1R - 267

REPORTS

DATE:

1998

Tipperary
CORPORATION

633 Seventeenth Street
Suite 1550
Denver, Colorado 80202

30

November 20, 1998

CERTIFIED MAIL

Mr. William C. Olson
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

RE: Tatum Pit Closure Project
Fifth Quarterly Progress Report
Sample Date of October 1,1998
Lea County, NM

Dear Mr. Olson:

Please find enclosed additional results from our monitor wells in the subject project area. These results are from water samples taken on October 1, 1998. These samples represent the fifth quarter of monitoring. The total BTEX concentrations continue to decline. The Vera and Iva Com monitor wells now have at least four consecutive quarters of acceptable concentrations. We will continue to analyze water samples quarterly from the other monitor wells.

If you have any questions, please call me at (303) 293-9379.

Very truly yours,

Larry G. Sugano
Vice President - Engineering

cc: NMOCD Hobbs District Office

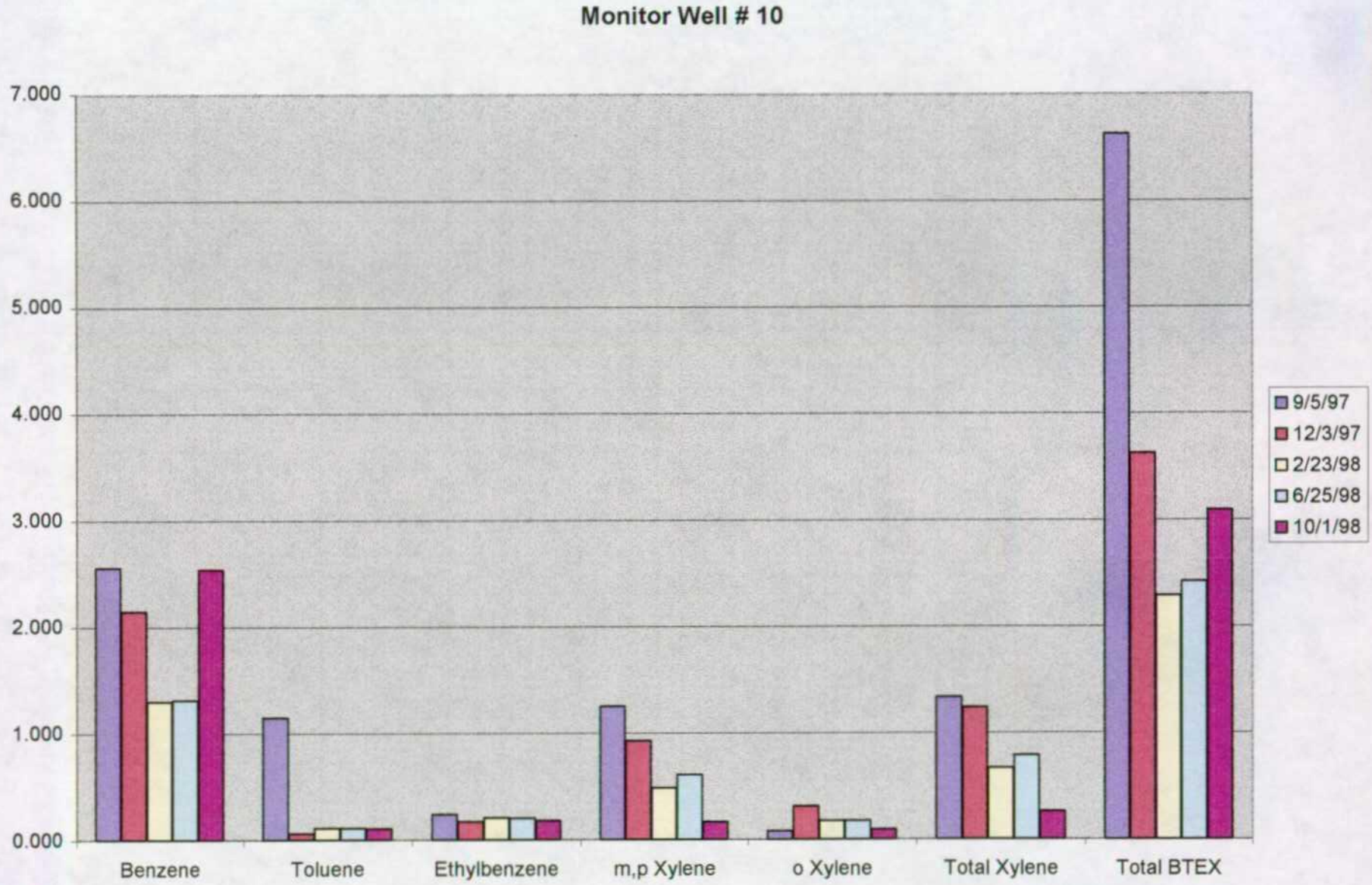
Enclosures

Tipperary
CORPORATION

TATUM PIT CLOSURE PROJECT
LEA COUNTY, NM
FIFTH QUARTERLY PROGRESS REPORT
