

1R - 268

REPORTS

DATE:

2002

1R268

RECEIVED



MAR 07 2002

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

To: Bill Olson / NMOCD

From: Mike Griffin / Whole Earth Environmental, Inc.

Date: February 23, 2002

Subject: Tatum Pit Closure Project
Your Letter February 13, 2002

Thank you for the reminder regarding our Work Plan for the Bagley Field Pit Closure Project.

Our work plan for the project is to drill a total of six additional delineation wells at the proposed locations referenced in Exhibits 1-6. The 2" wells will be drilled to a minimum depth of 15' below the upper water interface. Slotted casing will go from the bottom of the well to a distance of 10' above the water table as determined at the time of drilling. The slotted casing will be sand packed below a bentonite seal. The well bore will be grouted to surface and a locking cap installed. (Reference: Exhibit 7).

Rather than setting a separate reporting schedule for these wells, we propose to include the results of the investigation within our annual report to the OCD. We will sample each well each quarter in accordance with the sampling plan already in practice.

We will drill the wells within sixty days of your approval of this plan. If laboratory testing of the waters from any of the proposed wells reveals BTEX or chloride concentrations in excess of NMWQCC standards, we will immediately contact you.

Please don't hesitate to contact me if you've any additional questions.

Mike Griffin
Whole Earth Environmental

1/13/02 - Mike Griffin
Wells installed. Will
submit in next annual report

SOHIO "A" STATE #1

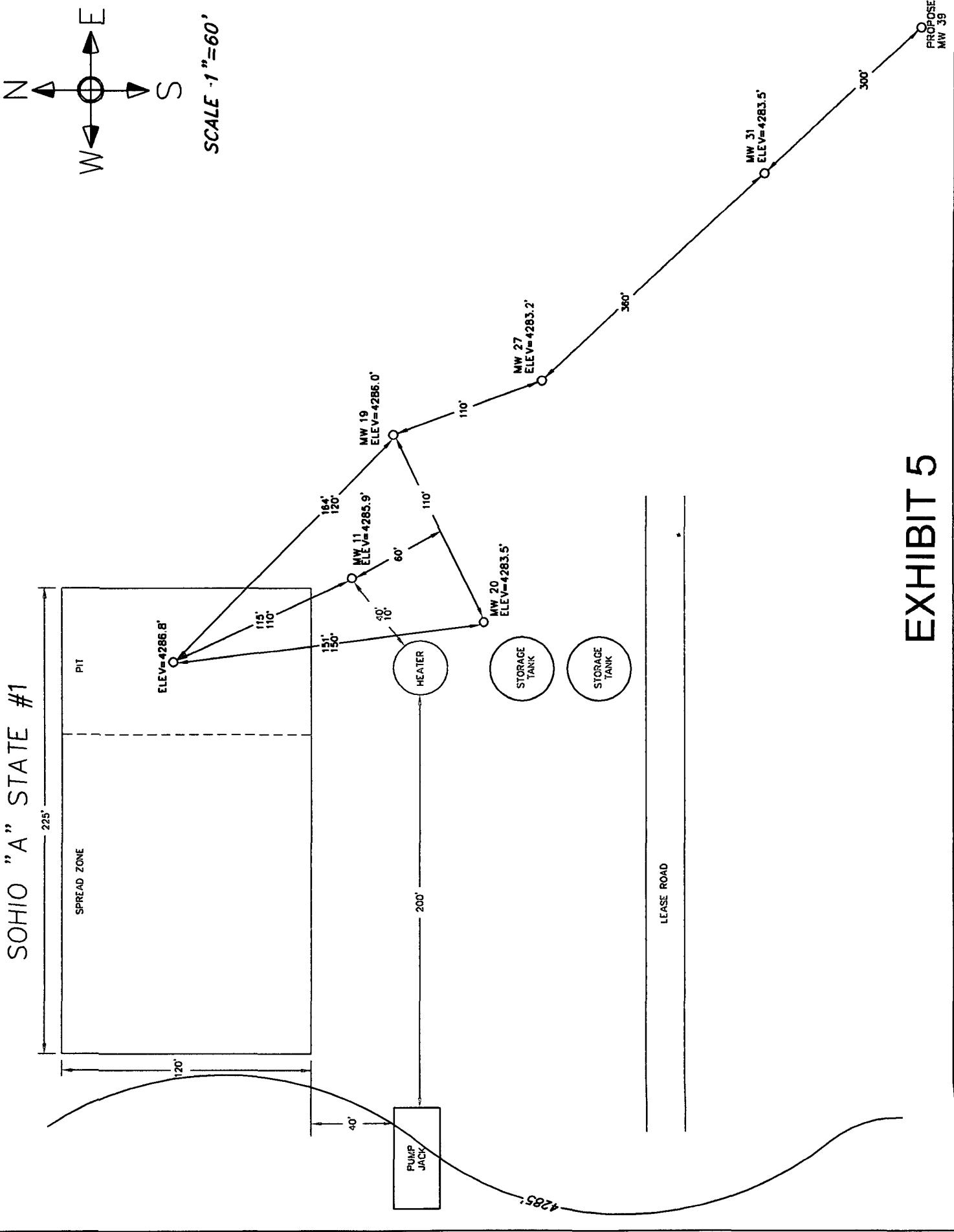


EXHIBIT 5



Exhibit Index

- Exhibit 1** Schematic of Well Site & Proposed New Monitor Well Location Mable COM
- Exhibit 2** Schematic of Well Site & Proposed New Monitor Well Location Bell State
- Exhibit 3** Schematic of Well Site & Proposed New Monitor Well Location NBF
- Exhibit 4** Schematic of Well Site & Proposed New Monitor Well Location Sohio # 1
- Exhibit 5** Schematic of Well Site & Proposed New Monitor Well Location Sohio "A"
- Exhibit 6** Schematic of Well Site & Proposed New Monitor Well Location G.S. State
- Exhibit 7** Schematic of Typical Monitor Well Construction
- Exhibit 8** Gradient Chart
- Exhibit 9** Gradient Chart

Atkins Engineering
Associates, Inc.

2904 W. 2nd St., Roswell, NM 88202-3156

LOG OF BORING Rice Operating MW-3

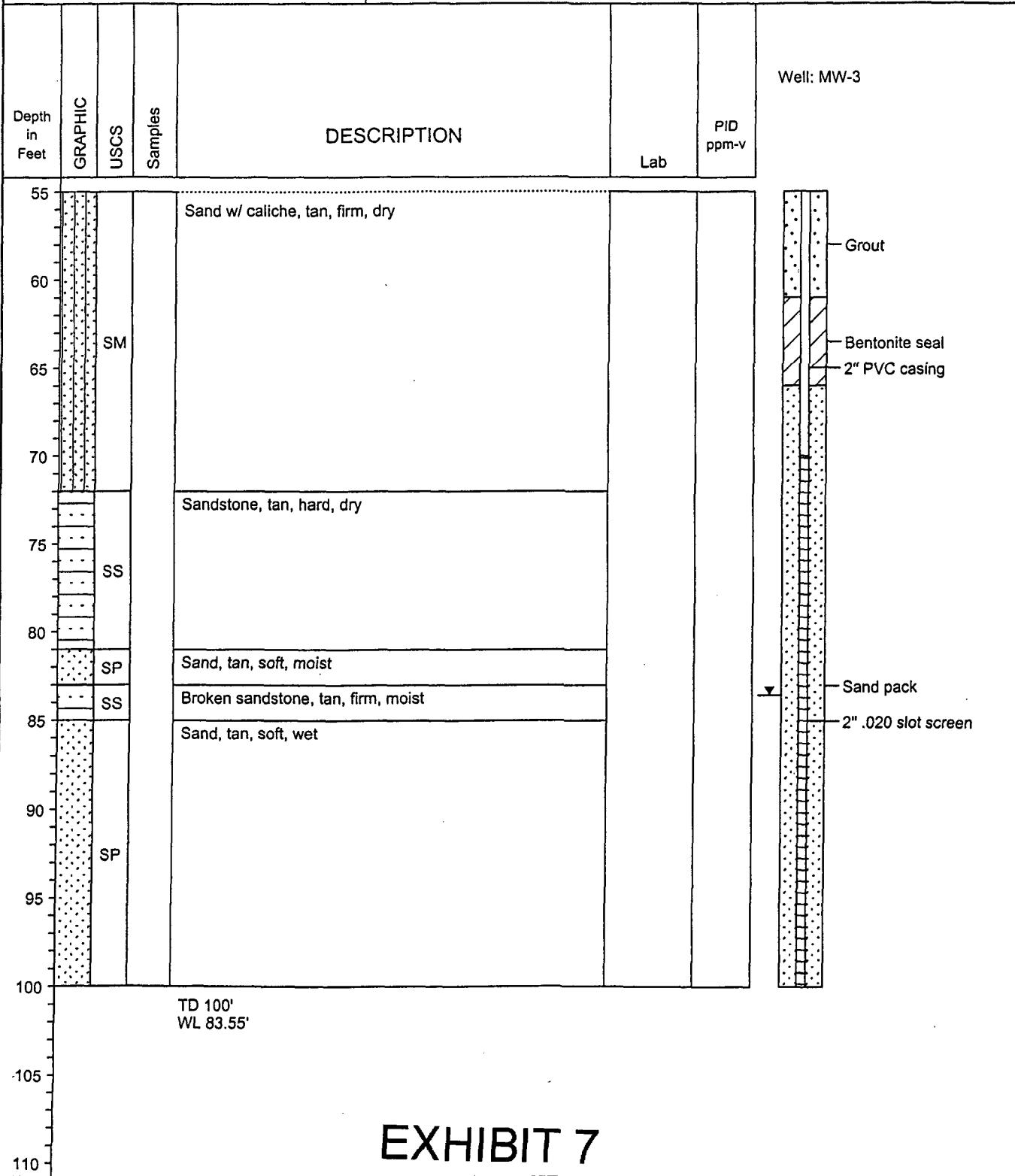
(Page 2 of 2)

Whole Earth Environmental
19606 San Gabriel
Houston, TX 77084

Contact: Mike Griffin

Job#: EUNICEG.MWD.01

Date	: 05-08 & 05-09-01	Site Location	: SE Eunice, NM
Drill Start	: a.m.		: Sec. 15, T22S, R37E
Drill End	: 12:00	Auger Type	: Hollow Stem
Boring Location	: 3 1/4 mi SE of Eunice & 1/2 mi E Logged By : Mort Bates		



WHOLE EARTH ENVIRONMENTAL, INC.

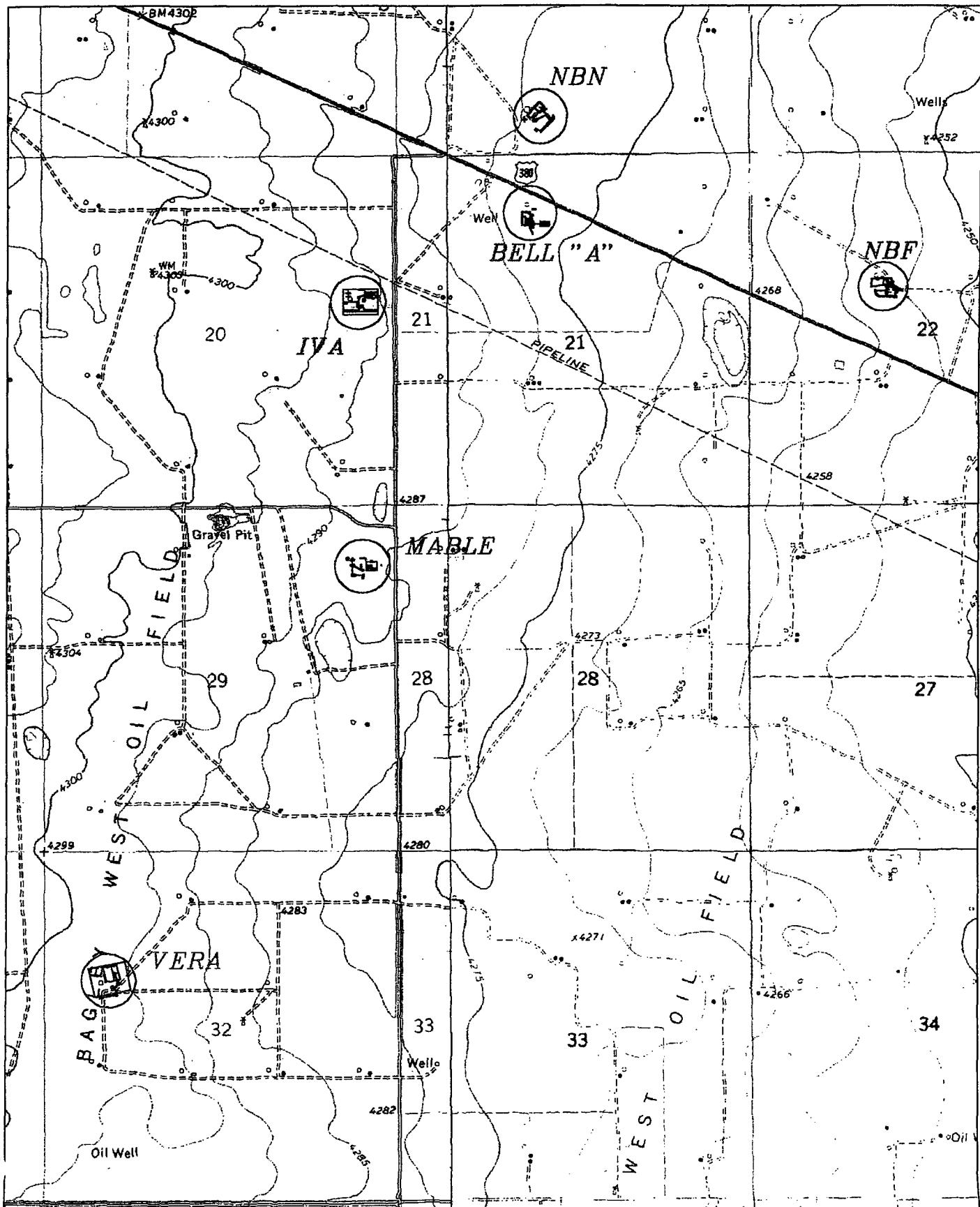
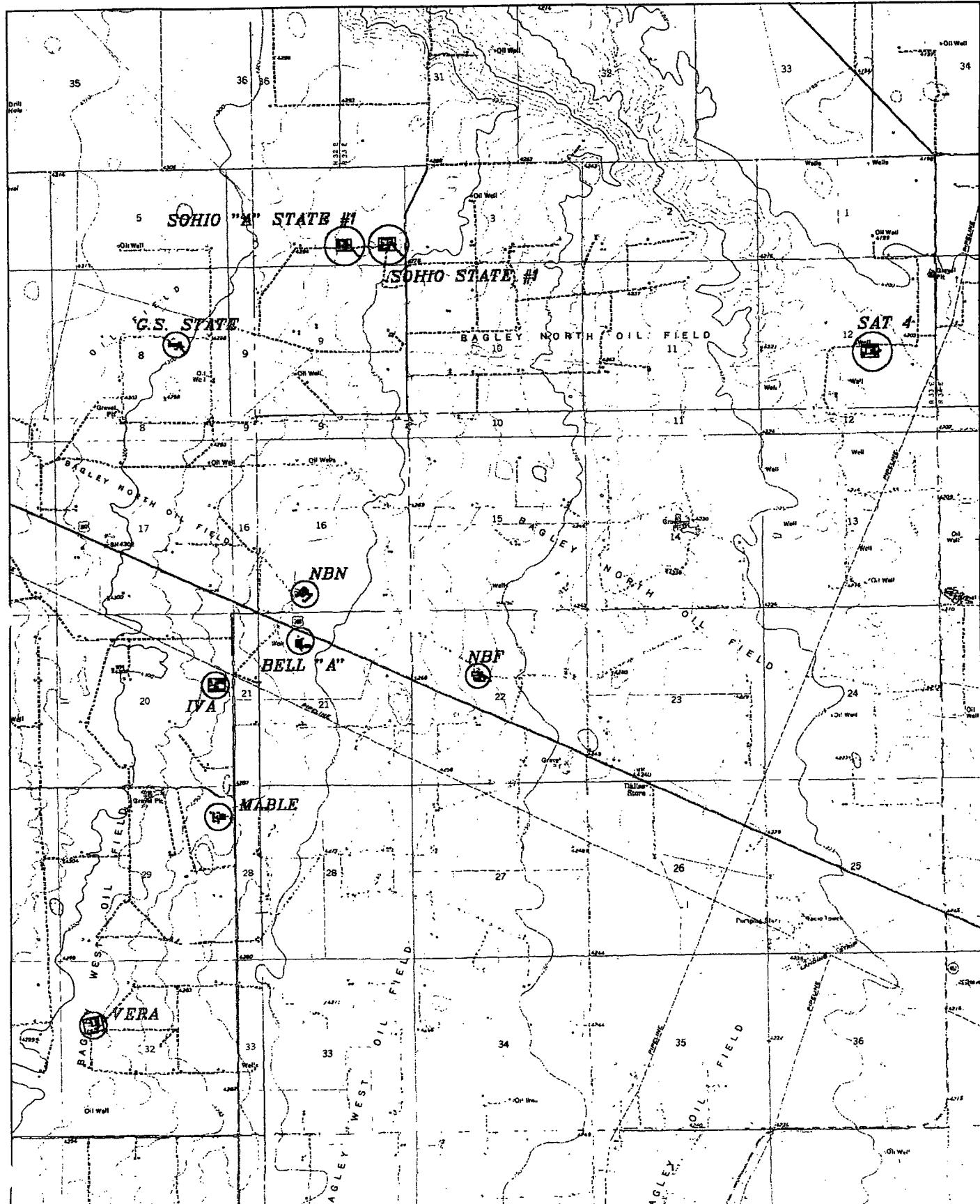


