1R - 252

REPORTS

DATE:

1998-1997

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

March 4, 1998

Mr. Robert Lord
P.O. Box 1112
Eunice, New Mexico 88231

RE: WATER WELL ANALYSES

Dear Mr. Lord:

Enclosed you will find copies of the New Mexico Oil Conservation Division's (OCD) laboratory analyses of ground water samples taken from your water well on October 30, 1997. A review of these analyses shows that ground water from your well contains chromium and nitrate in concentrations in excess of the New Mexico Water Quality Control Commission (WQCC) human health based standards as well as chloride and total dissolved solids in concentrations in excess of WQCC domestic water supply standards. The analyses also show that your ground water contains boron in excess of WQCC irrigation standards. Enclosed you will also find a copy of the WQCC regulations for your reference. The WQCC standards can be found in section 3103.

Based upon these analyses, the OCD recommends that you do not use this well water as either a source of drinking water or livestock watering. The OCD is currently working with Texaco to identify the source of this contamination. The OCD will copy you on all correspondence regarding the ground water investigations and remedial actions. In response to your inquiry to the OCD Hobbs District regarding human consumption of livestock which drink this water, the OCD does not have any information or expertise on this subject. The OCD suggests that you contact the New Mexico Health Department and the New Mexico Agriculture Department for answers to this question.

The OCD apologizes for the delay in getting this information to you. Several problems were encountered with the laboratory reporting of the analyses. If you have questions about the analyses or the investigations, please contact me at (505) 827-7154.

Sincerely,

William C. Olson
Hydrogeologist
Environmental Bureau

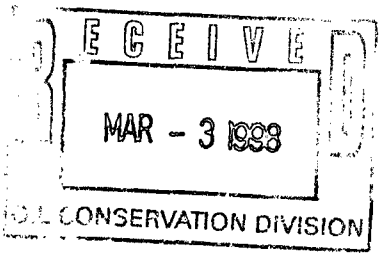
enclosures

xc: Chris Williams, OCD Hobbs District Supervisor
Robert Browning, Texaco Exploration & Development, Inc.

American Environmental Network, Inc.

AEN I.D. 710431

March 2, 1998



NMOCD
2040 S. PACHEO
SANTA FE, NM 87505

Project Name TEXACO EUNICE NORTH
Project Number (none)

Attention: BILL OLSON

On 10/31/97 American Environmental Network (NM), Inc. (ADHS License No. AZ0015), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

This report is being reissued in part to correct a typographical error. This report was originally dated 12/17/98.

EPA method 8010/8020 was analyzed by American Environmental Network (NM) Inc., Albuquerque, NM.

Calcium, Magnesium, Potassium and Sodium analyses were performed at American Environmental Network (OR), Inc., Portland, OR.

All other parameters were analyzed by American Environmental Network (AZ) Inc., Phoenix, AZ.

If you have any questions or comments, please do not hesitate to contact us at (505)344-3777.

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: mt

2709-D Pan American Freeway, NE • Albuquerque, NM 87107 • (505) 344-3777 • Fax (505) 344-4413

American Environmental Network, Inc.

CLIENT	: NMOCD	AEN I.D.	: 710431
PROJECT #	: (none)	DATE RECEIVED	: 10/31/97
PROJECT NAME	: TEXACO EUNICE NORTH	REPORT DATE	: 12/17/97

AEN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	LORD WELL	AQ	10/30/97
02	ROWLAND WELL	AQ	10/30/97
03	TRIP BLANK	AQ	10/29/97

ANALYTICAL REPORT

Marcia Smith
AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

01/28/1998
Job No.: 97.03080

Project Name: 711001
Date Received: 12/04/1997

Sample Number 88186 — Sample Description 711001-01

PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
ICP/AA Digestion - Water	ICP	-			12/05/1997	
Aluminum, ICP	6010	ND	0.05	mg/L	12/09/1997	
Antimony, ICP	6010	ND	0.005	mg/L	12/09/1997	
Arsenic, ICP	6010	0.012	0.005	mg/L	12/09/1997	
Barium, ICP	6010	0.021	0.005	mg/L	12/09/1997	
Beryllium, ICP	6010	ND	0.002	mg/L	12/09/1997	
Boron, ICP	6010	0.88	0.01	mg/L	12/09/1997	
Cadmium, ICP	6010	ND	0.002	mg/L	12/09/1997	
Calcium, ICP 200.7	200.7	280	0.05	mg/L	12/09/1997	
Chromium, ICP	6010	0.56	0.005	mg/L	12/09/1997	
Cobalt, ICP	6010	ND	0.005	mg/L	12/09/1997	
Copper, ICP	6010	ND	0.005	mg/L	12/09/1997	
Iron, ICP	6010	0.11	0.01	mg/L	12/09/1997	
Lead, ICP	6010	ND	0.005	mg/L	12/09/1997	
Magnesium, ICP 200.7	200.7	94	0.05	mg/L	12/09/1997	
Manganese, ICP	6010	ND	0.005	mg/L	12/09/1997	
Molybdenum, ICP	6010	0.011	0.005	mg/L	12/09/1997	
Nickel, ICP	6010	0.005	0.005	mg/L	12/09/1997	
Potassium, ICP 200.7	200.7	17	0.2	mg/L	12/09/1997	
Selenium, ICP	6010	0.043	0.005	mg/L	12/09/1997	
Silver, ICP	6010	ND	0.005	mg/L	12/09/1997	
Sodium, ICP 200.7	200.7	350	0.2	mg/L	12/09/1997	
Thallium, ICP	6010	ND	0.01	mg/L	12/09/1997	
Vanadium, ICP	6010	0.066	0.005	mg/L	12/09/1997	
Zinc, ICP	6010	ND	0.005	mg/L	12/09/1997	

Sample Number 88187 — Sample Description 711001-02

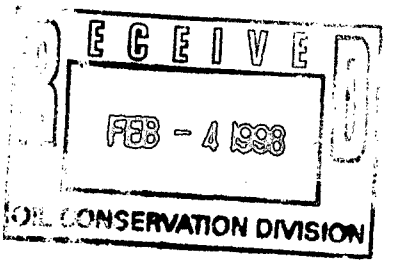
PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
ICP/AA Digestion - Water	ICP	-			12/05/1997	
Aluminum, ICP	6010	ND	0.05	mg/L	12/09/1997	

A sample result of ND indicates the parameter was Not Detected at the reporting limit.

American Environmental Network, Inc.

AEN I.D. 801303

February 3, 1998



NMOCD
2040 S. PACHEO
SANTA FE, NM 87505

Project Name TEXACO EUNICE NORTH
Project Number (none)

Attention: BILL OLSON

On 10/31/97 American Environmental Network (NM), Inc. (ADHS License No. AZ0015), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

AEN Accession number 710431 was released on December 17, 1997. Due to a misinterpretation of the COC, the ICP scan requested was not performed. The data was available from AEN (OR) and is submitted as AEN Accession number 801303.

We apologize in the delay of submitting the metal data to you and appreciate your patience and understanding.

All analyses were performed at American Environmental Network (OR) Inc., Portland, OR.

At the request of the client, sample 9710281105 (-02) was reanalyzed. Based on this analysis, the sodium result is being republished. We appreciate your patience in this matter.

If you have any questions or comments, please do not hesitate to contact us at (505)344-3777.

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph. D.
General Manager

2709-D Pan American Freeway, NE • Albuquerque, NM 87107 • (505) 344-3777 • Fax (505) 344-4413

American Environmental Network, Inc.

CLIENT	: NMOCD	AEN I.D.	: 801303
PROJECT #	: (none)	DATE RECEIVED	: 10/31/97
PROJECT NAME	: TEXACO EUNICE NORTH	REPORT DATE	: 1/8/98

AEN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	LORD WELL	AQ	10/30/97
02	ROWLAND WELL	AQ	10/30/97
03	TRIP BLANK	AQ	10/29/97

17400 SW Upper Boones Ferry Road • Suite 270 • Portland, OR 97224 • (503) 684-0447

Marcia Smith
AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

Date: 01/28/1998
AEN Account No.: 80
AEN Job Number: 97.03080

Project: 711001
Location:

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Sample Number	Sample Description	Matrix Type	Date Taken	Date Received
88186	711001-01	Water	10/30/1997	12/04/1997
88187	711001-02	Water	10/30/1997	12/04/1997
89787	711001-02 (Sodium re-run)	Water	10/30/1997	01/28/1998

Approved by:

Andi Hoeven
Project Manager
AEN, INC.

Technical Review
AEN, INC.

ANALYTICAL REPORT

Marcia Smith
AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

01/28/1998
Job No.: 97.03080

Project Name: 711001
Date Received: 12/04/1997

Sample Number: 88186
Sample Description: 711001-01

PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
ICP/AA Digestion - Water	ICP	-			12/05/1997	
Aluminum, ICP	6010	ND	0.05	mg/L	12/09/1997	
Antimony, ICP	6010	ND	0.005	mg/L	12/09/1997	
Arsenic, ICP	6010	0.012	0.005	mg/L	12/09/1997	
Barium, ICP	6010	0.021	0.005	mg/L	12/09/1997	
Beryllium, ICP	6010	ND	0.002	mg/L	12/09/1997	
Boron, ICP	6010	0.88 J	0.01	mg/L	12/09/1997	
Cadmium, ICP	6010	ND	0.002	mg/L	12/09/1997	
Calcium, ICP 200.7	200.7	ND	0.05	mg/L	12/09/1997	
Chromium, ICP	6010	0.56 J	0.005	mg/L	12/09/1997	
Cobalt, ICP	6010	ND	0.005	mg/L	12/09/1997	
Copper, ICP	6010	ND	0.005	mg/L	12/09/1997	
Iron, ICP	6010	0.11	0.01	mg/L	12/09/1997	
Lead, ICP	6010	ND	0.005	mg/L	12/09/1997	
Magnesium, ICP 200.7	200.7	ND	0.05	mg/L	12/09/1997	
Manganese, ICP	6010	ND	0.005	mg/L	12/09/1997	
Molybdenum, ICP	6010	0.011	0.005	mg/L	12/09/1997	
Nickel, ICP	6010	0.005	0.005	mg/L	12/09/1997	
Potassium, ICP 200.7	200.7	ND	0.2	mg/L	12/09/1997	
Selenium, ICP	6010	0.043	0.005	mg/L	12/09/1997	
Silver, ICP	6010	ND	0.005	mg/L	12/09/1997	
Sodium, ICP 200.7	200.7	ND	0.2	mg/L	12/09/1997	
Thallium, ICP	6010	ND	0.01	mg/L	12/09/1997	
Vanadium, ICP	6010	0.066	0.005	mg/L	12/09/1997	
Zinc, ICP	6010	ND	0.005	mg/L	12/09/1997	

Sample Number: 88187
Sample Description: 711001-02

PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
ICP/AA Digestion - Water	ICP	-			12/05/1997	
Aluminum, ICP	6010	ND	0.05	mg/L	12/09/1997	

A sample result of ND indicates the parameter was Not Detected at the reporting limit.

ANALYTICAL REPORT

Marcia Smith
AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

01/28/1998
Job No.: 97.03080

Project Name: 711001
Date Received: 12/04/1997

Sample Number: 88187
Sample Description: 711001-02

PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
Antimony, ICP	6010	ND	0.005	mg/L	12/09/1997	
Arsenic, ICP	6010	0.012	0.005	mg/L	12/09/1997	
Barium, ICP	6010	0.038	0.005	mg/L	12/09/1997	
Beryllium, ICP	6010	ND	0.002	mg/L	12/09/1997	
Boron, ICP	6010	0.63	0.01	mg/L	12/09/1997	
Cadmium, ICP	6010	ND	0.002	mg/L	12/09/1997	
Calcium, ICP 200.7	200.7	330	0.05	mg/L	12/09/1997	
Chromium, ICP	6010	0.19	0.005	mg/L	12/09/1997	
Cobalt, ICP	6010	ND	0.005	mg/L	12/09/1997	
Copper, ICP	6010	ND	0.005	mg/L	12/09/1997	
Iron, ICP	6010	0.096	0.01	mg/L	12/09/1997	
Lead, ICP	6010	ND	0.005	mg/L	12/09/1997	
Magnesium, ICP 200.7	200.7	120	0.05	mg/L	12/09/1997	
Manganese, ICP	6010	ND	0.005	mg/L	12/09/1997	
Molybdenum, ICP	6010	0.009	0.005	mg/L	12/09/1997	
Nickel, ICP	6010	ND	0.005	mg/L	12/09/1997	
Potassium, ICP 200.7	200.7	35	2.0	mg/L	12/09/1997	DIL,Q
Selenium, ICP	6010	0.027	0.005	mg/L	12/09/1997	
Silver, ICP	6010	ND	0.005	mg/L	12/09/1997	
Sodium, ICP 200.7	200.7	93000	2000	mg/L	12/09/1997	DIL,Q
Thallium, ICP	6010	ND	0.01	mg/L	12/09/1997	
Vanadium, ICP	6010	0.064	0.005	mg/L	12/09/1997	
Zinc, ICP	6010	0.006	0.005	mg/L	12/09/1997	

Sample Number: 89787
Sample Description: 711001-02 (Sodium re-run)

PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
ICP/AA Digestion - Water	ICP	-				
Sodium, ICP 200.7	200.7	510	20	mg/L	01/23/1998	DIL,Q

A sample result of ND indicates the parameter was Not Detected at the reporting limit.

