1R - 284

GENERAL CORRESPONDENCE

YEAR(S):

2003 →

Shane & Morgan Reaves
#8 Kyle Dr.
Lovington, NM 88260
(505) 631-2080

Sw¼ Nw¼ SE¼

420-4052

Shane Reaves
Morgan (w.f.)
631-2080

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

March 14, 2003

Mr. Bob Wilcox
AMEC Earth and Environmental, Inc.
8519 Jefferson, NE
Albuquerque, New Mexico 87113

RE: GROUND WATER INVESTIGATION
SHANE AND MORGAN REAVES RESIDENCE

Dear Mr. Wilcox:

The New Mexico Oil Conservation Division (OCD) has reviewed AMEC Earth and Environmental, Inc.'s (AMEC) February 14, 2003 correspondence titled "SCOPE OF WORK, MONITORING WELL INSTALLATION AND GROUNDWATER SAMPLING, SHANE AND MORGAN REAVES RESIDENCE, LEA COUNTY, NEW MEXICO. This document contains AMEC's scope of work and cost estimate for ground water investigation and monitoring services, pursuant to the State of New Mexico, General Services Department Contract #308050918056, at the Shane and Morgan Reaves residence located in the SW/4 NW/4 SE/4 of Section 5, Township 17 South, Range 37 East, Lea County, New Mexico.

The investigation services as outlined in the above-referenced document are approved. Enclosed you will find a purchase document showing that $60,000 has been encumbered for the investigation and monitoring required. All sample analyses will be covered separately under the OCD State contract with Pinnacle Laboratories.

If you have any questions, please contact me at (505) 476-3491.

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

xc w/o enclosure: Chris Williams, OCD Hobbs District Office
Shane and Morgan Reaves

STATE OF NEW MEXICO
PURCHASE DOCUMENT

AGENCY CODE	521	DOCUMENT NUMBER	03-199-000607
DATE	02/21/03	BUDGET FY	03

VENDOR CODE: 911641772

VENDOR NAME AND ORDER ADDRESS

AMEC EARTH & ENVIRONMENTAL INC
8519 JEFFERSON NE

ALBUQUERQUE, NM 87113

DO NOT STAPLE BAR CODES

SHIP TO	BILL TO
OIL CONSERVATION DIVISION 1220 SO. ST. FRANCIS DRIVE SANTA FE, NM 87505	OIL CONSERVATION DIVISION 1220 SO. ST. FRANCES DRIVE SANTA FE, NM 87505

AGENCY CONTACT: SALLY MARTINEZ PHONE NUMBER:

LN	FUND	AGCY	ORG/PRG	APPR UNIT	DIVISION	OBJECT	AMOUNT
01	199	521	P586	300	0700	3522	60000.00
							DFA APPROVED
Maximum of six accounting lines per purchase document						TOTAL	60,000.00

FOR AGENCY USE:

LN	FUND	AGCY	ORG/PRG	APPR UNIT	DIVISION	OBJECT	AMOUNT
1	199	521	0750	301	0700	3522	60000.00
						TOTAL	60,000.00

☐ **PURCHASE REQUISITION** *(BIDS MUST BE REQUESTED FOR ITEMS OVER $1,500.00)* **BUYER:**

RECOMMENDED SOURCE & SPECIAL REMARKS:

☐ ESTABLISH ☐ RENEWAL NO.: _____

☒ **CONTRACT , PRICE AGREEMENT, PURCHASE ORDER OTHER THAN PROFESSIONAL SERVICE CONTRACTS:**
(APPROVED VENDORS MUST BE USED FOR ITEMS UNDER CONTRACT)

C/PA /PO# 308050918056 EXPIRES: 100703

☐ **DIRECT PURCHASE ORDER**
(ONLY VALID FOR PURCHASES $1,500.00 AND UNDER)

☐ **EXEMPT FROM THE NM PROCUREMENT CODE**
PURSUANT TO SECTION _____ *NMSA, 1978.*

☐ **EXCLUDED FROM PROCUREMENT THROUGH STATE PURCHASING**
PURSUANT TO SECTION _____ *NMSA, 1978.*

☐ **FOR ENCUMBERING PURPOSES ONLY**
REASON: _____

APPROVAL 1	DATE	APPROVAL 2	DATE

AGENCY APPROVAL - I certify that the proposed purchase represented by this document is authorized by and is made in accordance with all State (and if applicable Federal) legislation, rules and regulations. I further certify that adequate unencumbered cash and budget expenditure authority exists for this proposed purchase and all other outstanding purchase commitments and accounts payable.

AGENCY AUTHORIZED SIGNATURE: DATE:

Generated by : New Mexico Energy, Minerals and Natural Resources. Advantage Web System Version 2.49 06/18/02

① VENDOR/SPD(PRONLY) ② DFA COPY ③ AGENCY COPY ④ AGENCY COPY

AGENCY CODE	DOCUMENT NUMBER
521	03-199-000607
DATE	BUDGET FY
02/21/03	03

STATE OF NEW MEXICO
PURCHASE DOCUMENT
CONTINUATION SHEET

TERMS	
DELIVERY DATE 02/21/03	FOB D
BUDGET VERIFIED BY:	

AGENCY NAME ENERGY, MINERALS & NAT RES

COMM LN	QUANTITY	UNIT	COMMODITY CODE	ACCT LN	ARTICLE AND DESCRIPTION	UNIT COST	TOTAL COST
1	1.0000	EACH	CCCC		GROUNDWATER INVESTIGATION - SHANE & MORGAN REAVES SITE	60000.0000	60000.00

Generated by : New Mexico Energy, Minerals and Natural Resources. Advantage Web System Version 2.49 06/18/02

TOTAL 60,000.00

① VENDO PRONLY) ② DFA COPY ③ AGENCY COPY AGENCY COPY

LABORATORY COST ESTIMATES
FOR
OCD
FEBRUARY 5, 2003
SHANE AND MORGAN REAVES SCOPE OF WORK
(Using Pinnacle Labs)

INDIVIDUAL ANALYSES

BTEX	-	$40
Chlorides	-	$15
Cations/anions	-	$160
Metals	-	$200
PAH	-	$135
TPH(GRO/DRO)	-	$90

PROJECT SAMPLING COST

BTEX/Cations/Anions/Metals	=	$400/sample x 11 samples = $4,400

amec

February 14, 2003
AMEC Proposal No. PF03-0214

Energy, Minerals and Natural Resources Department
New Mexico Oil Conservation Division
1220 St. Francis Drive
Santa Fe, New Mexico 87505

Attention: Mr. Bill Olson

RE: SCOPE OF WORK
Monitoring Well Installation and Groundwater Sampling
Shane and Morgan Reaves Residence
Lovington, Lea County, New Mexico

AMEC Earth & Environmental, Inc. (AMEC) is pleased to present you with this cost estimate to provide Monitoring Well Installation and Ground Water Sampling Services in the vicinity of the Shane and Morgan Reaves Residence located in Lea County, New Mexico. The scope of services were detailed in the Request for Proposal (RFP) provided to AMEC by the State of New Mexico Energy, Minerals and Natural Resources Department - Oil Conservation Division (NMOCD) dated February 5, 2003.

This scope of work will follow the terms and conditions of AMEC's Site Maintenance and Monitoring Contract (PA No. 30-805-09-18056) awarded by the State of New Mexico, General Services Department. Where a specific item is required in the NMOCD scope of work and is not detailed in the GSA Contract, AMEC will use its most current Unit Fee Schedule. We assume that the NMOCD will obtain access from property owners for drilling and sampling during the project. AMEC will contact the NMOCD Project Manager within one week prior to beginning the field work to inform interested parties of our drilling and sampling schedule.

All work performed at the site will conform with AMEC's Safety Policies and Procedures Manual. A site specific Health and Safety Plan (HASP) will be prepared prior to site mobilization. Since the project location is in the vicinity of oil and gas facilities, AMEC field personnel will carry a Hydrogen Sulfide monitor on their person at all times while onsite. AMEC will contact New Mexico One Call to locate underground utilities prior to the initiation of drilling.

1. MONITOR WELL INSTALLATION

The scope of work will consist of drilling and installing eleven (11) monitoring wells consisting of 2-inch diameter PVC casing to the depth of approximately ten (10) feet below the top of the water table using either an air rotary drilling rig or hollow stem auger rig with the capability of converting to air rotary drilling methods. In the attached cost estimate. AMEC has provided costs using a CME 95 heavy-duty drilling rig. This rig is larger than the light to medium duty rig

listed in Line Item 48 of the GSA Price Agreement. For the purposes of this proposal, and based on information from nearby wells, we anticipate that the depth to groundwater is 80 feet. Therefore, the total depth of each well is estimated to be 90 feet per the OCD's requested scope of services. If actual conditions prove groundwater is shallower or deeper than expected, our costs will reflect actual quantities at the listed unit rates. If costs are expected to exceed the total in the attached budget, AMEC will notify the NMOCD Project Manager prior to incurring those costs.

All down-hole equipment will be steam-cleaned prior to use and between each hole. The AMEC field geologist will collect soil samples from cuttings every five feet for logging formation descriptions. The cuttings also will be field screened using a calibrated photo-ionization detector (PID). For the purposes of this proposal, it is not anticipated that soil samples will be obtained for laboratory analysis. However, in the event that contaminated soils are encountered, the OCD Project Manager will be notified immediately. Suspected contaminated soils will be drummed for later disposal at a NMOCD-approved facility. In addition, If hydrocarbon contaminated soils are encountered during drilling near a potential source area, split-spoon samples will be obtained at 5-foot intervals from that particular boring. If split-spoon sampling is necessary, the split-spoons will be properly decontaminated between each use. If necessary, a minimum of one (1) sample from the highest PID reading and one (1) sample near the soil/groundwater interface will be submitted for laboratory analysis of total petroleum hydrocarbons (TPH) by EPA Method 8015 for full range hydrocarbons and benzene, toluene, ethylbenzene and xylene (BTEX) by EPA Method 8021. It is our understanding that the NMOCD contract laboratory will provide the necessary sampling supplies and laboratory analyses, if necessary, at no cost to AMEC. AMEC understands that all laboratory costs are to be direct billed by the laboratory to the NMOCD.

The monitor wells will be competed in the following manner:

- 10 feet of 0.010 PVC screen below the top of ground water level
- 5 feet of 0.010 PVC screen above the top of ground water level
- gravel pack from the bottom of the hole to 3 feet above the top of the well screen
- 2 to 3 feet bentonite plug placed on top of gravel pack
- cement grout containing 3 to 5 % bentonite to surface
- concrete pad around well surface with locking three (3) foot riser

2. MONITOR WELL DEVELOPMENT AND GROUND WATER SAMPLING

After completion of the wells, they will be developed using a clean bailer to surge and purge the well until the amount of suspended solids have been reduced and pH, temperature, and conductivity have stabilized. The bailer will be properly decontaminated between wells. All development water will be placed in 55-gallon steel drums that will be sealed and labeled according to their contents. For the purposes of the cost proposal, we are assuming six drums of development water will be generated during the project.

The wells will be allowed to recharge for 24 hours, then at least three casing volumes will be purged and ground water samples will be collected with separate disposable bailers from each well after pH, temperature, and conductivity have stabilized. These samples will be sent to the NMOCD contract laboratory for analysis of BTEX, TPH, total dissolved solids (TDS), major cations/anions and New Mexico Water Quality Control Commission (NMWQCC) metals. Any samples obtained during the project will be placed in containers supplied by the laboratory, chilled properly in a cooler, and sent via overnight delivery to the laboratory using standard chain-of custody protocols. It is our understanding that the NMOCD will provide the necessary sampling supplies and laboratory analysis, if necessary, at no cost to AMEC.

3. SURVEYING

AMEC will subcontract a surveyor licensed in the State of New Mexico to determine the top of casing elevations for the installed monitor wells and ground elevations near each water well at the site. These elevations will assist in determining the groundwater gradient and flow direction.

4. WASTE DISPOSAL

If regulated wastes such as contaminated soil or groundwater are generated during the project, the media will be drummed in 55-gallon containers, sealed and properly labeled as to their contents. Following the receipt and review of laboratory analyses, if necessary, the drums/contaminated media will be disposed at a nearby NMOCD-licensed facility. We request that NMOCD personnel sign applicable waste manifests.

5. REPORTING

AMEC will submit a report to the NMOCD summarizing the field activities and laboratory analyses. The report will include the following:

- A description of the investigation activities during the project including conclusions and recommendations;
- A lithologic log and well completion diagram for each monitor well;
- A water table map showing the location of the monitor wells, water wells, potential sources of contamination and other important site features. The magnitude and direction of the hydraulic gradient will be determined using the groundwater elevations obtained from each well;
- Isopleth maps for contaminant analyses obtained during the investigation;
- Summary tables of all groundwater quality sampling results and copies of all laboratory analytical data sheets and associated QA/QC data;
- A disposition of any waste generated.

The report will be submitted to the NMOCD within 60 days of the initiation of drilling activities.

It is anticipated that the field project will be completed in 13 working days. AMEC will provide Mr. Will Murley of our Hobbs, New Mexico office to perform oversight of the drilling, well installation, and sampling. We expect to begin the project within two weeks of being given the notice to proceed. Estimated costs are based on hollow-stem auger drilling methods with a CME-95 and installing wells to a depth of 90 feet each. If unforeseen drilling conditions are encountered, costs for the project may increase. The NMOCD will be notified if this occurs. The estimated cost for the project is $59,082.45, not including applicable sales tax. A detailed cost estimate for the project is provided on Attachment 1. Applicable unit rates are consistent with the rates established in GSD contract 30-805-09-18056. Should you have any questions concerning this proposal, please contact our office.

Respectfully submitted,

AMEC Earth & Environmental, Inc.

Bob Wilcox, P.G.
Senior Project Manager

Reviewed by:

Mike Schulz,
Albuquerque Consulting Unit Manager

Copies: Addressee (2)

AMEC Earth & Environmental, Inc.
8519 Jefferson, N.E.
Albuquerque, New Mexico 87113
Tel + 505/821-1801
Fax +505/821-7371
www.amec.com

C:\MyFiles\Backup\OCD Reaves

Attachment 1
Time and Materials Cost Estima
New Mexico Oil Conservation Division
Lea County, New Mexico
AMEC Proposal No. 03-0214: Shane and Morgan Reaves Groundwater Investigation

Project Task	Contract Line Item	Item	Unit of Measure	Estimated Units	Cost Per Unit	Total Estimated Costs
Item 1:						
AMEC Health and Safety Plan Preparation/Project Planning	0002	Senior Scientist	Hour	10	$ 72.00	$ 720.00
	0003	Staff Scientist	Hour	10	$ 59.00	$ 590.00
	0042	Mileage	Mile	100	$ 0.25	$ 25.00
	0053	Pickup Truck	Day	1	$ 43.00	$ 43.00
					Total:	**$ 1,378.00**
Item 2:						
Drilling Rig Mob/Demob	0055	Drilling Rig Preparation	Hour	4	$ 98.00	$ 392.00
	0047	Drill Rig Mileage	Mile	720	$ 0.75	$ 540.00
	0042	Support Truck Mileage	Mile	1,224	$ 0.25	$ 306.00
	0055	Travel (Drill Crew)	Hour	18	$ 98.00	$ 1,764.00
	0053	Per Diem (Drill Crew)	Day	6	$ 68.00	$ 408.00
					Total:	**$ 3,410.00**
Item 3:						
Drilling, Well Installation, and Survey	0002	Senior Scientist	Hour	6	$ 72.00	$ 432.00
	0003	Project Scientist	Hour	110	$ 59.00	$ 6,490.00
	0042	Mileage	Mile	400	$ 0.25	$ 100.00
	0053	Pickup Truck	Day	11	$ 43.00	$ 473.00
	0018	Explosimeter	Day	11	$ 10.00	$ 110.00
	0021	PID	Day	11	$ 10.00	$ 110.00
	0050	Auger Drilling with CME 95	Foot	990	$ 14.00	$ 13,860.00
	0031	10' Section 2" Blank PVC Riser	Each	88	$ 6.00	$ 528.00
	0031	10' Section 2" Screen PVC	Each	11	$ 9.00	$ 99.00
	0035	Filter Pack Sand	50 Lb Bag	55	$ 9.00	$ 495.00
	0037	Bentonite Chips	50 Lb Bag	11	$ 7.00	$ 77.00
	0058	Locking Cap	Each	11	$ 9.00	$ 99.00
	0053	Steam Cleaner	Day	11	$ 69.00	$ 759.00
	0053	Pickup Truck	Day	11	$ 43.00	$ 473.00
	0052	Heavy Support Truck	Day	11	$ 95.00	$ 1,045.00
	0043	Per Diem (Drill Crew)	Night	36	$ 68.00	$ 2,448.00
	0046	Licensed Surveyor	Hour	15	$ 93.00	$ 1,395.00
		Drilling Contractor Line Items Not Covered in Price Agreement				
		Well Completion (Drill Crew)	Hour	44	$ 140.00	$ 6,160.00
		Grout Wells (Drill Crew)	Foot	891	$ 7.00	$ 6,237.00
		Install Pad Well Covers (Drill Crew)	Each	11	$ 140.00	$ 1,540.00
		5' Section 2" Screen PVC	Each	11	$ 13.85	$ 152.35
		Flush-Threaded End Cap	Each	3	$ 7.00	$ 21.00
		Plastic Tarps	Each	11	$ 20.00	$ 220.00
		Locks	Each	11	$ 8.10	$ 89.10
		3' Stickup Cover	Each	11	$ 70.00	$ 770.00
					Total:	**$ 44,182.45**
Item 5:						
Well Development and Sampling	0003	Project Scientist	Hour	24	$ 59.00	$ 1,416.00
	0013	Water Quality Meter	Day	2	$ 20.00	$ 40.00
	0020	Interface Probe	Day	2	$ 10.00	$ 20.00
	0053	Steam Cleaner	Day	2	$ 69.00	$ 138.00
	0052	Heavy Support Truck	Day	2	$ 95.00	$ 190.00
	0053	Pickup Truck	Day	2	$ 43.00	$ 86.00
	0043	Per Diem (Drill Crew)	Night	3	$ 68.00	$ 204.00
	0043	Water Disposal	Drum	6	$ 113.00	$ 678.00
		Line Items Not Covered in Price Agreement				
		Well Development (Drill Crew)	Hour	22	$ 120.00	$ 2,640.00
		Disposable Bailers	Each	11	$ 20.00	$ 220.00
		String	Roll	1	$ 8.00	$ 8.00
		Ice	Bag	8	$ 1.50	$ 12.00
					Total:	**$ 5,652.00**
Item 6:						
Report	0001	Principal	Hour	2	$ 100.00	$ 200.00
	0002	Senior Scientist	Hour	24	$ 72.00	$ 1,728.00
	0002	Project Scientist	Hour	24	$ 59.00	$ 1,416.00
	0007	Draftsperson II	Hour	24	$ 41.00	$ 984.00
	0009	Administrator	Hour	6	$ 22.00	$ 132.00
					Total:	**$ 4,460.00**
Estimated Total						**$ 59,082.45**

Intera Incorporated
One Park Square
6501 Americas Parkway NE
Suite 820
Albuquerque, NM 87110
Telephone: 505 246 1600
Fax: 505 246 2600

February 14, 2003

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

RE: Transmittal of Proposals:

- **Investigation of Ground Water Contamination of Shane and Morgan Reaves Water Well**
- **Ground Water Contamination Investigation Windmill Oil Site**

Mr. Olson:

INTERA Inc. (INTERA) appreciates the opportunity to provide you with the enclosed proposals. The proposals have been prepared for investigating the ground water contamination observed at the Shane and Morgan Reaves water well, and for the profiling of ground water quality in a portion of the area of the Windmill Oil Site. We have based our proposals on the scopes of work that you provided. Each proposal includes a scope of work describing how INTERA will complete the project, and a cost estimate. The cost estimate provided for the Reaves water well investigation are based on a fixed unit price basis. INTERA proposes a similar basis for the Wind Mill Oil site project with the flexibility to reduce the authorized value for water wells that are not sampled.

INTERA will perform the proposed work under the terms of the contract between INTERA and the State of New Mexico General Services Department, Contract No. 30-805-09-18056.

Again, we thank you for the opportunity to bid on these projects and hope that you will consider INTERA for future projects where the services of a responsive and quality consulting firm are needed. If you have any questions regarding the attached proposals, please do not hesitate to contact me at (505) 246-1600.

Regards,
INTERA Inc.

Joseph Tracy, PG
Project Manager

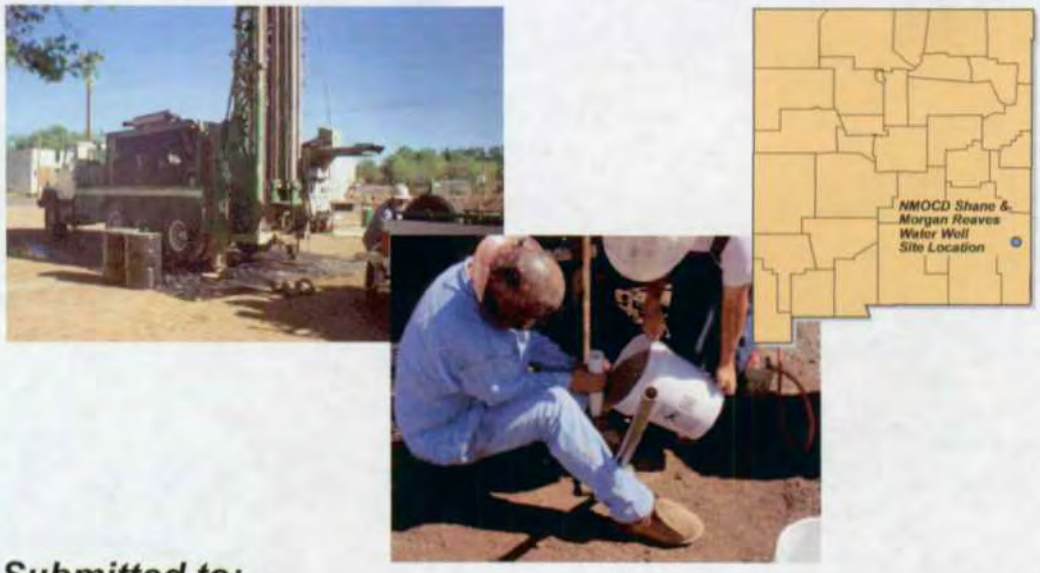
Ms. Stacy Sabol
Sector Manager

Enclosures:

- Scope of Work and Cost Proposal – Investigation of Shane & Morgan Reaves Water Well, Lovington, New Mexico
- Scope of Work and Cost Proposal – Ground Water Contamination Investigation - Windmill Oil Site

Scope of Work and Cost Proposal

Investigation of Ground Water Contamination Shane & Morgan Reaves Water Well Lovington, New Mexico



Submitted to:

State of New Mexico Energy, Minerals & Natural Resources Department
Oil Conservation Division

Submitted by:

INTERA Incorporated
One Park Square
6501 Americas Parkway NE, Suite 820
Albuquerque, New Mexico 87110

February 14, 2003

SCOPE OF WORK AND COST PROPOSAL

INVESTIGATION OF GROUND WATER CONTAMINATION OF SHANE AND MORGAN REAVES WATER WELL LOVINGTON, NEW MEXICO

Prepared for:

State of New Mexico
Energy, Minerals and Natural resources Department
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico

Prepared by:

INTERA Inc.
One Park Square
6501 Americas Parkway NE, Suite 820
Albuquerque, New Mexico 87110

February 14, 2003

TABLE OF CONTENTS

1.0 INTRODUCTION

This scope of work (SOW) and cost estimate are being submitted for an investigation of the Shane and Morgan Reaves Water Well (Site), a private residence located between Lovington and Hobbs in southeastern New Mexico. This submittal is in response to an e-mail letter request dated February 6, 2003, from Mr. William C. Olson of the New Mexico Oil Conservation Division (NMOCD) to Ms. Stacy Sabol of INTERA Inc. (INTERA).

The NMOCD is conducting an investigation to determine the source of petroleum contamination of ground water in a private water well at the Shane and Morgan Reaves residence between Lovington and Hobbs, New Mexico. INTERA has developed the attached SOW and cost estimate to perform work based on the following activities:

- Installation of ground water monitoring wells;
- Surveying monitoring well locations, water wells, and relevant site features;
- Sampling ground water from monitoring wells;
- Removal and disposal of investigation-derived wastes in a manner approved by the NMOCD; and
- Preparation of an investigation report.

Background Information

NMOCD's request provided the following background information:

> "On May 7, 2001, the NMOCD received a complaint of water contamination in an old private residential water well at the residence of Shane and Morgan Reaves at #8 Kyle Drive, Lovington, New Mexico. The Reaves residence is located in the southwest ¼ of the northwest ¼ of the southeast ¼ of Section 5, Township 17 South, Range 37 East, Lea County, New Mexico. Subsequent site inspections have shown that the water well is in the vicinity of several oilfield pipelines and an oil and gas production site. Samples taken from the Reaves well show that the ground water contains 0.0708 milligrams per liter (mg/l) benzene. Depth to ground water at the site is estimated to be approximately 80 feet. The local ground water gradient is estimated to be toward the southeast. Investigation of the source of these contaminants is necessary to determine the party responsible for remediation of the site."

2.0 SCOPE OF WORK

2.1 Task 1: Environmental Site Characterization

2.1.1 Subtask 1: Project Coordination and Preparation

This subtask involves the review of any documents provided by NMOCD representative(s); a preliminary site visit by INTERA and/or its subcontractors; initial communication with the property owner (s); and communication and interaction with NMOCD representatives.

2.1.2 Subtask 2: Drilling and Installation of Monitoring Wells (11)

INTERA will advance up to eleven (11) soil borings at the Site. These locations will be determined by the NMOCD representative prior to soil boring advancement. These locations will be between the Reaves Well and potential sources of contamination. The location of the Reaves Well is shown on Figure 1.

Each soil boring will be advanced using hollow-stem auger drilling methods to an approximate depth of 100 feet. The drilling rig will be equipped to convert the drilling application from hollow-stem to air rotary drilling methods if subsurface conditions prove to be too difficult and auger refusal is met. New Mexico One Call Systems, Inc. will be contacted as well as all local utilities prior to the initiation of drilling.

The INTERA geologist will produce a lithologic log of each soil boring by observing the cuttings and drilling conditions as the soil borings are advanced. The soil cuttings will be described in accordance to Unified Soil Classification System. Descriptions of the soil cuttings will include lithologic type, minerals present, color, particle size range, particle angularity, density, plasticity, particle sorting, and structure.

Random samples of the soil cuttings, as well as samples at approximate 5-foot intervals, will be containerized and will be screened in the field for volatile organic compounds using a photoionization detector (PID) via heated headspace techniques. The PID will be equipped with a 10.6 ionization potential electron volt lamp that provides the sensitivity necessary to identify the organic compounds suspected to be present in the area soil. The PID provides screening of ionizable organic compound concentrations in air and gives a direct readout in parts per million (ppm). The PID determines the concentration of total ionizable organic compounds, but does not differentiate between specific compounds. The operational range of the PID is 0 to 2,000 ppm, with a minimum instrument detection of 0.1 ppm. Soil samples collected for PID headspace screening will be placed in laboratory pre-cleaned glass jars and the opening will be sealed with aluminum foil. The soil samples will be allowed to reach ambient temperature either by placement in the sun and/or a warm water bath. When the soil sample is at ambient air temperature for approximately 10 minutes, the tip of the PID will be inserted into the jar by piercing the aluminum foil, and the corresponding reading will be recorded in the field notebook or appropriate field form. The New Mexico Environment Department (NMED) Petroleum Storage Tank Bureau guidance for heated headspace reading collection will be followed.