EXHIBIT 8

WHOLE EARTH ENVIRONMENTAL, INC.



4000

0

4000

8000

EXHIBIT 9



Tipperary
CORPORATION

633 Seventeenth Street
Suite 1550
Denver, Colorado 80202

November 14, 2001

VIA OVERNIGHT MAIL

Mr. William C. Olson
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: Progress Report for Year 2001
Tatum Pit Closure Project
Lea County, NM

RECEIVED *nd*
NOV 16 2001 → 2001

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Dear Mr. Olson:

Please find enclosed additional results from our monitor wells in the subject project area. This report summarizes the results from water samples taken on January 10, April 5, July 7, and September 26, 2001. These results represent the 17 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:

- Summary of results by location.
- Procedure for obtaining water samples.
- Summary of water depths in each monitor well.
- Monitor well gradient chart.
- LNAPL depth chart.
- Maps of pit reclamation locations.
- Chain of custody records and lab results of the water samples by quarter.

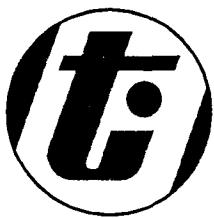
Detailed results are presented in tabular and graphical format for each monitor well. The monitor well data is grouped by site location in the report. We will continue to sample the project quarterly and report the results to your office on an annual basis. If you have any questions, please call me at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

Very truly yours,

Larry G. Sugano
Vice President - Engineering

cc: NMOCD Hobbs Office

Enclosures



Tipperary
CORPORATION

**Tipperary Corporation
September 2001
Sampling Results
Annual Report**

RECEIVED

NOV 16 2001

**ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION**



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



Executive Summary Tipperary Corporation Water Monitoring Program

Site History

In response to a request by a 1996 request by the NMOCD, Tipperary Corporation began a program to close a series of ten surface impoundments located within their Bagley Field west of Tatum, New Mexico. The closure program consisted of excavating the impoundments and encapsulating the contaminant plume within high-density polyethylene. As part of the closure program, a groundwater investigation was conducted at each site. The investigation concluded that due to the relatively shallow depth to the surface of the aquifer, each site impacted the Ogallala Aquifer to varying degrees.

The remediation plan included passive monitoring of those sites showing no free product on the water table and active fluid removal by means of the erection of windmills at three sites found to have more significant concentrations. A series of water monitoring wells were placed down gradient of each location. Each such well has been sampled and tested on a quarterly basis with the results of each laboratory analyses provided to the NMOCD on an annual basis. To date, two sites have been remediated to closure and a third is pending final approval.

Individual Site Descriptions

Iva COM

The Iva site includes a recovery well. Criteria contaminant concentrations within the well have shown a 94% reduction since installation and a 48% reduction over the past year. A review of the test results over the past three years indicates that the contaminant concentrations appear to be reduced at the rate of approximately 50% per year. If the trend continues, the concentrations will be within NMWQCC standards within the next two years. Two down gradient monitor wells at the site have never shown concentrations in excess of standards.

Mable COM

The Mable site includes a recovery well. Criteria contaminant concentrations within the well have shown a 73% reduction since installation and a 50% reduction over the past year. The primary contaminant compounds within this well are benzene and xylene. Only the xylene and ethylbenzene fractions have shown any significant improvement over previous sampling periods within the source well. Both down-gradient monitor wells generally fall within NMWQCC standards but are subject to periodic spikes in all tested fractions. LNAPL's are present within both monitor wells but appear to have

the viscous appearance and odor characteristics of fatty acids resulting from the aerobic degradation of hydrocarbons.

Bell State "A"

This site has no active recovery well but does contain a series of four monitor wells. The criteria contaminant concentrations within these wells have collectively dropped 92% from the initial concentrations however have shown no significant improvement over the past year. Benzene is the only fraction falling outside of NMWQCC standards.

NBF

This site has no active recovery well but does contain a series of four monitor wells. The criteria contaminant concentrations within these wells have collectively dropped 16% from the initial concentrations however have shown no significant improvement over the past year. Monitor wells nos. 15 and 16 continue to show elevated benzene concentrations and occasional spikes of xylene.

G.S. State

The G.S. site has an active recovery well and four down gradient monitor wells. The contaminant concentrations within the recovery well have been reduced by 78% over the life of the installation however the concentrations within the monitor wells have remained somewhat static. We introduced a program last year of installing absorbent socks within those wells having LNAPL's. The program did show significant reductions within those bores in which they were used however the BTEX concentrations came back to previous levels when their use was discontinued.

Sohio # 1

This site has no active recovery well but does contain a series of five monitor wells. The general trend within these wells is for an overall reduction in BTEX values-especially if the most recent results within Monitor Well # 18 are ignored due to our inability to bail a sufficient volume of fluids as a result of silting. Once again the absorbent sock program introduced last year proved effective until discontinued.

Sohio "A"

This site has no active recovery well but does contain a series of five monitor wells. The site has a gradient of .58' per 100' distance and may be considered quite static hydrologically. The BTEX concentrations have once again increased with the cessation of the absorbent sock program.



QP-78

WHOLE EARTH ENVIRONMENTAL QUALITY PROCEDURE

Procedure for Obtaining Water Samples (Cased Wells) Using Enviro-Tech ES-60 Pump

Completed By: Approved By: Effective Date: / /

1.0 Purpose

This procedure outlines the methods to be employed in obtaining water samples from cased monitoring wells.

2.0 Scope

This procedure shall be used for developed, cased water monitoring wells. It is not to be used for standing water samples such as ponds or streams.

3.0 Preliminary

3.1 Obtain sterile sampling containers from the testing laboratory designated to conduct analyses of the water. The shipment should include a Certificate of Compliance from the manufacturer of the collection bottle or vial and a Serial Number for the lot of containers. Retain this Certificate for future documentation purposes.

3.2 The following table shall be used to select the appropriate sampling container, preservative method and holding times for the various elements and compounds to be analyzed.

Compound to be Analyzed	Sample Container Size	Sample Container Description	Cap Requirements	Preservative	Maximum Hold Time
BTEX	40 ml.	VOA Container	Teflon Lined	HCl	7 days
TPH	1 liter	clear glass	Teflon Lined	HCl	28 days
PAH	1 liter	clear glass	Teflon Lined	Ice	7 days
Cation / Anion	1 liter	clear glass	Teflon Lined	None	48 Hrs.
Metals	1 liter	HD polyethylene	Any Plastic	Ice / HNO ₃	28 Days
TDS	300 ml.	clear glass	Any Plastic	Ice	7 Days

4.0 Chain of Custody

- 4.1 Prepare a Sample Plan. The plan will list the well identification and the individual tests to be performed at that location. The sampler will check the list against the available inventory of appropriate sample collection bottles to insure against shortage.
- 4.2 Transfer the data to the Laboratory Chain of Custody Form. Complete all sections of the form except those that relate to the time of delivery of the samples to the laboratory.
- 4.3 Pre-label the sample collection jars. Include all requested information except time of collection. (Use a fine point Sharpie to insure that the ink remains on the label). Affix the labels to the jars.

5.0 Bailing Procedure

- 5.1 Identify the well from the site schematics. Place pre-labeled jar(s) next to the well. Remove the bolts from the well cover and place the cover with the bolts nearby. Remove the plastic cap from the well bore by first lifting the metal lever and then unscrewing the entire assembly.
- 5.2 Lower the ES-60 pump into the monitor well bore taking care to insure that the pump and first 10' of hose and cable does not touch the ground or become cross-contaminated by contact with anything containing hydrocarbon residues. When the pump reaches the bottom of the well bore you will feel the hose and cable assembly go slack. Lift the pump a minimum distance of 18" above the bottom of the well bore and clamp the hose assembly to the top of the well bore by means of vice grips. (Take care to insure that the vice grips are adjusted so as not to "choke" the hose).
- 5.3 Attach the electrical cable leads to an automobile battery and begin pumping the well bore. If the pump does not bring fluid to the surface within one minute, disconnect the electrical leads, and re-connect for four seconds three times to remove air cavitation.
- 5.4 The pump has a minimum volume of 2.8 gallons per minute at 60'. Purge the well by pumping for a minimum of 10 minutes before taking a sample.

6.0 Sampling Procedure

- 6.1 Once the well has been bailed in accordance with 5.2 of this procedure, a sample may be decanted into the appropriate sample collection jar directly from the bailer. The collection jar should be filled to the brim. Once the jar is sealed, turn the jar over to detect any bubbles that may be present. Add additional water to remove all bubbles from the sample container.

- 6.2 Note the time of collection on the sample collection jar with a fine Sharpie.
- 6.3 Place the sample directly on ice for transport to the laboratory. The preceding table shows the maximum hold times between collection and testing for the various analyses.
- 6.4 Complete the Chain of Custody form to include the collection times for each sample. Deliver all samples to the laboratory.

7.0 Decontamination

- 7.1 After removing the pump from the well, use an aerosol spray pump bottle filled with denatured isopropyl alcohol to clean the pump and first 10' of the cable and hose assembly. Rinse the sprayed portion with distilled water to remove the alcohol and dry with a clean rag. Discard the rag after each use. During transport, the pump assembly should be carried in a 2" PVC protective sleeve.

8.0 Documentation

- 8.1 The testing laboratory shall provide the following minimum information:
 - A. Client, Project and sample name.
 - B. Signed copy of the original Chain of Custody Form including data on the time the sample was received by the lab.
 - C. Results of the requested analyses
 - D. Test Methods employed
 - E. Quality Control methods and results

Tipperary Corporation
Tatum Bagley Field
Monitor Well Depth to Water Chart

		Well Name	Well No.	Water Depth 8/9/99	Water Depth 10/21/99	Water Depth 1/8/00	Water Depth 4/13/00	Water Depth 7/20/00	Water Depth 9/26/00	Water Depth 1/15/01	Water Depth 4/5/01	Water Depth 7/5/01	Water Depth 9/26/01
Iva COM	Source Well	1	48.8	51.8	51.7	51.6	51.7	51.8	51.8	51.7	51.8	51.8	51.7
		2	49.2	51.5	51.4	51.5	51.6	51.7	51.8	51.7	51.8	51.8	51.8
Mable COM	Source Well	3	48.8	52.5	52.4	53.7	53.7	53.7	51.6	51.7	51.8	51.9	
Bell State		4	48.6	51.8	51.6	52.8	51.8	51.8	51.8	51.7	51.6	51.6	
		6	42.1	43.0	51.6	44.3	44.4	44.5	44.6	44.6	44.5	44.4	44.3
		13	40.8	43.7	43.7	44.0	43.9	44.0	44.0	44.1	44.0	44.0	43.9
		14	43.0	43.5	44.2	44.2	44.3	44.2	44.3	44.3	44.2	44.1	44.1
NBF		25	43.5	43.5	43.9	44.0	44.0	44.0	44.2	44.2	44.0	43.9	43.8
		8	35.8	35.8	36.1	37.1	35.6	35.9	36.1	36.1	36.1	36.0	
		15	34.8	37.0	37.1	37.9	37.5	36.3	36.3	36.1	36.2	36.0	
		16	36.0	36.1	36.2	36.2	36.2	36.2	36.2	36.1	36.2	36.0	
Sohio A		26	34.8	34.6	34.9	35.9	35.1	35.2	35.2	35.4	35.6	35.8	
		11	38.3	38.5	37.8	38.3	38.3	38.8	38.7	37.5	36.8	35.6	
		19	32.5	35.2	37.9	38.2	38.3	38.4	38.4	38.4	38.4	38.3	
		20	38.0	38.7	38.0	38.4	38.5	38.4	38.5	38.5	38.6	38.6	
		27	36.8	38.2	37.9	38.2	38.1	38.6	38.7	38.5	38.3	38.1	
Sohio # 1		31	37.5	38.9	39.7	38.5	38.5	38.1	38.4	38.6	38.6	38.8	
		10	44.5	44.9	43.9	44.2	45.0	44.9	45.1	45.0	45.0	44.9	
		17	44.0	44.5	44.4	44.7	44.5	44.7	44.8	44.6	44.5	44.4	
G.S. State	Source Well	18	43.8	44.1	45.4	46.4	45.7	45.4	45.8	46.0	45.9	46.6	
		28	35.0	44.2	45.8	44.9	44.9	45.1	45.1	45.2	45.2	45.0	
		30	45.3	44.1	44.2	44.8	44.3	44.3	44.3	44.2	44.3	44.2	
		12	42.8	42.9	44.1	43.2	44.7	44.2	44.2	44.6	44.8	45.1	
		21	43.3	43.7	43.9	44.0	44.2	44.3	44.3	44.2	44.3	44.2	
		22	43.5	43.9	44.0	44.0	44.1	44.2	44.2	44.2	44.2	44.1	
		29	44.0	44.3	44.2	44.3	44.7	44.7	44.7	44.5	44.6	44.4	