QUALITY CONTROL REPORT
CONTINUING CALIBRATION VERIFICATION

AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

Date: 01/28/1998

Job Number: 97.03080

Contact: Marcia Smith
Project: 711001

Analyte	CCV True Concentration	Concentration Found	Percent Recovery	Date Analyzed
Aluminum, ICP	25.0	25.0	100.0	12/09/1997
Antimony, ICP	0.500	0.490	98.0	12/09/1997
Antimony, ICP	0.500	0.490	98.0	12/09/1997
Arsenic, ICP	0.500	0.496	99.2	12/09/1997
Barium, ICP	0.500	0.502	100.4	12/09/1997
Beryllium, ICP	0.500	0.508	101.6	12/09/1997
Beryllium, ICP	0.500	0.508	101.6	12/09/1997
Boron, ICP	0.500	0.527	105.4	12/09/1997
Cadmium, ICP	0.500	0.488	97.6	12/09/1997
Cadmium, ICP	0.500	0.488	97.6	12/09/1997
Calcium, ICP 200.7	25.0	24.0	96.0	12/09/1997
Chromium, ICP	0.500	0.506	101.2	12/09/1997
Cobalt, ICP	0.500	0.487	97.4	12/09/1997
Copper, ICP	0.500	0.498	99.6	12/09/1997
Iron, ICP	0.500	0.532	106.4	12/09/1997
Lead, ICP	0.500	0.502	100.4	12/09/1997
Magnesium, ICP 200.7	25.0	25.1	100.4	12/09/1997
Molybdenum, ICP	0.500	0.493	98.6	12/09/1997
Nickel, ICP	0.500	0.502	100.4	12/09/1997
Potassium, ICP 200.7	5.00	4.83	96.6	12/09/1997
Selenium, ICP	0.500	0.497	99.4	12/09/1997
Selenium, ICP	0.500	0.497	99.4	12/09/1997
Silver, ICP	0.500	0.496	99.2	12/09/1997
Silver, ICP	0.500	0.496	99.2	12/09/1997
Sodium, ICP 200.7	5.00	4.91	98.2	12/09/1997
Sodium, ICP 200.7	5.00	4.97	99.4	01/23/1998
Thallium, ICP	0.500	0.498	99.6	12/09/1997
Thallium, ICP	0.500	0.498	99.6	12/09/1997
Vanadium, ICP	0.500	0.496	99.2	12/09/1997
Zinc, ICP	0.500	0.495	99.0	12/09/1997

CCV - Continuing Calibration Verification

QUALITY CONTROL REPORT
LABORATORY CONTROL STANDARD

AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

Date: 01/28/1998

Job Number: 97.03080

Contact: Marcia Smith
Project: 711001

Analyte	LCS True Concentration	Concentration Found	LCS % Recovery	Flags	Date Analyzed
Aluminum, ICP	5.00	4.76	95.2		12/09/1997
Antimony, ICP	0.500	0.479	95.8		12/09/1997
Arsenic, ICP	0.500	0.489	97.8		12/09/1997
Barium, ICP	0.500	0.484	96.8		12/09/1997
Beryllium, ICP	0.500	0.492	98.4		12/09/1997
Boron, ICP	0.500	0.524	104.8		12/09/1997
Cadmium, ICP	0.500	0.461	92.2		12/09/1997
Calcium, ICP 200.7	5.00	4.64	92.8		12/09/1997
Chromium, ICP	0.500	0.476	95.2		12/09/1997
Cobalt, ICP	0.500	0.472	94.4		12/09/1997
Copper, ICP	0.500	0.487	97.4		12/09/1997
Iron, ICP	2.00	2.04	102.0		12/09/1997
Lead, ICP	0.500	0.459	91.8		12/09/1997
Magnesium, ICP 200.7	5.00	4.86	97.2		12/09/1997
Molybdenum, ICP	0.500	0.482	96.4		12/09/1997
Nickel, ICP	0.500	0.461	92.2		12/09/1997
Potassium, ICP 200.7	5.00	6.77	135.4		12/09/1997
Selenium, ICP	0.500	0.476	95.2		12/09/1997
Silver, ICP	0.500	0.455	91.0		12/09/1997
Sodium, ICP 200.7	5.00	5.25	105.0		12/09/1997
Thallium, ICP	0.500	0.449	89.8		12/09/1997
Vanadium, ICP	0.500	0.497	99.4		12/09/1997
Zinc, ICP	0.500	0.474	94.8		12/09/1997

LCS - Laboratory Control Standard

QUALITY CONTROL REPORT
MATRIX SPIKE/MATRIX SPIKE DUPLICATE

AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

Date: 01/28/1998

Job Number: 97.03080

Contact: Marcia Smith
Project: 711001

Analyte	Matrix Spike Result	Sample Result	Spike Amount	Units	Percent Recovery	MSD Result	MSD Spike Amount	Units	Percent Recovery	MS/MSD RPD	Flags
Aluminum, ICP	4.73	ND	5.00	mg/L	94.6	4.73	5.00	mg/L	94.6	0.0	
Aluminum, ICP		ND	5.00	mg/L			5.00	mg/L			
Aluminum, ICP		ND	5.00	mg/L			5.00	mg/L			
Antimony, ICP		ND	0.500	mg/L			0.500	mg/L			
Antimony, ICP		ND	0.500	mg/L			0.500	mg/L			
Antimony, ICP	0.497	ND	0.500	mg/L	99.4	0.499	0.500	mg/L	99.8	0.4	
Arsenic, ICP	0.521	0.012	0.500	mg/L	101.8	0.521	0.500	mg/L	101.8	0.0	
Arsenic, ICP		ND	0.500	mg/L			0.500	mg/L			
Arsenic, ICP		ND	0.500	mg/L			0.500	mg/L			
Barium, ICP		ND	0.500	mg/L			0.500	mg/L			
Barium, ICP		ND	0.500	mg/L			0.500	mg/L			
Barium, ICP	0.497	0.021	0.500	mg/L	95.2	0.508	0.500	mg/L	97.4	2.3	
Beryllium, ICP	0.497	ND	0.500	mg/L	99.4	0.499	0.500	mg/L	99.8	0.4	
Beryllium, ICP		ND	0.500	mg/L			0.500	mg/L			
Beryllium, ICP		ND	0.500	mg/L			0.500	mg/L			
Boron, ICP	1.40	0.88	0.500	mg/L	104.0	1.41	0.500	mg/L	106.0	1.9	
Boron, ICP		ND	0.500	mg/L			0.500	mg/L			
Boron, ICP		ND	0.500	mg/L			0.500	mg/L			
Cadmium, ICP	0.449	ND	0.500	mg/L	89.8	0.448	0.500	mg/L	89.6	0.2	
Cadmium, ICP		ND	0.500	mg/L			0.500	mg/L			
Cadmium, ICP		ND	0.500	mg/L			0.500	mg/L			
QC Sample: 88186											

NOTE: Matrix Spike Samples may not be samples from this job.

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
dil.= Diluted Out

American Environmental Network, Inc. (503)684-0447 (503)620-0393 FAX
17400 SW Upper Boones Perry Rd., Portland, OR 97224

QUALITY CONTROL REPORT
MATRIX SPIKE/MATRIX SPIKE DUPLICATE

AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

Date: 01/28/1998

Job Number: 97.03080

Contact: Marcia Smith
Project: 711001

Analyte	Matrix Spike Result	Sample Result	Spike Amount	Units	Percent Recovery	MSD Result	MSD Spike Amount	Units	Percent Recovery	MS/MSD RPD	Flags
Calcium, ICP 200.7		ND	5.00	mg/L			5.00	mg/L			
Chromium, ICP	1.02	0.56	0.500	mg/L	92.0	1.02	0.500	mg/L	92.0	0.0	
Chromium, ICP		ND	0.500	mg/L			0.500	mg/L			
Chromium, ICP		ND	0.500	mg/L			0.500	mg/L			
Cobalt, ICP	0.463	ND	0.500	mg/L	92.6	0.462	0.500	mg/L	92.4	0.2	
Cobalt, ICP		ND	0.500	mg/L			0.500	mg/L			
Cobalt, ICP		ND	0.500	mg/L			0.500	mg/L			
Copper, ICP		ND	0.500	mg/L			0.500	mg/L			
Copper, ICP		ND	0.500	mg/L			0.500	mg/L			
Copper, ICP	0.496	ND	0.500	mg/L	99.2	0.502	0.500	mg/L	100.4	1.1	
Copper, ICP	0.496	ND	0.500	mg/L	99.2	0.502	0.500	mg/L	100.4	1.1	
Iron, ICP	2.07	0.11	2.00	mg/L	98.0	2.06	2.00	mg/L	97.5	0.5	
Iron, ICP		ND	2.00	mg/L			2.00	mg/L			
Iron, ICP		ND	2.00	mg/L			2.00	mg/L			
Lead, ICP	0.439	ND	0.500	mg/L	87.8	0.437	0.500	mg/L	87.4	0.5	MI
Lead, ICP	0.439	ND	0.500	mg/L	87.8	0.437	0.500	mg/L	87.4	0.5	
Lead, ICP		ND	0.500	mg/L			0.500	mg/L			
Lead, ICP		ND	0.500	mg/L			0.500	mg/L			
Magnesium, ICP 200.7		94	5.00	mg/L			5.00	mg/L			MD
Magnesium, ICP 200.7		ND	5.00	mg/L			5.00	mg/L			
Manganese, ICP	0.483	ND	0.500	mg/L	96.6	0.483	0.500	mg/L	96.6	0.0	
QC Sample: 88186											

NOTE: Matrix Spike Samples may not be samples from this job.

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
dil.= Diluted Out

American Environmental Network, Inc. (503)684-0447 (503)620-0393 FAX
17400 SW Upper Boones Ferry Rd., Portland, OR 97224

QUALITY CONTROL REPORT
MATRIX SPIKE/MATRIX SPIKE DUPLICATE

AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

Date: 01/28/1998

Job Number: 97.03080

Contact: Marcia Smith
Project: 711001

Analyte	Matrix Spike Result	Sample Result	Spike Amount	Units	Percent Recovery	MSD Result	MSD Spike Amount	Units	Percent Recovery	MS/MSD RPD	Flags
Molybdenum, ICP		ND	0.500	mg/L			0.500	mg/L			
Molybdenum, ICP		ND	0.500	mg/L			0.500	mg/L			
Nickel, ICP	0.450	0.005	0.500	mg/L	89.0	0.449	0.500	mg/L	88.8	0.2	
Nickel, ICP	0.450	0.005	0.500	mg/L	89.0	0.449	0.500	mg/L	88.8	0.2	
Nickel, ICP		ND	0.500	mg/L			0.500	mg/L			
Nickel, ICP		ND	0.500	mg/L			0.500	mg/L			
Potassium, ICP 200.7	20.4	12	5.00	mg/L	168.0	20.4	5.00	mg/L	168.0	0.0	DILQ,M
Potassium, ICP 200.7		ND	5.00	mg/L			5.00	mg/L			
Selenium, ICP	0.523	0.043	0.500	mg/L	96.0	0.527	0.500	mg/L	96.8	0.8	
Selenium, ICP		ND	0.500	mg/L			0.500	mg/L			
Selenium, ICP		ND	0.500	mg/L			0.500	mg/L			
Silver, ICP	0.471	ND	0.500	mg/L	94.2	0.472	0.500	mg/L	94.4	0.2	
Silver, ICP		ND	0.500	mg/L			0.500	mg/L			
Silver, ICP		ND	0.500	mg/L			0.500	mg/L			
Sodium, ICP 200.7		350	5.00	mg/L			5.00	mg/L			DIL,Q,
Sodium, ICP 200.7		ND	5.00	mg/L			5.00	mg/L			
Thallium, ICP	0.430	ND	0.500	mg/L	86.0	0.433	0.500	mg/L	86.6	0.7	
Thallium, ICP		ND	0.500	mg/L			0.500	mg/L			
Thallium, ICP		ND	0.500	mg/L			0.500	mg/L			
Vanadium, ICP	0.575	0.066	0.500	mg/L	101.8	0.576	0.500	mg/L	102.0	0.2	
Vanadium, ICP		ND	0.500	mg/L			0.500	mg/L			

QC Sample:
88186

NOTE: Matrix Spike Samples may not be samples from this job.

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
dil.= Diluted Out

American Environmental Network, Inc. (503)684-0447 (503)620-0393 FAX
17400 SW Upper Boones Ferry Rd., Portland, OR 97224

QUALITY CONTROL REPORT
MATRIX SPIKE/MATRIX SPIKE DUPLICATE

AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

Date: 01/28/1998

Job Number: 97.03080

Contact: Marcia Smith
Project: 711001

Analyte	Matrix Spike Result	Sample Result	Spike Amount	Units	Percent Recovery	MSD Result	MSD Spike Amount	Units	Percent Recovery	MS/MSD RPD	Flags
Zinc, ICP	0.487	ND	0.500	mg/L	97.4	0.481	0.500	mg/L	96.2	1.2	
Zinc, ICP	0.487	ND	0.500	mg/L	97.4	0.481	0.500	mg/L	96.2	1.2	
Zinc, ICP		ND	0.500	mg/L			0.500	mg/L			
Zinc, ICP		ND	0.500	mg/L			0.500	mg/L			

QC Sample:

NOTE: Matrix Spike Samples may not be samples from this job.

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
dil.= Diluted Out

American Environmental Network, Inc. (503)684-0447 (503)620-0393 FAX
17400 SW Upper Boones Ferry Rd., Portland, OR 97224

QUALITY CONTROL REPORT
BLANKS

AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

Date: 01/28/1998

Job Number: 97.03080

Contact: Marcia Smith
Project: 711001
Location:

Analyte	Blank Analysis	Report Limit	Units	Date Analyzed
Aluminum, ICP	ND	0.05	mg/L	12/09/1997
Antimony, ICP	ND	0.005	mg/L	12/09/1997
Arsenic, ICP	ND	0.005	mg/L	12/09/1997
Barium, ICP	ND	0.005	mg/L	12/09/1997
Beryllium, ICP	ND	0.002	mg/L	12/09/1997
Boron, ICP	ND	0.01	mg/L	12/09/1997
Cadmium, ICP	ND	0.002	mg/L	12/09/1997
Calcium, ICP 200.7	ND	0.05	mg/L	12/09/1997
Chromium, ICP	ND	0.005	mg/L	12/09/1997
Cobalt, ICP	ND	0.005	mg/L	12/09/1997
Copper, ICP	ND	0.005	mg/L	12/09/1997
Iron, ICP	ND	0.01	mg/L	12/09/1997
Lead, ICP	ND	0.005	mg/L	12/09/1997
Magnesium, ICP 200.7	ND	0.05	mg/L	12/09/1997
Molybdenum, ICP	ND	0.005	mg/L	12/09/1997
Nickel, ICP	ND	0.005	mg/L	12/09/1997
Potassium, ICP 200.7	ND	0.2	mg/L	12/09/1997
Selenium, ICP	ND	0.005	mg/L	12/09/1997
Silver, ICP	ND	0.005	mg/L	12/09/1997
Sodium, ICP 200.7	ND	0.2	mg/L	12/09/1997
Thallium, ICP	ND	0.01	mg/L	12/09/1997
Vanadium, ICP	ND	0.005	mg/L	12/09/1997
Zinc, ICP	ND	0.005	mg/L	12/09/1997

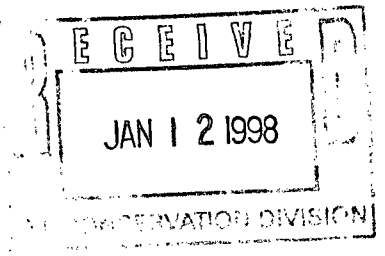
FLAG GLOSSARY

A	This sample does not have a typical gasoline pattern.
B1	This sample does not have a typical diesel pattern.
B	Analyte found in the associated blank as well as the sample.
C	The sample contains a lighter hydrocarbon than gasoline.
CN	See case narrative
CS	Outside control limits or unusual matrix; see case narrative.
D	The sample extends to a heavier hydrocarbon range than gasoline.
d	Results on a dry weight basis
DIL	Result was calculated from dilution.
E	The sample extends to a lighter hydrocarbon range than diesel.
F	The sample extends to a heavier hydrocarbon range than diesel.
G	The positive result for gasoline is due to single component comtamination.
I	The oil pattern for this sample is not typical.
J	The result for this compound is an estimated concentration.
L	The LCS recovery exceeded control limits. See the LCS page of this report.
LM	The LCS recovery exeeded control limits; the MS/MSD were in control validating the batch.
M	MS and/or MSD percent recovery exceeds control limits.
MD	Unable to calculate MS/MSD recovery due to high amount of analyte; greater than 4 times spike level.
MR	The MS/MSD RPD is greater than method critera. The sample was re-extracted and re-analyzed with similar results indica a non-homogeneous sample.
MM	The Matrix Spike exceeded control limits; LCS/LCS-D were in control validating the batch.
MI	Outside control limits due to matrix interference.
N	Manual integration performed on sample for quantification.
N/A	Not Applicable.
NC	Not calcuable.
NO	Not Analyzed.
P	A post digestion spike was analyzed, and recoveries were within control limits.
Q	Detection limits elevated due to sample matrix.
Q1	Detection limits elevated due to high levels of non-target compounds. Sample(s) run at a dilution.
R	The duplicate RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
RD	RPD not applicable for results less than five times the reporting limit.
RP	MS/MSD RPD is greater than 20%
SR	Surrogate recovery outside control limits. See the surrogate page of the report.
SD	Unable to quantitate surrogate due to sample dilution.
SC	Sample not provided to laboratory in proper sampling container.
V	Volatile analysis was requested, sample container received with headspace.
X1	The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
X	Sample was analyzed outside recommended holding times.
Y	The result for this parameter was greater than the TCLP regulatory limit.
Z	The pattern seen for the parameter being analyzed is not typical.