All drilling equipment used for boring advancement will be steam cleaned prior to drilling in a new soil boring location to remove any oils, chemicals, or soil. All soil boring equipment will also be steam cleaned between soil boring locations to eliminate any possibility of cross contamination between two borings. Sampling tools will be decontaminated between each use.

INTERA proposes to complete each soil boring location with a monitoring well (MW-1 through MW-11). Each monitoring well will be completed with 2-inch diameter polyvinyl chloride (PVC) flush-threaded casing and 0.010 slotted screen. Lengths of slotted screen in the monitoring well will be approximately 15 feet across the observed water table interface (with 5 feet of the well screen above the water table and 10 feet of the well screen below the water table). Actual screen length and placement may vary at each monitoring well location depending on the location of the water table, characteristics of the aquifer, and availability of ground water. Blank casing will be placed above and below the well screen. Ground water is anticipated to be encountered at a depth of 80 feet below ground surface (bgs). A gravel pack will be installed surrounding the monitoring well slotted screen consisting of 10/20 silica sand. The sand pack will be installed from the base of the screen to 2–3 feet above the top of the screen to allow for seasonal and local fluctuations in the water table. A 2- to 3-foot bentonite plug will be placed above the gravel pack to seal the well around the annulus. The remainder of the annular space in the soil boring will be filed with cement grout containing 3–5 % bentonite. The PVC casing will be completed 2–3 feet above the ground surface. A protective, outer, 4-inch steel casing will be placed around the primary PVC casing, and cemented in place with a concrete pad. The PVC casing will be installed with a locking cap.

Following completion, each monitoring well will be developed using a surge block and bailer via Environmental Protection Agency (EPA)-approved techniques until ground water appears clear and field parameters (pH, conductivity, temperature, and dissolved oxygen) stabilize. Every effort will be made to purge any water that was introduced into the soil boring during drilling activities; however, our proposed drilling techniques are not expected to introduce any water. Each monitoring well (immediately following installation) will be bailed to remove as much sediment present from drilling as possible. The monitoring well will be considered fully developed when pH, conductivity, temperature, and dissolved oxygen parameters have stabilized over three consecutive measurements. Typical acceptable tolerance levels for these parameters are +/- 0.2 units for pH, +/- 50 µmhos/cm for conductance, +/- 1 degree Celsius for temperature, and 5 NTUs or less for turbidity (where possible). Field parameters for well development will be documented on a Well Development Record form.

2.1.3 Subtask 3: Site Survey of Monitoring Wells, Water Wells, and Other Site Features

A site survey of all newly installed monitoring wells will be completed after all monitoring wells are constructed. The site survey will also include all relevant water wells and other site features including potential contamination sources observed. The site survey information will be used to determine local ground water flow and also document the location of the monitoring wells in reference to the oil field transmission pipelines.

The survey will locate the U.S. Geographical Survey or National Geographical Survey monument. The monitoring wells will be located at the ground surface and at the north rim of the top of casing. The elevations will be surveyed to 0.01 feet. Building corners, domestic water

wells, and relevant site features will be located to a tolerance of 0.1 feet. The bearing will be NAD 83 based or equivalent and elevations will be Navigational Data based. All coordinates will be reported to NM state plane coordinates. The surveyor will provide a deliverable consisting of a drawing in AutoCAD of surveyed points showing structure locations and dimensions and a table of surveyed coordinates in spreadsheet form (submittal in electronic file and hard copy).

2.1.4 Subtask 4: Sampling of Ground Water Monitoring Wells

Ground water samples will be collected from the newly installed monitoring wells. The newly installed monitoring wells will be allowed to equilibrate for at least 24 hours following development before the ground water sampling event. All field activities will be documented in the Site log book and these notes will be included in the final report.

Prior to purging, the static water level and total depth of each monitoring well will be measured with a decontaminated water level probe and the potential presence of petroleum hydrocarbons on the surface of the water table will also be ascertained using an interface probe. A minimum of three well casing volumes will be purged prior to sample collection. Field parameters (pH, conductivity, temperature, redox potential, and dissolved oxygen) will be monitored during purging. Ground water samples will be collected once the appropriate purge volume (approximately three well volumes or one volume if the well purges dry) has been extracted and field parameters have stabilized to ensure collection of a representative ground water sample. Purging information will be documented on a monitoring well purging form completed for each monitoring well.

The purging and subsequent sampling will be conducted using either a disposable bailer or a submersible pump. Sample containers will be filled at the surface leaving no headspace in the containers. In addition, ground water samples intended for dissolved metals analysis will be field-filtered prior to submittal to the contract laboratory.

All ground water samples will be analyzed for concentrations of benzene, toluene, ethyl benzene, and total xylenes via EPA Method 8260, total dissolved solids via EPA Method 160.1, major cations/anions via EPA Method 300.0/9065, and the New Mexico Water Quality Control Commission metals using EPA Methods 6010/7470/7471.

EPA quality assurance/quality control (QA/QC) procedures will be adhered to. QA/QC ground water samples will consist of field duplicates collected from randomly selected locations at a minimum frequency of 1 duplicate for every 10 sample locations, and of equipment blanks collected each day during sampling. The duplicate samples will be labeled with a dummy sample ID and collection time, so as to be "blind" duplicates. The actual sample collection data will be recorded in the field logbook. The equipment blanks will be analyzed for the same sampling suite as the primary samples. Additional QA/QC procedures will include trip blanks placed in the sample coolers with the primary and duplicate samples. Trip blanks ascertain actual conditions and possible sample contamination during shipping.

A NMOCD approved contract laboratory will be utilized to perform the sample analysis. NMOCD will instruct INTERA which contract laboratory to use and NMOCD will interface with the contract laboratory and will be billed directly from that contract laboratory. NMOCD

will also instruct INTERA how to ship samples (Federal Express delivery, Greyhound Bus, etc.) and pay for the sample shipping.

2.1.5 Subtask 5: Removal and Disposal of Investigation Derived Wastes

The primary types of wastes that will be produced during the execution of the Work Plan include:

- Potentially contaminated soil (drill cuttings)
- Purge and decontamination wastewater
- Personnel protective equipment (PPE) and other wastes

Excess soil will be generated during drilling activities. Soil cuttings generated during the drilling of the soil boring prior to monitoring well installation will be spread on the ground surface. If PID readings indicate that the soil cuttings are potentially contaminated, then the soil will be containerized and adequately characterized. The soil will then be disposed of according to all federal, state, and local regulations. INTERA assumes that two 55-gallon drums of soil per soil boring (22 total) may have to be used to contain soil. The cost of transportation of soil and disposal is included as a contingency cost in the attached cost estimate.

The wastewater derived from decontamination of the sampling and drilling equipment during the soil sampling activities (surface and subsurface), the drilling activities, and personnel decontamination water will be placed in 55-gallon drums. The purge and development water will then be disposed of according to all federal, state, and local regulations. INTERA assumes that nine 55-gallon drums may have to be used to containerize purge water. The cost of transportation of purge water and disposal is included as a contingency cost in the attached cost estimate.

Used disposable PPE will be placed in double, 10-mil-thick plastic bags and sealed with duct tape. The PPE that is classified as hazardous will be properly disposed of at a suitable and permitted off-site nonhazardous disposal facility. Likewise, spent PPE, equipment, and materials that have not been substantially contaminated by contact with water or soils, or that have been tested and determined to be nonhazardous, will be secured in the same fashion as the hazardous materials and properly disposed of at a suitable and NMED-permitted off-site nonhazardous disposal facility. Other wastes generated as part of investigation activities such as miscellaneous metal and plastic debris will be decontaminated and removed from the site. All decontaminated materials will be visually inspected for the presence of soil or dust particulate on the decontaminated objects. Objects which have been decontaminated and visually inspected to document satisfactory decontamination will be removed from the site and disposed of at a suitable and NMED-permitted off-site nonhazardous disposal facility.

2.1.6 Subtask 6: Preparation of an Investigation Report

An investigation report will be prepared by INTERA after installation of the monitoring wells and receipt of ground water sample analytical results from the contract laboratory. INTERA will complete a final report describing the work completed at the Site, including the following:

- a description of the investigation activities which occurred including conclusions regarding the potential source of contamination and recommendations for further investigation and/or remediation, if necessary;
- a geologic/lithologic log and well completion diagram for each monitoring well;
- a water table map showing the location of the monitoring well, water wells, potential sources of contamination and any other pertinent site features as well as the direction and magnitude of the hydraulic gradient created using the water table elevation from each monitoring well;
- isopleth maps for contaminants observed during the investigations;
- summary tables of all ground water quality sampling results and copies of all laboratory analytical data sheets and associated QA/QC data; and
- the disposition of all wastes generated.

3.0 SCHEDULE OF DELIVERABLES

There is one deliverable for this phase of the project. The deliverable is described in Section 2.1.6 (Subtask 6) and will be the preparation of an investigation report outlining the results of the monitoring well installation, the site survey, and ground water monitoring well sampling results. Drilling shall be schedule to commence as soon as possible after NMOCD negotiates access agreements with the various landowners. The investigation report will be submitted to the NMOCD within 60 days of initiation of drilling.

4.0 PROPOSAL

The cost estimate is provided in the attached cost estimate. INTERA's services will be provided on a combination time and materials/fixed price basis. All costs other than field investigation labor will be fixed price, while the field investigation will be on a per well basis. INTERA will not exceed these costs without first requesting and then obtaining approval for an amendment to this budget. Assumptions used in developing these costs are provided below.

4.1 Assumptions

- The Site will be accessible for field inspections and planning.
- NMOCD will review and comment on this SOW; however, major changes in strategy or rewriting of the document resulting from this review are not included in these costs.
- The NMOCD will provide copies of any and all environmental reports pertaining to the Site.
- The reports provided are complete and accurate.
- Additional research (e.g., searching for additional water wells in the area) is not required.
- NMOCD will negotiate all access agreements and assist in obtaining right-of-way entry as needed.
- Hollow-stem drilling methods will be sufficient to penetrate to subsurface materials to a depth of 100-feet bgs. An air-rotary drilling option will be available if needed.

- The drilling cuttings and purge water can be spread on site and do not have to be containerized. If this is not the case, no more than 22 55-gallon drums of soil and no more than nine 55-gallon drums are proposed to be containerized and disposed of.

5.0 PERSONNEL

The key personnel from INTERA devoted to working on this project are listed below along with their areas of responsibility.

Ms. Stacy Sabol - Principal	Client interface, oversight of project management and technical review of work plan and report documents
Mr. Joseph J. Tracy, PG – Project Geologist	Project management, site characterization activities, work plan development, health and safety plan development, final report development
Mr. James P. Joseph - Project Engineer	Project management, site characterization activities, work plan development, health and safety plan development, final report development
Mr. Jerome Marez – Staff Engineer	Background research, site characterization activities, work plan development, health and safety plan development, final report development
Mr. Christopher Burrus, Field Technician II	Coordination, scheduling, and lead technician on field activities. Completion of field forms and report development

FIGURE

SHANE AND MORGAN REAVES
LOVINGTON AND HOBBS, NEW MEXICO

SITE MAP - SHANE AND MORGAN
REAVES WATER WELL

LEGEND

ASSUMED LOCATION OF EXISTING WATER WELL

UNDERGROUND PIPE LINE (UPL)

RAILROAD TRACKS

Scale in Feet
0 80 200

COURTESY OF USGS
NOVEMBER 1, 1997

PROJECT NO.: [illegible]
DATE: 2/10/03
FILE ID: SHANE_MORGAN.DWG
SHEET NO.: 1 OF 1
DRAWING NO.: FIGURE 1
DRAWN BY: JAM

COST ESTIMATE

INVESTIGATION OF GROUND WATER CONTAMINATION
OF
SHANE AND MORGAN REAVES WATER WELL
LOVINGTON, NEW MEXICO

Subtask 1. Project Coordination and Preparation						
Professional Services	**Contract Line Item**	**Rate**	**Unit**	**# of Units**		**Total**
Principal	0001	100.00	hour	2	$	200.00
Project Scientist/Engineer/Manager	0003	57.00	hour	4	$	228.00
Staff Scientist/Engineer	0004	50.00	hour	4	$	200.00
Field Technician II	0005	40.00	hour	8	$	320.00
Draftperson II	0007	45.00	hour	2	$	90.00
Hourly Secretary	0010	30.00	hour	2	$	60.00
Subtotal Professional Labor					**$**	**1,098.00**
SUBTOTAL SUBTASK 1:					**$**	**1,098.00**
NMGRT @ 5.8125%					**$**	**63.82**
GRAND TOTAL SUBTASK 1:					**$**	**1,161.82**
Subtask 2. Field Investigation: Drilling/Installation of Monitoring Wells (11 Total), Well Development						
Professional Services	**Contract Line Item**	**Rate**	**Unit**	**# of Units**		**Total**
Principal	0001	100.00	hour	2	$	200.00
Project Scientist/Engineer/Manager	0003	57.00	hour	16	$	912.00
Field Technician II	0005	40.00	hour	140	$	5,600.00
Draftperson II	0007	45.00	hour	2	$	90.00
Hourly Secretary	0010	30.00	hour	2	$	60.00
Subtotal Professional Labor					**$**	**6,862.00**
Expenses	**Contract Line Item**	**Rate**	**Unit**	**# of Units**		**Total**
Hollow Stem Auger Drilling Services (2-3 Man Crew)	0048	21.00	foot	1100	$	23,100.00
Mobilization of Drilling Rig	0047	1.75	mile	1132	$	1,981.00
Per Diem/Overnight - Drillers (3 Man Crew)	0043	65.00	day	49	$	3,185.00
Mileage - Driller Vehicle Mileage, Local Travel	0047	0.25	mile	1960	$	490.00
Job Prep	NA	70.00	hour	4	$	280.00
Surface Completion	NA	175.00	each	11	$	1,925.00
Well Development	NA	120.00	hour	44	$	5,280.00
Support Equipment	NA	215.00	day	14	$	3,010.00
Third Crew Member	NA	350.00	day	14	$	4,900.00
Locking Cap 2" diameter	0058	14.00	well	11	$	154.00
Mileage - INTERA Vehicle Mileage	0047	0.25	mile	700	$	175.00
Per Diem/Overnight - INTERA Representative	0043	65.00	day	12	$	780.00
Interface Probe	0020	35.00	day	12	$	420.00
OVM (PID/FID)	0021	65.00	day	12	$	780.00
Subtotal Expenses					**$**	**46,460.00**
SUBTOTAL SUBTASK 2:					**$**	**53,322.00**
NMGRT @ 5.8125%					**$**	**3,099.34**
GRAND TOTAL SUBTASK 2:					**$**	**56,421.34**

INVESTIGATION OF GROUND WATER CONTAMINATION
OF
SHANE AND MORGAN REAVES WATER WELL
LOVINGTON, NEW MEXICO

Subtask 3. Field Investigation: Surveying Monitor Well Locations, Water Wells, and Relevant Site Features						
Professional Services	**Contract Line Item**	**Rate**	**Unit**	**# of Units**		**Total**
Project Scientist/Engineer/Manager	0003	57.00	hour	4	$	228.00
Staff Scientist/Engineer	0004	50.00	hour	4	$	200.00
Field Technician II	0005	40.00	hour	16	$	640.00
Draftperson II	0007	45.00	hour	8	$	360.00
Subtotal Professional Labor					**$**	**1,428.00**
Expenses	**Contract Line Item**	**Rate**	**Unit**	**# of Units**		**Total**
Mileage - INTERA Vehicle Mileage	0047	0.25	mile	50	$	12.50
Per Diem/Overnight - INTERA Representative	0043	65.00	day	1	$	65.00
Site Survey	0046	100.00	hour	14	$	1,400.00
Subtotal Expenses					**$**	**1,477.50**
SUBTOTAL SUBTASK 3:					**$**	**2,905.50**
NMGRT @ 5.8125%					**$**	**168.88**
GRAND TOTAL SUBTASK 3:					**$**	**3,074.38**
Subtask 4. Field Investigation: Sampling of Ground Water Monitoring Wells						
Professional Services	**Contract Line Item**	**Rate**	**Unit**	**# of Units**		**Total**
Project Scientist/Engineer/Manager	0003	57.00	hour	8	$	456.00
Staff Scientist/Engineer	0004	50.00	hour	4	$	200.00
Field Technician II	0005	40.00	hour	48	$	1,920.00
Subtotal Professional Labor					**$**	**2,576.00**
Expenses	**Contract Line Item**	**Rate**	**Unit**	**# of Units**		**Total**
Per Diem/Overnight	0043	65.00	day	5	$	325.00
Mileage - Personal Vehicle Mileage	0042	0.25	mile	700	$	175.00
Interface Probe	0020	35.00	day	6	$	210.00
Combination Water Quality Meter	0013	20.00	day	6	$	120.00
Dissolved Oxygen (DO) Meter	0014	35.00	day	6	$	210.00
Grundfos Monitoring Well Sampling Pump	NA	70.00	day	6	$	420.00
Electric Generator	NA	35.00	day	6	$	210.00
Polyethylene Tubing	0017	0.40	foot	1,320	$	528.00
Subtotal Expenses					**$**	**2,198.00**
SUBTOTAL SUBTASK 4:					**$**	**4,774.00**
NMGRT @ 5.8125%					**$**	**277.49**
GRAND TOTAL SUBTASK 4:					**$**	**5,051.49**
Subtask 5: Field Investigation: Removal and Disposal of Investigation Derived Wastes						
Professional Services	**Contract Line Item**	**Rate**	**Unit**	**# of Units**		**Total**
Principal	0001	100.00	hour	1	$	100.00
Project Scientist/Engineer/Manager	0003	57.00	hour	2	$	114.00
Field Technician II	0005	40.00	hour	8	$	320.00
Subtotal Professional Labor					**$**	**534.00**
IDW Contingency Expenses	**Contract Line Item**	**Rate**	**Unit**	**# of Units**		**Total**
Barrel Disposal of Contaminated Fluids	0044	100.00	barrel	22	$	2,200.00
Barrel Disposal of Contaminated Soils	0045	100.00	barrel	9	$	900.00
Subtotal Expenses					**$**	**3,100.00**
SUBTOTAL SUBTASK 5:					**$**	**3,634.00**
NMGRT @ 5.8125%					**$**	**211.23**
GRAND TOTAL SUBTASK 5:					**$**	**3,845.23**

INVESTIGATION OF GROUND WATER CONTAMINATION
OF
SHANE AND MORGAN REAVES WATER WELL
LOVINGTON, NEW MEXICO

Subtask 6. Preparation of an Investigation Report						
Professional Services	**Contract Line Item**	**Rate**	**Unit**	**# of Units**		**Total**
Principal	0001	100.00	hour	4	$	400.00
Project Scientist/Engineer/Manager	0003	57.00	hour	24	$	1,368.00
Staff Scientist/Engineer	0004	50.00	hour	16	$	800.00
Field Technician II	0005	40.00	hour	8	$	320.00
Draftperson II	0007	45.00	hour	10	$	450.00
Administrator	0009	40.00	hour	16	$	640.00
Hourly Secretary	0010	30.00	hour	4	$	120.00
Subtotal Professional Labor					**$**	**4,098.00**
SUBTOTAL SUBTASK 6:					**$**	**4,098.00**
NMGRT @ 5.8125%					**$**	**238.20**
GRAND TOTAL SUBTASK 6:					**$**	**4,336.20**

PROJECT GRAND TOTAL:	**$**	**73,890.46**

Notes:

1. All ground water samples collected at the Site will be analyzed for the NMWQCC List Metals (antimony, arsenic, barium, beryllium, cadmium, chromium. mercury, nickel, selenium, and thallium) by EPA Methods 6010/6020/7470.
2. NMGRT - New Mexico Gross Receipts Tax

RESPEC

4775 Indian School Rd. NE. Suite 300
Albuquerque, New Mexico 87110

February 11, 2003

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

Dear Mr. Olson:

Please find enclosed cost estimates for the Reaves and Windmill Sites. If you have any questions please call me at 268-2661 or 379-0274 (cell).

Thank you for your consideration, and I look forward to working with you on these projects.

Sincerely,

John Bunch, P.G
Project Geologist

COST ESTIMATE
Investigation of Ground Water Contamination
of the Shane and Morgan Reaves Water Well

Vendor No. 5187719
Contract Number: 30-805-09-18056

RESPEC Inc.
Commodity Code: 72002

LN	QTY	RATE	UNIT	COST	DESCRIPTION
*0002		$70.00	Hour	$0.00	Senior Scientist
*0003	16	$63.00	Hour	$1,008.00	Project Manager/Certified Scientist
*0004	80	$50.00	Hour	$4,000.00	Staff Scientist
*0005		$35.00	Hour	$0.00	Field Technician II
*0006	36	$30.00	Hour	$1,080.00	Field Technician I
*0010	4	$30.00	Hour	$120.00	Secretary
*0017		N/A			**Expendable Field Equipment - at cost**
*0021	10	$5.00	Day	$50.00	PID
*0031	83	$14.75	Each	$1,224.25	2" blank PVC, !0 ft sections
*0033	11	$27.00	Each	$297.00	2" screen, 10 ft sections
*0035	132	$8.50	Each	$1,122.00	Filter Pack Sand per 100# sack
*0036		$46.75	Each	$0.00	Bentonite pellets per 50# sack
*0037	11	$8.50	Each	$93.50	Bentonite Chips per 50# sack
*0038	11	$50.00	Each	$550.00	8" Manhole (well vault)
*0040		$0.05	Each	$0.00	Copies
*0042	1300	$0.32	Mile	$416.00	Personal Vehicle Mileage
*0043	36	$65.00	Each	$2,340.00	Per Diem/Overnight
*0046	9	$80.00	Hour	$720.00	Survey
*0047	650	$2.50	Mile	$1,625.00	Mobe/Demobe: Drill Rig (Medium duty)
*0048	990	$15.00	Foot	$14,850.00	Hollow-Stem Auger Drilling Services (S-M)
*0049		$19.00	Foot	$0.00	Hollow-Stem Auger Drilling Services (L)
*0050		$180.00	Hour	$0.00	Air Rotary Drill Rig
*0051		$25.00	Foot	$0.00	Coring
*0052		$50.00	Day	$0.00	Water Truck -
*0053		$50.00	Day	$0.00	Pick up Truck -
*0054	12	$80.00	Day	$960.00	Steam cleaner
*0058	11	$8.00	Each	$88.00	Locking well cap
					Surface Completions - at cost
					grout - at cost
					decontamination - at cost
					Five foot screen sections - at cost

TOTAL $30,543.75 (a) X 0.058125 (NMGRT) = **$32,319.11**

NOTE: LABORATORY COSTS ARE NOT INCLUDED

Olson, William

From: Olson, William
Sent: Thursday, February 06, 2003 11:32 AM
To: Bob Wilcox - AMEC (E-mail); Stacey Sabol - Intera (E-mail); John Bunch - Respec (E-mail)
Cc: Anderson, Roger; Williams, Chris; Johnson, Larry; Sheeley, Paul
Subject: Reaves Site - Scope of Work

Bob, Stacey and John,

Attached is a scope of work for an OCD ground water investigation at the Reaves Site between Lovington and Hobbs, New Mexico. Please provide a cost estimate, by February 14, 2003, for implementing this scope of work under State of New Mexico General Services Department Contract # 30-805-09-18056. For each item in the estimate, please reference the corresponding individual line item from the contract.

If you have any questions please contact me.

Sincerely,

William C. Olson
Hydrologist
New Mexico Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505
(505) 476-3491
e-mail: wolson@state.nm.us

ReavesScope.DOC

SCOPE OF WORK

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

NEW MEXICO OIL CONSERVATION DIVISION

INVESTIGATION OF GROUND WATER CONTAMINATION
OF
SHANE AND MORGAN REAVES WATER WELL

FEBRUARY 5, 2003

I. INTRODUCTION

A. PURPOSE

The State of New Mexico Oil Conservation Division of the Energy, Minerals and Natural Resources Department (NMOCD) is conducting an investigation to determine the source of petroleum contamination of ground water in a private water well at Shane and Morgan Reaves residence between Lovington and Hobbs, New Mexico.

B. SUMMARY SCOPE OF WORK

The contractor shall perform the work necessary to determine the source of ground water contamination of the Shane and Morgan Reaves water well in accordance with the rules of the NMOCD. The scope of work includes, but is not limited to:

1. installation of ground water monitoring wells;
2. surveying monitor well locations, water wells and relevant site features
3. sampling ground water from monitor wells
4. removal and disposal of investigation derived wastes in a manner approved by the NMOCD;
5. preparation of an investigation report.

C. PROCUREMENT MANAGER

NMOCD has designated a Procurement Manager who is responsible for the conduct of this procurement whose name, address and telephone number are listed below.

William C. Olson
New Mexico Oil Conservation Division
1220 Saint Francis
Santa Fe, New Mexico 87505
Phone: 505-476-3491
Fax: 505-476-3462
E-mail: wolson@state.nm.us

All deliveries via express carrier should be addressed as above. Any inquiries or requests regarding this procurement should be submitted to the Procurement Manager in writing. Other state employees do not have the authority to respond on behalf of the Agency.

D. BACKGROUND INFORMATION

On May 7, 2001, the NMOCD received a complaint of water contamination in an old private residential water well at the residence of Shane and Morgan Reaves at #8 Kyle Drive, Lovington, New Mexico. The Reaves residence is located in the SW/4 NW/4 SE/4 of Section 5, Township 17 South, Range 37 East, Lea County, New Mexico. Subsequent site inspections have shown that the water well is in the vicinity of several oilfield pipelines and an oil and gas production site. Samples taken from the Reaves well show that the ground water contains 0.0708 mg/l benzene. Depth to ground water at the site is estimated to be approximately 80 feet. The local ground water gradient is estimated to be toward the southeast. Investigation of the source of these contaminants is necessary to determine the party responsible for remediation of the site.

II. TECHNICAL SPECIFICATIONS

The contractor shall:

1. Install up to eleven (11) 2-inch ground water monitoring wells between the Reaves water well and potential sources of contamination.

2. Log the lithology and volatile organic vapor concentrations with depth during the drilling of each monitor well.

3. Complete the ground water monitor wells as follows:

    a. At least 15 feet of well screen shall be placed across the water table interface with 5 feet of the well screen above the water table and 10 feet of the well screen below the water table.

    b. An appropriately sized gravel pack shall be set in the annulus around the well screen from the bottom of the hole to 2-3 feet above the top of the well screen.

    c. A 2-3 foot bentonite plug shall be placed above the gravel pack.

    d. The remainder of the hole shall be grouted to the surface with cement

containing 3-5% bentonite.

e. A concrete pad and locking well cover shall be placed around the well at the surface.

f. The well shall be developed after construction using EPA approved procedures.

4. Sample ground water from the monitor wells no less than 24 hours after the well is developed. The ground water from each monitor well must be purged, sampled and analyzed for concentrations of benzene, toluene, ethylbenzene, xylene, total dissolved solids (TDS), major cations/anions and New Mexico Water Quality Control Commission (WQCC) metals using EPA approved methods and quality assurance/quality control (QA/QC) procedures.

5. Survey the locations of the monitor wells, water wells, potential sources of contamination and any other pertinent site features.

6. Remove and recycle or dispose of investigation derived wastes at an NMOCD-approved waste management facility.

7. Prepare and deliver to NMOCD an investigation report that contains:

   a. A description of the investigation activities which occurred including conclusions and recommendations.

   b. A geologic/lithologic log and well completion diagram for each monitor well.

   c. A water table map showing the location of the monitor wells, water wells, potential sources of contamination and any other pertinent site features as well as the direction and magnitude of the hydraulic gradient created using the water table elevation from each monitor well.

   d. Isopleth maps for contaminants observed during the investigations.

   e. Summary tables of all ground water quality sampling results and copies of all laboratory analytical data sheets and associated QA/QC data.

   f. The disposition of all wastes generated.