Tipperary Corporation
Tatum Bagley Field
Monitor Well Gradient Chart

Well Name	Well No.	Surface Elevation	Water Elevation	Distance to Pit Center	Gradient (Ft. / Ft.)	Gradient (Ft. / 100Ft.)
Iva COM	Source Well	4,298.42	4,246.42			
	1	4,292.10	4,237.20	115.00	0.080174	8.02
	2	4,291.93	4,238.93	140.00	0.053500	5.35
Mable COM	Source Well	4,290.55	4,238.55			
	3	4,287.22	4,235.22	148.00	0.022500	2.25
	4	4,287.86	4,235.46	160.00	0.019313	1.93
Bell State	6	4,281.12	4,230.12	93.00	0.021183	2.12
	13	4,280.84	4,233.04	51.00	0.044118	4.41
	14	4,280.80	4,232.50	47.00	0.048723	4.87
NBF	25	4,280.37	4,232.97	154.00	0.017662	1.77
	8	4,259.41	4,211.41	165.00	0.045152	4.52
	15	4,259.68	4,212.68	198.00	0.036263	3.63
Sohio A	16	4,259.06	4,211.96	247.00	0.031579	3.16
	26	4,258.04	4,215.04	387.00	0.022791	2.28
	11	4,285.88	4,235.88	115.00	0.011835	0.83
Sohio # 1	19	4,285.97	4,237.27	164.00	0.005305	0.53
	20	4,285.96	4,236.46	151.00	0.005822	0.58
	27	4,285.61	4,245.61	264.00	0.004659	0.47
G.S. State	31	4,283.54	4,246.09	624.00	0.005288	0.53
	10	4,283.63	4,233.63	110.00	0.016273	1.63
	17	4,283.31	4,233.91	262.00	0.000805	0.81
	18	4,283.59	4,234.99	176.00	0.010398	1.04
	28	4,283.21	4,236.96	552.00	0.004004	0.40
	30	4,281.13	4,235.82	776.00	0.005528	0.55
	Source Well	4,307.00	4,259.00			
	12	4,303.27	4,255.27	52.00	0.071731	7.17
	21	4,303.08	4,255.08	151.00	0.025960	2.60
	22	4,302.77	4,255.27	148.00	0.025203	2.52
	29	4,303.20	4,254.14	295.00	0.016475	1.65



Calculation for Determining the Minimum Bailing Volume for Monitor Wells

$$\text{Formula } V = (\pi r^2 h)$$

V= volume

π = pi

r= inside radius of the well bore

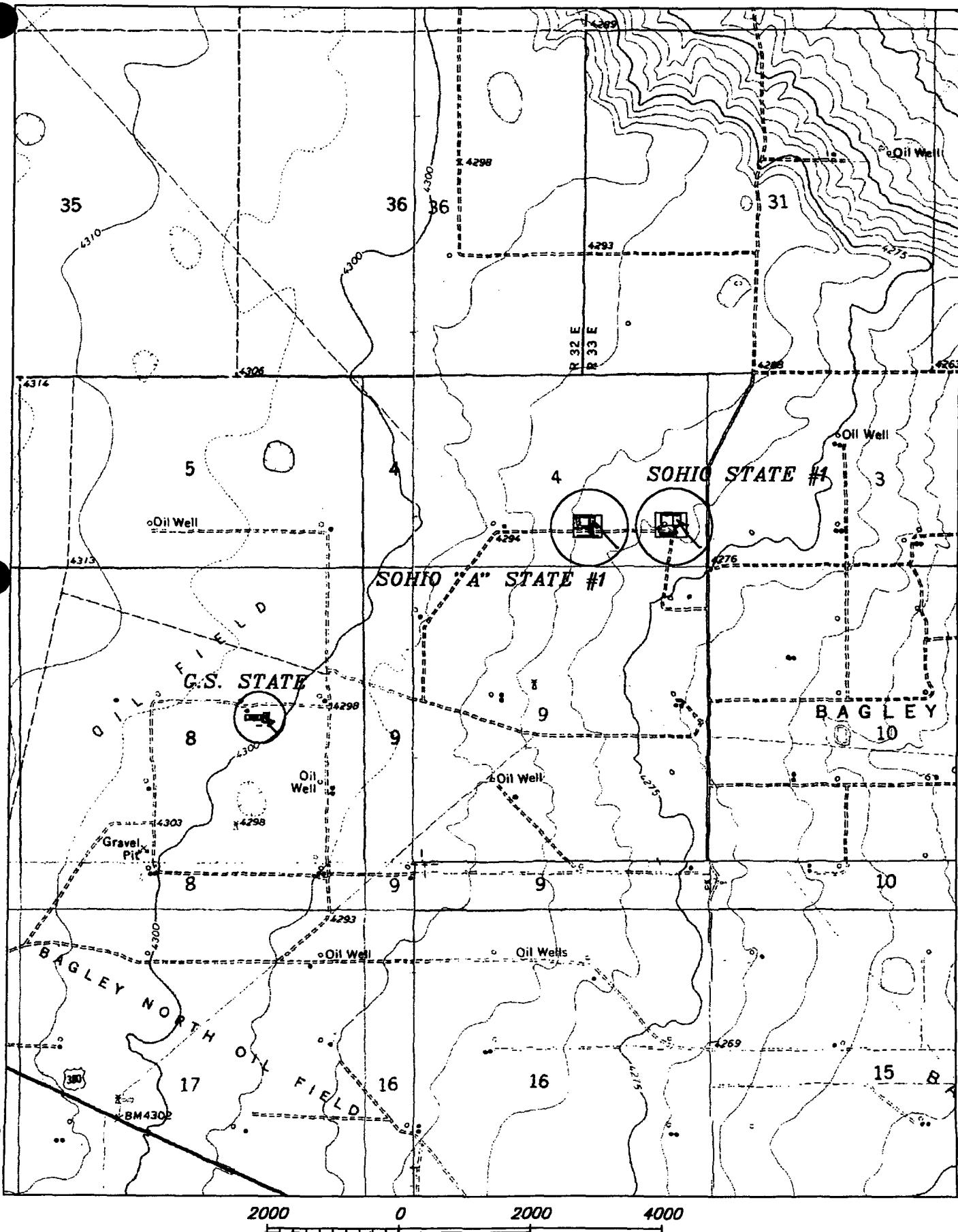
h= maximum height of well bore in water table

π	r^2	h (in)	V (cu. in)	V (gal)	X 3 Volumes	Actual
3.1416	1	180	565.488	2.448	7.344	>10

Tipperary Corporation
Tatum Bagley Field
LPNAL / DNAPL Depth Chart

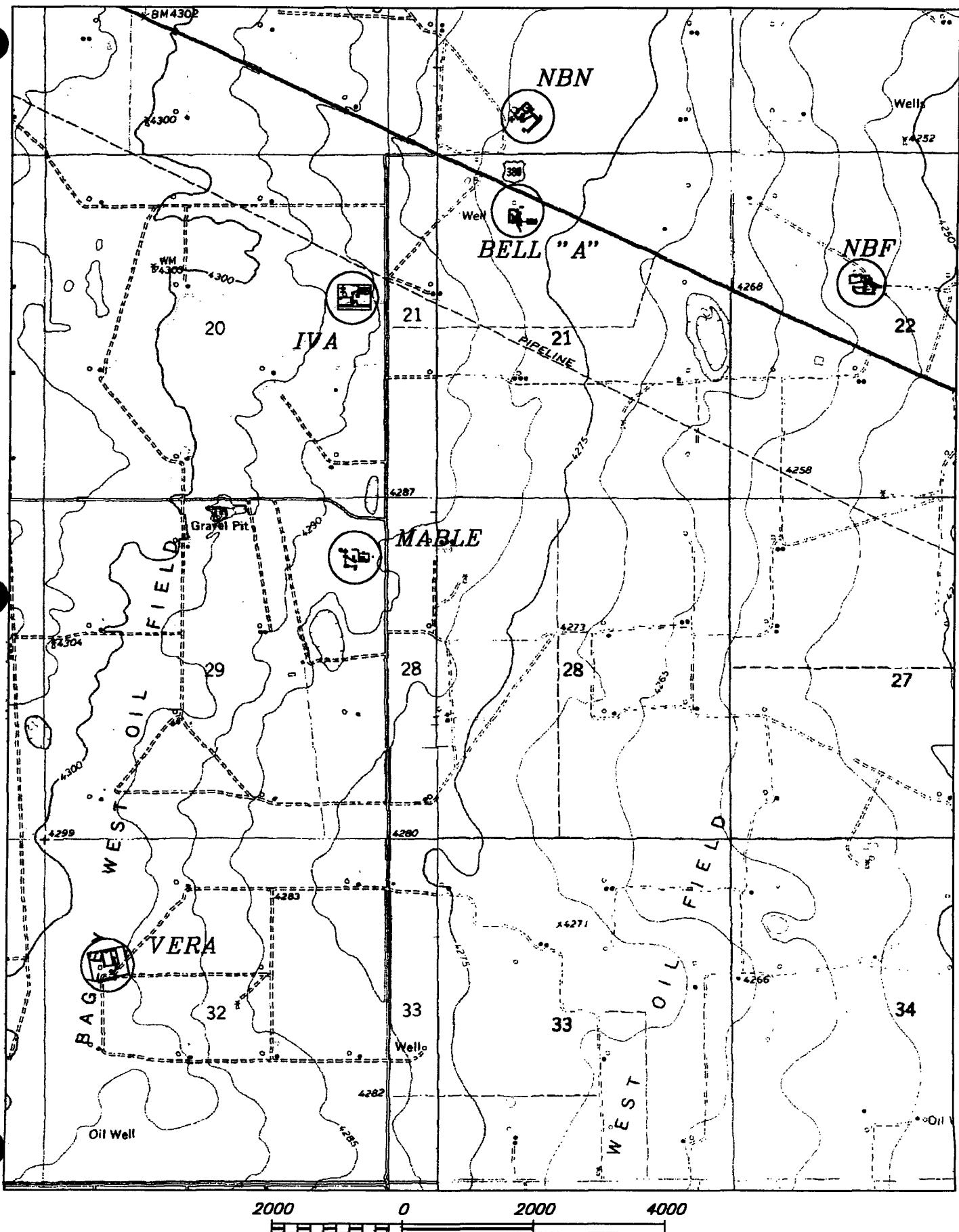
Well Name	Well No.	LNAPL Top	LNAPL Bottom	LNAPL Thickness	DNAPL Top	DNAPL Bottom
Iva COM	Source Well					
	1	N/A	N/A	N/A	N/A	N/A
	2	N/A	N/A	N/A	N/A	N/A
Mable COM	Source Well					
	3	51.90	52.60	0.70	N/A	N/A
	4	51.60	51.90	0.30	N/A	N/A
Bell State	6	N/A	N/A	N/A	N/A	N/A
	13	N/A	N/A	N/A	N/A	N/A
	14	N/A	N/A	N/A	N/A	N/A
	25	N/A	N/A	N/A	N/A	N/A
NBF	8	N/A	N/A	N/A	N/A	N/A
	15	36.00	36.15	0.15	N/A	N/A
	16	36.00	36.15	0.15	N/A	N/A
	26	N/A	N/A	N/A	N/A	N/A
Sohio A	11	35.60	36.20	0.60	N/A	N/A
	19	38.30	38.70	0.40	N/A	N/A
	20	38.60	38.70	0.10	N/A	N/A
	27	N/A	N/A	N/A	N/A	N/A
	31	N/A	N/A	N/A	N/A	N/A
Sohio # 1	10	44.90	45.00	0.10	N/A	N/A
	17	44.40	44.55	0.15	N/A	N/A
	18	46.60	46.70	0.10	N/A	N/A
	28	N/A	N/A	N/A	N/A	N/A
	30	N/A	N/A	N/A	N/A	N/A
G.S. State	Source Well					
	12	45.10	46.20	1.10	N/A	N/A
	21	44.20	45.10	0.90	N/A	N/A
	22	44.10	44.90	0.80	N/A	N/A
	29	44.40	44.55	0.15	N/A	N/A

WHOLE EARTH ENVIRONMENTAL, INC.



2000 0 2000 4000

WHOLE EARTH ENVIRONMENTAL, INC.



Environmental Lab of Texas, Inc.