American Environmental Network, Inc.

AEN I.D. 801303

January 8, 1998



NMOCD
2040 S. PACHEO
SANTA FE, NM 87505

Project Name TEXACO EUNICE NORTH
Project Number (none)

Attention: BILL OLSON

On 10/31/97 American Environmental Network (NM), Inc. (ADHS License No. AZ0015), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

AEN Accession number 710431 was released on December 17, 1997. Due to a misinterpretation of the COC, the ICP scan requested was not performed. The data was available from AEN (OR) and is submitted as AEN Accession number 801303.

We apologize in the delay of submitting the metal data to you and appreciate your patience and understanding.

All analyses were performed at American Environmental Network (OR) Inc., Portland, OR.

If you have any questions or comments, please do not hesitate to contact us at (505)344-3777.

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: mt

Enclosure

2709-D Pan American Freeway, NE • Albuquerque, NM 87107 • (505) 344-3777 • Fax (505) 344-4413

American Environmental Network, Inc.

CLIENT	: NMOCD	AEN I.D.	: 801303
PROJECT #	: (none)	DATE RECEIVED	: 10/31/97
PROJECT NAME	: TEXACO EUNICE NORTH	REPORT DATE	: 1/8/98

AEN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	LORD WELL	AQ	10/30/97
02	ROWLAND WELL	AQ	10/30/97
03	TRIP BLANK	AQ	10/29/97

American Environmental Network, Inc.

17400 SW Upper Boones Ferry Road • Suite 270 • Portland, OR 97224 • (503) 684-0447

Marcia Smith
AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

Date: 01/06/1998
AEN Account No.: 80
AEN Job Number: 97.03080

Project: 711001
Location:

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Sample Number	Sample Description	Matrix Type	Date Taken	Date Received
88186	711001-01	Water	10/30/1997	12/04/1997
88187	711001-02	Water	10/30/1997	12/04/1997

Approved by:

Andi Hoevet
Project Manager
AEN, INC.

Technical Review
AEN, INC.

ANALYTICAL REPORT

Marcia Smith
AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

01/06/1998
Job No.: 97.03080

Project Name: 711001
Date Received: 12/04/1997

Sample Number 88186 — Sample Description 711001-01

PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
ICP/AA Digestion - Water	ICP	-			12/05/1997	
Aluminum, ICP	6010	ND	0.05	mg/L	12/09/1997	
Antimony, ICP	6010	ND	0.005	mg/L	12/09/1997	
Arsenic, ICP	6010	0.012	0.005	mg/L	12/09/1997	
Barium, ICP	6010	0.021	0.005	mg/L	12/09/1997	
Beryllium, ICP	6010	ND	0.002	mg/L	12/09/1997	
Boron, ICP	6010	0.88	0.01	mg/L	12/09/1997	
Cadmium, ICP	6010	ND	0.002	mg/L	12/09/1997	
Calcium, ICP 200.7	200.7	ND	0.05	mg/L	12/09/1997	
Chromium, ICP	6010	0.56	0.005	mg/L	12/09/1997	
Cobalt, ICP	6010	ND	0.005	mg/L	12/09/1997	
Copper, ICP	6010	ND	0.005	mg/L	12/09/1997	
Iron, ICP	6010	0.11	0.01	mg/L	12/09/1997	
Lead, ICP	6010	ND	0.005	mg/L	12/09/1997	
Magnesium, ICP 200.7	200.7	ND	0.05	mg/L	12/09/1997	
Manganese, ICP	6010	ND	0.005	mg/L	12/09/1997	
Molybdenum, ICP	6010	0.011	0.005	mg/L	12/09/1997	
Nickel, ICP	6010	0.005	0.005	mg/L	12/09/1997	
Potassium, ICP 200.7	200.7	ND	0.2	mg/L	12/09/1997	
Selenium, ICP	6010	0.043	0.005	mg/L	12/09/1997	
Silver, ICP	6010	ND	0.005	mg/L	12/09/1997	
Sodium, ICP 200.7	200.7	ND	0.2	mg/L	12/09/1997	
Thallium, ICP	6010	ND	0.01	mg/L	12/09/1997	
Vanadium, ICP	6010	0.066	0.005	mg/L	12/09/1997	
Zinc, ICP	6010	ND	0.005	mg/L	12/09/1997	

Sample Number 88187 — Sample Description 711001-02

PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
ICP/AA Digestion - Water	ICP	-			12/05/1997	
Aluminum, ICP	6010	ND	0.05	mg/L	12/09/1997	

A sample result of ND indicates the parameter was Not Detected at the reporting limit.

ANALYTICAL REPORT

Marcia Smith
AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

01/06/1998
Job No.: 97.03080

Project Name: 711001
Date Received: 12/04/1997

Sample Number	Sample Description
88187	711001-02

PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
Antimony, ICP	6010	ND	0.005	mg/L	12/09/1997	
Arsenic, ICP	6010	0.012	0.005	mg/L	12/09/1997	
Barium, ICP	6010	0.038	0.005	mg/L	12/09/1997	
Beryllium, ICP	6010	ND	0.002	mg/L	12/09/1997	
Boron, ICP	6010	0.63	0.01	mg/L	12/09/1997	
Cadmium, ICP	6010	ND	0.002	mg/L	12/09/1997	
Calcium, ICP 200.7	200.7	330	0.05	mg/L	12/09/1997	
Chromium, ICP	6010	0.19	0.005	mg/L	12/09/1997	
Cobalt, ICP	6010	ND	0.005	mg/L	12/09/1997	
Copper, ICP	6010	ND	0.005	mg/L	12/09/1997	
Iron, ICP	6010	0.096	0.01	mg/L	12/09/1997	
Lead, ICP	6010	ND	0.005	mg/L	12/09/1997	
Magnesium, ICP 200.7	200.7	120	0.05	mg/L	12/09/1997	
Manganese, ICP	6010	ND	0.005	mg/L	12/09/1997	
Molybdenum, ICP	6010	0.009	0.005	mg/L	12/09/1997	
Nickel, ICP	6010	ND	0.005	mg/L	12/09/1997	
Potassium, ICP 200.7	200.7	35	2.0	mg/L	12/09/1997	DIL,Q
Selenium, ICP	6010	0.027	0.005	mg/L	12/09/1997	
Silver, ICP	6010	ND	0.005	mg/L	12/09/1997	
Sodium, ICP 200.7	200.7	93000	2000	mg/L	12/09/1997	DIL,Q
Thallium, ICP	6010	ND	0.01	mg/L	12/09/1997	
Vanadium, ICP	6010	0.064	0.005	mg/L	12/09/1997	
Zinc, ICP	6010	0.006	0.005	mg/L	12/09/1997	

A sample result of ND indicates the parameter was Not Detected at the reporting limit.

QUALITY CONTROL REPORT
CONTINUING CALIBRATION VERIFICATION

AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

Date: 01/06/1998

Job Number: 97.03080

Contact: Marcia Smith
Project: 711001

Analyte	CCV True Concentration	Concentration Found	Percent Recovery	Date Analyzed
Aluminum, ICP	25.0	25.0	100.0	12/09/1997
Antimony, ICP	0.500	0.490	98.0	12/09/1997
Antimony, ICP	0.500	0.490	98.0	12/09/1997
Arsenic, ICP	0.500	0.496	99.2	12/09/1997
Barium, ICP	0.500	0.502	100.4	12/09/1997
Beryllium, ICP	0.500	0.508	101.6	12/09/1997
Beryllium, ICP	0.500	0.508	101.6	12/09/1997
Boron, ICP	0.500	0.527	105.4	12/09/1997
Cadmium, ICP	0.500	0.488	97.6	12/09/1997
Cadmium, ICP	0.500	0.488	97.6	12/09/1997
Calcium, ICP 200.7	25.0	24.0	96.0	12/09/1997
Chromium, ICP	0.500	0.506	101.2	12/09/1997
Cobalt, ICP	0.500	0.487	97.4	12/09/1997
Copper, ICP	0.500	0.498	99.6	12/09/1997
Iron, ICP	0.500	0.532	106.4	12/09/1997
Lead, ICP	0.500	0.502	100.4	12/09/1997
Magnesium, ICP 200.7	25.0	25.1	100.4	12/09/1997
Molybdenum, ICP	0.500	0.493	98.6	12/09/1997
Nickel, ICP	0.500	0.502	100.4	12/09/1997
Potassium, ICP 200.7	5.00	4.83	96.6	12/09/1997
Selenium, ICP	0.500	0.497	99.4	12/09/1997
Selenium, ICP	0.500	0.497	99.4	12/09/1997
Silver, ICP	0.500	0.496	99.2	12/09/1997
Silver, ICP	0.500	0.496	99.2	12/09/1997
Sodium, ICP 200.7	5.00	4.91	98.2	12/09/1997
Thallium, ICP	0.500	0.498	99.6	12/09/1997
Thallium, ICP	0.500	0.498	99.6	12/09/1997
Vanadium, ICP	0.500	0.496	99.2	12/09/1997
Zinc, ICP	0.500	0.495	99.0	12/09/1997

CCV - Continuing Calibration Verification

QUALITY CONTROL REPORT
LABORATORY CONTROL STANDARD

AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

Date: 01/06/1998

Job Number: 97.03080

Contact: Marcia Smith
Project: 711001

Analyte	LCS True Concentration	Concentration Found	LCS % Recovery	Flags	Date Analyzed
Aluminum, ICP	5.00	4.76	95.2		12/09/1997
Antimony, ICP	0.500	0.479	95.8		12/09/1997
Arsenic, ICP	0.500	0.489	97.8		12/09/1997
Barium, ICP	0.500	0.484	96.8		12/09/1997
Beryllium, ICP	0.500	0.492	98.4		12/09/1997
Boron, ICP	0.500	0.524	104.8		12/09/1997
Cadmium, ICP	0.500	0.461	92.2		12/09/1997
Calcium, ICP 200.7	5.00	4.64	92.8		12/09/1997
Chromium, ICP	0.500	0.476	95.2		12/09/1997
Cobalt, ICP	0.500	0.472	94.4		12/09/1997
Copper, ICP	0.500	0.487	97.4		12/09/1997
Iron, ICP	2.00	2.04	102.0		12/09/1997
Lead, ICP	0.500	0.459	91.8		12/09/1997
Magnesium, ICP 200.7	5.00	4.86	97.2		12/09/1997
Molybdenum, ICP	0.500	0.482	96.4		12/09/1997
Nickel, ICP	0.500	0.461	92.2		12/09/1997
Potassium, ICP 200.7	5.00	6.77	135.4		12/09/1997
Selenium, ICP	0.500	0.476	95.2		12/09/1997
Silver, ICP	0.500	0.455	91.0		12/09/1997
Sodium, ICP 200.7	5.00	5.25	105.0		12/09/1997
Thallium, ICP	0.500	0.449	89.8		12/09/1997
Vanadium, ICP	0.500	0.497	99.4		12/09/1997
Zinc, ICP	0.500	0.474	94.8		12/09/1997

LCS - Laboratory Control Standard

QUALITY CONTROL REPORT
MATRIX SPIKE/MATRIX SPIKE DUPLICATE

AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

Date: 01/06/1998

Job Number: 97.03080

Contact: Marcia Smith
Project: 711001

Analyte	Matrix Spike Result	Sample Result	Spike Amount	Units	Percent Recovery	MSD Result	MSD Spike Amount	Units	Percent Recovery	MS/MSD RPD	Flags
Aluminum, ICP	4.73	ND	5.00	mg/L	94.6	4.73	5.00	mg/L	94.6	0.0	
Antimony, ICP	0.497	ND	0.500	mg/L	99.4	0.499	0.500	mg/L	99.8	0.4	
Arsenic, ICP	0.521	0.012	0.500	mg/L	101.8	0.521	0.500	mg/L	101.8	0.0	
Barium, ICP	0.497	0.021	0.500	mg/L	95.2	0.508	0.500	mg/L	97.4	2.3	
Beryllium, ICP	0.497	ND	0.500	mg/L	99.4	0.499	0.500	mg/L	99.8	0.4	
Boron, ICP	1.40	0.88	0.500	mg/L	104.0	1.41	0.500	mg/L	106.0	1.9	
Cadmium, ICP	0.449	ND	0.500	mg/L	89.8	0.448	0.500	mg/L	89.6	0.2	
Calcium, ICP 200.7		280	5.00	mg/L			5.00	mg/L			MD
Chromium, ICP	1.02	0.56	0.500	mg/L	92.0	1.02	0.500	mg/L	92.0	0.0	
Cobalt, ICP	0.463	ND	0.500	mg/L	92.6	0.462	0.500	mg/L	92.4	0.2	
Copper, ICP	0.496	ND	0.500	mg/L	99.2	0.502	0.500	mg/L	100.4	1.1	
Copper, ICP	0.496	ND	0.500	mg/L	99.2	0.502	0.500	mg/L	100.4	1.1	
Iron, ICP	2.07	0.11	2.00	mg/L	98.0	2.06	2.00	mg/L	97.5	0.5	
Lead, ICP	0.439	ND	0.500	mg/L	87.8	0.437	0.500	mg/L	87.4	0.5	MI
Lead, ICP	0.439	ND	0.500	mg/L	87.8	0.437	0.500	mg/L	87.4	0.5	
Magnesium,ICP 200.7		94	5.00	mg/L			5.00	mg/L			MD
Manganese, ICP	0.483	ND	0.500	mg/L	96.6	0.483	0.500	mg/L	96.6	0.0	
Nickel, ICP	0.450	0.005	0.500	mg/L	89.0	0.449	0.500	mg/L	88.8	0.2	
Nickel, ICP	0.450	0.005	0.500	mg/L	89.0	0.449	0.500	mg/L	88.8	0.2	
Potassium, ICP 200.7	20.4	12	5.00	mg/L	168.0	20.4	5.00	mg/L	168.0	0.0	DILQ,M
Selenium, ICP	0.523	0.043	0.500	mg/L	96.0	0.527	0.500	mg/L	96.8	0.8	
Silver, ICP	0.471	ND	0.500	mg/L	94.2	0.472	0.500	mg/L	94.4	0.2	
Sodium, ICP 200.7		350	5.00	mg/L			5.00	mg/L			DIL,Q,M
Thallium, ICP	0.430	ND	0.500	mg/L	86.0	0.433	0.500	mg/L	86.6	0.7	
Vanadium, ICP	0.575	0.066	0.500	mg/L	101.8	0.576	0.500	mg/L	102.0	0.2	
Zinc, ICP	0.487	ND	0.500	mg/L	97.4	0.481	0.500	mg/L	96.2	1.2	
Zinc, ICP	0.487	ND	0.500	mg/L	97.4	0.481	0.500	mg/L	96.2	1.2	

QC Sample:
88186

NOTE: Matrix Spike Samples may not be samples from this job.

