
22783	01/08/00	0.204	0.058	0.108	0.294	0.083	0.377	0.747
25149	04/14/00	0.413	0.057	0.017	0.082	0.048	0.130	0.617
28451	07/20/00	0.275	0.122	0.088	0.292	0.103	0.395	0.880
31498	09/26/00	0.171	0.022	0.062	0.051	0.099	0.150	0.405
36158	01/05/01	0.140	0.036	0.057	0.092	0.085	0.177	0.410
38944	04/05/01	0.085	0.038	0.060	0.076	0.099	0.175	0.358
0101098-28	07/07/01	0.062	0.020	0.046	0.047	0.069	0.116	0.244
0101642-28	09/26/01	0.041	0.019	0.038	0.032	0.042	0.074	0.172
0202619-28	02/15/02	0.124	0.015	0.140	0.050	0.124	0.174	0.453
0203001-27	04/10/02	0.013	0.060	0.007	0.020	0.011	0.031	0.111
0203602-29	06/17/02	0.007	0.048	0.004	0.011	0.007	0.018	0.077
0204814-07	10/28/02	0.006	0.034	0.008	0.009	0.004	0.013	0.061
0205349-31	01/04/03	0.006	0.004	0.046	0.015	0.006	0.021	0.077
0306249-32	04/17/03	0.002	0.001	0.001	0.003	0.001	0.004	0.008
0306733-36	06/20/03	0.012	0.041	0.038	0.051	0.026	0.077	0.168
0307790-16	10/30/03	0.007	0.013	0.045	0.047	0.013	0.060	0.125

G.S. MW #2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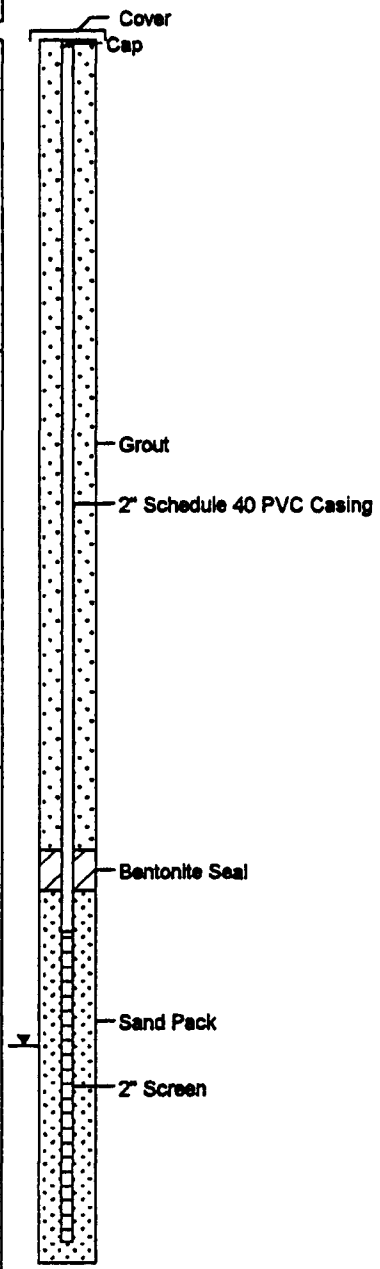
0.800
0.700
0.600
0.500
0.400
0.300
0.200
0.100
0.000
Benzene
Toluene
Ethylbenzene
m,p Xylene
o Xylene
Total Xylene
Total BTEX
10/02/97
12/03/97
03/23/98
06/25/98
10/01/98
01/06/99
07/14/99
10/06/99
01/08/00
04/14/00
07/20/00
09/26/00
01/05/01
04/05/01
07/07/01
09/26/01
02/15/02
04/10/02
06/17/02
10/28/02
01/04/03
04/17/03
06/20/03
10/30/03

Atkins Engineering Associates, Inc. P.O. Box 3156 Roswell, New Mexico 88202	LOG OF BORING G.S.State MW #2 (Page 1 of 1)
Tipperary Corp. (Whole Earth Environmental) 633 17th Street Denver, CO 80202 Job #97260	Date Completed : September 26, 1997 Drill Start : 1:10 p.m. Drill End : 4:00 p.m. Boring Location : G.S. State, Sec. 8; 150 ft. S. SE. of 4" well Site Location : 14 miles W. of Tatum Auger Type : Hollow Stem Logged By : Mort Bates

Depth in feet	GRAPHIC	USCS	DESCRIPTION
0			Caliche Rock w/Silty Clay, Brown, Stiff, Damp
15		CL	Sandy Clay w/Caliche, Tan, Stiff, Damp
35		SM	Silty Sand,Tan, Loose, Dry
45		CL	Sandy Clay, Tan, Loose, Wet WL = 48 ft.
60			TD = 59 ft. Bailed well for 45 mins.



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GS

Monitor Well Bailing Log

GS MW #3

Lat:	N33^0 22.87242'
Long.	W103^0 37.96106'
Surf. Elev.	4303.08 Ft.

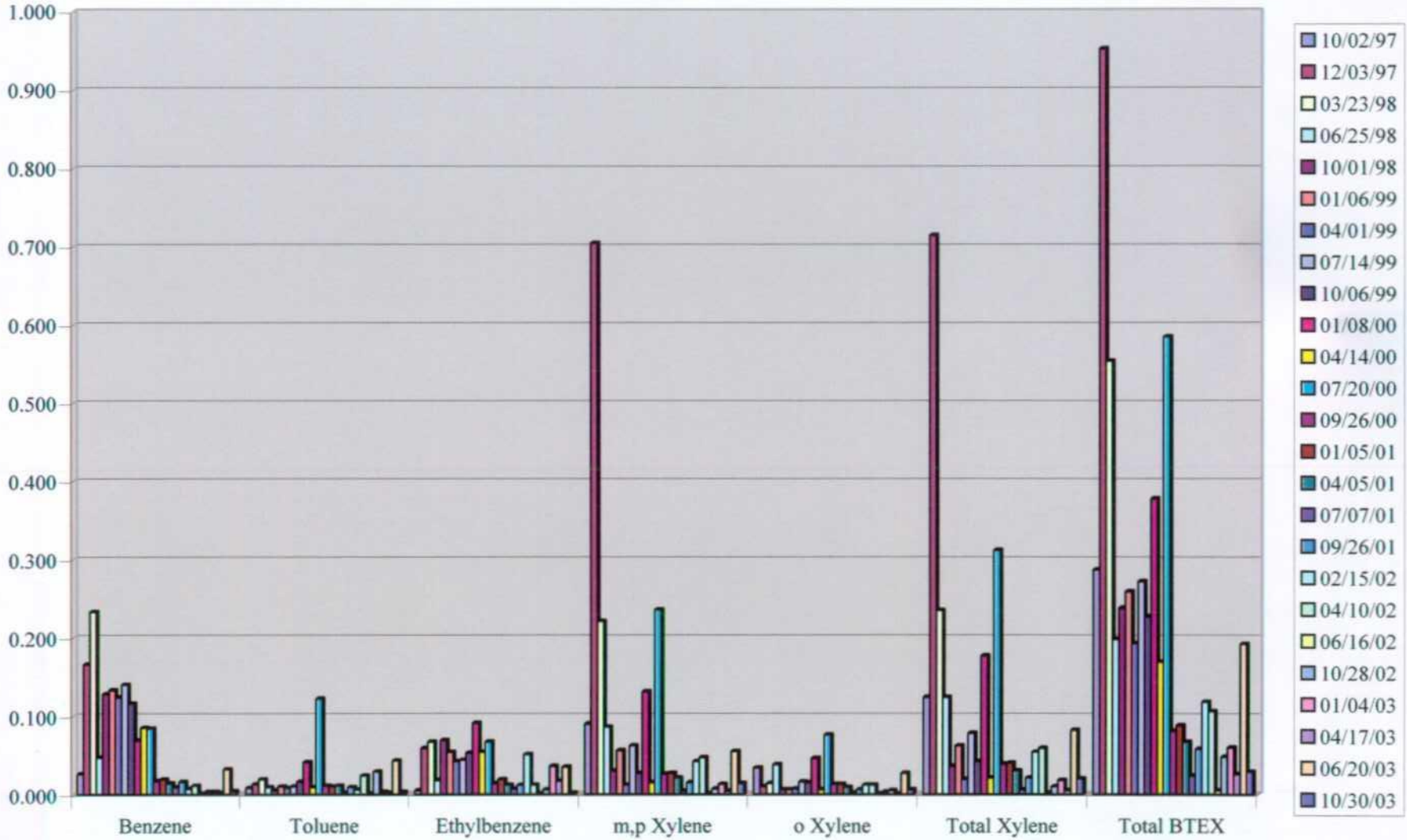
As Drilled		As Measured					
Date:	8/29/1997	Date:	12/28/02	4/12/03	6/12/03	10/25/03	
Top of Water	47.5 Ft.	Top of Water	45.00	45.10	45.10	44.90	Ft.
Bottom of Bore	59 Ft.	Bottom of Bore	58.00	57.80	57.60	58.80	Ft.
		Bore Volumn	2.10	2.05	2.02	2.24	Gal.
		LPNL Top	NA	NA	NA	NA	Ft.
		LPNL Bottom	NA	NA	NA	NA	Ft.
		DPNL Top	NA	NA	NA	NA	Ft.
		DPNL Bottom	NA	NA	NA	NA	Ft.
		Min. Bailing Vol.	6.29	6.15	6.05	6.73	Gal.
		Actual Bailing Vol.	15.00	20.00	20.00	10.00	Gal.

Comments

Monitor Well # 3
G.S. State # 1
Sampling Results

Lab. #	Sample Date	Benzene	Toluene	Ethylbenzene	m,p Xylene	o Xylene	Total Xylene	Total BTEX
12721	10/02/97	0.026	0.008	0.005	0.090	0.034	0.124	0.287
13185	12/03/97	0.166	0.013	0.059	0.705	0.01	0.715	0.953
14055	03/23/98	0.233	0.019	0.067	0.221	0.014	0.235	0.554
14675	06/25/98	0.047	0.009	0.018	0.086	0.038	0.124	0.198
15603	10/01/98	0.128	0.005	0.069	0.030	0.006	0.036	0.238
16591	01/06/99	0.133	0.010	0.054	0.056	0.006	0.062	0.259
17445	04/01/99	0.124	0.008	0.042	0.012	0.007	0.019	0.193
18597	07/14/99	0.140	0.010	0.044	0.062	0.016	0.078	0.272
20603	10/06/99	0.116	0.016	0.053	0.027	0.015	0.042	0.227
22785	01/08/00	0.069	0.041	0.091	0.131	0.046	0.177	0.378
25148	04/14/00	0.085	0.009	0.054	0.015	0.006	0.021	0.169
28450	07/20/00	0.084	0.122	0.067	0.236	0.076	0.312	0.585
31497	09/26/00	0.017	0.011	0.014	0.026	0.013	0.039	0.081
36150	01/05/01	0.019	0.010	0.019	0.027	0.013	0.040	0.088
38943	04/05/01	0.014	0.011	0.012	0.021	0.009	0.030	0.067
0101098-27	07/07/01	0.009	0.002	0.007	0.004	0.002	0.006	0.024
0101642-27	09/26/01	0.016	0.009	0.012	0.015	0.006	0.021	0.058
0202619-27	02/15/02	0.007	0.006	0.051	0.042	0.012	0.054	0.118
0203001-27	04/10/02	0.011	0.024	0.012	0.047	0.012	0.059	0.106
0203602-28	06/16/02	0.001	0.001	0.001	0.001	0.001	0.002	0.005
0204814-06	10/28/02	0.003	0.029	0.006	0.007	0.003	0.010	0.048
0205349-32	01/04/03	0.003	0.003	0.036	0.013	0.005	0.018	0.06
0306249-33	04/17/03	0.002	0.002	0.017	0.004	0.001	0.005	0.026
0306733-37	06/20/03	0.032	0.043	0.035	0.055	0.027	0.082	0.192
0307790-17	10/30/03	0.004	0.003	0.002	0.014	0.006	0.02	0.029

G.S. MW #3


1.000
0.900
0.800
0.700
0.600
0.500
0.400
0.300
0.200
0.100
0.000
Benzene
Toluene
Ethylbenzene
m,p Xylene
o Xylene
Total Xylene
Total BTEX
10/02/97
12/03/97
03/23/98
06/25/98
10/01/98
01/06/99
04/01/99
07/14/99
10/06/99
01/08/00
04/14/00
07/20/00
09/26/00
01/05/01
04/05/01
07/07/01
09/26/01
02/15/02
04/10/02
06/16/02
10/28/02
01/04/03
04/17/03
06/20/03
10/30/03

21

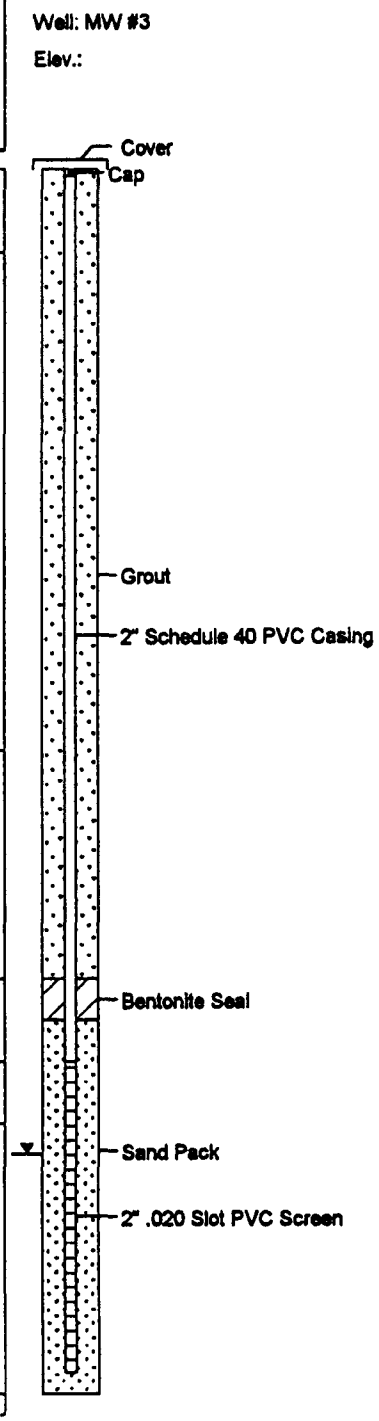
Atkins Engineering Associates, Inc. P.O. Box 3156 Roswell, New Mexico 88202	LOG OF BORING G.S. State MW #3 (Page 1 of 1)

Tipperary Corp. (Whole Earth Environmental)
633 17th Street
Denver, CO 80202

Job #97260

Date Completed	: September 29, 1997	Site Location	: 14 miles W. of Tatum
Drill Start	: 8:20 a.m.	Auger Type	: Hollow Stem
Drill End	: 10:00 a.m.	Logged By	: Mort Bates
Boring Location	: G.S. State, Sec. 8; 150 ft. E. SE. of 4" well Center of Pit		

Depth in feet	GRAPHIC	USCS	DESCRIPTION
0		CL	Silty Clay w/Caliche Rock, Brown, Stiff, Damp
5		CL	Silty Clay w/Caliche, Tan, Stiff, Damp to Dry
10			
15			
20			
25			
30		CL	Silty Sandy Clay w/Caliche,Reddish-Tan, Stiff, Dry
35			
40		CL	Silty Sandy Clay, Tan, Stiff, Dry
45		CL	Silty Sandy Clay, Tan, Stiff, Moist
50		CL	Silty Sandy Clay, Tan, Wet to Saturated WL = 47.5 ft.
55			
60			TD = 59 ft. Bailed well for 45 mins.



10-01-1997 ...geo46\tipperary\972603.bor

GS

Monitor Well Bailing Log

GS MW #4

Lat:	N33^0 22.84678'
Long.	W103^0 37.95211'
Surf. Elev.	4303.2 Ft.