SAMPLE DATE OF 10/1/98

Monitor Well # 10
Sohio State # 1
Sampling Results

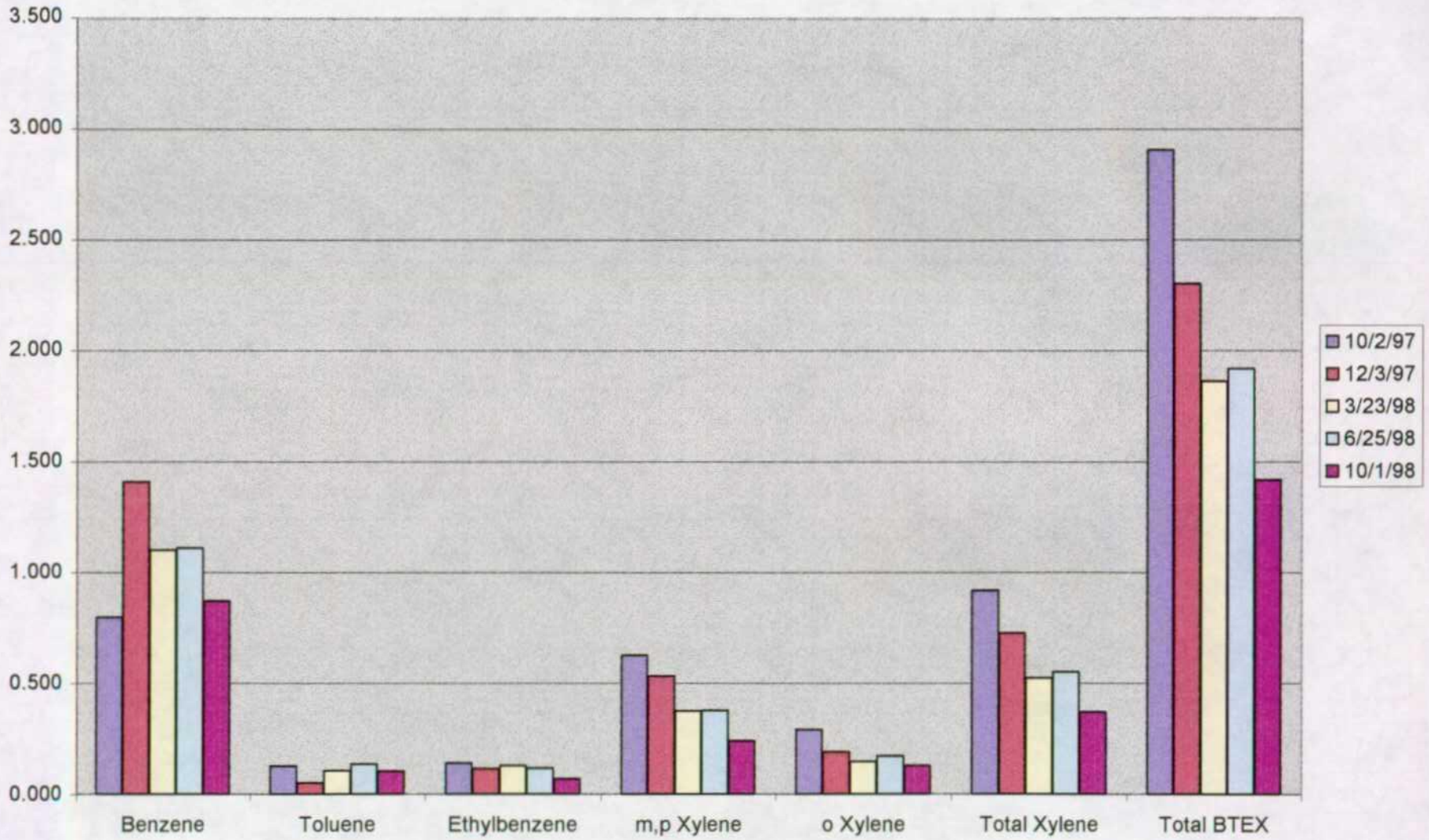
Lab. #	12483	13186	14066	14665	15597
Sample Date	9/5/97	12/3/97	2/23/98	6/25/98	10/1/98
Benzene	2.559	2.148	1.301	1.313	2.541
Toluene	1.148	0.062	0.113	0.113	0.108
Ethylbenzene	0.243	0.173	0.209	0.206	0.182
m,p Xylene	1.257	0.930	0.490	0.611	0.167
o Xylene	0.081	0.313	0.179	0.180	0.098
Total Xylene	1.338	1.243	0.669	0.791	0.265
Total BTEX	6.626	3.626	2.292	2.423	3.096


Monitor Well # 10
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
Benzene
Toluene
Ethylbenzene
m,p Xylene
o Xylene
Total Xylene
Total BTEX
9/5/97
12/3/97
2/23/98
6/25/98
10/1/98

Monitor Well # 17
Sohio State # 1
Sampling Results

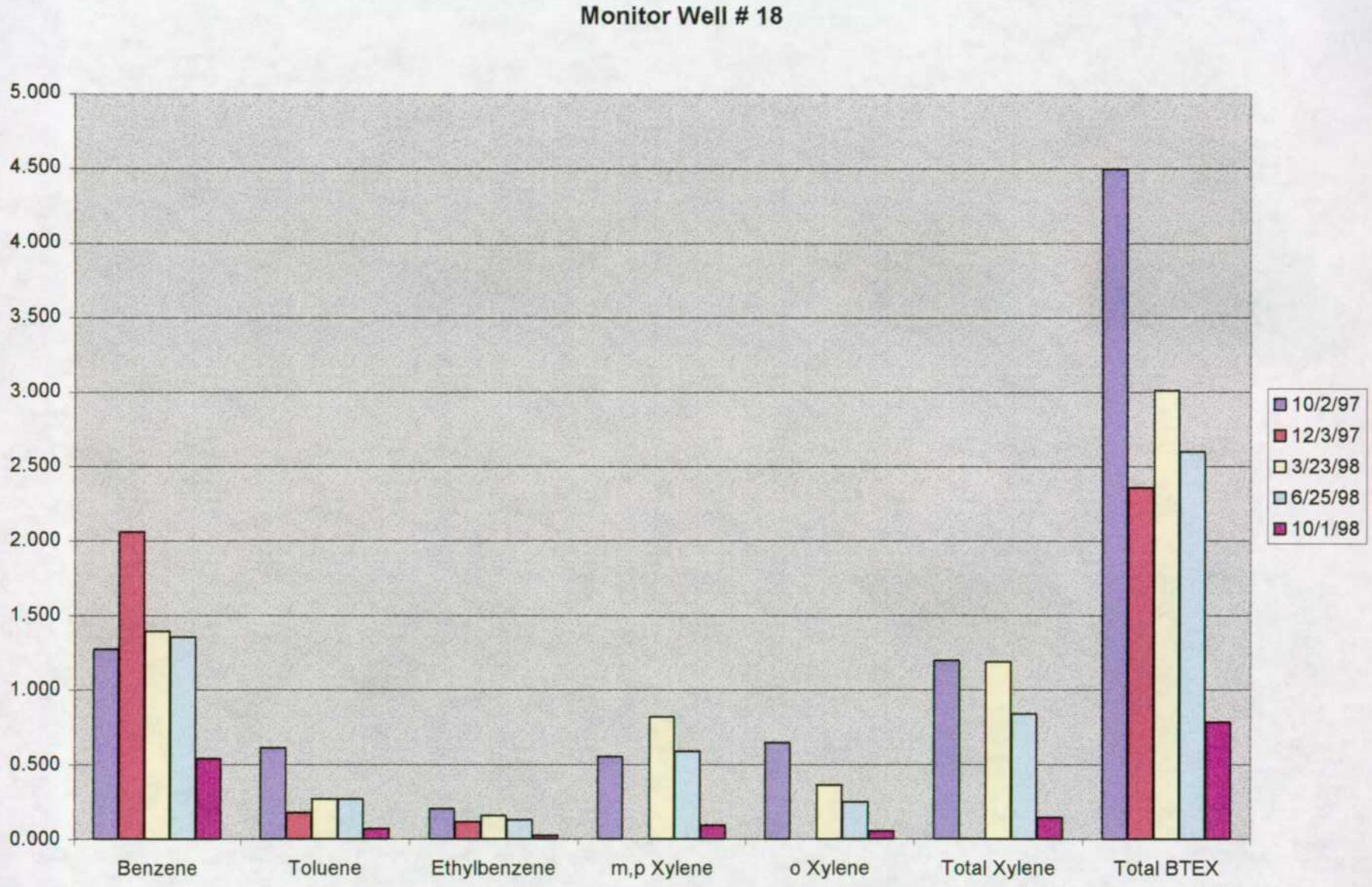
Lab. #	12723	13187	14051	14671	15601
Sample Date	10/2/97	12/3/97	3/23/98	6/25/98	10/1/98
Benzene	0.799	1.409	1.101	1.111	0.872
Toluene	0.128	0.053	0.108	0.138	0.105
Ethylbenzene	0.141	0.116	0.130	0.118	0.071
m,p Xylene	0.628	0.535	0.376	0.379	0.242
o Xylene	0.292	0.192	0.148	0.174	0.129
Total Xylene	0.920	0.727	0.524	0.553	0.371
Total BTEX	2.908	2.305	1.863	1.920	1.419