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
dil.= Diluted Out

QUALITY CONTROL REPORT
BLANKS

AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

Date: 01/06/1998

Job Number: 97.03080

Contact: Marcia Smith
Project: 711001
Location:

Analyte	Blank Analysis	Report Limit	Units	Date Analyzed
Aluminum, ICP	ND	0.05	mg/L	12/09/1997
Antimony, ICP	ND	0.005	mg/L	12/09/1997
Arsenic, ICP	ND	0.005	mg/L	12/09/1997
Barium, ICP	ND	0.005	mg/L	12/09/1997
Beryllium, ICP	ND	0.002	mg/L	12/09/1997
Boron, ICP	ND	0.01	mg/L	12/09/1997
Cadmium, ICP	ND	0.002	mg/L	12/09/1997
Calcium, ICP 200.7	ND	0.05	mg/L	12/09/1997
Chromium, ICP	ND	0.005	mg/L	12/09/1997
Cobalt, ICP	ND	0.005	mg/L	12/09/1997
Copper, ICP	ND	0.005	mg/L	12/09/1997
Iron, ICP	ND	0.01	mg/L	12/09/1997
Lead, ICP	ND	0.005	mg/L	12/09/1997
Magnesium, ICP 200.7	ND	0.05	mg/L	12/09/1997
Molybdenum, ICP	ND	0.005	mg/L	12/09/1997
Nickel, ICP	ND	0.005	mg/L	12/09/1997
Potassium, ICP 200.7	ND	0.2	mg/L	12/09/1997
Selenium, ICP	ND	0.005	mg/L	12/09/1997
Silver, ICP	ND	0.005	mg/L	12/09/1997
Sodium, ICP 200.7	ND	0.2	mg/L	12/09/1997
Thallium, ICP	ND	0.01	mg/L	12/09/1997
Vanadium, ICP	ND	0.005	mg/L	12/09/1997
Zinc, ICP	ND	0.005	mg/L	12/09/1997

FLAG GLOSSARY

A	This sample does not have a typical gasoline pattern.
B1	This sample does not have a typical diesel pattern.
B	Analyte found in the associated blank as well as the sample.
C	The sample contains a lighter hydrocarbon than gasoline.
CN	See case narrative
CS	Outside control limits or unusual matrix; see case narrative.
D	The sample extends to a heavier hydrocarbon range than gasoline.
d	Results on a dry weight basis
DIL	Result was calculated from dilution.
E	The sample extends to a lighter hydrocarbon range than diesel.
F	The sample extends to a heavier hydrocarbon range than diesel.
G	The positive result for gasoline is due to single component comtamination.
I	The oil pattern for this sample is not typical.
J	The result for this compound is an estimated concentration.
L	The LCS recovery exceeded control limits. See the LCS page of this report.
LM	The LCS recovery exeeded control limits; the MS/MSD were in control validating the batch.
M	MS and/or MSD percent recovery exceeds control limits.
MD	Unable to calculate MS/MSD recovery due to high amount of analyte; greater than 4 times spike level.
MR	The MS/MSD RPD is greater than method critera. The sample was re-extracted and re-analyzed with similar results indica a non-homogeneous sample.
MM	The Matrix Spike exceeded control limits; LCS/LCS-D were in control validating the batch.
MI	Outside control limits due to matrix interference.
N	Manual integration performed on sample for quantification.
N/A	Not Applicable.
NC	Not calcuable.
NO	Not Analyzed.
P	A post digestion spike was analyzed, and recoveries were within control limits.
Q	Detection limits elevated due to sample matrix.
Q1	Detection limits elevated due to high levels of non-target compounds. Sample(s) run at a dilution.
R	The duplicate RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
RD	RPD not applicable for results less than five times the reporting limit.
RP	MS/MSD RPD is greater than 20%
SR	Surrogate recovery outside control limits. See the surrogate page of the report.
SD	Unable to quantitate surrogate due to sample dilution.
SC	Sample not provided to laboratory in proper sampling container.
V	Volatile analysis was requested, sample container received with headspace.
X1	The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
X	Sample was analyzed outside recommended holding times.
Y	The result for this parameter was greater than the TCLP regulatory limit.
Z	The pattern seen for the parameter being analyzed is not typical.

American Environmental Network (NM), Inc.
Albuquerque • Phoenix • Pensacola • Portland • Pleasant Hills • Columbia

CHAIN OF CUSTODY

DATE: 10/31/97 PAGE: 1 OF 1

AEN LAB ID: 710151

PLEASE FILL THIS FORM IN COMPLETELY. SHADED AREAS ARE FOR LAB USE ONLY.

PROJECT MANAGER:	Bill Olson
COMPANY:	NM Oil Conservation Division
ADDRESS:	2040 S. Pacheco Santa Fe, NM 87505
PHONE:	(505) 827-7154
FAX:	(505) 827-8177
BILL TO:	Same
COMPANY:	
ADDRESS:	

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct/Inject	8010/8020	(M8015) Gas/Purge & Trap	Gasoline/BTEX & MTBE (M8015/8020)	BTXE/MTBE (8020)	BTEX & Chlorinated Aromatics (602/8020)	BTEX/MTBE/EDC & EDB (8020/8010/Short)	Chlorinated Hydrocarbons (601/8010)	504 EDB ☐ / DBCP ☐	Polynuclear Aromatics (610/8310)	Volatile Organics (624/8240) GC/MS	Volatile Organics (8260) GC/MS	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)	General Chemistry: Cations/Anions	Nitrates	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals: 6010 plus Hg + Se by AA	NUMBER OF CONTAINERS
Lord Well	10/30/97	0940	water	-01			3														1	2				1		7
Rowland Well	10/30/97	1030	water	-02			3														1	2				1		7
TRIP Blank	10-29-97	1040	AQ	-03			X																					1

ANALYSIS REQUEST

PROJECT INFORMATION	
PROJ. NO.:	
PROJ. NAME:	Texaco Eunice North
P.O. NO.:	
SHIPPED VIA:	

SAMPLE RECEIPT	
NO. CONTAINERS:	11
CUSTODY SEALS:	N/A
RECEIVED INTACT:	Yes
BOTTLE CONDITION:	OK

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) X

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

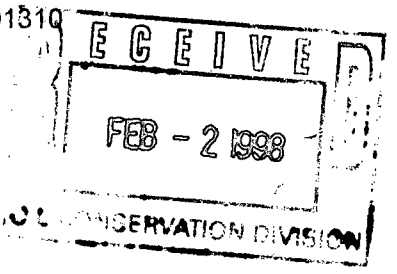
METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: Bill Olson Time: 0905	Signature: Time:
Printed Name: William Olson Date: 10/31/97	Printed Name: Date:
Company: NMOCD	Company:
RECEIVED BY: 1.	**RECEIVED BY (LAB): 2.**
Signature: Time:	Signature: Time: 0905
Printed Name: Date:	Printed Name: Date: 10-31-97
Company:	American Environmental Network (NM) Inc.

American Environmental Network, Inc.

AEN I.D. 801310



January 30, 1998

NMOCD
2040 S. PACHECO
SANTA FE, NM 87505

Project Name SALTY BILL
Project Number SALTY BILL

Attention: BILL OLSON

On 10/29/97 American Environmental Network (NM), Inc. (ADHS License No. AZ0015), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

AEN Accession number 710420 was released on December 17, 1997. Due to a misinterpretation of the COC, the ICP scan requested was not performed. The data was available from AEN (OR) and is submitted as AEN Accession number 801310.

We apologize in the delay of submitting the metal data to you and appreciate your patience and understanding.

All analyses were performed at American Environmental Network (OR) Inc., Portland, OR.

At the request of the client sample 9710281105 (-02) was reanalyzed. Based on this analysis, the sodium result is being republished.

We apologize for the long delay and appreciate your patience.

If you have any questions or comments, please do not hesitate to contact us at (505)344-3777.

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: mt

2709-D Pan American Freeway, NE • Albuquerque, NM 87107 • (505) 344-3777 • Fax (505) 344-4413

American Environmental Network, Inc.

CLIENT	: NMOCD	AEN I.D.	: 801310
PROJECT #	: SALTY BILL	DATE RECEIVED	: 10/29/97
PROJECT NAME	: SALTY BILL	REPORT DATE	: 1/8/98

AEN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	9710280910	AQ	10/28/97
02	9710281105	AQ	10/28/97

American Environmental Network, Inc.

17400 SW Upper Boones Ferry Road • Suite 270 • Portland, OR 97224 • (503) 684-0447

Marcia Smith
AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

Date: 01/28/1998
AEN Account No.: 80
AEN Job Number: 97.03080

Project: 711001
Location:

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Sample Number	Sample Description	Matrix Type	Date Taken	Date Received
88186	711001-01	Water	10/30/1997	12/04/1997
88187	711001-02	Water	10/30/1997	12/04/1997
89787	711001-02 (Sodium re-run)	Water	10/30/1997	01/28/1998

Approved by:

Andi Hoever
Project Manager
AEN, INC.

Technical Review
AEN, INC.

ANALYTICAL REPORT

Marcia Smith
AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

01/28/1998
Job No.: 97.03080

Project Name: 711001
Date Received: 12/04/1997

Sample Number: 88186
Sample Description: 711001-01

PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
ICP/AA Digestion - Water	ICP	-			12/05/1997	
Aluminum, ICP	6010	ND	0.05	mg/L	12/09/1997	
Antimony, ICP	6010	ND	0.005	mg/L	12/09/1997	
Arsenic, ICP	6010	0.012	0.005	mg/L	12/09/1997	
Barium, ICP	6010	0.021	0.005	mg/L	12/09/1997	
Beryllium, ICP	6010	ND	0.002	mg/L	12/09/1997	
Boron, ICP	6010	0.88	0.01	mg/L	12/09/1997	
Cadmium, ICP	6010	ND	0.002	mg/L	12/09/1997	
Calcium, ICP 200.7	200.7	ND	0.05	mg/L	12/09/1997	
Chromium, ICP	6010	0.56	0.005	mg/L	12/09/1997	
Cobalt, ICP	6010	ND	0.005	mg/L	12/09/1997	
Copper, ICP	6010	ND	0.005	mg/L	12/09/1997	
Iron, ICP	6010	0.11	0.01	mg/L	12/09/1997	
Lead, ICP	6010	ND	0.005	mg/L	12/09/1997	
Magnesium, ICP 200.7	200.7	ND	0.05	mg/L	12/09/1997	
Manganese, ICP	6010	ND	0.005	mg/L	12/09/1997	
Molybdenum, ICP	6010	0.011	0.005	mg/L	12/09/1997	
Nickel, ICP	6010	0.005	0.005	mg/L	12/09/1997	
Potassium, ICP 200.7	200.7	ND	0.2	mg/L	12/09/1997	
Selenium, ICP	6010	0.043	0.005	mg/L	12/09/1997	
Silver, ICP	6010	ND	0.005	mg/L	12/09/1997	
Sodium, ICP 200.7	200.7	ND	0.2	mg/L	12/09/1997	
Thallium, ICP	6010	ND	0.01	mg/L	12/09/1997	
Vanadium, ICP	6010	0.066	0.005	mg/L	12/09/1997	
Zinc, ICP	6010	ND	0.005	mg/L	12/09/1997	

Sample Number: 88187
Sample Description: 711001-02

PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
ICP/AA Digestion - Water	ICP	-			12/05/1997	
Aluminum, ICP	6010	ND	0.05	mg/L	12/09/1997	

A sample result of ND indicates the parameter was Not Detected at the reporting limit.

ANALYTICAL REPORT

Marcia Smith
AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

01/28/1998
Job No.: 97.03080

Project Name: 711001
Date Received: 12/04/1997

Sample Number	Sample Description
88187	711001-02

PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
Antimony, ICP	6010	ND	0.005	mg/L	12/09/1997	
Arsenic, ICP	6010	0.012	0.005	mg/L	12/09/1997	
Barium, ICP	6010	0.038	0.005	mg/L	12/09/1997	
Beryllium, ICP	6010	ND	0.002	mg/L	12/09/1997	
Boron, ICP	6010	0.63	0.01	mg/L	12/09/1997	
Cadmium, ICP	6010	ND	0.002	mg/L	12/09/1997	
Calcium, ICP 200.7	200.7	330	0.05	mg/L	12/09/1997	
Chromium, ICP	6010	0.19	0.005	mg/L	12/09/1997	
Cobalt, ICP	6010	ND	0.005	mg/L	12/09/1997	
Copper, ICP	6010	ND	0.005	mg/L	12/09/1997	
Iron, ICP	6010	0.096	0.01	mg/L	12/09/1997	
Lead, ICP	6010	ND	0.005	mg/L	12/09/1997	
Magnesium, ICP 200.7	200.7	120	0.05	mg/L	12/09/1997	
Manganese, ICP	6010	ND	0.005	mg/L	12/09/1997	
Molybdenum, ICP	6010	0.009	0.005	mg/L	12/09/1997	
Nickel, ICP	6010	ND	0.005	mg/L	12/09/1997	
Potassium, ICP 200.7	200.7	35	2.0	mg/L	12/09/1997	DIL,Q
Selenium, ICP	6010	0.027	0.005	mg/L	12/09/1997	
Silver, ICP	6010	ND	0.005	mg/L	12/09/1997	
Sodium, ICP 200.7	200.7	93000	2000	mg/L	12/09/1997	DIL,Q
Thallium, ICP	6010	ND	0.01	mg/L	12/09/1997	
Vanadium, ICP	6010	0.064	0.005	mg/L	12/09/1997	
Zinc, ICP	6010	0.006	0.005	mg/L	12/09/1997	

Sample Number	Sample Description
89787	711001-02 (Sodium re-run)

PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
ICP/AA Digestion - Water	ICP	-				
Sodium, ICP 200.7	200.7	510	20	mg/L	01/23/1998	DIL,Q

A sample result of ND indicates the parameter was Not Detected at the reporting limit.

