

1R - 124

REPORTS

DATE:

9-4-1998

ANALYTICAL REPORT 1-83193

for

K.E.I. Consultants, Inc.

Project Manager: Theresa Nix

Project Name: Monument Site 18

Project Id: 610057-6-18-0

September 4, 1998



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September 4, 1998

Project Manager: Theresa Nix
K.E.I. Consultants, Inc.
5309 Wurzbach Rd. Suite 100
San Antonio, TX 78238

Reference: **XENCO Report No.: 1-83193**
Project Name: Monument Site 18
Project ID: 610057-6-18-0
Project Address: Monument, NM

Dear Theresa 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 1-83193. 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. 1-83193 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,



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!*

Project ID: 610057-6-18-0
Project Manager: Theresa Nix
Project Location: Monument, NM

K.E.I. Consultants, Inc.
Project Name: Monument Site 18

Date Received in Lab : Aug 19, 1998 09:35
Date Report Faxed: Sep 4, 1998

XENCO contact : Carlos Castro/Eddie Clemons

Analysis Requested

Metals by ICP EPA 6010	Lab ID: Field ID: Depth: Matrix: Sampled:	183193 001 MW-2 Liquid 08/18/98 11:20	183193 002 MW-5 Liquid 08/18/98 10:30	183193 003 MW-6 Liquid 08/18/98 11:35	183193 004 MW-7 Liquid 08/18/98 11:05	183193 005 MW-8 Liquid 08/18/98 10:46
Aluminum	Analyzed: Units:				08/24/98 mg/L	R.L.
Arsenic					< 0.20 (0.20)	< 0.20 (0.20)
Barium					< 0.10 (0.10)	< 0.10 (0.10)
Beryllium					0.05 (0.02)	0.08 (0.02)
Boron					< 0.01 (0.01)	< 0.01 (0.01)
Cadmium					0.66 (0.20)	0.70 (0.20)
Calcium					< 0.01 (0.01)	< 0.01 (0.01)
Chromium					1140 (25.0)	1490 (25.0)
Cobalt					< 0.05 (0.05)	< 0.05 (0.05)
Copper					< 0.05 (0.05)	< 0.05 (0.05)
Iron					< 0.10 (0.10)	< 0.10 (0.10)
Lead					< 0.10 (0.10)	< 0.10 (0.10)
Magnesium					< 0.05 (0.05)	< 0.05 (0.05)
Manganese					531 (6.3)	562 (6.3)
Molybdenum					0.28 (0.10)	0.36 (0.10)
Nickel					< 0.20 (0.20)	< 0.20 (0.20)
Potassium					< 0.10 (0.10)	< 0.10 (0.10)
Selenium					20.3 (2.5)	24.8 (2.5)
Silicon					< 0.05 (0.05)	< 0.05 (0.05)
Silver					22.4 (0.5)	25.3 (0.5)
Sodium					< 0.05 (0.05)	< 0.05 (0.05)
Strontium					2610 (2.500)	2810 (2.500)
Tin					13.5 (0.1)	15.8 (0.1)
Vanadium					< 0.10 (0.10)	< 0.10 (0.10)
					< 0.05 (0.05)	< 0.05 (0.05)

This report summary, and the entire report it represents, has been made for the exclusive and confidential use of K.E.I. 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

K.E.I. Consultants, Inc.

Project ID: 610057-6-18-0
Project Manager: Theresa Nix
Project Location: Monument, NM

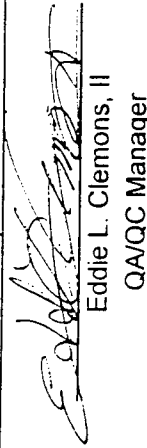
Project Name: Monument Site 18

Date Received in Lab : Aug 19, 1998 09:35
Date Report Faxed: Sep 4, 1998

XENCO contact : Carlos Castro/Eddie Clemons

Analysis Requested		Lab ID: Field ID: Depth: Matrix: Sampled:	183193 001 MW-2 Liquid 08/18/98 11:20	183193 002 MW-5 Liquid 08/18/98 10:30	183193 003 MW-6 Liquid 08/18/98 11:35	183193 004 MW-7 Liquid 08/18/98 11:05	183193 005 MW-8 Liquid 08/18/98 10:46
Metals by ICP EPA 6010	Analyzed: Units:					08/24/98 mg/L	08/24/98 mg/L
Zinc						< 0.10 (0.10)	< 0.10 (0.10)
Total Mercury EPA 7470	Analyzed: Units:					08/27/98 mg/L	08/27/98 mg/L
Mercury						< 0.0011 (0.0011)	< 0.0011 (0.0011)
BTEX EPA 8021B	Analyzed: Units:					08/19/98 ppm	08/19/98 ppm
Benzene			< 0.004 (0.004)	< 0.001 (0.001)	< 0.004 (0.004)	< 0.001 (0.001)	< 0.001 (0.001)
Toluene			< 0.004 (0.004)	< 0.001 (0.001)	< 0.004 (0.004)	< 0.001 (0.001)	< 0.001 (0.001)
Ethylbenzene			0.006 (0.004)	< 0.001 (0.001)	< 0.004 (0.004)	0.001 (0.001)	< 0.001 (0.001)
m,p-Xylenes			0.008 (0.008)	< 0.002 (0.002)	< 0.008 (0.008)	0.003 (0.002)	< 0.002 (0.002)
o-Xylene			< 0.004 (0.004)	< 0.001 (0.001)	< 0.004 (0.004)	0.002 (0.001)	< 0.001 (0.001)
Total BTEX			0.014	N.D.	N.D.	0.006	N.D.
PAHs by GC-MS (610 List) EPA 8270	Analyzed: Units:					08/27/98 mg/L	08/27/98 mg/L
Acenaphthene						< 0.002 (0.002)	< 0.002 (0.002)
Acenaphthylene						< 0.002 (0.002)	< 0.002 (0.002)
Anthracene						< 0.002 (0.002)	< 0.002 (0.002)
Benz(a)anthracene						< 0.002 (0.002)	< 0.002 (0.002)
Benzo(a)pyrene						< 0.002 (0.002)	< 0.002 (0.002)
Benzo(b)fluoranthene						< 0.002 (0.002)	< 0.002 (0.002)
Benzo(g,h,i)perylene						< 0.002 (0.002)	< 0.002 (0.002)
Benzo(k)fluoranthene						< 0.002 (0.002)	< 0.002 (0.002)

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Eddie L. Clemons, II
QA/QC Manager



CERTIFICATE OF ANALYSIS SUMMARY 1-83193

K.E.I. Consultants, Inc.
Project Name: Monument Site 18

Project ID: 610057-6-18-0
Project Manager: Theresa Nix
Project Location: Monument, NM