Monitor Well # 17



Monitor Well # 18
Sohio State # 1
Sampling Results

Lab. #	12724	13188	14052	14672	15609
Sample Date	10/2/97	12/3/97	3/23/98	6/25/98	10/1/98
Benzene	1.276	2.063	1.396	1.357	0.542
Toluene	0.614	0.178	0.269	0.272	0.072
Ethylbenzene	0.206	0.118	0.159	0.131	0.025
m,p Xylene	0.553	0.001	0.823	0.589	0.093
o Xylene	0.648	0.001	0.366	0.252	0.054
Total Xylene	1.201	0.002	1.189	0.841	0.147
Total BTEX	4.498	2.361	3.013	2.601	0.786


Monitor Well # 18
5.000
4.500
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
10/2/97
12/3/97
3/23/98
6/25/98
10/1/98

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

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

Receiving Date: 09/30/98
Sample Type: Water
Project : None Given
Project Location: Tatum, New Mexico

Analysis Date: 9/30 & 10/01/98
Sampling Date: 09/29/98
Sample Condition: Intact/Iced

ELT#	FIELD CODE	BENZENE (mg/l)	TOLUENE (mg/l)	ETHYLBENZENE (mg/l)	m,p-XYLENE (mg/l)	o-XYLENE (mg/l)
15590	Iva Com M/W #1	0.004	0.004	0.002	0.006	0.007
15591	Mable Com M/W #3	0.010	0.015	0.010	0.041	0.017
15592	Vera M/W #5	0.003	0.003	0.001	0.004	0.004
15593	Bell A M/W #6	0.130	0.002	0.003	0.004	0.002
15594	NBN M/W #7	0.006	0.007	0.001	0.006	0.003
15595	NBF M/W #8	0.005	0.004	0.001	0.004	0.004
15596	Satelite #4 M/W #9	0.036	0.002	0.006	0.003	0.001
15597	Sohio St. #1 M/W #10	2.541	0.106	0.182	0.167	0.098
15598	Sohio St. "A" M/W #11	0.070	0.010	0.003	0.014	0.011
15599	Bell A M/W #13	0.003	0.002	0.002	0.004	0.002
15600	NBF M/W #15	3.027	1.630	0.225	0.811	0.393
15601	Sohio St. #1 M/W #17	0.872	0.105	0.071	0.242	0.129
15602	Sohio St. "A" M/W #19	0.033	0.015	0.005	0.018	0.011
15603	G.S. State M/W #21	0.128	0.005	0.069	0.030	0.006
15604	Satelite #4 M/W #23	0.048	0.023	0.001	0.004	0.002
15605	Iva Com M/W #2	0.003	0.002	<0.001	0.003	0.001
15606	Mable Com M/W #4	0.007	0.002	<0.001	0.002	0.001
15607	Bell A M/W #14	0.175	0.002	0.001	0.002	0.001
15608	NBF M/W #16	1.046	0.065	0.037	0.100	0.039
15609	Sohio St. #1 M/W #18	0.542	0.072	0.025	0.093	0.054
15610	Sohio St. "A" M/W #20	0.464	0.011	0.008	0.045	0.011
15611	G.S. State M/W #22	0.049	0.011	0.026	0.040	0.018
15612	Satelite #4 M/W #24	0.002	0.001	<0.001	0.002	<0.001
	% IA	100	94	91	90	95
	% EA	98	97	93	91	93
	BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: SW 846-8020,5030

Raland K. Tuttle

10-5-98
Date

Environmental Lab of Texas, Inc.

12600 West I-20 East Odessa, Texas 79763
(915) 563-1800 FAX (915) 563-1713

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Vic Vice

Phone #: 505-398-6507
FAX #: 505-398-6510

Company Name & Address: Tipperary Oil & Gas

1-800-854-4358 "Whole Earth. "Mike"

Project #:

Project Name:

Project Location: Tatum, New Mexico

Sampler Signature: D.A. Vice

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	OTHER	SAMPLING: DATE	TIME
15590	IUA Com M/W #1 ~~#2~~	1												9-29-98	
15591	MAble Com M/W # 3 ~~#4~~	1													
15592	Uera # M/W #5	1													
15593	Bell A M/W #6	1													
15594	NBN M/W. #7	1													
15595	NBF M/W #8	1													
15596	SATILITE #4 M/W #9	1													
15597	Sohio ST. #1 M/W #10	1													
15598	Sohio ST "A" M/W #11	1													
15599	Bell A M/W #13 ~~#14~~	1													
15600	NBF M/W #15 ~~#16~~	1													

ANALYSIS REQUEST

BTEX 8120/5030	TPH 418.1	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	TDS	RCI

Relinquished by:	Date:	Times:	Received by:
[signature]	09-30-98	0855	[signature]
Relinquished by:	Date:	Times:	Received by:
Relinquished by:	Date:	Times:	Received by Laboratory:

REMARKS

Environmental Lab of Texas, Inc.

12600 West I-20 East Odessa, Texas 79763
(915) 563-1800 FAX (915) 563-1713

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Vic Vice

Phone #: 505-398-6507
FAX #: 505-398-6510
1-800-854-4358 Wade Earth "Mike"

Company Name & Address: Tipperary Oil & Gas

Project #:

Project Name:

Project Location: Tatum, New Mexico

Sampler Signature:

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	OTHER	SAMPLING: DATE	TIME
15601	Sohio ST #1 M/W #17 #18	1												9-29-98	
15602	Sohio ST "A" M/W #19 #20	1													
15603	G.S. State M/W #21 - #22	1													
15604	Satellite #4 - M/W #23 #24	1													
15605	Iva Com M/W #2	1													
15606	Mable Com M/W #4	1													
15607	Bell A M/W #14	1													
15608	NBF M/W #16	1													
15609	Sohio St #1 M/W #18	1													
15610	Sohio St "A" M/W #20	1													
15611	GS State M/W #22	1													
15612	Satellite #4 M/W #24	1													

ANALYSIS REQUEST

BTEX 8120/5030	TPH 418.1	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	TDS	RCI

Relinquished by:	Date:	Times:	Received by:
[signature]	09-30-98	0855	[signature]
Relinquished by:	Date:	Times:	Received by:
Relinquished by:	Date:	Times:	Received by Laboratory:

REMARKS

Tipperary
CORPORATION

633 Seventeenth Street
Suite 1550
Denver, Colorado 80202

September 8, 1998

CERTIFIED MAIL

Mr. William C. Olson
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

RE: Work Plan & 6/98 Progress Report
Tatum Pit Closure Project
Lea County, NM

Dear Mr. Olson:

In response to your June 29,1998 correspondence, please find enclosed the following:

1. A delineation work plan as requested for the pits requiring additional lateral data.
2. Additional results from the closure of ten pits in the project area. These results are from water samples taken from the monitor wells on June 25, 1998. In general, all pits have shown consistent reductions in BTEX concentrations with the total reduction being 32% during the past four quarters.

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: Wayne Price, NMOCD Hobbs Office

Enclosures

Delineation Protocol
Tipperary Corporation
Tatum Pit Closure Project

1.0 Purpose

This protocol is provide a detailed outline of the steps to be employed in the remediation and final closure of the Tipperary Tatum, New Mexico pits.

2.0 Scope

This protocol is site specific for the above stated site.