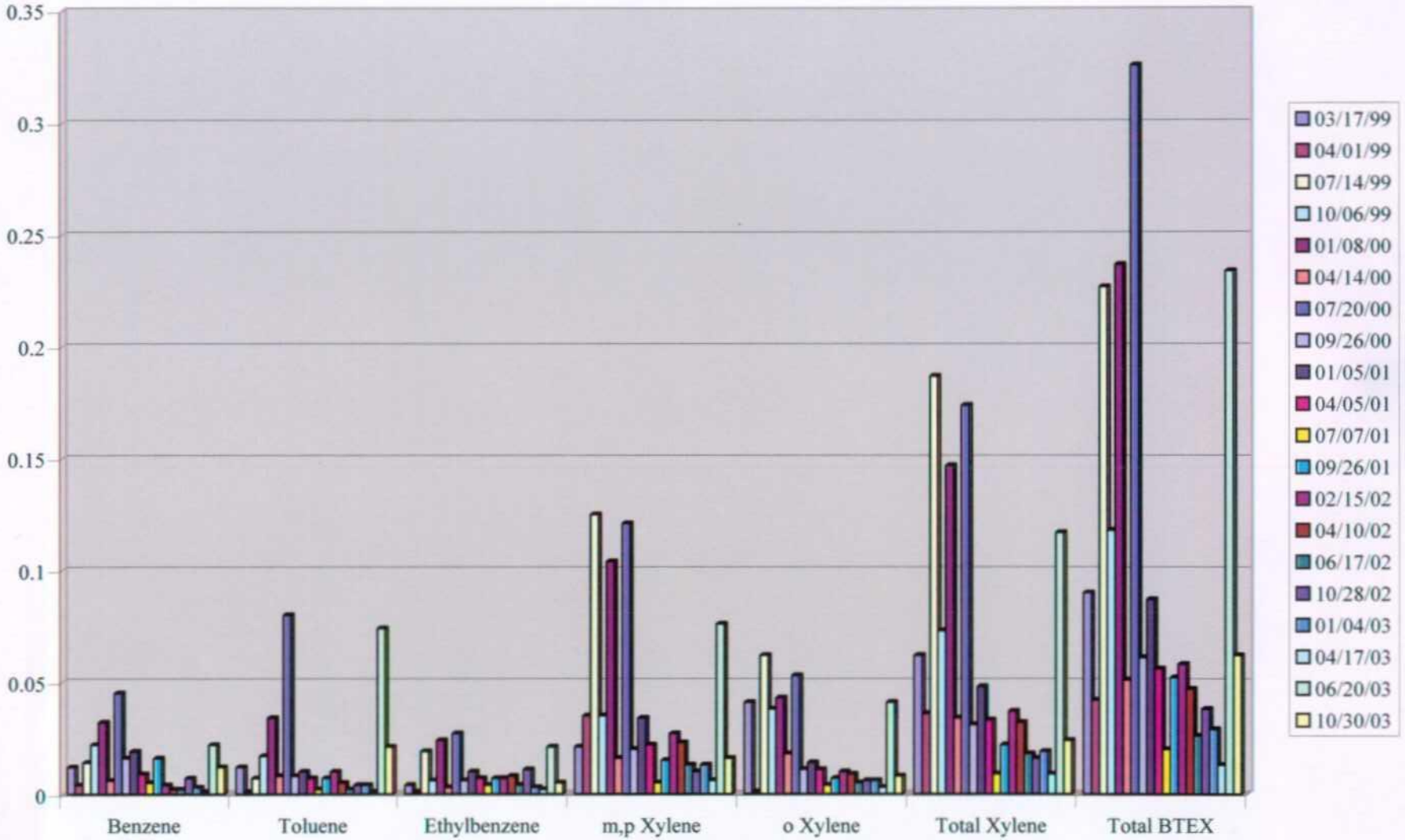
As Drilled			As Measured					
Date:	3/16/1999		Date:	12/28/02	4/12/03	6/12/03	10/25/03	
Top of Water	49.06	Ft.	Top of Water	45.30	45.10	45.10	45.30	Ft.
Bottom of Bore	57	Ft.	Bottom of Bore	56.50	56.40	56.60	57.00	Ft.
			Bore Volumn	1.81	1.82	1.85	1.89	Gal.
			LPNL Top	NA	NA	NA	NA	Ft.
			LPNL Bottom	NA	NA	NA	NA	Ft.
			DPNL Top	NA	NA	NA	NA	Ft.
			DPNL Bottom	NA	NA	NA	NA	Ft.
			Min. Bailing Vol.	5.42	5.47	5.56	5.66	Gal.
			Actual Bailing Vol.	10.00	10.00	10.00	10.00	Gal.

Comments

Monitor Well # 4
G.S. State # 1
Sampling Results

Lab. #	Sample Date	Benzene	Toluene	Ethylbenzene	m,p Xylene	o Xylene	Total Xylene	Total BTEX
17269	03/17/99	0.012	0.012	0.004	0.021	0.041	0.062	0.090
17447	04/01/99	0.004	0.001	0.001	0.035	0.001	0.036	0.042
18612	07/14/99	0.014	0.007	0.019	0.125	0.062	0.187	0.227
20624	10/06/99	0.022	0.017	0.006	0.035	0.038	0.073	0.118
22771	01/08/00	0.032	0.034	0.024	0.104	0.043	0.147	0.237
25150	04/14/00	0.006	0.008	0.003	0.016	0.018	0.034	0.051
28458	07/20/00	0.045	0.080	0.027	0.121	0.053	0.174	0.326
31499	09/26/00	0.016	0.008	0.006	0.020	0.011	0.031	0.061
36159	01/05/01	0.019	0.010	0.010	0.034	0.014	0.048	0.087
38945	04/05/01	0.009	0.007	0.007	0.022	0.011	0.033	0.056
0101098-29	07/07/01	0.005	0.002	0.004	0.005	0.004	0.009	0.020
0101642-29	09/26/01	0.016	0.007	0.007	0.015	0.007	0.022	0.052
0202619-29	02/15/02	0.004	0.010	0.007	0.027	0.010	0.037	0.058
0203001-29	04/10/02	0.002	0.005	0.008	0.023	0.009	0.032	0.047
0203602-30	06/17/02	0.002	0.002	0.004	0.013	0.005	0.018	0.026
0204814-08	10/28/02	0.007	0.004	0.011	0.010	0.006	0.016	0.038
0205349-33	01/04/03	0.003	0.004	0.003	0.013	0.006	0.019	0.029
0306249-34	04/17/03	0.001	0.001	0.002	0.006	0.003	0.009	0.013
0306733-38	06/20/03	0.022	0.074	0.021	0.076	0.041	0.117	0.234
0307790-18	10/30/03	0.012	0.021	0.005	0.016	0.008	0.024	0.062

G.S. MW #4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0.3
0.25
0.2
0.15
0.1
0.05
0
Benzene
Toluene
Ethylbenzene
m,p Xylene
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Total Xylene
Total BTEX
03/17/99
04/01/99
07/14/99
10/06/99
01/08/00
04/14/00
07/20/00
09/26/00
01/05/01
04/05/01
07/07/01
09/26/01
02/15/02
04/10/02
06/17/02
10/28/02
01/04/03
04/17/03
06/20/03
10/30/03

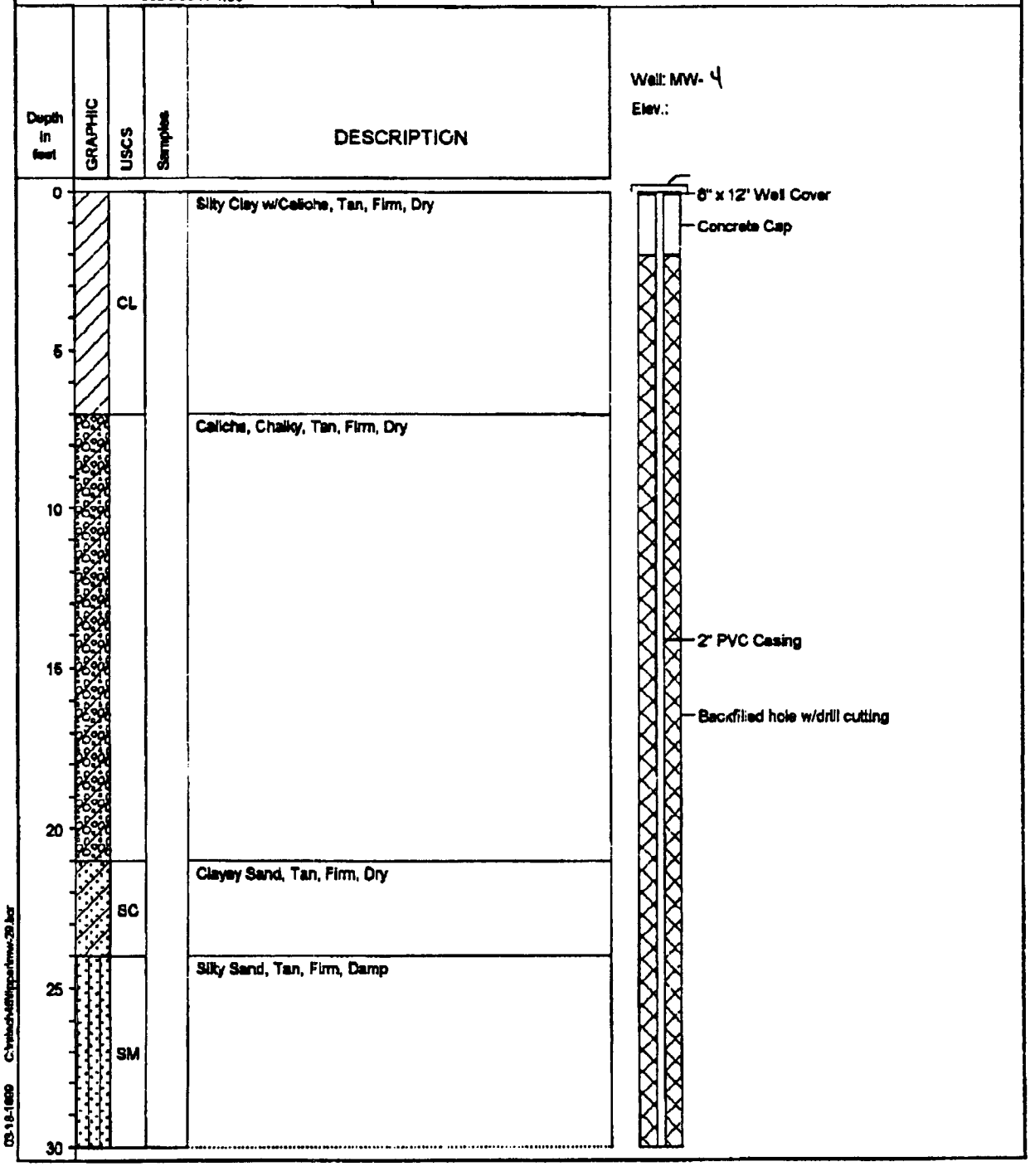
Atkins Engineering Associates, Inc.
P.O. Box 3156
Roswell, New Mexico 88202

LOG OF BORING GS State #1 MW-4
Formerly MW 29

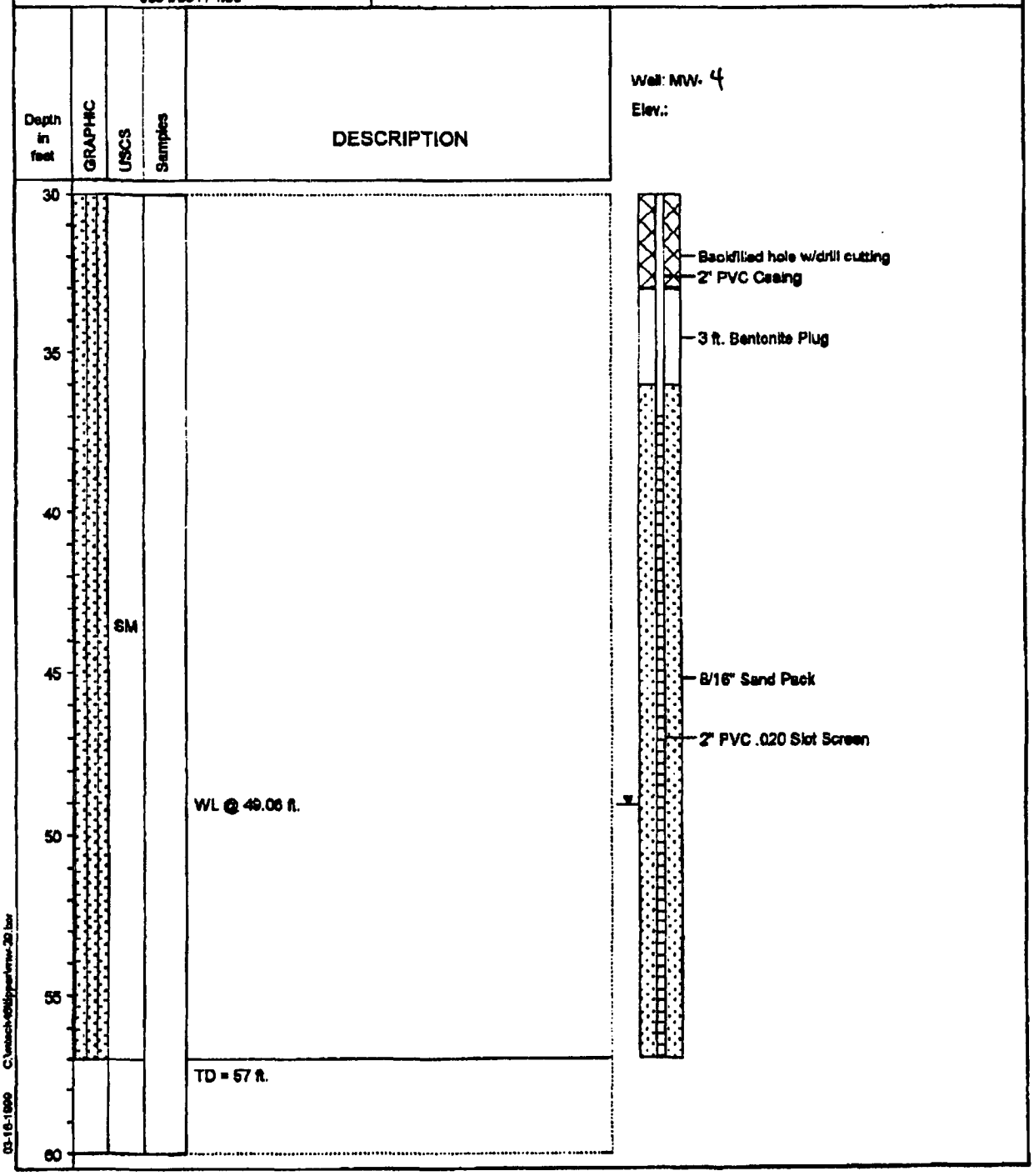
(Page 1 of 2)

Tipperary Corporation
633 17th Street, Suite 1550
Denver, CO 80202
Contact: Mike Griffin
Job #99174.00

Date	: 3-16-99	Site Location	: Lee County, NM
Drill Start	: 1:05 P.M.	Auger Type	: Hollow Stem
Drill End	: 5:10 P.M.	Logged By	: Mort Bates
Boring Location	: 125 ft. SE of MW-22		



Atkins Engineering Associates, Inc. P.O. Box 3156 Roswell, New Mexico 88202	LOG OF BORING GS State #1 MW 4 Formerly MW 29 (Page 2 of 2)
Tipperary Corporation 633 17th Street, Suite 1560 Denver, CO 80202 Contact: Mike Griffin Job #99174.00	Date : 3-18-99 Drill Start : 1:05 P.M. Drill End : 5:10 P.M. Boring Location : 125 ft. SE of MW-22 Site Location : Lee County, NM Auger Type : Hollow Stem Logged By : Mori Bates



GS

Monitor Well Bailing Log

GS MW #5

Lat:	N33^0 22.83475'
Long.	W103^0 37.92597'
Surf. Elev.	4303.2 Ft.