III. SCHEDULE

A. INITIATION OF WORK

Drilling shall be scheduled to commence as soon as possible after NMOCD negotiates assess agreements with various landowners.

B. REPORT SUBMISSION

A report on the investigations shall be submitted to the NMOCD within 60 days of initiation of drilling.

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Betty Rivera
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

February 12, 2002

Shane and Morgan Reaves
#8 Kyle Dr.
Lovington, New Mexico 88260

RE: WATER WELL SAMPLE ANALYSES

Dear Mr. and Mrs. Reaves:

Enclosed you will find a copy of the laboratory analytical results of the water samples that the New Mexico Oil Conservation Division (OCD) obtained from 2 of your private water wells on July 24, 2001. The sample analyses from your new deep drinking water well west of your house did not detect any petroleum-related contaminants or find any other health-based problems with the water that you currently use. The sample from the original property water well north of your shed contains benzene at a concentration of 0.0708 mg/l which is above the New Mexico Water Quality Control Commission (WQCC) drinking water standard of 0.01 mg/l. The original well also contained nitrates in the water at a concentration of 11.0 mg/l which is above the WQCC drinking water standard of 10.0 mg/l.

Benzene in ground water is typically associated with petroleum compounds such as gasoline or crude oil. However, nitrates are not an oilfield waste. The presence of high level nitrates and the shallow depth of the original well indicates that ground water in this well is likely contaminated from wastes from a septic tank leach field, and it is possible that the benzene could also be from a septic leach field, if auto part cleaning wastes were previously disposed of down the drain at your house or a neighboring residence. The OCD also sampled four of your neighbors water wells north and west of your wells and no petroleum-related contaminants or high level nitrates were observed. Your neighbors wells are located upgradient of your property which shows that the nitrate and benzene contamination appears to occur only in the area of the original well.

The OCD recommends that you not use the original well as a source of drinking water since the water is above health-based drinking water limits established by the WQCC. The depth of your new water well, and it's location upgradient of the original well, should prevent contamination from being drawn into it. The OCD will continue to investigate if the benzene in the original well water is a result of oilfield activity and will send you copies of any OCD correspondence related to this matter

If you have any questions regarding the laboratory analyses of your water or the OCD's investigations, please feel free to call me at (505) 476-3491.

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

Enclosure

xc w/ enclosure: Chris Williams, OCD Hobbs District Supervisor
Dennis McQuillan, NMED Ground Water Quality Bureau

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Betty Rivera
Acting Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

February 12, 2002

Mr. Paul Barnett
11 Kyle Dr.
Lovington, New Mexico 88260

RE: WATER WELL SAMPLE ANALYSES

Dear Mr. Barnett:

Enclosed you will find a copy of the laboratory analytical results of the water samples that the New Mexico Oil Conservation Division (OCD) obtained from your private water well on July 24, 2001. The sample analyses did not detect any oil or natural gas related contaminants in your water well.

If you have any questions regarding the laboratory analyses of your water, please feel free to call me at (505) 476-3491.

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

Enclosure

xc w/ enclosure: Chris Williams, OCD Hobbs District Supervisor
Dennis McQuillan, NMED Ground Water Quality Bureau

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Betty Rivera
Acting Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

February 12, 2002

Mr. Tom Hunter
P.O. Box 831
Lovington, New Mexico 88260

RE: WATER WELL SAMPLE ANALYSES

Dear Mr. Hunter:

Enclosed you will find a copy of the laboratory analytical results of the water samples that the New Mexico Oil Conservation Division (OCD) obtained from your private water well on July 24, 2001. The sample analyses did not detect any oil or natural gas related contaminants in your water well. However, fluoride was found to be present at a concentration of 1.77 mg/l which is in excess of the New Mexico Water Quality Control Commission health standard of 1.6 mg/l for drinking water. Elevated concentrations of fluoride are naturally occurring in portions of the Ogallala aquifer in southeastern New Mexico. Since this is not an oilfield-related constituent, I recommend that you contact Dennis McQuillan of the New Mexico Environment Department at (505) 827-2831 regarding the occurrence of fluoride in the area and possible effects of fluoride on human health.

If you have any questions regarding the laboratory analyses of your water, please feel free to call me at (505) 476-3491.

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

Enclosure

xc w/ enclosure: Chris Williams, OCD Hobbs District Supervisor
Dennis McQuillan, NMED Ground Water Quality Bureau

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

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Director
Oil Conservation Division

February 12, 2002

Mr. Lynard Barrera
Lot #4, Kyle Dr.
Lovington, New Mexico 88260

RE: WATER WELL SAMPLE ANALYSES

Dear Mr. Barrera:

Enclosed you will find a copy of the laboratory analytical results of the water samples that the New Mexico Oil Conservation Division (OCD) obtained from your private water well on July 24, 2001. The sample analyses did not detect any oil or natural gas related contaminants in your water well. However, fluoride was found to be present at a concentration of 1.87 mg/l which is in excess of the New Mexico Water Quality Control Commission health standard of 1.6 mg/l for drinking water. Elevated concentrations of fluoride are naturally occurring in portions of the Ogallala aquifer in southeastern New Mexico. Since this is not an oilfield-related constituent, I recommend that you contact Dennis McQuillan of the New Mexico Environment Department at (505) 827-2831 regarding the occurrence of fluoride in the area and possible effects of fluoride on human health.

If you have any questions regarding the laboratory analyses of your water, please feel free to call me at (505) 476-3491.

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

Enclosure

xc w/ enclosure: Chris Williams, OCD Hobbs District Supervisor
Dennis McQuillan, NMED Ground Water Quality Bureau

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
155 McCutcheon, Suite H El Paso, Texas 79932 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Bill Olson
OCD
1220 S. Saint Francis Dr.
Santa Fe, NM 87504

Report Date: August 24, 2001

Order ID Number: A01072608

Project Number: N/A
Project Name: N/A
Project Location: Kyle Drive

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
175781	0107241730 (Reavest #1)	Water	7/24/01	17:30	7/26/01
175782	0107241740 (Reaves #2)	Water	7/24/01	17:40	7/26/01
175783	0107241800 (Lot #7)	Water	7/24/01	18:00	7/26/01
175784	0107241830 (Barrera)	Water	7/24/01	18:30	7/26/01
175785	0107241900 (Barnett)	Water	7/24/01	19:00	7/26/01
175786	0107241920 (Hunter)	Water	7/24/01	19:20	7/26/01

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 19 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Summary Report

Bill Olson
OCD
1220 S. Saint Francis Dr.
Santa Fe, NM 87504

Report Date: August 24, 2001

Order ID Number: A01072608

Project Number: N/A
Project Name: N/A
Project Location: Kyle Drive

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
175781	0107241730 (Reavest #1)	Water	7/24/01	17:30	7/26/01
175782	0107241740 (Reaves #2)	Water	7/24/01	17:40	7/26/01
175783	0107241800 (Lot #7)	Water	7/24/01	18:00	7/26/01
175784	0107241830 (Barrera)	Water	7/24/01	18:30	7/26/01
175785	0107241900 (Barnett)	Water	7/24/01	19:00	7/26/01
175786	0107241920 (Hunter)	Water	7/24/01	19:20	7/26/01

This report consists of a total of 4 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX				
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
175781 - 0107241730 (Reavest #1)	0.0708	<0.001	<0.001	<0.001	0.0708
175782 - 0107241740 (Reaves #2)	<0.001	<0.001	<0.001	<0.001	<0.001
175783 - 0107241800 (Lot #7)	<0.001	<0.001	<0.001	<0.001	<0.001
175784 - 0107241830 (Barrera)	<0.001	<0.001	<0.001	<0.001	<0.001
175785 - 0107241900 (Barnett)	<0.001	<0.001	<0.001	<0.001	<0.001
175786 - 0107241920 (Hunter)	<0.001	<0.001	<0.001	<0.001	<0.001

Sample: 175781 - 0107241730 (Reavest #1)

Param	Flag	Result	Units
Hydroxide Alkalinity		<1.0	mg/L as CaCo3
Carbonate Alkalinity		<1.0	mg/L as CaCo3
Bicarbonate Alkalinity		294	mg/L as CaCo3
Total Alkalinity		294	mg/L as CaCo3
Specific Conductance		1270	μMHOS/cm
CL		150	mg/L
Fluoride		1.46	mg/L
Nitrate-N	[1]	11.0	mg/L
Sulfate		91.0	mg/L
Dissolved Calcium		148	mg/L
Dissolved Magnesium		17.2	mg/L
Dissolved Potassium		5.88	mg/L
Dissolved Sodium		47.7	mg/L

Continued on next page ...

[1] Sample out of hold time for NO3.

Sample 175781 continued . . .

Param	Flag	Result	Units
Total Dissolved Solids		845	mg/L
pH	2	7.1	s.u.

Sample: 175782 - 0107241740 (Reaves #2)

Param	Flag	Result	Units
Hydroxide Alkalinity		<1.0	mg/L as CaCo3
Carbonate Alkalinity		<1.0	mg/L as CaCo3
Bicarbonate Alkalinity		232	mg/L as CaCo3
Total Alkalinity		232	mg/L as CaCo3
Specific Conductance		981	μMHOS/cm
CL		81.6	mg/L
Fluoride		1.51	mg/L
Nitrate-N	3	5.69	mg/L
Sulfate		122	mg/L
Dissolved Calcium		125	mg/L
Dissolved Magnesium		15.7	mg/L
Dissolved Potassium		5.68	mg/L
Dissolved Sodium		44.2	mg/L
Total Dissolved Solids		625	mg/L
pH	4	7.2	s.u.

Sample: 175783 - 0107241800 (Lot #7)

Param	Flag	Result	Units
Hydroxide Alkalinity		<1.0	mg/L as CaCo3
Carbonate Alkalinity		<1.0	mg/L as CaCo3
Bicarbonate Alkalinity		178	mg/L as CaCo3
Total Alkalinity		178	mg/L as CaCo3
Specific Conductance		872	μMHOS/cm
CL		103	mg/L
Fluoride		1.63	mg/L
Nitrate-N	5	6.14	mg/L
Sulfate		83.4	mg/L
Dissolved Calcium		110	mg/L
Dissolved Magnesium		16.6	mg/L
Dissolved Potassium		2.85	mg/L
Dissolved Sodium		38.7	mg/L
Total Dissolved Solids		575	mg/L
pH	6	7.5	s.u.

[2]out of holding time
[3]Sample out of hold time for NO3.
[4]out of holding time
[5]Sample out of hold time for NO3.
[6]out of holding time

Sample: 175784 - 0107241830 (Barrera)

Param	Flag	Result	Units
Hydroxide Alkalinity		<1.0	mg/L as CaCo3
Carbonate Alkalinity		<1.0	mg/L as CaCo3
Bicarbonate Alkalinity		180	mg/L as CaCo3
Total Alkalinity		180	mg/L as CaCo3
Specific Conductance		894	μMHOS/cm
CL		98.6	mg/L
Fluoride		1.87	mg/L
Nitrate-N	[7]	5.72	mg/L
Sulfate		90.4	mg/L
Dissolved Calcium		111	mg/L
Dissolved Magnesium		11.3	mg/L
Dissolved Potassium		5.27	mg/L
Dissolved Sodium		44.3	mg/L
Total Dissolved Solids		559	mg/L
pH	[8]	7.4	s.u.

Sample: 175785 - 0107241900 (Barnett)

Param	Flag	Result	Units
Hydroxide Alkalinity		<1.0	mg/L as CaCo3
Carbonate Alkalinity		<1.0	mg/L as CaCo3
Bicarbonate Alkalinity		162	mg/L as CaCo3
Total Alkalinity		162	mg/L as CaCo3
Specific Conductance		811	μMHOS/cm
CL		65.5	mg/L
Fluoride		1.51	mg/L
Nitrate-N	[9]	5.14	mg/L
Sulfate		101	mg/L
Dissolved Calcium		105	mg/L
Dissolved Magnesium		9.78	mg/L
Dissolved Potassium		5.24	mg/L
Dissolved Sodium		37.3	mg/L
Total Dissolved Solids		524	mg/L
pH	[10]	7.5	s.u.

Sample: 175786 - 0107241920 (Hunter)

Param	Flag	Result	Units
Hydroxide Alkalinity		<1.0	mg/L as CaCo3
Carbonate Alkalinity		<1.0	mg/L as CaCo3
Bicarbonate Alkalinity		166	mg/L as CaCo3
Total Alkalinity		166	mg/L as CaCo3
Specific Conductance		945	μMHOS/cm
CL		126	mg/L
Fluoride		1.77	mg/L
Nitrate-N	[11]	5.00	mg/L

Continued on next page ...

[7]Sample out of hold time for NO3.
[8]out of holding time
[9]Sample out of hold time for NO3.
[10]out of holding time
[11]Sample out of hold time for NO3.

Sample 175786 continued ...

Param	Flag	Result	Units
Sulfate		80.6	mg/L
Dissolved Calcium		113	mg/L
Dissolved Magnesium		11.4	mg/L
Dissolved Potassium		5.31	mg/L
Dissolved Sodium		41.4	mg/L
Total Dissolved Solids		650	mg/L
pH	[12]	7.5	s.u.

[12] out of holding time

Cation-Anion Balance Sheet

DATE: 8/24/01

Sample #	Calcium ppm	Magnesium ppm	Sodium ppm	Potassium ppm	Alkalinity ppm	Sulfate ppm	Chloride ppm	Nitrate ppm	Fluoride ppm	TDS ppm	EC µMHOs/cm
175781	148	17.2	47.7	5.88	294	91	150	11	1.46	845	1270
175782	125	15.7	44.2	5.68	232	122	81.6	5.69	1.51	625	981
175783	110	16.6	38.7	2.85	178	83.4	103	6.14	1.63	575	872
175784	111	11.3	44.3	5.27	180	90.4	98.6	5.72	1.87	559	894
175785	105	9.78	37.3	5.24	162	101	65.5	5.14	1.51	524	811
175786	113	11.4	41.4	5.31	166	80.6	126	5	1.77	650	945

Sample #	Calcium in meq/L	Magnesium in meq/L	Sodium in meq/L	Potassium in meq/L	Alkalinity in meq/L	Sulfate in meq/L	Chloride in meq/L	Nitrate in meq/L	Fluoride in meq/L	**Total Cations in meq/L**	**Total Anions in meq/L**	**Percentage Error**
175781	7.39	1.42	2.07	0.15	5.88	1.89	4.23	0.7853	0.0769	11.03	12.87	15.4
175782	6.24	1.29	1.92	0.15	4.64	2.54	2.30	0.4062	0.0795	9.60	9.97	3.8
175783	5.49	1.37	1.68	0.07	3.56	1.74	2.91	0.4383	0.0858	8.61	8.73	1.3
175784	5.54	0.93	1.93	0.13	3.60	1.88	2.78	0.4084	0.0984	8.53	8.77	2.8
175785	5.24	0.80	1.62	0.13	3.24	2.10	1.85	0.3669	0.0795	7.80	7.64	2.1
175786	5.64	0.94	1.80	0.14	3.32	1.68	3.55	0.3570	0.0932	8.51	9.00	5.6

	EC/Cation	EC/Anion				
175781	1103	1287	range	1143	to	1397
175782	960	997	range	882.9	to	1079.1
175783	861	873	range	784.8	to	959.2
175784	853	877	range	804.6	to	983.4
175785	780	764	range	729.9	to	892.1
175786	851	900	range	850.5	to	1039.5

TDS/EC	TDS/Cat	TDS/Anion	
0.67	0.77	0.66	needs to be 0.55-0.77
0.64	0.65	0.63	needs to be 0.55-0.77
0.66	0.67	0.66	needs to be 0.55-0.77
0.63	0.66	0.64	needs to be 0.55-0.77
0.65	0.67	0.69	needs to be 0.55-0.77
0.69	0.76	0.72	needs to be 0.55-0.77

Analytical Report

Sample: 175781 - 0107241730 (Reavest #1)

Analysis: Alkalinity Analytical Method: E 310.1 QC Batch: QC12988 Date Analyzed: 7/31/01
Analyst: RS Preparation Method: N/A Prep Batch: PB11108 Date Prepared: 7/31/01

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1	1
Bicarbonate Alkalinity		294	mg/L as CaCo3	1	1
Total Alkalinity		294	mg/L as CaCo3	1	1

Sample: 175781 - 0107241730 (Reavest #1)

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC12879 Date Analyzed: 7/26/01
Analyst: CG Preparation Method: E 5030B Prep Batch: PB11018 Date Prepared: 7/26/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0708	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		0.0708	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[1]	0.0549	mg/L	1	0.10	55	72 - 128
4-BFB	[2]	0.0579	mg/L	1	0.10	58	72 - 128

Sample: 175781 - 0107241730 (Reavest #1)

Analysis: Conductivity Analytical Method: SM 2510B QC Batch: QC12982 Date Analyzed: 7/31/01
Analyst: JS Preparation Method: N/A Prep Batch: PB11102 Date Prepared: 7/31/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		1270	μMHOS/cm	1	

Sample: 175781 - 0107241730 (Reavest #1)

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC12908 Date Analyzed: 7/26/01
Analyst: JS Preparation Method: N/A Prep Batch: PB11043 Date Prepared: 7/26/01

Param	Flag	Result	Units	Dilution	RDL
CL		150	mg/L	5	0.50
Fluoride		1.46	mg/L	5	0.20
Nitrate-N	[3]	11.0	mg/L	5	0.20
Sulfate		91.0	mg/L	5	0.50

[1] Low surrogate recovery due to lack of mixing.
[2] Low surrogate recovery due to lack of mixing.
[3] Sample out of hold time for NO3.

Sample: 175781 - 0107241730 (Reavest #1)

Analysis:	Salts	Analytical Method:	E 200.7	QC Batch:	QC12919	Date Analyzed:	7/30/01
Analyst:	LDB	Preparation Method:	E 3005 A	Prep Batch:	PB11299	Date Prepared:	8/10/01

Param	Flag	Result	Units	Dilution	RDL
Dissolved Calcium		148	mg/L	1.10	0.50
Dissolved Magnesium		17.2	mg/L	1.10	0.50
Dissolved Potassium		5.88	mg/L	1.10	0.50
Dissolved Sodium		47.7	mg/L	1.10	0.50

Sample: 175781 - 0107241730 (Reavest #1)

Analysis:	TDS	Analytical Method:	E 160.1	QC Batch:	QC12984	Date Analyzed:	8/1/01
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB11103	Date Prepared:	7/31/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		845	mg/L	1	10

Sample: 175781 - 0107241730 (Reavest #1)

Analysis:	pH	Analytical Method:	E 150.1	QC Batch:	QC12992	Date Analyzed:	7/26/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB11106	Date Prepared:	7/26/01

Param	Flag	Result	Units	Dilution	RDL
pH	[4]	7.1	s.u.	1	1

Sample: 175782 - 0107241740 (Reaves #2)

Analysis:	Alkalinity	Analytical Method:	E 310.1	QC Batch:	QC12988	Date Analyzed:	7/31/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB11108	Date Prepared:	7/31/01

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1	1
Bicarbonate Alkalinity		232	mg/L as CaCo3	1	1
Total Alkalinity		232	mg/L as CaCo3	1	1

Sample: 175782 - 0107241740 (Reaves #2)

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC12879	Date Analyzed:	7/26/01
Analyst:	CG	Preparation Method:	E 5030B	Prep Batch:	PB11018	Date Prepared:	7/26/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

[4] out of holding time

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[5]	0.0526	mg/L	1	0.10	53	72 - 128
4-BFB	[6]	0.0543	mg/L	1	0.10	54	72 - 128

Sample: 175782 - 0107241740 (Reaves #2)

Analysis: Conductivity Analytical Method: SM 2510B QC Batch: QC12982 Date Analyzed: 7/31/01
Analyst: JS Preparation Method: N/A Prep Batch: PB11102 Date Prepared: 7/31/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		981	μMHOS/cm	1	

Sample: 175782 - 0107241740 (Reaves #2)

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC12910 Date Analyzed: 7/26/01
Analyst: JS Preparation Method: N/A Prep Batch: PB11043 Date Prepared: 7/26/01

Param	Flag	Result	Units	Dilution	RDL
CL		81.6	mg/L	5	0.50
Fluoride		1.51	mg/L	5	0.20
Nitrate-N	[7]	5.69	mg/L	5	0.20
Sulfate		122	mg/L	5	0.50

Sample: 175782 - 0107241740 (Reaves #2)

Analysis: Salts Analytical Method: E 200.7 QC Batch: QC12919 Date Analyzed: 7/30/01
Analyst: LDB Preparation Method: E 3005 A Prep Batch: PB11299 Date Prepared: 8/10/01

Param	Flag	Result	Units	Dilution	RDL
Dissolved Calcium		125	mg/L	1.10	0.50
Dissolved Magnesium		15.7	mg/L	1.10	0.50
Dissolved Potassium		5.68	mg/L	1.10	0.50
Dissolved Sodium		44.2	mg/L	1.10	0.50

Sample: 175782 - 0107241740 (Reaves #2)

Analysis: TDS Analytical Method: E 160.1 QC Batch: QC12984 Date Analyzed: 8/1/01
Analyst: JS Preparation Method: N/A Prep Batch: PB11103 Date Prepared: 7/31/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		625	mg/L	1	10

Sample: 175782 - 0107241740 (Reaves #2)

Analysis: pH Analytical Method: E 150.1 QC Batch: QC12992 Date Analyzed: 7/26/01
Analyst: RS Preparation Method: N/A Prep Batch: PB11106 Date Prepared: 7/26/01

[5]Low surrogate recovery due to lack of mixing.
[6]Low surrogate recovery due to lack of mixing.
[7]Sample out of hold time for NO3.

Param	Flag	Result	Units	Dilution	RDL
pH	[8]	7.2	s.u.	1	1

Sample: 175783 - 0107241800 (Lot #7)

Analysis:	Alkalinity	Analytical Method:	E 310.1	QC Batch:	QC12988	Date Analyzed:	7/31/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB11108	Date Prepared:	7/31/01

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1	1
Bicarbonate Alkalinity		178	mg/L as CaCo3	1	1
Total Alkalinity		178	mg/L as CaCo3	1	1

Sample: 175783 - 0107241800 (Lot #7)

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC12879	Date Analyzed:	7/26/01
Analyst:	CG	Preparation Method:	E 5030B	Prep Batch:	PB11018	Date Prepared:	7/26/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[9]	0.065	mg/L	1	0.10	65	72 - 128
4-BFB	[10]	0.0681	mg/L	1	0.10	68	72 - 128

Sample: 175783 - 0107241800 (Lot #7)

Analysis:	Conductivity	Analytical Method:	SM 2510B	QC Batch:	QC12982	Date Analyzed:	7/31/01
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB11102	Date Prepared:	7/31/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		872	μMHOS/cm	1	

Sample: 175783 - 0107241800 (Lot #7)

Analysis:	Ion Chromatography (IC)	Analytical Method:	E 300.0	QC Batch:	QC12910	Date Analyzed:	7/26/01
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB11043	Date Prepared:	7/26/01

Param	Flag	Result	Units	Dilution	RDL
CL		103	mg/L	5	0.50
Fluoride		1.63	mg/L	5	0.20

Continued ...

[8] out of holding time
[9] Low surrogate recovery due to lack of mixing.
[10] Low surrogate recovery due to lack of mixing.

... *Continued* Sample: 175783 Analysis: Ion Chromatography (IC)

Param	Flag	Result	Units	Dilution	RDL
Nitrate-N	[11]	6.14	mg/L	5	0.20
Sulfate		83.4	mg/L	5	0.50

Sample: 175783 - 0107241800 (Lot #7)

Analysis:	Salts	Analytical Method:	E 200.7	QC Batch:	QC12919	Date Analyzed:	7/30/01
Analyst:	LDB	Preparation Method:	E 3005 A	Prep Batch:	PB11299	Date Prepared:	8/10/01

Param	Flag	Result	Units	Dilution	RDL
Dissolved Calcium		110	mg/L	1.10	0.50
Dissolved Magnesium		16.6	mg/L	1.10	0.50
Dissolved Potassium		2.85	mg/L	1.10	0.50
Dissolved Sodium		38.7	mg/L	1.10	0.50

Sample: 175783 - 0107241800 (Lot #7)

Analysis:	TDS	Analytical Method:	E 160.1	QC Batch:	QC12984	Date Analyzed:	8/1/01
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB11103	Date Prepared:	7/31/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		575	mg/L	1	10

Sample: 175783 - 0107241800 (Lot #7)

Analysis:	pH	Analytical Method:	E 150.1	QC Batch:	QC12992	Date Analyzed:	7/26/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB11106	Date Prepared:	7/26/01

Param	Flag	Result	Units	Dilution	RDL
pH	[12]	7.5	s.u.	1	1

Sample: 175784 - 0107241830 (Barrera)

Analysis:	Alkalinity	Analytical Method:	E 310.1	QC Batch:	QC12988	Date Analyzed:	7/31/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB11108	Date Prepared:	7/31/01

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1	1
Bicarbonate Alkalinity		180	mg/L as CaCo3	1	1
Total Alkalinity		180	mg/L as CaCo3	1	1

Sample: 175784 - 0107241830 (Barrera)

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC12879	Date Analyzed:	7/26/01
Analyst:	CG	Preparation Method:	E 5030B	Prep Batch:	PB11018	Date Prepared:	7/26/01

[11] Sample out of hold time for NO3.
[12] out of holding time

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[13]	0.0635	mg/L	1	0.10	64	72 - 128
4-BFB	[14]	0.0638	mg/L	1	0.10	64	72 - 128

Sample: 175784 - 0107241830 (Barrera)

Analysis: Conductivity Analytical Method: SM 2510B QC Batch: QC12982 Date Analyzed: 7/31/01
Analyst: JS Preparation Method: N/A Prep Batch: PB11102 Date Prepared: 7/31/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		894	μMHOS/cm	1	

Sample: 175784 - 0107241830 (Barrera)

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC12910 Date Analyzed: 7/26/01
Analyst: JS Preparation Method: N/A Prep Batch: PB11043 Date Prepared: 7/26/01

Param	Flag	Result	Units	Dilution	RDL
CL		98.6	mg/L	5	0.50
Fluoride		1.87	mg/L	5	0.20
Nitrate-N	[15]	5.72	mg/L	5	0.20
Sulfate		90.4	mg/L	5	0.50

Sample: 175784 - 0107241830 (Barrera)

Analysis: Salts Analytical Method: E 200.7 QC Batch: QC12919 Date Analyzed: 7/30/01
Analyst: LDB Preparation Method: E 3005 A Prep Batch: PB11299 Date Prepared: 8/10/01

Param	Flag	Result	Units	Dilution	RDL
Dissolved Calcium		111	mg/L	1.10	0.50
Dissolved Magnesium		11.3	mg/L	1.10	0.50
Dissolved Potassium		5.27	mg/L	1.10	0.50
Dissolved Sodium		44.3	mg/L	1.10	0.50

Sample: 175784 - 0107241830 (Barrera)

Analysis: TDS Analytical Method: E 160.1 QC Batch: QC12984 Date Analyzed: 8/1/01
Analyst: JS Preparation Method: N/A Prep Batch: PB11103 Date Prepared: 7/31/01

[13]Low surrogate recovery due to lack of mixing.
[14]Low surrogate recovery due to lack of mixing.
[15]Sample out of hold time for NO3.