3.0 Define the Lateral Extent of Contamination

3.1 Whole Earth Environmental will contact Mr. Wayne Price of the Hobbs office of the NMOCD and request a site visit to five pits presently requiring lateral delineation. Mr. Price will select the best location for an additional monitoring well at each pit site. The location will be marked with pin flags and plotted on a plat map.

3.2 Atkins Engineering will be instructed to drill, case and develop an additional monitoring well at each pit site. Whole Earth will collect water samples in accordance with WEQP-76 (previously submitted) and transfer them to Environmental Labs of Tx. for testing. For purposes of defining the lateral extent of contamination we propose that a single BTEX measurement run in accordance with EPA Method 8020 be used.

3.3 The analysis will be reviewed by Whole Earth to confirm that the individual BTEX values all fall below NMWQCC standards. If not, we will repeat the steps contained within paragraph 3 of this protocol until the final results pass NMWQCC standards.

3.4 Once established, these delineation wells will not be subject to quarterly monitoring. They will be tested to insure acceptable concentrations of all criteria pollutants at the time of final pit closure.

4.0 Documentation & Reporting

4.1 At the conclusion of the pit remediation project, Whole Earth will prepare a closure report to include the following information:

- A plat map of the location showing the exact location of the pits, the location and orientation of all monitoring wells associated with the pit.
- Laboratory analyses of the BTEX concentration within the ground water.
- Well diagram to include the construction, soil morphology and final depth of the monitor wells.

Tipperary Tatum Pit Closure Project
One Year Sampling Summary

Project History

Tipperary began the excavation and remediation of ten pit locations located west of Tatum, New Mexico in August 1997. The remediation protocol was to model the potential migration of all pits having hydrocarbon concentrations in excess of 1, 000 ppm TPH and 10 ppm benzene, to determine their potential for impacting the Ogallala Aquifer. The model was "ground truthed" by the installation of twenty-four down gradient monitor wells. Free product was discovered within three monitor wells and wind driven recovery wells were erected to capture the hydrocarbons. The seven sites not having recovery wells were covered with 20 mill polyethylene liners to prevent any further potential vertical migration of hydrocarbons. Each monitoring well was sampled quarterly and the BTEX concentrations studied to determine trending.

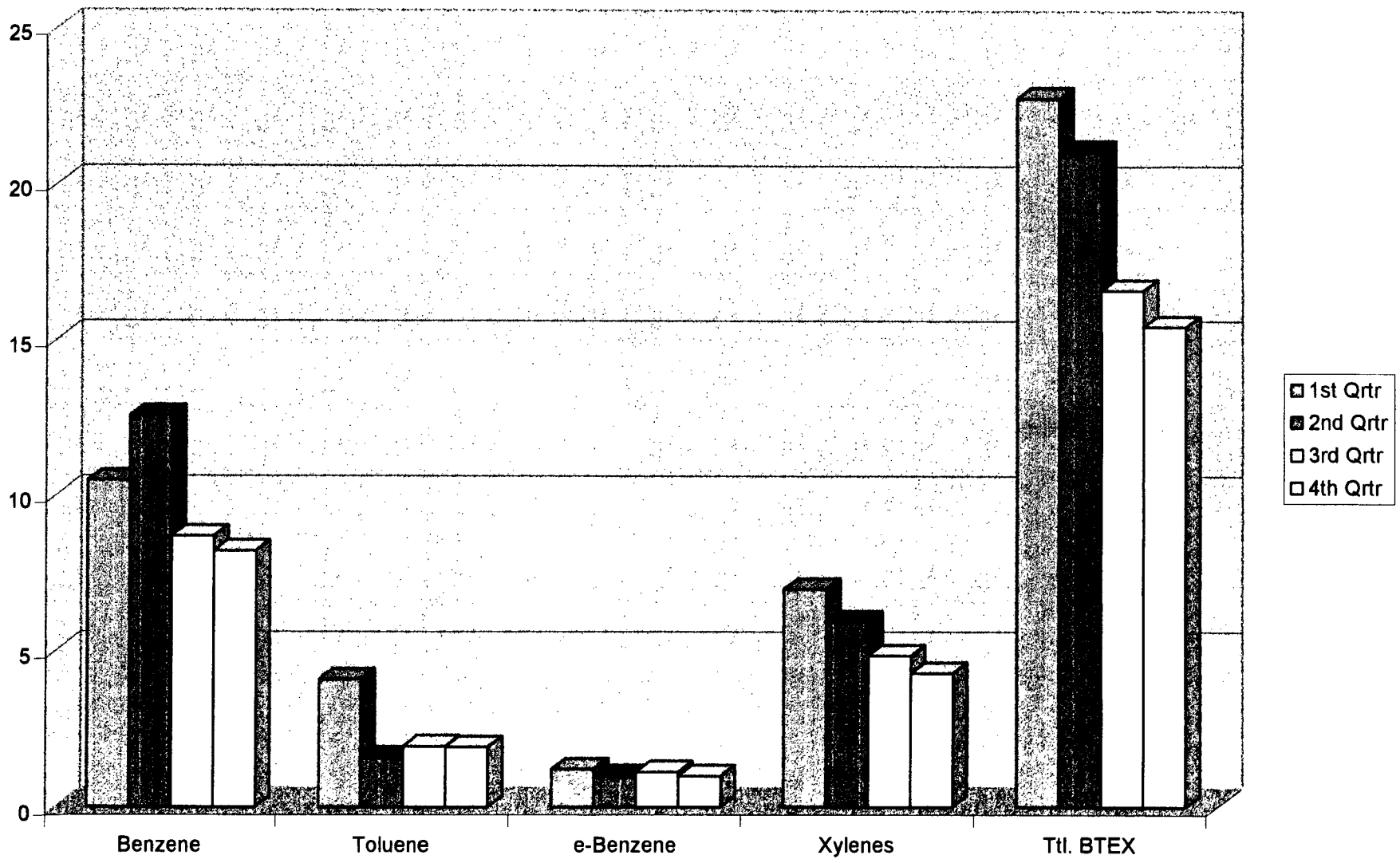
Present Status

One pit site is ready for closure having never shown BTEX concentrations in excess of WQCC standards. Three sites have shown two or more consecutive quarters with BTEX concentrations within WQCC standards. All remaining sites have shown consistent reductions in BTEX concentrations and will continue to be sampled quarterly until four consecutive quarters of acceptable results are obtained. The attached bar graph shows the total reduction in BTEX concentrations for all wells to have been 32% over the past year.

Future Activities

Tipperary will install an additional monitoring well at each of five sites to delineate the lateral extent of contamination. Those monitor wells not showing four consecutive quarters of acceptable BTEX concentrations will be monitored quarterly until they do.