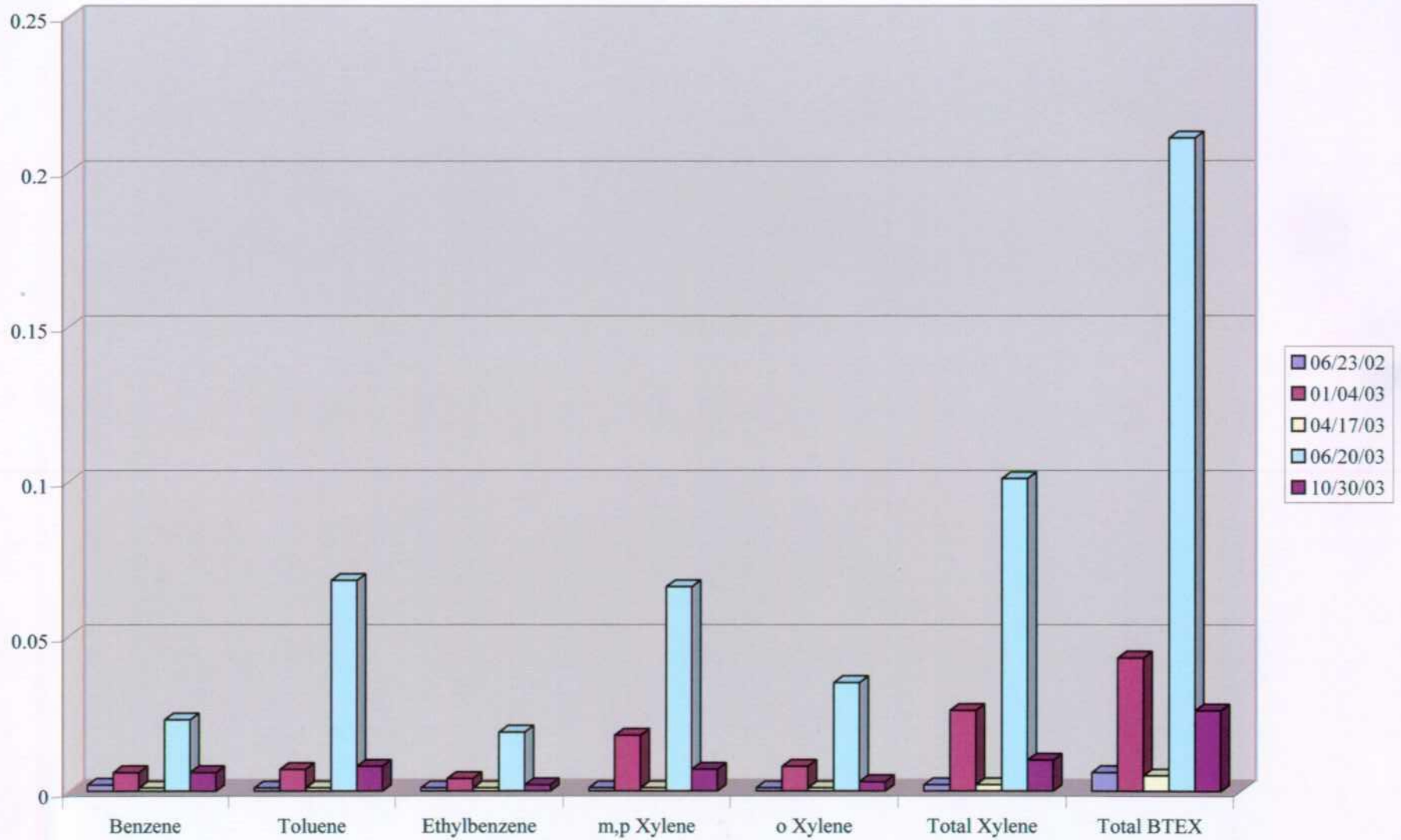
As Drilled			As Measured					
Date:	6/18/2002		Date:			6/12/03	10/25/03	
Top of Water	44.44	Ft.	Top of Water			45.00	45.00	Ft.
Bottom of Bore	55	Ft.	Bottom of Bore			54.50	54.50	Ft.
			Bore Volumn			1.53	1.53	Gal.
			LPNL Top			NA	NA	Ft.
			LPNL Bottom			NA	NA	Ft.
			DPNL Top			NA	NA	Ft.
			DPNL Bottom			NA	NA	Ft.
			Min. Bailing Vol.			4.60	4.60	Gal.
			Actual Bailing Vol.			10.00	10.00	Gal.

Comments

Monitor Well # 5
G.S. State # 1

Lab. #	Sample Date	Benzene	Toluene	Ethylbenzene	m,p Xylene	o Xylene	Total Xylene	Total BTEX
0203719-01	06/23/02	0.002	0.001	0.001	0.001	0.001	0.002	0.006
0205349-34	01/04/03	0.006	0.007	0.004	0.018	0.008	0.026	0.043
0306249-35	04/17/03	0.001	0.001	0.001	0.001	0.001	0.002	0.005
0306733-43	06/20/03	0.023	0.068	0.019	0.066	0.035	0.101	0.211
0307790-19	10/30/03	0.006	0.008	0.002	0.007	0.003	0.01	0.026

G.S. MW #5


0.25
0.2
0.15
0.1
0.05
0
Benzene
Toluene
Ethylbenzene
m,p Xylene
o Xylene
Total Xylene
Total BTEX
06/23/02
01/04/03
04/17/03
06/20/03
10/30/03

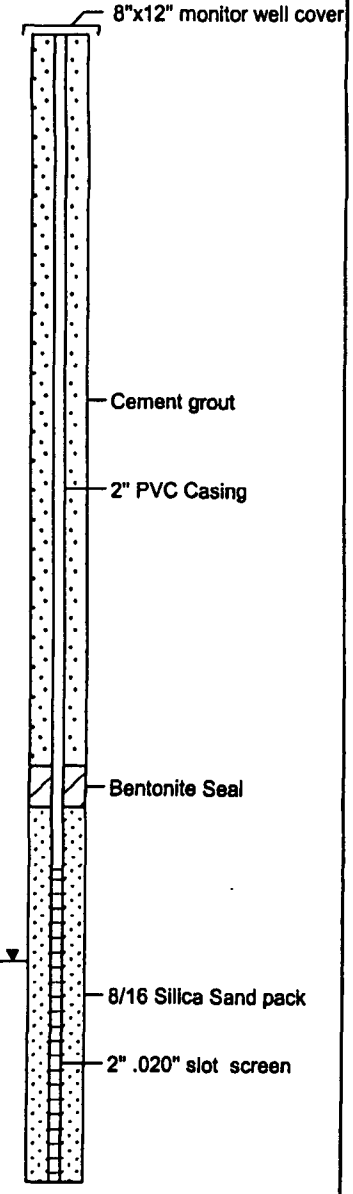
Atkins Engineering Associates, Inc. 2904 W. 2nd St., Roswell, NM 88202-3156	LOG OF BORING GS MW 5 Formerly MW 38 (Page 1 of 1)

Whole Earth Environmental
19606 San Gabriel
Houston, Texas 77084
Contact Mike Griffin
Project # CALLIER.MWD.02

Date	: 6/18/02	Site Location	: Caprock, NM
Drill Start	: 0700	Auger Type	: Hollow Stem
Drill End	: 1400	Logged By	: Mort Bates
Boring Location	: SE of site location		

Depth in feet	GRAPHIC	USCS	Samples	DESCRIPTION	Lab mg/kg
0		CL		Clay, brown, loose, dry	
5				Caliche, tan, loose, dry	
				Caliche, tan, hard, dry	
10		SP		Poorly graded sand w/caliche, tan, loose, dry	
15					
20				Poorly graded sand w/broken sandstone, tan, loose, dry	
25					
30		SP			
35					
40					
45		SP		Poorly graded sand, tan, loose, damp	
50		SP		Poorly graded sand w/sandstone, firm, wet	
55				TD = 55 feet WL = 44.44 feet	
60					

Well: MW 5



06-20-2002 C:\MTECH46\CALLIER\mw38.bor

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

May 21, 2003

Mr. Larry Sugano
Tipperary Corporation
633 Seventeenth St., Suite 1550
Denver, Colorado 80202

RE: BELL STATE "A" PIT – CASE # 1R260
SOHIO STATE #1 PIT – CASE #1R267
SOHIO STATE "A" PIT – CASE #1R268
STATE NBF #1 PIT – CASE #1R269
LEA COUNTY, NEW MEXICO

Dear Mr. Sugano:

The New Mexico Oil Conservation Division (OCD) has reviewed Tipperary Corporation's (TC) May 6, 2003 "TATUM PIT CLOSURE PROJECT YOUR LETTER OF 4-21-03" which was submitted on behalf of TC by their consultant Whole Earth Environmental. This document contains TC's response to the OCD's April 21, 2003 correspondence and TC's work plan for installation of additional ground water monitoring wells to further delineate the extent of contamination related to the closure of unlined pits at the above listed sites west of Tatum, New Mexico.

The above-referenced work plan is approved with the following conditions:

1. At the Sohio State #1 site, proposed monitor well MW-43 shall be relocated and an additional ground water monitoring well shall be installed at the locations shown on the attached figure #1.

2. At the Sohio State "A" site, an additional ground water monitoring well shall be installed at the location shown on the attached figure #2.

3. All monitor wells shall be constructed and completed as follows:

   a. A minimum of 15 feet of well screen shall be installed with 5 feet of well screen placed above the water table and 10 feet of well screen placed below the water table.

   b. An appropriately sized gravel pack shall be set in the annulus around the well screen from the bottom of the hole to 2-3 feet above the top of the well screen.

c. A 2-3 foot bentonite plug shall be placed above the gravel pack.

d. The remainder of the hole shall be grouted to the surface with cement containing 3-5% bentonite.

e. A concrete pad and locking well cover shall be placed at the surface.

f. The well shall be developed after construction using EPA approved procedures.

4. No less than 24 hours after the wells are developed, ground water from all site monitor wells at each site shall be purged, sampled and analyzed for concentrations of benzene, toluene, ethylbenzene, xylene (BTEX) using EPA approved methods and quality assurance/quality control procedures (QA/QC).

5. All monitor wells shall be surveyed to determine their locations in reference to the former pits, tanks, other site monitor and recovery wells and any other pertinent site features.

6. In order to resolve the issue of chloride and total dissolved solids (TDS) contamination at TC's remaining pit closure sites, during one of the 2003 sampling events TC shall sample and analyze ground water from all monitor wells at the Bell State "A" [redacted] #1 (Case #1R262), Iva Com #1 (Case #1R263), Mabel Com #1 (Case #1R264), Sohio State #1, Sohio State "A", and State NBF #1 sites for concentrations of TDS and major cations and anions using EPA approved methods and QA/QC.

7. All wastes generated during the investigation shall be disposed of at an OCD approved facility.

8. TC will submit the results the investigation and sampling activities to the OCD in the subsequent annual report for each site which is due on April 1, 2004. The report will present the investigation and sampling work for each site as a separate case report. Each case report will contain the following information:

a. A description of the investigation activities which occurred including conclusions and recommendations.

b. A geologic/lithologic log and well completion diagram for each newly installed monitor well.

c. A contoured ground water potentiometric map of each site, for each sampling event, showing the direction and magnitude of the hydraulic gradient, the location of the pits, tanks, monitor wells, recovery wells and any other pertinent site features.

d. Summary tables of all past and present ground water quality sampling results and copies of all recent laboratory analytical data sheets and associated QA/QC data.

e. If ground water recovery is occurring at the site, the volume of ground water and volume of product recovered to date.

f. The disposition of all wastes generated.

Please be advised that OCD approval does not limit TC to the proposed work plan if the plan fails to adequately determine the extent of contamination or if contamination exists which is outside the scope of the plan. In addition, OCD approval does not relieve TC of responsibility for compliance with any other federal, state or local laws and regulations.

If you have any questions, please call me at (505) 476-3491.

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

xc: Chris Williams, OCD Hobbs District Office
Cody Morrow, NM State Land Office
Mike Griffin, Whole Earth Environmental, Inc.

Olson, William

From: Mike Griffin [whearth@iamerica.net]
Sent: Tuesday, May 06, 2003 9:27 PM
To: Bill Olson
Cc: Larry Sugano
Subject: Tatum Pit Closure Project Your Letter of 4-21-03


Site Locations.jpg


Plat Map - Bell State A.xls


Plat Map - NBF.xls


Plat Map - Sohio 1.xls


Plat Map - Sohio A.xls

Good Morning, Bill:

I'm in receipt of your above letter and have a few questions or comments. It would probably be easiest for all concerned to go down your list in order.

1. You requested that future filings have a contoured ground water potentiometric map. We've included the map within this submittal.

2. You requested that we analyze each well - each quarter for TDS and major cat and anions. These analyses were performed at the time each well was drilled and we've a good baseline of their concentrations. With the sole exception of the Collier site, the non-organics were found to be within limits. In order to receive closure for each site, we will be required to pass the full NMWQCC spectrum of contaminants of concern including these minerals. At the present time, our main concern in each Tatum site location is benzene, (indeed all of the other BTEX constituents are within limits in all wells).

I would ask that you consider allowing us to continue our existing program for BTEX only until time of final closure. (Though I'll willingly concede the prudence of testing Collier at least annually and even quarterly if the concentrations show any significant increase over the original baselines).

3. You requested that we measure the phase-separated hydrocarbons where present. We can do so on all but the recovery wells.

4. You requested that we conduct further delineation on Bell, Sohio A, Sohio 1 and NBF. We propose to comply as follows:

a. Attached, please find copies of the plat map for each well site in question marked up to include our proposed new well locations. The existing well locations are all shown along with the locations of the major equipment. Existing wells with acceptable concentrations are shown in blue, and the wells with benzene concentrations exceeding NMWQCC standards are in red.

b. The wells will be constructed as are all others within the field. Drilled 2" dia. with a minimum of 10' of screen into the table and 5" of screen above the table. The surface will be flush mounted with a bolted steel cap. No cuttings will be allowed into the hole.

c. We propose to sample each well - each quarter in accordance with the existing sampling plan. The initial testing will include BTEX, major cat and anions, and TDS. Assuming that the minerals are within acceptable limits, subsequent tests will be for BTEX only.

d. We propose to begin drilling on or about May 15th. And will submit a report within two weeks of the receipt of the laboratory analytical results.

Thank you in advance for what I know will be prompt response.

WHOLE EARTH ENVIROMENTAL, INC.

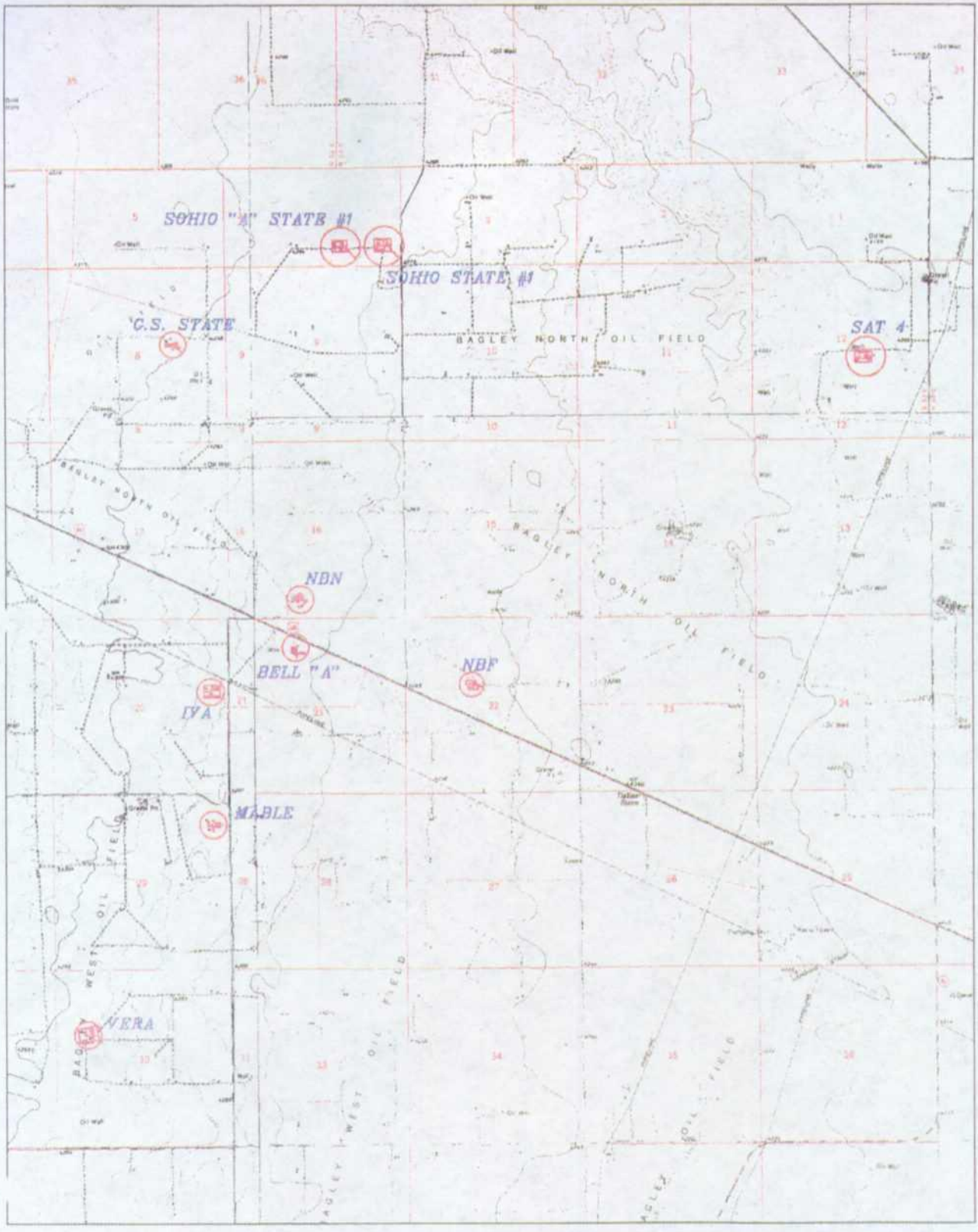


EXHIBIT 9

BASIN SURVEYS P.O. BOX 1786 – HOBBS, NEW MEXICO	W.O. Number: 9352	Drawn By: K. GOAD
	Date: 10-21-99	Disk: KJG #122 – WE9352.DWG

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

April 21, 2003

Mr. Larry G. Sugano
Tipperary Corporation
633 Seventeenth St., Suite 1550
Denver, Colorado 80202

RE: TATUM PIT CLOSURE PROJECT
LEA COUNTY, NEW MEXICO

Dear Mr. Sugano:

The New Mexico Oil Conservation Division (OCD) has reviewed Tipperary Corporation's (TC) February 12, 2003 "PROGRESS REPORT FOR YEAR 2002, TATUM PIT CLOSURE PROJECT, LEA COUNTY, NEW MEXICO". This document contains the results of TC's 2002 ground water quality monitoring and additional investigations of the extent of ground water contamination at the Bell State "A" (Case #1R260), [redacted] Iva Com #1 (Case #1R263), Mabel Com #1 (Case #1R264), Sohio State #1 (Case # 1R267), Sohio State "A" (Case #1R268), State NBF #1 (Case #1R269) and Collier #1 (Case # AP-32) sites west of Tatum, New Mexico.