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		559	mg/L	1	10

Sample: 175784 - 0107241830 (Barrera)

Analysis:	pH	Analytical Method:	E 150.1	QC Batch:	QC12992	Date Analyzed:	7/26/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB11106	Date Prepared:	7/26/01

Param	Flag	Result	Units	Dilution	RDL
pH	[16]	7.4	s.u.	1	1

Sample: 175785 - 0107241900 (Barnett)

Analysis:	Alkalinity	Analytical Method:	E 310.1	QC Batch:	QC12988	Date Analyzed:	7/31/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB11108	Date Prepared:	7/31/01

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1	1
Bicarbonate Alkalinity		162	mg/L as CaCo3	1	1
Total Alkalinity		162	mg/L as CaCo3	1	1

Sample: 175785 - 0107241900 (Barnett)

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC12879	Date Analyzed:	7/26/01
Analyst:	CG	Preparation Method:	E 5030B	Prep Batch:	PB11018	Date Prepared:	7/26/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[17]	0.0709	mg/L	1	0.10	71	72 - 128
4-BFB		0.0736	mg/L	1	0.10	74	72 - 128

Sample: 175785 - 0107241900 (Barnett)

Analysis:	Conductivity	Analytical Method:	SM 2510B	QC Batch:	QC12982	Date Analyzed:	7/31/01
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB11102	Date Prepared:	7/31/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		811	μMHOS/cm	1	

[16] out of holding time
[17] Low surrogate recovery due to lack of mixing.

Sample: 175785 - 0107241900 (Barnett)

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC12910 Date Analyzed: 7/26/01
Analyst: JS Preparation Method: N/A Prep Batch: PB11043 Date Prepared: 7/26/01

Param	Flag	Result	Units	Dilution	RDL
CL		65.5	mg/L	5	0.50
Fluoride		1.51	mg/L	5	0.20
Nitrate-N	[18]	5.14	mg/L	5	0.20
Sulfate		101	mg/L	5	0.50

Sample: 175785 - 0107241900 (Barnett)

Analysis: Salts Analytical Method: E 200.7 QC Batch: QC12919 Date Analyzed: 7/30/01
Analyst: LDB Preparation Method: E 3005 A Prep Batch: PB11299 Date Prepared: 8/10/01

Param	Flag	Result	Units	Dilution	RDL
Dissolved Calcium		105	mg/L	1.10	0.50
Dissolved Magnesium		9.78	mg/L	1.10	0.50
Dissolved Potassium		5.24	mg/L	1.10	0.50
Dissolved Sodium		37.3	mg/L	1.10	0.50

Sample: 175785 - 0107241900 (Barnett)

Analysis: TDS Analytical Method: E 160.1 QC Batch: QC12984 Date Analyzed: 8/1/01
Analyst: JS Preparation Method: N/A Prep Batch: PB11103 Date Prepared: 7/31/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		524	mg/L	1	10

Sample: 175785 - 0107241900 (Barnett)

Analysis: pH Analytical Method: E 150.1 QC Batch: QC12992 Date Analyzed: 7/26/01
Analyst: RS Preparation Method: N/A Prep Batch: PB11106 Date Prepared: 7/26/01

Param	Flag	Result	Units	Dilution	RDL
pH	[19]	7.5	s.u.	1	1

Sample: 175786 - 0107241920 (Hunter)

Analysis: Alkalinity Analytical Method: E 310.1 QC Batch: QC12988 Date Analyzed: 7/31/01
Analyst: RS Preparation Method: N/A Prep Batch: PB11108 Date Prepared: 7/31/01

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1	1
Bicarbonate Alkalinity		166	mg/L as CaCo3	1	1
Total Alkalinity		166	mg/L as CaCo3	1	1

[18]Sample out of hold time for NO3.
[19]out of holding time

Sample: 175786 - 0107241920 (Hunter)

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC12879	Date Analyzed:	7/26/01
Analyst:	CG	Preparation Method:	E 5030B	Prep Batch:	PB11018	Date Prepared:	7/26/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.073	mg/L	1	0.10	73	72 - 128
4-BFB		0.0749	mg/L	1	0.10	75	72 - 128

Sample: 175786 - 0107241920 (Hunter)

Analysis:	Conductivity	Analytical Method:	SM 2510B	QC Batch:	QC12982	Date Analyzed:	7/31/01
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB11102	Date Prepared:	7/31/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		945	μMHOS/cm	1	

Sample: 175786 - 0107241920 (Hunter)

Analysis:	Ion Chromatography (IC)	Analytical Method:	E 300.0	QC Batch:	QC12910	Date Analyzed:	7/26/01
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB11043	Date Prepared:	7/26/01

Param	Flag	Result	Units	Dilution	RDL
CL		126	mg/L	5	0.50
Fluoride		1.77	mg/L	5	0.20
Nitrate-N	[20]	5.00	mg/L	5	0.20
Sulfate		80.6	mg/L	5	0.50

Sample: 175786 - 0107241920 (Hunter)

Analysis:	Salts	Analytical Method:	E 200.7	QC Batch:	QC12919	Date Analyzed:	7/30/01
Analyst:	LDB	Preparation Method:	E 3005 A	Prep Batch:	PB11299	Date Prepared:	8/10/01

Param	Flag	Result	Units	Dilution	RDL
Dissolved Calcium		113	mg/L	1.10	0.50
Dissolved Magnesium		11.4	mg/L	1.10	0.50
Dissolved Potassium		5.31	mg/L	1.10	0.50
Dissolved Sodium		41.4	mg/L	1.10	0.50

Sample: 175786 - 0107241920 (Hunter)

Analysis:	TDS	Analytical Method:	E 160.1	QC Batch:	QC12984	Date Analyzed:	8/1/01
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB11103	Date Prepared:	7/31/01

[20] Sample out of hold time for NO3.

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		650	mg/L	1	10

Sample: 175786 - 0107241920 (Hunter)

Analysis:	pH	Analytical Method:	E 150.1	QC Batch:	QC12992	Date Analyzed:	7/26/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB11106	Date Prepared:	7/26/01

Param	Flag	Result	Units	Dilution	RDL
pH	[21]	7.5	s.u.	1	1

[21] out of holding time

Quality Control Report
Method Blank

Method Blank QCBatch: QC12879

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0898	mg/L	1	0.10	90	72 - 128
4-BFB		0.0919	mg/L	1	0.10	92	72 - 128

Method Blank QCBatch: QC12908

Param	Flag	Results	Units	Reporting Limit
CL		<2.0	mg/L	0.50
Fluoride		<0.2	mg/L	0.20
Nitrate-N		<0.2	mg/L	0.20
Sulfate		<2.0	mg/L	0.50

Method Blank QCBatch: QC12910

Param	Flag	Results	Units	Reporting Limit
CL		<2.0	mg/L	0.50
Fluoride		<0.2	mg/L	0.20
Nitrate-N		<0.2	mg/L	0.20
Sulfate		<2.0	mg/L	0.50

Method Blank QCBatch: QC12919

Param	Flag	Results	Units	Reporting Limit
Dissolved Calcium		<0.5	mg/L	0.50
Dissolved Magnesium		<0.5	mg/L	0.50
Dissolved Potassium		<0.5	mg/L	0.50
Dissolved Sodium		<0.5	mg/L	0.50

Method Blank QCBatch: QC12982

Param	Flag	Results	Units	Reporting Limit
Specific Conductance		5.11	µMHOS/cm	

Method Blank QCBatch: QC12984

Param	Flag	Results	Units	Reporting Limit
Total Dissolved Solids		<10	mg/L	10

Method Blank QCBatch: QC12988

Param	Flag	Results	Units	Reporting Limit
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1
Bicarbonate Alkalinity		<4.0	mg/L as CaCo3	1
Total Alkalinity		<4.0	mg/L as CaCo3	1

Quality Control Report
Duplicate Samples

Duplicate QCBatch: QC12982

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance		823	811	µMHOS/cm	1	1	5.9

Duplicate QCBatch: QC12984

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		3755	3460	mg/L	1	8	8.9

Duplicate QCBatch: QC12992

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH		6.7	6.7	s.u.	1	0	0.99

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC12879

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.093	0.0945	mg/L	1	0.10	<0.001	93	1	80 - 120	20
Benzene	0.096	0.0988	mg/L	1	0.10	<0.001	96	2	80 - 120	20
Toluene	0.0912	0.0932	mg/L	1	0.10	<0.001	91	2	80 - 120	20
Ethylbenzene	0.0917	0.0931	mg/L	1	0.10	<0.001	91	1	80 - 120	20
M,P,O-Xylene	0.264	0.268	mg/L	1	0.30	<0.001	88	1	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.086	0.0889	mg/L	1	0.10	86	88	72 - 128
4-BFB	0.0908	0.0936	mg/L	1	0.10	90	93	72 - 128

Laboratory Control Spikes

QCBatch: QC12908

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
CL	11.99	11.76	mg/L	1	12.50	<2.0	95	1	90 - 110	20
Fluoride	[22] 2.44	2.46	mg/L	1	2.50	<0.2	97	0	90 - 110	20
Nitrate-N	2.36	2.33	mg/L	1	2.50	<0.2	94	1	90 - 110	20
Sulfate	12.06	12.25	mg/L	1	12.50	<2.0	96	1	90 - 110	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes

QCBatch: QC12910

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
CL	12.02	12.43	mg/L	1	12.50	<2.0	96	3	90 - 110	20
Fluoride	2.47	2.53	mg/L	1	2.50	<0.2	98	2	90 - 110	20
Nitrate-N	2.36	2.37	mg/L	1	2.50	<0.2	94	0	90 - 110	20
Sulfate	11.75	12.00	mg/L	1	12.50	<2.0	94	2	90 - 110	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes

QCBatch: QC12919

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Dissolved Calcium	107	103.2	mg/L	1	100	<0.5	107	3	75 - 125	20
Dissolved Magnesium	103.4	99.9	mg/L	1	100	<0.5	103	3	75 - 125	20
Dissolved Potassium	106.3	103	mg/L	1	100	<0.5	106	3	75 - 125	20
Dissolved Sodium	105.3	101.9	mg/L	1	100	<0.5	105	3	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

[22] Blank spikes reported for fluoride because I'm re-running the fluoride on the sample that I spiked (175806).

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes QCBatch: QC12908

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
CL	2804.38	2801.88	mg/L	1	1250	1650	92	0	52 - 131	20
Fluoride	226.64	230.74	mg/L	1	1.25		0	0	80 - 113	20
Nitrate-N	[23] 246.54	[24] 247.34	mg/L	1	250	<1.0	98	0	84 - 105	20
Sulfate	[25] 1220.30	[26] 1225.77	mg/L	1	1250	8.2	96	0	79 - 104	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spikes QCBatch: QC12910

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
CL	1607.60	1611.43	mg/L	1	625	1040	90	0	52 - 131	20
Fluoride	[27] 125.96	[28] 122.33	mg/L	1	125	1.56	99	2	80 - 113	20
Nitrate-N	[29] 127.96	[30] 125.41	mg/L	1	125	1.89	100	2	84 - 105	20
Sulfate	[31] 710.61	[32] 709.06	mg/L	1	625	100	97	0	79 - 104	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spikes QCBatch: QC12919

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Dissolved Calcium	207	203	mg/L	1	100	148	59	7	75 - 125	20
Dissolved Magnesium	111	108.8	mg/L	1	100	17.2	93	2	75 - 125	20
Dissolved Potassium	99.3	96.9	mg/L	1	100	5.88	93	2	75 - 125	20
Dissolved Sodium	128.7	126.3	mg/L	1	100	47.7	81	3	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report
Continuing Calibration Verification Standards

CCV (1) QCBatch: QC12879

[23] I spiked the *100 dilution for 175806, but reported the *5 dilution.
[24] I spiked the *100 dilution for 175806, but reported the *5 dilution.
[25] I spiked the *100 dilution for 175806, but reported the *5 dilution. The correct %EA = 91.
[26] I spiked the *100 dilution for 175806, but reported the *5 dilution.
[27] I spiked the *50 dilution for 175827, but reported the *5 dilution. The correct %EA = 93.
[28] I spiked the *50 dilution for 175827, but reported the *5 dilution.
[29] I spiked the *50 dilution for 175827, but reported the *5 dilution. The correct %EA = 94.
[30] I spiked the *50 dilution for 175827, but reported the *5 dilution.
[31] I spiked the *50 dilution for 175827, but reported the *5 dilution. The correct %EA = 93.
[32] I spiked the *50 dilution for 175827, but reported the *5 dilution.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0872	87	85 - 115	7/26/01
Benzene		mg/L	0.10	0.0899	89	85 - 115	7/26/01
Toluene		mg/L	0.10	0.0846	84	85 - 115	7/26/01
Ethylbenzene		mg/L	0.10	0.0844	84	85 - 115	7/26/01
M,P,O-Xylene		mg/L	0.30	0.242	80	85 - 115	7/26/01

CCV (2)

QCBatch: QC12879

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.089	89	85 - 115	7/26/01
Benzene		mg/L	0.10	0.0936	93	85 - 115	7/26/01
Toluene		mg/L	0.10	0.0886	88	85 - 115	7/26/01
Ethylbenzene		mg/L	0.10	0.0898	89	85 - 115	7/26/01
M,P,O-Xylene		mg/L	0.30	0.258	86	85 - 115	7/26/01

ICV (1)

QCBatch: QC12879

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0952	95	85 - 115	7/26/01
Benzene		mg/L	0.10	0.1	100	85 - 115	7/26/01
Toluene		mg/L	0.10	0.0948	94	85 - 115	7/26/01
Ethylbenzene		mg/L	0.10	0.0958	95	85 - 115	7/26/01
M,P,O-Xylene		mg/L	0.30	0.274	91	85 - 115	7/26/01

CCV (1)

QCBatch: QC12908

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.42	96	90 - 110	7/26/01
CL		mg/L	12.50	11.79	94	90 - 110	7/26/01
Fluoride		mg/L	2.50	2.47	98	90 - 110	7/26/01
Nitrate-N		mg/L	2.50	2.36	94	90 - 110	7/26/01
Sulfate		mg/L	12.50	12.43	99	90 - 110	7/26/01

ICV (1)

QCBatch: QC12908

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.48	99	90 - 110	7/26/01

Continued ...

... Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
CL		mg/L	12.50	11.65	93	90 - 110	7/26/01
Fluoride		mg/L	2.50	2.42	96	90 - 110	7/26/01
Nitrate-N		mg/L	2.50	2.37	94	90 - 110	7/26/01
Sulfate		mg/L	12.50	11.88	95	90 - 110	7/26/01

CCV (1)

QCBatch: QC12910

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.46	98	90 - 110	7/26/01
CL		mg/L	12.50	11.55	92	90 - 110	7/26/01
Fluoride		mg/L	2.50	2.48	99	90 - 110	7/26/01
Nitrate-N		mg/L	2.50	2.35	94	90 - 110	7/26/01
Sulfate		mg/L	12.50	11.85	94	90 - 110	7/26/01

ICV (1)

QCBatch: QC12910

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.45	98	90 - 110	7/26/01
CL		mg/L	12.50	11.89	95	90 - 110	7/26/01
Fluoride		mg/L	2.50	2.52	100	90 - 110	7/26/01
Nitrate-N		mg/L	2.50	2.35	94	90 - 110	7/26/01
Sulfate		mg/L	12.50	11.90	95	90 - 110	7/26/01

CCV (1)

QCBatch: QC12919

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25	24.9	99	90 - 110	7/30/01
Dissolved Magnesium		mg/L	25	24.5	98	90 - 110	7/30/01
Dissolved Potassium		mg/L	25	24.6	98	90 - 110	7/30/01
Dissolved Sodium		mg/L	25	23.8	95	90 - 110	7/30/01

ICV (1)

QCBatch: QC12919

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25	24.88	99	95 - 105	7/30/01
Dissolved Magnesium		mg/L	25	24.93	99	95 - 105	7/30/01

Continued ...

... Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Potassium		mg/L	25	25.21	100	95 - 105	7/30/01
Dissolved Sodium		mg/L	25	25.19	100	95 - 105	7/30/01

CCV (1) QCBatch: QC12982

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		µMHOS/cm	1412	1406	99	90 - 110	7/31/01

ICV (1) QCBatch: QC12982

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		µMHOS/cm	1400	1435	102	90 - 110	7/31/01

CCV (1) QCBatch: QC12984

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	986	98	90 - 110	8/1/01

ICV (1) QCBatch: QC12984

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	951	95	90 - 110	8/1/01

CCV (1) QCBatch: QC12988

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/L as CaCo3	0	<1.0	0	90 - 110	7/31/01
Carbonate Alkalinity		mg/L as CaCo3	0	236	0	90 - 110	7/31/01
Bicarbonate Alkalinity		mg/L as CaCo3	0	2.0	0	90 - 110	7/31/01
Total Alkalinity		mg/L as CaCo3	250	238	95	90 - 110	7/31/01

ICV (1) QCBatch: QC12988

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/L as CaCo3	0	<1.0	0	90 - 110	7/31/01
Carbonate Alkalinity		mg/L as CaCo3	0	260	0	90 - 110	7/31/01
Bicarbonate Alkalinity		mg/L as CaCo3	0	4.0	0	90 - 110	7/31/01
Total Alkalinity		mg/L as CaCo3	250	264	105	90 - 110	7/31/01

ICV (1) QCBatch: QC12992

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7	7.0	100	-0.1 s.u. - +0.1 s.u.	7/26/01

1

175781-86

...ceAnalysis, Inc.

6701 Aberdeen Ave.
Lubbock, Tx.

155 McCutcheon, Suite H
El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # A0107260 08

Company: NM Oil Conservation Division Phone #: (505) 476-3491

Address: (Street, City, Zip) 1220 St. Francis Dr. Fax #: (505) 476-3440

Contact Person: Bill Olson

Invoice to: (If different from above) Same

Project #: Project Name: Kyle Drive

Project Location: Sampler Signature: Bill Olson

ANALYSIS REQUEST

(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
175781	0107241730 (Reaves #1)	2	40mL	X				X						7-24	1730
	0107241730 (Reaves #1)	1	1-L	X										"	1730
82	0107241740 (Reaves #2)	2	40mL	X				X						"	1740
	0107241740 (Reaves #2)	1	1-L	X										"	1740
83	0107241800 (Lot #7)	2	40mL	X				X						"	1800
	0107241800 (Lot #7)	1	1-L	X										"	1800
84	0107241830 (Barrera)	2	40mL	X				X						"	1830
	0107241830 (Barrera)	1	1-L	X										"	1830
85	0107241900 (Barnett)	2	40mL	X				X						"	1900
	0107241900 (Barnett)	1	1-L	X										4	1900

ANALYSIS	BTEX 8021B/602	Turn Around Time if different from standard	Hold
MTBE 8021B/602			
BTEX 8021B/602	X		
TPH 418.1/TX1005			
PAH 8270C			
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7			
TCLP Metals Ag As Ba Cd Cr Pb Se Hg			
TCLP Volatiles			
TCLP Semi Volatiles			
TCLP Pesticides			
RCI			
GC/MS Vol. 8260B/624			
GC/MS Semi. Vol. 8270C/625			
PCB's 8082/608			
Pesticides 8081A/608			
BOD, TSS, pH			
General Chemistry	X		

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Bill Olson	7/26/01	13:00		7-25-01	13:00
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by: Vicki Dewey	7-26-01	10:00

LAB USE ONLY

Intact (Y) / N

Headspace Y / N

Temp 1 °

Log-in Review MW

REMARKS:

8/7 0

9/27

☐ Check If Special Reporting Limits Are Needed

Carrier # 902 474 415-5

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

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6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

TraceAnalysis, Inc.

155 McCutcheon,Suite H
El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # A0107260 8

Company Name: NM Oil Conservation Division
Phone #: (505) 476-3491
Address: (Street, City, Zip) 1220 St. Francis Dr.
Fax #: (505) 476-3440
Contact Person: Bill Olson
Invoice to: (If different from above) same
Project #:
Project Name: Kyle Drive
Project Location:
Sampler Signature: Bill Olson

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
175786	0107241920(Hunter)	2	40mL	X				X				X		7-24	1920
	0107241920(Hunter)	1	1-L	X								X		7-24	1920

ANALYSIS REQUEST
(Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	General Chemistry	Turn Around Time if different from standard	Hold
	X														X		

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Bill Olson	7/25/01	13:00	Paul Kinsley	7-25-01	13:00
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by: Vicki Kinsley	Date: 7-26-01	Time: 10:00am

LAB USE ONLY
Intact (Y) / N
Headspace Y / N
Temp 1 °
Log-in Review NA

REMARKS:

☐ Check If Special Reporting Limits Are Needed

Carrier # 902 6074 4155

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

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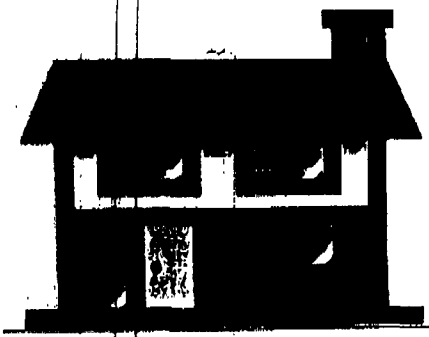

EARLENE ROBERTS
REAL ESTATE

205 E. Washington
Lovington, NM
88260
505-396-4663
505-396-0078 fax

Fax Transmittal Form

TO: Bill Olson/OCD **FROM:** Kallie Richards

FAX NUMBER

- ☐ Urgent
- ☐ For Review
- ☐ Please Comment
- ☐ Please Reply

Date sent:
Time sent:
Number of pages including cover page:

Message:

CARDINAL LABORATORIES

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
EARLENE ROBERTS REAL ESTATE
ATTN: KALLIE RICHARDS
301 N, 7th ST.
LOVINGTON, NM 88260
FAX TO: (505) 396-0078

Receiving Date: 05/03/01
Reporting Date: 05/04/01
Project Number: # 8 KYLE DRIVE
Project Name: NOT GIVEN
Project Location: NOT GIVEN

Sampling Date: 05/03/01
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: AH
Analyzed By: BC

LAB NO.	SAMPLE ID	TPH (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE:		05/04/01	05/03/01	05/03/01	05/03/01	05/03/01
H5845-1	OLD WELL	-	0.236	<0.002	<0.002	<0.006
H5845-2	NEW WELL	<1.0	<0.002	<0.002	<0.002	<0.006
Quality Control		5.73	0.099	0.102	0.103	0.298
True Value QC		6.00	0.100	0.100	0.100	0.300
% Recovery		95.5	99.0	102	103	99.3
Relative Percent Difference		5.4	6.3	1.4	5.8	6.2

METHODS: TRPHC - EPA 600/4-79-020, 418.1; BTEX - EPA SW-846 8260

Chemist

5/4/01
Date

H5845.XLS

ATTENTION:

MR. ROGER ANDERSON

ENVIRONMENTAL BUREAU

SANTA FE

FROM:

WAYNE PRICE

HOBBS

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

September 29, 1996

Mr. & Mrs. Ivan White
P.O. Box 1171
Lovington, NM 88260

OGRID # 195498

Re: Water Well Sampling
8 Kyle Road-WhiteRock Subdivision
Hobbs-Lovington Hwy 18

Dear Mr. & Mrs. White,

On August 28, 1996 the New Mexico Oil Conservation Division (NMOCD) collected a water sample from your private well in order to analyze for the presence of hydrocarbon related contamination. The enclosed analysis indicates that your well contained the following constituent that is above the New Mexico Water Quality Control Commission (WQCC) standards.

Constituent	Concentration (ug/l)	NM Standard (ug/l)	EPA Standard (ug/l)
Benzene	72	10	5

Please note the Benzene found in your water well exceeds the WQCC's health based standards, the **NMOCD recommends that the well not be used as a potable source of water.**

Benzene is a known and/or suspected human carcinogen which can increase your risk of cancer if exposed to at certain levels by ingestion (i.e. drinking water) , inhalation (i.e. breathing vapors while showering), and absorption thur the skin (i.e. physical contact while bathing, washing dishes etc). For additional information concerning the health hazards of your water it is my recommendation you contact the New Mexico Environmental Department in Hobbs at 505-393-4302.

Please note at this time our investigation has not found a definite source of the ground water problem. The NMOCD will continue to evaluate potential sources from oil and gas activities which might be a cause of the ground water contamination in the area.

If you require any further assistance concerning this matter please do not hesitate to call (505-393-6161) or write.

Sincerely yours,

Wayne Price

Wayne Price-Environmental Engineer

cc: Jerry Sexton-NMOCD District I Supervisor
Roger Anderson-NM NMOCD Environmental Bureau Chief, Santa Fe
Bill Olson-NMOCD Hydrogeologist-Environmental Bureau
Myra Meyers-New Mexico Environmental Dept.-Hobbs Office

attachments-1 Analyticals

FedEx USA Airbill

Tracking Number 9239162424

41

Sender's Copy

1 From (please print)

Date 8/28/96 Sender's FedEx Account Number

Sender's Name _____ Phone ( ) _____

Company Oil Conservation Dept./Floor/Suite/Room

Address 1000 W Broadway

City Hobbs State NM Zip 88240

2 Your Internal Billing Reference Information
(Optional) (First 24 characters will appear on invoice)

3 To (please print)

Recipient's Name _____ Phone ( ) _____

Company American Env. Network Dept./Floor/Suite/Room

Address 2709-D Pan American Frwy, NE
(To "HOLD" at FedEx location, print FedEx address here) (We Cannot Deliver to PO Boxes or PO Zip Codes)

City Abuquerque State NM Zip 87107

For [illegible] at FedEx Location check here
- ☐ Hold Weekday (Not available with FedEx First Overnight)
- ☐ Hold Saturday (Not available at all locations) (Not available with FedEx First Overnight or FedEx Standard Overnight)

For Saturday Delivery check here
- ☐ (Extra Charge. Not available to all locations) (Not available with FedEx First Overnight or FedEx Standard Overnight)

4 Service Delivery commitment may be later in some areas

- ☒ FedEx Priority Overnight (Next business morning)
- ☐ FedEx Standard Overnight (Next business afternoon)
- ☐ FedEx 2Day* (Second business day)
- ☐ FedEx Govt. Overnight (Authorized user only)
- ☐ _____
- ☐ FedEx Overnight Freight
- ☐ FedEx 2Day Freight
  (For packages over 150 pounds. Call for delivery schedule.)
- ☐ FedEx First Overnight (Earliest next business morning delivery to select locations)

*FedEx Letter Rate not available. Minimum charge: One pound FedEx 2Day rate.

5 Packaging

- ☒ FedEx Letter* (Declared value limit $500)
- ☐ FedEx Pak*
- ☐ FedEx Box
- ☐ FedEx Tube
- ☒ Other Packaging

6 Special Handling

Does this shipment contain dangerous goods?

- ☐ Yes (As per attached Shipper's Declaration)
- ☐ Yes (Shipper's Declaration not required)
- ☐ Dry Ice (Dry Ice, 9, UN 1845) x _____ kg
- CA ☐ Cargo Aircraft Only

(Dangerous Goods Shipper's Declaration not required)

7 Payment

Bill to:
- ☐ Sender (Account no. in section 1 will be billed)
- ☒ Recipient
- ☐ Third Party
- ☐ Credit Card
- ☐ Cash/Check

(Enter FedEx account no. or Credit Card no. below)

FedEx Account No 1584-3463-6

Credit Card No _____ Exp Date

Total Packages	Total Weight	Total Declared Value*	Total Charges
		$ .00	$

*When declaring a value higher than $100 per package, you pay an additional charge. See **SERVICE CONDITIONS, DECLARED VALUE AND LIMIT OF LIABILITY** section for further information.