One Year BTEX Survey



ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

TIPPERARY
ATTN: MR. VICTOR A. VICE
P.O. BOX 857
TATUM, NM 88267
FAX: 1-281-646-8996

Receiving Date: 06/26/98
Sample Type: WATER
Project : TATUM, NM
Project Location: TATUM, NM

Analysis Date: 06/26/98
Sampling Date: 06/25/98
Sample Condition: Intact/Iced

ELT#	FIELD CODE	BENZENE (mg/l)	TOLUENE (mg/l)	ETHYLBENZENE (mg/l)	m,p-XYLENE (mg/l)	o-XYLENE (mg/l)
14657	IVA COM M/W #1	0.006	0.005	0.002	0.008	0.009
14658	MABLE COM M/W #3	0.009	0.011	0.009	0.033	0.009
14659	MABLE COM M/W #4	0.020	0.006	0.003	0.015	0.005
14660	VERA M/W #5	0.007	0.006	0.005	0.011	0.008
14661	BELL A M/W #6	0.203	0.008	0.015	0.017	0.006
14662	NBN M/W #7	0.009	0.007	0.007	0.016	0.009
14663	NBF M/W #8	0.034	0.003	0.007	0.011	0.003
14664	SATELITE #4 M/W #9	0.055	0.003	0.010	0.011	0.002
14665	SOHIO STATE #1 M/W #10	1.313	0.113	0.206	0.611	0.180
14666	SOHIO STATE A M/W #11	0.093	0.009	0.005	0.020	0.014
14667	BELL A M/W #13	0.016	0.014	0.005	0.015	0.006
14668	BELL A M/W #14	0.735	0.009	0.005	0.011	0.004
14669	NBF M/W #15	1.415	1.165	0.270	0.927	0.412
14670	NBF M/W #16	1.058	0.113	0.070	0.145	0.060
14671	SOHIO STATE #1 M/W #17	1.111	0.138	0.118	0.379	0.174
14672	SOHIO STATE #1 M/W #18	1.357	0.272	0.131	0.589	0.252
14673	SOHIO STATE A #1 M/W #19	0.029	0.010	0.007	0.022	0.011
14674	SOHIO STATE A #1 MW/ #20	0.517	0.009	0.008	0.061	0.009
14675	GS STATE #1 M/W #21	0.047	0.009	0.019	0.086	0.038
14676	GS STATE #1 M/W #22	0.183	0.012	0.062	0.077	0.010
14677	SATELITE #4 M/W #23	0.002	<.001	0.001	0.003	0.001
14678	SATELITE #4 M/W #24	0.003	0.003	0.002	0.006	0.003
14679	IVA COM WINDMILL SW #1	1.174	1.290	0.265	1.262	1.241
	% IA	99	95	92	90	94
	% EA	98	95	94	92	95
	BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: SW 846-8020,5030

Michael R. Fowler

7-9-98
Date

Environmental Lab of Texas, Inc.

12600 West I-20 East Odessa, Texas 79763
(915) 563-1800 FAX (915) 563-1713

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: VICTOR A. VICE

Phone #: 1-800-854-4358

FAX #:

Company Name & Address: TIPPERARY OIL & GAS P.O. Box 857

Project #: TATUM, N. Mex 88267

Project Name:

Project Location: TATUM, N.M.

Sampler Signature:

ANALYSIS REQUEST

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	OTHER	SAMPLING: DATE	TIME	BTEX 8021/5030	TPH 418.1	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	TDS	RCI	Chlorides
14657	IVA COM M/W #1	1												6-25-98		X								
14658	Mable Com M/W #3	1														X								
14659	" " " #4	1														X								
14660	VERA M/W #5	1														✓								DW
14661	BELLA M/W #6	1														X								
14662	NBN M/W #7	1														X								
14663	UBF M/W #8	1														X								
14664	SATELITE #4 M/W #9	1														X								
14665	SOHIO STATE #1 M/W #10	1														X								
14666	SOHIO STATE A M/W #11	1														X								

Relinquished by:	Date:	Times:	Received by:	REMARKS
	6-26-98	1035		
Relinquished by:	Date:	Times:	Received by:	
Relinquished by:	Date:	Times:	Received by Laboratory:	

Remediation Results
One Year Review
Sohio State #1

Remediation Summary
The site was excavated to an approximate depth of 25' bgl., lined and three monitor wells installed down gradient from the pit center.

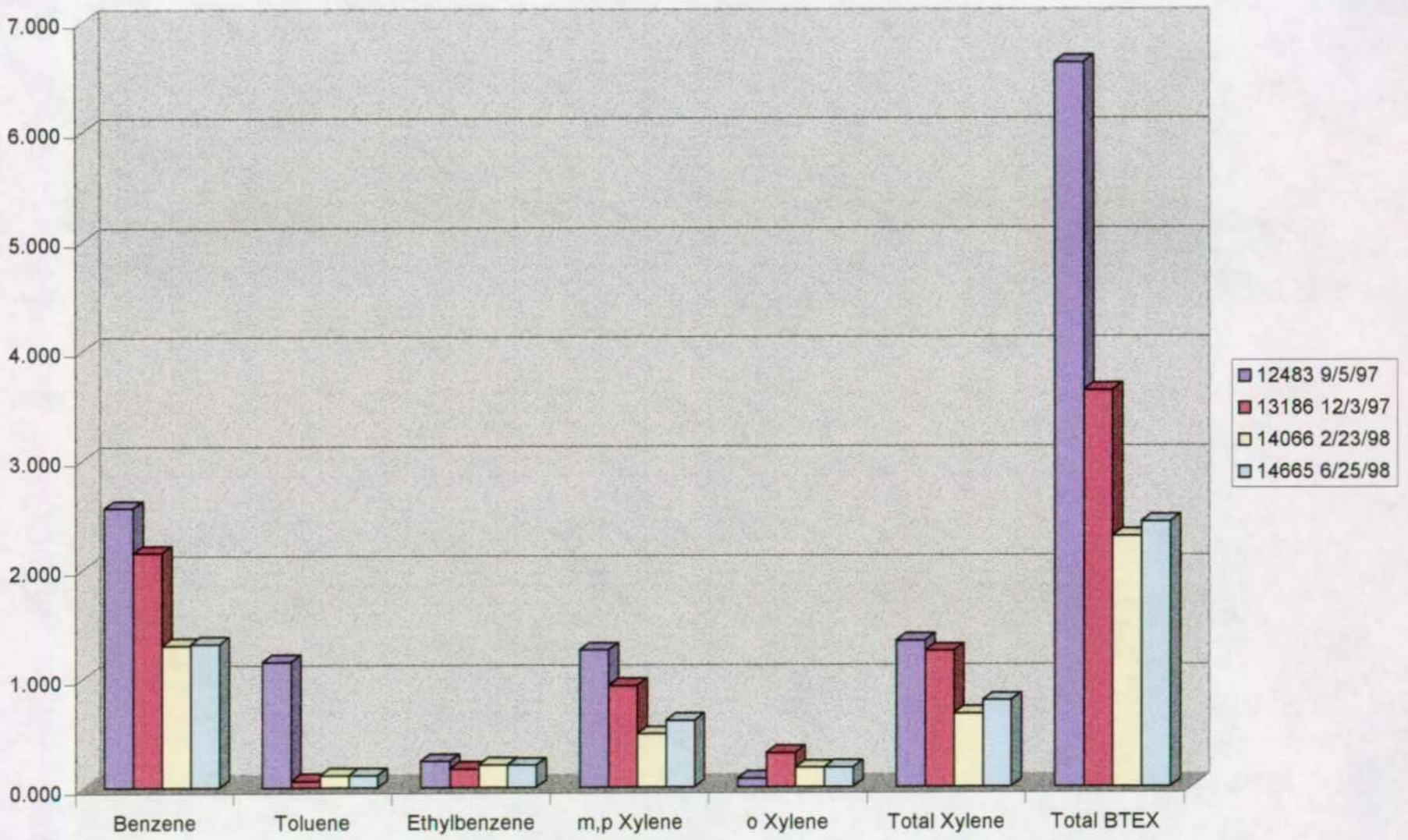
Present Status
All monitoring wells show a very slight reduction in BTEX concentrations over the past year. The rate of decline has been rather marginal due in large part to the lack of recharge to the aquifer during the sampling period.