The OCD has the following comments and requirements concerning the above referenced documents:

1. The reports do not include a contoured ground water potentiometric map of each site, for each sampling event, showing the direction and magnitude of the hydraulic gradient. The OCD has required this information for all monitoring reports as a condition of approval of previous work plans. Please provide such a map for each site from the last monitoring event in calendar year 2002. In future reports, for each sampling event, TC shall include a contoured ground water potentiometric map of each site showing the direction and magnitude of the hydraulic gradient.

2. A review of site data shows that, at most of the sites, chloride and total dissolved solids (TDS) have been observed in ground water downgradient of the pits in concentrations in excess of New Mexico Water Quality Control Commission (WQCC) standards. Therefore, the OCD requires that all future ground water samples from each monitor well, during each sampling event, also be analyzed for concentrations of TDS and major cations and anions using EPA approved methods and quality assurance/quality control procedures.

3. The reports note that phase-separated hydrocarbons (PSH) are present in some monitor wells, however, the OCD cannot evaluate the effectiveness of the recovery systems since the amount of PSH in each monitor or recovery well is not reported. In future reports please include tables showing the thickness of PSH, measured to the nearest 0.01 of a foot, in each monitor and recovery well during all past and present monitoring events.

4. A review of the analytical data shows that the lateral and/or downgradient extent of ground water contamination in excess of WQCC standards has still not been completely defined at the Bell State "A", Sohio State #1, Sohio State "A", and State NBF #1 sites. The OCD requires that TC submit work plans to complete the investigation of the extent of ground water contamination at these sites. The work plans shall include:

   a. A map of each site showing proposed monitor well locations to accomplish the above task.
   b. Proposed monitor well construction details.
   c. A proposed ground water sampling plan.
   d. A schedule for implementation of the plan and submission of an investigation report.

Please submit the information and work plans required in above items 1 and 4 to the OCD Santa Fe Office by June 21, 2003 with a copy provided to the OCD Hobbs District Office.

The investigation actions at the Collier #1 site are being conducted under an abatement plan pursuant to OCD Rule 19. The Stage 1 investigation proposal for the site is currently within a public comment period. The OCD reserves comment on the Collier #1 site until the public comment period for the Stage 1 investigation proposal has been completed.

If you have any questions, please call me at (505) 476-3491.

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

xc: Chris Williams, OCD Hobbs District Office
Mike Griffin, Whole Earth Environmental, Inc.

Tipperary CORPORATION

633 Seventeenth Street
Suite 1550
Denver, Colorado 80202-3622

February 12, 2003

VIA OVERNIGHT MAIL

Mr. William C. Olson
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87504

RE: Progress Report for Year 2002
Tatum Pit Closure Project
Lea County, NM

Dear Mr. Olson:

Please find enclosed the 2002 results from our monitor wells in the subject project area. This report summarizes the results from water samples taken on February 16, April 3, June 7 and October 19, 2002. These results represent 21 quarters of monitoring. In general, we are continuing to observe decreasing levels of BTEX in the monitor wells.

The Executive Summary section contains the following:

- Discussion of results by location.
- Map of pit reclamation locations.
- Chart of monitor well gradients.
- Monitor well location maps.
- Wellbore logs of recently drilled monitor wells.

Detailed results are presented in tabular and graphical format for each monitor well. The monitor well data is grouped by site location in the report. The Exhibits Section contains the quarterly lab results and all associated quality control information. We will continue to sample the project quarterly and report the results to your office on an annual basis. If you have any questions, please call me at (303) 293-9379.

Very truly yours,

Larry G. Sugano

Larry G. Sugano
Vice President - Engineering

cc: Mr. Paul Sheeley, NMOCD Hobbs Office

Enclosure

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 ENVIROMENTAL, INC.

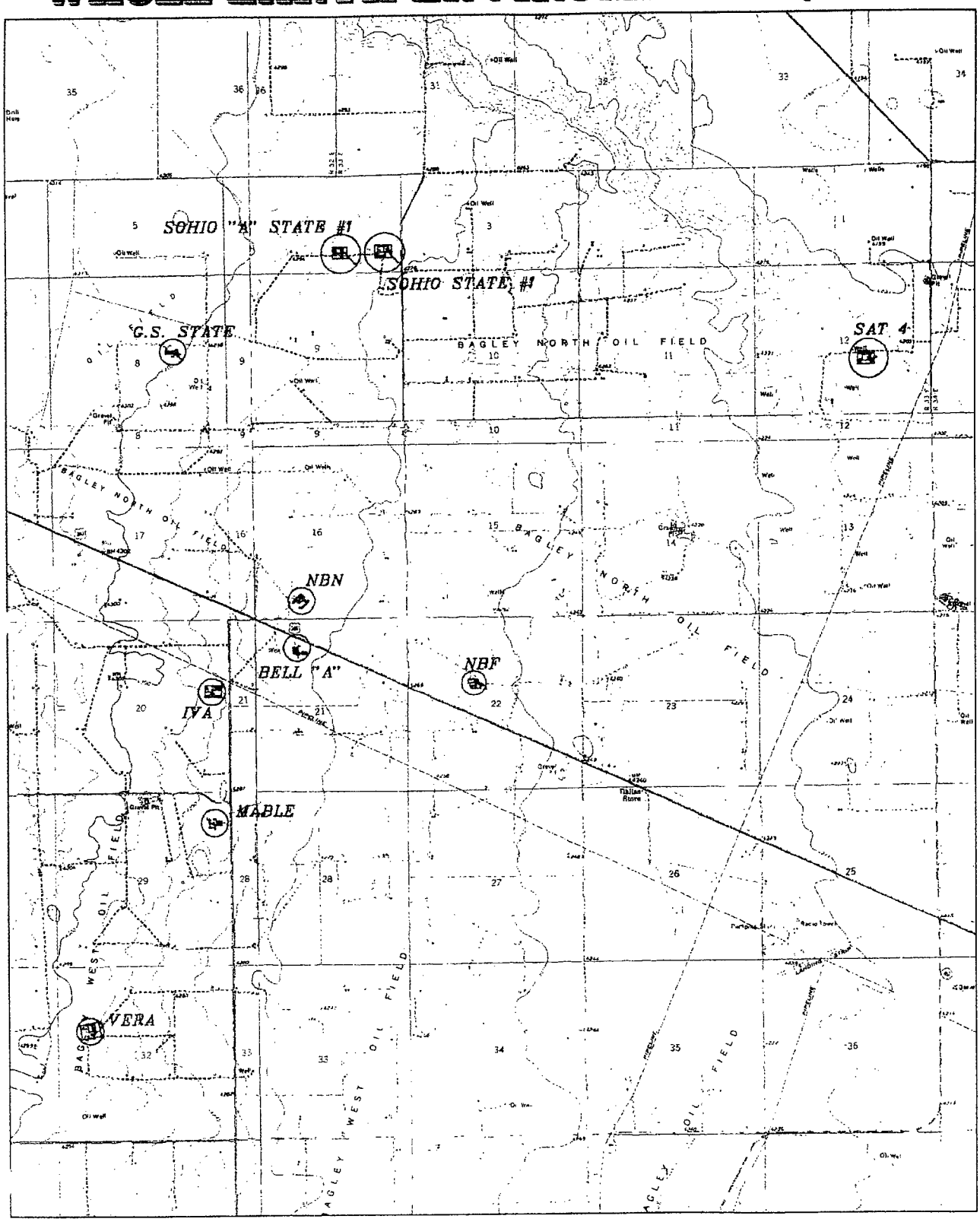


EXHIBIT 9

BASIN SURVEYS P.O. BOX 1786 – HOBBS, NEW MEXICO	W.O. Number: 9352	Drawn By: K. GOAD
	Date: 10-21-99	Disk: KJG #122 – WE9352.DWG

Tipperary Corporation

Tatum Bagley Field

Monitor Well Gradient Chart

Well Name	Well No.	Surface Elevation	Water Elevation	Distance to Pit Center (Ft.)	Gradient (Ft. / Ft.)	Gradient (Ft. / 100Ft.)
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

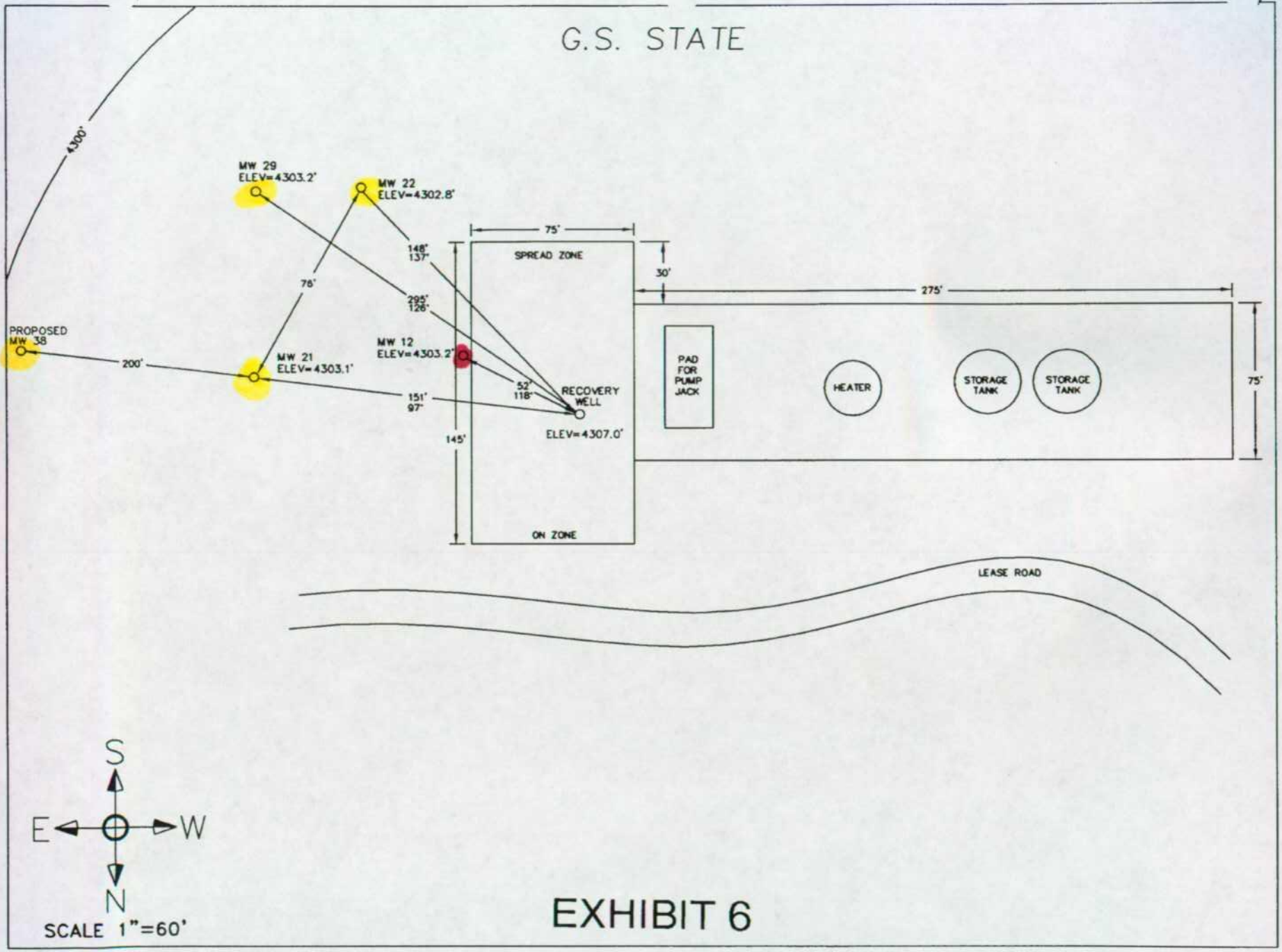
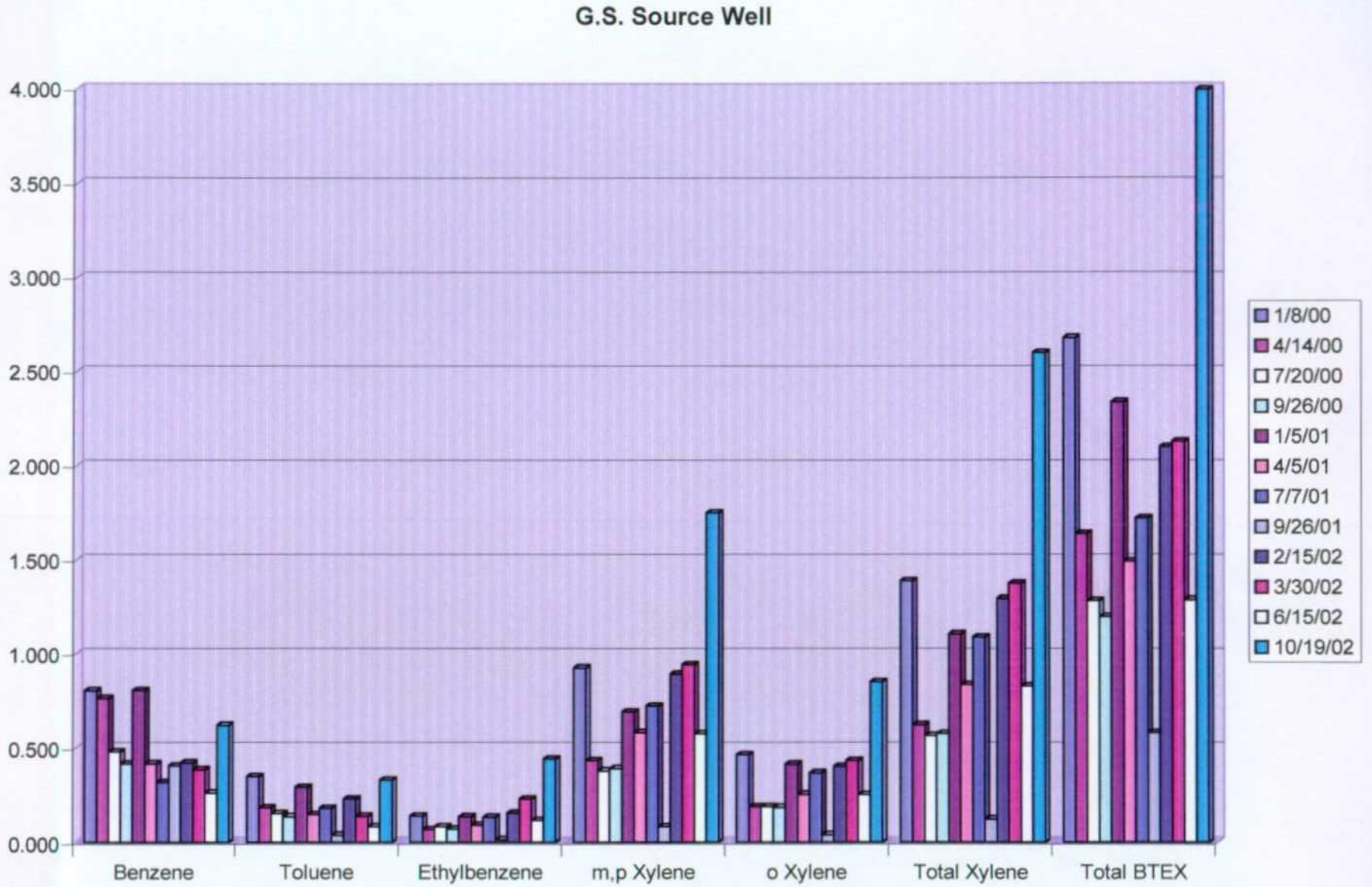

