

**AP - 012**

**ANNUAL  
MONITORING REPORT**

**YEAR(S):  
2000**

**ANNUAL MONITORING REPORT**

**EOTT ENERGY CORP.  
TNM 98-05A  
LEA COUNTY, NEW MEXICO**

**PREPARED FOR:**

**EOTT PIPELINE COMPANY  
P. O. BOX  
MIDLAND, TEXAS 79704**

**Ms. Lennah Frost**

**PREPARED BY:**

**ENVIRONMENTAL TECHNOLOGY GROUP, INC.  
4600 WEST WALL STREET  
MIDLAND, TEXAS 79704**

**March 2000**

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## **INTRODUCTION**

Environmental Technology Group, Inc. (ETGI), on behalf of EOTT Energy Corp. (EOTT), prepared this annual report in compliance with the New Mexico Oil Conservation Division (ODC) letter of May 1998, requiring submittal of an annual report by April 1 of each year. The report presents the results of the quarterly ground water monitoring events only. Additional site activities and remedial work is summarized in reports previously submitted to the OCD. For reference, a site location map is provided as Figure 1.

Ground water monitoring was conducted during four quarterly events in 1999 to assess the levels and extent of dissolved phase and free phase petroleum hydrocarbon constituents. The groundwater monitoring events consisted of measuring static water levels in the monitoring wells, checking for the presence of phase-separated hydrocarbons (PSH), and purging and sampling of each well exhibiting sufficient recharge. Monitoring wells containing measurable levels of PSH were not sampled.

## **FIELD ACTIVITIES**

The site monitoring wells were gauged and sampled on February 3, May 12, August 23 and November 29, 1999. During each sampling event, the monitoring wells, designated to be sampled, were purged of approximately 3 well volumes of water or until the wells were dry using a PVC bailer or electrical Grundfos Pump. Groundwater was allowed to recharge and samples were obtained using disposable Teflon samplers. Monitoring wells with a measurable presence of PSH were not sampled. Water samples were stored in clean, glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a polystyrene tank and introduced into the existing ground water treatment system.

## **GROUNDWATER GRADIENT**

Locations of the monitoring wells and the inferred ground water gradient, as measured on November 29, 1999, are depicted on Figure 2. The ground water elevation data are provided as Table 1. Groundwater elevation contours, generated from the final semi-annual event of 1999 water level measurements, indicated a general gradient of approximately 0.0007 ft/ft to the southeast. The depth to groundwater, as measured from the top of the well casing, ranged between 46.18 to 49.70 feet.

A measurable thickness of PSH has been detected in monitoring wells MW-1 and MW-2 throughout the year. The thickness of PSH in these well remained consistent during the year until the final monitoring event, when the measured thickness decreased substantially as shown on Table 1. A thickness of 0.97 feet of PSH was detected in monitoring well MW-10 on November 29, 1999. This was the first monitoring event for the recently completed wells. Recovery of PSH from the well was implemented in early December 1999, utilizing a down-hole skimmer pump as described in the recently approved Abatement Plan.

## **LABORATORY RESULTS**

Ground water samples obtained during the first two sampling events were mailed to Xenco Laboratories in San Antonio, Texas. Ground water samples collected during the latter two events were hand delivered to Environmental Laboratory of Texas, Midland, Texas for determination of benzene, toluene, ethylbenzene and total xylenes (BTEX) concentrations by EPA Method SW846-8020 and 8021B. The ground water chemistry data are provided as Table 2 and the Labatory Reports are provided as Appendix A.

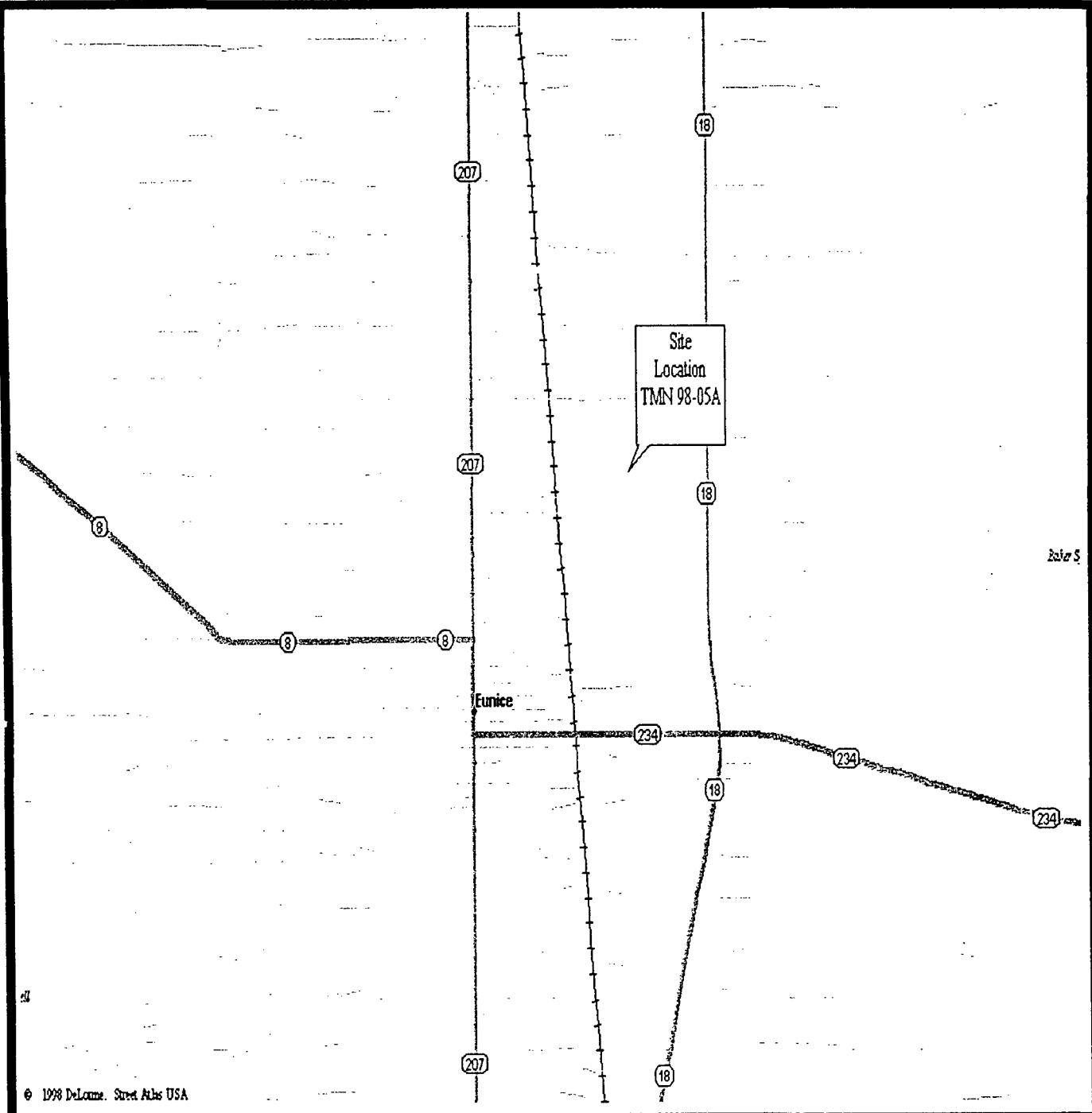
Laboratory results for ground water samples collected from monitoring wells MW-2 and MW-3 indicate that benzene concentrations are consistently above MCLs. Benzene concentrations in samples from monitoring well MW-2 appear to be increasing, while benzene concentrations in samples from monitoring well MW-3 appear to be generally stable. Dissolved phase concentrations of BTEX were below detection limits in the samples collected from monitoring well MW-1.

## **SUMMARY**

This report presents the results of monitoring activities for the annual monitoring period of calendar year 1999. On November 30, 1999, 2.20 feet of PSH was detected in monitoring well MW-4 and 3.61 feet of PSH was measured in monitoring well MW-5.. This was the first monitoring event for the recently completed wells. Recovery of PSH from the well will be implemented in early February 2000, utilizing a down-hole skimmer pump as described in the recently approved Abatement Plan.

Laboratory results for ground water samples collected from monitoring wells MW-2 and MW-3 indicate that dissolved phase benzene concentrations are consistently above MCLs. Benzene concentrations in samples from monitoring well MW-2 appear to be increasing, while benzene concentrations in samples from monitoring well MW-3 appear to be generally stable. Dissolved phase concentrations of BTEX were below detection limits in the samples collected from monitoring well MW-1.

## **FIGURES**



**FIGURE  
1**

Not To Scale

Site Location Map  
EOTT Energy Corp.  
Eott Release Site 98-05A  
Lea County, NM

Environmental  
Technology  
Group, Inc.