Future Remediation Activities
We will install a fourth monitoring well within thirty days of the OCD's approval of this plan.

Monitor Well # 10
Sohio State # 1
Sampling Results

Lab. #	12483	13186	14066	14665
Sample Date	9/5/97	12/3/97	2/23/98	6/25/98
Benzene	2.559	2.148	1.301	1.313
Toluene	1.148	0.062	0.113	0.113
Ethylbenzene	0.243	0.173	0.209	0.206
m,p Xylene	1.257	0.930	0.490	0.611
o Xylene	0.081	0.313	0.179	0.180
Total Xylene	1.338	1.243	0.669	0.791
Total BTEX	6.626	3.626	2.292	2.423

Monitor Well # 10



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Sohio State # 1
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Ethylbenzene	0.141	0.116	0.130	0.118
m,p Xylene	0.628	0.535	0.376	0.379
o Xylene	0.292	0.192	0.148	0.174
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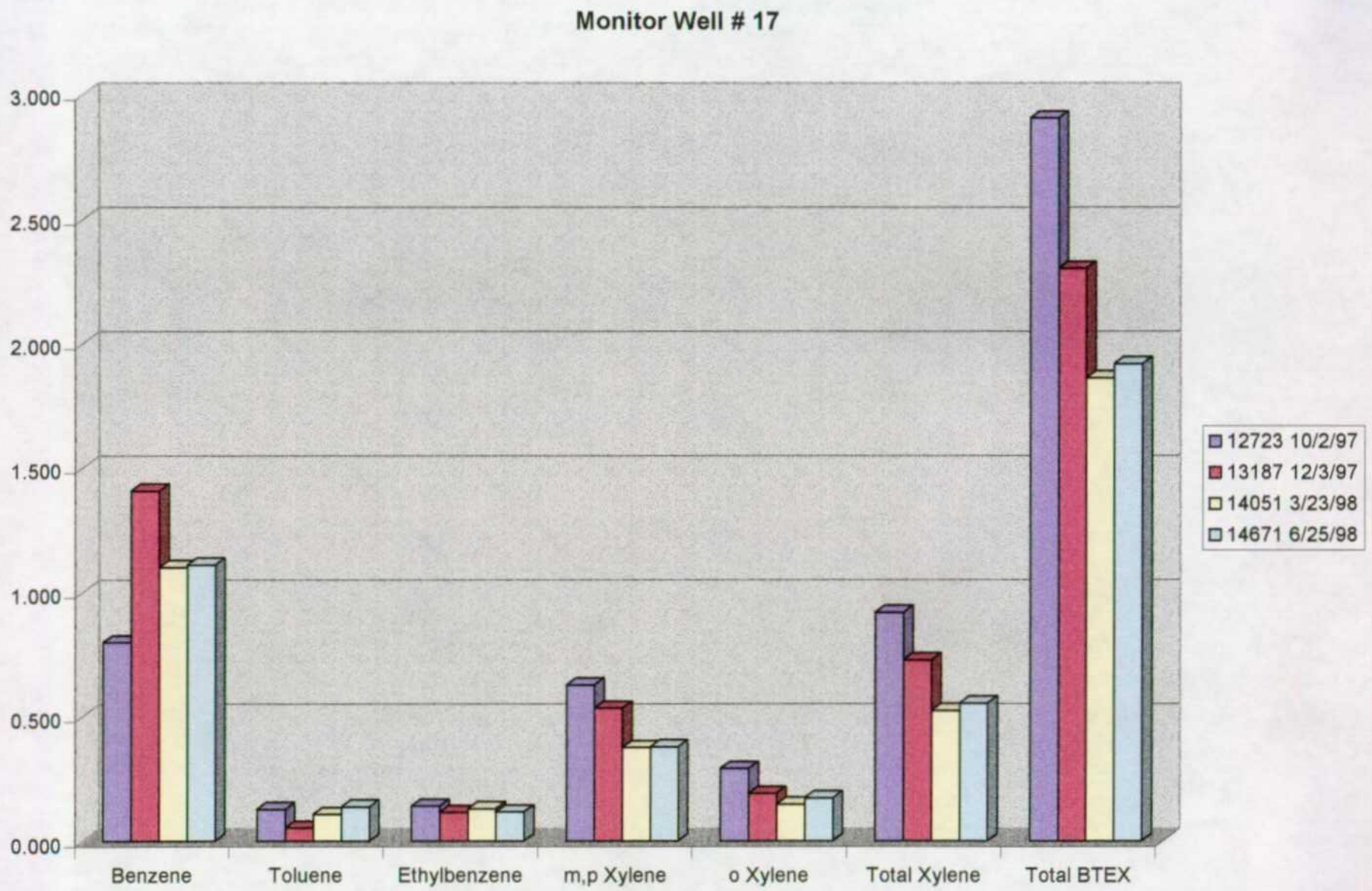
Monitor Well # 17
3.000
2.500
2.000
1.500
1.000
0.500
0.000
Benzene
Toluene
Ethylbenzene
m,p Xylene
o Xylene
Total Xylene
Total BTEX
12723 10/2/97
13187 12/3/97
14051 3/23/98
14671 6/25/98