G.S. STATE
4300'
MW 29
ELEV=4303.2'
MW 22
ELEV=4302.8'
75'
SPREAD ZONE
148'
137'
30'
275'
76'
295'
126'
PROPOSED
MW 38
200'
MW 21
ELEV=4303.1'
MW 12
ELEV=4303.2'
PAD
FOR
PUMP
JACK
HEATER
STORAGE
TANK
STORAGE
TANK
75'
52'
118'
RECOVERY
WELL
151'
97'
ELEV=4307.0'
145'
ON ZONE
LEASE ROAD
S
E
W
N
SCALE 1"=60'

EXHIBIT 6

Source Well
G.S. State # 1

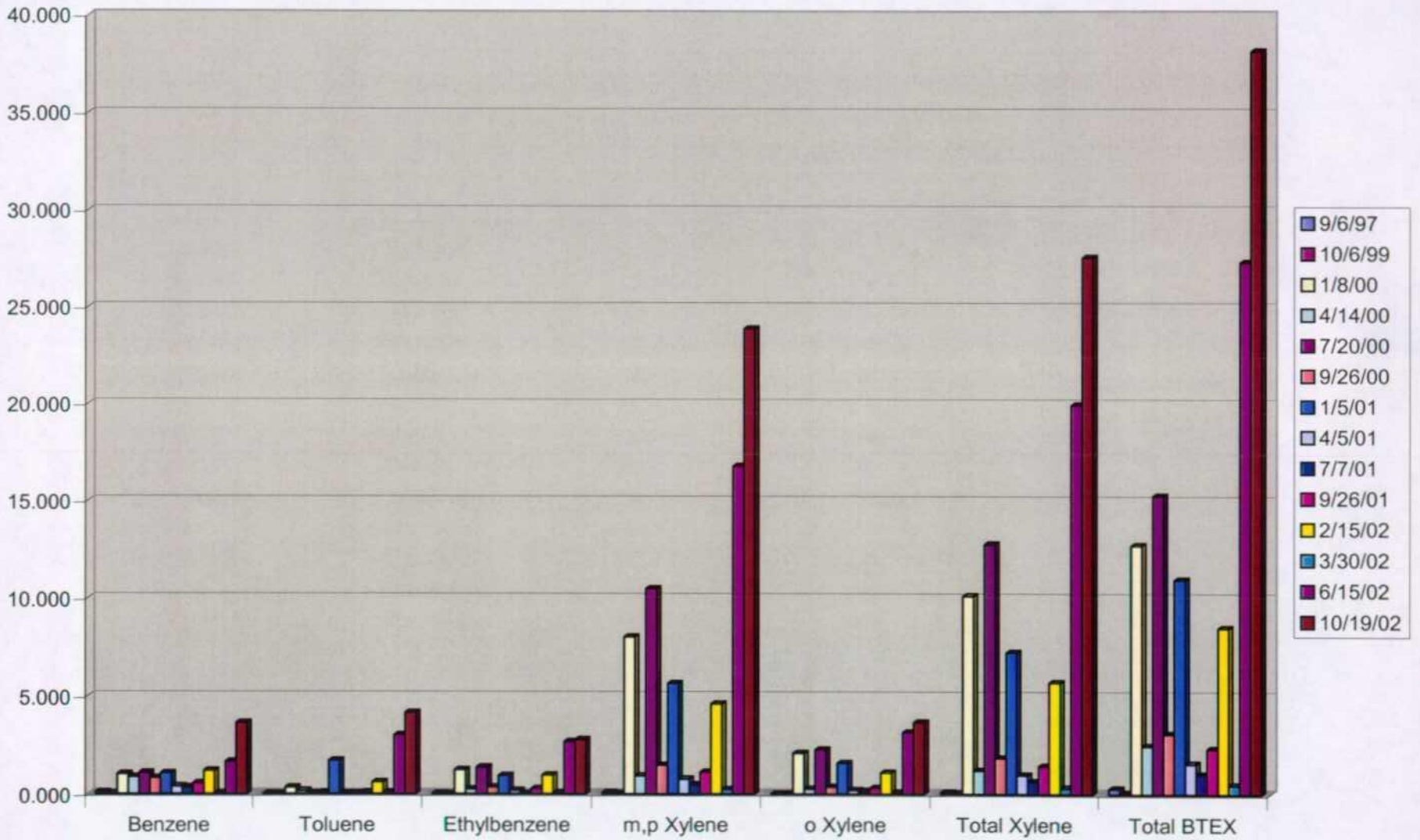
Lab. #	22782	25146	28461	31496	36160	38941	0101098-25	0101642-24	0202619-25	0203001-25	0203602-26	0204815-29
Sample Date	1/8/00	4/14/00	7/20/00	9/26/00	1/5/01	4/5/01	7/7/01	9/26/01	2/15/02	3/30/02	6/15/02	10/19/02
Benzene	0.804	0.763	0.481	0.415	0.805	0.417	0.318	0.406	0.422	0.386	0.262	0.621
Toluene	0.348	0.184	0.153	0.136	0.292	0.148	0.180	0.038	0.229	0.138	0.082	0.331
Ethylbenzene	0.139	0.068	0.083	0.070	0.136	0.091	0.133	0.014	0.155	0.230	0.116	0.441
m,p Xylene	0.925	0.434	0.378	0.391	0.692	0.582	0.722	0.083	0.892	0.942	0.576	1.750
o Xylene	0.464	0.189	0.188	0.185	0.414	0.254	0.368	0.040	0.402	0.433	0.253	0.852
Total Xylene	1.389	0.623	0.566	0.576	1.106	0.836	1.090	0.123	1.294	1.375	0.829	2.602
Total BTEX	2.680	1.638	1.283	1.197	2.339	1.492	1.721	0.581	2.100	2.129	1.289	3.995


G.S. Source Well
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
Benzene
Toluene
Ethylbenzene
m,p Xylene
o Xylene
Total Xylene
Total BTEX
1/8/00
4/14/00
7/20/00
9/26/00
1/5/01
4/5/01
7/7/01
9/26/01
2/15/02
3/30/02
6/15/02
10/19/02

Monitor Well # 12
G.S. State # 1

Lab. #	12478	20625	22764	25147	28462	31518	36169	38942	0101098-26	0101642-26	0202619-26	0203001-26	0203602-27	0204815-30
Sample Date	9/6/97	10/6/99	1/8/00	4/14/00	7/20/00	9/26/00	1/5/01	4/5/01	7/7/01	9/26/01	2/15/02	3/30/02	6/15/02	10/19/02
Benzene	0.092	0.008	1.030	0.871	1.090	0.820	1.070	0.394	0.350	0.553	1.200	0.031	1.660	3.650
Toluene	0.010	0.007	0.336	0.162	0.025	0.066	1.710	0.022	0.026	0.078	0.612	0.072	3.020	4.160
Ethylbenzene	0.015	0.006	1.240	0.246	1.370	0.354	0.945	0.180	0.010	0.267	0.968	0.051	2.690	2.790
m,p Xylene	0.082	0.024	8.030	0.932	10.500	1.480	5.660	0.767	0.483	1.120	4.620	0.234	16.800	23.900
o Xylene	0.002	0.007	2.090	0.261	2.280	0.365	1.580	0.200	0.150	0.309	1.090	0.071	3.160	3.680
Total Xylene	0.084	0.031	10.120	1.193	12.780	1.845	7.240	0.967	0.633	1.429	5.710	0.304	19.960	27.580
Total BTEX	0.285	0.052	12.726	2.472	15.265	3.085	10.965	1.563	1.019	2.327	8.490	0.459	27.330	38.180

MW-12


40.000
35.000
30.000
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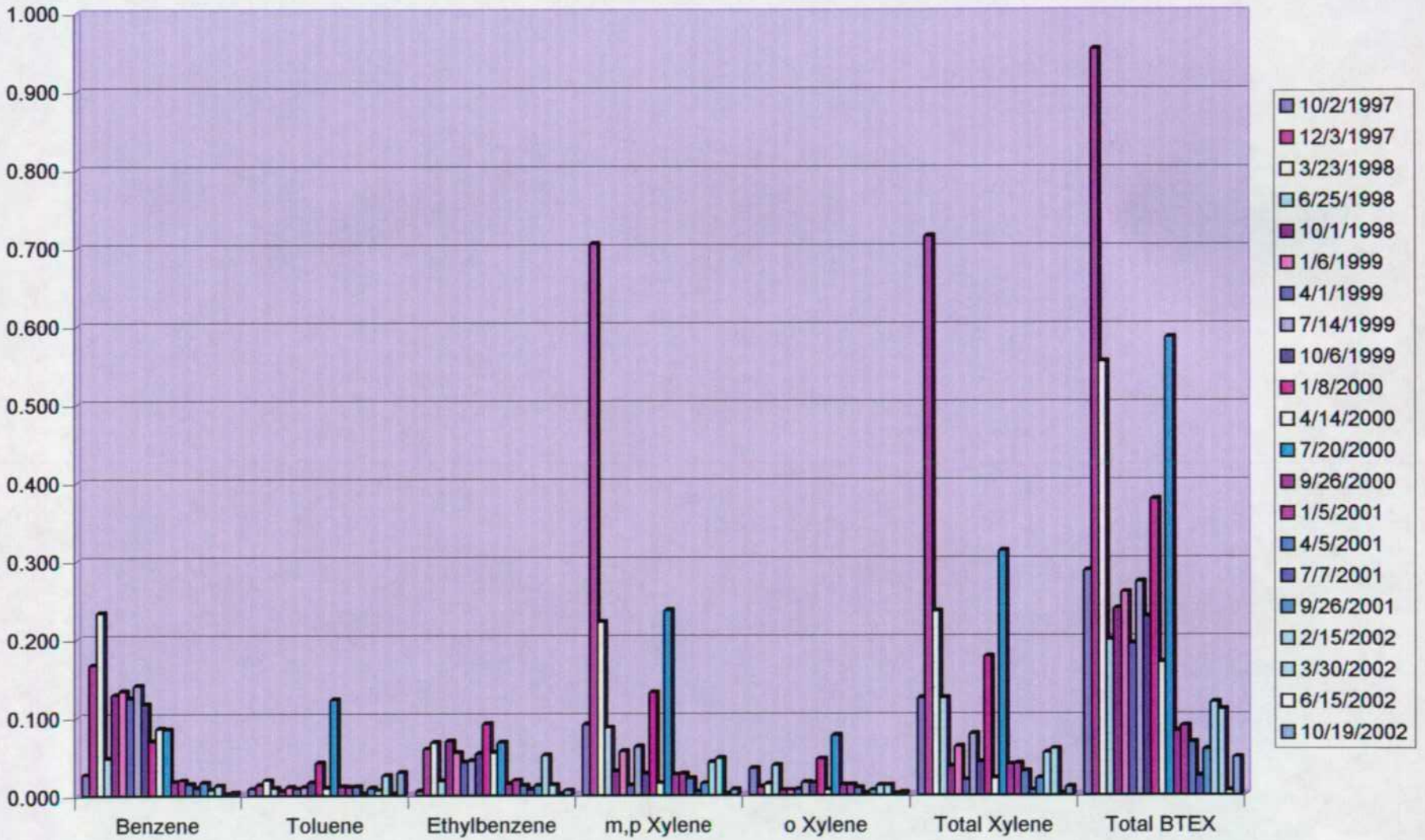
20.000
15.000
10.000
5.000
0.000
Benzene
Toluene
Ethylbenzene
m,p Xylene
o Xylene
Total Xylene
Total BTEX
9/6/97
10/6/99
1/8/00
4/14/00
7/20/00
9/26/00
1/5/01
4/5/01
7/7/01
9/26/01
2/15/02
3/30/02
6/15/02
10/19/02

Monitor Well # 21
G.S. State # 1
Sampling Results

Lab. #	12721	13185	14055	14678	15603	16591	17445	18597	20603	22785	25148	28450	31497	36150	38943	0101098-27	0101642-27	0202618-27	0203061-27	0203602-28	0204814-06
Sample Date	10/2/1997	12/3/1997	3/23/1998	6/25/1998	10/1/1998	1/6/1999	4/1/1999	7/14/1999	10/6/1999	1/9/2000	4/14/2000	7/20/2000	9/26/2000	1/5/2001	4/5/2001	7/7/2001	9/26/2001	2/15/2002	3/30/2002	6/15/2002	10/19/2002
Benzene	0.026	0.166	0.233	0.047	0.128	0.133	0.124	0.140	0.116	0.069	0.085	0.084	0.017	0.019	0.014	0.009	0.016	0.007	0.012	0.001	0.003
Toluene	0.008	0.013	0.019	0.009	0.005	0.010	0.008	0.010	0.016	0.041	0.009	0.122	0.011	0.010	0.011	0.002	0.009	0.006	0.025	0.001	0.029
Ethylbenzene	0.005	0.059	0.067	0.018	0.069	0.054	0.042	0.044	0.053	0.091	0.054	0.067	0.014	0.019	0.012	0.007	0.012	0.051	0.013	0.001	0.006
m,p Xylene	0.090	0.705	0.221	0.086	0.030	0.056	0.012	0.062	0.027	0.131	0.015	0.236	0.028	0.027	0.021	0.004	0.015	0.042	0.047	0.001	0.007
o Xylene	0.034	0.01	0.014	0.038	0.006	0.006	0.007	0.016	0.015	0.046	0.006	0.076	0.013	0.013	0.009	0.002	0.006	0.012	0.012	0.001	0.003
Total Xylene	0.124	0.715	0.235	0.124	0.036	0.062	0.019	0.078	0.042	0.177	0.021	0.312	0.039	0.040	0.030	0.006	0.021	0.054	0.059	0.002	0.010
Total BTEX	0.287	0.953	0.554	0.198	0.238	0.259	0.193	0.272	0.227	0.378	0.169	0.585	0.081	0.088	0.067	0.024	0.058	0.118	0.109	0.005	0.048