11 - 22 - 99 RS

ETGI Project # EOT 1026C

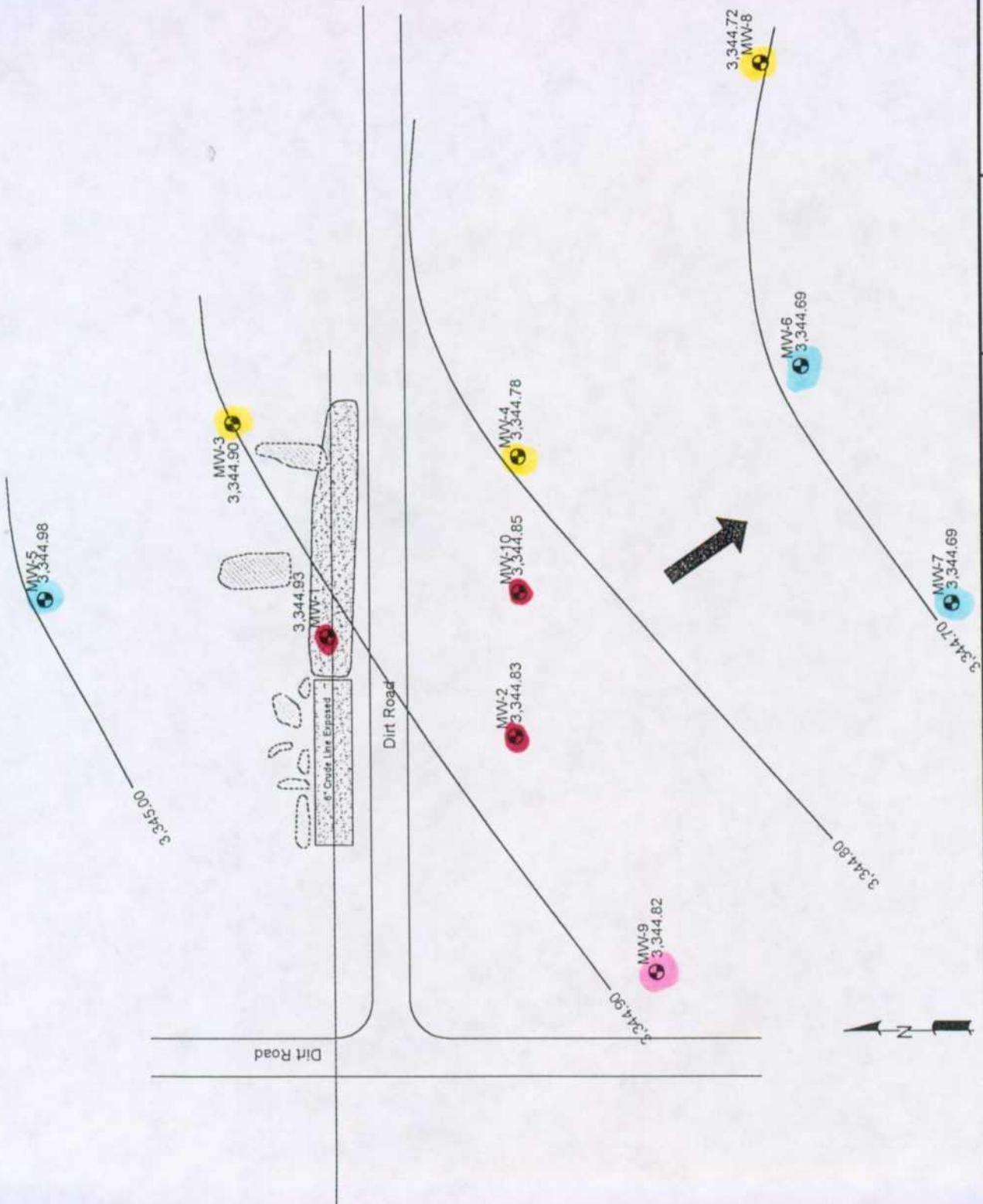


		Figure 2 Inferred Ground Water Contours 10/29/99		Environmental Technology Group, Inc.
Excavation Backfilled	—	Inferred Ground Water Gradient Contours	3,344.82	TNM 98-05A Lea County, NM
Legend:	<ul style="list-style-type: none"> <li>● Existing Monitoring Wells</li> <li>□ Stockpile Soil</li> <li>— Inferred Ground Water Flow Direction</li> <li>— Inferred Ground Water Gradient Contours</li> </ul>			<p>Scale 1:800 September 28, 1999 ETG Environmental Technology Group, Inc.</p>

**TABLES**

**TABLE 1**  
**GROUNDWATER ELEVATION TABLE**  
**TNM 98-05A**  
**LEA COUNTY, NM**  
**ETGI PROJECT# EOT1015C**

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW-1	02/03/99	3,390.57	-	49.57	3.54	3,344.01
MW-1	05/12/99	3,390.57	-	49.31	3.32	3,344.01
MW-1	08/13/99	3,390.57	-	49.51	3.36	3,343.79
MW-1	11/29/99	3,390.57	-	45.84	0.23	3,344.93
MW-2	02/03/99	3,390.85	-	49.37	2.84	3,343.89
MW-2	05/12/99	3,390.85	-	49.02	2.56	3,344.01
MW-2	08/13/99	3,390.85	-	49.38	2.73	3,343.79
MW-2	11/29/99	3,390.85	-	46.25	0.27	3,344.83
MW-3	02/03/99	3,391.08	-	47.09	ND	3,343.99
MW-3	05/12/99	3,391.08	-	47.06	ND	3,344.02
MW-3	08/13/99	3,391.08	-	47.24	ND	3,343.84
MW-3	11/29/99	3,391.08	-	46.18	ND	3,344.90
MW-4	02/03/99	3,390.81	-	47.01	ND	3,343.80
MW-4	05/12/99	3,390.81	-	46.91	ND	3,343.90
MW-4	08/13/99	3,390.81	-	47.16	ND	3,343.65
MW-4	11/29/99	3,390.81	-	46.03	ND	3,344.78
MW-5	11/29/99	3,391.53	-	46.55	ND	3,344.98
MW-6	11/29/99	3,391.14	-	46.45	ND	3,344.69
MW-7	11/29/99	3,391.21	-	46.52	ND	3,344.69
MW-8	11/29/99	3,391.14	-	46.42	ND	3,344.72
MW-9	11/29/99	3,391.47	-	46.45	ND	3,344.82
MW-10	11/29/99	3,391.26	-	47.23	0.97	3,344.85

**TABLE 2**  
**GROUND WATER CHEMISTRY**  
**TNM 98-05A**  
**LEA COUNTY, NEW MEXICO**  
**ETGI PROJECT # EOT1015C**

SAMPLE	SAMPLE DATE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYLBENZENE (mg/L)	mp-XYLENE (mg/L)	o-XYLENE (mg/L)
MW-3	02/03/99	0.012	0.006	0.001	<0.002	<0.001
MW-3	05/12/99	0.013	0.009	<0.001	<0.002	<0.001
MW-3	08/23/99	0.004	0.006	0.001	0.001	0.001
MW-3	11/29/99	0.003	0.003	0.001	0.001	<0.001
MW-4	02/03/99	0.051	0.036	0.006	0.004	<0.001
MW-4	05/12/99	0.221	0.141	0.024	0.023	0.009
MW-4	08/23/99	0.071	0.043	0.010	0.006	0.003
MW-4	11/29/99	0.002	0.002	0.009	0.005	0.001
MW-5	11/29/99	<0.001	<0.001	<0.001	<0.001	<0.001
MW-6	11/29/99	<0.001	<0.001	<0.001	<0.001	<0.001
MW-7	11/29/99	<0.001	<0.001	<0.001	<0.001	<0.001
MW-8	11/29/99	0.004	0.003	0.001	0.002	<0.001
MW-9	11/29/99	0.013	0.009	0.002	0.003	0.001

NOTE: Monitor Wells 5, 6, 7, 8, & 9 were installed 4Q99

Methods: EPA SW 846-8020, 5030

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## **APPENDIX A**



11381 Meadowglen Suite L  
Houston, Texas 77082-2647  
(281) 589-0692 Fax: (281) 589-0695  
Houston - Dallas - San Antonio - Latin America

February 10, 1999

Project Manager: S. Grover/T. Nix  
KEI Consultants, Inc.  
5309 Wurzbach Rd. Suite 100  
San Antonio, TX 78238

Reference: **XENCO Report No.: -90449**  
**Project Name: TNMPL**  
**Project ID: 810060-1-0**  
**Project Address: Lea Co,NM**

Dear S. Grover/T. Nix:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with XENCO Chain of Custody Number -90449.r All results being reported to you apply only to the samples analyzed, properly identified with a Laboratory ID number. This letter documents the official transmission of the contents of the report and validates the information contained within.