8 Release Signature

Your signature authorizes Federal Express to deliver this shipment without obtaining a signature and agrees to indemnify and hold harmless Federal Express from any resulting claims.

Service Conditions, Declared Value, and Limit of Liability – By using this Airbill, you agree to the service conditions in our current Service Guide or U.S. Government Service Guide. Both are available on request. See back of Sender's Copy of this airbill for information and additional terms. We will not be responsible for any claim in excess of $100 per package whether the result of loss, damage, or delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, and document your actual loss in a timely manner. Your right to recover from us for any loss includes intrinsic value of the package, loss of sales, interest, profit, attorney's fees, costs, and other forms of damage, whether direct, incidental, consequential, or special, and is limited to the greater of $100 or the declared value but cannot exceed actual documented loss. The maximum declared value for any FedEx Letter and FedEx Pak is $500. Federal Express may, upon your request, and with some limitations, refund all transportation charges paid. See our FedEx Service Guide for further details.

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The World On Time

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American Environmental Network (NM), Inc.

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

CHAIN OF CUSTODY

DATE: 8/28/96 PAGE: 1 OF 1

AEN LAB I.D.

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: WAYNE PRICE - ENVR. ENGR.

COMPANY: NMOCD
ADDRESS: P.O. Box 1980
HOBBS N.M. 88241
PHONE: 505-393-6161
FAX: " " - 0720

BILL TO: SAME
COMPANY:
ADDRESS:

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:	BT	PH	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals: (25) - Mineral Salinity Kit	NUMBER OF CONTAINERS
960828 1051	3-40ml	VOA	WATER							X		X																3
960828 1058	2-1L AMBER		"											X														2
960828 1103	1-1000 ml PL		"																							X		1
960828 1105	1-1000 ml PL		"																	X								1
960828 1107	1-250 ml PL		"																		X							1
960828 1107	1-125 ml PL		"																			X						1
TRIP BLANK	1-40ml VOA		"																									1

PROJECT INFORMATION

PROJ. NO.: 8 MILE RD - Hwy 18M
PROJ. NAME: WHITE WATER WELL
P.O. NO.: 1584-345-6
SHIPPED VIA: FED EX

SAMPLE RECEIPT

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

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 ☐

ALL SAMPLES PRESERVED AS PER SAMPLE KIT + ICE. / WELL PURGED 5 WELL VOLUMES / SAMPLES COLLECTED AFTER WELL RECOVERED

RELINQUISHED BY: 1.

Signature: Time: 1:40pm
Printed Name: WAYNE PRICE Date: 9/28/96
Company: NMOCD

RECEIVED BY: 1.

Signature: Time:
Printed Name: Date:
Company:

RELINQUISHED BY: 2.

Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY: (LAB) 2.

Signature: Time:
Printed Name: Date:
American Enviromental Network (NM), Inc.

American Environmental Network (NM), Inc.

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

CHAIN OF CUSTODY

DATE: 8/28/96 PAGE: 1 OF 1

AEN LAB I.D.

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: WAYNE PRICE - ENVR. ENGR.

COMPANY: NMOCD
ADDRESS: P.O. Box 1980
HOBBS N.M. 88241
PHONE: 505-393-6161
FAX: " " - 0720

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:	Br	PH	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals: (25)-NMOCD SAMPLE KIT		NUMBER OF CONTAINERS
960828 1051	3-40ml	VOA	WATER							X		X																	3
960828 1058	2-1L	AMBER	"											X															2
960828 1103	1-1000	mL	PL	"																							X		1
960828 1105	1-1000	mL	PL	"																X									1
960828 1107	1-250	mL	PL	"																	X								1
960828 1109	1-125	mL	PL	"																		X							1
TRIP BLANK	1-40	mL	VOA	"																									1

PROJECT INFORMATION	
PROJ. NO.:	8 KYLE RD-Hwy 18M
PROJ. NAME:	WHITE WATER WELL
P.O. NO.:	1584-3463-6
SHIPPED VIA:	FED EX

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

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 ☐

ALL SAMPLES PRESERVED AS PER SAMPLE KIT + 4°C. / WATER WELL PURGED 5 MINS BEFORE COLLECTING SAMPLES / SAMPLE LOCATION - SEE ATTACHED SKETCH.

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: Time: 1:40pm	Signature: Time:
Printed Name: WAYNE PRICE Date: 8/28/96	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.

King Surveying
P.O. BOX 1246 • 4001 MAHAN DR.
PHONE: (505) 393-7316
HOBBS, NEW MEXICO 88240

SURVEYOR'S INSPECTION REPORT

THIS IS TO CERTIFY,

TO TITLE CO.: Elliott and Waldron Title and Abstract Company, Inc.

TO UNDERWRITER: Title Insurance Company of Minnesota

TO LENDER: Western Commerce Bank

that on October 21, 19 91, I made an inspection of the premises situated at #8 Kyle Drive, Lea County, N.M. briefly described as: Tract 8, Whiterock Estates Subdivision.
(Address, if applicable)

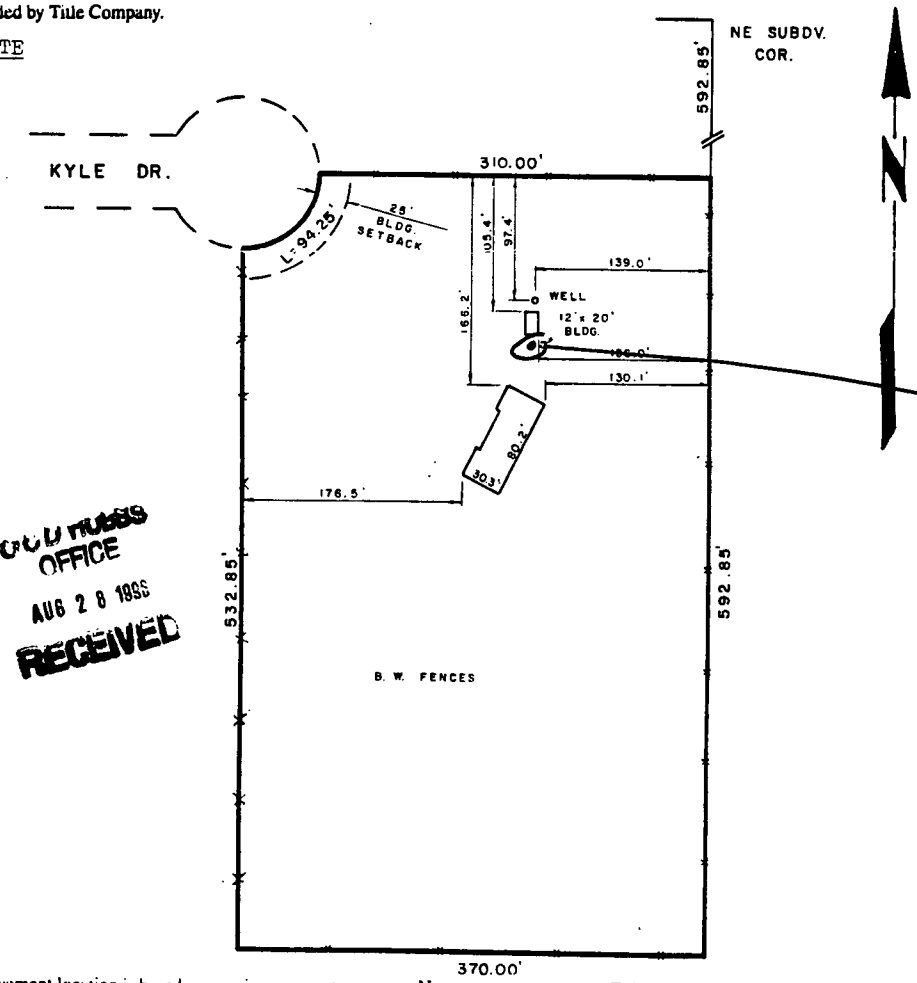
PLAT REFERENCE: Bearings, distances and/or curve data are taken from the following plat (include filing information if plat is filed).

Whiterock Estates Subdivision as recorded in Book 432, Page 217 of the Miscellaneous Records of Lea County, New Mexico.

NOTE: The error of closure is one foot of error for every not available feet along the perimeter of the legal description provided.

Easements shown hereon are as listed in Title Commitment No. _____ provided by Title Company.

WHITE



PROJ. NAME WHITEROCK ADDITION
PROJ. NO. 8 KYLE RD 18 HOBBS NM

SAMPLE TAKEN FROM WATER WELL HOUSE SPIGOT.

8/28/96

SAMPLES
960828 1051
" 1058
" 1103
" 1105
" 1107
" 1109

HOBBS OFFICE
AUG 28 1996
RECEIVED

mprovement location is based on previous property surveys. No monuments were set. This tract is subject to all easements, restrictions and reservations of record which pertain. This report is not to be relied on for the establishment of ences, buildings or other future improvements.

American Environmental Network - 2709 D Pan American Frwy NE, Albuquerque, NM 87107. (505) 344-3777

Client: NM OCD
Phone:
Address: 1000 W BROADWAY
HOBBS, NM 88240
Attention: Wayne Price

Date Needed: 8/23 Friday Time: ____ am/pm
☐ Pick up by Client
☒ Deliver to client
Kit Prepared by: ☐ Andrew
☐ Other ____

SAMPLE KIT

	PARAMETER	HOLDING TIME	BOTTLE DESCRIPTION			
			WATER- PRESERVATIVE		SOIL- PRESERVATIVE	
VOLATILES	624 (8240)	14 DAYS	___ 3X40ML VOA	$HCL/HgCl_2$	___ 1 X 4 oz Jar	4^{oc}
	601/602		X 3X40ML VOA	$HCL/HgCl_2$	___ 1 X 4 oz Jar	4^{oc}
	8010/8020		___ 3X40ML VOA	$HCL/HgCl_2$	___ 1 X 4 oz Jar	4^{oc}
	____		___ 3X40ML VOA	$HCL/HgCl_2$	___ 1 X 4 oz Jar	4^{oc}
	504		___ 3X40ML VOA	$HCL+NaS_2O_3$	___ NA	NA
FUELS	8015 (TPH)	14 DAYS	___ 3X40ML VOA	$HCL/HgCl_2$	___	
	8015/8020	14 DAYS	___ 3X40ML VOA	$HCL/HgCl_2$	___ 1 X 4 oz Jar	4^{oc}
	418.1	28 DAYS	___ 2X500ML AMB.	H_2SO_4	___	
ORGANICS	625 (8270)	7 DAYS	___		___	
	608 (8080)		___		___	
	615 (8150)		___ 2 X 1L	4^{oc}	___ 1 X 4 oz Jar	4^{oc}
	610(8310)		1 AMBER		___	
	____		___		___	
	TOC	28 DAYS	___ 1X250ML AMB.	H_2SO_4	___ 1 X 4 oz Jar	4^{oc}
	TOX	7 DAYS	___ 1X250ML AMB.	H_2SO_4	___	
METALS	Metals #24 (see Below)	6 MONTHS	1 1X 100 ML PL.		___	
			___ 1X___ML PL.	HNO_3	___ 1 X 4 oz Jar	4^{oc}
			___ 1X___ML PL.		___	
GEN. CHEM.	____	14 DAYS	___ 1X___ML PL.		___	
	____		___ 1X___ML PL.	4^{oc}	___ 1 X 4 oz Jar	4^{oc}
	____		___ 1X___ML PL.		___	
	Gen Chem #25		___		___	
Cl,	F, K, Mg, ALK (HCO_3, CO_3),	EC	1 X 1000mL	4°	___	
	Br		___ 1 X 250 mL	4°	___	
	pH		___ 1 X 125 mL	4°	___	
	____		___		___	
	TRIP BLANK	14 DAYS	1 1X40ML VOA	$HCL/HgCl_2$	NA	NA
	AIR:____	3 DAYS	___ 1 X 1L. TEDLAR AIR BAG VALVE: STAINLESS STEEL/POLYPROPYLENE			
METH.	METHANOL PRESERVED		___ 2 X 60ML Amber Preweight; 2 X 10ML Methanol Vials; 1 X 2oz jar (4oz jar for diesel)			

☐ COC
☐ BLUE ICE
☐ LABELS
☐ SEALS
☐ PENS/GLOVES

Metals = Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Si, Ag, Na, Tl, V, Zn

} 25 metals
No Hg

King Surveying
P.O. BOX 1246 • 4001 MAHAN DR.
PHONE: (505) 393-7316
HOBBS, NEW MEXICO 88240

SURVEYOR'S INSPECTION REPORT

THIS IS TO CERTIFY,

TO TITLE CO.: Elliott and Waldron Title and Abstract Company, Inc.

TO UNDERWRITER: Title Insurance Company of Minnesota

TO LENDER: Western Commerce Bank

that on October 21, 19 91, I made an inspection of the premises situated at #8 Kyle Drive, Lea County, N.M. briefly described as: Tract 8, Whiterock Estates Subdivision.
(Address, if applicable)

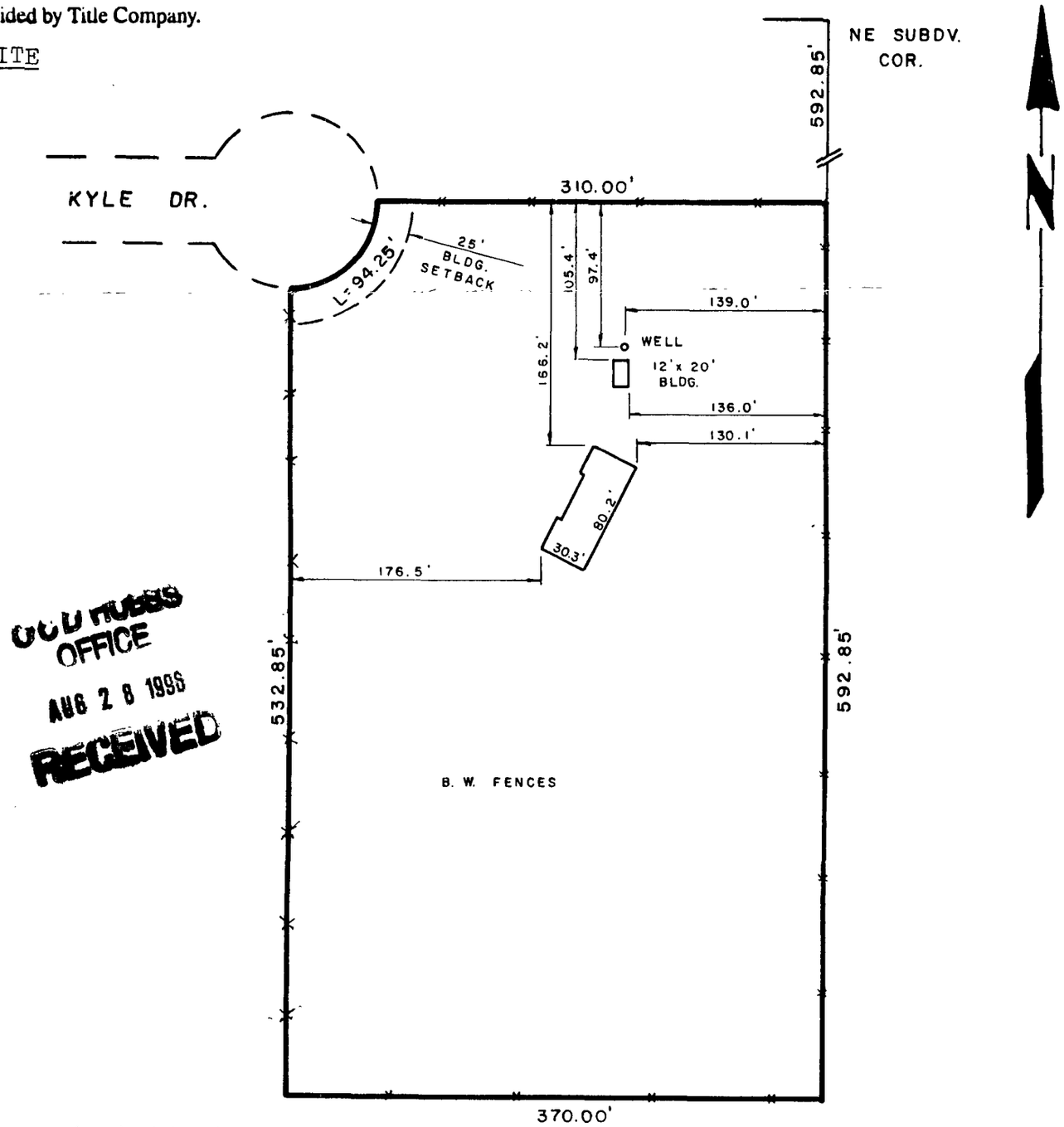
PLAT REFERENCE: Bearings, distances and/or curve data are taken from the following plat (include filing information if plat is filed).

Whiterock Estates Subdivision as recorded in Book 432, Page 217 of the Miscellaneous Records of Lea County, New Mexico.

NOTE: The error of closure is one foot of error for every not available feet along the perimeter of the legal description provided.

Easements shown hereon are as listed in Title Commitment No. _____ provided by Title Company.

WHITE



Improvement location is based on previous property surveys. No monuments were set. This tract is subject to all easements, restrictions and reservations of record which pertain. This report is not to be relied on for the establishment of fences, buildings or other future improvements.

SURVEYOR'S INSPECTION REPORT

I FURTHER CERTIFY as to the existence of the following at the time of my last inspection:

1. Evidence of rights of way, old highways or abandoned roads, lanes, trails or driveways, sewer, drains, water, gas or oil pipe lines on or crossing said premises (show location, if none visible, so indicate):

none

2. Springs, streams, rivers, ponds, or lakes located, bordering on or through said premises:

none

3. Evidence of cemeteries or family burial grounds located on said premises (show location):

none

4. Overhead utility poles, anchors, pedestals, wires or lines overhanging or crossing said premises and serving other properties (show location):

none

5. Joint driveways or walkways, joint garages, party walls or rights of support, steps or roofs in common or joint garages:

none

6. Apparent encroachments. If the building, projections or cornices thereof, or signs affixed thereto, fences or other indications of occupancy appear to encroach upon or overhang adjoining property, or the like appear to encroach upon or overhang inspected premises, specify all such (show location):

none

7. Specific physical evidence of boundary lines on all sides:

Roadway at entry, fences on all other sides

8. Is the property improved? (If structure appears to encroach or appears to violate set back lines, show approximate distances):

yes

9. Indications of recent building construction, alterations or repairs:

none

10. Approximate distance of structure from at least two lot lines must be shown.

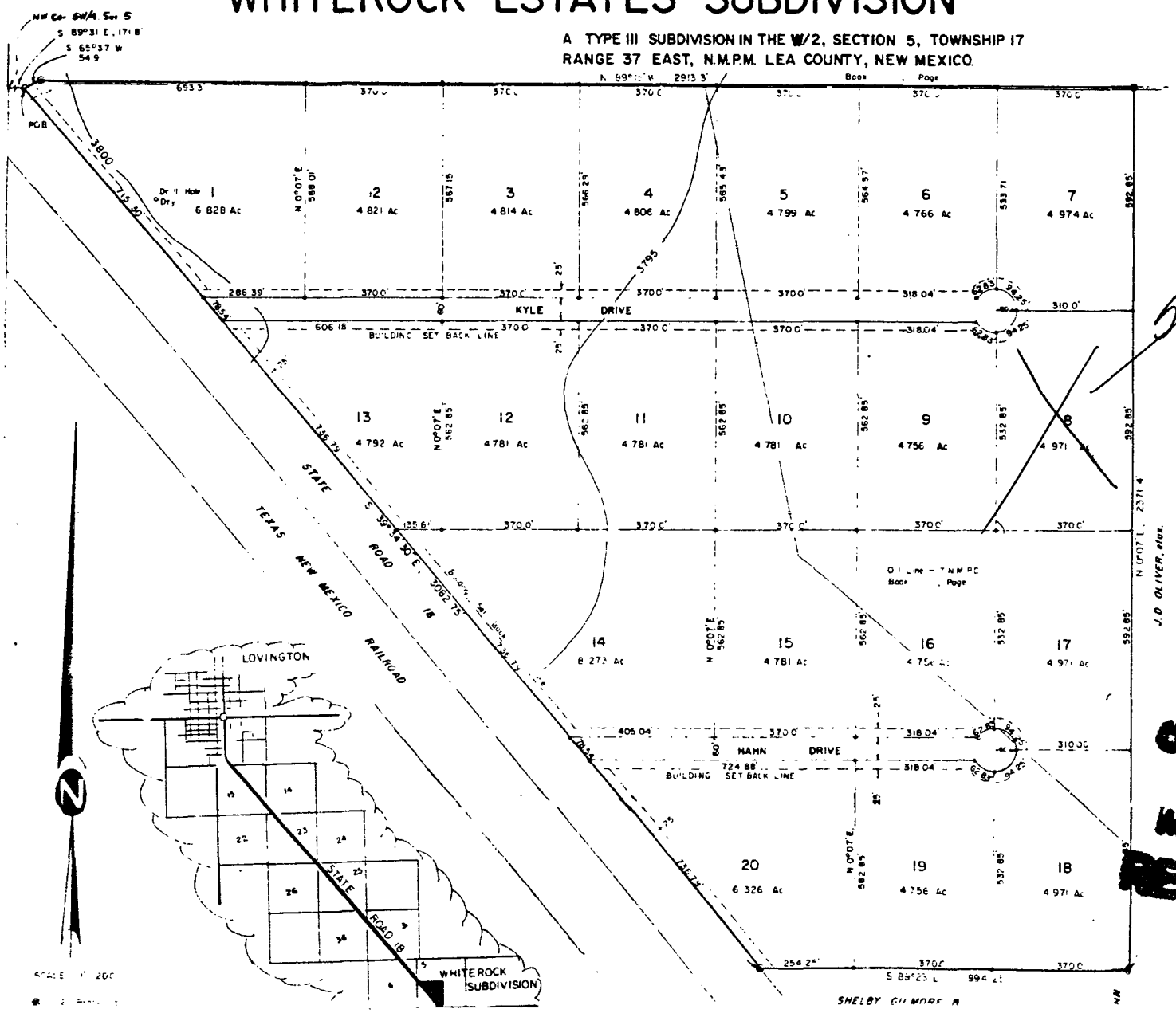
see page 1

Surveyor NMPS NO. 6541

The above information is based on boundary information taken from a previous survey and may not reflect that which may be disclosed by a boundary survey.

WHITEROCK ESTATES SUBDIVISION

A TYPE III SUBDIVISION IN THE W/2, SECTION 5, TOWNSHIP 17
RANGE 37 EAST, N.M.P.M. LEA COUNTY, NEW MEXICO.



Subject

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone ☐ Personal	Time 11:30 AM	Date 8/19/96

Originating Party	Other Parties
WAYNE PRICE - NMOCD	MRS. WHITE - OWNER
	WHITE ROCK SUB-DIVISION
Subject PROGRESS REPORT	RESIDENCE # 8 KYLE RD.

Discussion

MRS. WHITE WOULD LIKE TO HAVE THEIR WATER WELL TESTED - SHE IS WORRIED THAT CRUDE OIL & GAS IS IN THEIR WATER & IT MIGHT BE HARMFUL TO HER CHILDREN!

Conclusions or Agreements

I WILL REQUEST FROM SANTA FE - ENVIRONMENTAL BUREAU; CALLED ROGER ANDERSON - HE AGREED WILL SEND SAMPLE EQUIPMENT!

Distribution CC: J SEXTON

Signed

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

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Distribution CC: J SEXTON

Signed

State Lease - 4 copies
Fee Lease - 3 copies

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

NORTHPORT PROD CO.

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

NORTHPORT PROD CO.

Operator	Lease	Well No.
~~GRAND PRODUCTION CO.~~	Midway 5	1

Unit Letter	Section	Township	Range	County
O	5	17 South	37 East NMPM	Lea

Actual Footage Location of Well:
660 feet from the South line and 1980 feet from the East line

Ground level Elev.	Producing Formation	Pool	Dedicated Acreage:
3789.6	Strawn	~~Nash~~ Shipp-Strawn	80 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

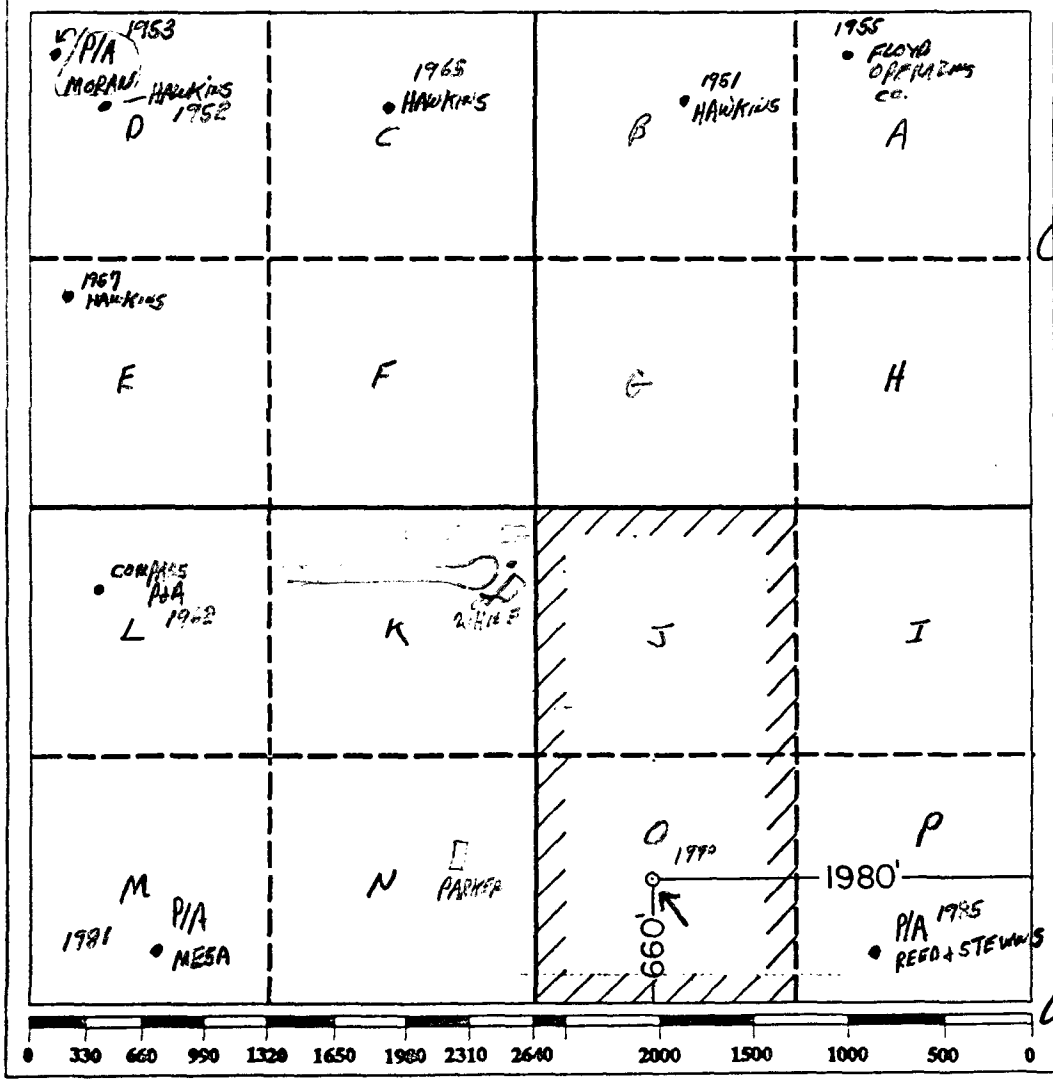
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?