Date Received in Lab : Aug 19, 1998 09:35
Date Report Faxed: Sep 4, 1998

XENCO contact : Carlos Castro/Eddie Clemons

Analysis Requested		Lab ID: Field ID: Depth: Matrix: Sampled:	183193 001 MW-2 Liquid 08/18/98 11:20	183193 002 MW-5 Liquid 08/18/98 10:30	183193 003 MW-6 Liquid 08/18/98 11:35	183193 004 MW-7 Liquid 08/18/98 11:05	183193 005 MW-8 Liquid 08/18/98 10:46
PAHs by GC-MS (610 List)	Analyzed: Units:					08/27/98 mg/L	08/27/98 mg/L
EPA 8270							
Chrysene						< 0.002 (0.002)	< 0.002 (0.002)
Dibenz(a,h)anthracene						< 0.002 (0.002)	< 0.002 (0.002)
Fluoranthene						< 0.002 (0.002)	< 0.002 (0.002)
Fluorene						< 0.002 (0.002)	< 0.002 (0.002)
Indeno(1,2,3-cd)pyrene						< 0.002 (0.002)	< 0.002 (0.002)
Naphthalene						< 0.002 (0.002)	< 0.002 (0.002)
Phenanthrene						< 0.002 (0.002)	< 0.002 (0.002)
Pyrene						< 0.002 (0.002)	< 0.002 (0.002)
Bicarbonate	Analyzed: Units:					08/25/98 mg/L	08/25/98 mg/L
SM 4500CO2D							
Bicarbonate						248 (4.0)	235 (4.0)
Carbonate	Analyzed: Units:					08/25/98 mg/L	08/25/98 mg/L
SM4500CO2D							
Carbonate						< 4.0 (4.0)	< 4.0 (4.0)
Total Dissolved Solids	Analyzed: Units:					08/24/98 mg/L	08/24/98 mg/L
EPA 160.1							
Total Dissolved Solids						19200 (5.0)	19900 (5.0)
Anions by Ion Chromatography	Analyzed: Units:					08/27/98 mg/L	08/27/98 mg/L
EPA 300.0							
Chloride						11100 (100)	22600 (400)
Sulfate						1160 (100)	1930 (400)

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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 : 18A18G52

EPA 6010 Metals by ICP

Date Validated: Sep 2, 1998 13:36

Analyst: CG

Date Analyzed: Aug 24, 1998 15:29

Matrix: Liquid

BLANK SPIKE ANALYSIS

Parameter	[A]	[B]	[C]	[D]	[E]	[F]	[G] Qualifier
	Blank Result	Blank Spike Result	Blank Spike Amount	Detection Limit	QC	LIMITS	
	mg/L	mg/L	mg/L	mg/L	Blank Spike Recovery %	Recovery Range %	
Aluminum	< 0.05	0.54	0.50	0.05	108.0	70-125	
Arsenic	< 0.050	0.511	0.500	0.050	102.2	70-125	
Barium	< 0.005	0.258	0.250	0.005	103.2	70-125	
Beryllium	< 0.005	0.103	0.100	0.005	103.0	70-125	
Cadmium	< 0.010	0.111	0.100	0.010	111.0	70-125	
Calcium	< 0.13	1.06	1.00	0.13	106.0	70-125	
Chromium	< 0.025	0.253	0.250	0.025	101.2	70-125	
Cobalt	< 0.005	0.259	0.250	0.005	103.6	70-125	
Copper	< 0.008	0.266	0.250	0.008	106.4	70-125	
Iron	< 0.025	0.540	0.500	0.025	108.0	70-125	
Lead	< 0.025	0.508	0.500	0.025	101.6	70-125	
Magnesium	< 0.125	1.084	1.000	0.125	108.4	70-125	
Manganese	< 0.006	0.561	0.500	0.006	112.2	70-125	
Nickel	< 0.025	0.270	0.250	0.025	108.0	70-125	
Potassium	< 0.125	1.015	1.000	0.125	101.5	70-125	
Selenium	< 0.050	0.486	0.500	0.050	97.2	70-125	
Silicon	< 0.050	0.557	0.500	0.050	111.4	70-125	
Silver	< 0.010	0.263	0.250	0.010	105.2	70-125	
Sodium	< 0.250	3.144	4.000	0.250	78.6	70-125	
Strontium	< 0.025	0.539	0.500	0.025	107.8	70-125	
Vanadium	< 0.008	0.248	0.250	0.008	99.2	70-125	
Zinc	< 0.008	0.259	0.250	0.008	103.6	70-125	

Blank Spike Recovery [E] = $100 \times (B-A)/(C)$

N.C. = Not Calculated, data below detection limit

N.D. = Below detection limit

All results are based on MDL and validated for QC purposes only

Eddie L. Clemens, II
QA/QC Manager

Certificate Of Quality Control for Batch : 18A18G52
EPA 6010 Metals by ICP

Date Validated: Sep 2, 1998 13:36

Analyst: CG

Date Analyzed: Aug 24, 1998 15:56

Matrix: Liquid

MATRIX DUPLICATE ANALYSIS

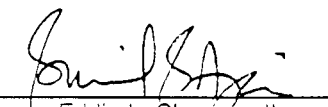
Q.C. Sample ID 183193- 004	[A]	[B]	[C]	[D]	[E]	[F] Qualifier
	Sample Result	Duplicate Result	Detection Limit	QC	LIMITS	
	mg/L	mg/L	mg/L	Relative Difference %	Relative Difference %	
Aluminum	< 0.050	< 0.050	0.050	N.C	25.0	
Arsenic	< 0.050	< 0.050	0.050	N.C	25.0	
Barium	0.052	0.059	0.005	12.6	25.0	
Beryllium	< 0.005	< 0.005	0.005	N.C	25.0	
Boron	0.665	0.682	0.025	2.5	25.0	
Cadmium	< 0.010	< 0.010	0.010	N.C	25.0	
Calcium	1140	1170	0.13	2.6	25.0	
Chromium	< 0.025	< 0.025	0.025	N.C	25.0	
Cobalt	< 0.005	< 0.005	0.005	N.C	25.0	
Copper	< 0.008	< 0.008	0.008	N.C	25.0	
Iron	0.025	< 0.025	0.025	N.C	25.0	
Lead	< 0.025	< 0.025	0.025	N.C	25.0	
Magnesium	531	519	0.13	2.3	25.0	
Manganese	0.275	0.288	0.006	4.6	25.0	
Molybdenum	< 0.025	< 0.025	0.025	N.C	25.0	
Nickel	< 0.025	< 0.025	0.025	N.C	25.0	
Potassium	20.31	20.54	0.13	1.1	25.0	
Selenium	< 0.050	< 0.050	0.050	N.C	25.0	
Silicon	22.40	25.22	0.05	11.8	25.0	