All the results for the quality control samples passed thorough examination. Also, all parameters for data reduction and validation checked satisfactorily. In view of this, we are able to release the analytical data for this report within acceptance criteria for accuracy, precision, completeness or properly flagged.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 3 years in our archives and after that time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in COC No. -90449r will be filed for 60 days, and after that time they will be properly disposed of without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

XENCO operates under the A2LA guidelines. Our Quality System meets ISO/IEC Guide 25 requirements which is strictly implemented and enforced through our standard QA/QC procedures.

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Sincerely,

A handwritten signature in black ink, appearing to read "Eddie L. Clemons, II".

Eddie L. Clemons, II

QA/QC Manager

*Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.*

*Certified and approved by numerous States and Agencies.*

*A Small Business and Minority Status Company that delivers SERVICE and QUALITY!*



## ANALYTICAL CHAIN OF CUSTODY REPORT CHRONOLOGY OF SAMPLES

KEI Consultants, Inc.

Project ID: 810060-1-0

Project Manager: S. Grover/T. Nix

Project Location: Lea Co, NM

Project Name: TNMPL

XENCO COC#: -90449  
Date Received in Lab: Feb 4, 1999 10:20 by LY  
XENCO contact: Carlos Castro/Karen Olson

Field ID	Lab. ID	Method Name	Method ID	Units	Turn Around	Sample Collected	Addition Requested	Date and Time	
								Extraction	Analysis
1 MW-3	90449-001	BTEX	SW-846	ppm	10 days	Feb 3, 1999 09:00		Feb 9, 1999 by HL	Feb 9, 1999 18:53 by HL
2 MW-4	90449-002	BTEX	SW-846	ppm	10 days	Feb 3, 1999 09:30		Feb 9, 1999 by HL	Feb 9, 1999 18:10 by HL

**KEI Consultants, Inc.**

*Project Name: TNMPL*

Project ID: 810060-1-0

Project Manager: S. Grover/T. Nix

Project Location: Lea Co, NM

Date Received in Lab : Feb 4, 1999 10:20

Date Report Faxed: Feb 10, 1999

**XENCO contact :** Carlos Castro/Karen Olson

<b>Analysis Requested</b>	<i>Lab ID:</i> <i>Field ID:</i> <i>Depth:</i> <i>Matrix:</i> <i>Sampled:</i>	90449 001 MW-3 Liquid 02/03/99 09:00	90449 002 MW-4 Liquid 02/03/99 09:30		
BTEX EPA 8021B	Analyzed: <i>Units:</i>	02/09/99 ppm	R.L.	02/09/99 ppm	R.L.
Benzene		0.012 (0.001)		0.051 (0.001)	
Toluene		0.006 (0.001)		0.036 (0.001)	
Ethylbenzene		0.001 (0.001)		0.006 (0.001)	
m,p-Xylene		< 0.002 (0.002)		0.004 (0.002)	
o-Xylene		< 0.001 (0.001)		< 0.001 (0.001)	
Total BTEX		0.019		0.097	

This report summary, and the entire report it represents, has been made for the exclusive and confidential use of KEI Consultants, Inc..

The interpretations and results expressed through this analytical report represent the best judgment of XENCO Laboratories. Xenco Laboratories, however, assumes no responsibility and makes no warranty to the end use of the data hereby presented.



Eddie L. Clemons, II  
QA/QC Manager



## Certificate Of Quality Control for Batch : 19A25A73

**SW- 846 5030/8021B ITRIX**

Date Validated: Feb 10, 1999 14:30  
Date Analyzed: Feb 9, 1999 15:25

Analyst: HL  
Matrix: Liquid

### BLANK SPIKE / BLANK SPIKE DUPLICATE AND RECOVERY

Parameter	[A]		[B]		[C]		[D]		[E]		[F]		[G]		[H]		[I]		[J]	
	Blank Result	Blank Spike Result	Blank Spike Duplicate Result	Blank Spike Amount	Blank Spike ppm	Detection Limit	Blank Spike ppm	Blank Amount	Blank Spike ppm	Blank Detection Limit	Blank Spike ppm	Blank Recovery %	QC	QC	Blank Spike Recovery %	QC	QC	Blank Spike Recovery %	QC	Blank Spike Recovery %
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	Spike Relative Difference %	Recovery %	B.S.D.	Recovery %	B.S.D.	Recovery %	Range %	Qualifer
Benzene	< 0.0010	0.0984	0.0938	0.1000	0.0010	20.0	20.0	20.0	20.0	20.0	4.8	98.4	93.8	65-135						
Toluene	< 0.0010	0.1010	0.0932	0.1000	0.0010	20.0	20.0	20.0	20.0	20.0	8.0	100.9	93.2	65-135						
Ethylbenzene	< 0.0010	0.1010	0.0942	0.1000	0.0010	20.0	20.0	20.0	20.0	20.0	7.0	100.9	94.2	65-135						
m,p-Xylene	< 0.0020	0.2060	0.1910	0.2000	0.0020	20.0	20.0	20.0	20.0	20.0	7.6	103.0	95.5	65-135						
o-Xylene	< 0.0010	0.0998	0.0882	0.1000	0.0010	20.0	20.0	20.0	20.0	20.0	12.3	99.8	88.2	65-135						

Spike Relative Difference [F] =  $200 \cdot (B-C) / (B+C)$

Blank Spike Recovery [G] =  $100 \cdot (B-A) / (D)$

B.S.D = Blank Spike Duplicate

B.S.D. Recovery [H] =  $100 \cdot (C-A) / (D)$

N.D. = Below detection limit or not detected

All results are based on MDL and validated for QC purposes

Eddie L. Clemons, II  
QA/QC Manager

Houston Dallas - San Antonio





11381 Meadowglen Suite L  
Houston, Texas 77082-2647  
(281) 589-0692 Fax: (281) 589-0695  
Houston - Dallas - San Antonio - Latin America

May 20, 1999

Project Manager: Stanley Grover  
KEI Consultants, Ltd.  
5309 Wurzbach Rd. Suite 100  
San Antonio, TX 78238

Reference: XENCO Report No.: -91911  
Project Name: EOTT  
Project ID: 810060-1-0  
Project Address: Lea County, NM

Dear Stanley Grover:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with XENCO Chain of Custody Number -91911.G All results being reported to you apply only to the samples analyzed, properly identified with a Laboratory ID number. This letter documents the official transmission of the contents of the report and validates the information contained within.

All the results for the quality control samples passed thorough examination. Also, all parameters for data reduction and validation checked satisfactorily. In view of this, we are able to release the analytical data for this report within acceptance criteria for accuracy, precision, completeness or properly flagged.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 3 years in our archives and after that time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in COC No. -91911G will be filed for 60 days, and after that time they will be properly disposed of without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

XENCO operates under the A2LA guidelines. Our Quality System meets ISO/AEC Guide 25 requirements which is strictly implemented and enforced through our standard QA/QC procedures.

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Sincerely,

A handwritten signature in black ink, appearing to read "Eddie L. Clemons, II".

Eddie L. Clemons, II  
QA/QC Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY!



# ANALYTICAL CHAIN C. CUSTODY REPORT

## CHRONOLOGY OF SAMPLES

KEL Consultants, Ltd.

Project ID: 810060-1-0

Project Manager: Stanley Grover  
Project Location: Lea County, NM

Project Name: EOTT

XENCO COC#: -91911

Date Received in Lab: May 13, 1999 12:57 by DA

XENCO Contact : Carlos Castro/Debbie Simmons

### Date and Time

Field ID	Lab ID	Method Name	Method ID	Units	Turn Around	Sample Collected	Addition Requested	Extraction	Analysis
1 MW-3	91911-001	BTEX	SW-846	ppm	7 days	May 12, 1999 10:45		May 18, 1999 by MGC	May 18, 1999 14:15 by MG
2 MW-4	91911-002	BTEX	SW-846	ppm	7 days	May 12, 1999 11:05		May 18, 1999 by MGC	May 18, 1999 14:38 by MG

## CERTIFICATE OF ANALYSIS SUMMARY -91911

KEI Consultants, Ltd.

Project Name: EOTT

Project ID: 810060-1-0

Project Manager: Stanley Grover

Project Location: Lea County, NM

Date Received in Lab : May 13, 1999 12:57

Date Report Faxed: May 20, 1999

XENCO contact : Carlos Castro/Debbie Simmons

Analysis Requested	Lab ID: Field ID: Depth: Matrix: Sampled:	91911 001 / MW-3  Liquid 05/12/99 10:45	91911 002 / MW-4  Liquid 05/12/99 11:05		
BTEX EPA 8021B	Analyzed: Units:	05/18/99 ppm	R.L.	05/18/99 ppm	R.L.
Benzene		0.013 (0.001)	0.221 (0.001)		
Toluene		0.009 (0.001)	0.141 (0.001)		
Ethylbenzene		< 0.001 (0.001)	0.024 (0.001)		
m,p-Xylene		< 0.002 (0.002)	0.023 (0.002)		
o-Xylene		< 0.001 (0.001)	0.009 (0.001)		
Total BTEX		0.022	0.418		

This report summary, and the entire report it represents, has been made for the exclusive and confidential use of KEI Consultants, Ltd..