[X] Yes [ ] No If answer is "yes" type of consolidation Force-Pooling R9186

If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if neccessary. _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein in true and complete to the best of my knowledge and belief.

Signature: John W. West

Printed Name: John W. West

Position: Agent

Company: Grand Production

Date: 9/26/90

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: September 25, 1990

Signature & Seal of Professional Surveyor

Certificate No. JOHN W. WEST 676
RONALD J. EIDSON 3239

126630

WELL RECORD RESEARCH

OIL OR PRODUCT LOSS REPORT

Report No. TNM-34

Company TEXAS NEW MEXICO PIPE LINE CO. Division SA Dist

Date of Loss 6-2-94 Time of Loss, if Known M

Accounting Location and Number Dist. 95 Sys. No. Trunk Line ☐ Gath Line ☒ Line Size 4" In

Loss Reported: Date 6-2-94 Time 10:30 M. By ECS Gauger Address

Loss Occurred Feet ☐ Miles ☐ N. E. S. W. From:- Mile Post ☐ Pump Station ☐ Other Point ☒ TANK BATTERY TEXACO BATTON A 95-384

S.W 1/4 of NW 1/4 Survey ☐ Block ☐ Parish ☐

Section 5 Township ☒ 17 S Range ☒ 37 County ☒ Lea State NM

Property Owner H. L. Batton Tenant's Name

Cause of Loss:

External Corrosion ☐ Collar ☐ Split Line ☐ Tank Run Over ☒ Bad Fitting ☐ Damaged by Others ☐ Show
Internal Corrosion ☐ Line Cut ☐ Line Parted ☐ Check Valve Failure ☐ Other (describe) ☐ Equipment Owner and how Damaged

Weld To 4" (Poly Pipe broke)

Estimated Number Barrels of SOUR Lost: Gross 2 Recovered 0 Net 2

If Loss on Main Line: Station Shut Down At M. Date Resumed Pumping At M. Date Pressure Dropped: From # To #

Nature of Soil: Wet ☐ Sulphur ☐ Acid ☐ Sewage ☐ Dry ☒ Salt Water ☐ Alkali ☐ Other (describe) ☐

Depth Line Buried 18" Coated Line: Yes ☐ No ☐

Repaired: By J A Roberts & J R Green Date 6-2-94 Time M. Temporarily ☐ Permanently ☒

Material Used Install 4" 150 SCR Flange

Pipe Recoated: Yes ☐ No ☐ Type Coating Used NA

Number and Size Anodes Installed NA Estimated Cost of Repairs $

Disposition of Oil or Product:
Lost:- Burned ☐ Soaked in Ground ☒ Other (describe) ☐

Soaked Earth:- Removed ☐ Covered ☒ Other (describe) ☐

Property Damaged:
Land ☐ Timber ☐ Crops ☐ Pasture ☐ Live Stock ☐ Stock Water ☐ Other Battery yard

Approximate Area Covered by Oil or Product 125 Sq Feet

Remarks: Gathering to Tal All Grades

JUN 27 1994

J R Green - 2hr 10.32 P Hour - 20.64

Cosy Siddall - 2hr 7.00 P.H - 14.00

Backhoe w/op - 2hr 42.00 P.H - 84.00

J A R. - 2hr - 50.00 = 200.00

Date of Report 6-3-94 Prepared By BP Chapman Approved

89-106100 Form PL-117 (1-76)

OIL OR PRODUCT LOSS REPORT

Report No. HOO-21

Company Texas New Mexico Division Hobbs Dist.

Date of Loss 2-26-89 Time of Loss, if Known ____ M.

Accounting Location and Number Dist. 95 Sys. No. ____ Trunk Line ☐ Gath Line ☑ Line Size 4 In:

Loss Reported: Date 2-27-89 Time 2:30 M. By Bob Henson Address ____

Loss Occured 4:00 Feet ☐ Miles ☐ 5 N. E. S. W. From: Mile Post ☐ 95 354 Pump Station ☐ Tie In Texaco Other Point ☐ Dalton H

SW1/4 ~~NW~~ SE 1/4

Section 5 Survey ☐ Township ☑ 17 Block ☐ Range ☑ 37 Parish ☐ County ☑ Lea State NM

Property Owner ____ Tenant's Name ____

Cause of Loss:

External Corrosion ☐ Collar ☐ Split Line ☐ Tank Run Over ☐ Bad Fitting ☐ Damaged by Others ☐ Show
Internal Corrosion ☑ Line Cut ☐ Line Parted ☐ Check Valve Failure ☐ Other (describe) ☐ Equipment Owner and how Damaged.

Estimated Number Barrels of Soil Lost: Gross 4 Recovered 0 Net 4

If Loss on Main Line: Station Shut Down At ____ M. Date ____ Resumed Pumping At ____ M. Date ____ Pressure Dropped: From ____ # To ____ #

Nature of Soil: Wet ☐ Dry ☑ Sulphur ☐ Salt Water ☐ Acid ☐ Alkali ☐ Sewage ☐ Other (describe) ☐ ____

Depth Line Buried 12 " Coated Line: Yes ☐ No ☐

Repaired: By JW Hooper Date 2-27-89 Time 10:30 M. Temporarily ☑ Permanently ☐

Material Used 1- 4" Skinner REF: PL-392 # ____

Pipe Recoated: Yes ☐ No ☐ Type Coating Used ____

Number and Size Anodes Installed ____ Estimated Cost of Repairs $ ____

Disposition of Oil or Product:

Lost:– Burned ☐ Soaked in Ground ☑ Other (describe) ☐ ____

Soaked Earth:– Removed ☐ Covered ☑ Other (describe) ☐ ____

Property Damaged:

Land ☐ Timber ☐ Crops ☐ Pasture ☑ Live Stock ☐ Stock Water ☐ Other ____

Approximate Area Covered by Oil or Product 632 Sq feet

JUN 27 1989 NM OCD HOBBS OFFICE

Was Consent Obtained To Burn: Landowner ____ Gov't. Agency ____

Remarks:

Clean up 150

2-28-89 BJC

HOO-102
86-011-456

Form PL-1[illegible] (4-76)

OIL OR PRODUCT LOSS REPORT

Report No. HOO-102

Company Texas-New Mexico Pipeline Co Division Hobbs

Date of Loss 11-26-86 Time of Loss, if Known Unknown M.

Accounting Location and Number 295 Sys. No. 2 Trunk Line ☐ Gath Line ☑ Line Size 4" In:

Loss Reported: Date 11-26-86 Time 7:45 A M. By Texaco Address Lovington

Loss Occured X Feet ☑ Miles ☐ E N. E. S. W. From: Mile Post ☐ Pump Station ☐ Other Point ☑ MS-250 - Texaco STV

Section 5 Survey ☐ Township ☑ 17 Block ☐ Range ☑ 37 Parish ☐ County ☑ Lea State N.M.

Property Owner State of New Mexico Tenant's Name Damon Shupp

Cause of Loss:

External Corrosion ☑ Collar ☐ Split Line ☐ Tank Run Over ☐ Bad Fitting ☐ Damaged by Others ☐ Show
Internal Corrosion ☐ Line Cut ☐ Line Parted ☐ Check Valve Failure ☐ Other (describe) ☐ Equipment Owner and how Damaged.

Estimated Number Barrels of Sour Lost: Gross 100 bbl Recovered 70 bbl Net 30

If Loss on Main Line: Station Shut Down At M. Date Resumed Pumping At M. Date Pressure Dropped: From # To #

Nature of Soil: Wet ☑ Dry ☐ Sulphur ☐ Salt Water ☐ Acid ☐ Alkali ☐ Sewage ☐ Other (describe) ☐

Depth Line Buried Coated Line: Yes ☑ No ☐

Repaired: By Jones Roberts Date 11-24-86 Time 1000 A M. Temporarily ☐ Permanently ☑

Material Used 1 Replaced - 30' 4" polyethlene REF: PL-392 #

Pipe Recoated: Yes ☐ No ☐ Type Coating Used

Number and Size Anodes Installed Estimated Cost of Repairs $300.00

Disposition of Oil or Product:
Lost:- Burned ☐ Soaked in Ground ☑ Other (describe) ☐

Soaked Earth:- Removed ☐ Covered ☑ Other (describe) ☐

Property Damaged:
Land ☐ Timber ☐ Crops ☐ Pasture ☑ Live Stock ☐ Stock Water ☐ Other

Approximate Area Covered by Oil or Product

Was Consent Obtained To Burn: Landowner Gov't. Agency

JUN 27 1990
HOBBS

Remarks: 5000 Sq FT IN Road.
1000 Sq FT.

Date of Report 11-24-86 Prepared By Jones Roberts Approved JRR

- 86-008316 Form PL-117 (1-76)

OIL OR PRODUCT LOSS REPORT

Report No. HDO-66

Company Texas New Mexico Pipe Line Co. Division Hobbs Dist.

Date of Loss 7-21-86 Time of Loss, if Known ____ M.

Accounting Location and Number Dist. 95 Sys. No. Trunk Line ☐ Gath Line ☑ Line Size 4" In:

Loss Reported: Date 7-21-86 Time 3:30 P M. By Texaco Production Address ____

Loss Occured 15 Feet ☑ Miles ☐ E N. E. S. W. From: Mile Post ☐ Pump Station ☐ T. Batton A 95-384 Other Point ☐

SW 1/4 NW 1/4

Section 5 Survey ☐ Township ☑ 17S Block ☐ Range ☑ 37E Parish ☐ County ☑ Lea State N.M.

Property Owner H.L. Batton Est. Tenant's Name ____

Cause of Loss:

External Corrosion ☑ Collar ☐ Split Line ☐ Tank Run Over ☐ Bad Fitting ☐ Damaged by Others ☐ Show

Internal Corrosion ☐ Line Cut ☐ Line Parted ☐ Check Valve Failure ☐ Other (describe) ☐ Equipment Owner and how Damaged.

Estimated Number Barrels of SOUR Lost: Gross 2 Recovered 0 Net 2

If Loss on Main Line: Station Shut Down 'At ____ M. Date ____ Resumed Pumping At ____ M. Date ____ Pressure Dropped: From ____ # To ____ #

Nature of Soil: Wet ☐ Dry ☑ Sulphur ☐ Salt Water ☐ Acid ☐ Alkali ☐ Sewage ☐ Other (describe) ☐

Depth Line Buried 12" Coated Line: Yes ☐ No ☐

Repaired: By J.W Harper & K.J Rivas Date 7-21-86 Time 4:30 M. Temporarily ☑ Permanently ☐

Material Used 1- 4" Vega Clamp REF: PL-392 #

Pipe Recoated: Yes ☐ No ☐ Type Coating Used ____

Number and Size Anodes Installed ____ Estimated Cost of Repairs $ ____

Disposition of Oil or Product:

Lost:- Burned ☐ Soaked in Ground ☑ Other (describe) ☐

Soaked Earth:- Removed ☐ Covered ☑ Other (describe) ☐

Property Damaged:

Land ☐ Timber ☐ Crops ☐ Pasture ☐ Live Stock ☐ Stock Water ☑ Other Battery pad

Approximate Area Covered by Oil or Product 210 Sq feet

Was Consent Obtained To Burn: Landowner ____ Gov't. Agency ____

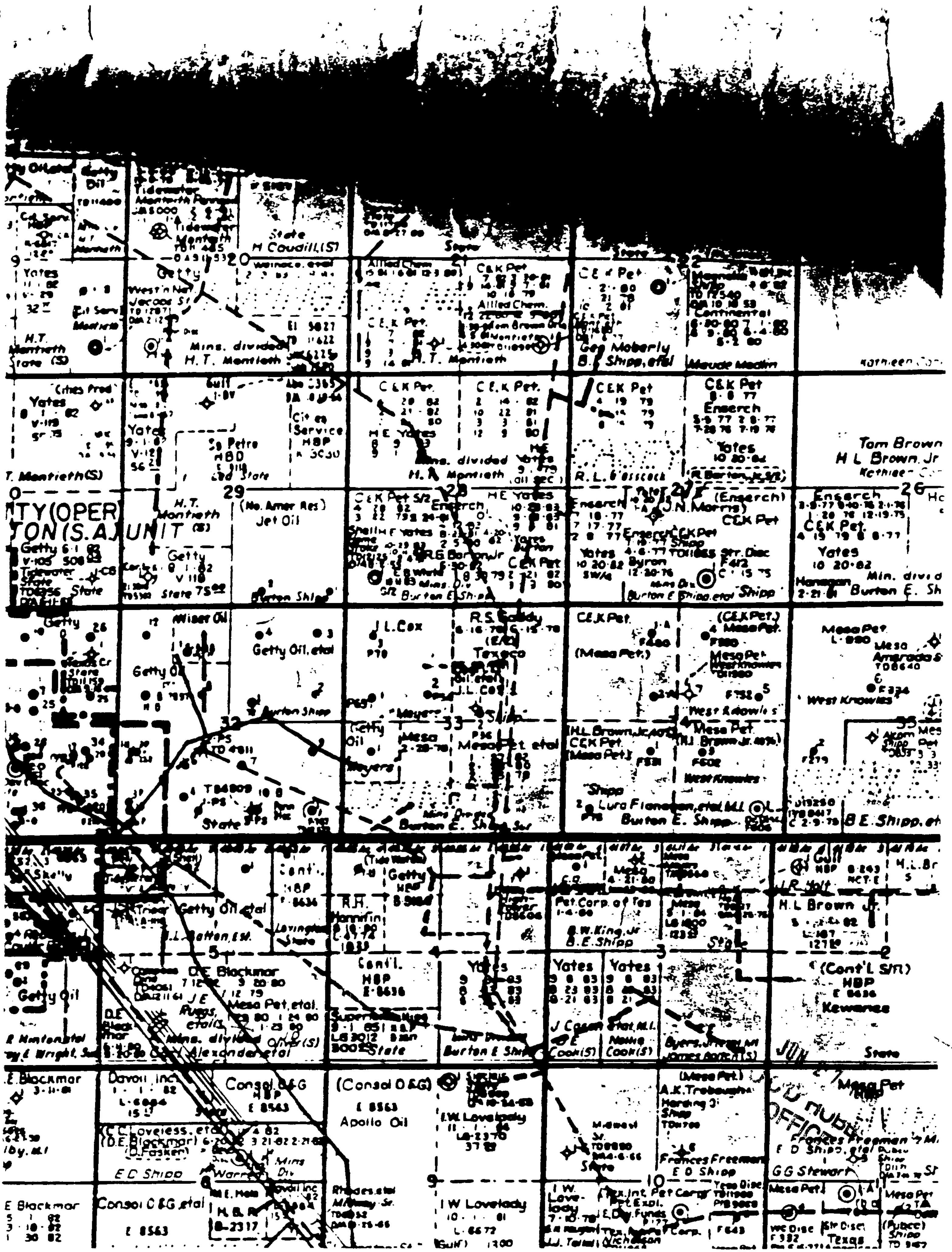
Remarks: NO damages

1- Vega Clamp 100.

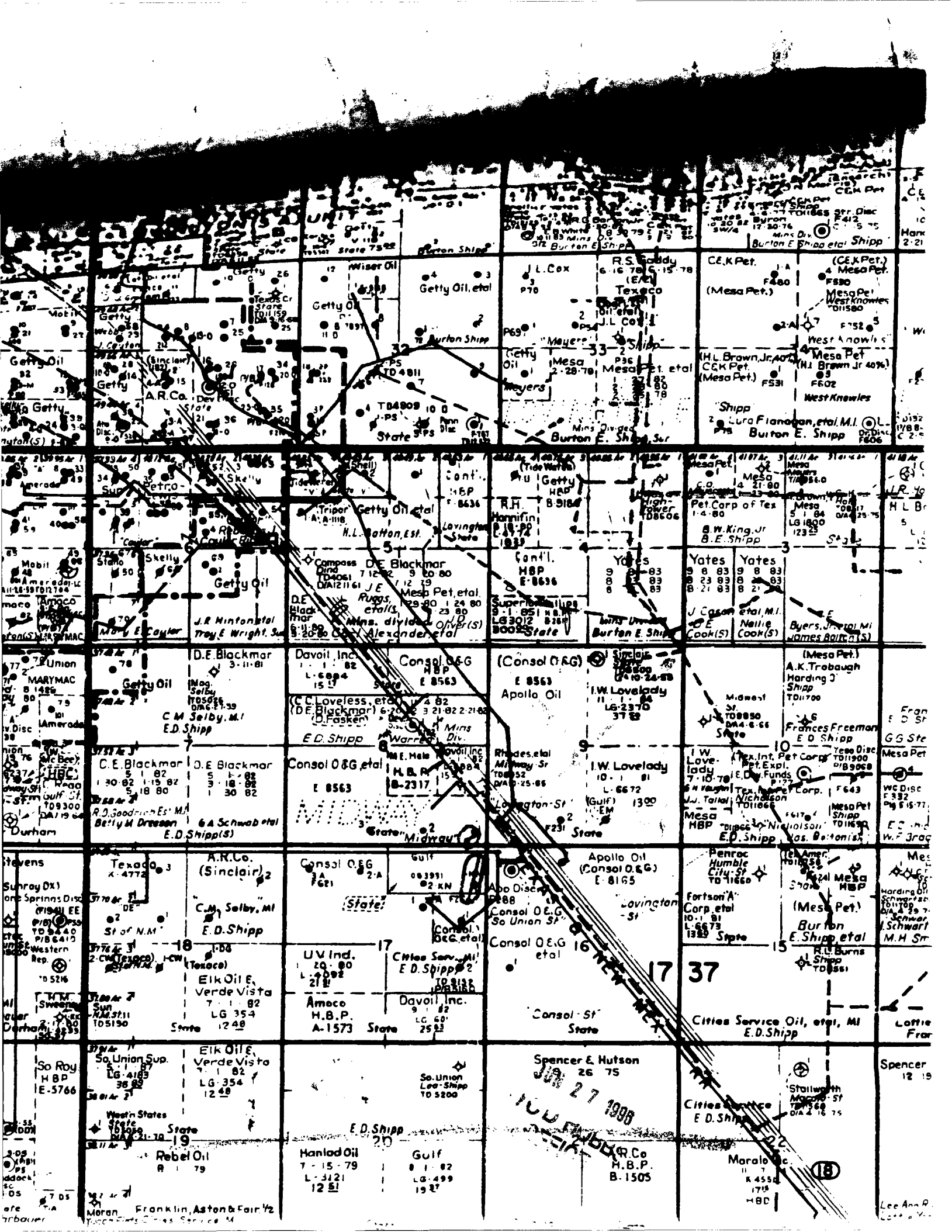
2- P.Liners 2-hrs

JUN 27 1996

Date of Report 7-22-86 Prepared By B.D Chapman Approved ____



Tidewater
State
H Coudill (S)
C&K Pet
Allied Chem.
Continental
H.T. Montieth
Mins. divided
Geo Moberly
B.E. Shipp, etal
Maude Medlin
Yates
Cities Service
HBP
Sp Petre
HBD
H E Yates
Mins. divided
Enserch
Tom Brown
H L Brown Jr
T. Montieth (S)
R.L. Bissock
(No. Amer Res)
Jet Oil
J.N. Morris
Getty
Burton Shipp
Burton E Shipp
Min. divid
Wiser Oil
Getty Oil, etal
J L Cox
R.S. Caddy
Texaco
(Mesa Pet.)
Mesa Pet.
West Knowles
Mesa Pet etal
Lura Flanagan, etal
B E Shipp, et
Getty Oil etal
Cont'l
Pet Corp. of Tex
B.W. King, Jr
B.E. Shipp
H L Brown Jr.
D.E. Blackmar
Mesa Pet, etal
Getty Oil
(Cont'L S/R)
Kewanee
Alexander etal
Burton E Shipp
State
E Blackmar
Davoil Inc
Consol O&G
(Consol O&G)
Apollo Oil
I.W. Lovelady
A.K. Trobaugh
Frances Freeman
E D Shipp
G G Stewart
Consol O&G etal
E C Shipp
Rhodes etal
I W Lovelady
Texas


Getty Oil
Getty
A.R.Co.
Wiser Oil
Getty Oil, etal
Burton Shipp
R.S. Caddy
Texaco
J.L. Cox
Meyers
Shipp
Mesa
Mesa Pet. etal
C.E.K Pet.
(Mesa Pet.)
Mesa Pet
West Knowles
Burton E. Shipp
Skelly
Petro-
Tripor
Getty Oil etal
H.L. Patton, Est.
Lovington
R.H. Hamilin
Cont'l. HBP
E-8636
Mesa Pet
Pet. Corp of Tex
B.W. King, Jr
B.E. Shipp
Yates
J. Cason etal, M.I.
E. Cook(S)
Nellie Cook(S)
Byers, Jr. etal, M.I.
James Boltz(S)
Union
MARYMAC
Amerada
Mobil
Amoco
Mary E. Cayler
J.R. Hinton etal
Troy E. Wright, Sr.
D.E. Blackmar
C.M. Selby, M.I.
E.D. Shipp
Davoil, Inc.
Consol O&G HBP
E 8563
C.C. Loveless, etal
(D.E. Blackmar)
D. Fasken
Mins. Div. Warren
Consol O&G etal
(Consol O&G)
Apollo Oil
I.W. Lovelady
Midwest St.
Frances Freeman
HBC
Durham
C.E. Blackmar
R.D. Goodrich Est. M.I.
Betty M. Dreeson
D.E. Blackmar
6A Schwab etal
E.D. Shipp(S)
Midway
Rhodes, etal
Midway St.
Tex. Int. Pet Corp.
Pet. Expl.
E.D. Funds
Nicholson
Mesa HBP
Stevens
Sunray DX
Texaco
A.R.Co. (Sinclair)
C.M. Selby, M.I.
E.D. Shipp
Gulf
Apollo Oil (Consol O&G)
E-8165
Penroc
Humble City St
Fortson 'A'
Corp. etal
Mesa HBP
(Mesa Pet.)
Burton E. Shipp etal
Western Rep.
T.H.M. Sweeney
Elk Oil &
Verde Vista
LG 354
Consol O&G etal
So Union St
Lovington St
Cities Service Oil, etal, M.I.
E.D. Shipp
So. Roy
H.B.P.
E-5766
So. Union Sup.
Lee-Shipp
Spencer & Hutson
Jun 27 1996
Cities Service
E.D. Shipp
Stallworth
Marcelo St
Rebel Oil
Hanlad Oil
Gulf
Franklin, Aston & Fair 1/2
Moran
Cities Service
H.B.P.
B-1505
Marcelo
HBD
Lee Ann R.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone ☐ Personal	Time 11:30 AM	Date 8/19/96

Originating Party	Other Parties
WAYNE PRICE - NMOCD	WES ROOT - RICE ENGR.

Subject PIPELINES IN SEC 5-17S-R37E

Discussion MR ROOT RESEARCHED HIS RECORDS, THEY HAVE SYSTEM IN SEC 6 NW NE & TAKE WATER FROM NORTH PART OF SEC 5 HAWKINS P&A -

NOTHING NEAR WHITE RESIDENCE!

Conclusions or Agreements

Distribution

Signed

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone ☐ Personal	Time ~ 11:00 AM	Date 8/19/96
Originating Party	**Other Parties**	
WAYNE PRICE - NMOCD	NAVAJO-REF KEN HICKS	

Subject PIPELINES IN SEC 5-17S-R37E

Discussion MR. HICKS INDICATED THEY HAVE NO PIPELINES IN THIS AREA

Conclusions or Agreements

Distribution

Signed [signature]

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone ☐ Personal	Time	Date
	3:27 pm	7-11-96

Originating Party	Other Parties
WAYNE PRICE - NMOCD	Scott Seeby - GPM
	915-368-1142

Subject

Discussion REQUESTED INFO ON GAS LINE IN SEC 5 - T5 17S - R37E

Conclusions or Agreements

WILL CHECK & SEE IF THEY HAVE ANY RECORD OF LEAKS

7/22/96 - Progress Report - Scott is gathering leak info will send in week - 10 days!

Distribution

Signed

TEXAS-NEW MEXICO PIPELINE COMPANY

P.O. BOX 1027
LOVINGTON, NM 88260

505-396-3341
FAX 396-2754

28 June 1996

Mr. Wayne Price
New Mexico Oil Conservation Division
P.O. Box 1980
Hobbs, NM 88240

Dear Mr. Price,

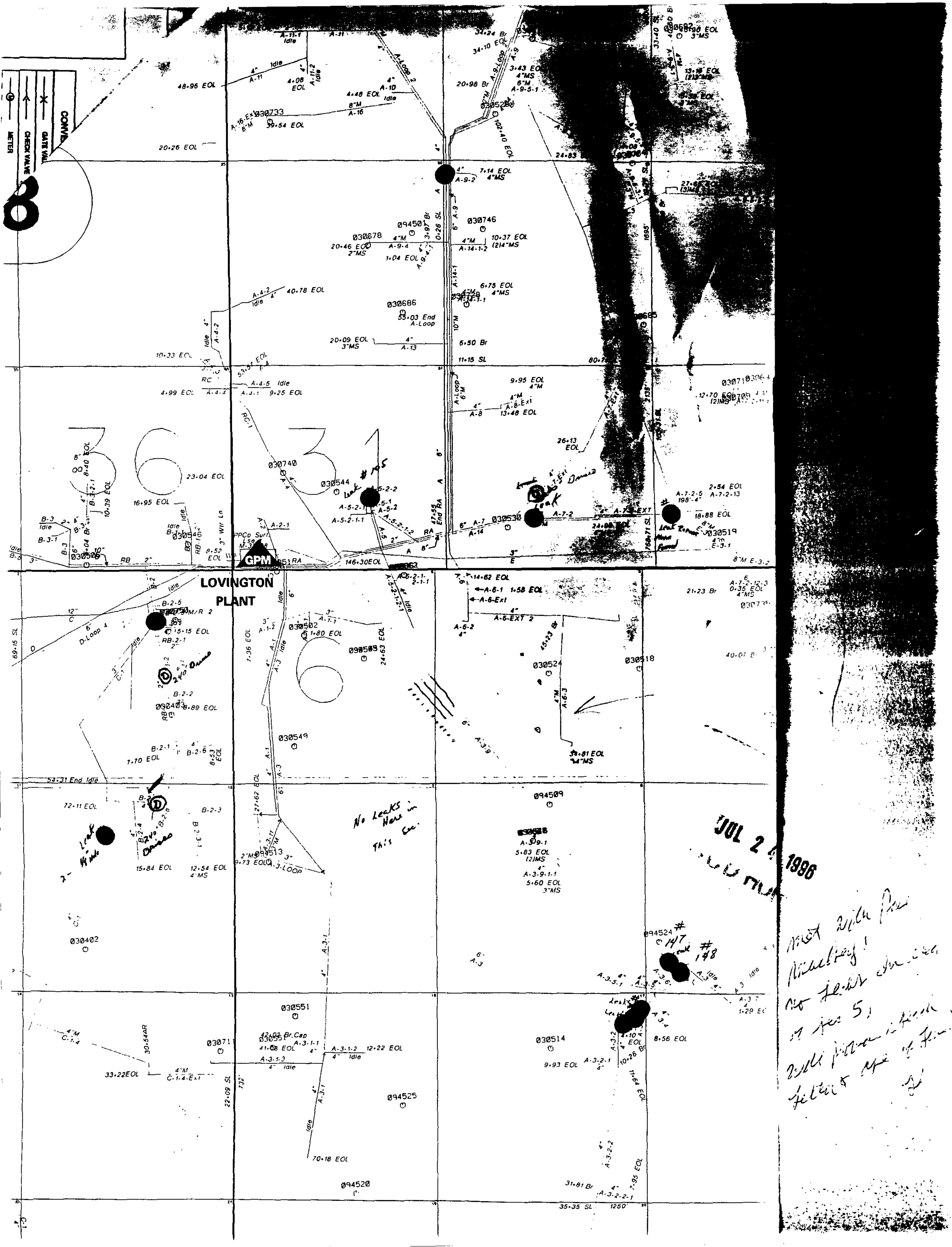
According to our records, the 4" Polyethylene line in question, Section 5, Township 17S, Range 37E, was installed and put into operation in February 1991.