Monitor Well # 18
Sohio State # 1
Sampling Results

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m,p Xylene	0.553	0.001	0.823	0.589
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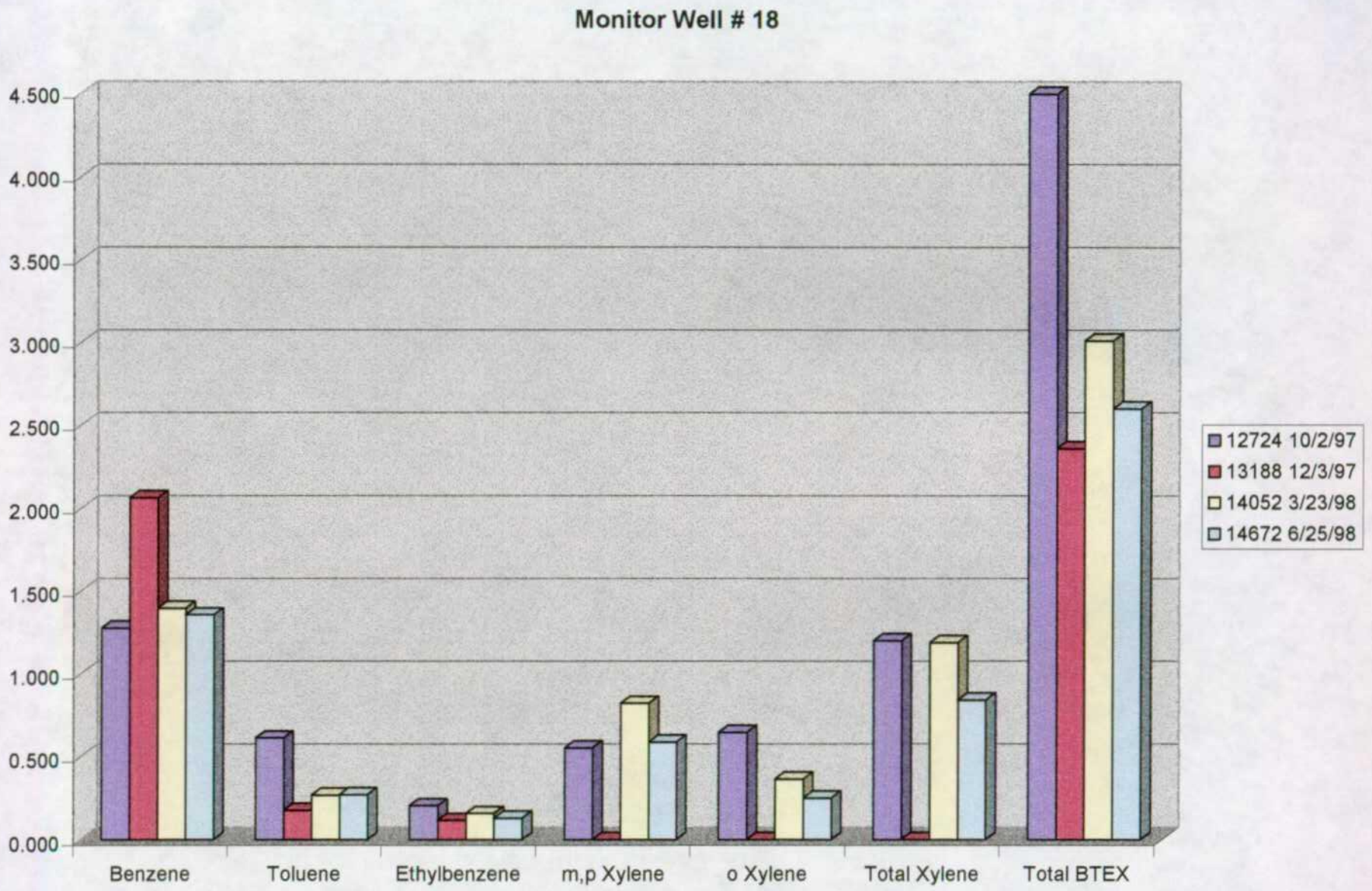
Total BTEX	4.498	2.361	3.013	2.601


Monitor Well # 18
4.500
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
12724 10/2/97
13188 12/3/97
14052 3/23/98
14672 6/25/98

Tipperary
CORPORATION

633 Seventeenth Street
Suite 1550
Denver, Colorado 80202

April 2, 1998

CERTIFIED MAIL

Mr. William C. Olson
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

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

Dear Mr. Olson:

Please find enclosed additional results from our monitor wells in the subject project area. These results are from water samples taken on March 23, 1998. The total BTEX concentrations have declined significantly from the December 1997 sample results. We are currently planning to analyze water samples quarterly from the project monitor wells.

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: Wayne Price, NMOCD Hobbs Office

Enclosure

Executive Summary
Tipperary Corporation
Tatum Pit Closure Project
March, 1998 Well Sampling

Procedures

On March 23, 1998, Mr. Vic Vice, Tipperary Production Foreman, sampled the fluid contents of twenty-three monitoring wells in accordance with WEQP-76. The samples were delivered the next day to Environmental Labs of Texas and results provided to Whole Earth Environmental on March 26, 1998. Analysis methods and QA / QC data are provided on the laboratory report.

Whole Earth prepared various spreadsheets and graphs comparing the results to those of two prior sampling events.

Results

The total BTEX concentrations within the monitoring wells are shown to decline by an average of 20% per quarter. There was a 39% increase in the number of wells having all individual BTEX compound concentrations within WQCC standards. Though benzene remains the principal contaminant, the benzene concentrations were reduced by an average of 31% from the December sampling indicating that the "slug" resultant from the closure activities is now passing the monitoring perimeter.

Conclusions

The process of natural attenuation is demonstrated to be working. In June one and possibly two pit sites should be considered for final closure as it is expected that they will have shown four consecutive quarters of BTEX concentrations falling below New Mexico WQCC standards.

The construction of any additional delineation wells is not recommended at this time. One additional sampling round should provide us with enough statistical data to forecast which wells (if any) will require further testing.

Tipperary Corporation
Sampling Instructions
June 1, 1998 Sampling Round

1. Sample Monitor Wells # 1-24 as performed on 3/23/98 sampling round.

2. Sample Iva COM source well for BTEX. If results are acceptable, we will then immediately test for PAH's. If PAH results are acceptable, we will request formal closure from the State. *(The State may require additional witnessed sampling for final closure).*

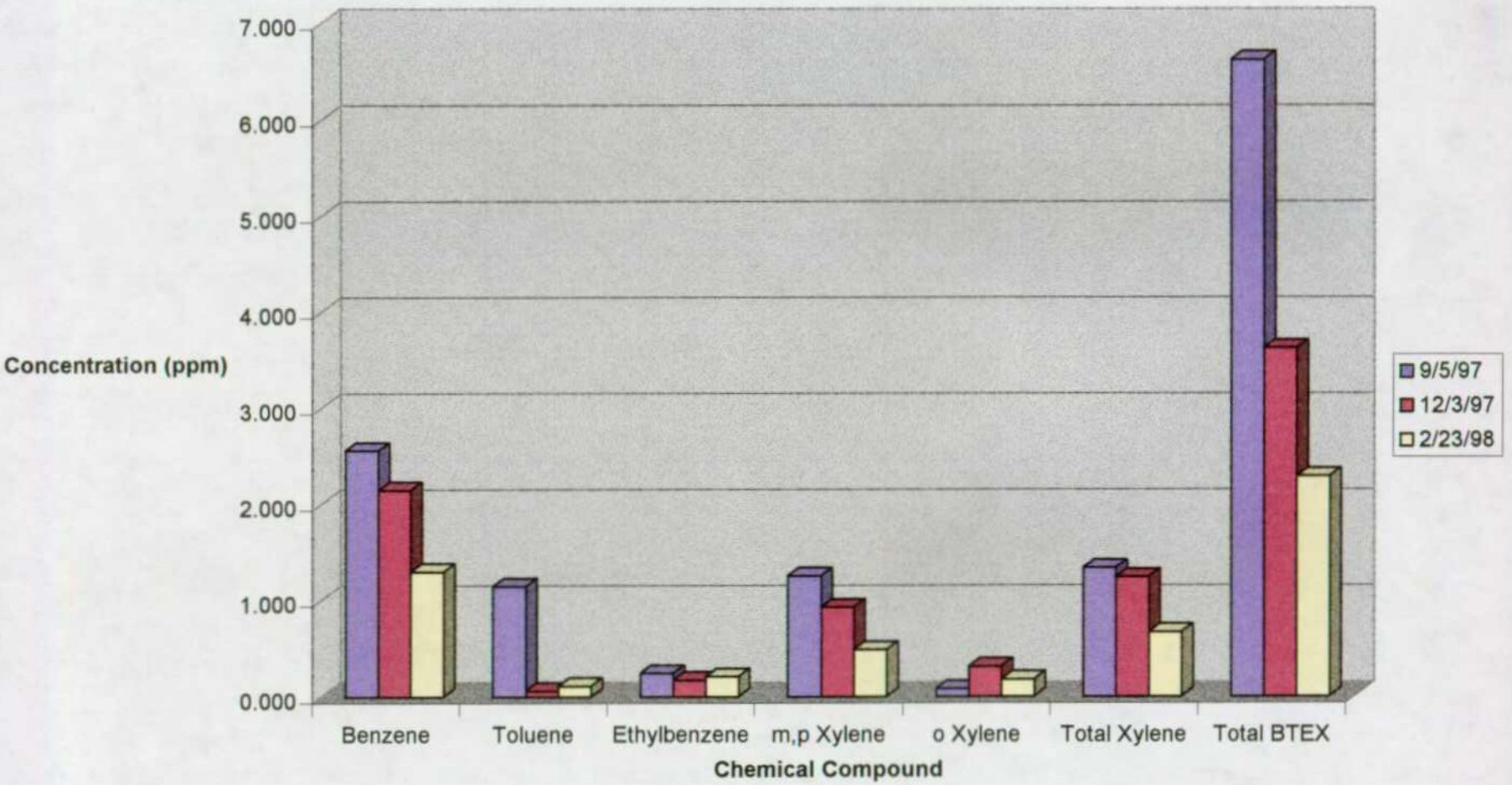
3. Sample Vera for PAH's. Use 1 liter amber jar with no preservatives for PAH and 1 liter clear jar with H_2SO_4 preservative for metals in addition to your normal BTEX sample vial. If PAH's are acceptable, we will request immediate closure. *(PAH & RCRA 8 metals were all within limits on 9/5/97 sampling).*