The interpretations and results expressed through this analytical report represent the best judgment of XENCO Laboratories. Xenco Laboratories, however, assumes no responsibility and makes no warranty to the end use of the data hereby presented.



Eddie L. Clemons, II  
QA/QC Manager



## Certificate Of Quality Control for Batch: 19A03G11

Date Validated: May 19, 1999 14:00  
Date Analyzed: May 18, 1999 12:23

### SW- 346 5030/3021B RTREX

Analyst: MG  
Matrix: Liquid

1

#### BLANK SPIKE/BLANK SPIKE DUPLICATE AND RECOVERY

Parameter	[A] Blank Result ppm	[B] Blank Spike Result ppm	[C] Blank Spike Duplicate Result ppm	[D] Blank Spike Amount ppm	[E] Spike Detection Limit ppm	[F] Blank Limit Relative Difference %	[G] Spike Relative Difference %	[H] Blank Spike Recovery %	[I] QC Recovery %	[J] B.S.D. Recovery %	[K] Blank Spike Recovery Range %	[L] Qualifier
Benzene	< 0.0010	0.0961	0.0933	0.1000	0.0010	20.0	3.0	96.1	93.3	65-135		
Toluene	< 0.0010	0.0947	0.0920	0.1000	0.0010	20.0	2.9	94.7	92.0	65-135		
Ethylbenzene	< 0.0010	0.1030	0.1001	0.1000	0.0010	20.0	2.9	103.0	100.1	65-135		
m,p-Xylene	< 0.0020	0.1958	0.1907	0.2000	0.0020	20.0	2.6	97.9	95.4	65-135		
o-Xylene	< 0.0010	0.0922	0.0900	0.1000	0.0010	20.0	2.4	92.2	90.0	65-135		

Spike Relative Difference [F] =  $200 \cdot (B-C)/(B+C)$

Blank Spike Recovery [G] =  $100 \cdot (D-A)/D$

B.S.D. = Blank Spike Duplicate

B.S.D. Recovery [H] =  $100 \cdot (C-A)/D$

N.D. = Below detection limit or not detected

All results are based on MDL and validated for QC purposes

Eddie L. Clemons, II  
QA/QC Manager

Houston - Dallas - San Antonio



11381 Meadowglen, Suite L, Houston TX 77082 281-589-0692  
 5309 Wurzbach Road, Suite 104, San Antonio, TX 78238 210-509-3334  
 11078 Morrison Road, Suite D, Dallas, TX 75229 972-481-9999

### ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

On-LINE Help & Technical Services at [XENCO.com](http://XENCO.com)

Company COC No: 333 Work Order No:

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.811

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Company <b>XENCO</b>		Phone <b>210 - 680 - 3767</b>		Lab Only: <b>#9/9/11-81</b>	
Project Name <b>Previously done at XENCO</b>		Project ID <b>810010-10</b>		TAT: 5h 12h 20h 24h 48h 3d 5d 7d 14d 21d Standard TAT is 10 Working Days unless otherwise agreed in writing. But often reported in 5-7 Working Days	
Location <b>La Coubre, NM</b>		Project Manager (PM) <b>M. Howard Horne</b>		Remarks <b>3.6.0ver</b>	
Project Manager (PM) <b>M. Howard Horne</b>		Fax Results to <input type="checkbox"/> PM and/or <b>210 - 680 - 3767</b>		Hold Analysis <b>Quarantine</b>	
Invoice to <input type="checkbox"/> Accounting <input type="checkbox"/> Include Invoice with final Report Attn PM <input type="checkbox"/> Invoice must have a P.O. Bill to: <b>P.O. No.</b>		P.O. No. <b>Call for a P.O.</b>		Addn: PAH above mg/L w. mg/kg's Highest Ht	
Special Dis (RR) RR II DW QAPP See Lab PM Call Proj. PM)		TAT: 5h 12h 24h 48h 3d 5d 7d 14d 21d		SVOAs by 8270 625 PATHS BN8A TCL PPs See List Coll PM	
Specifications		PAHS by 8270 8100 8310		VOAs by 8260 624 BTEX MTBE PPs TCL See List Coll PM	
Sampling		BTEX-MTBE by 8020 8021 8260 602 524 Other		METALS by 6010 BRCRA Tot Pb TCL8 13PP 23TAL See List	
Sampler Name <b>John Sacco</b>		Signature		PAHs by TX1005 418.1 8015GR0 8015DR0 8015jeif	
Sampling Date <b>5-12-99</b>		Time <b>1045</b>		TIPH by TX1005 418.1 8015GR0 8015DR0 8015jeif	
Sample ID <b>H1W-3</b>		Depth <b>3</b>		Type <b>Preservatives</b>	
Matrix A PSW <b>Composite</b>		Container Size <b>2 V</b>		# Containers <b>2</b>	
Matrix B PSW <b>Grob</b>		Depth <b>3</b>		Type <b>Preservatives</b>	
Relinquished to (Initials and Signature) <b>J.S. John Sacco</b>		Date & Time <b>5-12-99 1600</b>		Total Containers per COC: <b>4</b>	
Relinquished to (Initials and Signature) <b>J.S. John Sacco</b>		Date & Time <b>5/3/03 12:57</b>		Rush TATs Fax Due: <b>Final Report Data Package Due Date:</b>	
Preservatives - Various (V), HCl pH<2 (H), H2SO4 pH<2 (S), HNO3 pH<2 (N), NaOH+AsP Acid (NAA), NaAc+NaOH (ZA), (Cool, <4C) (C4), None (N), See Label (SL), Other (O) <b>TYPE Glass Amb (GA), Plastic (P), Other (O)</b>		SIZE: 4oz (4), 8oz (8), 32oz (32), 40ml VOA (V), 11.1 (1), 500ml (5), Toller Bag (B), Wipo (W), Other (O)		Rush Charges are Pre-Approved upon Requesting them. All Terms Apply	

## GROUNDWATER MONITORING AND SAMPLING DATA

JOB NO.: TNA 98-Φ5A

FIELD TECHNICIAN: \_\_\_\_\_

DATE: 23 Aug 95

**DRUMS ON SITE:** \_\_\_\_\_

**CARBON DRUM TRAILER:** (yes/no) \_\_\_\_\_

DISCHARGE SAMPLE (time/date):

pht.

139имо.doc

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.  
ATTN: MR. JESSE TAYLOR  
P.O. BOX 4845  
MIDLAND, TEXAS 79704  
FAX: 915-520-4310

Sample Type: Water  
Sample Condition: Intact/ Iced/HCl  
Project #: TNM 98-05A  
Project Name: None Given  
Project Location: Lea County, N.M.

Sampling Date: 08/23/99  
Receiving date: 08/27/99  
Analysis Date: 08/27/99

ELT#	FIELD CODE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYLBENZENE (mg/L)	m,p-XYLENE (mg/L)	o-XYLENE (mg/L)
19601	MW-3	0.004	0.006	0.001	0.001	0.001
19602	MW-4	0.071	0.043	0.010	0.006	0.003

% IA	97	92	93	91	92
% EA	97	89	85	86	86
BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: EPA SW 846-8020,5030

Raland K. Tuttle  
Raland K. Tuttle

9-2-99  
Date



JOB NO.: Tnum 98-05AFIELD TECHNICIAN: SCDATE: 11-29-99

## GROUND WATER MONITORING AND SAMPLING DATA

WELL NO.	TIME WELL PURGED	TOTAL WELL DEPTH (feet)	DEPTH TO WATER (feet)	HEIGHT WATER COLUMN (feet) (1-2)=J	WELL FACTOR 2"=.16 4"=.65 6"=1.5 8"=4	CALC. WELL VOLUME (gal) (Jx4)=5	TOTAL WATER PURGED (gal) 6	ESTIMATED NO. WELL VOLUMES PURGED 65	1999		SAMPLE CHARACTERISTIC
									TIME SAMPLE TAKEN/DATE	DEPTH TO PSI (feet)	
MW 3	1311	58.85	46.18	12.67	.16	2.02	6.08	3.0	11-29	7	C
CONDITION:	Cover:	Cap:	Casing:	Lock:					1450	26	0
MW 4	1233	57.75	46.53	11.72	.16	1.87	5.62	3.0	11-29	7	C
CONDITION:	Cover:	Cap:	Casing:	Lock:					1435	26	0
MW 5	1128	64.90	46.55	18.35	.16	2.93	8.80	3.0	11-29	7	1150 m/s
CONDITION:	Cover:	Cap:	Casing:	Lock:					1338	26	0
MW 6	1215	57.98	46.95	11.53	.16	1.84	5.53	3.0	11-29	7	C
CONDITION:	Cover:	Cap:	Casing:	Lock:					1423	26	0
MW 7	1204	55.87	46.52	9.35	.16	1.49	4.48	3.0	11-29	7	C
CONDITION:	Cover:	Cap:	Casing:	Lock:					1414	26	0
MW 8	1251	55.06	46.42	8.64	.16	1.38	4.14	3.0	11-29	7	C
CONDITION:	Cover:	Cap:	Casing:	Lock:					1440	26	0
MW 9	1150	54.96	46.65	8.31	.16	1.32	3.98	3.0	11-29	7	C
CONDITION:	Cover:	Cap:	Casing:	Lock:					1400	26	0
CONDITION:	Cover:	Cap:	Casing:	Lock:					Total Removed: _____ gal.		