MW # 21


1.000
0.900
0.800
0.700
0.600
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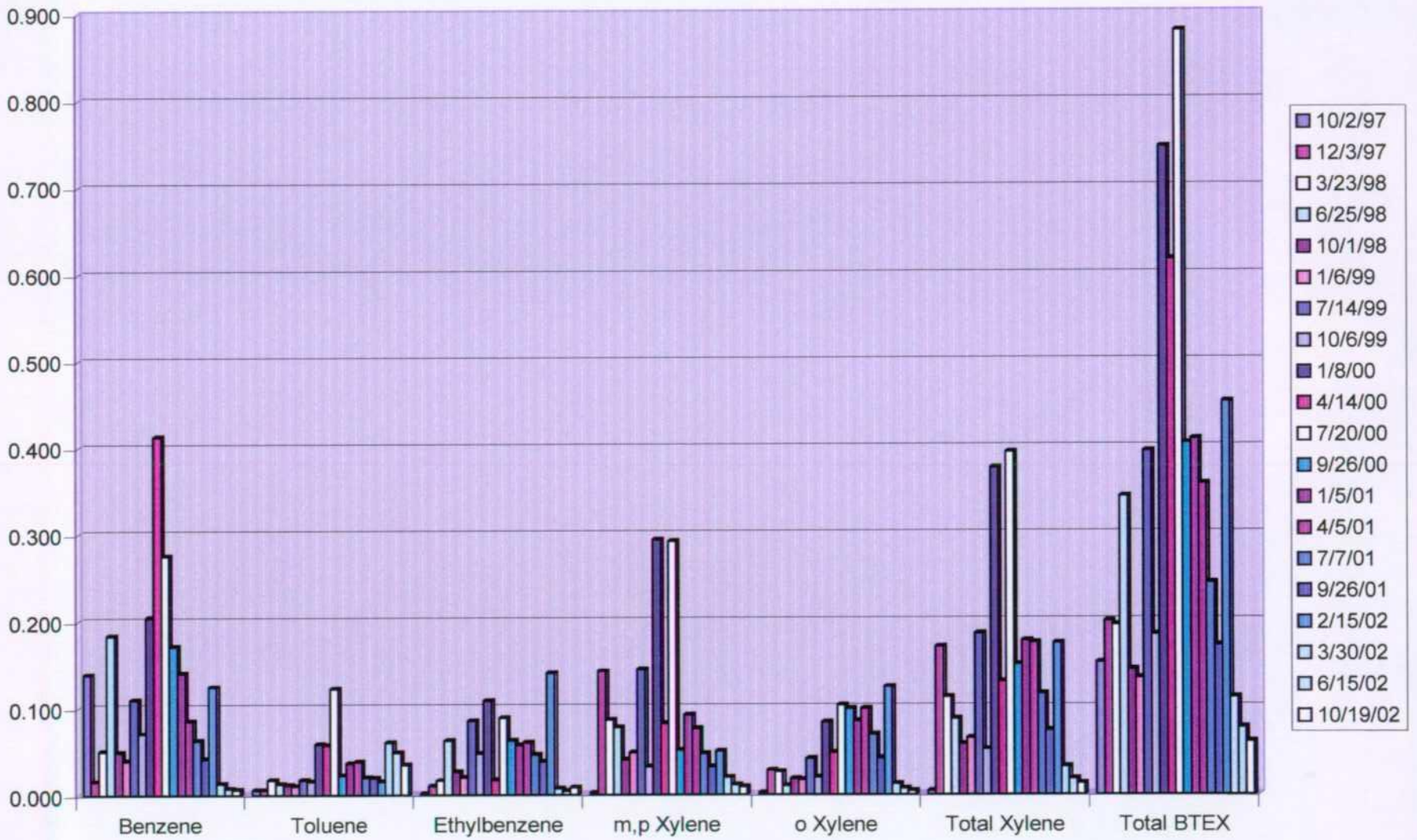
0.400
0.300
0.200
0.100
0.000
Benzene
Toluene
Ethylbenzene
m,p Xylene
o Xylene
Total Xylene
Total BTEX
10/2/1997
12/3/1997
3/23/1998
6/25/1998
10/1/1998
1/6/1999
4/1/1999
7/14/1999
10/6/1999
1/8/2000
4/14/2000
7/20/2000
9/26/2000
1/5/2001
4/5/2001
7/7/2001
9/26/2001
2/15/2002
3/30/2002
6/15/2002
10/19/2002

Monitor Well # 22
G.S. State # 1
Sampling Results

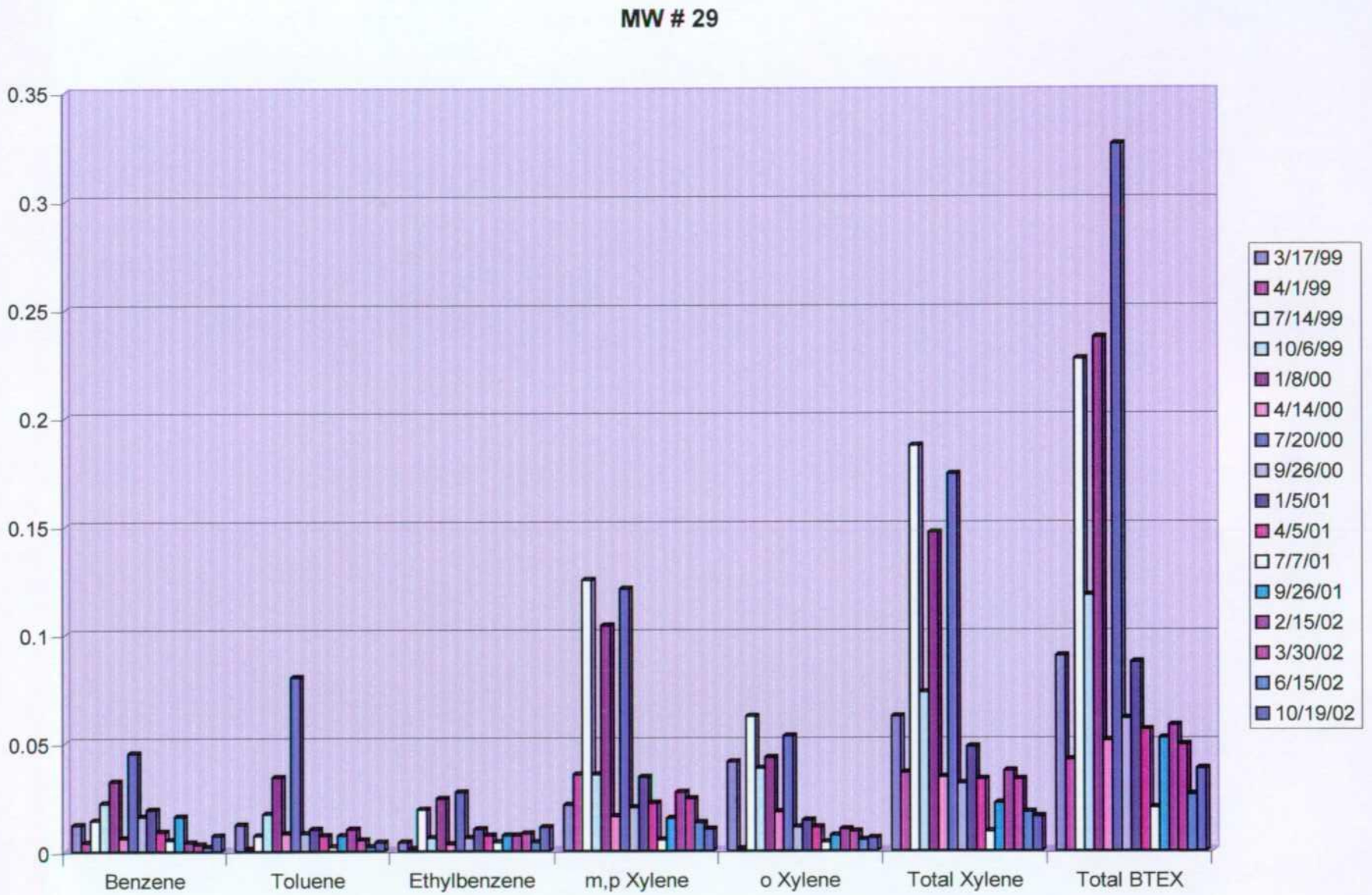
Lab. #	12722	13134	14056	14876	15811	16592	18811	20623	22783	25149	28451	31488	36158	38944	0101098-28	0101642-28	0202819-28	0203001-28	0203502-28	0204814-07
Sample Date	10/2/97	12/3/97	3/23/98	6/25/98	10/1/98	1/6/99	7/14/99	10/6/99	1/8/00	4/14/00	7/20/00	9/26/00	1/5/01	4/5/01	7/7/01	9/26/01	2/15/02	3/30/02	6/15/02	10/19/02
Benzene	0.138	0.015	0.05	0.183	0.049	0.039	0.109	0.070	0.204	0.413	0.275	0.171	0.140	0.085	0.082	0.041	0.124	0.013	0.007	0.006
Toluene	0.005	0.005	0.017	0.012	0.011	0.01	0.017	0.015	0.058	0.057	0.122	0.022	0.036	0.038	0.02	0.019	0.015	0.06	0.048	0.034
Ethylbenzene	0.001	0.010	0.016	0.062	0.026	0.020	0.085	0.047	0.108	0.017	0.088	0.062	0.057	0.060	0.046	0.038	0.140	0.007	0.004	0.008
m,p Xylene	0.002	0.142	0.089	0.077	0.040	0.048	0.144	0.032	0.294	0.082	0.292	0.051	0.092	0.076	0.047	0.032	0.050	0.020	0.011	0.009
o Xylene	0.002	0.028	0.026	0.010	0.018	0.017	0.041	0.020	0.083	0.048	0.103	0.099	0.085	0.099	0.069	0.042	0.124	0.012	0.007	0.004
Total Xylene	0.004	0.170	0.112	0.087	0.058	0.065	0.185	0.052	0.377	0.130	0.395	0.150	0.177	0.175	0.116	0.074	0.174	0.032	0.018	0.013
Total BTEX	0.152	0.200	0.195	0.344	0.144	0.134	0.396	0.184	0.747	0.617	0.880	0.405	0.410	0.358	0.244	0.172	0.453	0.112	0.077	0.061

MW # 22


0.900
0.800
0.700
0.600
0.500
0.400
0.300
0.200
0.100
0.000
Benzene
Toluene
Ethylbenzene
m,p Xylene
o Xylene
Total Xylene
Total BTEX
10/2/97
12/3/97
3/23/98
6/25/98
10/1/98
1/6/99
7/14/99
10/6/99
1/8/00
4/14/00
7/20/00
9/26/00
1/5/01
4/5/01
7/7/01
9/26/01
2/15/02
3/30/02
6/15/02
10/19/02

Monitor Well # 29
G.S. State # 1
Sampling Results

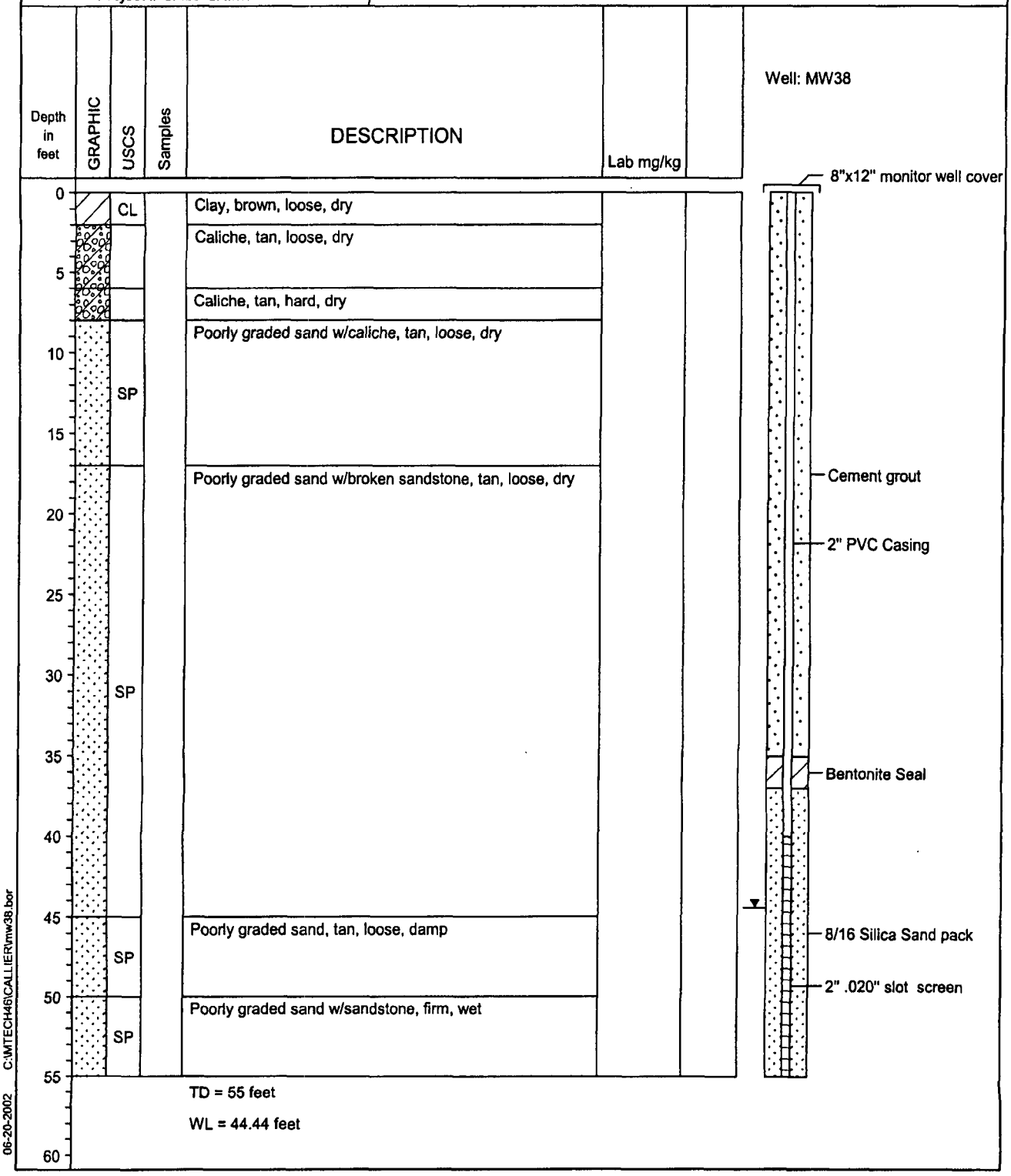
Lab. #	17269	17447	18612	20624	22771	25150	28458	31499	36159	38945	0101098-29	0101642-29	0202619-29	0203001-29	0203602-30	0204814-08
Sample Date	3/17/99	4/1/99	7/14/99	10/6/99	1/8/00	4/14/00	7/20/00	9/26/00	1/5/01	4/5/01	7/7/01	9/26/01	2/15/02	3/30/02	6/15/02	10/19/02
Benzene	0.012	0.004	0.014	0.022	0.032	0.006	0.045	0.016	0.019	0.009	0.005	0.016	0.004	0.003	0.002	0.007
Toluene	0.012	0.001	0.007	0.017	0.034	0.008	0.080	0.008	0.010	0.007	0.002	0.007	0.010	0.005	0.002	0.004
Ethylbenzene	0.004	0.001	0.019	0.006	0.024	0.003	0.027	0.006	0.010	0.007	0.004	0.007	0.007	0.008	0.004	0.011
m,p Xylene	0.021	0.035	0.125	0.035	0.104	0.016	0.121	0.020	0.034	0.022	0.005	0.015	0.027	0.024	0.013	0.010
o Xylene	0.041	0.001	0.062	0.038	0.043	0.018	0.053	0.011	0.014	0.011	0.004	0.007	0.010	0.009	0.005	0.006
Total Xylene	0.062	0.036	0.187	0.073	0.147	0.034	0.174	0.031	0.048	0.033	0.009	0.022	0.037	0.033	0.018	0.016
Total BTEX	0.090	0.042	0.227	0.118	0.237	0.051	0.326	0.061	0.087	0.056	0.020	0.052	0.058	0.049	0.026	0.038


MW # 29
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
Benzene
Toluene
Ethylbenzene
m,p Xylene
o Xylene
Total Xylene
Total BTEX
3/17/99
4/1/99
7/14/99
10/6/99
1/8/00
4/14/00
7/20/00
9/26/00
1/5/01
4/5/01
7/7/01
9/26/01
2/15/02
3/30/02
6/15/02
10/19/02

Monitor Well # 38
G.S. State # 1
Sampling Results

Lab. #	0203719-01
Sample Date	6/23/02
Benzene	0.002
Toluene	0.001
Ethylbenzene	0.001
m,p Xylene	0.001
o Xylene	0.001
Total Xylene	0.002
Total BTEX	0.006

Atkins Engineering Associates, Inc. 2904 W. 2nd St., Roswell, NM 88202-3156	LOG OF BORING GS MW 38 (Page 1 of 1)
Whole Earth Environmental 19606 San Gabriel Houston, Texas 77084 Contact Mike Griffin Project # CALLIER.MWD.02	Date : 6/18/02 Drill Start : 0700 Drill End : 1400 Boring Location : SE of site location Site Location : Caprock, NM Auger Type : Hollow Stem Logged By : Mort Bates



06-20-2002 C:\MTECH46\CALLIER\mw38.bor

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: See Below
Receiving Date: 02/18/02
Analysis Date: 02/21/02