If you need any more information regarding this line, do not hesitate to call.

Sincerely,

Ernest Richarte

Ernest Richarte


METER
CHECK VALVE
GATE VALVE
LOVINGTON PLANT
GPM
PPCo Surf
A-Loop 2
A-Loop
D-Loop 4
A-3-Loop
A-9-Loop 2
48+96 EOL
20+26 EOL
20+98 Br
7+14 EOL
030746
030678
030686
030740
030544
030530
030519
030502
030549
030524
030518
094509
030402
030551
030514
094525
094520
094524
23+04 EOL
16+95 EOL
146+30EOL
14+62 EOL
21+23 Br
15+15 EOL
8+89 EOL
7+70 EOL
72+11 EOL
15+84 EOL
12+54 EOL
33+22EOL
12+22 EOL
70+18 EOL
9+93 EOL
8+56 EOL
35+35 SL
No Leaks in Here in This Sec.
Leak #105
#147
#148
JUL 2 1996

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

September 29, 1996

Mr. & Mrs. Ivan White
P.O. Box 1171
Lovington, NM 88260

Re: Water Well Sampling
8 Kyle Road-WhiteRock Subdivision
Hobbs-Lovington Hwy 18

Dear Mr. & Mrs. White,

On August 28, 1996 the New Mexico Oil Conservation Division (NMOCD) collected a water sample from your private well in order to analyze for the presence of hydrocarbon related contamination. The enclosed analysis indicates that your well contained the following constituent that is above the New Mexico Water Quality Control Commission (WQCC) standards.

Constituent	Concentration (ug/l)	NM Standard (ug/l)	EPA Standard (ug/l)
Benzene	72	10	5

Please note the Benzene found in your water well exceeds the WQCC's health based standards, the **NMOCD recommends that the well not be used as a potable source of water.**

Benzene is a known and/or suspected human carcinogen which can increase your risk of cancer if exposed to at certain levels by ingestion (i.e. drinking water) , inhalation (i.e. breathing vapors while showering), and absorption thur the skin (i.e. physical contact while bathing, washing dishes etc). For additional information concerning the health hazards of your water it is my recommendation you contact the New Mexico Environmental Department in Hobbs at 505-393-4302.

Please note at this time our investigation has not found a definite source of the ground water problem. The NMOCD will continue to evaluate potential sources from oil and gas activities which might be a cause of the ground water contamination in the area.

If you require any further assistance concerning this matter please do not hesitate to call (505-393-6161) or write.

Sincerely yours,

Wayne Price

Wayne Price-Environmental Engineer

cc: Jerry Sexton-NMOCD District I Supervisor
Roger Anderson-NM NMOCD Environmental Bureau Chief, Santa Fe
Bill Olson-NMOCD Hydrogeologist-Environmental Bureau
Myra Meyers-New Mexico Environmental Dept.-Hobbs Office

attachments-1 Analyticals

American Environmental Network (N.M.), Inc.
Albuquerque Office: 2709-D Pan American Fwy., NE
Albuquerque, NM 87107
(505) 344-3777
Remit To: American Environmental Network (N.M.), Inc.
P.O. Box 5878
Boston, MA 02206

American Environmental Network, Inc.

Bill To: N.M. Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Client #: 810-134

Date	Invoice
9/18/96	75641

Project #: 8 Kyle Rd-Hwy 18NM
Proj. Name: White Water Well

Original
BALANCE DUE: 595.00

PO Number	Terms	Project
	Net 30	AEN ALB-810

Quantity	Description	Rate	Amount
1	EPA Method 8010/8020	100.00	100.00
1	EPA Method 8310	135.00	135.00
1	Metals # 24	200.00	200.00
1	Gen Chem #25	160.00	160.00

OCD HOBBS OFFICE
SEP 23 1996
RECEIVED

TO: ROGER ANDERSON - NMOCD

OK TO PAY Wayne Price 11/13/96

Accession #:608359
Authorized by:Wayne Price

TOTAL: 595.00

A finance charge of 1½% will be charged on balances 30 days past due.
DISTRIBUTION: White-Customer, Yellow-File, Pink-Accounting

American Environmental Network, Inc.

AEN I.D. 608359

September 18, 1996

NMOCD
P.O. BOX 1980
HOBBS, NM 88241

Project Name White Water Well
Project Number 8 Kyle Rd-Hwy 18NM

Attention: WAYNE PRICE

On 8/29/96 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.

Bromide analysis was performed by American Environmental Network (AZ), Inc., 9830 S. 51st Street, Suite B-113, Phoenix, AZ.

EPA methods 8010/8020 and 105.1 were performed by American Environmental Network (NM), Inc., Albuquerque, NM.

All other analyses were performed by American Environmental Network (FL), Inc., 11 East Olive Road, Pensacola, FL.

The Trip Blank arrived broken and was not analyzed.

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

American Environmental Network, Inc.

CLIENT	: NMOCD	AEN I.D.	: 608359
PROJECT #	: 8 Kyle Rd-Hwy 18NM	DATE RECEIVED	: 8/29/96
PROJECT NAME	: White Water Well	REPORT DATE	: 9/18/96

AEN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	9608281051	AQUEOUS	8/28/96
02	9608281058	AQUEOUS	8/28/96
03	9608281103	AQUEOUS	8/28/96
04	9608281105	AQUEOUS	8/28/96
05	9608281107	AQUEOUS	8/28/96
06	9608281109	AQUEOUS	8/28/96
07	TRIP BLANK	BROKEN	BROKEN

American Environmental Network, Inc.

GENERAL CHEMISTRY RESULTS

CLIENT	: NMOCD	AEN I.D.	: 608359
PROJECT #	: 8 Kyle Rd-Hwy 18NM	DATE RECEIVED	: 8/29/96
PROJECT NAME	: White Water Well		

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE ANALYZED
06	9608281109	AQUEOUS	8/28/96	8/29/96

PARAMETER	UNITS	06
PH (150.1)	UNITS	6.79

CHEMIST NOTES:
N/A

GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT	: NMOCD	AEN I.D.	: 608359
PROJECT #	: 8 Kyle Rd-Hwy 18NM	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: White Water Well		

PARAMETER	UNITS	AEN I.D.	SAMPLE RESULT	DUP. RESULT	% RPD
PH	UNITS	608359-06	6.79	6.81	0

CHEMIST NOTES:
N/A

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

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

American Environmental Network, Inc.

CLIENT : AMERICAN ENV. NETWORK OF NM, INC.
PROJECT # : 608359
PROJECT NAME : WHT WTR WELL
ATI I.D. : 609534

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	608359-05	AQUEOUS	08/28/96

----- TOTALS -----

MATRIX	# SAMPLES
AQUEOUS	1

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.

American Environmental Network, Inc.

GENERAL CHEMISTRY RESULTS

CLIENT : AMERICAN ENV. NETWORK OF NM, INC.
PROJECT # : 608359
PROJECT NAME : WHT WTR WELL

PARAMETER	UNITS	05
BROMIDE (EPA 300.0)	MG/L	0.7

American Environmental Network, Inc.

GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT : AMERICAN ENV. NETWORK OF NM, INC.
PROJECT # : 608359
PROJECT NAME : WHT WTR WELL ATI I.D. : 609534

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
BROMIDE	MG/L	60953401	0.7	0.7	0	1.9	1.0	120

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

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

American Environmental Network
Albuquerque, New Mexico

Interlab Chain of Custody 60 8782

DATE: 8/29 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

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals - TAL	Metals - PP List	Metals - RCRA	RCRA Metals by TCLP (1311)	Metals #24 (see attached list)	TOX	TOC	Gen Chemistry #25 (see attached list)	BC	Oil and Grease	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
608359-02	8/28	1058	AQ	1					X												X										1
-03		1103		2					X																						2
-04		1105		3								X																			3
-05		1107		4									X																		4

UST Mobile Office

PROJECT INFORMATION

PROJECT NUMBER: 608359
PROJECT NAME: White Water Well
QC LEVEL: (STD) IV
QC REQUIRED: MS MSD BLANK
TAT: (STANDARD) RUSH!

SAMPLE RECEIPT

TOTAL NUMBER OF CONTAINERS	1
CHAIN OF CUSTODY SEALS	NA
INTACT?	Y
RECEIVED GOOD COND./COLD	BLUE
LAB NUMBER	60A534

DUE DATE: 8/10/96
RUSH SURCHARGE: _____
CLIENT DISCOUNT: _____
SPECIAL CERTIFICATION REQUIRED: ☐YES ☐NO

SAMPLES SENT TO:

SAN DIEGO	
FT. COLLINS	
RENTON	
PENSACOLA	X
PORTLAND	
PHOENIX	

RELINQUISHED BY: 1.
Signature: [signature] Time: 1700
Printed Name: John Caldwell Date: 8/29/96
Company: AEN Albuquerque

RECEIVED BY: 1.
Signature: [signature] Time: 0945
Printed Name: R. ELSPERMAN Date: 8/30/96
Company: AEN-FL

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

RECEIVED BY: (LAB) 2.
Signature: [signature] Time: 945
Printed Name: [illegible] Date: 8/30/96
Company: AEN-AZ

American Environmental Network, Inc.

"FINAL REPORT FORMAT - SINGLE"

Accession: 608782
Client: AMERICAN ENVIRONMENTAL NETWORK OF NEW MEXICO
Project Number: 608359
Project Name: NMOCD
Project Location: WHITEWATER WELL
Test: Group of Single Wetchem
Matrix: WATER
QC Level: II

Lab ID: 003 Sample Date/Time: 28-AUG-96 1105
Client Sample Id: 608359-04 Received Date: 30-AUG-96

Parameters:	Units:	Results:	Rpt Lmts:	Q:	Batch:	Analyst:
CHLORIDE (325.3)	MG/L	76	1		CIW046	AB
CONDUCTIVITY (120.1/2510 B)	UMH/CM	980	1		CDW035	ED
FLUORIDE (340.2/4500-F C)	MG/L	0.7	0.2		FLW031	ED
SULFATE (375.4)	MG/L	79	20	+	SEW051	SG
TOTAL DISSOLVED SOLIDS (160.1)	MG/L	700	5		TDW067	ED

Comments:

American Environmental Network, Inc.

"Method Report Summary"

Accession Number: 608782
Client: AMERICAN ENVIRONMENTAL NETWORK OF NEW MEXICO
Project Number: 608359
Project Name: NMOCD
Project Location: WHITEWATER WELL
Test: Group of Single Wetchem

Client Sample Id:	Parameter:	Unit:	Result:
608359-04	CHLORIDE (325.3)	MG/L	76
	CONDUCTIVITY (120.1/2510 B)	UMH/CM	980
	FLUORIDE (340.2/4500-F C)	MG/L	0.7
	SULFATE (375.4)	MG/L	79
	TOTAL DISSOLVED SOLIDS (160.1)	MG/L	700

American Environmental Network, Inc.

"WetChem Quality Control Report"

Parameter:	CHLORIDE	CONDUCT'Y	FLUORIDE	SULFATE	TDS
Batch Id:	CIW046	CDW035	FLW031	SEW051	TDW067
Blank Result:	<1	<1	<0.2	<10	<5
Anal. Method:	325.3	120.1	340.2	375.4	160.1
Prep. Method:	N/A	N/A	N/A	N/A	N/A
Analysis Date:	03-SEP-96	04-SEP-96	10-SEP-96	07-SEP-96	06-SEP-96
Prep. Date:	03-SEP-96	04-SEP-96	10-SEP-96	07-SEP-96	04-SEP-96
Sample Duplication					
Sample Dup:	608575-1	608782-3	608750-1	609001-1	608782-3
Rept Limit:	<1	<1	<0.2	<10	<5
Sample Result:	18.4	977	0.328	<10	697
Dup Result:	18.3	977	0.325	<10	690
Sample RPD:	1	0	0.003G	N/C	1
Max RPD:	6	4	0.2	10	16
Dry Weight%	N/A	N/A	N/A	N/A	N/A
Matrix Spike					
Sample Spiked:	608575-1	N/A	608750-1	609001-1	N/A
Rept Limit:	<1	N/A	<0.2	<10	N/A
Sample Result:	18.4		0.328	<10	
Spiked Result:	73.9		1.160	17.9	
Spike Added:	55.0		0.800	20.0	
% Recovery:	101		104	90	
% Rec Limits:	89-110		70-129	51-151	
Dry Weight%	N/A		N/A	N/A	
ICV					
ICV Result:	96	1417	1.16	18	
True Result:	100	1413	1.20	20	
% Recovery:	96	100	97	90	
% Rec Limits:	90-110	90-110	90-110	90-110	
LCS					
LCS Result:		316			299
True Result:		303			293
% Recovery:		104			102
% Rec Limits:		84-110			66-122

American Environmental Network, Inc.

"Quality Control Comments"

Batch Id:	Comments:
FLW031	608750-1,2,3,4,5,6,7,8,9,10 WERE ANALYZED USING METHOD 4500-F C.

----- Common Footnotes WetChem -----

N/A = NOT APPLICABLE.
N/S = NOT SUBMITTED.
N/C = SAMPLE AND DUPLICATE RESULTS ARE AT OR BELOW AEN REPORTING LIMIT; THEREFORE, THE RPD IS "NOT CALCULABLE" AND NO CONTROL LIMITS APPLY.
N/D = NOT DETECTED.
DISS. OR D = DISSOLVED
T & D = TOTAL AND DISSOLVED
R = REACTIVE
T = TOTAL
G = SAMPLE AND/OR DUPLICATE RESULT IS BELOW 5 X AEN REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND DUPLICATE RESULT IS AT OR BELOW AEN REPORTING LIMIT; THEREFORE, THE RESULTS ARE "IN CONTROL".
Q = THE ANALYTICAL (POST-DISTILLATION) SPIKE IS REPORTED DUE TO PERCENT RECOVERY BEING OUTSIDE ACCEPTANCE LIMITS ON THE MATRIX (PRE-DISTILLATION) SPIKE.
# = ELEVATED REPORTING LIMIT DUE TO INSUFFICIENT SAMPLE.
+ = ELEVATED REPORTING LIMIT DUE TO DILUTION INTO CALIBRATION RANGE.
* = ELEVATED REPORTING LIMIT DUE TO MATRIX INTERFERENCE. (DILUTION PRIOR TO ANALYSIS)
@ = ADJUSTED REPORTING LIMIT DUE TO SAMPLE MATRIX. (DILUTION PRIOR TO DIGESTION)
P = ANALYTICAL (POST DIGESTION) SPIKE.
I = DUPLICATE INJECTION.
& = AUTOMATED
F = SAMPLE SPIKED > 4 X SPIKE CONCENTRATION.
N/C+ = NOT CALCULABLE
N/C* = NOT CALCULABLE; SAMPLE SPIKED > 4 X SPIKE CONCENTRATION.
H = SAMPLE AND/OR DUPLICATE RESULT IS BELOW 5 X AEN REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE RESULTS EXCEEDS THE AEN REPORTING LIMIT; THEREFORE, THE RESULTS ARE "OUT OF CONTROL".
A = SAMPLE AND DUPLICATE RESULTS ARE "OUT OF CONTROL".
Z = THE SAMPLE RESULT FOR THE SPIKE IS BELOW THE REPORTING LIMIT. HOWEVER, THIS RESULT IS REPORTED FOR ACCURATE QC CALCULATIONS.
NH= SAMPLE AND / OR DUPLICATE RESULT IS BELOW 5 X AEN REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE RESULTS EXCEEDS THE AEN REPORTING LIMIT; THEREFORE, THE RESULTS ARE "OUT OF CONTROL". SAMPLE IS NON-HOMOGENEOUS.
(*) = DETECTION LIMITS RAISED DUE TO CLP METHOD NOT REQUIRING A CONCENTRATION STEP FOR CN.
(CA) = SEE CORRECTIVE ACTIONS FORM.
**= MATRIX INTERFERENCE
SW-846, 3rd Edition, latest revision
EPA 600/4-79-020, Revised March 1983.
STANDARD METHODS, For the Examination of Water and Wastewater, 18TH ED., 1992
NIOSH Manual of Analytical Methods, 4th Edition.
ANNUAL BOOK OF ASTM STANDARDS, VOLUME 11.01, 1991.
METHODS FOR THE DETERMINATION OF INORGANIC SUBSTANCES IN ENVIRONMENTAL SAMPLES, EPA600/R-93/100, AUGUST 1993

1. COLIFORM. COLIFORM PRECISION IS MEASURED BY THE ABSOLUTE DIFFERENCE BETWEEN THE LOGARITHM OF COLONIES PER 100 MLS OF SAMPLE ON DUPLICATE PLATES.
2. PH. PH PRECISION IS MEASURED BY THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND DUPLICATE ANALYSIS.
3. FLASHPOINT. FLASHPOINT PRECISION IS MEASURED BY THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND DUPLICATE ANALYSIS. IF FLASHPOINT IS LESS THAN 25 DEGREES CELSIUS, THE DETECTION LIMIT BECOMES THE INITIAL STARTING TEMPERATURE.

RPD = RELATIVE PERCENT DIFFERENCE (OR DEVIATION).

RPT LIMIT = REPORTING LIMITS BASED ON METHOD DETECTION LIMIT STUDIES.

DPH = DOLLY P. HWANG
JL = JAN LECLEAR
CF = CHRISTINE FOSTER
PLD = PAULA L. DOUGHTY
SG = SCOTT GRESHAM
NSB = NANCY S. BUTLER
ED = ESTHER DANTIN
RH = RICKY HAGENDORFER
RB = REBECCA BROWN
MM = MIKE MCKENZIE
AB = ANDY BROTHERTON
BH = BARRY HICKS

American Environmental Network, Inc.

"FINAL REPORT FORMAT - SINGLE"

Accession: 608782
Client: AMERICAN ENVIRONMENTAL NETWORK OF NEW MEXICO
Project Number: 608359
Project Name: NMOCD
Project Location: WHITEWATER WELL
Test: TOTAL ALKALINITY
Matrix: WATER
QC Level: II

Lab ID: 003 Sample Date/Time: 28-AUG-96 1105
Client Sample Id: 608359-04 Received Date: 30-AUG-96

Parameters:	Units:	Results:	Rpt Lmts:	Q:	Batch:	Analyst:
ALKALINITY, TOTAL (2320B)	MG/L	280	1		ASW020	AB
PH (150.1)	UNITS	7.7	NA		PHW176	SG
BICARBONATE, CACO3 (2330B)	MG/L	280	1		NONE	DPH
CARBONATE, CACO3 (2330B)	MG/L	1	1		NONE	DPH
CARBON DIOXIDE, FREE AS CACO3	MG/L	11	1		NONE	DPH
HYDROXIDE (2330B) AS CACO3	MG/L	ND	1		NONE	DPH

Comments:

American Environmental Network, Inc.

"Method Report Summary"

Accession Number: 608782
Client: AMERICAN ENVIRONMENTAL NETWORK OF NEW MEXICO
Project Number: 608359
Project Name: NMOCD
Project Location: WHITEWATER WELL
Test: TOTAL ALKALINITY

Client Sample Id:	Parameter:	Unit:	Result:
608359-04	ALKALINITY, TOTAL (2320B)	MG/L	280
	PH (150.1)	UNITS	7.7
	BICARBONATE, CACO3 (2330B)	MG/L	280
	CARBONATE, CACO3 (2330B)	MG/L	1
	CARBON DIOXIDE, FREE AS CACO3	MG/L	11

American Environmental Network, Inc.

"WetChem Quality Control Report"

Parameter:	ALKALINITY	PH
Batch Id:	ASW020	PHW176
Blank Result:	<1	N/A
Anal. Method:	2320B	150.1
Prep. Method:	N/A	N/A
Analysis Date:	09-SEP-96	03-SEP-96
Prep. Date:	09-SEP-96	03-SEP-96
Sample Duplication		
Sample Dup:	608782-3	609002-1
Rept Limit:	<1	N/A
Sample Result:	281	6.50
Dup Result:	282	6.50
Sample RPD:	0	0.00
Max RPD:	4	0.12
Dry Weight%	N/A	N/A
Matrix Spike		
Sample Spiked:	608782-3	N/A
Rept Limit:	<1	N/A
Sample Result:	281	
Spiked Result:	305	
Spike Added:	25F	
% Recovery:	96	
% Rec Limits:	80-113	
Dry Weight%	N/A	
ICV		
ICV Result:	242	9.93
True Result:	250	10.00
% Recovery:	97	99
% Rec Limits:	90-110	90-110
LCS		
LCS Result:		6.74
True Result:		6.87
% Recovery:		98
% Rec Limits:		97-103

----- Common Footnotes WetChem -----

N/A = NOT APPLICABLE.
N/S = NOT SUBMITTED.
N/C = SAMPLE AND DUPLICATE RESULTS ARE AT OR BELOW AEN REPORTING LIMIT; THEREFORE, THE RPD IS "NOT CALCULABLE" AND NO CONTROL LIMITS APPLY.
N/D = NOT DETECTED.
DISS. OR D = DISSOLVED
T & D = TOTAL AND DISSOLVED
R = REACTIVE
T = TOTAL
G = SAMPLE AND/OR DUPLICATE RESULT IS BELOW 5 X AEN REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND DUPLICATE RESULT IS AT OR BELOW AEN REPORTING LIMIT; THEREFORE, THE RESULTS ARE "IN CONTROL".
Q = THE ANALYTICAL (POST-DISTILLATION) SPIKE IS REPORTED DUE TO PERCENT RECOVERY BEING OUTSIDE ACCEPTANCE LIMITS ON THE MATRIX (PRE-DISTILLATION) SPIKE.
# = ELEVATED REPORTING LIMIT DUE TO INSUFFICIENT SAMPLE.
+ = ELEVATED REPORTING LIMIT DUE TO DILUTION INTO CALIBRATION RANGE.
* = ELEVATED REPORTING LIMIT DUE TO MATRIX INTERFERENCE. (DILUTION PRIOR TO ANALYSIS)
@ = ADJUSTED REPORTING LIMIT DUE TO SAMPLE MATRIX. (DILUTION PRIOR TO DIGESTION)
P = ANALYTICAL (POST DIGESTION) SPIKE.
I = DUPLICATE INJECTION.
& = AUTOMATED
F = SAMPLE SPIKED > 4 X SPIKE CONCENTRATION.
N/C+ = NOT CALCULABLE
N/C* = NOT CALCULABLE; SAMPLE SPIKED > 4 X SPIKE CONCENTRATION.
H = SAMPLE AND/OR DUPLICATE RESULT IS BELOW 5 X AEN REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE RESULTS EXCEEDS THE AEN REPORTING LIMIT; THEREFORE, THE RESULTS ARE "OUT OF CONTROL".
A = SAMPLE AND DUPLICATE RESULTS ARE "OUT OF CONTROL".
Z = THE SAMPLE RESULT FOR THE SPIKE IS BELOW THE REPORTING LIMIT. HOWEVER, THIS RESULT IS REPORTED FOR ACCURATE QC CALCULATIONS.
NH= SAMPLE AND / OR DUPLICATE RESULT IS BELOW 5 X AEN REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE RESULTS EXCEEDS THE AEN REPORTING LIMIT; THEREFORE, THE RESULTS ARE "OUT OF CONTROL". SAMPLE IS NON-HOMOGENEOUS.
(*) = DETECTION LIMITS RAISED DUE TO CLP METHOD NOT REQUIRING A CONCENTRATION STEP FOR CN.
(CA) = SEE CORRECTIVE ACTIONS FORM.
**= MATRIX INTERFERENCE
SW-846, 3rd Edition, latest revision
EPA 600/4-79-020, Revised March 1983.
STANDARD METHODS, For the Examination of Water and Wastewater, 18TH ED., 1992
NIOSH Manual of Analytical Methods, 4th Edition.
ANNUAL BOOK OF ASTM STANDARDS, VOLUME 11.01, 1991.
METHODS FOR THE DETERMINATION OF INORGANIC SUBSTANCES IN ENVIRONMENTAL SAMPLES, EPA600/R-93/100, AUGUST 1993

1. COLIFORM. COLIFORM PRECISION IS MEASURED BY THE ABSOLUTE DIFFERENCE BETWEEN THE LOGARITHM OF COLONIES PER 100 MLS OF SAMPLE ON DUPLICATE PLATES.
2. PH. PH PRECISION IS MEASURED BY THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND DUPLICATE ANALYSIS.
3. FLASHPOINT. FLASHPOINT PRECISION IS MEASURED BY THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND DUPLICATE ANALYSIS. IF FLASHPOINT IS LESS THAN 25 DEGREES CELSIUS, THE DETECTION LIMIT BECOMES THE INITIAL STARTING TEMPERATURE.

RPD = RELATIVE PERCENT DIFFERENCE (OR DEVIATION).

RPT LIMIT = REPORTING LIMITS BASED ON METHOD DETECTION LIMIT STUDIES.

DPH = DOLLY P. HWANG	SG = SCOTT GRESHAM	RB = REBECCA BROWN
JL = JAN LECLEAR	NSB = NANCY S. BUTLER	MM = MIKE MCKENZIE
CF = CHRISTINE FOSTER	ED = ESTHER DANTIN	AB = ANDY BROTHERTON
PLD = PAULA L. DOUGHTY	RH = RICKY HAGENDORFER	BH = BARRY HICKS

American Environmental Network, Inc.

"FINAL REPORT FORMAT - SINGLE"

Accession: 608782
Client: AMERICAN ENVIRONMENTAL NETWORK OF NEW MEXICO
Project Number: 608359
Project Name: NMOCD
Project Location: WHITEWATER WELL
Test: HARDNESS
Matrix: WATER
QC Level: II

Lab Id: 003 Sample Date/Time: 28-AUG-96 1105
Client Sample Id: 608359-04 Received Date: 30-AUG-96

Parameters:	Units:	Results:	Rpt Lmts:	Q:	Batch:	Analyst:
CALCIUM, HARDNESS (200.7)	MG/L	310	2		I0W180	JR
MAGNESIUM, HARDNESS (200.7)	MG/L	60	0.8		J0W180	JR
TOTAL HARDNESS	MG/L	370	NA		NONE	JR

Comments:

American Environmental Network, Inc.

"Method Report Summary"

Accession Number: 608782
Client: AMERICAN ENVIRONMENTAL NETWORK OF NEW MEXICO
Project Number: 608359
Project Name: NMOCD
Project Location: WHITEWATER WELL
Test: HARDNESS

Client Sample Id:	Parameter:	Unit:	Result:
608359-04	CALCIUM, HARDNESS (200.7)	MG/L	310
	MAGNESIUM, HARDNESS (200.7)	MG/L	60
	TOTAL HARDNESS	MG/L	370

American Environmental Network, Inc.