DRUMS ON SITE: \_\_\_\_\_  
CARBON DRUM TRAILER: (yes/no) \_\_\_\_\_DISCHARGE SAMPLE (time/date): \_\_\_\_\_  
plt. \_\_\_\_\_COMMENTS: Field myriad 6" was ~~1000~~ inop

## GROUND WATER MONITORING AND SAMPLING DATA

JOB NO.: Tum 98-054

FIELD TECHNICIAN: SC

DATE: 1/18-99

WELL NO.	TOTAL WELL DEPTH (feet)	DEPTH TO WATER (feet)	HEIGHT WATER COLUMN (feet) (1-2)=3	WELL FACTOR 2"=.16 4"=.15 6"=.15 4	CALC. WELL VOLUME (gal) (3x4)=5	TOTAL WATER PURGED (gal) 36.6/3	ESTIMATED NO. WELL VOLUMES PURGED G/S	DEPTH TO PSH (feet)	PSH THICKNESS (feet)	SAMPLE CHARACTERISTIC
MW5	64.65	46.05	18.15	.16	3.88	3.88	1	9.0		
mw6	58.15	45.83	12.32	.16	1.97	1.97	1	7.0		
mw7	55.87	45.92	9.95	.16	1.59	1.59	1	7.0		
mw8	56.05	45.79	9.26	.16	1.48	1.48	1	7.0		
mw9	54.97	46.12	8.85	.16	1.41	1.41	1	7.0		
CONDITION:	Cover: Cap: Casing: Lock: Manway/Pad:									
CONDITION:	Cover: Cap: Casing: Lock: Manway/Pad:									
CONDITION:	Cover: Cap: Casing: Lock: Manway/Pad:									
CONDITION:	Cover: Cap: Casing: Lock: Manway/Pad:									
CONDITION:	Cover: Cap: Casing: Lock: Manway/Pad:									
CONDITION:	Cover: Cap: Casing: Lock: Manway/Pad:									
CONDITION:	Cover: Cap: Casing: Lock: Manway/Pad:									
CONDITION:	Cover: Cap: Casing: Lock: Manway/Pad:									
CONDITION:	Cover: Cap: Casing: Lock: Manway/Pad:									
CONDITION:	Cover: Cap: Casing: Lock: Manway/Pad:									
COMMENT:	well development									
DRUMS ON SITE:										
CARBON DRUM TRAILER: (yes/no)										
DISCHARGE SAMPLE (time/date):										
Total Removed:	gnl.									

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.  
 ATTN: MR. JESSE TAYLOR  
 P.O. BOX 4845  
 MIDLAND, TEXAS 79704  
 FAX: 505-392-3780

Sample Type: Water  
 Sample Condition: Intact/ Iodized/HCl  
 Project #: TNM 98-03A  
 Project Name: EOT 1015C  
 Project Location: Eunice, N.M.

Sampling Date: 11/29/99  
 Receiving Date: 12/02/99  
 Analysis Date: 12/2 & 12/3/99

ELTN	FIELD CODE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYLBENZENE (mg/L)	m,p-XYLENE (mg/L)	<i>o</i> -XYLENE (mg/L)
21830	MW-3	0.003	0.003	0.001	0.001	<0.001
21831	MW-4	0.002	0.002	0.009	0.005	0.001
21832	MW-5	<0.001	<0.001	<0.001	<0.001	<0.001
21833	MW-6	<0.001	<0.001	<0.001	<0.001	<0.001
21834	MW-7	<0.001	<0.001	<0.001	<0.001	<0.001
21835	MW-8	0.004	0.003	0.001	0.002	<0.001
21836	MW-9	0.013	0.009	0.002	0.003	0.001
<hr/>						
% IA		101	96	97	97	96
% EA		98	95	98	97	96
BLANK		<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: EPA SW 846-8021B.5030

Roland K. Tuttle  
 Roland K. Tuttle

12-7-99  
 Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.  
ATTN: MR. JESSE TAYLOR  
P.O. BOX 4845  
MIDLAND, TEXAS 79704  
FAX: 505-392-3780

Sample Type: Water  
Sample Condition: Intact/Iced/HCl  
Project #: TNM 98-05A  
Project Name: EOT 1015C  
Project Location: Eunice, N.M.

Sampling Date: 11/29/99  
Receiving Date: 12/02/99  
Analysis Date: 12/2 & 12/3/99

ELT#	FIELD CODE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYLBENZENE (mg/L)	m,p-XYLENE (mg/L)	<i>o</i> -XYLENE (mg/L)
21930	MW-3	0.003	0.003	0.001	0.001	<0.001
21931	MW-4	0.002	0.002	0.009	0.005	0.001
21932	MW-5	<0.001	<0.001	<0.001	<0.001	<0.001
21933	MW-6	<0.001	<0.001	<0.001	<0.001	<0.001
21934	MW-7	<0.001	<0.001	<0.001	<0.001	<0.001
21935	MW-8	0.004	0.003	0.001	0.002	<0.001
21936	MW-9	0.013	0.009	0.002	0.003	0.001
% IA		101	96	97	97	95
% EA		96	95	96	97	96
BLANK		<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: EPA SW 846-8021B,5030

Roland K. Tuttle  
Roland K. Tuttle

12-7-99  
Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.  
ATTN: MR. JESSE TAYLOR  
P.O. BOX 4845  
MIDLAND, TEXAS 79704  
FAX: 505-392-3760

Sample Type: Water  
Sample Condition: Intact/Iced  
Project #: TNM 9.2-05A  
Project Name: EOT 1015C  
Project Location: Eunice, N.M.

Sampling Date: 11/29/99  
Receiving Date: 12/02/99  
Analysis Date: See Below

ELT#	FIELD CODE	Sulfate mg/L	Chloride mg/L	Carbonate mg/L	Bicarbonate mg/L	TDS mg/L
21932	MW-5	245	195	0	50	2077
21933	MW-6	140	204	0	200	868
21934	MW-7	168	177	0	250	889
21935	MW-8	198	213	0	180	921
21836	MW-9	203	213	0	0	2028
QUALITY CONTROL		45	5052	*	*	*
TRUE VALUE		50	5000	*	*	*
% PRECISION		90	101	*	*	*
ANALYSIS DATE		12/10/99	12/8/99	12/8/99	12/8/99	12/8/99

METHODS: EPA 375.4, 325.3, 310, 160.1

Raland K. Tuttle

Raland K. Tuttle

12-21-99

Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.  
 ATTN: MR. JESSE TAYLOR  
 P.O. BOX 4845  
 MIDLAND, TEXAS 79704  
 FAX: 505-392-3760

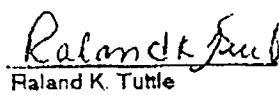
Sample Type: Water  
 Sample Condition: Intact/Iced/HCl  
 Project #: EOT 1015C  
 Project Name: TNM 98-05A  
 Project Location: Eunice, N.M.