12800 West I-20 East
Odessa, Texas 79763
Phone: 915-863-1800
Fax: 915-863-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Elliot Werner

Company Name Whole Earth

Company Address:

City/State/Zip:

Telephone No. (915) 854-4358
Sampler Signature: Robert Brown

Date Sampled: 10/10/01
Time Sampled: 4:15 PM

LAB # (if needed)

FIELD CODE

No. of Containers

Preservative

Analyze For:

RUSH/TAT (Pre-Schedule)

Analyze For:	TOTAL		TC/CP	TOTAL
	TPH 418.1	TDS / CL / SAR / EC		
TPH TX 1005/1006				
TPH 8015M GRODRO				
Methyls: As Ag Ba Cd Cr Pb Hg Se				
Volatile				
Semivolatiles				
BTEX 8021B/6030	X			
Other (Specify):				
Soil				
Sludge				
Water	X			
None				
H ₂ SO ₄				
NaOH				
HCl				
HNO ₃				
Iso				
No. of Containers	2	X		
Time Sampled				
Date Sampled				
Matrix				
Other (Specify):				

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
<u>Robert Brown</u>	<u>10/11/01</u>	<u>9:45 AM</u>	<u>Received by ELLIOT</u>		
Relinquished by:					

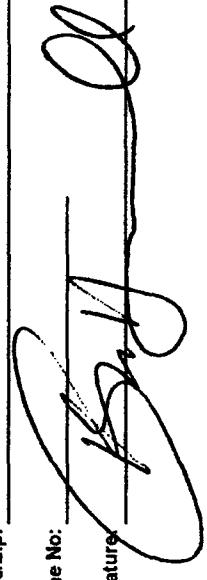
Sample Collected by:	Robert Brown
Interim Lab Location:	4°C
Labatory Oriented to:	

Environmental Lab of Texas, Inc.12600 West 20th
Odessa, Texas 79763Phone: 915-563-1800
Fax: 915-563-1713**CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST**Project Manager: Eduot Wiesner
Company Name: Whole Earth 500

Company Address:

City/State/Zip:

Telephone No:

Sampler Signature: 

Fax No:

Project Name: TIPPERARY

Project #: _____

Project Loc: _____

PO #: _____

		Analyze For:												RUSH TAT Pre-Schedule	
		TCIP:		TOTAL:		Metals: As Ag Ba Cd Cr Pb Hg Se		Organics: BTEX 8021B5030		Semi-volatiles		Vocetals			
Preservative		Matrix													
None		Soil													
H ₂ SO ₄		Sludge													
NaOH		Water													
HCl		Other (Specify):													
HNO ₃		Soil													
KCl		TDS / CL / SAR / EC													
H ₂ O ₂		TPH 418.1													
TPH TX 1005/1006		TPH 8015M GRODR0													
TOTAL:		Metals: As Ag Ba Cd Cr Pb Hg Se													
Date Sampled		Time Sampled													
FIELD CODE															
11/12	MW 3	11/5	8:25	2	✓	G. DDM	2	✓	G. DDM	2	✓	N			
11/13	MW 1	11/5	9:00am	2	✓	9:00am	2	✓	9:00am	2	✓	S			
11/14	MW 2	11/5	8:45am	2	✓	8:45am	2	✓	8:45am	2	✓	C			
11/15	MW 4	11/5	10:10am	2	✓	10:10am	2	✓	10:10am	2	✓	R			
11/16	MW 5	11/5	9:00pm	2	✓	9:00pm	2	✓	9:00pm	2	✓	P			
11/17	MW 6	11/5	11:15pm	2	✓	11:15pm	2	✓	11:15pm	2	✓	F			
11/18	MW 7	11/5	9:15pm	2	✓	9:15pm	2	✓	9:15pm	2	✓	A			
11/19	MW 8	11/5	10:00pm	2	✓	10:00pm	2	✓	10:00pm	2	✓	S			
11/20	MW 9	11/5	11:00pm	1	✓	11:00pm	1	✓	11:00pm	1	✓	C			
11/21	MW 10	11/5	11:00pm	1	✓	11:00pm	1	✓	11:00pm	1	✓	S			
11/22	MW 11	11/5	11:00pm	1	✓	11:00pm	1	✓	11:00pm	1	✓	C			
11/23	MW 12	11/5	11:00pm	1	✓	11:00pm	1	✓	11:00pm	1	✓	S			
11/24	MW 13	11/5	11:00pm	1	✓	11:00pm	1	✓	11:00pm	1	✓	C			
11/25	MW 14	11/5	11:00pm	1	✓	11:00pm	1	✓	11:00pm	1	✓	S			

Special Instructions:

Received by: Eduot Wiesner Date: 11/20/01 Time: 11:00pm Received by: Eduot Wiesner Date: 11/20/01 Time: 11:00pm

Relinquished by: Eduot Wiesner Date: 11/20/01 Time: 11:00pm Relinquished by: Eduot Wiesner Date: 11/20/01 Time: 11:00pm

Carried Chassis: 11/20/01
Transporter Name: None
Address of Transporter: None

Environmental Lab of Texas, Inc.

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

12600 West I-20 East
Odessa, Texas 79763

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Elliott Weener

Company Name Whole Earth Environmental

Company Address:

City/State/Zip:

Telephone No.:

Sampler Signature: Elliott Weener

Project Name: TIPPARC V

Project #: _____

Project Loc: _____

PO #: _____

Fax No.: _____

LAB # (In Order Only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Other (Specify)	Water	Soil	Other (Specify)	Matrix	Analyze For:	PUSH TAT (Pre-Schedule)								
											TCLP	TOTAL	TPH 418.1	TDS / CL / SAR / EC	TPH TX 1005/1006	TPH 8015M GRODRD	Metals: As Ag Ba Cd Cr Pb Hg Se	Semivolatiles	BTEX 8021B/5030
36142	MW 11	1/5	12:40	2															
36143	MW 10	1/5	1:30	2															
36144	MW 24	1/5	2:10	2															
36145	MW 15	1/5	10:30	2															
36146	MW 24	1/5	10:45	1															
36147	MW 8	1/5	10:20	2															
36148	MW 20	1/5	12:30	2															
36149	MW 14	1/5	2:00	2															
36150	MW 21	1/5	11:55	2															
36151	MW 23	1/5	3:10	2															

Special Instructions:

Received by:	Date	Time	Received by:	Date	Time
<u>John M. Johnson</u>	1/10/01	11:20 AM	<u>John M. Johnson</u>	1/10/01	11:20 AM

Environmental Lab of Texas, Inc.

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

12800 West 44th East
Odessa, Texas 79763

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

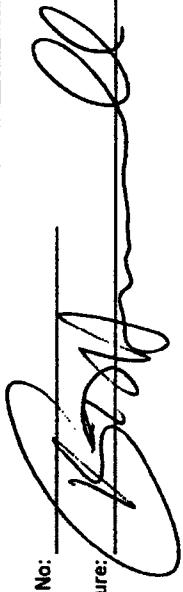
Project Manager: Elliott W. Gruenewald

Company Name Whole Earth Env

Company Address:

City/State/Zip:

Telephone No.: 740-2300

Sampler Signature: 

Fax No.: _____

Project Name: TIPPERARY

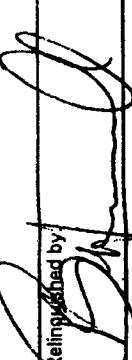
Project #: _____

Project Loc: _____

PO #: _____

SAMPLE NUMBER	FIELD CODE	DATE SAMPLED	TIME SAMPLED	NO. OF CONTAINERS	OTHER (SPECIFY)	WATER	SLUDGE	SOIL	ANALYZE FOR:		
									TCLP	TOTAL	RUSH TAT (Pre-Schedule)
7-6152	MW 25	1/5	9:40	2							
7-6153	MW 27	1/5	1:00	2							
7-6154	MW 19	1/5	12:50	2							
7-6155	MW 17	1/5	1:45	2							
7-6156	MW 14	1/5	10:35	2							
7-6157	MW 24	1/5	10:45	2							
7-6158	MW 22	1/5	11:30	2							
7-6159	MW 29	1/5	11:45	2							
7-6160	GS SOURCE	1/5	11:45	2							
7-6161	MW 30	1/5	2:20	2							

Special Instructions:

Received by:	Date	Time	Received by:	Date	Time
	01/06/01	11:20		01/06/01	11:20

Reinforced by:


Reinforced by:

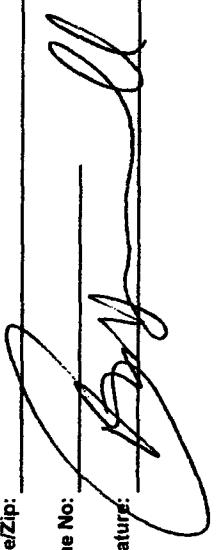
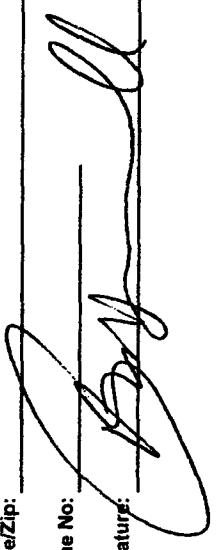

Sample Containers intact	Temperature upon Receipt	Location / Comments
✓	74°	✓ 5°C

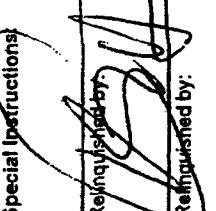
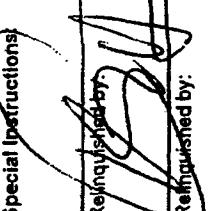
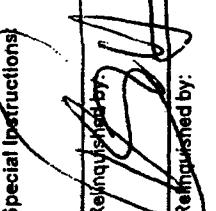
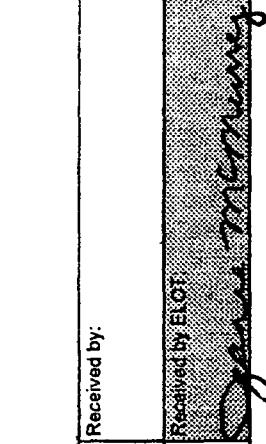
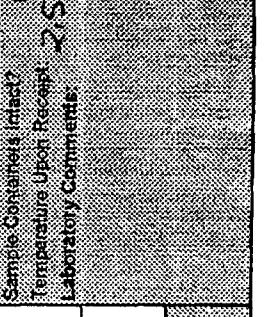
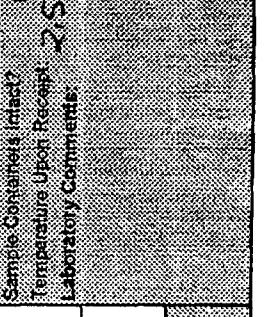
Environmental Lab of Texas, Inc.

12600 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1900
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Edward Wiegand
Company Name: Whole Earth Env.

Company Address: _____
City/State/Zip: _____
Telephone No.: 
Fax No.: _____
Sampler Signature: 

RUSH/TAT (Pre-Schedule)							
Analyze For:							
TCLP:							
TOTAL:							
BTEX 902/B/5030							
Metals: As Ag Ba Cd Cr Pb Hg Se							
TPH SD15M GRODRD							
TPH TX 1005/1006							
TPH 418.1							
TDS / CL / SAR / EC							
Other (Specify):							
Soil							
Sediment							
Water							
None							
HNO ₃							
NaOH							
HCl							
Ice							
No. of Containers	2						
Date Sampled	1/15			1:15			
Time Sampled							
FIELD CODE	MW 31						
Lab. Number	3112						
Special Instructions:  Requisitioned by:  Requisitioned by: 							
Date	Time	Received by:			Date	Time	Date
1/10	11:35	Received by: ELC			1/10	11:35	1/10
Comments: 							
Customer's Laboratory Comment: 							
Customer's Laboratory Comment: 							

LAB OF INC.

"Don't Treat Your Soil Like Dirt!"

TIPPERARY
ATTN: MR. VICTOR A. VICE
P.O. BOX 857
TATUM, N.M. 88267
FAX: 505-398-6510
FAX: 281-646-8996

Sample Type: Water
Sample Condition: Intact/ Iced/ HCl/ 4.0 deg. C
Project #: Quarterly Sampling
Project Name: Tipperary
Project Location: None Given

Sampling Date: 01/10/01
Receiving Date: 01/11/01
Analysis Date: 01/11/01

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
36195	IUA Com. Source Well	0.533	0.168	0.015	0.067	0.044

%IA	87	87	86	91	88
%EA	86	87	87	93	91
BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: EPA SW 846-8021B ,5030

Raland K. Tuttle
Raland K. Tuttle

1-11-01
Date

LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

TIPPERARY
ATTN: MR. VICTOR A. VICE
P.O. BOX 857
TATUM, N.M. 88267
FAX: 505-398-6510
FAX: 281-646-8996

Sample Type: Water
Sample Condition: Intact/ Iced/ HCl/ 2.5 deg. C
Project #: None Given
Project Name: Tipperary
Project Location: None Given

Sampling Date: 01/05/01
Receiving Date: 01/10/01
Analysis Date: 01/11/01

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
36132	MW 3	<0.010	1.21	1.21	5.50	0.894

%IA	87	87	86	91	88
%EA	86	87	87	93	91
BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: EPA SW 846-8021B ,5030

Armando O. Gomez
Armando O. Gomez

1-16-01
Date

LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

TIPPERARY
 ATTN: MR. VICTOR A. VICE
 P.O. BOX 857
 TATUM, N.M. 88267
 FAX: 505-398-6510
 FAX: 281-646-8996

Sample Type: Water

Sample Condition: Intact/ Iced/ HCl/ 2.5 deg. C

Project #: None Given

Project Name: Tipperary

Project Location: None Given

Sampling Date: 01/05/01

Receiving Date: 01/10/01

Analysis Date: 01/12/01

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	<i>o</i> -XYLENE mg/L
36133	MW 1	<0.001	0.004	0.006	0.014	0.007
36134	MW 2	<0.001	0.003	0.005	0.011	0.005
36135	MW 4	<0.010	0.038	0.020	0.063	0.021
36136	MW 6	0.014	<0.001	0.005	0.007	0.003
36137	Mable Source	0.590	0.475	0.127	0.927	0.768
36138	MW 9	0.037	0.032	0.014	0.051	0.037
36139	MW 12	1.07	1.71	0.945	5.66	1.58
36140	MW 13	<0.001	0.002	0.004	0.009	0.004
36141	MW 14	0.024	<0.001	0.004	0.007	0.003
36142	MW 11	0.043	0.005	0.004	0.013	0.008
36143	MW 10	2.43	0.011	0.153	0.251	0.089
36144	MW 28	0.156	0.115	0.034	0.175	0.120
36145	MW 15	2.79	1.36	0.249	0.612	0.493
36146	MW 26	0.044	0.016	0.006	0.012	0.009
36147	MW 8	0.001	0.001	0.002	0.005	0.002
36148	MW 20	0.009	0.006	0.005	0.016	0.008
36149	MW 18	2.95	1.84	0.364	1.54	1.22
36150	MW 21	0.019	0.010	0.019	0.027	0.013
36151	MW 23	0.031	0.032	0.013	0.050	0.034
36152	MW 25	<0.001	<0.001	<0.001	<0.001	<0.001
%IA		103	100	101	96	101
%EA		105	98	100	97	103
BLANK		<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: EPA SW 846-8021B ,5030

Armando O. Gomez
 Armando O. Gomez

1-16-01
 Date

LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

TIPPERARY
 ATTN: MR. VICTOR A. VICE
 P.O. BOX 857
 TATUM, N.M. 88267
 FAX: 505-398-6510
 FAX: 281-646-8996

Sample Type: Water
 Sample Condition: Intact/ Iced/ HCl/ 2.5 deg. C
 Project #: None Given
 Project Name: Tipperary
 Project Location: None Given

Sampling Date: 01/05/01
 Receiving Date: 01/10/01
 Analysis Date: 01/13/01

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
36153	MW 27	0.355	0.004	0.003	0.020	0.009
36154	MW 19	0.248	0.002	0.002	0.006	0.003
36155	MW 17	1.42	0.036	0.140	0.428	0.287
36156	MW 16	1.32	0.023	0.083	0.110	0.055
36157	MW 24	0.004	0.004	0.002	0.008	0.005
36158	MW 22	0.140	0.036	0.057	0.092	0.085
36159	MW 29	0.019	0.010	0.010	0.034	0.014
36160	GS Source	0.805	0.292	0.136	0.692	0.414
36161	MW 30	0.036	0.030	0.009	0.036	0.026
36162	MW 31	0.130	0.004	0.003	0.010	0.005

%IA	93	90	89	86	90
%EA	100	98	98	95	100
BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: EPA SW 846-8021B ,5030

Armando Gomez
 Armando O. Gomez

1/16-01
 Date

Environmental Lab of Texas, Inc.

1200 West I-20 East
Odessa, Texas 79713
Phone: 915-553-1900
Fax: 915-553-1713

Project Manager:

Company Name Whole Earth Environmental, Inc.