 Relative Difference [D] = $200 \times (B-A) / (B+A)$

N.C. = Not calculated, data below detection limit

N.D. = Below detection limit

All results are based on MDL and validated for QC purposes only


 Eddie L. Clemens, II
 QA/QC Manager



Certificate Of Quality Control for Batch : 18A18G52

EPA 6010 Metals by ICP

Date Validated: Sep 2, 1998 13:36

Analyst: CG

Date Analyzed: Aug 24, 1998 15:56

Matrix: Liquid

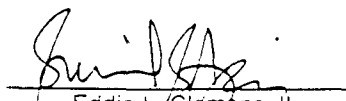
MATRIX DUPLICATE ANALYSIS						
Q.C. Sample ID 183193- 004	[A] Sample Result	[B] Duplicate Result	[C] Detection Limit	[D] QC	[E] LIMITS	[F] Qualifier
	mg/L	mg/L	mg/L	Relative Difference %	Relative Difference %	
Silver	< 0.010	< 0.010	0.010	N.C	25.0	
Sodium	2610	2560	0.2500	1.9	25.0	
Strontium	13.45	13.97	0.03	3.8	25.0	
Tin	< 0.025	< 0.025	0.025	N.C	25.0	
Vanadium	0.014	0.016	0.008	13.3	25.0	
Zinc	<0.100	<0.100	0.100	N.C	25.0	

Relative Difference [D] = $200 \cdot (B-A)/(B+A)$

N.C. = Not calculated, data below detection limit

N.D. = Below detection limit

All results are based on MDL and validated for QC purposes only


Eddie L. Clemons, II
QA/QC Manager



Certificate Of Quality Control for Batch : 18A05D12

SW846- 7470 Total Mercury

Date Validated: Aug 28, 1998 00:11

Analyst: CG

Date Analyzed: Aug 27, 1998 18:02

Matrix: Liquid

BLANK SPIKE ANALYSIS

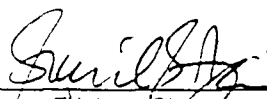
Parameter	[A] Blank Result mg/L	[B] Blank Spike Result mg/L	[C] Blank Spike Amount mg/L	[D] Detection Limit mg/L	[E]	[F]	[G] Qualifier
					QC	LIMITS	
					Blank Spike Recovery	Recovery Range	
					%	%	
Mercury	< 0.0011	0.0026	0.0028	0.0011	92.9	70-120	

Blank Spike Recovery [E] = $100 \times (B-A)/(C)$

N.C. = Not Calculated, data below detection limit

N.D. = Below detection limit

All results are based on MDL and validated for QC purposes only


Eddie L. Clemens, II
QA/QC Manager



Certificate Of Quality Control for Batch : 18A05D12

SW846- 7470 Total Mercury

Date Validated: Aug 28, 1998 00:11
Date Analyzed: Aug 27, 1998 18:10

Analyst: CG
Matrix: Liquid

Q.C. Sample ID 183193- 004 Parameter		MATRIX DUPLICATE ANALYSIS						MATRIX SPIKE ANALYSIS						
		[A] Sample Result mg/L	[B] Duplicate Result mg/L	[C] Detection Limit mg/L	[D]		[E]		[F] Matrix Spike Result mg/L	[G] Matrix Spike Amount mg/L	[H]		[I] LIMITS Recovery Range %	[G] Qualifier
					QC	Relative Difference %	QC	LIMITS			Matrix Spike Recovery %			
Mercury		< 0.0011	< 0.0011	0.0011	N.C		25.0	0.0030	0.0028	107.1		70-120		

Relative Difference [D] = $200 \cdot (B-A)/(B+A)$
Matrix Spike Recovery [H] = $100 \cdot (F-A)/[G]$
N.C. = Not calculated, data below detection limit
N.D. = Below detection limit
All results are based on MDL and validated for QC purposes only

Eugene L. Clemons, II
QA/QC Manager

Certificate Of Quality Control for Batch : 18A25C84

SW- 346 5030/8021B BTEx

Date Validated: Aug 20, 1998 11:45

Date Analyzed: Aug 19, 1998 15:29

Analyst: HL

Matrix: Liquid

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] Detection Limit ppm	Blank Limit Relative Difference %	[F] QC		[G] QC	[H] QC	[I] Blank Spike Recovery Range %	[J] Qualifier
							Spike Relative Difference %			B.S.D. Recovery %		
Benzene	< 0.0010	0.0974	0.0940	0.1000	0.0010	20.0	3.6		97.4	94.0	65-135	
Toluene	< 0.0010	0.0856	0.0998	0.1000	0.0010	20.0	15.3		85.6	99.8	65-135	
Ethylbenzene	< 0.0010	0.0914	0.1090	0.1000	0.0010	20.0	17.6		91.4	109.0	65-135	
m,p-Xylenes	< 0.0020	0.1830	0.2140	0.2000	0.0020	20.0	15.6		91.5	107.0	65-135	
o-Xylene	< 0.0010	0.0863	0.1010	0.1000	0.0010	20.0	15.7		86.3	101.0	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



Certificate Of Quality Control for Batch : 18A20B50

SM4500C02D Carbonate

Date Validated: Aug 26, 1998 09:55

Analyst: IF

Date Analyzed: Aug 25, 1998 14:20

Matrix: Liquid

MATRIX DUPLICATE ANALYSIS						
Q.C. Sample ID 183193- 004	[A] Sample Result	[B] Duplicate Result	[C] Detection Limit	[D] QC	[E] LIMITS	[F] Qualifier
	mg/L	mg/L	mg/L	Relative Difference %	Relative Difference %	
Parameter						
Carbonate	< 4.00	< 4.00	4.00	N.C	25.0	

Relative Difference [D] = $200 \times (B-A) / (B+A)$

N.C. = Not calculated, data below detection limit

N.D. = Below detection limit

All results are based on MDL and validated for QC purposes only

Eddie L. Clemons, II

QA/QC Manager

Certificate Of Quality Control for Batch : 18A20B49

SM 4500C02D Bicarbonate

Date Validated: Aug 26, 1998 09:55

Analyst: IF

Date Analyzed: Aug 25, 1998 14:20

Matrix: Liquid

MATRIX DUPLICATE ANALYSIS						
Q.C. Sample ID 183193- 004	[A] Sample Result	[B] Duplicate Result	[C] Detection Limit mg/L	[D] QC	[E] LIMITS	[F] Qualifier
	mg/L	mg/L		Relative Difference %	Relative Difference %	
Parameter						
Bicarbonate	248	252	4.00	1.6	25.0	