4. Save G.S. State monitor well # 12 for last. Pump well bore for at least 30 minutes in an attempt to remove all of the free product from the sample. If free product is still present, forward the sample to the lab anyway with instructions to additionally run TPH analysis.

Monitor Well # 10
Sohio State # 1
Sampling Results

Lab. #	12483	13186	14066
Sample Date	9/5/97	12/3/97	2/23/98
Benzene	2.559	2.148	1.301
Toluene	1.148	0.062	0.113
Ethylbenzene	0.243	0.173	0.209
m,p Xylene	1.257	0.930	0.490
o Xylene	0.081	0.313	0.179
Total Xylene	1.338	1.243	0.669
Total BTEX	6.626	3.626	2.292

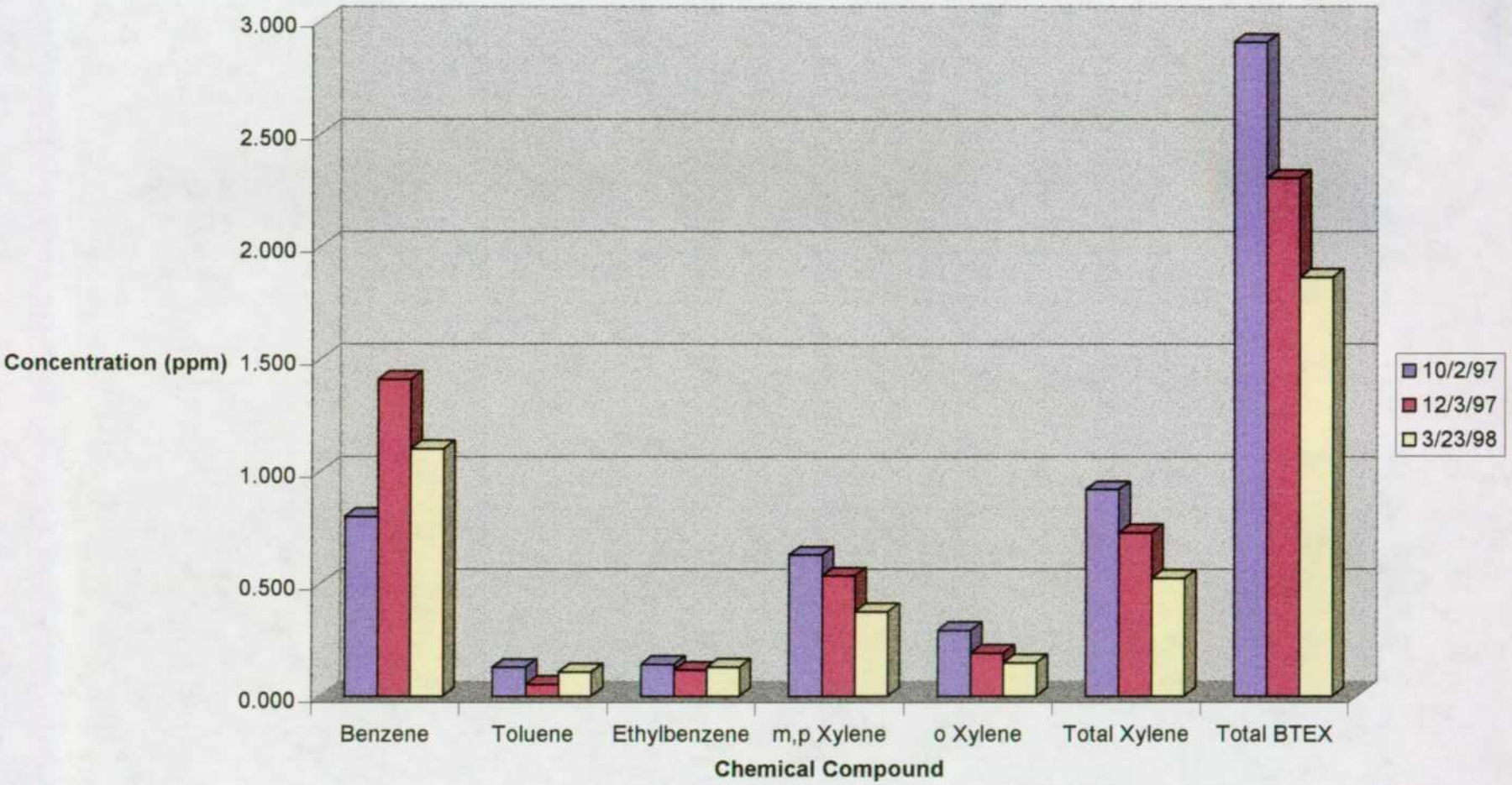
Monitor Well # 10



Monitor Well # 17
Sohio State # 1
Sampling Results

Lab. #	12723	13187	14051
Sample Date	10/2/97	12/3/97	3/23/98
Benzene	0.799	1.409	1.101
Toluene	0.128	0.053	0.108
Ethylbenzene	0.141	0.116	0.130
m,p Xylene	0.628	0.535	0.376
o Xylene	0.292	0.192	0.148
Total Xylene	0.920	0.727	0.524
Total BTEX	2.908	2.305	1.863

Monitor Well # 17



Monitor Well # 18
Sohio State # 1
Sampling Results

Lab. #	12724	13188	14052
Sample Date	10/2/97	12/3/97	3/23/98
Benzene	1.276	2.063	1.396
Toluene	0.614	0.178	0.269
Ethylbenzene	0.206	0.118	0.159
m,p Xylene	0.553	0.001	0.823
o Xylene	0.648	0.001	0.366
Total Xylene	1.201	0.002	1.189
Total BTEX	4.498	2.361	3.013

Monitor Well # 18