Company Address: 1800 San Gabriel

City/State/Zip: Houston, Tx. 77064

Telephone No: (800) 884-4358

Sampler Signature:

Project Name: Quarterly Sampling

Project #: _____

Project Loc: Tatum, New Mexico

PO #:

Fax No: (281) 646-8886

		Analyze For:		RUSH/TAT Pre-Schedule		Standard TAT	
		TCLP:	Total:				
Preservative	Water	X	X	BTEX 8021B/5000			
	Mercury As Ag/Ba/CD/CR/Pb/Hg/Sr	X	X	Semivolatiles			
	TPH TX 1005/1006	X	X	Volatiles			
	TPH 418.1	X	X				
	TOS/CL/SAR/EC	X	X				
	Other (Specify):	X	X				
	SDS	X	X				
	Studie	X	X				
	Nitrogen	X	X				
	H2SO4	X	X				
Matrix	HCl	X	X				
	HNO3	X	X				
	H2O	X	X				
	NaOH	X	X				
	NaCl	X	X				
	Other (Specify):	X	X				
	SDS	X	X				
	Studie	X	X				
	Nitrogen	X	X				
	H2SO4	X	X				
No. of Contaminants	Time Sampled						
	Date Sampled						
	4-5	10:40					
	10:45	X					
	11:07	X					
	11:12	X					
	11:15	X					
	11:26	X					
	16:20	X					
	9:59	X					
10:10	X						
9:44	X						
Special Instructions:							
Reinquired by: <i>M. C. H.</i>	Date	Time	Received by	Date	Time		
	1/6/01	9:25					
Reinquired by: <i>M. C. H.</i>	Date	Time	Received by	Date	Time		

Environmental Lab of Texas, Inc.

12600 West I-20 East
Odessa, Texas 79763

Phone: 915-633-1800
Fax: 915-633-1713

Project Manager:

Company Name Whole Earth Environmental, Inc.

Company Address: 18008 San Gabriel

City/State/Zip: Houston, Tx. 77064

Telephone No.: (800) 864-4366

Sampler Signature:

Fax No: (281) 843-5998

Project Name: Quarterly Sampling

Project #:

Project Loc: Tatum, New Mexico

PO #: _____

FIELD CODE	Date Sampled	Time Sampled	No. of Contaminants	Other (Specify)	HCl	HNO ₃	H ₂ SO ₄	None	Water	Soil	Sludge	Matrix	Other (Specify):	TOTAL:	TCIP:	Analyze For:		Standard TAT	PUSH TAT Pre-Schedule	
																Analyze For:				
NBF MW 8	4-5	11:58	8		X	X	X	X	X	X	X	X	X	X	X	X				
NBF MW 15		12:20																		
NBF MW 16		12:12																		
NBF MW 26		11:45																		
Sohio #1 MW 10		1:50																		
Sohio #1 MW 17		2:27																		
Sohio #1 MW 18		1:22																		
Sohio #1 MW 28		1:10																		
Sohio #1 MW 30		12:55																		
Sohio "A" MW 11		2:20																		

Special Instructions:

Reinquainted by:	Date	Time	Received by:	Date	Time
<i>M. J. Miller</i>	4-6-01	9:25			

Environmental Lab of Texas, Inc.

12800 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: 19006 San Gabriel

City/State/Zip: Houston, Tx. 77084

Telephone No: (800) 854-4366

Sampler Signature:

Project Name: Quarterly Sampling - Tippence

Project #: _____

Project Loc: Tatum, New Mexico

PO #:

Fax No: (281) 648-8986

FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Other (Specify)	Water	Soil	Sediment	Matrix	TCLP: TOTAL:	Analyze For:	RUSH TAT pre-Schedule		Standard TAT		
											Volatile Metals As Ag Ba Cd Cr Pb Hg Se	TPH 418.1	TPH TX 105/106	TPH SOLID GROUND	Solvent Solvents
225-3	Sohio "A" MW 19	4:5	2:30		X										
225-23	Sohio "A" MW 20		2:22		X										
225-29	Sohio "A" MW 27		2:10		X										
225-40	Sohio "A" MW 31		2:02		X										
225-41	GS Source Well		2:42		X										
	GS MW 12		2:52		X										
	GS MW 21		3:10		X										
	GS MW 22		3:25		X										
	GS MW 29		3:45		X										
	Sat. 4 MW 9		9:55		X										

Special Instructions:

Reinquainted by:	Date	Time	Received by:	Date	Time
<i>M.J. J.</i>	4/6/01	9:25			

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

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

Sample Type: Water
 Sample Condition: Intact/ Iced/ HCl/ 2.5 deg. C
 Project #: None Given
 Project Name: Quarterly Sampling
 Project Location: Tatum, New Mexico

Sampling Date: 04/05/01
 Receiving Date: 04/06/01
 Analysis Date: 04/06/01

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	<i>o</i> -XYLENE mg/L
38917 ✓	Iva Source Well	0.666	0.599	0.141	1.05	0.824
38918 ✓	Iva MW 1	<0.001	<0.001	<0.001	<0.001	<0.001
38919 ✓	Iva MW 2	<0.001	<0.001	<0.001	<0.001	<0.001
38920 ✓	Mable Source Well	0.509	0.435	0.128	1.09	0.816
38921 ✓	Mable MW 3	<0.010	0.047	0.088	0.270	0.049
38922 ✓	Mable MW 4	<0.001	<0.001	0.006	0.015	0.004
38923 ✓	Bell MW 6	0.024	<0.001	0.002	0.001	<0.001
38924 ✓	Bell MW 13	<0.001	<0.001	<0.001	<0.001	<0.001
38925 ✓	Bell MW 14	0.047	<0.001	0.006	0.001	<0.001
38926 ✓	Bell MW 25	<0.001	<0.001	<0.001	<0.001	<0.001
38927 ✓	NBF MW 8	<0.001	<0.001	0.003	0.007	0.002
%IA		99	102	102	100	101
%EA		88	93	97	95	97
BLANK		<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: EPA SW 846-8021B, 5030

Roland K. Tuttle
 Roland K. Tuttle

4-10-01
 Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

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

Sample Type: Water
 Sample Condition: Intact/ Iced/ HCl/ 2.5 deg. C
 Project #: None Given
 Project Name: Quarterly Sampling
 Project Location: Tatum, New Mexico

Sampling Date: 04/05/01
 Receiving Date: 04/06/01
 Analysis Date: 04/08/01

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	<i>o</i> -XYLENE mg/L
38928 ✓	NBF MW 15	2.57	1.46	0.308	0.821	0.481
38929 ✓	NBF MW 16	1.55	<0.005	0.101	0.104	0.039
38930 ✓	NBF MW 26	<0.001	<0.001	0.003	0.009	0.003
38931 ✓	Sohio #1 MW 10	2.08	0.031	0.179	0.342	0.074
38932 ✓	Sohio #1 MW 17	1.49	0.038	0.199	0.606	0.348
38933 ✓	Sohio #1 MW 18	1.41	0.179	0.095	0.449	0.306
38934 ✓	Sohio #1 MW 28	0.014	0.010	0.007	0.016	0.006
38935 ✓	Sohio #1 MW 30	0.007	0.008	0.005	0.010	0.004
38936 ✓	Sohio "A" MW 11	0.033	0.006	0.007	0.024	0.013
38937 ✓	Sohio "A" MW 19	0.325	0.007	0.009	0.030	0.016
38938 ✓	Sohio "A" MW 20	0.020	0.006	0.009	0.029	0.016
38939 ✓	Sohio "A" MW 27	0.324	0.012	0.016	0.069	0.035
%IA		90	93	94	93	93
%EA		88	92	91	89	94
BLANK		<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: EPA SW 846-8021B, 5030

R.K. Tuttle
 Roland K. Tuttle

4-11-01
 Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

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

Sample Type: Water
 Sample Condition: Intact/ Iced/ HCl/ 2.5 deg. C
 Project #: None Given
 Project Name: Quarterly Sampling
 Project Location: Tatum, New Mexico

Sampling Date: 04/05/01
 Receiving Date: 04/06/01
 Analysis Date: 04/09/01

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	<i>o</i> -XYLENE mg/L
38940	Sohio "A" MW 31	0.105	0.008	0.013	0.042	0.023
38941 ✓	GS Source Well	0.417	0.148	0.091	0.582	0.254
38942 ✓	GS MW 12	0.394	0.022	0.180	0.767	0.200
38943 ✓	GS MW 21	0.014	0.011	0.012	0.021	0.009
38944 ✓	GS MW 22	0.085	0.038	0.060	0.076	0.099
38945 ✓	GS MW 29	0.009	0.007	0.007	0.022	0.011
38946 ✓	Sat 4 MW 9	<0.001	<0.001	<0.001	<0.001	<0.001
38947 ✓	23	<0.001	<0.001	<0.001	<0.001	<0.001
38948 ✓	24	<0.001	<0.001	<0.001	<0.001	<0.001

%IA	93	98	100	99	100
%EA	102	106	106	104	105
BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: EPA SW 846-8021B ,5030

Roland K. Tuttle
 Roland K. Tuttle

4-11-01
 Date

Environmental Lab of Texas, Inc.

West 1-20 East
se, 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: 10606 San Gabriel

City/State/Zip: Houston, Tx. 77084

Telephone No: (800) 864-4368

Sampler Signature: *M. Goff*

Project Name: Quarterly Sampling

Project #:

Project Loc: Tatum, New Mexico

PO #:

Fax No: (281) 844-3998

Sampler Signature:

FIELD CODE	Date Sampled	Time Sampled	No. of Containers	None	HNO ₃	HCl	None	H ₂ SO ₄	None	Water	Soil	Other (Specify):	TOTAL	Analyze For:	RUSH/TAT Pre-Schedule	Standard TAT	
Iva Source Well	1	6/6/01	2	X	X	X	X	X	X	X	X	X	X	X	X	BTEX 8021B/5030	Volatile
Iva MW 1		6/5/01	2	X	X	X	X	X	X	X	X	X	X	X	X	Merch: Ag Ba Cd Cr Pb Hg Se	Semivolatiles
Iva MW 2		6/5/01	2	X	X	X	X	X	X	X	X	X	X	X	X	TPH B015M GRO/DRO	
Mable Source Well		6/5/01	2	X	X	X	X	X	X	X	X	X	X	X	X	TPH TX 1005/1006	TDS/CL/SAR/EC
Mable MW 3		6/5/01	2	X	X	X	X	X	X	X	X	X	X	X	X	TSP 418.1	
Mable MW 4		6/5/01	2	X	X	X	X	X	X	X	X	X	X	X	X	BTEX 8021B/5030	Analyze For:
Bell MW 6		6/5/01	2	X	X	X	X	X	X	X	X	X	X	X	X		
Bell MW 13		6/5/01	2	X	X	X	X	X	X	X	X	X	X	X	X		
Bell MW 14		6/5/01	2	X	X	X	X	X	X	X	X	X	X	X	X		
Bell MW 26		6/5/01	2	X	X	X	X	X	X	X	X	X	X	X	X		

Instructions:

Entered by: <i>Goff</i>	Date: 7-7-01	Time: 11:30	Received by:	Date:	Time:
----------------------------	--------------	-------------	--------------	-------	-------

Viro...ntal Lab of Texas, Inc.

West 1-20 East
18, Texas 79763

Phone: 915-663-1800
Fax: 915-663-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager:

Company Name Whole Earth Environmental, Inc.

Company Address: 18008 San Gabriel

City/State/Zip: Houston, Tx. 77084

Telephone No: (800) 854-4368

Sampler Signature: M. Jeff

Project Name: Quarterly Sampling

Project #: _____

Project Loc: Tatum, New Mexico

PO #: _____

Fax No: (281) 646-5996

Instructions:

FIELD CODE	Date Sampled	Time Sampled	No. of Containers	NaOH	HNO ₃	K ₂ S	HCl	NaOH	H ₂ SO ₄	None	Other (Specify)	Soil	Sludge	Water	Other (Specify)	TPH 418.1	TPH TX 10051006	TPH 8015M GRO/DRD	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatile	Semivolatiles	BTEX 9021B/S030	TOTAL	TCLP:	Analyze For:	RUSH TAT (Pre-Schedule)		Standard TAT	
NBF MW 8	1/15/01	11:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
NBF MW 15	1/15/01	11:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
NBF MW 16	1/15/01	11:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
NBF MW 26	1/15/01	11:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Sohio #1 MW 10	1/16/01	11:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Sohio #1 MW 17	1/16/01	11:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Sohio #1 MW 18	1/16/01	11:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Sohio #1 MW 28	1/16/01	11:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Sohio #1 MW 30	1/16/01	11:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Sohio "A" MW 11	1/16/01	11:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Entered by:	Date	Time	Received by:	Date	Time
<i>M. Jeff</i>	7-2-01	11:30			

Viro~~nt~~al Lab of Texas, Inc.

West 1-20 East
a, Texas 79763
Phone: 915-663-1800
Fax: 915-663-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager:	Project Name: <u>Quarterly Sampling</u>
Company Name	<u>Whole Earth Environmental, Inc.</u>
Company Address:	<u>19608 San Gabriel</u>
City/State/Zip:	<u>Houston, Tx. 77084</u>
Telephone No.:	<u>(800) 954-4358</u>
Sampler Signature:	<u>M. J. H.</u>
Fax No.:	<u>(281) 646-8996</u>

		Analyze For:		RUSH TAT (Pre-Schedule)		Standard TAT	
		TCLP:	Total:				
Preservative	Soil						
	Sludge						
	Water						
	Other (Specify):						
	NH ₃						
	HNO ₃						
	HCl						
	NaOH						
	H ₂ SO ₄						
	NaOH						
Matrix	No. of Containers						
	Time Sampled						
	Date Sampled						
	Time Sampled						
	No. of Containers						
	Other (Specify):						
	NH ₃						
	HNO ₃						
	HCl						
	NaOH						
Analyte For:	TPH 418.1						
	TPH TX 1005/1008						
	TPH 8015M GRODR0						
	Meals: As Ag Ba Cd Cr Pb Hg Se						
	Volatiles						
	Semivolatile						
	BTEX 802/B5030						
	TOTAL:						

Instructions:

Received by:	Date	Time	Received by:	Date	Time
<i>M. J. H.</i>	7-7-01	11:30			
Entered by:	Date	Time			
<i>M. J. H.</i>					

Environmental Lab of Texas, Inc.

Phone: 816-863-1800
Fax: 816-863-1713
West 1-20 East
Le., Texas 79763

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: _____

Company Name Whole Earth Environmental, Inc.

Company Address: 19806 San Gabriel

City/State/Zip: Houston, Tx. 77084

Telephone No: (800) 864-4368

Sampler Signature: M. J. J.