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L	Sample Date
0202619-16	Sohio #1 MW 17	2.47	0.007	0.381	1.76	0.013	02/16/02
0202619-17	Sohio #1 MW 18	1.87	1.35	0.453	2.49	1.47	02/16/02
0202619-18	Sohio #1 MW 28	0.091	0.144	0.089	0.438	0.259	02/16/02
0202619-19	Sohio #1 MW 30	0.046	0.095	0.064	0.328	0.169	02/16/02
0202619-20	Sohio "A" MW 11	0.025	0.007	0.014	0.077	0.018	02/16/02
0202619-21	Sohio "A" MW 19	0.358	0.003	0.008	0.048	0.009	02/17/02
0202619-22	Sohio "A" MW 20	0.004	0.003	0.013	0.074	0.015	02/17/02
0202619-23	Sohio "A" MW 27	0.123	0.001	0.007	0.041	0.008	02/17/02
0202619-24	Sohio "A" MW 31	0.325	0.003	0.007	0.056	0.015	02/17/02
0202619-25	GS Source Well	0.422	0.229	0.155	0.892	0.402	02/17/02
0202619-26	GS MW 12	1.20	0.612	0.968	4.62	1.09	02/17/02
0202619-27	GS MW 21	0.007	0.006	0.051	0.042	0.012	02/17/02
0202619-28	GS MW 22	0.124	0.015	0.140	0.050	0.124	02/17/02
0202619-29	GS MW 29	0.004	0.010	0.007	0.027	0.010	02/17/02
	QUALITY CONTROL	0.099	0.106	0.114	0.228	0.115	
	TRUE VALUE	0.100	0.100	0.100	0.200	0.100	
	% INSTRUMENT ACCURACY	99	106	114	114	115	
	SPIKED AMOUNT	0.100	0.100	0.100	0.200	0.100	
	ORIGINAL SAMPLE	<0.001	0.001	<0.001	0.001	0.001	
	SPIKE	0.101	0.105	0.114	0.230	0.115	
	SPIKE DUP	0.098	0.104	0.110	0.228	0.114	
	% EXTRACTION ACCURACY	98	103	110	114	113	
	BLANK	<0.001	<0.001	<0.001	<0.001	<0.001	
	RPD	3.02	0.96	3.57	0.87	0.87	

METHODS: EPA SW 846-8021B ,5030

Raland K Tuttle

Celey D. Keene
Raland K. Tuttle

2-22-02
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: 0203001-25
Sample ID: GS Source Well

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0001159-02		4/9/02 13:25	1	5	CK	8021B

Parameter	Result µg/L	RL
Benzene	**386**	5.00
Ethylbenzene	**137**	5.00
Toluene	**230**	5.00
p/m-Xylene	**942**	5.00
o-Xylene	**433**	5.00

Lab ID: 0203001-26
Sample ID: GS MW-12

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0001160-02		4/10/02 17:06	1	100	CK	8021B

Parameter	Result µg/L	RL
Benzene	**31400**	100
Ethylbenzene	**71800**	100
Toluene	**51400**	100
p/m-Xylene	**234000**	100
o-Xylene	**70700**	100

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

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: 0203001-27
Sample ID: GS MW-21

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0001160-02		4/10/02 14:31	1	1	CK	8021B

Parameter	Result µg/L	RL
Benzene	**11.9**	1.00
Ethylbenzene	**24.7**	1.00
Toluene	**12.6**	1.00
p/m-Xylene	**47.0**	1.00
o-Xylene	**12.3**	1.00

Lab ID: 0203001-28
Sample ID: GS MW-22

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0001160-02		4/10/02 14:53	1	1	CK	8021B

Parameter	Result µg/L	RL
Benzene	**13.3**	1.00
Ethylbenzene	**60.3**	1.00
Toluene	**7.00**	1.00
p/m-Xylene	**20.3**	1.00
o-Xylene	**11.9**	1.00

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

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: 0203001-29
Sample ID: GS MW-29

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0001160-02		4/10/02 15:15	1	1	CK	8021B

Parameter	Result µg/L	RL
Benzene	**2.51**	1.00
Ethylbenzene	**5.34**	1.00
Toluene	**8.14**	1.00
p/m-Xylene	**23.7**	1.00
o-Xylene	**9.19**	1.00

Lab ID: 0203001-30
Sample ID: Collier MW-Source

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0001160-02		4/10/02 15:37	1	5	CK	8021B

Parameter	Result µg/L	RL
Benzene	**852**	5.00
Ethylbenzene	**113**	5.00
Toluene	**40.1**	5.00
p/m-Xylene	**264**	5.00
o-Xylene	**49.0**	5.00

Approval:
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.

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

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#: G0203602
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.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0203602-23	Sohio "A" MW 20	WATER	6/7/02	6/10/02 9:17	See COC	See COC
	Lab Testing: 8021B/5030 BTEX	Rejected: No		Temp: -2.5 C		
0203602-24	Sohio "A" MW 27	WATER	6/7/02	6/10/02 9:17	See COC	See COC
	Lab Testing: 8021B/5030 BTEX	Rejected: No		Temp: -2.5 C		
0203602-25	Sohio "A" MW 31	WATER	6/7/02	6/10/02 9:17	See COC	See COC
	Lab Testing: 8021B/5030 BTEX	Rejected: No		Temp: -2.5 C		
0203602-26	GS Source Well	WATER	6/7/02	6/10/02 9:17	See COC	See COC
	Lab Testing: 8021B/5030 BTEX	Rejected: No		Temp: -2.5 C		
0203602-27	GS MW 12	WATER	6/7/02	6/10/02 9:17	See COC	See COC
	Lab Testing: 8021B/5030 BTEX	Rejected: No		Temp: -2.5 C		
0203602-28	GS MW 21	WATER	6/7/02	6/10/02 9:17	See COC	See COC
	Lab Testing: 8021B/5030 BTEX	Rejected: No		Temp: -2.5 C		
0203602-29	GS MW 22	WATER	6/7/02	6/10/02 9:17	See COC	See COC
	Lab Testing: 8021B/5030 BTEX	Rejected: No		Temp: -2.5 C		
0203602-30	GS MW 29	WATER	6/7/02	6/10/02 9:17	See COC	See COC
	Lab Testing: 8021B/5030 BTEX	Rejected: No		Temp: -2.5 C		

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

Lab ID: 0203602-25
Sample ID: Sohio "A" MW 31

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0002051-02		6/16/02 22:30	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	**<0.001**	0.001
Ethylbenzene	**0.006**	0.001
Toluene	**<0.001**	0.001
p/m-Xylene	**0.019**	0.001
o-Xylene	**0.001**	0.001

Lab ID: 0203602-26
Sample ID: GS Source Well

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0002051-02		6/16/02 22:52	1	5	CK	8021B

Parameter	Result mg/L	RL
Benzene	**0.262**	0.005
Ethylbenzene	**0.082**	0.005
Toluene	**0.116**	0.005
p/m-Xylene	**0.576**	0.005
o-Xylene	**0.253**	0.005

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

MIKE GRIFFIN
WHOLE EARTH
19606 SAN GABRIEL
HOUSTON, TX 77084

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

Lab ID: 0203602-27
Sample ID: GS MW 12

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0002051-02		6/16/02 23:14	1	100	CK	8021B

Parameter	Result mg/L	RL
Benzene	**1.66**	0.100
Ethylbenzene	**3.02**	0.100
Toluene	**2.69**	0.100
p/m-Xylene	**16.8**	0.100
o-Xylene	**3.16**	0.100

Lab ID: 0203602-28
Sample ID: GS MW 21

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0002051-02		6/16/02 23:36	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	**0.001**	0.001
o-Xylene	**<0.001**	0.001

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

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

Lab ID: 0203602-29
Sample ID: GS MW 22

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0002051-02		6/17/02 8:48	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	**0.007**	0.001
Ethylbenzene	**0.048**	0.001
Toluene	**0.004**	0.001
p/m-Xylene	**0.011**	0.001
o-Xylene	**0.007**	0.001

Lab ID: 0203602-30
Sample ID: GS MW 29

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0002051-02		6/17/02 9:09	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	**0.002**	0.001
Ethylbenzene	**0.002**	0.001
Toluene	**0.004**	0.001
p/m-Xylene	**0.013**	0.001
o-Xylene	**0.005**	0.001

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

ANALYTICAL REPORT

Prepared for:

MIKE GRIFFIN
WHOLE EARTH
19606 SAN GABRIEL
HOUSTON, TX 77084

Project:	Tipperary Bagley Field
Order#:	G0203719
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#: G0203719
Project:
Project Name: Tipperary Bagley Field
Location: Tatum, NM

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.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0203719-01	GS MW 38	WATER	6/18/02 14:30	6/20/02 10:10	See COC	See COC

Lab Testing: **Rejected:** No **Temp:** 9 C

8021B/5030 BTEX
Anions
Cations
Total Dissolved Solids (TDS)

0203719-02	Sohio "A" MW 39	WATER	6/18/02 20:00	6/20/02 10:10	See COC	See COC

Lab Testing: **Rejected:** No **Temp:** 9 C

8021B/5030 BTEX
Anions
Cations
Total Dissolved Solids (TDS)

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

MIKE GRIFFIN
WHOLE EARTH
19606 SAN GABRIEL
HOUSTON, TX 77084

Order#: G0203719
Project:
Project Name: Tipperary Bagley Field
Location: Tatum, NM

Lab ID: 0203719-01
Sample ID: GS MW 38

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0002165-02		6/23/02 19:59	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	**0.002**	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

Lab ID: 0203719-02
Sample ID: Sohio "A" MW 39

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0002165-02		6/23/02 20:21	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	**0.118**	0.001
Ethylbenzene	**0.002**	0.001
Toluene	**0.006**	0.001
p/m-Xylene	**0.009**	0.001
o-Xylene	**0.006**	0.001

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.

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

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

MIKE GRIFFIN
WHOLE EARTH
19606 SAN GABRIEL
HOUSTON, TX 77084

Order#: G0203719
Project:
Project Name: Tipperary Bagley Field
Location: Tatum, NM

Lab ID: 0203719-01
Sample ID: GS MW 38

Anions

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Bicarbonate Alkalinity	190	mg/L	1	2.00	310.1	6/20/02	SB
Carbonate Alkalinity	<0.10	mg/L	1	0.10	310.1	6/20/02	SB
Chloride	523	mg/L	1	5.00	9253	6/20/02	SB
Hydroxide Alkalinity	<0.10	mg/L	1	<0.10	310.1	6/20/02	SB
SULFATE, 375.4	110	mg/L	5	2.5	375.4	6/25/02	CC

Cations

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Calcium	266	mg/L	10	0.10	7140	6/26/02	CK
Magnesium	39.8	mg/L	20	0.020	7460	6/26/02	CK
Potassium	10.9	mg/L	1	0.050	7610	6/26/02	CK
Sodium	99.0	mg/L	10	0.10	7770	7/1/02	MB

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Total Dissolved Solids (TDS)	1400	mg/L	1	5.0	160.1	6/20/02	SB

Lab ID: 0203719-02
Sample ID: Sohio "A" MW 39

Anions

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Bicarbonate Alkalinity	152	mg/L	1	2.00	310.1	6/20/02	SB
Carbonate Alkalinity	<0.10	mg/L	1	0.10	310.1	6/20/02	SB
Chloride	6560	mg/L	1	5.00	9253	6/20/02	SB
Hydroxide Alkalinity	<0.10	mg/L	1	<0.10	310.1	6/20/02	SB
SULFATE, 375.4	167	mg/L	5	2.5	375.4	6/25/02	CC

Cations

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Calcium	2460	mg/L	100	1.0	7140	6/26/02	CK
Magnesium	244	mg/L	100	0.10	7460	6/26/02	CK
Potassium	19.9	mg/L	10	0.50	7610	6/26/02	CK
Sodium	1650	mg/L	100	1.0	7770	7/1/02	MB

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Total Dissolved Solids (TDS)	10700	mg/L	1	5.0	160.1	6/20/02	SB

RL = Reporting Limit N/A = Not Applicable

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

MIKE GRIFFIN	**Order#:** G0203719
WHOLE EARTH	**Project:**
19606 SAN GABRIEL	**Project Name:** Tipperary Bagley Field
HOUSTON, TX 77084	**Location:** Tatum, NM

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

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0203719

BLANK WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L	0002165-02			<0.001		
Ethylbenzene-mg/L	0002165-02			<0.001		
Toluene-mg/L	0002165-02			<0.001		
p/m-Xylene-mg/L	0002165-02			<0.001		
o-Xylene-mg/L	0002165-02			<0.001		
MS WATER	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Benzene-mg/L	0203725-01	0.022	0.1	0.135	113.%	
Ethylbenzene-mg/L	0203725-01	0.003	0.1	0.112	109.%	
Toluene-mg/L	0203725-01	0	0.1	0.109	109.%	
p/m-Xylene-mg/L	0203725-01	0.003	0.2	0.223	110.%	
o-Xylene-mg/L	0203725-01	0	0.1	0.110	110.%	
MSD WATER	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Benzene-mg/L	0203725-01	0.022	0.1	0.134	112.%	0.7%
Ethylbenzene-mg/L	0203725-01	0.003	0.1	0.115	112.%	2.6%
Toluene-mg/L	0203725-01	0	0.1	0.111	111.%	1.8%
p/m-Xylene-mg/L	0203725-01	0.003	0.2	0.227	112.%	1.8%
o-Xylene-mg/L	0203725-01	0	0.1	0.113	113.%	2.7%
SRM WATER	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Benzene-mg/L	0002165-05		0.1	0.109	109.%	
Ethylbenzene-mg/L	0002165-05		0.1	0.107	107.%	
Toluene-mg/L	0002165-05		0.1	0.108	108.%	
p/m-Xylene-mg/L	0002165-05		0.2	0.216	108.%	
o-Xylene-mg/L	0002165-05		0.1	0.106	106.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Cations

Order#: G0203719

BLANK WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L	0002262-02			<0.010		
Magnesium-mg/L	0002262-02			<0.001		
Potassium-mg/L	0002262-02			<0.050		
Sodium-mg/L	0002262-02			<0.010		
CONTROL WATER	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Calcium-mg/L	0002262-03		10	9.7	97.%	
Magnesium-mg/L	0002262-03		5	4.9	98.%	
Potassium-mg/L	0002262-03		10	9.2	92.%	
Sodium-mg/L	0002262-03		5	5.0	100.%	
DUPLICATE WATER	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Calcium-mg/L	0203734-11	136		140		2.9%
Magnesium-mg/L	0203734-11	146		140		4.2%
Potassium-mg/L	0203734-11	43.1		43		0.2%
Sodium-mg/L	0203734-11	1310		1300		0.8%
SRM WATER	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Calcium-mg/L	0002262-05		10	9.7	97.%	
Magnesium-mg/L	0002262-05		5	4.9	98.%	
Potassium-mg/L	0002262-05		10	9.9	99.%	
Sodium-mg/L	0002262-05		5	5.3	106.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Anions

Order#: G0203719

BLANK WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Bicarbonate Alkalinity-mg/L	0002110-01			<2.00		
Carbonate Alkalinity-mg/L	0002111-01			<0.10		
Chloride-mg/L	0002105-01			<5.00		
Hydroxide Alkalinity-mg/L	0002112-01			<0.10		
SULFATE, 375.4-mg/L	0002176-01			<0.5		
DUPLICATE WATER	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
SULFATE, 375.4-mg/L	0203579-01	135		137		1.5%
MS WATER	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Chloride-mg/L	0203657-01	337	500	833	99.2%	
MSD WATER	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Chloride-mg/L	0203657-01	337	500	842	101.%	1.1%
SRM WATER	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Bicarbonate Alkalinity-mg/L	0002110-04		0.05	0.0496	99.2%	
Chloride-mg/L	0002105-04		5000	5050	101.%	
Hydroxide Alkalinity-mg/L	0002112-04		0.05	0.0496	99.2%	
LFATE, 375.4-mg/L	0002176-04		50	46.5	93.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0203719

BLANK WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L	0002115-01			<5.00		
DUPLICATE WATER	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Total Dissolved Solids (TDS)-mg/L	0203691-01	27100		27400		1.1%

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 Fax No: (281) 646-8996

Sampler Signature: Mark Bates E-mail results

Project Name: Tipperary Bagley Field

Project #: _____

Project Loc: Tatum, NM

PO #: _____

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	HNO_3	HCl 40mL glass	NaOH	H_2SO_4	None 1 HDPE	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify):	Analyze For: TDS / CL / SAR / EC	TPH 418.1	TPH TX 1005/1006	TPH 8015M GRO/DRO	Metals: As Ag Ba Cd Cr Pb Hg Se (TCLP / TOTAL)	Volatiles	Semivolatiles	BTEX 8021B/5030	Chlorides	Cations/Anions, TDS					RUSH TAT (Pre-Schedule)	Standard TAT
0203719-01	GS MW 38	6-18-02	1430	3	X		X			X		X											X	X	X						
02	Sohio "A" MW 39	6-18-02	2000	3	X		X			X		X											X	X	X						

Special Instructions:

Sample Coritainers Intact? (Y) N
Temperature Upon Receipt: 9°C
Laboratory Comments: 1 Liter Hape
2 VOA's

Relinquished by:	Date	Time	Received by:	Date	Time
Mort Bates / Mark Bates	6-19-02	0830			
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Jeanne McMurrey	06-19-02	1010

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.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0204815-01	Iva Source Well	WATER	10/19/02	10/21/02 12:50	40 mL VOA	See COC
	Lab Testing: 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
	Lab Testing: 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
	Lab Testing: 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
	Lab Testing: 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
	Lab Testing: 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
	Lab Testing: 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
	Lab Testing: 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
	Lab Testing: 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.