Relative Difference [D] = $200 \cdot (B-A)/(B+A)$

N.C. = Not calculated, data below detection limit

N.D. = Below detection limit

All results are based on MDL and validated for QC purposes only


Eddie L. Clemons, II
QA/QC Manager



Certificate Of Quality Control for Batch : 18A10C00

EPA 300.0 Anions by Ion Chromatography

Date Validated: Aug 28, 1998 08:31

Date Analyzed: Aug 26, 1998 22:51

Analyst: OR

Matrix: Liquid

BLANK SPIKE / BLANK SPIKE DUPLICATE AND RECOVERY

Parameter	[A] Blank Result mg/L	[B] Blank Spike Result mg/L	[C] Blank Spike Duplicate Result mg/L	[D] Blank Spike Amount mg/L	[E] Detection Limit mg/L	Blank Limit Relative Difference %	[F]		[G]	[H]	[I]	[J] Qualifier	
							QC	Blank Spike Recovery	QC	B.S.D. Recovery	Range		%
Chloride	< 0.20	5.36	5.23	5.00	0.20	20.0	2.5	107.2	104.6	70-125			
Nitrate	< 0.20	4.16	4.17	5.00	0.20	20.0	0.2	83.2	83.4	70-125			
Sulfate	< 0.20	4.62	4.43	5.00	0.20	20.0	4.2	92.4	88.6	70-125			

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

Ernie L. Clemens, II
QA/QC Manager

EPA 300.0 Anions by Ion Chromatography

Date Validated: Aug 28, 1998 08:31

Analyst: OR

Date Analyzed: Aug 27, 1998 03:11

Matrix: Liquid

MATRIX DUPLICATE ANALYSIS						
Q.C. Sample ID 183237- 002	[A] Sample Result	[B] Duplicate Result	[C] Detection Limit mg/L	[D] QC	[E] LIMITS	[F] Qualifier
	mg/L	mg/L		Relative Difference %	Relative Difference %	
Nitrate	58.3	58.1	2.0	0.3	20.0	
Sulfate	196	195	2.0	0.5	20.0	

Relative Difference [D] = $200 \times (B-A)/(B+A)$

N.C. = Not calculated, data below detection limit

N.D. = Below detection limit

All results are based on MDL and validated for QC purposes only


Eddie L. Clemons, II
QA/QC Manager



Certificate Of Quality Control for Batch : 18A19C50

EPA 160.1 Total Dissolved Solids

Date Validated: Aug 24, 1998 10:13

Analyst: EZ

Date Analyzed: Aug 24, 1998 08:25

Matrix: Liquid

MATRIX DUPLICATE ANALYSIS						
Q.C. Sample ID 183175- 003	[A]	[B]	[C]	[D]	[E]	[F]
	Sample	Duplicate	Detection	QC	LIMITS	Qualifier
	Result	Result		Relative	Relative	
Parameter	mg/L	mg/L	Limit	Difference	Difference	
			mg/L	%	%	
Total Dissolved Solids	332	326	5.00	1.8	25.0	

Relative Difference [D] = $200 \times (B-A)/(B+A)$

N.C. = Not calculated, data below detection limit

N.D. = Below detection limit

All results are based on MDL and validated for QC purposes only

Eddie L. Clemons, II

QA/QC Manager



ANALYTICAL CHAIN OF CUSTODY REPORT CHRONOLOGY OF SAMPLES

K.E.I. Consultants, Inc.

Project ID: 610057-6-18-0
Project Manager: Theresa Nix
Project Location: Monument, NM

Project Name: Monument Site 18

XENCO COC#: 1-83193

Date Received in Lab: Aug 19, 1998 09:35 by JO

XENCO contact : Carlos Castro/Eddie Clemons

Date and Time									
Field ID	Lab. ID	Method Name	Method ID	Units	Turn Around	Sample Collected	Addition Requested	Extraction	Analysis
1 MW-2	183193-001	BTEX	SW-846	ppm	10 days	Aug 18, 1998 11:20		Aug 19, 1998 by HL	Aug 19, 1998 20:01 by HL
2 MW-5	183193-002	BTEX	SW-846	ppm	10 days	Aug 18, 1998 10:30		Aug 19, 1998 by HL	Aug 19, 1998 21:09 by HL
3 MW-6	183193-003	BTEX	SW-846	ppm	10 days	Aug 18, 1998 11:35		Aug 19, 1998 by HL	Aug 19, 1998 20:17 by HL
4 MW-7	183193-004	BTEX	SW-846	ppm	10 days	Aug 18, 1998 11:05		Aug 19, 1998 by HL	Aug 19, 1998 19:29 by HL
5		PAHs	SW846-8270	mg/L	10 days	Aug 18, 1998 11:05		Aug 21, 1998 by SS	Aug 27, 1998 20:40 by LC
6		Anions	EPA 300.0	mg/L	10 days	Aug 18, 1998 11:05		Aug 27, 1998 by OR	Aug 27, 1998 00:41 by OR
7		TDS	EPA 160.1	mg/L	10 days	Aug 18, 1998 11:05		Aug 21, 1998 by EZ	Aug 24, 1998 08:35 by EZ
8		Metals (ICP)	EPA 6010	mg/L	10 days	Aug 18, 1998 11:05		Aug 24, 1998 by AO	Aug 24, 1998 15:47 by CG
9		Mercury, Tot	SW846-7470	mg/L	10 days	Aug 18, 1998 11:05		Aug 24, 1998 by AO	Aug 27, 1998 18:10 by CG
10		Carbonate	SM4500CO2D	mg/L	10 days	Aug 18, 1998 11:05		Aug 25, 1998 by IF	Aug 25, 1998 14:10 by IF
11		Bicarbonate	SM 4500CO2D	mg/L	10 days	Aug 18, 1998 11:05		Aug 25, 1998 by IF	Aug 25, 1998 14:10 by IF
12 MW-8	183193-005	BTEX	SW-846	ppm	10 days	Aug 18, 1998 10:46		Aug 19, 1998 by HL	Aug 19, 1998 19:45 by HL
13		PAHs	SW846-8270	mg/L	10 days	Aug 18, 1998 10:46		Aug 21, 1998 by SS	Aug 27, 1998 21:27 by LC
14		Metals (ICP)	EPA 6010	mg/L	10 days	Aug 18, 1998 10:46		Aug 24, 1998 by AO	Aug 24, 1998 16:14 by CG
15		Anions	EPA 300.0	mg/L	10 days	Aug 18, 1998 10:46		Aug 27, 1998 by OR	Aug 27, 1998 00:49 by OR
16		TDS	EPA 160.1	mg/L	10 days	Aug 18, 1998 10:46		Aug 21, 1998 by EZ	Aug 24, 1998 08:40 by EZ
17		Mercury, Tot	SW846-7470	mg/L	10 days	Aug 18, 1998 10:46		Aug 24, 1998 by AO	Aug 27, 1998 18:17 by CG
18		Carbonate	SM4500CO2D	mg/L	10 days	Aug 18, 1998 10:46		Aug 25, 1998 by IF	Aug 25, 1998 14:30 by IF
19		Bicarbonate	SM 4500CO2D	mg/L	10 days	Aug 18, 1998 10:46		Aug 25, 1998 by IF	Aug 25, 1998 14:30 by IF