Project Name: Quarterly Sampling

Project #: _____

Project Loc: Tatum, New Mexico

PO #: _____

Fax No: (281) 844-8996

FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative	Matrix	Other (Specify):	Soil	Sludge	Water	Nons	H ₂ SO ₄	HNO ₃	HCl	NaOH	Hg	Nons	Other (Specify)	TPH 418.1	TPH TX 1005M008	TPH 8015M GRO/DRD	Meiss As Ag Ba Cd Cr Pb Hg Se	Volatile	Semivolatiles	BTEX 6021B/5030	Cations / Anions	RUSH TAT (Pre-Schedule)	Analyze For:		
																											Analyze For:		
TCLP:	Total:																												
Satellite # 4 MW 23	1	6/8/01	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Satellite # 4 MW 24		6/8/01	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Collier MW 32		6/8/01	4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Collier MW 33		6/8/01	4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Instructions:

Entered by:	Date	Time	Received by:	Date	Time
<i>J. J.</i>	7-7-01	11:30			

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

WHOLE EARTH ENVIRONMENTAL
 ATTN: MR. MIKE GRIFFIN
 19606 SAN GABRIEL
 HOUSTON, TEXAS 77084
 FAX: 281-646-8996
 FAX: 505-397-3591 (motel)

Sample Type: Water
 Sample Condition: Intact/ Iced/ HCl 2 deg C
 Project #: None Given
 Project Name: Quarterly Sampling
 Project Location: Tatum, N.M.

Sampling Date: See Below
 Receiving Date: 07/07/01
 Analysis Date: 07/07/01

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L	SAMPLE DATE
0101098-01	Iva Source Well	0.371	0.252	0.075	0.574	0.474	07/06/01
0101098-02	Iva MW 1	<0.001	<0.001	0.003	0.008	0.002	07/05/01
0101098-03	Iva MW 2	<0.001	<0.001	0.002	0.006	<0.001	07/05/01
0101098-04	Mable Source Well	0.459	0.343	0.118	0.928	0.735	07/05/01
0101098-05	Mable MW 3	0.003	0.007	0.025	0.057	0.021	07/05/01
0101098-06	Mable MW 4	0.004	0.014	0.006	0.014	0.005	07/05/01
0101098-07	Bell MW 6	0.056	<0.001	0.002	0.005	<0.001	07/05/01
0101098-08	Bell MW 13	0.001	<0.001	0.002	0.005	0.002	07/05/01
0101098-09	Bell MW 14	0.034	0.001	0.005	0.007	0.002	07/05/01
0101098-10	Bell MW 25	<0.001	<0.001	0.003	0.006	0.002	07/05/01
0101098-11	NBF MW 8	<0.001	<0.001	0.001	0.004	0.001	07/05/01
0101098-12	NBF MW 15	1.80	0.948	0.250	0.598	0.409	07/05/01
0101098-13	NBF MW 16	1.65	0.026	0.097	0.159	0.069	07/05/01
0101098-14	NBF MW 26	<0.001	<0.001	0.002	0.004	<0.001	07/05/01
0101098-15	Sohio #1 MW 10	2.20	<0.010	0.190	0.455	0.052	07/06/01
0101098-16	Sohio #1 MW 17	1.22	0.017	0.166	0.583	0.303	07/06/01
0101098-17	Sohio #1 MW 18	1.10	0.077	0.082	0.364	0.257	07/06/01
QUALITY CONTROL		0.110	0.108	0.112	0.224	0.114	
TRUE VALUE		0.100	0.100	0.100	0.200	0.100	
% INSTRUMENT ACCURACY		110	108	112	112	114	
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		0.092	0.088	0.087	0.171	0.089	
SPIKE DUP		0.088	0.084	0.085	0.167	0.086	
% EXTRACTION ACCURACY		92	88	87	86	89	
BLANK		<0.001	<0.001	<0.001	<0.001	<0.001	
RPD		4	4	2	2	3	

METHODS: EPA SW 846-8021B ,5030

Roland K. Tuttle
 Roland K. Tuttle

7-13-01
 Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

WHOLE EARTH ENVIRONMENTAL
 ATTN: MR. MIKE GRIFFIN
 19606 SAN GABRIEL
 HOUSTON, TEXAS 77084
 FAX: 281-646-8996
 FAX: 505-397-3591 (motel)

Sample Type: Water
 Sample Condition: Intact/ Iced/ HCl 2 deg C
 Project #: None Given
 Project Name: Quarterly Sampling
 Project Location: Tatum, N.M.

Sampling Date: 07/06/01
 Receiving Date: 07/07/01
 Analysis Date: 07/09/01

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	<i>o</i> -XYLENE mg/L
0101098-18	Sohio #1 MW 28	0.009	0.002	0.006	0.025	0.007
0101098-19	Sohio #1 MW 30	0.005	0.001	0.004	0.017	0.005
0101098-20	Sohio "A" MW 11	0.035	0.002	0.005	0.018	0.007
0101098-21	Sohio "A" MW 19	0.307	0.001	0.004	0.017	0.005
0101098-22	Sohio "A" MW 20	0.005	<0.001	0.004	0.014	0.004
0101098-23	Sohio "A" MW 27	0.073	<0.001	0.004	0.012	0.004
0101098-24	Sohio "A" MW 31	0.275	0.003	0.007	0.039	0.014
0101098-25	GS Source Well	0.318	0.180	0.133	0.722	0.368
0101098-26	GS MW 12	0.350	0.026	0.150	0.483	0.150
0101098-27	GS MW 21	0.009	0.002	0.007	0.004	0.002
0101098-28	GS MW 22	0.062	0.020	0.046	0.047	0.069
0101098-29	GS MW 29	0.005	0.002	0.004	0.005	0.004
0101098-30	Sat. 4 MW 9	<0.001	<0.001	0.001	0.003	<0.001
0101098-31	Satellite #4 MW 23	<0.001	<0.001	<0.001	<0.001	<0.001
0101098-32	Satellite #4 MW 24	<0.001	<0.001	<0.001	<0.001	<0.001
0101098-33	Collier MW 32	0.537	0.054	0.073	0.077	0.078
0101098-34	Collier MW 33	0.043	0.003	0.005	0.007	0.005
QUALITY CONTROL		0.092	0.098	0.095	0.186	0.097
TRUE VALUE		0.100	0.100	0.100	0.200	0.100
% INSTRUMENT ACCURACY		92	90	95	93	97
SPIKED AMOUNT		0.100	0.100	0.100	0.200	0.100
ORIGINAL SAMPLE		0.005	0.001	0.004	0.017	0.005
SPIKE		0.097	0.090	0.098	0.202	0.101
SPIKE DUP		0.097	0.091	0.090	0.185	0.090
% EXTRACTION ACCURACY		92	89	94	93	96
BLANK		<0.001	<0.001	<0.001	<0.001	<0.001
RPD		0	1	8	9	11

METHODS: EPA SW 846-8021B ,5030

Roland K. Tuttle

Roland K. Tuttle

7-13-01
Date

Environmental Lab of Texas, Inc.
 12600 West I-20 East
 Odessa, Texas 79763
 Phone: 915-583-1800
 Fax: 915-583-1713

Project Manager:

Company Name Whole Earth Environmental, Inc.

Company Address: 18606 San Gabriel

City/State/Zip: Houston, Tx. 77084

Telephone No: (800) 854-4958

Sampler Signature:

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Name: Quarterly Sampling

Project #: _____

Project Loc: Tatum, New Mexico

PO #: _____

Fax No: (281) 845-3994

FIELD CODE	Date Sampled	Time Sampled	No. of Containers	HCl as P-C-M-Galena %	HNO ₃ 70%	None	Water	Dust/grease	Soil	Other (Specify):	TDS / CL / SAR / EEC	TPH 418.1	TPH 8015M GRODRD	TPH TX 10051006	Hazardous As Ag Be Cd Cr Pb Ni Sb	Volatile	Gentrifielders	TRK 80218/5030	RUSH TAT pre-Schedule	Standard TAT	
Iva Source Well	9/24/01	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Iva MW 1	9/24/01	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Iva MW 2	9/24/01	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Mable Source Well	9/24/01	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Mable MW 3	9/24/01	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Mable MW 4	9/24/01	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Bell MW 6	9/24/01	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Bell MW 13	9/24/01	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Bell MW 14	9/24/01	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Bell MW 26	9/24/01	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Special Instructions:

Received by:	Date	Time	Received by:	Date	Time
<i>M. J. O.</i>	9-26	8:18			

Environmental Lab of Texas, Inc.
 12800 West I-20 East
 Odessa, Texas 79763
 Phone: 915-563-1600
 Fax: 915-563-1173

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager:

Company Name Whole Earth Environmental, Inc.

Phone: 915-563-1600
 Fax: 915-563-1173

Company Address: 18604 San Gabriel

City/State/Zip: Houston, Tx 77064

Telephone No: (281) 884-4368

Sampler Signature:

Fax No: (281) 646-3886

Project Name: Quarry Sampling

Project #: _____

Project Loc: Taum, New Mexico

PO #: _____

		Analysis For:		Sampled TAT		Standard TAT	
		TCIP	Total	Sampled TAT Pre-Schedule		Standard TAT	
Preservative	Water	X	X	X	X	X	X
	NaOH	X	X	X	X	X	X
	H ₂ SO ₄	X	X	X	X	X	X
	EDTA	X	X	X	X	X	X
	Other (Specify):	X	X	X	X	X	X
	Sediment	X	X	X	X	X	X
	Sludge	X	X	X	X	X	X
	Soil	X	X	X	X	X	X
	Other (Specify):	X	X	X	X	X	X
	Matrix	X	X	X	X	X	X
Sampled	THM 8015N GRODRO	X	X	X	X	X	X
	THM TX 1005/1008	X	X	X	X	X	X
	TDS / CL / SAR / EC	X	X	X	X	X	X
	TTHM 418.1	X	X	X	X	X	X
	Waste: As Ag Be Cd Cr Pb Hg Se	X	X	X	X	X	X
	MTBE 8021BIS200	X	X	X	X	X	X
	Stannousbates	X	X	X	X	X	X
	Volatile	X	X	X	X	X	X
	Analysis For:	X	X	X	X	X	X
		X	X	X	X	X	X

Special Instructions:

Relinquished by: M. Goff Date: 9-26-01 Time: 8:18 Received by: _____

Relinquished by: _____ Date: _____ Time: _____

Environmental Lab of Texas, Inc.

12800 West I-20 East
Odessa, Texas 79763

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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager:	Quarterly Sampling
Company Name	Whole Earth Environmental, Inc.
Company Address:	1800 San Gabriel
City/State/Zip:	Houston, Tx 77064
Telephone No.:	(281) 654-4358
Sampler Signature:	

		Analyze For:		Sampled TAT	Searched TAT	
		TCLP:	Total:			
Preservative	SO ₂	X	X			
	NH ₃	X	X			
Matrix	Water	X	X			
	Other (Specify):	X	X			
TDS/CL/SAR/EC	SO ₄ ²⁻	X	X	X	X	
	TPH TX 1005M005	X	X	X	X	
TPH 0015M GRIDDR0	TPH 418.1	X	X	X	X	
	MEER: AS/AZ CD CR/P/Hg/Se	X	X	X	X	
VOCs	BTX 0018/500	X	X	X	X	
	SEMANTICSES	X	X	X	X	
Sampled	Time Sampled					
	Date Sampled					
FIELD CODE	Sohlo "A" MW 19	9/24/01	2	X		
	Sohlo "A" MW 20	9/24/01	2	X		
	Sohlo "A" MW 27	9/24/01	2	X		
	Sohlo "A" MW 31	9/24/01	2	X		
	GS Source Well	9/24/01	2	X		
	GS MW 12	9/24/01	2	X		
	GS MW 21	9/24/01	2	X		
	GS MW 22	9/24/01	2	X		
	GS MW 29	9/24/01	2	X		
	Colter MW 32	9/24/01	2	X		
	Special instructions:		On Tyrannus Bigley Field Co. 9/24/01			
	Reinquired by:	Date: 9/26/01	Time: 8:18	Received by:	Date:	Time:
M. Joffe						
Reinquired by:						

Oct 05 01 03:07p

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

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

Sample Type: Water
 Sample Condition: Intact/ Iced/ HCl/ 0.0 deg C
 Project Name: Quarterly Sampling
 Project #: None Given
 Project Location: Tatum, NM

Sampling Date: 09/24/01
 Receiving Date: 09/26/01
 Analysis Date: 10/04/01

FLT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	<i>o</i> -XYLENE mg/L
C101642-01	Iva Source Well	0.430	0.204	0.048	0.486	0.359
0101642-02	Iva MW 1	<0.001	<0.001	<0.001	0.003	<0.001
0101642-03	Iva MW 2	0.004	0.003	0.001	0.006	0.004
0101642-04	Mable Source Well	0.550	0.425	0.148	1.36	0.904
0101642-05	Mable MW 3	0.053	0.163	0.173	0.826	0.154
0101642-06	Mable MW 4	0.039	0.038	0.102	0.273	0.091
0101642-07	Bell MW 6	0.038	<0.001	<0.001	<0.001	<0.001
0101642-08	Bell MW 13	0.002	0.002	0.003	0.009	0.003
0101642-09	Bell MW 14	0.054	0.001	0.005	0.011	0.004

QUALITY CONTROL	0.091	0.090	0.088	0.170	0.087
TRUE VALUE	0.100	0.100	0.100	0.200	0.100
% IA	91	90	88	85	87
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	0.093	0.089	0.082	0.160	0.077
SPIKE DUP	0.086	0.104	0.090	0.171	0.087
%EA	86	104	90	86	87
BLANK	<0.001	<0.001	<0.001	<0.001	<0.001
RPD	4.51	0.79	2.97	1.26	1.69

METHODS: SW 846-8021B, 5030

Roland K. Tuttle
 Roland K. Tuttle

10-05-01
 Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

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

Sample Type: Water
 Sample Condition: Intact/ Iced/ HCl/ 0.0 deg C
 Project Name: Quarterly Sampling
 Project #: None Given
 Project Location: Tatum, NM

Sampling Date: 09/24/01
 Receiving Date: 09/26/01
 Analysis Date: 10/04/01

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	<i>o</i> -XYLENE mg/L
0101642-10	Bell MW 25	<0.001	<0.001	0.005	0.016	0.006
0101642-11	NBF MW 8	0.041	0.044	0.018	0.040	0.026
0101642-12	NBF MW 15	2.52	1.34	0.331	0.960	0.562
0101642-13	NBF MW 16	1.39	0.001	0.058	0.041	0.005
0101642-14	NBF MW 26	0.027	0.002	0.003	0.008	0.003
0101642-15	Sohio #1 MW 10	2.15	0.131	0.189	0.510	0.137
0101642-16	Sohio #1 MW 17	1.03	0.035	0.035	0.381	0.108
0101642-17	Sohio #1 MW 18	2.81	2.22	0.554	3.15	1.65
0101642-18	Sohio #1 MW 28	<0.005	0.031	0.010	0.020	0.014