QUALITY CONTROL REPORT
CONTINUING CALIBRATION VERIFICATION

AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

Date: 01/28/1998

Job Number: 97.03080

Contact: Marcia Smith
Project: 711001

Analyte	CCV True Concentration	Concentration Found	Percent Recovery	Date Analyzed
Aluminum, ICP	25.0	25.0	100.0	12/09/1997
Antimony, ICP	0.500	0.490	98.0	12/09/1997
Antimony, ICP	0.500	0.490	98.0	12/09/1997
Arsenic, ICP	0.500	0.496	99.2	12/09/1997
Barium, ICP	0.500	0.502	100.4	12/09/1997
Beryllium, ICP	0.500	0.508	101.6	12/09/1997
Beryllium, ICP	0.500	0.508	101.6	12/09/1997
Boron, ICP	0.500	0.527	105.4	12/09/1997
Cadmium, ICP	0.500	0.488	97.6	12/09/1997
Cadmium, ICP	0.500	0.488	97.6	12/09/1997
Calcium, ICP 200.7	25.0	24.0	96.0	12/09/1997
Chromium, ICP	0.500	0.506	101.2	12/09/1997
Cobalt, ICP	0.500	0.487	97.4	12/09/1997
Copper, ICP	0.500	0.498	99.6	12/09/1997
Iron, ICP	0.500	0.532	106.4	12/09/1997
Lead, ICP	0.500	0.502	100.4	12/09/1997
Magnesium, ICP 200.7	25.0	25.1	100.4	12/09/1997
Molybdenum, ICP	0.500	0.493	98.6	12/09/1997
Nickel, ICP	0.500	0.502	100.4	12/09/1997
Potassium, ICP 200.7	5.00	4.83	96.6	12/09/1997
Selenium, ICP	0.500	0.497	99.4	12/09/1997
Selenium, ICP	0.500	0.497	99.4	12/09/1997
Silver, ICP	0.500	0.496	99.2	12/09/1997
Silver, ICP	0.500	0.496	99.2	12/09/1997
Sodium, ICP 200.7	5.00	4.91	98.2	12/09/1997
Sodium, ICP 200.7	5.00	4.97	99.4	01/23/1998
Thallium, ICP	0.500	0.498	99.6	12/09/1997
Thallium, ICP	0.500	0.498	99.6	12/09/1997
Vanadium, ICP	0.500	0.496	99.2	12/09/1997
Zinc, ICP	0.500	0.495	99.0	12/09/1997

CCV - Continuing Calibration Verification

QUALITY CONTROL REPORT
LABORATORY CONTROL STANDARD

AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

Date: 01/28/1998

Job Number: 97.03080

Contact: Marcia Smith
Project: 711001

Analyte	LCS True Concentration	Concentration Found	LCS % Recovery	Flags	Date Analyzed
Aluminum, ICP	5.00	4.76	95.2		12/09/1997
Antimony, ICP	0.500	0.479	95.8		12/09/1997
Arsenic, ICP	0.500	0.489	97.8		12/09/1997
Barium, ICP	0.500	0.484	96.8		12/09/1997
Beryllium, ICP	0.500	0.492	98.4		12/09/1997
Boron, ICP	0.500	0.524	104.8		12/09/1997
Cadmium, ICP	0.500	0.461	92.2		12/09/1997
Calcium, ICP 200.7	5.00	4.64	92.8		12/09/1997
Chromium, ICP	0.500	0.476	95.2		12/09/1997
Cobalt, ICP	0.500	0.472	94.4		12/09/1997
Copper, ICP	0.500	0.487	97.4		12/09/1997
Iron, ICP	2.00	2.04	102.0		12/09/1997
Lead, ICP	0.500	0.459	91.8		12/09/1997
Magnesium, ICP 200.7	5.00	4.86	97.2		12/09/1997
Molybdenum, ICP	0.500	0.482	96.4		12/09/1997
Nickel, ICP	0.500	0.461	92.2		12/09/1997
Potassium, ICP 200.7	5.00	6.77	135.4		12/09/1997
Selenium, ICP	0.500	0.476	95.2		12/09/1997
Silver, ICP	0.500	0.455	91.0		12/09/1997
Sodium, ICP 200.7	5.00	5.25	105.0		12/09/1997
Thallium, ICP	0.500	0.449	89.8		12/09/1997
Vanadium, ICP	0.500	0.497	99.4		12/09/1997
Zinc, ICP	0.500	0.474	94.8		12/09/1997

LCS - Laboratory Control Standard

QUALITY CONTROL REPORT
MATRIX SPIKE/MATRIX SPIKE DUPLICATE

AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

Date: 01/28/1998

Job Number: 97.03080

Contact: Marcia Smith
Project: 711001

Analyte	Matrix Spike Result	Sample Result	Spike Amount	Units	Percent Recovery	MSD Result	MSD Spike Amount	Units	Percent Recovery	MS/MSD RPD	Flags
Aluminum, ICP	4.73	ND	5.00	mg/L	94.6	4.73	5.00	mg/L	94.6	0.0	
Aluminum, ICP		ND	5.00	mg/L			5.00	mg/L			
Aluminum, ICP		ND	5.00	mg/L			5.00	mg/L			
Antimony, ICP		ND	0.500	mg/L			0.500	mg/L			
Antimony, ICP		ND	0.500	mg/L			0.500	mg/L			
Antimony, ICP	0.497	ND	0.500	mg/L	99.4	0.499	0.500	mg/L	99.8	0.4	
Arsenic, ICP	0.521	0.012	0.500	mg/L	101.8	0.521	0.500	mg/L	101.8	0.0	
Arsenic, ICP		ND	0.500	mg/L			0.500	mg/L			
Arsenic, ICP		ND	0.500	mg/L			0.500	mg/L			
Barium, ICP		ND	0.500	mg/L			0.500	mg/L			
Barium, ICP		ND	0.500	mg/L			0.500	mg/L			
Barium, ICP	0.497	0.021	0.500	mg/L	95.2	0.508	0.500	mg/L	97.4	2.3	
Beryllium, ICP	0.497	ND	0.500	mg/L	99.4	0.499	0.500	mg/L	99.8	0.4	
Beryllium, ICP		ND	0.500	mg/L			0.500	mg/L			
Beryllium, ICP		ND	0.500	mg/L			0.500	mg/L			
Boron, ICP	1.40	0.88	0.500	mg/L	104.0	1.41	0.500	mg/L	106.0	1.9	
Boron, ICP		ND	0.500	mg/L			0.500	mg/L			
Boron, ICP		ND	0.500	mg/L			0.500	mg/L			
Cadmium, ICP	0.449	ND	0.500	mg/L	89.8	0.448	0.500	mg/L	89.6	0.2	
Cadmium, ICP		ND	0.500	mg/L			0.500	mg/L			
Cadmium, ICP		ND	0.500	mg/L			0.500	mg/L			

QC Sample:
88186

NOTE: Matrix Spike Samples may not be samples from this job.

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
dil.= Diluted Out

American Environmental Network, Inc. (503)684-0447 (503)620-0393 FAX
17400 SW Upper Boones Ferry Rd., Portland, OR 97224

QUALITY CONTROL REPORT
MATRIX SPIKE/MATRIX SPIKE DUPLICATE

AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

Date: 01/28/1998

Job Number: 97.03080

Contact: Marcia Smith
Project: 711001

Analyte	Matrix Spike Result	Sample Result	Spike Amount	Units	Percent Recovery	MSD Result	MSD Spike Amount	Units	Percent Recovery	MS/MSD RPD	Flags
Calcium, ICP 200.7		ND	5.00	mg/L			5.00	mg/L			
Chromium, ICP	1.02	0.56	0.500	mg/L	92.0	1.02	0.500	mg/L	92.0	0.0	
Chromium, ICP		ND	0.500	mg/L			0.500	mg/L			
Chromium, ICP		ND	0.500	mg/L			0.500	mg/L			
Cobalt, ICP	0.463	ND	0.500	mg/L	92.6	0.462	0.500	mg/L	92.4	0.2	
Cobalt, ICP		ND	0.500	mg/L			0.500	mg/L			
Cobalt, ICP		ND	0.500	mg/L			0.500	mg/L			
Copper, ICP		ND	0.500	mg/L			0.500	mg/L			
Copper, ICP		ND	0.500	mg/L			0.500	mg/L			
Copper, ICP	0.496	ND	0.500	mg/L	99.2	0.502	0.500	mg/L	100.4	1.1	
Copper, ICP	0.496	ND	0.500	mg/L	99.2	0.502	0.500	mg/L	100.4	1.1	
Iron, ICP	2.07	0.11	2.00	mg/L	98.0	2.06	2.00	mg/L	97.5	0.5	
Iron, ICP		ND	2.00	mg/L			2.00	mg/L			
Iron, ICP		ND	2.00	mg/L			2.00	mg/L			
Lead, ICP	0.439	ND	0.500	mg/L	87.8	0.437	0.500	mg/L	87.4	0.5	MI
Lead, ICP	0.439	ND	0.500	mg/L	87.8	0.437	0.500	mg/L	87.4	0.5	
Lead, ICP		ND	0.500	mg/L			0.500	mg/L			
Lead, ICP		ND	0.500	mg/L			0.500	mg/L			
Magnesium, ICP 200.7		94	5.00	mg/L			5.00	mg/L			MD
Magnesium, ICP 200.7		ND	5.00	mg/L			5.00	mg/L			
Manganese, ICP	0.483	ND	0.500	mg/L	96.6	0.483	0.500	mg/L	96.6	0.0	

QC Sample:
88186

NOTE: Matrix Spike Samples may not be samples from this job.

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
dil.= Diluted Out

American Environmental Network, Inc. (503)684-0447 (503)620-0393 FAX
17400 SW Upper Boones Ferry Rd., Portland, OR 97224

QUALITY CONTROL REPORT
MATRIX SPIKE/MATRIX SPIKE DUPLICATE

AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

Date: 01/28/1998

Job Number: 97.03080

Contact: Marcia Smith
Project: 711001

Analyte	Matrix Spike Result	Sample Result	Spike Amount	Units	Percent Recovery	MSD Result	MSD Spike Amount	Units	Percent Recovery	MS/MSD RPD	Flags
Molybdenum, ICP		ND	0.500	mg/L			0.500	mg/L			
Molybdenum, ICP		ND	0.500	mg/L			0.500	mg/L			
Nickel, ICP	0.450	0.005	0.500	mg/L	89.0	0.449	0.500	mg/L	88.8	0.2	
Nickel, ICP	0.450	0.005	0.500	mg/L	89.0	0.449	0.500	mg/L	88.8	0.2	
Nickel, ICP		ND	0.500	mg/L			0.500	mg/L			
Nickel, ICP		ND	0.500	mg/L			0.500	mg/L			
Potassium, ICP 200.7	20.4	12	5.00	mg/L	168.0	20.4	5.00	mg/L	168.0	0.0	DILQ,M
Potassium, ICP 200.7		ND	5.00	mg/L			5.00	mg/L			
Selenium, ICP	0.523	0.043	0.500	mg/L	96.0	0.527	0.500	mg/L	96.8	0.8	
Selenium, ICP		ND	0.500	mg/L			0.500	mg/L			
Selenium, ICP		ND	0.500	mg/L			0.500	mg/L			
Silver, ICP	0.471	ND	0.500	mg/L	94.2	0.472	0.500	mg/L	94.4	0.2	
Silver, ICP		ND	0.500	mg/L			0.500	mg/L			
Silver, ICP		ND	0.500	mg/L			0.500	mg/L			
Sodium, ICP 200.7		350	5.00	mg/L			5.00	mg/L			DIL,Q,
Sodium, ICP 200.7		ND	5.00	mg/L			5.00	mg/L			
Thallium, ICP	0.430	ND	0.500	mg/L	86.0	0.433	0.500	mg/L	86.6	0.7	
Thallium, ICP		ND	0.500	mg/L			0.500	mg/L			
Thallium, ICP		ND	0.500	mg/L			0.500	mg/L			
Vanadium, ICP	0.575	0.066	0.500	mg/L	101.8	0.576	0.500	mg/L	102.0	0.2	
Vanadium, ICP		ND	0.500	mg/L			0.500	mg/L			

QC Sample:
88186

NOTE: Matrix Spike Samples may not be samples from this job.

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
dil.= Diluted Out

American Environmental Network, Inc. (503)684-0447 (503)620-0393 FAX
17400 SW Upper Boones Ferry Rd., Portland, OR 97224

QUALITY CONTROL REPORT
MATRIX SPIKE/MATRIX SPIKE DUPLICATE

AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

Date: 01/28/1998

Job Number: 97.03080

Contact: Marcia Smith
Project: 711001

Analyte	Matrix Spike Result	Sample Result	Spike Amount	Units	Percent Recovery	MSD Result	MSD Spike Amount	Units	Percent Recovery	MS/MSD RPD	Flags
Zinc, ICP	0.487	ND	0.500	mg/L	97.4	0.481	0.500	mg/L	96.2	1.2	
Zinc, ICP	0.487	ND	0.500	mg/L	97.4	0.481	0.500	mg/L	96.2	1.2	
Zinc, ICP		ND	0.500	mg/L			0.500	mg/L			
Zinc, ICP		ND	0.500	mg/L			0.500	mg/L			

QC Sample:

NOTE: Matrix Spike Samples may not be samples from this job.

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
dil.= Diluted Out

American Environmental Network, Inc. (503)684-0447 (503)620-0393 FAX
17400 SW Upper Boones Ferry Rd., Portland, OR 97224

QUALITY CONTROL REPORT
BLANKS

AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

Date: 01/28/1998

Job Number: 97.03080

Contact: Marcia Smith
Project: 711001
Location:

Analyte	Blank Analysis	Report Limit	Units	Date Analyzed
Aluminum, ICP	ND	0.05	mg/L	12/09/1997
Antimony, ICP	ND	0.005	mg/L	12/09/1997
Arsenic, ICP	ND	0.005	mg/L	12/09/1997
Barium, ICP	ND	0.005	mg/L	12/09/1997
Beryllium, ICP	ND	0.002	mg/L	12/09/1997
Boron, ICP	ND	0.01	mg/L	12/09/1997
Cadmium, ICP	ND	0.002	mg/L	12/09/1997
Calcium, ICP 200.7	ND	0.05	mg/L	12/09/1997
Chromium, ICP	ND	0.005	mg/L	12/09/1997
Cobalt, ICP	ND	0.005	mg/L	12/09/1997
Copper, ICP	ND	0.005	mg/L	12/09/1997
Iron, ICP	ND	0.01	mg/L	12/09/1997
Lead, ICP	ND	0.005	mg/L	12/09/1997
Magnesium, ICP 200.7	ND	0.05	mg/L	12/09/1997
Molybdenum, ICP	ND	0.005	mg/L	12/09/1997
Nickel, ICP	ND	0.005	mg/L	12/09/1997
Potassium, ICP 200.7	ND	0.2	mg/L	12/09/1997
Selenium, ICP	ND	0.005	mg/L	12/09/1997
Silver, ICP	ND	0.005	mg/L	12/09/1997
Sodium, ICP 200.7	ND	0.2	mg/L	12/09/1997
Thallium, ICP	ND	0.01	mg/L	12/09/1997
Vanadium, ICP	ND	0.005	mg/L	12/09/1997
Zinc, ICP	ND	0.005	mg/L	12/09/1997

FLAG GLOSSARY

A	This sample does not have a typical gasoline pattern.
B1	This sample does not have a typical diesel pattern.
B	Analyte found in the associated blank as well as the sample.
C	The sample contains a lighter hydrocarbon than gasoline.
CN	See case narrative
CS	Outside control limits or unusual matrix; see case narrative.
D	The sample extends to a heavier hydrocarbon range than gasoline.
d	Results on a dry weight basis
DIL	Result was calculated from dilution.
E	The sample extends to a lighter hydrocarbon range than diesel.
F	The sample extends to a heavier hydrocarbon range than diesel.
G	The positive result for gasoline is due to single component comtamination.
I	The oil pattern for this sample is not typical.
J	The result for this compound is an estimated concentration.
L	The LCS recovery exceeded control limits. See the LCS page of this report.
LM	The LCS recovery exeeded control limits; the MS/MSD were in control validating the batch.
M	MS and/or MSD percent recovery exceeds control limits.
MD	Unable to calculate MS/MSD recovery due to high amount of analyte; greater than 4 times spike level.
MR	The MS/MSD RPD is greater than method critera. The sample was re-extracted and re-analyzed with similar results indica a non-homogeneous sample.
MM	The Matrix Spike exceeded control limits; LCS/LCS-D were in control validating the batch.
MI	Outside control limits due to matrix interference.
N	Manual integration performed on sample for quantification.
N/A	Not Applicable.
NC	Not calcuable.
NO	Not Analyzed.
P	A post digestion spike was analyzed, and recoveries were within control limits.
Q	Detection limits elevated due to sample matrix.
Q1	Detection limits elevated due to high levels of non-target compounds. Sample(s) run at a dilution.
R	The duplicate RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
RD	RPD not applicable for results less than five times the reporting limit.
RP	MS/MSD RPD is greater than 20%
SR	Surrogate recovery outside control limits. See the surrogate page of the report.
SD	Unable to quantitate surrogate due to sample dilution.
SC	Sample not provided to laboratory in proper sampling container.
V	Volatile analysis was requested, sample container received with headspace.
X1	The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
X	Sample was analyzed outside recommended holding times.
Y	The result for this parameter was greater than the TCLP regulatory limit.
Z	The pattern seen for the parameter being analyzed is not typical.