Company KEL CONSULTANTS (210) 680-3767 Phone MONUMENT SITE 18 610057-6-18-0 Project ID Location MONUMENT NM Project Manager (PM) T. NIX Project Director (PD) M. MATHUR Fax Results to PM and / or Fax (512) 364-3556		Lab Only: 183193 - SA		Lab Only Additions																			
Project Name ☒ Previously done at XENCO Invoice to ☐ Accounting ☐ Include Invoice with Final Report Attn PM ☐ Invoice must have a P.O. Bill to:		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		Date Rcv by: From: Date Rcv by: From:																			
Quote No. P.O. No. 610057-6-18 call for a P.O.		Special DLs (RR) DW QAPP See Lab PM Call Proj. PM)		Date Rcv by: From:																			
Specifications		Signature Ken Dutton		Date Rcv by: From:																			
Sample ID		Sampling Date	Time	Depth ft. in 3	Matrix A P S W	Composite	Grab	# Containers	Container Size	Type	Preservatives												
MW-2								2	✓	GC H ₂													
MW-5								2	✓	GC H ₂													
MW-6								2	✓	GC H ₂													
MW-7								7	✓	GC H ₂ 5% CH ₃ N													
MW-8								7	✓	GC H ₂ 5% CH ₃ N													
BTEX by 8020 8021 8260 602 624 Other		BTEX-MTBE by 8020 8021 8260 602 624 Other		TPH by TX1005 418.1 8015GRO 8015DRO 8015JEIF		PAHs by 8270 8100 8310		METALS by 6010 8RCRA Tox Pb TCLP8 13PP 23TAL See List		VOAs by 8260 624 BTEX MTBE PPs TCL See List Call PM		SVOAs by 8270 625 PAHs BN&A TCL PPs See List Call PM		CATIONS - 6010 ANIONS - 300.0 TDS - 160.1		TAT 5h 12h 20h 24h 48h 3d 5d 7d 14d 21d		Addn: PAH above mg/L W. mg/Kg S Highest Hit		Hold Analysis		Remarks CALL T. NIX @ (210) 680-3767 FOR QUESTIONS	
Relinquished by (Initials and Signature)		Relinquished to (Initials and Signature)		Date & Time		Total Containers per COC: 20		Rush TATs Fax Due: 18 Aug 98 / 1445		Final Report Data Package Due Date: 8/19/98 9:35		Final Fax Due: 8/19/98 9:35		Final Report Data Package Due Date: 8/19/98 9:35		Final Fax Due: 8/19/98 9:35		Final Report Data Package Due Date: 8/19/98 9:35		Final Fax Due: 8/19/98 9:35			

Preservatives - Various (V), HCl pH<2 (H), H₂SO₄ pH<2 (S), HNO₃ pH<2 (N), NaOH+Asbc Acid (NAA), ZnAc+NaOH (ZA), (Cool,<4C) (C4), None (N), See Label (SL), Other (O)

SIZE: 4oz (4), 8oz (8), 32oz (32), 40ml VOA (V), 1L (1), 500ml (.5), Tedlar Bag (B), Wipe (W), Other _____ **TYPE** Glass Amb (GA), Glass Clear (GC), Plastic (P), Other (O)



5309 Wurzbach, Suite 100
San Antonio, Texas 78238
(210) 680-3767
(210) 680-3763 FAX

December 28, 1998

Mr. Tony Savoie
TEXAS - NEW MEXICO PIPE LINE COMPANY
P. O. Box 1030
Jal, New Mexico 88252

RECEIVED

JAN 22 1999

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Re: Groundwater Monitoring Event
Texas - New Mexico Pipe Line Company
Monument Site No. 18
Monument, New Mexico
KEI Job No. 610057-6-18

Dear Mr. Savoie:

Transmitted with this letter is the ground water binder update packet for the fourth quarter of 1998 ground water monitoring event conducted at Monument Site No. 10, located near Monument, New Mexico. One copy has been submitted to OCD Hobbs and OCD Santa Fe.

The packet contains the following:

- Updated gauging tables
- Updated ground water laboratory results tables
- Updated figures
- A copy of the laboratory ground water results and chain-of-custody documentation
- A dated "tab" for the new event

Please remove and replace the former tables. Add the new dated tab and place the updated figures, laboratory reports, and chain-of-custody documentation behind this tab.

Please call me at (210) 680-3767 if you have any questions or comments.

Respectfully,

A handwritten signature in cursive script that reads 'Theresa Nix'.

Theresa Nix
Project Manager

Enclosure

cc: Marc Oler, Equilon
J. Michael Hawthorne, KEI
OCD Hobbs
OCD Santa Fe, William Olson ✓

TABLE I

**SUMMARY OF GROUND WATER RESULTS - BTEX
TEXAS - NEW MEXICO PIPE LINE COMPANY
MONUMENT SITE NO. 18
LEA COUNTY, NEW MEXICO**

MONITORING WELL NO.	DATE SAMPLED	BENZENE (mg/l)	TOLUENE (mg/l)	ETHYL- BENZENE (mg/l)	XYLENES (mg/l)	BTEX (mg/l)
MW18-2	05/02/97	0.010	ND	0.060	0.022	0.092
MW18-2	08/15/97	ND	ND	ND	ND	ND
MW18-2	11/02/97	0.002	ND	0.004	ND	0.006
MW18-2	02/19/98	0.003	ND	0.004	ND	0.007
MW18-2	05/12/98	0.006	0.004	0.005	ND	0.015
MW18-2	08/18/98	ND	ND	0.006	0.008	0.014
MW18-2	11/07/98	0.011	ND	0.021	ND	0.032
MW18-3	05/02/97	0.006	ND	ND	ND	0.006
MW18-5	09/19/97	ND	ND	ND	ND	ND
MW18-5	11/02/97	ND	ND	ND	ND	ND
MW18-5	02/19/98	ND	ND	ND	ND	ND
MW18-5	05/12/98	ND	ND	ND	ND	ND
MW18-5	08/18/98	ND	ND	ND	ND	ND
MW18-5	11/07/98	0.005	ND	ND	ND	0.005
MW18-6	09/19/97	ND	ND	ND	ND	ND
MW18-6	11/02/97	ND	ND	ND	ND	ND
MW18-6	02/19/98	ND	ND	ND	ND	ND
MW18-6	05/12/98	ND	ND	ND	ND	ND
MW18-6	08/18/98	ND	ND	ND	ND	ND
MW18-6	11/07/98	0.003	ND	ND	ND	0.003
MW18-7	08/18/98	ND	ND	0.001	0.005	0.006
MW18-7	11/07/98	0.002	ND	ND	ND	0.002
MW18-8	08/18/98	ND	ND	ND	ND	ND
MW18-8	11/07/98	0.004	ND	ND	ND	0.004