QUALITY CONTROL	0.099	0.099	0.092	0.179	0.086
TRUE VALUE	0.100	0.100	0.100	0.200	0.100
% IA	99	99	92	90	86
SPiked AMOUNT	0.100	0.100	0.100	0.200	0.100
ORIGINAL SAMPLE	<0.001	<0.001	0.005	0.016	0.006
SPIKE	0.093	0.092	0.089	0.181	0.087
SPIKE DUP	0.090	0.089	0.086	0.173	0.083
%EA	93	90	84	83	81
BLANK	<0.001	<0.001	<0.001	<0.001	<0.001
RPD	4	4	4	5	5

METHODS: SW 846-8021B, 5030

Raland K. Tuttle
Raland K. Tuttle

10-5-01
Date

Oct 05 01 03:07p

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

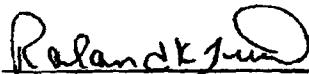
WHOLE EARTH ENVIRONMENTAL
 ATTN: MR. MIKE GRIFFIN
 19606 SAN GABRIEL
 HOUSTON, TEXAS 77084
 FAX: 281-646-8996

Sample Type: Water
 Sample Condition: Intact/ Iced/ HCl/ 0.0 deg C
 Project Name: Quarterly Sampling
 Project #: None Given
 Project Location: Tatum, NM

Sampling Date: 09/24/01
 Receiving Date: 09/26/01
 Analysis Date: 10/04/01

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	<i>o</i> -XYLENE mg/L
0101642-19	Sohio #1 MW 30	0.040	0.033	0.007	0.045	0.010
0101642-20	Sohio "A" MW 11	0.045	0.015	0.007	0.034	0.020
0101642-21	Sohio "A" MW 19	0.250	0.013	0.006	0.032	0.016
0101642-22	Sohio "A" MW 20	0.037	0.025	0.011	0.052	0.026
0101642-23	Sohio "A" MW 27	0.123	0.036	0.018	0.082	0.039
0101642-24	Sohio "A" MW 31	0.406	0.038	0.014	0.083	0.040
0101642-25	GS Source Well	0.350	0.141	0.097	0.430	0.226
0101642-26	GS MW 12	0.533	0.078	0.267	1.12	0.309
0101642-27	GS MW 21	0.016	0.009	0.012	0.015	0.006
0101642-28	GS MW 22	0.041	0.019	0.038	0.032	0.042
0101642-29	GS MW 29	0.016	0.007	0.007	0.015	0.007
QUALITY CONTROL		0.104	0.100	0.092	0.185	0.088
TRUE VALUE		0.100	0.100	0.100	0.200	0.100
% IA		104	100	92	92	88
SPIKED AMOUNT		0.100	0.100	0.100	0.200	0.100
ORIGINAL SAMPLE		0.037	0.025	0.011	0.052	0.026
SPIKE		0.155	0.130	0.111	0.270	0.126
SPIKE DUP		0.129	0.114	0.098	0.236	0.113
%EA		92	89	87	92	86
BLANK		<0.001	<0.001	<0.001	<0.001	<0.001
RPD		25	16	14	17	15

METHODS: SW 846-8021B, 5030



Ralond K. Tuttle

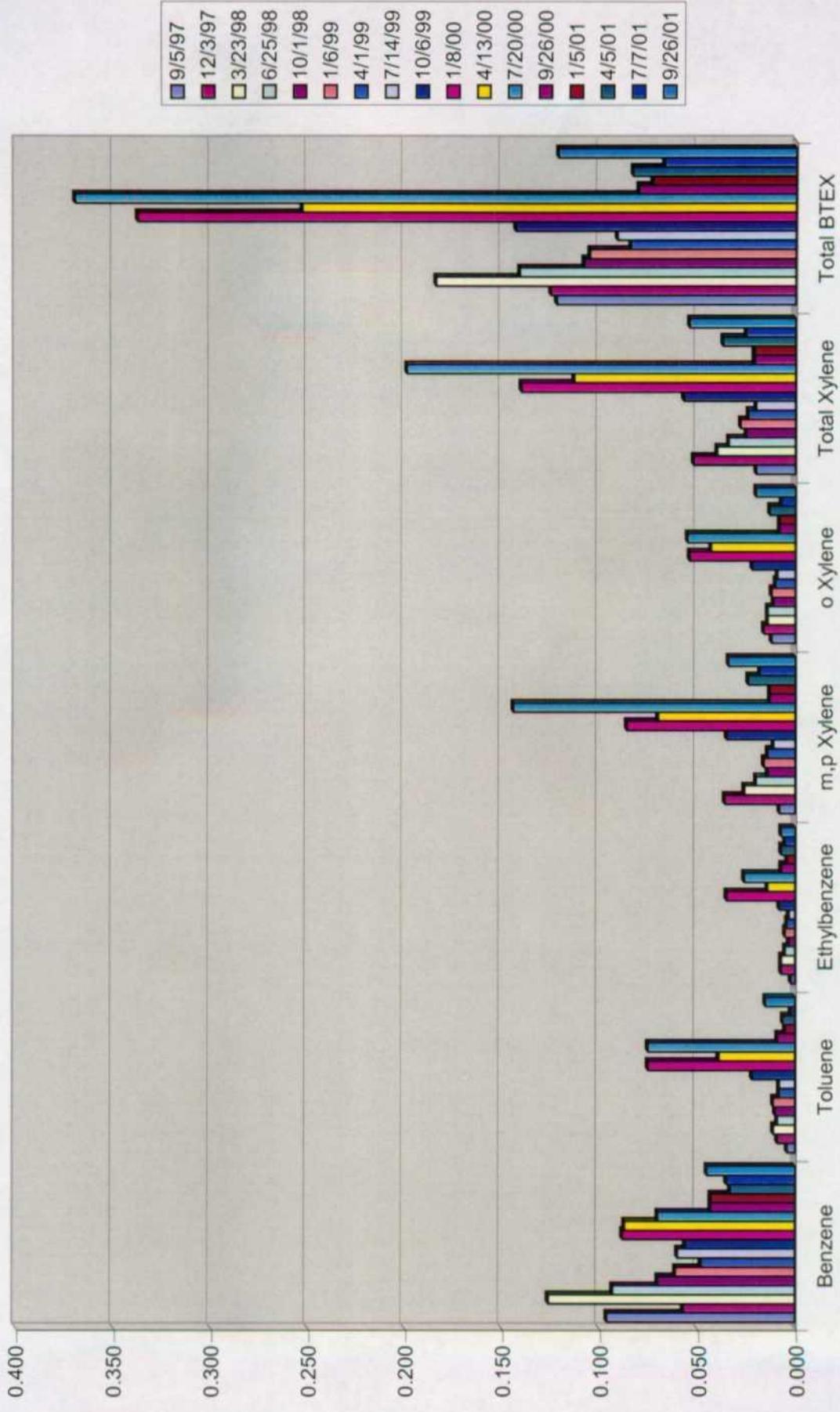
10-5-01
Date

Sohio A

**Monitor Well # 11
Sohio State "A"
Sampling Results**

Lab. #	12484	13132	14067	14656	15598	16605	17441	18596	20602	22763	25151	28422	31513	36142	38936	0101098-20
Sample Date	9/5/97	12/3/97	3/23/98	6/25/98	10/1/98	1/6/99	4/1/99	7/14/99	10/6/99	1/8/00	4/13/00	7/20/00	9/26/00	1/5/01	4/5/01	9/26/01
Benzene	0.096	0.057	0.126	0.093	0.070	0.061	0.048	0.060	0.056	0.088	0.087	0.070	0.043	0.033	0.035	0.045
Toluene	0.004	0.009	0.011	0.009	0.010	0.011	0.008	0.008	0.022	0.075	0.039	0.075	0.009	0.006	0.002	0.015
Ethylbenzene	0.002	0.007	0.007	0.005	0.003	0.005	0.004	0.003	0.008	0.035	0.014	0.026	0.007	0.005	0.007	0.007
m,p Xylene	0.008	0.016	0.026	0.020	0.014	0.016	0.014	0.011	0.035	0.086	0.070	0.144	0.013	0.024	0.018	0.034
o Xylene	0.012	0.016	0.014	0.011	0.012	0.010	0.014	0.009	0.022	0.054	0.043	0.055	0.008	0.013	0.007	0.020
Total Xylyne	0.020	0.052	0.040	0.034	0.025	0.028	0.024	0.020	0.057	0.140	0.113	0.199	0.021	0.037	0.025	0.054
Total BTEX	0.122	0.125	0.184	0.141	0.108	0.105	0.084	0.091	0.143	0.338	0.253	0.370	0.080	0.073	0.083	0.121

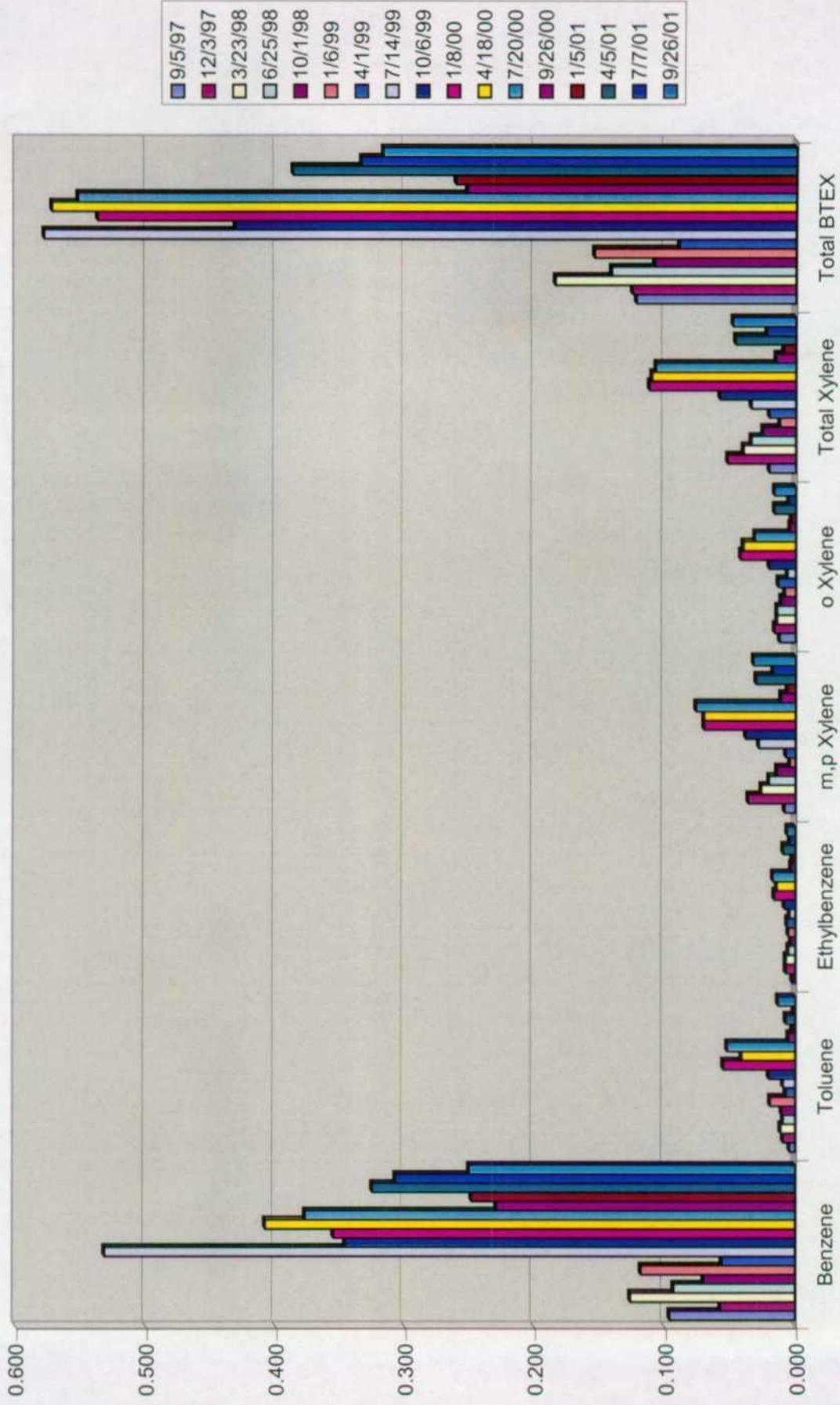
Monitor Well # 11



Monitor Well # 19
 Sohio State "A"
 Sampling Results

Lab. #	12484	13132	14067	14666	15598	16505	17441	18595	20502	22763	25151	28422	31513	36142	38937	0101098-21	0101642-21
Sample Date	9/5/97	12/3/97	3/23/98	6/25/98	10/1/98	1/6/99	4/1/99	7/14/99	10/6/99	1/8/00	4/18/00	7/20/00	9/26/00	1/5/01	4/5/01	7/7/01	9/26/01
Benzene	0.096	0.057	0.126	0.093	0.070	0.118	0.056	0.532	0.346	0.355	0.408	0.377	0.229	0.248	0.325	0.307	0.250
Toluene	0.004	0.009	0.011	0.009	0.010	0.019	0.007	0.005	0.020	0.055	0.041	0.052	0.005	0.002	0.007	0.001	0.013
Ethylbenzene	0.002	0.007	0.007	0.005	0.003	0.005	0.006	0.004	0.008	0.016	0.014	0.017	0.003	0.002	0.009	0.004	0.006
m,p Xylene	0.008	0.026	0.026	0.026	0.014	0.004	0.004	0.007	0.028	0.038	0.028	0.070	0.076	0.011	0.006	0.030	0.032
o Xylene	0.012	0.016	0.014	0.014	0.011	0.008	0.013	0.006	0.020	0.042	0.040	0.031	0.004	0.003	0.016	0.005	0.016
Total Xylene	0.020	0.052	0.040	0.034	0.025	0.012	0.020	0.034	0.058	0.112	0.110	0.107	0.015	0.009	0.046	0.022	0.048
Total BTEx	0.122	0.125	0.184	0.141	0.108	0.154	0.089	0.579	0.432	0.538	0.573	0.553	0.252	0.261	0.387	0.334	0.317