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

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

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

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

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

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

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

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

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
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

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
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

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 Blank	Date Prepared	Date Analyzed	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 Blank	Date Prepared	Date Analyzed	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

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

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

MIKE GRIFFIN		Order#:	G0204815
WHOLE EARTH		Project:	None Given
19606 SAN GABRIEL		Project Name:	Quarterly Sampling
HOUSTON, TX 77084		Location:	Tatum, New Mexico

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

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	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 Blank	Date Prepared	Date Analyzed	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**

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

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

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

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

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

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

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

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 Blank	Date Prepared	Date Analyzed	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 Blank	Date Prepared	Date Analyzed	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**

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

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 Blank	Date Prepared	Date Analyzed	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 Blank	Date Prepared	Date Analyzed	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

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

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003563-02		10/29/02 10:47	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	<0.001	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

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003563-02		10/29/02 11:09	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	<0.001	0.001
o-Xylene	<0.001	0.001

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

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

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 Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	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 Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	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

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

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

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

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

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

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

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
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

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
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.

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

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

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: Kala A K Smith Date: 10-31-02

Environmental Lab of Texas I, Ltd.

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0204815

BLANK 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		
MS 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.%	
MSD 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.%
SRM 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: _____ Project Name: Quarterly Sampling

Company Name: Whole Earth Environmental, Inc. Project #: _____

Company Address: 19606 San Gabriel Project Loc: Tatum, New Mexico

City/State/Zip: Houston, Tx. 77084 PO #: _____

Telephone No: (800) 884-4358 Fax No: (281) 646-8996

Sampler Signature: _____

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	HNO_3	HCl	NaOH	H_2SO_4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify):	Analyze For: TCLP: / TOTAL: TDS / CL / SAR / EC	TPH 418.1	TPH TX 1005/1006	TPH 8015M GRO/DRO	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 80218/5030	Chlorides	Cations/Anions,TDS					RUSH TAT (Pre-Schedule)	Standard TAT
01	Iva Source Well	~~6/6/02~~ 10/19/02		2	X		X					X											X								
02	Iva MW 1	~~6/6/02~~ 10/19/02		2	X		X					X											X								
03	Iva MW 2	~~6/6/02~~ 10/19/02		2	X		X					X											X								
04	Mable Source Well	~~6/6/02~~ 10/19/02		2	X		X					X											X								
05	Mable MW 3	~~6/6/02~~ 10/19/02		2	X		X					X											X								
06	Mable MW 4	~~6/6/02~~ 10/19/02		2	X		X					X											X								
07	Iva MW-35 • Missing Sample	~~6/6/02~~ 10/19/02		3	X		X					X											X	X	X	do not analyze BTEX only					
08	Bell MW 6	~~6/6/02~~ 10/19/02		2	X		X					X											X								
09	Bell MW 13	~~6/6/02~~ 10/19/02		2	X		X					X											X								
10	Bell MW 14	~~6/6/02~~ 10/19/02		2	X		X					X											X								

Special Instructions:

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

* 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: 19606 San Gabriel

City/State/Zip: Houston, Tx. 77084

Telephone No: (800) 854-4358 **Fax No:** (281) 646-8996

Sampler Signature:

Project Name: Quarterly Sampling

Project #:

Project Loc: Tatum, New Mexico

PO #:

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	Preservative: HNO_3	Preservative: HCl	Preservative: NaOH	Preservative: H_2SO_4	Preservative: None	Preservative: Other (Specify)	Matrix: Water	Matrix: Sludge	Matrix: Soil	Matrix: Other (specify):	Analyze For: TDS / CL / SAR / EC	TPH 418.1	TPH TX 1005/1006	TPH 8015M GRO/DRO	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030	Chlorides	Cations/Anions, TDS	RUSH TAT (Pre-Schedule)	Standard TAT
		10/29/02																									
	Bell MW 25	6/6/02		2	X		X					X											X				
	Bell MW 36	6/6/02		3	X		X					X											X	~~X~~	don't analyze BTEX only		
	NBF MW 8	6/6/02		2	X		X					X											X				
	NBF MW 15	6/6/02		2	X		X					X											X				
	NBF MW 16	6/6/02		2	X		X					X											X				
	NBF MW 26	6/6/02		2	X		X					X											X				
	NBF MW 37	6/6/02		3	X		X					X											X	~~X~~	don't analyze BTEX only		
	Sohio #1 MW 10	6/7/02		2	X		X					X											X				
	Sohio #1 MW 17	6/7/02		2	X		X					X											X				
	Sohio # 1 MW 18	6/7/02		2	X		X					X											X				
	Sohio # 1 MW 28	6/7/02		2	X		X					X											X				

Special Instructions:

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

Company Address: 19606 San Gabriel

City/State/Zip: Houston, Tx. 77084

Telephone No: (800) 854-4358 **Fax No:** (281) 646-8996

Sampler Signature:

Project Name: Quarterly Sampling

Project #:

Project Loc: Tatum, New Mexico

PO #:

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	HNO_3	HCl	NaOH	H_2SO_4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify):	Analyze For: TCLP: TDS / CL / SAR / EC	TPH 418.1	TPH TX 1005/1006	TPH 8015M GRO/DRO	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX 8021B/5030	Chlorides	Cations/Anions, TDS					RUSH TAT (Pre-Schedule)	Standard TAT
	Sohio # 1 MW 30	6/7/02		2	X		X					X											X								
	Sohio # 1 MW 40	6/7/02		3	X		X					X											X	~~X~~	~~X~~ DON'T ANALYZE BTEX						
	Sohio "A" MW 11	6/7/02		2	X		X					X											X								
	Sohio "A" MW 19	6/7/02		2	X		X					X											X								
	Sohio "A" MW 20	6/7/02		2	X		X					X											X								
	Sohio "A" MW 27	6/7/02		2	X		X					X											X								
	Sohio "A" MW 31	6/7/02		2	X		X					X											X								
	Sohio "A" MW 39																														
	GS Source Well	6/7/02		2	X		X					X											X								
	GS MW 12	6/7/02		2	X		X					X											X								

Special Instructions:

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

ANALYTICAL REPORT

Prepared for:

MIKE GRIFFIN
WHOLE EARTH
19606 SAN GABRIEL
HOUSTON, TX 77084

Project: Tipperary Bagley Field

PO#:

Order#: G0204814

Report Date: 10/29/2002

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#: G0204814
Project: None Given
Project Name: Tipperary Bagley Field
Location: Tatum, NM

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.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0204814-01	Collier MW 32 / Source	WATER	10/19/02	10/21/02 12:50	40 mL VOA	C HCL to <pH2 / I
	Lab Testing: 8021B/5030 BTEX	Rejected: No		Temp: 3 C		
0204814-02	Collier MW 33	WATER	10/19/02	10/21/02 12:50	40 mL VOA	C HCL to <pH2 / I
	Lab Testing: 8021B/5030 BTEX	Rejected: No		Temp: 3 C		
0204814-03	Collier MW 34	WATER	10/19/02	10/21/02 12:50	40 mL VOA	C HCL to <pH2 / I
	Lab Testing: 8021B/5030 BTEX	Rejected: No		Temp: 3 C		
0204814-04	Collier MW 35	WATER	10/19/02	10/21/02 12:50	40 mL VOA	C HCL to <pH2 / I
	Lab Testing: 8021B/5030 BTEX	Rejected: No		Temp: 3 C		
0204814-05	Collier MW 36	WATER	10/19/02	10/21/02 12:50	40 mL VOA	C HCL to <pH2 / I
	Lab Testing: 8021B/5030 BTEX	Rejected: No		Temp: 3 C		
0204814-06	G.S. MW 21	WATER	10/19/02	10/21/02 12:50	40 mL VOA	C HCL to <pH2 / I
	Lab Testing: 8021B/5030 BTEX	Rejected: No		Temp: 3 C		
0204814-07	G.S. MW 22	WATER	10/19/02	10/21/02 12:50	40 mL VOA	C HCL to <pH2 / I
	Lab Testing: 8021B/5030 BTEX	Rejected: No		Temp: 3 C		
0204814-08	G.S. MW 29	WATER	10/19/02	10/21/02 12:50	40 mL VOA	C HCL to <pH2 / I
	Lab Testing: 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#: G0204814
Project: None Given
Project Name: Tipperary Bagley Field
Location: Tatum, NM

Lab ID: 0204814-01
Sample ID: Collier MW 32 / Source

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003551-02		10/25/02 12:56	1	10	CK	8021B

Parameter	Result mg/L	RL
Benzene	0.439	0.010
Ethylbenzene	0.068	0.010
Toluene	0.016	0.010
p/m-Xylene	0.139	0.010
o-Xylene	0.033	0.010

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	102%	80	120
Bromofluorobenzene	94%	80	120

Lab ID: 0204814-02
Sample ID: Collier MW 33

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003551-02		10/25/02 13:18	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	0.014	0.001
Ethylbenzene	0.036	0.001
Toluene	0.012	0.001
p/m-Xylene	0.198	0.001
o-Xylene	0.043	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	161%	80	120
Bromofluorobenzene	105%	80	120

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

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

MIKE GRIFFIN
WHOLE EARTH
19606 SAN GABRIEL
HOUSTON, TX 77084

Order#: G0204814
Project: None Given
Project Name: Tipperary Bagley Field
Location: Tatum, NM

Lab ID: 0204814-03
Sample ID: Collier MW 34

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003551-02		10/28/02 11:38	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	0.129	0.001
Ethylbenzene	0.114	0.001
Toluene	0.044	0.001
p/m-Xylene	0.581	0.001
o-Xylene	0.146	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	134%	80	120
Bromofluorobenzene	103%	80	120

Lab ID: 0204814-04
Sample ID: Collier MW 35

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003551-02		10/28/02 12:00	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	0.011	0.001
Ethylbenzene	0.021	0.001
Toluene	0.008	0.001
p/m-Xylene	0.154	0.001
o-Xylene	0.058	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	142%	80	120
Bromofluorobenzene	99%	80	120

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

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

MIKE GRIFFIN
WHOLE EARTH
19606 SAN GABRIEL
HOUSTON, TX 77084

Order#: G0204814
Project: None Given
Project Name: Tipperary Bagley Field
Location: Tatum, NM

Lab ID: 0204814-05
Sample ID: Collier MW 36

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003551-02		10/28/02 12:22	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	0.002	0.001
o-Xylene	0.001	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	88%	80	120
Bromofluorobenzene	90%	80	120

Lab ID: 0204814-06
Sample ID: G.S. MW 21

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003551-02		10/28/02 12:44	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	0.003	0.001
Ethylbenzene	0.029	0.001
Toluene	0.006	0.001
p/m-Xylene	0.007	0.001
o-Xylene	0.003	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	82%	80	120
Bromofluorobenzene	88%	80	120

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

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

MIKE GRIFFIN
WHOLE EARTH
19606 SAN GABRIEL
HOUSTON, TX 77084

Order#: G0204814
Project: None Given
Project Name: Tipperary Bagley Field
Location: Tatum, NM

Lab ID: 0204814-07
Sample ID: G.S. MW 22

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003551-02		10/28/02 13:06	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	0.006	0.001
Ethylbenzene	0.034	0.001
Toluene	0.008	0.001
p/m-Xylene	0.009	0.001
o-Xylene	0.004	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	84%	80	120
Bromofluorobenzene	87%	80	120

Lab ID: 0204814-08
Sample ID: G.S. MW 29

8021B/5030 BTEX

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

Parameter	Result mg/L	RL
Benzene	0.007	0.001
Ethylbenzene	0.004	0.001
Toluene	0.011	0.001
p/m-Xylene	0.010	0.001
o-Xylene	0.006	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	81%	80	120
Bromofluorobenzene	80%	80	120

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

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

MIKE GRIFFIN	Order#:	G0204814
WHOLE EARTH	Project:	None Given
19606 SAN GABRIEL	Project Name:	Tipperary Bagley Field
HOUSTON, TX 77084	Location:	Tatum, NM

Approval: Raland K Tuttle 10-28-02

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.

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

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0204814

BLANK WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L	0003551-02			<0.001		
Ethylbenzene-mg/L	0003551-02			<0.001		
Toluene-mg/L	0003551-02			<0.001		
p/m-Xylene-mg/L	0003551-02			<0.001		
o-Xylene-mg/L	0003551-02			<0.001		
MS WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L	0204813-01	0	0.1	0.097	97.%	
Ethylbenzene-mg/L	0204813-01	0	0.1	0.102	102.%	
Toluene-mg/L	0204813-01	0	0.1	0.097	97.%	
p/m-Xylene-mg/L	0204813-01	0	0.2	0.216	108.%	
o-Xylene-mg/L	0204813-01	0	0.1	0.104	104.%	
MSD 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%
Ethylbenzene-mg/L	0204813-01	0	0.1	0.094	94.%	8.2%
Toluene-mg/L	0204813-01	0	0.1	0.092	92.%	5.3%
p/m-Xylene-mg/L	0204813-01	0	0.2	0.202	101.%	6.7%
o-Xylene-mg/L	0204813-01	0	0.1	0.098	98.%	5.9%
SRM WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L	0003551-05		0.1	0.098	98.%	
Ethylbenzene-mg/L	0003551-05		0.1	0.102	102.%	
Toluene-mg/L	0003551-05		0.1	0.100	100.%	
p/m-Xylene-mg/L	0003551-05		0.2	0.216	108.%	
o-Xylene-mg/L	0003551-05		0.1	0.105	105.%	

CASE NARRATIVE

ENVIRONMENTAL LAB OF TEXAS

Prepared for:

WHOLE EARTH
19606 SAN GABRIEL
HOUSTON, TX 77084

Order#: G0204814

Project: Tipperary Bagley Field

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
Collier MW 32 / Sou	0204814-01	WATER	10/19/2002	10/21/2002
Collier MW 33	0204814-02	WATER	10/19/2002	10/21/2002
Collier MW 34	0204814-03	WATER	10/19/2002	10/21/2002
Collier MW 35	0204814-04	WATER	10/19/2002	10/21/2002
Collier MW 36	0204814-05	WATER	10/19/2002	10/21/2002
G.S. MW 21	0204814-06	WATER	10/19/2002	10/21/2002
G.S. MW 22	0204814-07	WATER	10/19/2002	10/21/2002
G.S. MW 29	0204814-08	WATER	10/19/2002	10/21/2002

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: Rolando K Judy Date: 10-28-02

Environmental Lab of Texas I, Ltd.

Envi oI nental Lab of Texas, Inc.

12600 We -20 st Phone: 915-563-1800
Odessa, T as 7 53 Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

oje lanager:

om y Name: Whole Earth Environmental, Inc.

C pan ddress: 19606 San Gabriel

Cit ate/Zip: Houston, Tx. 77084

Tel one No: (800) 854-4368 Fax No: (281) 646-8996

S: ler nature:

Project Name: Tipperary Bagley Field

Project #:

Project Loc: Tatum, NM

PO #:

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	HNO_3	HCl	NaOH	H_2SO_4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify):	Analyze For: TCLP: / TOTAL: TDS / CL / SAR / EC	TPH 418.1	TPH TX 1005/1006	TPH 8015M GRO/DRO	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030	RUSH TAT (Pre-Schedule)	Standard TAT
01	Collier MW 32 /Source	2/17/02		2	X		X					X											X		
02	Collier MW 33	2/17/02		2	X		X					X											X		
03	Collier MW 34	2/17/02		2	X		X					X											X		
04	Collier MW 35	10/19/02		2	✓		✓					✓											✓		
05	Collier MW 36	10/19/02		2	✓		✓					✓											✓		
06	G.S. MW-21	10/19/02		2	✓		✓					✓											✓		
07	G.S. MW 22	10/19/02		2	✓		✓					✓											✓		
08	G.S. MW 29	10/19/02		2	✓		✓					✓											✓		

Special Instructions:

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