TABLE II

MONITORING WELL MW18-1
SUMMARY OF GROUND WATER MONITORING
TEXAS - NEW MEXICO PIPE LINE COMPANY
MONUMENT SITE NO. 18
LEA COUNTY, NEW MEXICO

DATE MEASURED	PVC ELEVATION (feet)	DEPTH TO WATER (feet)	GROUND WATER ELEVATION		PSH THICKNESS (feet)
			Actual	Corrected	
04/30/97	3,557.59	32.07	3525.52	3526.10	0.68
07/23/97	3,557.59	19.99	3537.60	---	---
08/15/97	3,557.59	33.86	3523.73	3525.96	2.62
10/23/97	3,558.71	34.47	3524.24	3527.04	3.18
11/02/97	3,558.71	34.55	3524.16	3527.02	3.24
12/09/97	3,558.71	34.02	3524.69	3526.99	2.61
12/17/97	3,558.71	33.97	3524.74	3527.00	2.56
01/02/98	3,558.71	31.37	3527.34	3528.53	1.35
01/30/98	3,558.71	33.90	3524.81	3527.03	2.52
02/06/98	3,558.71	33.76	3524.95	3527.03	2.36
02/13/98	3,558.71	33.66	3525.05	3527.03	2.25
02/21/98	3,558.71	33.62	3525.09	3527.03	2.20
02/25/98	3,558.71	33.40	3525.31	3527.05	1.97
03/04/98	3,558.71	33.36	3525.35	3527.04	1.92
03/13/98	3,558.71	33.51	3525.20	3527.02	2.07
03/17/98	3,558.71	33.11	3525.60	3527.05	1.65
03/24/98	3,558.71	33.20	3525.51	3526.95	1.64
03/31/98	3,558.71	33.33	3525.38	3527.03	1.87
04/07/98	3,558.71	33.11	3525.60	3527.03	1.62
04/17/98	3,558.71	33.52	3525.19	3527.02	2.08
04/21/98	3,558.71	33.16	3525.55	3527.02	1.67
04/28/98	3,558.71	33.11	3525.60	3527.02	1.61
05/06/98	3,558.71	33.27	3525.44	3527.02	1.79
05/12/98	3,558.71	33.30	3525.41	3527.02	1.83
05/18/98	3,558.71	33.25	3525.46	3526.99	1.74
05/27/98	3,558.71	33.59	3525.12	3527.01	2.14
06/01/98	3,558.71	33.28	3525.43	3527.00	1.78
06/08/98	3,558.71	33.46	3525.25	3526.96	1.94
06/17/98	3,558.71	33.71	3525.00	3526.93	2.19
06/23/98	3,558.71	33.62	3525.09	3526.93	2.09
07/01/98	3,558.71	33.76	3524.95	3526.92	2.24
07/16/98	3,558.71	34.05	3524.66	3526.90	2.54
07/21/98	3,558.71	33.86	3524.85	3526.88	2.30
07/29/98	3,558.71	33.96	3524.75	3526.86	2.40
08/05/98	3,558.71	33.98	3524.73	3526.82	2.37

TABLE II
(continued)

MONITORING WELL MW18-1
SUMMARY OF GROUND WATER MONITORING
TEXAS - NEW MEXICO PIPE LINE COMPANY
MONUMENT SITE NO. 18
LEA COUNTY, NEW MEXICO

DATE MEASURED	PVC ELEVATION (feet)	DEPTH TO WATER (feet)	GROUND WATER ELEVATION		PSH THICKNESS (feet)
			Actual	Corrected	
08/12/98	3,558.71	34.01	3524.70	3526.81	2.39
08/18/98	3,558.71	33.96	3524.75	3526.79	2.31
08/28/98	3,558.71	34.11	3524.60	3526.78	2.47
09/01/98	3,558.71	33.92	3524.79	3526.75	2.22
09/10/98	3,558.71	34.07	3524.64	3526.73	2.37
09/16/98	3,558.71	33.96	3524.75	3526.71	2.22
09/22/98	3,558.71	33.85	3524.86	3526.65	2.03
09/30/98	3,558.71	33.91	3524.80	3526.68	2.13
10/06/98	3,558.71	33.82	3524.89	3526.67	2.02
10/15/98	3,558.71	34.09	3524.62	3526.67	2.33
10/20/98	3,558.71	33.94	3524.77	3526.62	2.10
10/29/98	3,558.71	34.06	3524.65	3526.65	2.27
11/03/98	3,558.71	34.00	3524.71	3526.61	2.16
11/11/98	3,558.71	34.03	3524.68	3526.62	2.20
11/17/98	3,558.71	33.92	3524.79	3526.62	2.08
11/25/98	3,558.71	33.97	3524.74	3526.63	2.15
12/01/98	3,558.71	33.86	3524.85	3526.63	2.02

TABLE II
(continued)

**MONITORING WELL MW18-2
SUMMARY OF GROUND WATER MONITORING
TEXAS - NEW MEXICO PIPE LINE COMPANY
MONUMENT SITE NO. 18
LEA COUNTY, NEW MEXICO**

DATE MEASURED	PVC ELEVATION (feet)	DEPTH TO WATER (feet)	GROUND WATER ELEVATION		PSH THICKNESS (feet)
			Actual	Corrected	
04/30/97	3,558.54	32.67	3525.87	---	---
07/23/97	3,558.54	21.60	3536.94	---	---
08/15/97	3,558.54	32.52	3526.02	---	---
10/23/97	3,559.64	32.60	3527.04	---	---
11/02/97	3,559.64	32.63	3527.01	---	---
12/03/97	3,559.64	32.63	3527.01	---	---
01/02/98	3,559.64	32.62	3527.02	---	---
02/06/98	3,559.64	32.61	3527.03	---	---
02/19/98	3,559.64	32.62	3527.02	---	---
03/04/98	3,559.64	32.59	3527.05	---	---
04/07/98	3,559.64	32.63	3527.01	---	---
05/12/98	3,559.64	32.56	3527.08	---	---
06/01/98	3,559.64	32.66	3526.98	---	---
07/01/98	3,559.64	32.74	3526.90	---	---
08/18/98	3,559.64	32.85	3526.79	---	---
09/01/98	3,559.64	32.92	3526.72	---	---
10/06/98	3,559.64	33.00	3526.64	---	---
11/03/98	3,559.64	33.04	3526.60	---	---
11/07/98	3,559.64	32.97	3526.67	---	---
12/01/98	3,559.64	33.04	3526.60	---	---

TABLE II
(continued)

**MONITORING WELL MW18-3
SUMMARY OF GROUND WATER MONITORING
TEXAS - NEW MEXICO PIPE LINE COMPANY
MONUMENT SITE NO. 18
LEA COUNTY, NEW MEXICO**