American Environmental Network, Inc.

AEN I.D. 710431

December 17,1997

NMOCD
2040 S. PACHEO
SANTA FE, NM 87505

Project Name TEXACO EUNICE NORTH
Project Number (none)

Attention: BILL OLSON

On 10/31/97 American Environmental Network (NM), Inc. (ADHS License No. AZ0015), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

EPA method 8010/8020 was analyzed by American Environmental Network (NM) Inc., Albuquerque, NM.

Calcium, Magnesium, Potassium and Sodium analyses were performed at American Environmental Network (OR), Inc., Portland, OR.

All other parameters were analyzed by American Environmental Network (AZ) Inc., Phoenix, AZ.

If you have any questions or comments, please do not hesitate to contact us at (505)344-3777.

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: mt

Enclosure

2709-D Pan American Freeway, NE • Albuquerque, NM 87107 • (505) 344-3777 • Fax (505) 344-4413

American Environmental Network , Inc.

CLIENT	: NMOCD	AEN I.D.	: 710431
PROJECT #	: (none)	DATE RECEIVED	: 10/31/97
PROJECT NAME	: TEXACO EUNICE NORTH	REPORT DATE	: 12/17/97

AEN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	LORD WELL	AQ	10/30/97
02	ROWLAND WELL	AQ	10/30/97
03	TRIP BLANK	AQ	10/29/97

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS / AROMATICS (EPA 8010/8020)
CLIENT : NMOCD AEN I.D.: 710431
PROJECT # : (none)
PROJECT NAME : TEXACO EUNICE NORTH

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	LORD WELL	AQUEOUS	10/30/97	NA	11/4/97	1
02	ROWLAND WELL	AQUEOUS	10/30/97	NA	11/4/97	1
03	TRIP BLANK	AQUEOUS	10/29/97	NA	11/4/97	1

PARAMETER	DET. LIMIT	UNITS	01	02	03
BENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
BROMODICHLORMETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
BROMOFORM	0.5	UG/L	< 0.5	< 0.5	< 0.5
BROMOMETHANE	1.0	UG/L	< 1.0	< 1.0	< 1.0
CARBON TETRACHLORIDE	0.2	UG/L	< 0.2	< 0.2	< 0.2
CHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
CHLOROETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
CHLOROFORM	0.5	UG/L	< 0.5	< 0.5	< 0.5
CHLOROMETHANE	1.0	UG/L	< 1.0	< 1.0	< 1.0
DIBROMOCHLOROMETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
1,2-DIBROMOETHANE (EDB)	0.2	UG/L	< 0.2	< 0.2	< 0.2
1,2-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,3-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,4-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,1-DICHLOROETHANE	0.3	UG/L	< 0.3	< 0.3	< 0.3
1,2-DICHLOROETHANE (EDC)	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,1-DICHLOROETHENE	0.2	UG/L	< 0.2	< 0.2	< 0.2
cis-1,2-DICHLOROETHENE	0.2	UG/L	< 0.2	< 0.2	< 0.2
trans-1,2-DICHLOROETHENE	1.0	UG/L	< 1.0	< 1.0	< 1.0
1,2-DICHLOROPROPANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
cis-1,3-DICHLOROPROPENE	0.2	UG/L	< 0.2	< 0.2	< 0.2
trans-1,3-DICHLOROPROPENE	0.2	UG/L	< 0.2	< 0.2	< 0.2
ETHYLBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
METHYL-t-BUTYL ETHER	2.5	UG/L	< 2.5	< 2.5	< 2.5
METHYLENE CHLORIDE	2.0	UG/L	< 2.0	< 2.0	< 2.0
1,1,2,2-TETRACHLOROETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TETRACHLOROETHENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOLUENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,1,1-TRICHLOROETHANE	1.0	UG/L	< 1.0	< 1.0	< 1.0
1,1,2-TRICHLOROETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
TRICHLOROETHENE	0.3	UG/L	< 0.3	< 0.3	< 0.3
TRICHLOROFLUOROMETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
VINYL CHLORIDE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOTAL XYLENES	0.5	UG/L	< 0.5	< 0.5	< 0.5
SURROGATE:					
BROMOCHLOROMETHANE (%)			112	107	110
SURROGATE LIMITS	(73 - 117)				
TRIFLUOROTOLUENE (%)			103	104	102
SURROGATE LIMITS	(69 - 117)				

CHEMIST NOTES:
N/A

American Environmental Network , Inc.

GAS CHROMOTOGRAPHY RESULTS
REAGENT BLANK

TEST	: PURGEABLE HALOCARBONS / AROMATICS (EPA 8010/8020)		
BLANK I.D.	: 110497B	AEN I.D.	: 710431
CLIENT	: NMOCD	DATE EXTRACTED	: N.A
PROJECT #	: (none)	DATE ANALYZED	: 11/4/97
PROJECT NAME	: TEXACO EUNICE NORTH	SAMPLE MATRIX	: AQUEOUS

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
BROMODICHLORMETHANE	UG/L	<0.2
BROMOFORM	UG/L	<0.5
BROMOMETHANE	UG/L	<1.0
CARBON TETRACHLORIDE	UG/L	<0.2
CHLOROBENZENE	UG/L	<0.5
CHLOROETHANE	UG/L	<0.5
CHLOROFORM	UG/L	<0.5
CHLOROMETHANE	UG/L	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.2
1,2-DIBROMOETHANE (EDB)	UG/L	<0.2
1,2-DICHLOROBENZENE	UG/L	<0.5
1,3-DICHLOROBENZENE	UG/L	<0.5
1,4-DICHLOROBENZENE	UG/L	<0.5
1,1-DICHLOROETHANE	UG/L	<0.3
1,2-DICHLOROETHANE (EDC)	UG/L	<0.5
1,1-DICHLOROETHENE	UG/L	<0.2
cis-1,2-DICHLOROETHENE	UG/L	<0.2
trans-1,2-DICHLOROETHENE	UG/L	<1.0
1,2-DICHLOROPROPANE	UG/L	<0.2
cis-1,3-DICHLOROPROPENE	UG/L	<0.2
trans-1,3-DICHLOROPROPENE	UG/L	<0.2
ETHYLBENZENE	UG/L	<0.5
METHYL -t-BUTYL ETHER	UG/L	<2.5
METHYLENE CHLORIDE	UG/L	<2.0
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.5
TETRACHLOROETHENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
1,1,1-TRICHLOROETHANE	UG/L	<1.0
1,1,2-TRICHLOROETHANE	UG/L	<0.2
TRICHLOROETHENE	UG/L	<0.3
TRICHLOROFLUOROMETHANE	UG/L	<0.2
VINYL CHLORIDE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5
SURROGATE:		
BROMOCHLOROMETHANE (%)		111
SURROGATE LIMITS	(73 - 117)	
TRIFLUOROTOLUENE (%)		104
SURROGATE LIMITS	(69 - 117)	

CHEMIST NOTES:

American Environmental Network, Inc.

N/A

GAS CHROMOTOGRAPHY RESULTS
REAGENT BLANK

TEST	: PURGEABLE HALOCARBONS / AROMATICS (EPA 8010/8020)		
BLANK I.D.	: 110597	AEN I.D.	: 710431
CLIENT	: NMOCD	DATE EXTRACTED	: N/A
PROJECT #	: (none)	DATE ANALYZED	: 11/5/97
PROJECT NAME	: TEXACO EUNICE NORTH	SAMPLE MATRIX	: AQUEOUS

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
BROMODICHLORMETHANE	UG/L	<0.2
BROMOFORM	UG/L	<0.5
BROMOMETHANE	UG/L	<1.0
CARBON TETRACHLORIDE	UG/L	<0.2
CHLOROBENZENE	UG/L	<0.5
CHLOROETHANE	UG/L	<0.5
CHLOROFORM	UG/L	<0.5
CHLOROMETHANE	UG/L	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.2
1,2-DIBROMOETHANE (EDB)	UG/L	<0.2
1,2-DICHLOROBENZENE	UG/L	<0.5
1,3-DICHLOROBENZENE	UG/L	<0.5
1,4-DICHLOROBENZENE	UG/L	<0.5
1,1-DICHLOROETHANE	UG/L	<0.3
1,2-DICHLOROETHANE (EDC)	UG/L	<0.5
1,1-DICHLOROETHENE	UG/L	<0.2
cis-1,2-DICHLOROETHENE	UG/L	<0.2
trans-1,2-DICHLOROETHENE	UG/L	<1.0
1,2-DICHLOROPROPANE	UG/L	<0.2
cis-1,3-DICHLOROPROPENE	UG/L	<0.2
trans-1,3-DICHLOROPROPENE	UG/L	<0.2
ETHYLBENZENE	UG/L	<0.5
METHYL -t-BUTYL ETHER	UG/L	<2.5
METHYLENE CHLORIDE	UG/L	<2.0
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.5
TETRACHLOROETHENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
1,1,1-TRICHLOROETHANE	UG/L	<1.0
1,1,2-TRICHLOROETHANE	UG/L	<0.2
TRICHLOROETHENE	UG/L	<0.3
TRICHLOROFLUOROMETHANE	UG/L	<0.2
VINYL CHLORIDE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5
SURROGATE:		
BROMOCHLOROMETHANE (%)		109
SURROGATE LIMITS	(73 - 117)	
TRIFLUOROTOLUENE (%)		105
SURROGATE LIMITS	(69 - 117)	

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY QUALITY CONTROL
MSMSD

TEST	: PURGEABLE HALOCARBONS / AROMATICS (EPA 8010/8020)		
MSMSD #	: 710410-02	AEN I.D.	: 710431
CLIENT	: NMOCD	DATE EXTRACTED	: N/A
PROJECT #	: (none)	DATE ANALYZED	: 11/5/97
PROJECT NAME	: TEXACO EUNICE NORTH	SAMPLE MATRIX	: AQUEOUS
		UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	10.0	8.8	88	9.1	91	3	(82 -128)	20
TOLUENE	<0.5	10.0	9.2	92	9.5	95	3	(87 -128)	20
1,1-DICHLOROETHENE	<0.2	10.0	6.0	60	6.2	62	3	(44 - 99)	20
TRICHLOROETHENE	<0.3	10.0	11.1	111	12.1	121	9	(89 - 127)	20
CHLOROBENZENE	<0.5	10.0	9.4	94	10.1	101	7	(87 - 124)	20

CHEMIST NOTES:
N/A

$$\%\ \text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

CLIENT : AMERICAN ENV. NETWORK OF NM, INC. DATE RECEIVED : 11/01/97
PROJECT # : 710431
PROJECT NAME : NMOCD REPORT DATE : 12/16/97

ATI I.D. : 711001

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	710431-01	AQUEOUS	10/30/97
02	710431-02	AQUEOUS	10/30/97

----- TOTALS -----

MATRIX	# SAMPLES
AQUEOUS	2

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

GENERAL CHEMISTRY RESULTS

ATI I.D. : 711001

CLIENT : AMERICAN ENV. NETWORK OF NM, INC.
PROJECT # : 710431
PROJECT NAME : NMOCD

DATE RECEIVED : 11/01/97
REPORT DATE : 12/16/97

PARAMETER	UNITS	01	02
CARBONATE (CACO3)	MG/L	<1	<1
BICARBONATE (CACO3)	MG/L	254	233
HYDROXIDE (CACO3)	MG/L	<1	<1
TOTAL ALKALINITY (AS CACO3)	MG/L	254	233
BROMIDE (EPA 300.0)	MG/L	3	3
CHLORIDE (EPA 325.2)	MG/L	630	760
CONDUCTIVITY, (UMHOS/CM)		3030	3230
FLUORIDE (EPA 340.2)	MG/L	2.50	2.67
NITRATE AS N (EPA 353.2)	MG/L	72	49
PH (EPA 150.1)	UNITS	7.4	7.6
SULFATE (EPA 375.2)	MG/L	870	600
T. DISSOLVED SOLIDS (160.1)	MG/L	2340	2300

GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT : AMERICAN ENV. NETWORK OF NM, INC.
PROJECT # : 710431
PROJECT NAME : NMOCD ATI I.D. : 711001

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
CARBONATE	MG/L	71102001	<1	<1	NA	NA	NA	NA
BICARBONATE	MG/L		361	361	0	NA	NA	NA
HYDROXIDE	MG/L		<1	<1	NA	NA	NA	NA
TOTAL ALKALINITY	MG/L		361	361	0	NA	NA	NA
BROMIDE	MG/L	71039608	<0.3	<0.3	NA	1.0	1.0	100
CHLORIDE	MG/L	71104401	88	88	0	190	100	102
CONDUCTIVITY(UMHOS/CM)		71104301	640	641	0.2	NA	NA	NA
FLUORIDE	MG/L	71199902	0.39	0.39	0	1.00	0.50	122
NITRATE AS NITROGEN	MG/L	71035009	0.08	0.07	13	1.99	2.00	96
PH	UNITS	71041101	8.1	8.1	0	NA	NA	NA
SULFATE	MG/L	71038801	200	210	5	410	200	105
TOTAL DISSOLVED SOLIDS	MG/L	71102101	2110	2130	0.9	NA	NA	NA