Sample Date: 11/29/99  
 Receiving Date: 12/02/99  
 Analysis Date: 12/08/99  
 Analysis Date: Hg 12/08/99

Analyte (mg/L)	MW-5 21932	MW-6 21933	MW-7 21934	MW-8 21935	MW-9 21936	Reporting Limit	%IA	%EA	BLANK	RPD
Aluminum	5.340	4.100	1.000	1.310	3.910	0.0500	95	33	<0.0500	*
Arsenic	0.0180	0.0170	0.0190	0.0140	0.0230	0.0050	100	98	<0.0050	4.00
Barium	0.7300	0.1000	0.0670	0.0990	0.0690	0.0100	95	92	<0.0100	0.53
Beryllium	ND	ND	ND	ND	ND	0.0040	100	100	<0.0040	1.98
Cadmium	0.0050	ND	0.0010	ND	ND	0.0010	98	96	<0.0010	0.00
Calcium	225.0	211.0	99.40	104.0	109.0	1.000	*	*	<1.000	*
Chromium	0.0110	0.0090	ND	0.0060	0.0090	0.0050	96	94	<0.0050	0.53
Cobalt	ND	ND	ND	ND	ND	0.0200	97	94	<0.0200	0.64
Copper	ND	ND	ND	ND	ND	0.0100	95	94	<0.0100	0.42
Iron	4.750	2.550	0.6710	1.050	2.360	0.0500	96	68	<0.0500	1.60
Lead	0.0060	ND	ND	ND	ND	0.0030	100	98	<0.0030	0.00
Magnesium	40.00	43.80	40.00	42.50	40.10	1.000	*	*	<1.000	*
Manganese	0.0800	0.0490	0.0150	ND	0.0300	0.0150	97	134	<0.0150	*
Mercury	ND	ND	ND	ND	ND	0.00020	89	83	<0.00020	0.00
Molybdenum	ND	ND	ND	ND	ND	0.050	97	94	<0.050	*
Nickel	ND	ND	ND	ND	0.0110	0.0100	90	87	<0.0100	0.46
Potassium	9.180	9.010	7.430	10.50	7.620	1.000	*	*	<1.000	*
Selenium	0.0200	0.0200	0.0160	0.0280	0.0120	0.0050	98	92	<0.0050	8.33
Silver	ND	ND	ND	ND	ND	0.0050	98	96	<0.0050	0.00
Sodium	146.0	167.0	185.0	169.0	266.0	1.000	*	*	<1.000	*
Tin	ND	ND	ND	ND	ND	0.0500	107	104	<0.0500	*
Vanadium	0.5040	0.1540	0.1060	0.1370	0.1450	0.0200	99	97	<0.0200	0.62
Zinc	0.0510	0.0220	ND	0.0270	0.0500	0.0200	89	87	<0.0200	0.87
Boron	0.197	0.213	0.320	0.232	0.378	0.050	*	*	<0.050	*
Strontium	2.17	2.15	1.76	2.26	1.79	0.050	*	*	<0.050	*

ND = Below Reporting Limit

METHOD: EPA SW846-6010B, 7470

  
Raland K. Tuttle

12-21-99  
Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.  
 ATTN: MR JESSE TAYLOR  
 P.O. BOX 4845  
 MIDLAND, TEXAS 79704  
 FAX: 505-392-3760

Sample Type: Water  
 Samp. & Condition: Intact/Iced  
 Project #: TNM 98-05A  
 Project Name: EOT 1015C  
 Project Location: Eunice, N.M.  
 Field Code: MW-5

Sampling Date: 11/29/99  
 Receiving Date: 12/02/99  
 Extraction Date: 12/03/99  
 Analysis Date: 12/07/99

EPA SW846 8270 (mg/l)	REPORT LIMIT	ELT#	RPD	%EA	%IA
Naphthalene	0.005	ND			64
Acenaphthylene	0.005	ND			72
Acenaphthene	0.005	ND	11.76	54	62
Fluorene	0.005	ND			76
Phenanthrene	0.005	ND			84
Anthracene	0.005	ND			64
Fluoranthene	0.005	ND			82
Pyrene	0.005	ND	4.88	63	74
Benzo[a]anthracene	0.005	ND			72
Chrysene	0.005	ND			74
Benzo[b]fluoranthene	0.005	ND			70
Benzo[k]fluoranthene	0.005	ND			102
Benzo [a]pyrene	0.005	ND			74
Indeno[1,2,3-cd]pyrene	0.005	ND			78
Dibenz[a,h]anthracene	0.005	ND			84
Benzo[g,h,i]perylene	0.005	ND			76

#### % RECOVERY

Nitrobenzene-d5 SURL	48
2-Fluorobiphenyl SURL	52
Terphenyl-d14 SURL	48

ND= NOT DETECTED

Method: EPA SW 846 8270C, 3510

Raland K. Tuttle

Raland K. Tuttle

12-21-99  
Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.  
 ATTN: MR. JESSE TAYLOR  
 P.O. BOX 4845  
 MIDLAND, TEXAS 79704  
 FAX: 505-392-3760

Sample Type: Water  
 Sample Condition: Intact/Iced  
 Project #: TNM 98-05A  
 Project Name: EOT 1015C  
 Project Location: Eunice, N.M.  
 Field Code: MW-8

Sampling Date: 11/29/99  
 Receiving Date: 12/02/99  
 Extraction Date: 12/03/99  
 Analysis Date: 12/07/99

EPA SW846 8270 (mg/l)	REPORT LIMIT	ELT# 21933	RPD	%EA	%IA
Naphthalene	0.005	ND			64
Acenaphthylene	0.005	ND			72
Acenaphthene	0.005	ND	11.76	54	62
Fluorene	0.005	ND			76
Phenanthrene	0.005	ND			84
Anthracene	0.005	ND			84
Fluoranthene	0.005	ND			82
Pyrene	0.005	ND	4.88	83	74
Benzo[a]anthracene	0.005	ND			72
Chrysene	0.005	ND			74
Benzo[b]fluoranthene	0.005	ND			70
Benzo[k]fluoranthene	0.005	ND			102
Benzo [a]pyrene	0.005	ND			74
Indeno[1,2,3-cd]pyrene	0.005	ND			76
Dibenz[a,h]anthracene	0.005	ND			84
Benzo[g,h,i]perylene	0.005	ND			76

#### % RECOVERY

Nitrobenzene-d5 SURL	58
2-Fluorobiphenyl SURL	58
Terphenyl-d14 SURL	55

ND= NOT DETECTED

Method: EPA SW 846 8270C, 3510

Raland K. Tuttle  
 Raland K. Tuttle

12-21-99  
 Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.  
 ATTN: MR. JESSE TAYLOR  
 P.O. BOX 4845  
 MIDLAND, TEXAS 79704  
 FAX: 505-392-3760

Sample Type: Water  
 Sample Condition: Intact/ Iced  
 Project #: TNM 98-05A  
 Project Name: EOT 1015C  
 Project Location: Eunice, N.M.  
 Field Code: MW-7

Sampling Date: 11/29/99  
 Receiving Date: 12/02/99  
 Extraction Date: 12/03/99  
 Analysis Date: 12/07/99

EPA SW846 8270 (mg/l)	REPORT LIMIT	ELT# 21934	RPD	%EA	%IA
Naphthalene	0.005	ND			64
Acenaphthylene	0.005	ND			72
Acenaphthene	0.005	ND	11.76	54	62
Fluorene	0.005	ND			76
Phenanthrene	0.005	ND			84
Anthracene	0.005	ND			84
Fluoranthene	0.005	ND			82
Pyrene	0.005	ND	4.88	63	74
Benzo[a]anthracene	0.005	ND			72
Chrysene	0.005	ND			74
Benzo[b]fluoranthene	0.005	ND			70
Benzo[k]fluoranthene	0.005	ND			102
Benzo [a]pyrene	0.005	ND			74
Indeno[1,2,3-cd]pyrene	0.005	ND			76
Dibenz[a,h]anthracene	0.005	ND			84
Benzo[g,h,i]perylene	0.005	ND			76
<b>% RECOVERY</b>					
Nitrobenzene-d5 SURR		53			
2-Fluorobiphenyl SURR		56			
Terphenyl-d14 SURR		48			

ND= NOT DETECTED

Method: EPA SW 846 8270C, 3510

Roland K. Tuttle  
 Roland K. Tuttle

12-21-99  
 Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.  
ATTN: MR. JESSE TAYLOR  
P.O. BOX 4845  
MIDLAND, TEXAS 79704  
FAX: 505-392-3780

Sample Type: Water  
Sample Condition: Intact/Iced  
Project #: TNM 98-05A  
Project Name: EOT 1015C  
Project Location: Eunice, N.M.  
Field Code: MW-8

Sampling Date: 11/29/99  
Receiving Date: 12/02/99  
Extraction Date: 12/03/99  
Analysis Date: 12/07/99

EPA SW846 8270 (mg/l)	REPORT LIMIT	ELT#	RPD	%EA	%IA
Naphthalene	0.005	ND			64
Acenaphthylene	0.005	ND			72
Acenaphthene	0.005	ND	11.76	54	62
Fluorene	0.005	ND			76
Phenanthrene	0.005	ND			84
Anthracene	0.005	ND			84
Fluoranthene	0.005	ND			82
Pyrene	0.005	ND	4.88	63	74
Benzo[a]anthracene	0.005	ND			72
Chrysene	0.005	ND			74
Benzo[b]fluoranthene	0.005	ND			70
Benzo[k]fluoranthene	0.005	ND			102
Benzo [a]pyrene	0.005	ND			74
Indeno[1,2,3- <i>cd</i> ]pyrene	0.005	ND			76
Dibenz[a,h]anthracene	0.005	ND			84
Benzo[g,h,i]perylene	0.005	ND			76