DATE MEASURED	PVC ELEVATION (feet)	DEPTH TO WATER (feet)	GROUND WATER ELEVATION		PSH THICKNESS (feet)
			Actual	Corrected	
04/30/97	3,557.43	31.26	3526.17	3526.36	0.22
07/23/97	3,557.43	21.78	3535.65	3535.66	0.01
08/15/97	3,557.43	33.65	3523.78	3526.08	2.70
10/23/97	3,558.53	33.80	3524.73	3527.15	2.75
11/02/97	3,558.53	33.80	3524.73	3527.13	2.73
12/03/97	3,558.53	33.81	3524.72	3527.13	2.74
12/09/97	3,558.53	33.52	3525.01	3527.12	2.40
12/17/97	3,558.53	33.58	3524.95	3527.13	2.48
01/02/98	3,558.53	33.60	3524.93	3527.13	2.50
01/30/98	3,558.53	33.49	3525.04	3527.15	2.40
02/06/98	3,558.53	33.38	3525.15	3527.14	2.26
02/13/98	3,558.53	33.36	3525.17	3527.14	2.24
02/21/98	3,558.53	33.35	3525.18	3527.22	2.32
02/25/98	3,558.53	33.26	3525.27	3527.15	2.14
03/04/98	3,558.53	33.32	3525.21	3527.15	2.21
03/13/98	3,558.53	33.41	3525.12	3527.13	2.29
03/17/98	3,558.53	33.18	3525.35	3527.16	2.06
03/24/98	3,558.53	33.24	3525.29	3527.17	2.14
03/31/98	3,558.53	33.38	3525.15	3527.16	2.28
04/07/98	3,558.53	33.37	3525.16	3527.13	2.24
04/17/98	3,558.53	33.47	3525.06	3527.14	2.36
04/21/98	3,558.53	33.21	3525.32	3527.13	2.06
04/28/98	3,558.53	33.37	3525.16	3527.13	2.24
05/06/98	3,558.53	33.38	3525.15	3527.13	2.25
05/12/98	3,558.53	33.34	3525.19	3527.12	2.20
05/18/98	3,558.53	33.33	3525.20	3527.11	2.17
05/27/98	3,558.53	33.48	3525.05	3527.11	2.34
06/01/98	3,558.53	33.28	3525.25	3527.11	2.12
06/08/98	3,558.53	33.51	3525.02	3527.08	2.34
06/17/98	3,558.53	33.62	3524.91	3527.05	2.43
06/23/98	3,558.53	33.59	3524.94	3527.03	2.38
07/01/98	3,558.53	33.61	3524.92	3527.04	2.41
07/16/98	3,558.53	33.70	3524.83	3526.99	2.46
07/21/98	3,558.53	33.57	3524.96	3526.97	2.29

TABLE II
(continued)

**MONITORING WELL MW18-3
SUMMARY OF GROUND WATER MONITORING
TEXAS - NEW MEXICO PIPE LINE COMPANY
MONUMENT SITE NO. 18
LEA COUNTY, NEW MEXICO**

DATE MEASURED	PVC ELEVATION (feet)	DEPTH TO WATER (feet)	GROUND WATER ELEVATION		PSH THICKNESS (feet)
			Actual	Corrected	
07/29/98	3,558.53	33.68	3524.85	3526.96	2.40
08/05/98	3,558.53	33.66	3524.87	3526.93	2.34
08/12/98	3,558.53	33.70	3524.83	3526.91	2.37
08/18/98	3,558.53	33.67	3524.86	3526.91	2.33
08/28/98	3,558.53	33.79	3524.74	3526.87	2.42
09/01/98	3,558.53	33.59	3524.94	3526.86	2.18
09/10/98	3,558.53	33.80	3524.73	3526.84	2.40
09/16/98	3,558.53	33.72	3524.81	3526.83	2.30
09/22/98	3,558.53	33.58	3524.95	3526.81	2.11
09/30/98	3,558.53	33.79	3524.74	3526.80	2.34
10/06/98	3,558.53	33.77	3524.76	3526.77	2.29
10/15/98	3,558.53	33.85	3524.68	3526.77	2.38
10/20/98	3,558.53	33.73	3524.80	3526.73	2.20
10/29/98	3,558.53	33.87	3524.66	3526.74	2.37
11/03/98	3,558.53	33.78	3524.75	3526.72	2.24
11/11/98	3,558.53	33.85	3524.68	3526.72	2.32
11/17/98	3,558.53	33.77	3524.76	3526.73	2.24
11/25/98	3,558.53	33.82	3524.71	3526.73	2.30
12/01/98	3,558.53	33.76	3524.77	3526.73	2.23

TABLE II
(continued)

**MONITORING WELL MW18-4
SUMMARY OF GROUND WATER MONITORING
TEXAS - NEW MEXICO PIPE LINE COMPANY
MONUMENT SITE NO. 18
LEA COUNTY, NEW MEXICO**

DATE MEASURED	PVC ELEVATION (feet)	DEPTH TO WATER (feet)	GROUND WATER ELEVATION		PSH THICKNESS (feet)
			Actual	Corrected	
09/19/97	3,558.14	30.90	3527.24	3527.25	0.01
10/23/97	3,558.14	30.92	3527.22	---	---
11/02/97	3,558.14	30.94	3527.20	3527.21	0.01
12/03/97	3,558.14	30.95	3527.19	---	Sheen
12/09/97	3,558.14	30.95	3527.19	---	Sheen
12/17/97	3,558.14	30.94	3527.20	---	Sheen
01/02/98	3,558.14	30.96	3527.18	---	Sheen
01/30/98	3,558.14	30.94	3527.20	---	Sheen
02/06/98	3,558.14	30.95	3527.19	---	---
02/13/98	3,558.14	30.95	3527.19	---	Sheen
02/19/98	3,558.14	30.93	3527.21	---	Sheen
02/25/98	3,558.14	30.93	3527.21	---	Sheen
03/04/98	3,558.14	30.94	3527.20	---	Sheen
03/13/98	3,558.14	30.96	3527.18	---	Sheen
03/17/98	3,558.14	30.93	3527.21	---	Sheen
03/24/98	3,558.14	30.94	3527.20	---	Sheen
03/31/98	3,558.14	30.94	3527.20	---	Sheen
04/07/98	3,558.14	30.95	3527.19	---	Sheen
04/17/98	3,558.14	30.91	3527.23	---	Sheen
04/21/98	3,558.14	30.96	3527.18	---	Sheen
04/28/98	3,558.14	30.96	3527.18	---	Sheen
05/06/98	3,558.14	30.96	3527.18	---	Sheen
05/12/98	3,558.14	30.96	3527.18	---	Sheen
05/18/98	3,558.14	31.00	3527.14	---	Sheen
05/27/98	3,558.14	30.98	3527.16	---	Sheen
06/01/98	3,558.14	30.99	3527.15	---	Sheen
06/08/98	3,558.14	31.02	3527.12	---	Sheen
06/17/98	3,558.14	31.05	3527.09	---	Sheen
06/23/98	3,558.14	31.06	3527.08	---	Sheen
07/01/98	3,558.14	31.06	3527.08	---	Sheen
07/16/98	3,558.14	31.10	3527.04	---	Sheen
07/21/98	3,558.14	31.12	3527.02	---	Sheen
07/29/98	3,558.14	31.14	3527.00	---	Sheen
08/05/98	3,558.14	31.17	3526.97	---	Sheen