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

METALS RESULTS

ATI I.D. : 711001

CLIENT : AMERICAN ENV. NETWORK OF NM, INC.
PROJECT # : 710431
PROJECT NAME : NMOCD

DATE RECEIVED : 11/01/97
REPORT DATE : 12/16/97

PARAMETER	UNITS	01	02
MERCURY (EPA 245.2/7470)	MG/L	<0.0002	<0.0002
SELENIUM (EPA 270.2/7740)	MG/L	0.016	0.009

METALS - QUALITY CONTROL

CLIENT : AMERICAN ENV. NETWORK OF NM, INC.
PROJECT # : 710431
PROJECT NAME : NMOCD ATI I.D. : 711001

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
MERCURY	MG/L	71043901	<0.0002	<0.0002	NA	0.0052	0.0050	104
SELENIUM	MG/L	71102601	<0.005	<0.005	NA	0.036	0.050	72

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

DATE OF ANALYSIS REPORT

AEN ID: 711001

16-Dec-97

METHOD	SAMPLE #	DATE	ANALYST
ALKALINITY (EPA 310.1)	01	11/08/97	DIPTI A. SHAH
	02	11/08/97	DIPTI A. SHAH
BROMIDE (EPA 300.0)	01	11/12/97	MARLA WILSON
	02	11/12/97	MARLA WILSON
CHLORIDE (EPA 325.2)	01	11/20/97	CARLENE MCCUTCHEON
	02	11/20/97	CARLENE MCCUTCHEON
CONDUCTIVITY, (UMHOS/CM)	01	11/05/97	PAUL STRICKLER
	02	11/05/97	PAUL STRICKLER
FLUORIDE (EPA 340.2)	01	11/07/97	DIPTI A. SHAH
	02	11/07/97	DIPTI A. SHAH
MERCURY (245.2/7470)	01	11/06/97	TRACY L. SPRANG
	02	11/06/97	TRACY L. SPRANG
NITRATE AS N (EPA 353.2)	01	11/04/97	MELISSA HUGHES
	02	11/04/97	MELISSA HUGHES
PH (EPA 150.1)	01	11/04/97	CARLENE MCCUTCHEON
	02	11/04/97	CARLENE MCCUTCHEON
SELENIUM (EPA 270.2/7740)	01	11/06/97	BAYARD A VANDEGRIFT IV
	02	11/06/97	BAYARD A VANDEGRIFT IV
SULFATE (EPA 375.2)	01	11/12/97	CARLENE MCCUTCHEON
	02	11/12/97	CARLENE MCCUTCHEON
T. DISSOLVED SOLIDS (160.1)	01	11/04/97	CARLENE MCCUTCHEON
	02	11/04/97	CARLENE MCCUTCHEON

Methods for Chemical Analysis of Water and Wastes, EPA-600 4-79-020, March 1983

Methods for the Determination of Inorganic Substances in Environmental Samples, EPA-600-R-93/100

DATE: 12-11-97

ION BALANCE

AEN ACCESSION NUMBER: 71100101
SAMPLE IDENTIFICATION: 710431-01
CLIENT: AMERICAN ENVIRONMENTAL NETWORK OF NM, IN

ANIONS	RESULT MG/L	FACTOR ME/L	TOTAL	
ALKALINITY (AS $CaCO_3$)	254.000	0.02000	5.08000	
CHLORIDE	630.000	0.02821	17.77230	
FLUORIDE	2.500	0.05264	0.13160	
NITRATE AS N (NO_3(NO_3-N X 4.43)	72.000	0.01613	5.14482	
SiO_3 (SILICON X 2.71)	NA	0.02629	0.00000	
SULFATE	870.000	0.02082	18.11340	
		TOTAL ANIONS		46.24212

CATIONS	RESULT	FACTOR	TOTAL	
CALCIUM	280.000	0.04990	13.972	
POTASSIUM	12.000	0.02558	0.30696	
MAGNESIUM	94.000	0.08229	7.73526	
SODIUM	350.000	0.04350	15.22500	
		TOTAL CATIONS		37.23922
		%RPD (<10%)*		21.57
TOTAL ANIONS/CATIONS	(CALCULATED)	2462.900		
TOTAL DISSOLVED SOLIDS	(ANALYZED)	2340	%RPD (<15%)*	5.12
ELECTRICAL COND.		3030	TDS/EC RATIO (0.65+/-0.10)	0.77

* If either Total Cations or Total Anions <10, then the %RPD Limit is not applicable.

DATE: 12-11-97

ION BALANCE

AEN ACCESSION NUMBER: 71100102
SAMPLE IDENTIFICATION: 710431-02
CLIENT: AMERICAN ENVIRONMENTAL NETWORK OF NM, IN

ANIONS	RESULT MG/L	FACTOR ME/L	TOTAL	
ALKALINITY (AS $CaCO_3$)	233.000	0.02000	4.66000	
CHLORIDE	760.000	0.02821	21.43960	
FLUORIDE	2.670	0.05264	0.14055	
NITRATE AS N (NO_3(NO_3-N X 4.43)	49.000	0.01613	3.50134	
SiO_3 (SILICON X 2.71)	NA	0.02629	0.00000	
SULFATE	600.000	0.02082	12.49200	
		TOTAL ANIONS		42.23349

CATIONS	RESULT	FACTOR	TOTAL	
CALCIUM	330.000	0.04990	16.467	
POTASSIUM	35.000	0.02558	0.89530	
MAGNESIUM	120.000	0.08229	9.87480	
SODIUM	93000.000	0.04350	4045.50000	
		TOTAL CATIONS		4072.737
		%RPD (<10%)*		-195.89
TOTAL ANIONS/CATIONS	(CALCULATED)	95036.470		
TOTAL DISSOLVED SOLIDS	(ANALYZED)	2300	%RPD (<15%)*	190.55
ELECTRICAL COND.		3230	TDS/EC RATIO (0.65+/-0.10)	0.71

* If either Total Cations or Total Anions <10, then the %RPD Limit is not applicable.

American Environmental Network
Albuquerque, New Mexico

Interlab Chain of Custody

DATE: 10-31-97 PAGE: 1 OF 1

NETWORK PROJECT MANAGER: KIMBERLY D. McNEILL

COMPANY: American Environmental Network
ADDRESS: 2709-D Pan American Freeway, NE
Albuquerque, NM 87107

CLIENT PROJECT MANAGER:

Kim McNeill

SAMPLE ID	DATE	TIME	MATRIX	LAB ID
710131-01	10-30-97	0940	AQ	1
" -02	10-30-97	10:30	AQ	2

ANALYSIS REQUEST

	Metals - ~~TCLP~~ by AA Hg + Se	Metals - PP List	Metals - RCRA	RCRA Metals by TCLP (1311)			TOX	TOC	Gen Chemistry: cation/anion balance	Ca, K, Mg, Na, Alk trip	Cl, SO4, TDS, conductivity, pH	Oil and Grease NO3	BOD	COD	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral Acid Compounds GC/MS (625/8270)	Volatile Organics GC/MS (624/8240)	Polynuclear Aromatics (610/8310)	8240 (TCLP 1311) ZHE	8270 (TCLP 1311)			TO-14	Gross Alpha/Beta				NUMBER OF CONTAINERS
1	X								X	X	X	X																4
2	X								X	X	X	X																4

PROJECT INFORMATION

PROJECT NUMBER: 710431
PROJECT NAME: NM OCD
QC LEVEL: (STD) IV
QC REQUIRED: MS MSD BLANK
TAT: (STANDARD) RUSH!

SAMPLE RECEIPT

TOTAL NUMBER OF CONTAINERS	8
CHAIN OF CUSTODY SEALS	NA
INTACT?	Y
RECEIVED GOOD COND./COLD	BLUE
LAB NUMBER	71001

DUE DATE: 10-31-97
RUSH SURCHARGE: _____
CLIENT DISCOUNT: _____
SPECIAL CERTIFICATION REQUIRED: ☐ YES ☐ NO

SAMPLES SENT TO:

SAN DIEGO	
N.C.	
RENTON	
PENSACOLA	
PORTLAND	
PHOENIX	X
ILL	

RELINQUISHED BY: 1.
Signature: [signature] Time: 1700
Printed Name: Brian Price Date: 10-31-97
Albuquerque NM

RECEIVED BY: 1.
Signature: Time:
Printed Name: Date:
Company:

RELINQUISHED BY: 2.
Signature Time
Printed Name Date
Company

RECEIVED BY: (LAB) 2.
Signature: [signature] Time: 1045
Printed Name: Heather Ossinger Date: 11/1/97
Company: AEN-Phx

Labs: San Diego (619) 458-9141 • Phoenix (602) 496-4400 • Seattle (206) 228-8335 • Pensacola (904) 474-1001 • Portland (503) 684-0447 • Albuquerque (505) 344-3777

RECHECKED BY: _____

American Environmental Network (NM), Inc.
Albuquerque • Phoenix • Pensacola • Portland • Pleasant Hills • Columbia

CHAIN OF CUSTODY

DATE: 10/31/97 PAGE: 1 OF 1

AEN LAB I.D. 710431

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: Bill Olson
COMPANY: NM Oil Conservation Division
ADDRESS: 2040 S. Pacheco
Santa Fe, NM 87505
PHONE: (505) 827-7154
FAX: (505) 827-8177
BILL TO: Same
COMPANY:
ADDRESS:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct/Inject	(M8015) Gas/Purge & Trap	Gasoline/BTEX & MTBE (M8015/8020)	BTXE/MTBE (8020)	BTEX & Chlorinated Aromatics (602/8020)	BTEX/MTBE/EDC & EDB (8020/8010/Short)	Chlorinated Hydrocarbons (601/8010)	504 EDB☐ / DBCP☐	Polynuclear Aromatics (610/8310)	Volatile Organics (624/8240) GC/MS	Volatile Organics (8260) GC/MS	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)		General Chemistry: Cations/Anions		Nitrates	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals: 6010 plus Hg + Se by AA		NUMBER OF CONTAINERS
Lord Well	10/30/97	0940	water	-01																	1		2				1		7
Rowland Well	10/30/97	1030	water	-02																	1		2				1		7
TRIP Blank	10-29-97	1040	AQ	-03																									1

PROJECT INFORMATION	
PROJ. NO.:	
PROJ. NAME:	Texaco Eunice North
P.O. NO.:	
SHIPPED VIA:	

SAMPLE RECEIPT	
NO. CONTAINERS:	15
CUSTODY SEALS:	Y / N / NA
RECEIVED INTACT:	Yes
BLUE ICE/ICE:	Y

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

RELINQUISHED BY: 1.	RELINQUISHED BY:
Signature: Bill Olson Time: 0905	Signature: Time:
Printed Name: William Olson Date: 10/31/97	Printed Name: Date:
Company: NMOCD	Company:
RECEIVED BY: 1.	**RECEIVED BY: (LAB) 2**
Signature: Time:	Signature: Time: 0905
Printed Name: Date:	Printed Name: Debbie Date: 10-31-97
Company:	American Environmental Network (NM), Inc.

ATTACHMENT 1

American Environmental Network, Inc.

17400 SW Upper Boones Ferry Road • Suite 270 • Portland, OR 97224 • (503) 684-0447

Marcia Smith
AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

Date: 12/10/1997
AEN Account No.: 80
AEN Job Number: 97.03080

Project: 711001
Location:

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Sample Number	Sample Description	Matrix Type	Date Taken	Date Received
88186	711001-01	Water	10/30/1997	12/04/1997
88187	711001-02	Water	10/30/1997	12/04/1997

Approved by:

Andi Roevet
Project Manager
AEN, INC.

Technical Review
AEN, INC.

ANALYTICAL REPORT

Marcia Smith
AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

12/10/1997
Job No.: 97.03080

Project Name: 711001
Date Received: 12/04/1997

Sample Number 88186 — Sample Description 711001-01

PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
ICP/AA Digestion - Water	ICP	-			12/05/1997	
Calcium, ICP 200.7	200.7	280	0.05	mg/L	12/09/1997	MD
Magnesium, ICP 200.7	200.7	94	0.05	mg/L	12/09/1997	MD
Potassium, ICP 200.7	200.7	12	2.0	mg/L	12/09/1997	DILQ,MI
Sodium, ICP 200.7	200.7	350	20.0	mg/L	12/09/1997	DIL,Q,MD

Sample Number 88187 — Sample Description 711001-02

PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
ICP/AA Digestion - Water	ICP	-			12/05/1997	
Calcium, ICP 200.7	200.7	330	0.05	mg/L	12/09/1997	
Magnesium, ICP 200.7	200.7	120	0.05	mg/L	12/09/1997	
Potassium, ICP 200.7	200.7	35	2.0	mg/L	12/09/1997	DIL,Q
Sodium, ICP 200.7	200.7	93000	2000	mg/L	12/09/1997	DIL,Q

A sample result of ND indicates the parameter was Not Detected at the reporting limit.

QUALITY CONTROL REPORT
CONTINUING CALIBRATION VERIFICATION

AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

Date: 12/10/1997

Job Number: 97.03080

Contact: Marcia Smith
Project: 711001

Analyte	CCV True Concentration	Concentration Found	Percent Recovery	Date Analyzed
Calcium, ICP 200.7	25.0	24.0	96.0	12/09/1997
Magnesium, ICP 200.7	25.0	25.1	100.4	12/09/1997
Potassium, ICP 200.7	5.00	4.83	96.6	12/09/1997
Sodium, ICP 200.7	5.00	4.91	98.2	12/09/1997

CCV - Continuing Calibration Verification

QUALITY CONTROL REPORT
LABORATORY CONTROL STANDARD

AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

Date: 12/10/1997

Job Number: 97.03080

Contact: Marcia Smith
Project: 711001

Analyte	LCS True Concentration	Concentration Found	LCS % Recovery	Flags	Date Analyzed
Calcium, ICP 200.7	5.00	4.64	92.8		12/09/1997
Magnesium, ICP 200.7	5.00	4.86	97.2		12/09/1997
Potassium, ICP 200.7	5.00	6.77	135.4		12/09/1997
Sodium, ICP 200.7	5.00	5.25	105.0		12/09/1997

LCS - Laboratory Control Standard

QUALITY CONTROL REPORT
MATRIX SPIKE/MATRIX SPIKE DUPLICATE

AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

Date: 12/10/1997

Job Number: 97.03080

Contact: Marcia Smith
Project: 711001

Analyte	Matrix Spike Result	Sample Result	Spike Amount	Units	Percent Recovery	MSD Result	MSD Spike Amount	Units	Percent Recovery	MS/MSD RPD	Flags
Calcium, ICP 200.7		280	5.00	mg/L			5.00	mg/L			MD
Magnesium, ICP 200.7		94	5.00	mg/L			5.00	mg/L			MD
Potassium, ICP 200.7	20.4	12	5.00	mg/L	168.0	20.4	5.00	mg/L	168.0	0.0	DILQ,M
Sodium, ICP 200.7		350	5.00	mg/L			5.00	mg/L			DIL,Q,

QC Sample:

NOTE: Matrix Spike Samples may not be samples from this job.