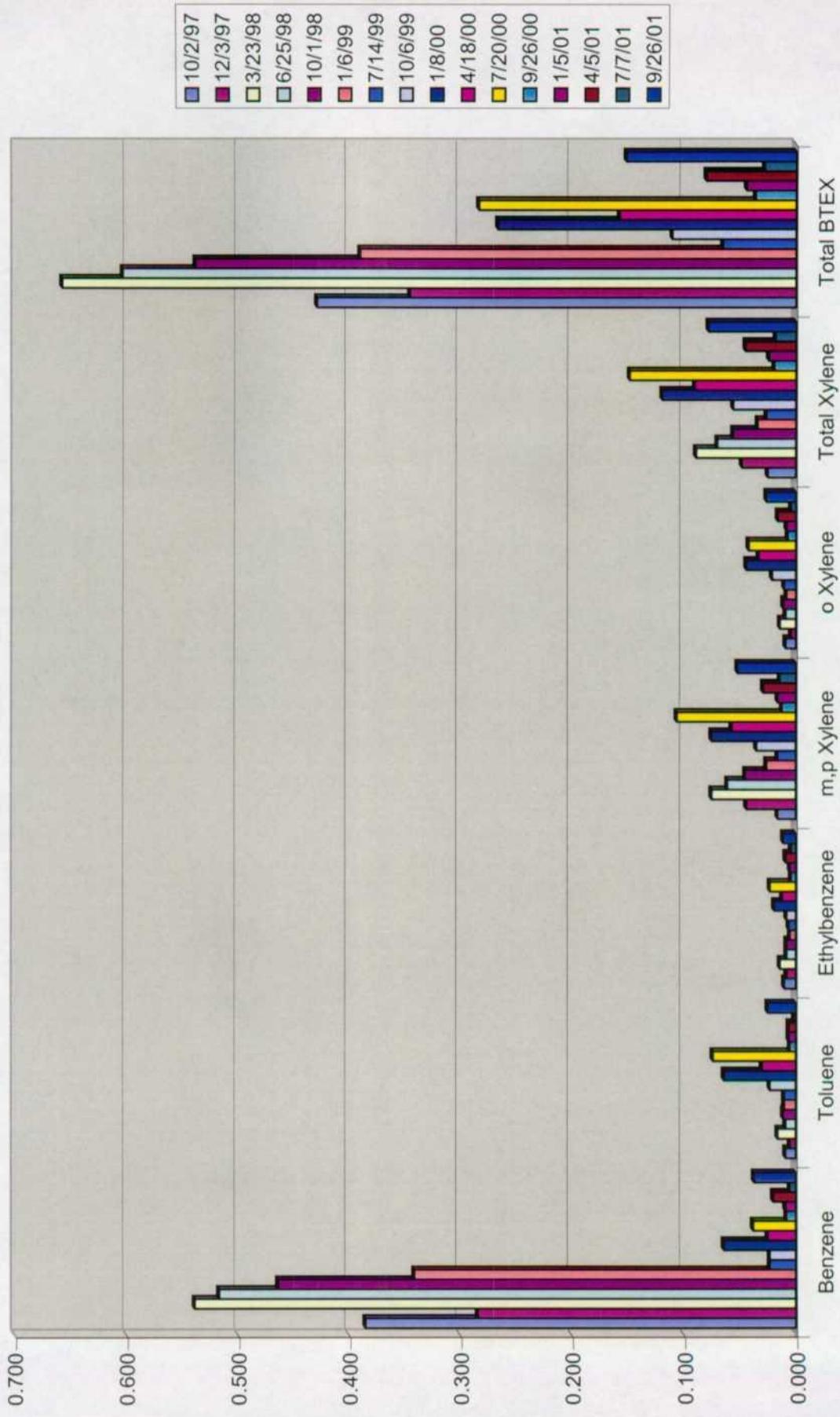
Monitor Well # 19



Monitor Well # 20
 Sohio State "A"
 Sampling Results

Lab. #	12726	13190	14054	14874	15610	16590	18609	20620	22769	25160	28449	31515	36148	38938	0101098-22	0101642-22
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	4/18/00	7/20/00	9/26/00	1/5/01	4/5/01	7/7/01	9/26/01
Benzene	0.385	0.284	0.539	0.517	0.464	0.341	0.023	0.023	0.064	0.025	0.038	0.009	0.008	0.020	0.005	0.037
Toluene	0.009	0.005	0.016	0.009	0.011	0.010	0.010	0.023	0.064	0.030	0.074	0.005	0.006	0.006	0.001	0.025
Ethylbenzene	0.010	0.008	0.014	0.008	0.008	0.005	0.005	0.006	0.019	0.012	0.023	0.004	0.005	0.005	0.004	0.011
m,p Xylene	0.016	0.044	0.075	0.061	0.045	0.026	0.016	0.035	0.075	0.057	0.106	0.012	0.016	0.029	0.014	0.052
o Xylene	0.009	0.004	0.014	0.009	0.011	0.008	0.010	0.021	0.044	0.033	0.042	0.007	0.008	0.016	0.004	0.026
Total Xylene	0.025	0.048	0.089	0.070	0.056	0.034	0.026	0.056	0.119	0.090	0.148	0.019	0.024	0.045	0.018	0.078
Total BTEX	0.429	0.345	0.658	0.604	0.539	0.390	0.065	0.110	0.266	0.157	0.283	0.036	0.044	0.080	0.028	0.151

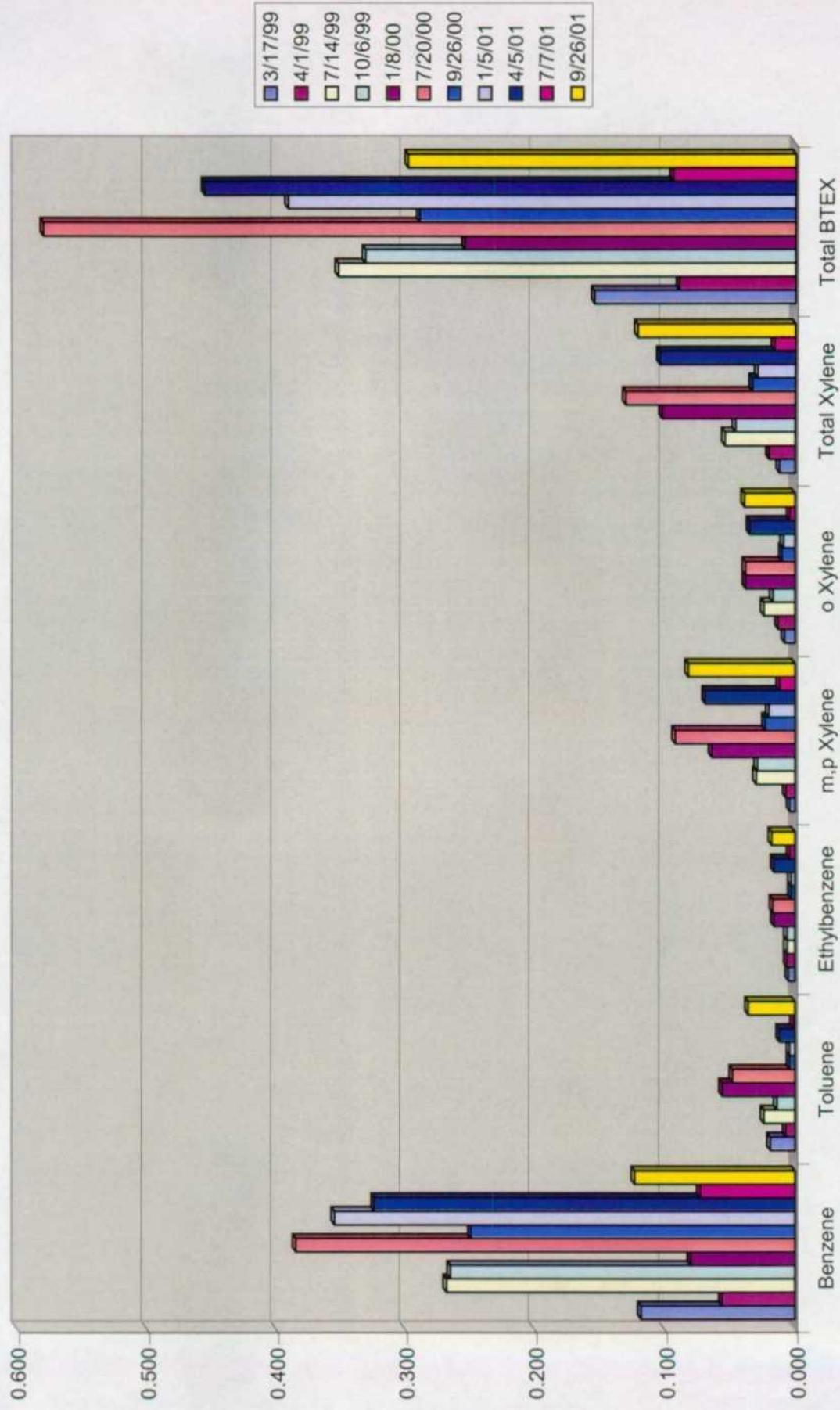
Monitor Well # 20



Monitor Well # 27
Sohio State "A"
Sampling Results

Lab. #	17267	17444	18610	20621	22780	28456	31516	36153	38939	0101098-23	0101642-23
Sample Date	3/17/99	4/1/99	7/14/99	10/6/99	1/8/00	7/22/00	9/26/00	1/5/01	4/5/01	7/7/01	9/26/01
Benzene	0.118	0.056	0.268	0.265	0.080	0.385	0.249	0.355	0.324	0.073	0.123
Toluene	0.019	0.007	0.024	0.014	0.056	0.048	0.004	0.004	0.012	0.001	0.036
Ethylbenzene	0.005	0.006	0.006	0.006	0.016	0.017	0.003	0.003	0.016	0.004	0.018
m,p Xylene	0.004	0.007	0.030	0.029	0.064	0.092	0.023	0.020	0.069	0.012	0.082
o Xylene	0.008	0.013	0.024	0.017	0.038	0.038	0.010	0.009	0.035	0.004	0.039
Total Xylene	0.012	0.020	0.054	0.046	0.102	0.130	0.033	0.029	0.104	0.016	0.121
Total BTEX	0.154	0.089	0.352	0.331	0.254	0.580	0.289	0.391	0.456	0.094	0.298

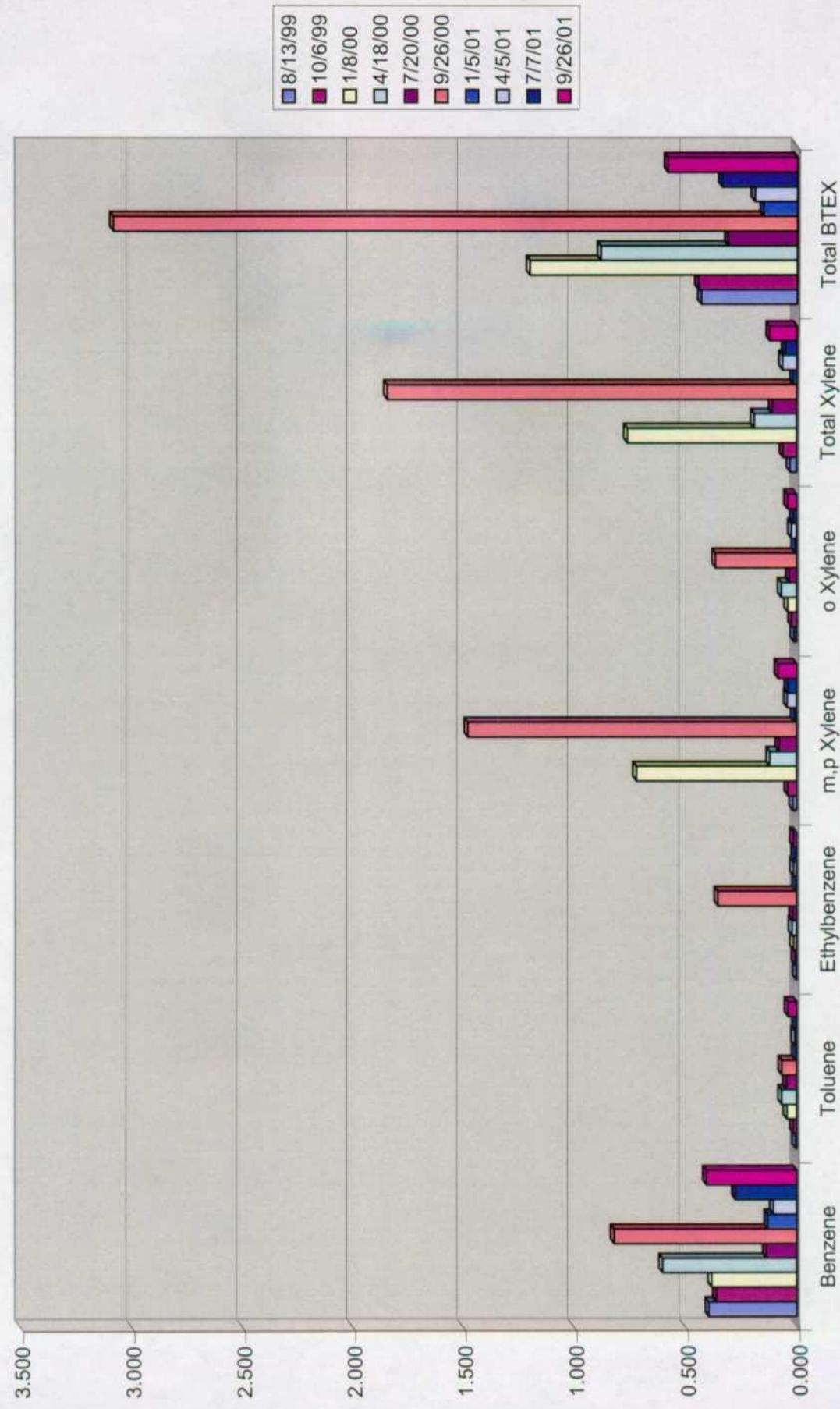
Monitor Well # 27



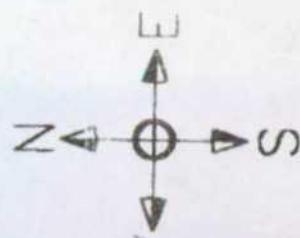
Monitor Well # 31
Sohio State "A"
Sampling Results

Lab. #	19166	20622	22787	25153	28460	31517	36162	38940	0101098-24	0101642-24
Sample Date	8/13/99	10/6/99	1/8/00	4/18/00	7/20/00	9/26/00	1/5/01	4/5/01	7/7/01	9/26/01
Benzene	0.396	0.362	0.383	0.602	0.137	0.820	0.130	0.105	0.275	0.406
Toluene	0.004	0.015	0.044	0.067	0.046	0.066	0.004	0.008	0.003	0.038
Ethylbenzene	0.001	0.006	0.013	0.020	0.017	0.354	0.003	0.013	0.007	0.014
m,p Xylene	0.017	0.039	0.720	0.121	0.078	1.480	0.010	0.042	0.039	0.083
o Xylene	0.012	0.022	0.040	0.070	0.032	0.365	0.005	0.023	0.014	0.040
Total Xylene	0.029	0.061	0.760	0.191	0.110	1.845	0.015	0.065	0.053	0.123
Total BTEX	0.430	0.444	1.200	0.880	0.310	3.085	0.152	0.191	0.338	0.581

Monitor Well # 31



SOHIO "A" STATE #1



225'

SPREAD ZONE

PIT

SCALE 1"=50'

ELEV=4286.8'

120'

115'

110'

104'

120'

40'

PUMP JACK

200'

HEATER

STORAGE TANK

STORAGE TANK

MW 18
ELEV=4286.0'

MW 11
ELEV=4285.8'

MW 16
ELEV=4285.6'

MW 20
ELEV=4283.9'

MW 27
ELEV=4283.2'

MW 31
ELEV=4283.5'

LEASE ROAD