TABLE II
(continued)

**MONITORING WELL MW18-4
SUMMARY OF GROUND WATER MONITORING
TEXAS - NEW MEXICO PIPE LINE COMPANY
MONUMENT SITE NO. 18
LEA COUNTY, NEW MEXICO**

DATE MEASURED	PVC ELEVATION (feet)	DEPTH TO WATER (feet)	GROUND WATER ELEVATION		PSH THICKNESS (feet)
			Actual	Corrected	
08/12/98	3,558.14	31.19	3526.95	---	Sheen
08/18/98	3,558.14	31.21	3526.93	---	SHEEN
08/28/98	3,558.14	31.22	3526.92	---	SHEEN
09/01/98	3,558.14	31.25	3526.89	---	SHEEN
09/16/98	3,558.14	31.28	3526.86	---	SHEEN
09/22/98	3,558.14	31.30	3526.84	---	SHEEN
10/06/98	3,558.14	31.32	3526.82	---	SHEEN
10/15/98	3,558.14	31.32	3526.82	3526.84	0.02
10/20/98	3,558.14	31.35	3526.79	---	SHEEN
10/29/98	3,558.14	31.34	3526.80	---	SHEEN
11/03/98	3,558.14	31.36	3526.78	---	SHEEN
11/25/98	3,558.14	31.36	3526.78	---	SHEEN
12/01/98	3,558.14	31.36	3526.78	---	SHEEN

TABLE II
(continued)

**MONITORING WELL MW18-5
SUMMARY OF GROUND WATER MONITORING
TEXAS - NEW MEXICO PIPE LINE COMPANY
MONUMENT SITE NO. 18
LEA COUNTY, NEW MEXICO**

DATE MEASURED	PVC ELEVATION (feet)	DEPTH TO WATER (feet)	GROUND WATER ELEVATION		PSH THICKNESS (feet)
			Actual	Corrected	
09/19/97	3,560.07	33.19	3526.88	---	---
10/23/97	3,560.07	33.20	3526.87	---	---
11/02/97	3,560.07	33.23	3526.84	---	---
12/03/97	3,560.07	33.23	3526.84	---	---
01/02/98	3,560.07	33.23	3526.84	---	---
02/06/98	3,560.07	33.22	3526.85	---	---
02/19/98	3,560.07	33.22	3526.85	---	---
03/04/98	3,560.07	33.20	3526.87	---	---
04/07/98	3,560.07	33.23	3526.84	---	---
05/12/98	3,560.07	33.16	3526.91	---	---
06/01/98	3,560.07	33.26	3526.81	---	---
07/01/98	3,560.07	33.34	3526.73	---	---
08/18/98	3,560.07	33.40	3526.67	---	---
09/01/98	3,560.07	33.51	3526.56	---	---
10/06/98	3,560.07	33.59	3526.48	---	---
11/03/98	3,560.07	33.64	3526.43	---	---
11/07/98	3,560.07	33.55	3526.52	---	---
12/01/98	3,560.07	33.64	3526.43	---	---

TABLE II
(continued)

**MONITORING WELL MW18-6
SUMMARY OF GROUND WATER MONITORING
TEXAS - NEW MEXICO PIPE LINE COMPANY
MONUMENT SITE 18
LEA COUNTY, NEW MEXICO**

DATE MEASURED	PVC ELEVATION (feet)	DEPTH TO WATER (feet)	GROUND WATER ELEVATION		PSH THICKNESS (feet)
			Actual	Corrected	
09/19/97	3,557.64	30.41	3527.23	---	---
10/23/97	3,557.64	30.44	3527.20	---	---
11/02/97	3,557.64	30.46	3527.18	---	---
12/03/97	3,557.64	30.47	3527.17	---	---
01/02/98	3,557.64	30.47	3527.17	---	---
02/06/98	3,557.64	30.45	3527.19	---	---
02/19/98	3,557.64	30.45	3527.19	---	---
03/04/98	3,557.64	30.43	3527.21	---	---
04/07/98	3,557.64	30.46	3527.18	---	---
05/12/98	3,557.64	30.48	3527.16	---	---
06/01/98	3,557.64	30.49	3527.15	---	---
07/01/98	3,557.64	30.57	3527.07	---	---
08/18/98	3,557.64	30.70	3526.94	---	---
09/01/98	3,557.64	30.76	3526.88	---	---
10/06/98	3,557.64	30.83	3526.81	---	---
11/03/98	3,557.64	30.89	3526.75	---	---
11/07/98	3,557.64	30.80	3526.84	---	---
12/01/98	3,557.64	30.87	3526.77	---	---

TABLE II
(continued)

**MONITORING WELL MW18-7
SUMMARY OF GROUND WATER MONITORING
TEXAS - NEW MEXICO PIPE LINE COMPANY
MONUMENT SITE 18
LEA COUNTY, NEW MEXICO**

DATE MEASURED	PVC ELEVATION (feet)	DEPTH TO WATER (feet)	GROUND WATER ELEVATION		PSH THICKNESS (feet)
			Actual	Corrected	
09/01/98	3,558.65	31.68	3526.97	---	---
09/01/98	3,558.65	31.68	3526.97	---	---
10/06/98	3,558.65	31.79	3526.86	---	---
11/03/98	3,558.65	31.81	3526.84	---	---
11/07/98	3,558.65	31.73	3526.92	---	---
12/01/98	3,558.65	31.81	3526.84	---	---

TABLE II
(continued)

**MONITORING WELL MW18-8
SUMMARY OF GROUND WATER MONITORING
TEXAS - NEW MEXICO PIPE LINE COMPANY
MONUMENT SITE 18
LEA COUNTY, NEW MEXICO**

DATE MEASURED	PVC ELEVATION (feet)	DEPTH TO WATER (feet)	GROUND WATER ELEVATION		PSH THICKNESS (feet)
			Actual	Corrected	
08/18/98	3,559.30	32.48	3526.82	---	---
09/01/98	3,559.30	32.61	3526.69	---	---
10/06/98	3,559.30	32.69	3526.61	---	---
11/03/98	3,559.30	32.73	3526.57	---	---
11/07/98	3,559.30	32.64	3526.66	---	---
12/01/98	3,559.30	32.73	3526.57	---	---