#### % RECOVERY

Nitrobenzene-d5 SURR	57
2-Fluorobiphenyl SURR	60
Terphenyl-d14 SURR	59

ND= NOT DETECTED

Method: EPA SW 846 8270C, 3510

Roland K. Tuttle  
Roland K. Tuttle

12-21-99  
Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.  
 ATTN: MR. JESSE TAYLOR  
 P.O. BOX 4845  
 MIDLAND, TEXAS 79704  
 FAX: 505-392-3780

Samp'e Type: Water  
 Sample Condition: Intact/Iced  
 Project #: TNM 98-05A  
 Project Name: EOT 1015C  
 Project Location: Eunice, N.M.  
 Field Code: MW-9

Sampling Date: 11/29/99  
 Receiving Date: 12/02/99  
 Extraction Date: 12/03/99  
 Analysis Date: 12/07/99

EPA SW846 8270 (mg/l)	REPORT LIMIT	ELT# 21936	RPD	%EA	%IA
Naphthalene	0.005	ND			64
Acenaphthylene	0.005	ND			72
Acenaphthene	0.005	ND	11.76	54	62
Fluorene	0.005	ND			76
Phenanthrene	0.005	ND			84
Anthracene	0.005	ND			84
Fluoranthene	0.005	ND			82
Pyrene	0.005	ND	4.88	63	74
Benzo[a]anthracene	0.005	ND			72
Chrysene	0.005	ND			74
Benzo[b]fluoranthene	0.005	ND			70
Benzo[k]fluoranthene	0.005	ND			102
Benzo [a]pyrene	0.005	ND			74
Indeno[1,2,3-cd]pyrene	0.005	ND			76
Dibenz[a,h]anthracene	0.005	ND			84
Benzo[g,h,i]perylene	0.005	ND			78

#### % RECOVERY

Nitrobenzene-d5 SURR	52
2-Fluorobiphenyl SURR	54
Terphenyl-d14 SURR	58

ND= NOT DETECTED

Method: EPA SW 846 8270C, 3510

Raland K. Tuttle  
 Raland K. Tuttle

12-21-99  
 Date



# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

## ENVIRONMENTAL TECHNOLOGY GROUP, INC.

ATTN: MR. JESSE TAYLOR  
 P.O. BOX 4845  
 MIDLAND, TEXAS 79704  
 FAX: 505-392-3760

Sample Type: Water

Sample Date: 11/29/99

Sample Condition: Intact/Iced/HCl

Receiving Date: 12/02/99

Project #: EOT 1015C

Analysis Date: 12/08/99

Project Name: TNM 98-05A

Analysis Date: Hg 12/06/99

Project Location: Eunice, N.M.

Analyte (mg/L)	MW-5 21932	MW-6 21933	MW-7 21934	MW-8 21935	MW-9 21936	Reporting Limit	%IA	%EA	BLANK	RPD
Aluminum	5.340	4.100	1.000	1.310	3.910	0.0500	95	33	<0.0500	*
Arsenic	0.0180	0.0170	0.0190	0.0140	0.0230	0.0050	100	98	<0.0050	4.00
Barium	0.7300	0.1000	0.0670	0.0990	0.0690	0.0100	95	92	<0.0100	0.53
Beryllium	ND	ND	ND	ND	ND	0.0040	100	100	<0.0040	1.98
Cadmium	0.0050	ND	0.0010	ND	ND	0.0010	98	96	<0.0010	0.00
Calcium	225.0	211.0	99.40	104.0	109.0	1.000	*	*	<1.000	*
Chromium	0.0110	0.0090	ND	0.0060	0.0090	0.0050	96	94	<0.0050	0.53
Cobalt	ND	ND	ND	ND	ND	0.0200	97	94	<0.0200	0.64
Copper	ND	ND	ND	ND	ND	0.0100	95	94	<0.0100	0.42
Iron	4.750	2.550	0.6710	1.050	2.360	0.0500	96	68	<0.0500	1.60
Lead	0.0060	ND	ND	ND	ND	0.0030	100	98	<0.0030	0.00
Magnesium	40.00	43.80	40.00	42.50	40.10	1.000	*	*	<1.000	*
Manganese	0.0900	0.0490	0.0150	ND	0.0300	0.0150	97	134	<0.0150	*
Mercury	ND	ND	ND	ND	ND	0.00020	89	83	<0.00020	0.00
Molybdenum	ND	ND	ND	ND	ND	0.050	97	94	<0.050	*
Nickel	ND	ND	ND	ND	0.0110	0.0100	90	87	<0.0100	0.46
Potassium	9.180	9.010	7.430	10.50	7.620	1.000	*	*	<1.000	*
Selenium	0.0200	0.0200	0.0160	0.0280	0.0120	0.0050	98	92	<0.0050	8.33
Silver	ND	ND	ND	ND	ND	0.0050	98	96	<0.0050	0.00
Sodium	146.0	167.0	185.0	169.0	266.0	1.000	*	*	<1.000	*
Tin	ND	ND	ND	ND	ND	0.0500	107	104	<0.0500	*
Vanadium	0.5040	0.1540	0.1060	0.1370	0.1450	0.0200	99	97	<0.0200	0.62
Zinc	0.0510	0.0220	ND	0.0270	0.0500	0.0200	89	87	<0.0200	0.87
Boron	0.197	0.213	0.320	0.232	0.379	0.050	*	*	<0.050	*
Strontium	2.17	2.15	1.76	2.26	1.79	0.050	*	*	<0.050	*

ND = Below Reporting Limit

METHOD: EPA SW846-6010B, 7470

Raland K. Tuttle  
 Raland K. Tuttle

12-21-99  
 Date

# ENVIRONMENTAL LAB OF INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.  
ATTN: MR. JESSE TAYLOR  
P.O. BOX 4845  
MIDLAND, TEXAS 79704  
FAX: 505-392-3760

Sample Type: Water  
Sample Condition: Intact/Iced  
Project #: TNM 98-05A  
Project Name: EOT 1015C  
Project Location: Eunice, N.M.

Sampling Date: 11/29/99  
Receiving Date: 12/02/99  
Analysis Date: See Below

ELT#	FIELD CODE	Sulfate mg/L	Chloride mg/L	Carbonate mg/L	Bicarbonate mg/L	TDS mg/L
21932	MW-5	245	195	0	50	2077
21933	MW-6	140	204	0	200	868
21934	MW-7	168	177	0	250	889
21935	MW-8	198	213	0	180	921
21936	MW-9	203	213	0	0	2028
QUALITY CONTROL		45	5052	*	*	*
TRUE VALUE		50	5000	*	*	*
% PRECISION		90	101	*	*	*
ANALYSIS DATE		12/10/99	12/8/99	12/8/99	12/8/99	12/8/99

METHODS: EPA 375.4, 325.3, 310, 160.1

Raland K. Tuttle  
Raland K. Tuttle

12-21-99  
Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.  
ATTN: MR. JESSE TAYLOR  
P.O. BOX 4845  
MIDLAND, TEXAS 79704  
FAX: 505-392-3760

Sample Type: Water  
Sample Condition: Intact/ Iced  
Project #: TNM 98-05A  
Project Name: EOT 1015C  
Project Location: Eunice, N.M.  
Field Code: MW-5

Sampling Date: 11/29/99  
Receiving Date: 12/02/99  
Extraction Date: 12/03/99  
Analysis Date: 12/07/99

EPA SW846 8270 (mg/l)	REPORT LIMIT	ELT#	RPD	%EA	%IA
Naphthalene	0.005	ND			64
Acenaphthylene	0.005	ND			72
Acenaphthene	0.005	ND	11.76	54	62
Fluorene	0.005	ND			76
Phenanthrene	0.005	ND			84
Anthracene	0.005	ND			84
Fluoranthene	0.005	ND			82
Pyrene	0.005	ND	4.88	63	74
Benzo[a]anthracene	0.005	ND			72
Chrysene	0.005	ND			74
Benzo[b]fluoranthene	0.005	ND			70
Benzo[k]fluoranthene	0.005	ND			102
Benzo [a]pyrene	0.005	ND			74
Indeno[1,2,3-cd]pyrene	0.005	ND			76
Dibenz[a,h]anthracene	0.005	ND			84
Benzo[g,h,i]perylene	0.005	ND			76

#### % RECOVERY

Nitrobenzene-d5 SURR	48
2-Fluorobiphenyl SURR	52
Terphenyl-d14 SURR	48

ND= NOT DETECTED

Method: EPA SW 846 8270C , 3510

Raland K. Tuttle  
Raland K. Tuttle

12-21-99  
Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.  
ATTN: MR. JESSE TAYLOR  
P.O. BOX 4845  
MIDLAND, TEXAS 79704  
FAX: 505-392-3760

Sample Type: Water  
Sample Condition: Intact/ Iced  
Project #: TNM 98-05A  
Project Name: EOT 1015C  
Project Location: Eunice, N.M.  
Field Code: MW-6

Sampling Date: 11/29/99  
Receiving Date: 12/02/99  
Extraction Date: 12/03/99  
Analysis Date: 12/07/99