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
dil.= Diluted Out

American Environmental Network, Inc. (503)684-0447 (503)620-0393 FAX
17400 SW Upper Boones Ferry Rd., Portland, OR 97224

QUALITY CONTROL REPORT
BLANKS

AEN - Phoenix
9830 S 51st Street
Suite B-113
Phoenix, AZ 85044

Date: 12/10/1997

Job Number: 97.03080

Contact: Marcia Smith
Project: 711001
Location:

Analyte	Blank Analysis	Report Limit	Units	Date Analyzed
Calcium, ICP 200.7	ND	0.05	mg/L	12/09/1997
Magnesium, ICP 200.7	ND	0.05	mg/L	12/09/1997
Potassium, ICP 200.7	ND	0.2	mg/L	12/09/1997
Sodium, ICP 200.7	ND	0.2	mg/L	12/09/1997

FLAG GLOSSARY

A	This sample does not have a typical gasoline pattern.
B1	This sample does not have a typical diesel pattern.
B	Analyte found in the associated blank as well as the sample.
C	The sample contains a lighter hydrocarbon than gasoline.
CN	See case narrative
CS	Outside control limits or unusual matrix; see case narrative.
D	The sample extends to a heavier hydrocarbon range than gasoline.
d	Results on a dry weight basis
DIL	Result was calculated from dilution.
E	The sample extends to a lighter hydrocarbon range than diesel.
F	The sample extends to a heavier hydrocarbon range than diesel.
G	The positive result for gasoline is due to single component comtamination.
I	The oil pattern for this sample is not typical.
J	The result for this compound is an estimated concentration.
L	The LCS recovery exceeded control limits. See the LCS page of this report.
LM	The LCS recovery exeeded control limits; the MS/MSD were in control validating the batch.
M	MS and/or MSD percent recovery exceeds control limits.
MD	Unable to calculate MS/MSD recovery due to high amount of analyte; greater than 4 times spike level.
MR	The MS/MSD RPD is greater than method critera. The sample was re-extracted and re-analyzed with similar results indica a non-homogeneous sample.
MM	The Matrix Spike exceeded control limits; LCS/LCS-D were in control validating the batch.
MI	Outside control limits due to matrix interference.
N	Manual integration performed on sample for quantification.
N/A	Not Applicable.
NC	Not calcuable.
NO	Not Analyzed.
P	A post digestion spike was analyzed, and recoveries were within control limits.
Q	Detection limits elevated due to sample matrix.
Q1	Detection limits elevated due to high levels of non-target compounds. Sample(s) run at a dilution.
R	The duplicate RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
RD	RPD not applicable for results less than five times the reporting limit.
RP	MS/MSD RPD is greater than 20%
SR	Surrogate recovery outside control limits. See the surrogate page of the report.
SD	Unable to quantitate surrogate due to sample dilution.
SC	Sample not provided to laboratory in proper sampling container.
V	Volatile analysis was requested, sample container received with headspace.
X1	The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
X	Sample was analyzed outside recommended holding times.
Y	The result for this parameter was greater than the TCLP regulatory limit.
Z	The pattern seen for the parameter being analyzed is not typical.

AEN American Environmental Network (Arizona), Inc.

Interlab Chain of Custody

DATE 12/3/97 PAGE 1 OF 1

PROJECT MANAGER: Marcia Smith

COMPANY: American Environmental Network (Arizona), Inc.

ADDRESS: 9830 S. 51st Street, Suite B-113
Phoenix, Arizona 85044
(602) 496-4400

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	NUMBER OF CONTAINERS	AIR - O_2, CO_2, METHANE, CO, N_2	GROSS ALPHA / BETA	RADIUM 226 / 228	ISOTOPIC URANIUM	RADON 222	SURFACTANTS (MBAS)	FECAL COLIFORM	TOTAL COLIFORM	BOD	COD	VOLATILE ORGANICS ( )	EPA 610 / 8310	EPA 547	EPA 548	EPA 549	EPA 1613	EPA 525	ASBESTOS	KARL FISHER % MOISTURE	SULFIDE	TOC	TOX
711001-01	10/30/97	0940	AQ		1																	X					
711001-02	↓	1030	↓		1																	X					

Ca, K, Mg, Na 300.7

PROJECT INFORMATION

PROJECT NUMBER: 711001
PROJECT NAME:
QC LEVEL: (STD.) IV
TAT: [ ] STANDARD [ ] RUSH!
AEN WORKORDER #

DUE DATE:
TIME:

SAMPLE RECEIPT

TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS	
INTACT?	
RECEIVED GOOD COND. / COLD	
LAB NUMBER	97-03080

ASAP please (prelims + hardcopy)

SAMPLES SENT TO:	
PENSACOLA	
PORTLAND	X
AQUATIC	
CORE	
ALBUQUERQUE	
ATEL	
WEST COAST	
FORT COLLINS	

RELINQUISHED BY: 1.
Signature: [signature] Time: 1700
Printed Name: Marcia Smith Date: 12/3/97
American Environmental Network
Phoenix

RECEIVED BY: 1.
Signature: [signature] Time: 1700
Printed Name: A. Hoult Date: 12/4/97
Company: AEN

RELINQUISHED BY: 2.
Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY: (LAB) 2.
Signature: Time:
Printed Name: Date:
Company:

American Environmental Network (NM), Inc.
Albuquerque • Phoenix • Pensacola • Portland • Pleasant Hills • Columbia

CHAIN OF CUSTODY

DATE: 10/31/97 PAGE: 1 OF 1

AEN LAB I.D. 710431

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: Bill Olson

COMPANY: NM Oil Conservation Division
ADDRESS: 2040 S. Pacheco
Santa Fe, NM 87505
PHONE: (505) 827-7154
FAX: (505) 827-8177

BILL TO: Same
COMPANY:
ADDRESS:

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.
Lord Well	10/30/97	0940	water	-01
Rowland Well	10/30/97	1030	water	-02
TRIP Blank	10-28-97	1040	AQ	-03

ANALYSIS REQUEST

SAMPLE ID	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject	8010/8020	(M8015) Gas/Purge & Trap	Gasoline/BTEX & MTBE (M8015/8020)	BTXE/MTBE (8020)	BTEX & Chlorinated Aromatics (602/8020)	BTEX/MTBE/EDC & EDB (8020/8010/Short)	Chlorinated Hydrocarbons (601/8010)	504 EDB ☐ / DBCP ☐	Polynuclear Aromatics (610/8310)	Volatile Organics (624/8240) GC/MS	Volatile Organics (8260) GC/MS	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)	General Chemistry: Cations/anions	Nitrates	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals: 6010 plus Hg 4 Se by AA	NO. OF CONTAINERS
Lord Well			3														1	2					1	7
Rowland Well			3														1	2					1	7
TRIP Blank			X																					1

PROJECT INFORMATION

PROJ. NO.:
PROJ. NAME: Texaco Eunice North
P.O. NO.:
SHIPPED VIA:

SAMPLE RECEIPT

NO. CONTAINERS	15
CUSTODY SEALS	Y / N / NA
RECEIVED INTACT	yes
BLUE ICE/ICE	Y

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) X

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

RELINQUISHED BY: 1.

Signature: Bill Olson Time: 0905
Printed Name: William Olson Date: 10/31/97
Company: NMOCD

RECEIVED BY: 1.

Signature: Time:
Printed Name: Date:
Company:

RELINQUISHED BY:

Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY: (LAB) 2

Signature: Time: 0905
Printed Name: Brandie Date: 10-31-97
American Environmental Network (NM), Inc.

DISTRIBUTION: White, Canary - AEN Pink - ORIGINATOR

American Environmental Network (NM), Inc.

Albuquerque • Phoenix • Pensacola • Portland • Pleasant Hills • Columbia

CHAIN OF CUSTODY

DATE: 10/31/97 PAGE: 1 OF 1

AEN LAB I.D.

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: Bill Olson

COMPANY: NM O.C.D. Conservation Division
ADDRESS: 2040 S. Pacheco
Santa Fe, NM 87505
PHONE: (505) 827-7154
FAX: (505) 827-8177

BILL TO: Same
COMPANY:
ADDRESS:

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.
Lord Well	10/30/97	0940	water	-01
Rowland Well	10/30/97	1030	water	-02
TRIP Blank	10/29/97	1040	AQ	-03

ANALYSIS REQUEST

Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct/Inject	(M8015) Gas/Purge & Trap	Gasoline/BTEX & MTBE (M8015/8020)	BTXE/MTBE (8020)	BTEX & Chlorinated Aromatics (602/8020)	BTEX/MTBE/EDC & EDB (8020/8010/Short)	Chlorinated Hydrocarbons (601/8010)	504 EDB ☐ / DBCP ☐	Polynuclear Aromatics (610/8310)	Volatile Organics (624/8240) GC/MS	Volatile Organics (8260) GC/MS	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)	General Chemistry: Cl, SO4, Ca, Mg, Na, K	Nitrates	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals: 6010 plus Hg + Se by AA	NUMBER OF CONTAINERS
	8015/8020														1	2				1		2
															1	2				1		2
	X																					1

PROJECT INFORMATION	
PROJ. NO.:	
PROJ. NAME: Texaco Eunice North	
P.O. NO.:	
SHIPPED VIA:	

SAMPLE RECEIPT	
NO. CONTAINERS	5
CUSTODY SEALS	Y / N / NA
RECEIVED INTACT	Y / N
BLUE ICE/ICE	Y

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: Bill Olson Time: 0905	Signature: Time:
Printed Name: William Olson Date: 10/31/97	Printed Name: Date:
Company: NMOCD	Company:
RECEIVED BY: 1.	**RECEIVED BY: (LAB) 2.**
Signature: Time:	Signature: Time:
Printed Name: Date:	Printed Name: Date:
Company:	American Enviromental Network (NM), Inc.

Highlander Environmental Corp.

Midland, Texas

November 3, 1997

Mr. William C. Olson
Hydrogeologist
New Mexico Oil Conservation Division
Environmental Bureau
2040 S. Pacheco
Santa Fe, New Mexico 87505

Re: Laboratory reports of groundwater samples from water wells, Texaco Exploration and Production, Inc., Eunice #2 (North) Gas Plant, Lea County, New Mexico

Dear Mr. Olson:

Please find enclosed analytical laboratory reports of groundwater samples obtained from water wells located southeast of the Texaco Exploration and Production, Inc. (Texaco), Eunice #2 (North) Gas Plant, Eunice, New Mexico. The groundwater samples were collected on September 29, 1997, and were analyzed for dissolved metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver). The sample identified as "Lord Water Well" was obtained from the Robert Lord residence. The sample identified as "RTC Water Well" was obtained from the Rowland Trucking Company, Inc. brine facility.

Should you have any questions please call.

Sincerely,
Highlander Environmental Corp.

Mark J. Larson
Project Manager/Sr. Hydrogeologist

Encl.

cc: Robert W. Browning

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Mark Larson
1910 N. Big Spring Street
Midland, TX 79705

October 02, 1997
Receiving Date: 09/30/97
Sample Type: Water
Project No: 787
Project Location: Eunice, NM

Prep Date: 09/30/97
Analysis Date: 10/01/97
Sampling Date: 09/29/97
Sample Condition: I & C
Sample Received by: JH
Client Name: Texaco E & P, Inc.
Project Name: Texaco/Texaco North Eunice Gas Plant, NM

DISSOLVED METALS (mg/L)

TA#	Field Code	As	Se	Cr	Cd	Pb	Ag	Ba	Hg
T82381	Lord Water Well	<0.10	<0.10	0.59	<0.02	<0.10	<0.05	<0.10	<0.001
QC	Quality Control	1.1	1.0	1.1	1.1	1.1	1.0	1.0	0.0053
Reporting Limit		0.10	0.10	0.05	0.02	0.10	0.05	0.10	0.001
RPD		4	0	4	4	4	9	0	6
% Extraction Accuracy		110	105	110	110	110	86	105	101
% Instrument Accuracy		105	100	105	105	105	100	100	106

CHEMIST: As, Se, Cd, Cr, Pb, Ag, Ba: RR Hg: HC
METHODS: EPA SW 846-3015, 6010, 7470.
TOTAL METALS SPIKE: 2.0 mg/L Ase, Se, Cd, Cr, Pb, Ba; 1.0 mg/L Ag; 0.005 mg/L Hg.
TOTAL METALS QC: 1.0 mg/L As, Se, Cd, Cr, Pb, Ba, Ag; 0.005 mg/L Hg.

Director, Dr. Blair Leftwich

10-2-97
Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES
Attention: Mark Larson
1910 N. Big Spring St.
Midland, TX 79705

October 02, 1997
Receiving Date: 09/30/97
Sample Type: Water
Project No: 787
Project Location: Eunice, NM

Prep Date: 09/30/97
Analysis Date: 09/30/97
Sampling Date: 09/29/97
Sample Condition: Intact & Cool
Sample Received by: JH
Client Name: Texaco E & P, Inc.
Project Name: Texaco/Texaco North
Eunice Gas Plant, NM

TA#	FIELD CODE	TDS (mg/L)	CHLORIDE (mg/L)
T82381	Lord Water Well	2,200	480
QC	Quality Control	---	24
Reporting Limit		---	10
RPD		1	12
% Extraction Accuracy		---	100
% Instrument Accuracy		---	95

METHODS: EPA 160.1, 300.0.
CHEMIST: TDS: RC CHLORIDE: JS
CHLORIDE SPIKE: 25 mg/L CHLORIDE.
CHLORIDE QC: 24 mg/L CHLORIDE.

BB

Director, Dr. Blair Leftwich

10-2-97

DATE

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Mark Larson
1910 N. Big Spring Street
Midland, TX 79705

October 02, 1997
Receiving Date: 09/30/97
Sample Type: Water
Project No: 787
Project Location: Eunice, NM

Prep Date: 09/30/97
Analysis Date: 10/01/97
Sampling Date: 09/29/97
Sample Condition: I & C
Sample Received by: JH
Client Name: Texaco E & P, Inc.
Project Name: Texaco/Texaco North Eunice Gas Plant, NM

DISSOLVED METALS (mg/L)

TA#	Field Code	As	Se	Cr	Cd	Pb	Ag	Ba	Hg
T82380	RTC Water Well	<0.10	<0.10	0.16	<0.02	<0.10	<0.05	<0.10	<0.001
QC	Quality Control	1.1	1.0	1.1	1.1	1.1	1.0	1.0	0.0053
Reporting Limit		0.10	0.10	0.05	0.02	0.10	0.05	0.10	0.001
RPD		4	0	4	4	4	9	0	6
% Extraction Accuracy		110	105	110	110	110	86	105	101
% Instrument Accuracy		105	100	105	105	105	100	100	106

CHEMIST: As, Se, Cd, Cr, Pb, Ag, Ba: RR Hg: HC
METHODS: EPA SW 846-3015, 6010, 7470.
TOTAL METALS SPIKE: 2.0 mg/L Ase, Se, Cd, Cr, Pb, Ba; 1.0 mg/L Ag; 0.005 mg/L Hg.
TOTAL METALS QC: 1.0 mg/L As, Se, Cd, Cr, Pb, Ba, Ag; 0.005 mg/L Hg.

Director, Dr. Blair Leftwich

10-2-97
Date