EPA SW846 8270 (mg/l)	REPORT LIMIT	ELT#	RPD	%EA	%IA
Naphthalene	0.005	ND			64
Acenaphthylene	0.005	ND			72
Acenaphthene	0.005	ND	11.76	54	62
Fluorene	0.005	ND			76
Phenanthrene	0.005	ND			84
Anthracene	0.005	ND			84
Fluoranthene	0.005	ND			82
Pyrene	0.005	ND	4.88	63	74
Benzo[a]anthracene	0.005	ND			72
Chrysene	0.005	ND			74
Benzo[b]fluoranthene	0.005	ND			70
Benzo[k]fluoranthene	0.005	ND			102
Benzo [a]pyrene	0.005	ND			74
Indeno[1,2,3-cd]pyrene	0.005	ND			76
Dibenz[a,h]anthracene	0.005	ND			84
Benzo[g,h,i]perylene	0.005	ND			76

#### % RECOVERY

Nitrobenzene-d5 SURR	56
2-Fluorobiphenyl SURR	56
Terphenyl-d14 SURR	55

ND= NOT DETECTED

Method: EPA SW 846 8270C , 3510

Raland K. Tuttle  
Ralond K. Tuttle

12-21-99  
Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.  
ATTN: MR. JESSE TAYLOR  
P.O. BOX 4845  
MIDLAND, TEXAS 79704  
FAX: 505-392-3760

Sample Type: Water  
Sample Condition: Intact/ Iced  
Project #: TNM 98-05A  
Project Name: EOT 1015C  
Project Location: Eunice, N.M.  
Field Code: MW-7

Sampling Date: 11/29/99  
Receiving Date: 12/02/99  
Extraction Date: 12/03/99  
Analysis Date: 12/07/99

EPA SW846 8270 (mg/l)	REPORT LIMIT	ELT#	RPD	%EA	%IA
Naphthalene	0.005	ND			64
Acenaphthylene	0.005	ND			72
Acenaphthene	0.005	ND	11.76	54	62
Fluorene	0.005	ND			76
Phenanthrene	0.005	ND			84
Anthracene	0.005	ND			84
Fluoranthene	0.005	ND			82
Pyrene	0.005	ND	4.88	63	74
Benzo[a]anthracene	0.005	ND			72
Chrysene	0.005	ND			74
Benzo[b]fluoranthene	0.005	ND			70
Benzo[k]fluoranthene	0.005	ND			102
Benzo [a]pyrene	0.005	ND			74
Indeno[1,2,3-cd]pyrene	0.005	ND			76
Dibenz[a,h]anthracene	0.005	ND			84
Benzo[g,h,i]perylene	0.005	ND			76

#### % RECOVERY

Nitrobenzene-d5 SURR	53
2-Fluorobiphenyl SURR	56
Terphenyl-d14 SURR	48

ND= NOT DETECTED

Method: EPA SW 846 8270C , 3510

Raland K. Tuttle  
Raland K. Tuttle

12-21-99  
Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.  
ATTN: MR. JESSE TAYLOR  
P.O. BOX 4845  
MIDLAND, TEXAS 79704  
FAX: 505-392-3760

Sample Type: Water  
Sample Condition: Intact/ Iced  
Project #: TNM 98-05A  
Project Name: EOT 1015C  
Project Location: Eunice, N.M.  
Field Code: MW-8

Sampling Date: 11/29/99  
Receiving Date: 12/02/99  
Extraction Date: 12/03/99  
Analysis Date: 12/07/99

EPA SW846 8270 (mg/l)	REPORT LIMIT	ELT#	RPD	%EA	%IA
Naphthalene	0.005	ND			64
Acenaphthylene	0.005	ND			72
Acenaphthene	0.005	ND	11.76	54	62
Fluorene	0.005	ND			76
Phenanthrene	0.005	ND			84
Anthracene	0.005	ND			84
Fluoranthene	0.005	ND			82
Pyrene	0.005	ND	4.88	63	74
Benzo[a]anthracene	0.005	ND			72
Chrysene	0.005	ND			74
Benzo[b]fluoranthene	0.005	ND			70
Benzo[k]fluoranthene	0.005	ND			102
Benzo [a]pyrene	0.005	ND			74
Indeno[1,2,3-cd]pyrene	0.005	ND			76
Dibenz[a,h]anthracene	0.005	ND			84
Benzo[g,h,i]perylene	0.005	ND			76

#### % RECOVERY

Nitrobenzene-d5 SURR	57
2-Fluorobiphenyl SURR	60
Terphenyl-d14 SURR	59

ND= NOT DETECTED

Method: EPA SW 846 8270C , 3510

Raland K. Tuttle  
Raland K. Tuttle

12-21-99  
Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.  
 ATTN: MR. JESSE TAYLOR  
 P.O. BOX 4845  
 MIDLAND, TEXAS 79704  
 FAX: 505-392-3760

Sample Type: Water  
 Sample Condition: Intact/Iced  
 Project #: TNM 98-05A  
 Project Name: EOT 1015C  
 Project Location: Eunice, N.M.  
 Field Code: MW-9

Sampling Date: 11/29/99  
 Receiving Date: 12/02/99  
 Extraction Date: 12/03/99  
 Analysis Date: 12/07/99

EPA SW846 8270 (mg/l)	REPORT LIMIT	ELT#	RPD	%EA	%IA
Naphthalene	0.005	ND			64
Acenaphthylene	0.005	ND			72
Acenaphthene	0.005	ND	11.76	54	62
Fluorene	0.005	ND			76
Phenanthrene	0.005	ND			84
Anthracene	0.005	ND			84
Fluoranthene	0.005	ND			82
Pyrene	0.005	ND	4.88	63	74
Benzo[a]anthracene	0.005	ND			72
Chrysene	0.005	ND			74
Benzo[b]fluoranthene	0.005	ND			70
Benzo[k]fluoranthene	0.005	ND			102
Benzo [a]pyrene	0.005	ND			74
Indeno[1,2,3-cd]pyrene	0.005	ND			76
Dibenz[a,h]anthracene	0.005	ND			84
Benzo[g,h,i]perylene	0.005	ND			76

#### % RECOVERY

Nitrobenzene-d5 SURR	52
2-Fluorobiphenyl SURR	54
Terphenyl-d14 SURR	58

ND= NOT DETECTED

Method: EPA SW 846 8270C , 3510

Raland K. Tuttle  
 Raland K. Tuttle

12-21-99  
 Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.  
ATTN: MR. JESSE TAYLOR  
P.O. BOX 4845  
MIDLAND, TEXAS 79704  
FAX: 505-392-3760

Sample Type: Water  
Sample Condition: Intact/ Iced/HCl  
Project #: TNM 98-05A  
Project Name: EOT 1015C  
Project Location: Eunice, N.M.

Sampling Date: 11/29/99  
Receiving Date: 12/02/99  
Analysis Date: 12/2 & 12/3/99

ELT#	FIELD CODE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYLBENZENE (mg/L)	m,p-XYLENE (mg/L)	o-XYLENE (mg/L)
21930	MW-3	0.003	0.003	0.001	0.001	<0.001
21931	MW-4	0.002	0.002	0.009	0.005	0.001
21932	MW-5	<0.001	<0.001	<0.001	<0.001	<0.001
21933	MW-6	<0.001	<0.001	<0.001	<0.001	<0.001
21934	MW-7	<0.001	<0.001	<0.001	<0.001	<0.001
21935	MW-8	0.004	0.003	0.001	0.002	<0.001
21936	MW-9	0.013	0.009	0.002	0.003	0.001
% IA		101	96	97	97	95
% EA		96	95	96	97	96
BLANK		<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: EPA SW 846-8021B,5030

Roland K. Tuttle  
Roland K. Tuttle

12-7-99  
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:	Jesse Taylor		Phone #: (915) 664-9166	ANALYSIS REQUEST		
Company Name & Address:	P.O. Box 4845 Midland TX 79704		FAX # (505) 392-3260			
Project NAME:			Project #: II			
TNM 98-05A			EOT 10/5/98			
Project Location:	Eunice, NM		Sampler Signature:	Jimmy Casas		
LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	VOLUME/AMOUNT	SAMPLING		
				MATRIX	PRESERVATIVE METHOD	DATE
21930	MW 3	2	V X	Y	11-29	1450 X
21931	MW 4	2	V	X		1435
21932	MW 5	5	V S 1/2			1338
21933	MW 6	6				1423
21934	MW 7	5				1414
21935	MW 8	5				1440
21936	MW 9	5	V			1400
Reliinquished by:	Date:		Times:		REMARKS:	Mail Results - K. Durroo
Jesse Taylor	12-2-99	0900			Received by:	Craig
Rellequished by:	Date:		Times:		Received by Laboratory:	Monetary Invoice: Lennah Frost 1015m
Jesse Taylor	12-2-99	1320				