"Metals Quality Control Report"

Parameter:	CALCIUM	MAGNESIUM
Batch Id:	I0W180	J0W180
Blank Result:	<1	<0.2
Anal. Method:	200.7	200.7
Prep. Method:	EPA 600	EPA 600
Analysis Date:	06-SEP-96	06-SEP-96
Prep. Date:	04-SEP-96	04-SEP-96
Sample Duplication		
Sample Dup:	608782-2	608782-2
Rept Limit:	<1	<0.2
Sample Result:	150	34
Dup Result:	150	34
Sample RPD:	0	0
Max RPD:	20	20
Dry Weight%	N/A	N/A
Matrix Spike		
Sample Spiked:	608782-2	608782-2
Rept Limit:	<1	<0.2
Sample Result:	130	15
Spiked Result:	150	34
Spike Added:	20F	20
% Recovery:	100	95
% Rec Limits:	75-125	75-125
Dry Weight%	N/A	N/A
ICV		
ICV Result:	9.9	5.1
True Result:	10	5.0
% Recovery:	99	102
% Rec Limits:	90-110	90-110
LCS		
LCS Result:	20	20
True Result:	20	20
% Recovery:	100	100
% Rec Limits:	80-120	80-120

American Environmental Network, Inc.

"Quality Control Comments"

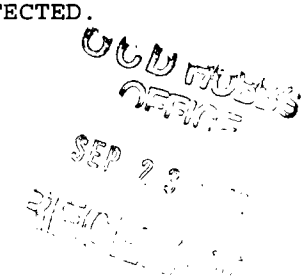
Batch Id:	Comments:
I0W180	ANALYST: JR
I0W180	The results reported under "Sample Duplication" are the MS/MSD.
J0W180	ANALYST: JR
J0W180	The results reported under "Sample Duplication" are the MS/MSD.

----- Common Footnotes Metals -----

N/A = NOT APPLICABLE.
N/S = NOT SUBMITTED.
N/C = SAMPLE AND DUPLICATE RESULTS ARE AT OR BELOW ATI REPORTING LIMIT; THEREFORE, THE RPD IS "NOT CALCULABLE" AND NO CONTROL LIMITS APPLY.
N/D = NOT DETECTED.
DISS. OR D = DISSOLVED
T & D = TOTAL AND DISSOLVED
R = REACTIVE
T = TOTAL
G = SAMPLE AND/OR DUPLICATE RESULT IS BELOW 5 X ATI REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND DUPLICATE RESULT IS AT OR BELOW ATI REPORTING LIMIT; THEREFORE, THE RESULTS ARE "IN CONTROL".
Q = THE ANALYTICAL (POST-DIGESTION) SPIKE IS REPORTED DUE TO PERCENT RECOVERY BEING OUTSIDE ACCEPTANCE LIMITS ON THE MATRIX (PRE-DIGESTION) SPIKE.
# = ELEVATED REPORTING LIMIT DUE TO INSUFFICIENT SAMPLE.
+ = ELEVATED REPORTING LIMIT DUE TO DILUTION INTO CALIBRATION RANGE.
* = ELEVATED REPORTING LIMIT DUE TO MATRIX INTERFERENCE. (DILUTION PRIOR TO ANALYSIS)
@ = ADJUSTED REPORTING LIMIT DUE TO SAMPLE MATRIX. (DILUTION PRIOR TO DIGESTION)
P = ANALYTICAL (POST DIGESTION) SPIKE.
I = DUPLICATE INJECTION.
& = AUTOMATED
F = SAMPLE SPIKED > 4 X SPIKE CONCENTRATION.
N/C+ = NOT CALCULABLE
N/C* = NOT CALCULABLE; SAMPLE SPIKED > 4 X SPIKE CONCENTRATION.
H = SAMPLE AND/OR DUPLICATE RESULT IS BELOW 5 X ATI REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE RESULTS EXCEEDS THE ATI REPORTING LIMIT; THEREFORE, THE RESULTS ARE "OUT OF CONTROL".
A = SAMPLE AND DUPLICATE RESULTS ARE "OUT OF CONTROL".
Z = THE SAMPLE RESULT FOR THE SPIKE IS BELOW THE REPORTING LIMIT. HOWEVER, THIS RESULT IS REPORTED FOR ACCURATE QC CALCULATIONS.
NH= SAMPLE AND / OR DUPLICATE RESULT IS BELOW 5 X ATI REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE RESULTS EXCEEDS THE ATI REPORTING LIMIT; THEREFORE, THE RESULTS ARE "OUT OF CONTROL". SAMPLE IS NON-HOMOGENEOUS.
J = (FLORIDA DEP 'J' FLAG) - MATRIX SPIKE AND POST SPIKE RECOVERY IS OUT OF THE ACCEPTABLE RANGE. SEE OUT OF CONTROL EVENTS FORM.
U = (FLORIDA DEP 'U' FLAG) - THE COMPOUND WAS ANALYZED FOR, BUT NOT DETECTED.
S = METHOD OF STANDARD ADDITIONS (MSA) WAS PERFORMED ON THIS SAMPLE.

FROM ANALYSIS REPORT:
RL= REPORTING LIMIT BASED ON METHOD DETECTION LIMIT STUDIES.
Q= QUALIFIER (FOOTNOTE)

FROM QUALITY CONTROL REPORT:
RPD= RELATIVE PERCENT DEVIATION.
RPT LIMIT= REPORTING LIMIT BASED ON METHOD DETECTION LIMIT STUDIES.



NOTE: THE UNITS REPORTED ON THE QUALITY CONTROL REPORT ARE REPORTED ON AN AS RUN BASIS.

SW-846, 3rd Edition, latest revision.
EPA 600/4-79-020, Revised March 1983.
NIOSH Manual of Analytical Methods, 4th Edition.
Standard Methods For the Examination of Water and Wastewater, 18th Edition, 1992.
Methods For the Determination of Metals in Environmental Samples - Supplement I, EPA 600/R-94-111, May 1994.

GJ = GARY JACOBS
JLH = JAMES L. HERED
CD = CHRISTY DRAPER
JR = JOHN REED
LV = LASSANDRA VON APPEN

American Environmental Network, Inc.

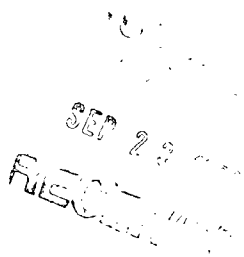
"FINAL REPORT FORMAT - SINGLE"

Accession: 608782
Client: AMERICAN ENVIRONMENTAL NETWORK OF NEW MEXICO
Project Number: 608359
Project Name: NMOCD
Project Location: WHITEWATER WELL
Test: Group of Single Metals
Matrix: WATER
QC Level: II

Lab Id: 002 Sample Date/Time: 28-AUG-96 1103
Client Sample Id: 608359-03 Received Date: 30-AUG-96

Parameters:	Units:	Results:	Rpt Lmts:	Q:	Batch:	Analyst:
SILVER (6010)	MG/L	ND	0.01		A6W180	JR
ALUMINUM (6010)	MG/L	ND	0.06		L6W180	JR
ARSENIC (6010)	MG/L	ND	0.05		R6W180	JR
BORON (6010)	MG/L	0.26	0.09		O6W180	JR
BARIUM (6010)	MG/L	0.13	0.01		B6W180	JR
BERYLLIUM (6010)	MG/L	ND	0.004		Y6W180	JR
CALCIUM (6010)	MG/L	130	1		I6W180	JR
CADMIUM (6010)	MG/L	ND	0.005		C6W180	JR
COBALT (6010)	MG/L	ND	0.01		T6W180	JR
CHROMIUM (6010)	MG/L	0.01	0.01		H6W180	JR
COPPER (6010)	MG/L	ND	0.01		F6W180	JR
IRON (6010)	MG/L	0.09	0.02		N6W180	JR
POTASSIUM (6010)	MG/L	3	2		X6W180	JR
MAGNESIUM (6010)	MG/L	15	0.2		J6W180	JR
MANGANESE (6010)	MG/L	0.22	0.01		G6W180	JR
MOLYBDENUM (6010)	MG/L	ND	0.01		D6W180	JR
SODIUM (6010)	MG/L	47	0.2		16W180	JR
NICKEL (6010)	MG/L	ND	0.02		E6W180	JR
LEAD (6010)	MG/L	ND	0.05		P6W180	JR
ANTIMONY (6010)	MG/L	ND	0.06		36W180	JR
SELENIUM (6010)	MG/L	ND	0.1		S6W180	JR
SILICON (6010)	MG/L	17	0.1		26W180	JR
THALLIUM (6010)	MG/L	ND	0.1		46W180	JR
VANADIUM (6010)	MG/L	0.02	0.01		V6W180	JR
ZINC (6010)	MG/L	ND	0.02		56W180	JR

Comments:



American Environmental Network, Inc.

"Method Report Summary"

Accession Number: 608782
Client: AMERICAN ENVIRONMENTAL NETWORK OF NEW MEXICO
Project Number: 608359
Project Name: NMOCD
Project Location: WHITEWATER WELL
Test: Group of Single Metals

Client Sample Id:	Parameter:	Unit:	Result:
608359-03	BORON (6010)	MG/L	0.26
	BARIUM (6010)	MG/L	0.13
	CALCIUM (6010)	MG/L	130
	CHROMIUM (6010)	MG/L	0.01
	IRON (6010)	MG/L	0.09
	POTASSIUM (6010)	MG/L	3
	MAGNESIUM (6010)	MG/L	15
	MANGANESE (6010)	MG/L	0.22
	SODIUM (6010)	MG/L	47
	SILICON (6010)	MG/L	17
	VANADIUM (6010)	MG/L	0.02

American Environmental Network, Inc.

"Metals Quality Control Report"

Parameter:	SILVER	ALUMINUM	ARSENIC	BORON	BARIUM	BERYLLIUM
Batch Id:	A6W180	L6W180	R6W180	O6W180	B6W180	Y6W180
Blank Result:	<0.01	<0.06	<0.05	<0.09	<0.01	<0.004
Anal. Method:	6010	6010	6010	6010	6010	6010
Prep. Method:	3010	3010	3010	3010	3010	3010
Analysis Date:	06-SEP-96	06-SEP-96	06-SEP-96	06-SEP-96	06-SEP-96	06-SEP-96
Prep. Date:	04-SEP-96	04-SEP-96	04-SEP-96	04-SEP-96	04-SEP-96	04-SEP-96
Sample Duplication						
Sample Dup:	608782-2	608782-2	608782-2	608782-2	608782-2	608782-2
Rept Limit:	<0.01	<0.06	<0.05	<0.09	<0.01	<0.004
Sample Result:	2.0	1.9	1.9	2.2	2.0	1.8
Dup Result:	2.0	2.0	2.0	2.2	2.0	1.9
Sample RPD:	0	5	5	0	0	5
Max RPD:	20	20	20	20	20	20
Dry Weight%	N/A	N/A	N/A	N/A	N/A	N/A
Matrix Spike						
Sample Spiked:	608782-2	608782-2	608782-2	608782-2	608782-2	608782-2
Rept Limit:	<0.01	<0.06	<0.05	<0.09	<0.01	<0.004
Sample Result:	<0.01	<0.06	<0.05	0.26	0.13	<0.004
Spiked Result:	2.0	1.9	1.9	2.2	2.0	1.8
Spike Added:	2.0	2.0	2.0	2.0	2.0	2.0
% Recovery:	100	95	95	97	94	90
% Rec Limits:	75-125	75-125	75-125	75-125	75-125	75-125
Dry Weight%	N/A	N/A	N/A	N/A	N/A	N/A
ICV						
ICV Result:	5.0	5.0	5.0	5.0	4.9	5.0
True Result:	5.0	5.0	5.0	5.0	5.0	5.0
% Recovery:	100	100	100	100	98	100
% Rec Limits:	90-110	90-110	90-110	90-110	90-110	90-110
LCS						
LCS Result:	2.0	1.9	2.0	1.9	1.9	1.9
True Result:	2.0	2.0	2.0	2.0	2.0	2.0
% Recovery:	100	95	100	95	95	95
% Rec Limits:	80-120	80-120	80-120	80-120	80-120	80-120

"Metals Quality Control Report"

Parameter:	CALCIUM	CADMIUM	COBALT	CHROMIUM	COPPER	IRON
Batch Id:	I6W180	C6W180	T6W180	H6W180	F6W180	N6W180
Blank Result:	<1	<0.005	<0.01	<0.01	<0.01	<0.02
Anal. Method:	6010	6010	6010	6010	6010	6010
Prep. Method:	3010	3010	3010	3010	3010	3010
Analysis Date:	06-SEP-96	06-SEP-96	06-SEP-96	06-SEP-96	06-SEP-96	06-SEP-96
Prep. Date:	04-SEP-96	04-SEP-96	04-SEP-96	04-SEP-96	04-SEP-96	04-SEP-96
Sample Duplication						
Sample Dup:	608782-2	608782-2	608782-2	608782-2	608782-2	608782-2
Rept Limit:	<1	<0.005	<0.01	<0.01	<0.01	<0.02
Sample Result:	150	1.9	1.9	2.0	1.9	2.0
Dup Result:	150	1.9	1.9	2.0	1.9	2.0
Sample RPD:	0	0	0	0	0	0
Max RPD:	20	20	20	20	20	20
Dry Weight%	N/A	N/A	N/A	N/A	N/A	N/A
Matrix Spike						
Sample Spiked:	608782-2	608782-2	608782-2	608782-2	608782-2	608782-2
Rept Limit:	<1	<0.005	<0.01	<0.01	<0.01	<0.02
Sample Result:	130	<0.005	<0.01	0.01	<0.01	0.09
Spiked Result:	150	1.9	1.9	2.0	1.9	2.0
Spike Added:	20F	2.0	2.0	2.0	2.0	2.0
% Recovery:	100	95	95	100	95	96
% Rec Limits:	75-125	75-125	75-125	75-125	75-125	75-125
Dry Weight%	N/A	N/A	N/A	N/A	N/A	N/A
ICV						
ICV Result:	9.9	5.0	5.0	5.0	5.1	5.1
True Result:	10	5.0	5.0	5.0	5.0	5.0
% Recovery:	99	100	100	100	102	102
% Rec Limits:	90-110	90-110	90-110	90-110	90-110	90-110
LCS						
LCS Result:	20	1.9	2.0	2.1	1.9	2.0
True Result:	20	2.0	2.0	2.0	2.0	2.0
% Recovery:	100	95	100	105	95	100
% Rec Limits:	80-120	80-120	80-120	80-120	80-120	80-120

American Environmental Network, Inc.

"Metals Quality Control Report"

Parameter:	POTASSIUM	MAGNESIUM	MANGANESE	MOLYBDENUM	SODIUM	NICKEL
Batch Id:	X6W180	J6W180	G6W180	D6W180	16W180	E6W180
Blank Result:	<2	<0.2	<0.01	<0.01	<0.2	<0.02
Anal. Method:	6010	6010	6010	6010	6010	6010
Prep. Method:	3010	3010	3010	3010	3010	3010
Analysis Date:	06-SEP-96	06-SEP-96	06-SEP-96	06-SEP-96	06-SEP-96	06-SEP-96
Prep. Date:	04-SEP-96	04-SEP-96	04-SEP-96	04-SEP-96	04-SEP-96	04-SEP-96
Sample Duplication						
Sample Dup:	608782-2	608782-2	608782-2	608782-2	608782-2	608782-2
Rept Limit:	<2	<0.2	<0.01	<0.01	<0.2	<0.02
Sample Result:	22	34	2.1	1.9	65	1.9
Dup Result:	22	34	2.2	1.9	65	1.9
Sample RPD:	0	0	5	0	0	0
Max RPD:	20	20	20	20	20	20
Dry Weight%	N/A	N/A	N/A	N/A	N/A	N/A
Matrix Spike						
Sample Spiked:	608782-2	608782-2	608782-2	608782-2	608782-2	608782-2
Rept Limit:	<2	<0.2	<0.01	<0.01	<0.2	<0.02
Sample Result:	3	15	0.22	<0.01	47	<0.02
Spiked Result:	22	34	2.1	1.9	65	1.9
Spike Added:	20	20	2.0	2.0	20	2.0
% Recovery:	95	95	94	95	90	95
% Rec Limits:	75-125	75-125	75-125	75-125	75-125	75-125
Dry Weight%	N/A	N/A	N/A	N/A	N/A	N/A
ICV						
ICV Result:	49	5.1	5.0	5.0	9.6	5.0
True Result:	50	5.0	5.0	5.0	10	5.0
% Recovery:	98	102	100	100	96	100
% Rec Limits:	90-110	90-110	90-110	90-110	90-110	90-110
LCS						
LCS Result:	20	20	2.0	2.0	18	2.0
True Result:	20	20	2.0	2.0	20	2.0
% Recovery:	100	100	100	100	90	100
% Rec Limits:	80-120	80-120	80-120	80-120	80-120	80-120

American Environmental Network, Inc.

"Metals Quality Control Report"

Parameter:	LEAD	ANTIMONY	SELENIUM	SILICON	THALLIUM	VANADIUM
Batch Id:	P6W180	36W180	S6W180	26W180	46W180	V6W180
Blank Result:	<0.05	<0.06	<0.1	<0.1	<0.1	<0.01
Anal. Method:	6010	6010	6010	6010	6010	6010
Prep. Method:	3010	3010	3010	3010	3010	3010
Analysis Date:	06-SEP-96	06-SEP-96	06-SEP-96	07-SEP-96	06-SEP-96	06-SEP-96
Prep. Date:	04-SEP-96	04-SEP-96	04-SEP-96	04-SEP-96	04-SEP-96	04-SEP-96
Sample Duplication						
Sample Dup:	608782-2	608782-2	608782-2	608782-2	608782-2	608782-2
Rept Limit:	<0.05	<0.06	<0.1	<0.1	<0.1	<0.01
Sample Result:	1.9	1.9	1.9	19	1.8	1.9
Dup Result:	1.9	1.9	1.9	20	1.8	2.0
Sample RPD:	0	0	0	5	0	5
Max RPD:	20	20	20	20	20	20
Dry Weight%	N/A	N/A	N/A	N/A	N/A	N/A
Matrix Spike						
Sample Spiked:	608782-2	608782-2	608782-2	608782-2	608782-2	608782-2
Rept Limit:	<0.05	<0.06	<0.1	<0.1	<0.1	<0.01
Sample Result:	<0.05	<0.06	<0.1	17	<0.1	0.02
Spiked Result:	1.9	1.9	1.9	19	1.8	1.9
Spike Added:	2.0	2.0	2.0	2.0F	2.0	2.0
% Recovery:	95	95	95	100	90	94
% Rec Limits:	75-125	75-125	75-125	75-125	75-125	75-125
Dry Weight%	N/A	N/A	N/A	N/A	N/A	N/A
ICV						
ICV Result:	5.1	5.0	5.1	5.2	4.9	5.0
True Result:	5.0	5.0	5.0	5.0	5.0	5.0
% Recovery:	102	100	102	104	98	100
% Rec Limits:	90-110	90-110	90-110	90-110	90-110	90-110
LCS						
LCS Result:	2.0	2.0	1.9	2.0	1.9	2.0
True Result:	2.0	2.0	2.0	2.0	2.0	2.0
% Recovery:	100	100	95	100	95	100
% Rec Limits:	80-120	80-120	80-120	80-120	80-120	80-120

American Environmental Network, Inc.

"Metals Quality Control Report"

Parameter:	ZINC
Batch Id:	56W180
Blank Result:	<0.02
Anal. Method:	6010
Prep. Method:	3010
Analysis Date:	06-SEP-96
Prep. Date:	04-SEP-96

Sample Duplication

Sample Dup:	608782-2
Rept Limit:	<0.02
Sample Result:	1.9
Dup Result:	1.9
Sample RPD:	0
Max RPD:	20
Dry Weight%	N/A

Matrix Spike

Sample Spiked:	608782-2
Rept Limit:	<0.02
Sample Result:	<0.02
Spiked Result:	1.9
Spike Added:	2.0
% Recovery:	95
% Rec Limits:	75-125
Dry Weight%	N/A

ICV

ICV Result:	5.1
True Result:	5.0
% Recovery:	102
% Rec Limits:	90-110

LCS

LCS Result:	2.0
True Result:	2.0
% Recovery:	100
% Rec Limits:	80-120

American Environmental Network, Inc.

"Quality Control Comments"

Batch Id:	Comments:
A6W180	ANALYST: JR
A6W180	The results reported under "Sample Duplication" are the MS/MSD.
L6W180	ANALYST: JR
L6W180	The results reported under "Sample Duplication" are the MS/MSD.
R6W180	ANALYST: JR
R6W180	The results reported under "Sample Duplication" are the MS/MSD.
O6W180	ANALYST: JR
O6W180	The results reported under "Sample Duplication" are the MS/MSD.
B6W180	ANALYST: JR
B6W180	The results reported under "Sample Duplication" are the MS/MSD.
Y6W180	ANALYST: JR
Y6W180	The results reported under "Sample Duplication" are the MS/MSD.
I6W180	ANALYST: JR
I6W180	The results reported under "Sample Duplication" are the MS/MSD.
C6W180	ANALYST: JR
C6W180	The results reported under "Sample Duplication" are the MS/MSD.
T6W180	ANALYST: JR
T6W180	The results reported under "Sample Duplication" are the MS/MSD.
H6W180	ANALYST: JR
H6W180	The results reported under "Sample Duplication" are the MS/MSD.
F6W180	ANALYST: JR
F6W180	The results reported under "Sample Duplication" are the MS/MSD.
N6W180	ANALYST: JR
N6W180	The results reported under "Sample Duplication" are the MS/MSD.
X6W180	ANALYST: JR
X6W180	The results reported under "Sample Duplication" are the MS/MSD.
J6W180	ANALYST: JR
J6W180	The results reported under "Sample Duplication" are the MS/MSD.
G6W180	ANALYST: JR
G6W180	The results reported under "Sample Duplication" are the MS/MSD.
D6W180	ANALYST: JR
D6W180	The results reported under "Sample Duplication" are the MS/MSD.
16W180	ANALYST: JR
16W180	The results reported under "Sample Duplication" are the MS/MSD.
E6W180	ANALYST: JR
E6W180	The results reported under "Sample Duplication" are the MS/MSD.
P6W180	ANALYST: JR
P6W180	The results reported under "Sample Duplication" are the MS/MSD.
36W180	ANALYST: JR
36W180	The results reported under "Sample Duplication" are the MS/MSD.
S6W180	ANALYST: JR
S6W180	The results reported under "Sample Duplication" are the MS/MSD.
26W180	ANALYST: JR
26W180	The results reported under "Sample Duplication" are the MS/MSD.
46W180	ANALYST: JR
46W180	The results reported under "Sample Duplication" are the MS/MSD.
V6W180	ANALYST: JR
V6W180	The results reported under "Sample Duplication" are the MS/MSD.
56W180	ANALYST: JR
56W180	The results reported under "Sample Duplication" are the MS/MSD.

----- Common Footnotes Metals -----

N/A = NOT APPLICABLE.
N/S = NOT SUBMITTED.
N/C = SAMPLE AND DUPLICATE RESULTS ARE AT OR BELOW ATI REPORTING LIMIT; THEREFORE, THE RPD IS "NOT CALCULABLE" AND NO CONTROL LIMITS APPLY.
N/D = NOT DETECTED.
DISS. OR D = DISSOLVED
T & D = TOTAL AND DISSOLVED
R = REACTIVE
T = TOTAL
G = SAMPLE AND/OR DUPLICATE RESULT IS BELOW 5 X ATI REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND DUPLICATE RESULT IS AT OR BELOW ATI REPORTING LIMIT; THEREFORE, THE RESULTS ARE "IN CONTROL".
Q = THE ANALYTICAL (POST-DIGESTION) SPIKE IS REPORTED DUE TO PERCENT RECOVERY BEING OUTSIDE ACCEPTANCE LIMITS ON THE MATRIX (PRE-DIGESTION) SPIKE.
# = ELEVATED REPORTING LIMIT DUE TO INSUFFICIENT SAMPLE.
+ = ELEVATED REPORTING LIMIT DUE TO DILUTION INTO CALIBRATION RANGE.
* = ELEVATED REPORTING LIMIT DUE TO MATRIX INTERFERENCE. (DILUTION PRIOR TO ANALYSIS)
@ = ADJUSTED REPORTING LIMIT DUE TO SAMPLE MATRIX. (DILUTION PRIOR TO DIGESTION)
P = ANALYTICAL (POST DIGESTION) SPIKE.
I = DUPLICATE INJECTION.
& = AUTOMATED
F = SAMPLE SPIKED > 4 X SPIKE CONCENTRATION.
N/C+ = NOT CALCULABLE
N/C* = NOT CALCULABLE; SAMPLE SPIKED > 4 X SPIKE CONCENTRATION.
H = SAMPLE AND/OR DUPLICATE RESULT IS BELOW 5 X ATI REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE RESULTS EXCEEDS THE ATI REPORTING LIMIT; THEREFORE, THE RESULTS ARE "OUT OF CONTROL".
A = SAMPLE AND DUPLICATE RESULTS ARE "OUT OF CONTROL".
Z = THE SAMPLE RESULT FOR THE SPIKE IS BELOW THE REPORTING LIMIT. HOWEVER, THIS RESULT IS REPORTED FOR ACCURATE QC CALCULATIONS.
NH= SAMPLE AND / OR DUPLICATE RESULT IS BELOW 5 X ATI REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE RESULTS EXCEEDS THE ATI REPORTING LIMIT; THEREFORE, THE RESULTS ARE "OUT OF CONTROL". SAMPLE IS NON-HOMOGENEOUS.
J = (FLORIDA DEP 'J' FLAG) - MATRIX SPIKE AND POST SPIKE RECOVERY IS OUT OF THE ACCEPTABLE RANGE. SEE OUT OF CONTROL EVENTS FORM.
U = (FLORIDA DEP 'U' FLAG) - THE COMPOUND WAS ANALYZED FOR, BUT NOT DETECTED.
S = METHOD OF STANDARD ADDITIONS (MSA) WAS PERFORMED ON THIS SAMPLE.

FROM ANALYSIS REPORT:
RL= REPORTING LIMIT BASED ON METHOD DETECTION LIMIT STUDIES.
Q= QUALIFIER (FOOTNOTE)

FROM QUALITY CONTROL REPORT:
RPD= RELATIVE PERCENT DEVIATION.
RPT LIMIT= REPORTING LIMIT BASED ON METHOD DETECTION LIMIT STUDIES.

NOTE: THE UNITS REPORTED ON THE QUALITY CONTROL REPORT ARE REPORTED ON AN AS RUN BASIS.

SW-846, 3rd Edition, latest revision.
EPA 600/4-79-020, Revised March 1983.
NIOSH Manual of Analytical Methods, 4th Edition.
Standard Methods For the Examination of Water and Wastewater, 18th Edition, 1992.
Methods For the Determination of Metals in Environmental Samples - Supplement I, EPA 600/R-94-111, May 1994.

GJ = GARY JACOBS
JLH = JAMES L. HERED
CD = CHRISTY DRAPER
JR = JOHN REED
LV = LASSANDRA VON APPEN

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS / AROMATICS (EPA 8010/8020)
CLIENT : NMOCD AEN I.D.: 608359
PROJECT # : 8 Kyle Rd-Hwy 18NM
PROJECT NAME : White Water Well

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	9608281051	AQUEOUS	8/28/96	NA	8/30/96	1

PARAMETER	DET. LIMIT	UNITS	01
BENZENE	0.5	**UG/L**	**72 D(5)**
BROMODICHLORMETHANE	0.2	UG/L	< 0.2
BROMOFORM	0.5	UG/L	< 0.5
BROMOMETHANE	1.0	UG/L	< 1.0
CARBON TETRACHLORIDE	0.2	UG/L	< 0.2
CHLOROBENZENE	0.5	UG/L	< 0.5
CHLOROETHANE	0.5	UG/L	< 0.5
CHLOROFORM	0.5	UG/L	< 0.5
CHLOROMETHANE	1.0	UG/L	< 1.0
DIBROMOCHLOROMETHANE	0.2	UG/L	< 0.2
1,2-DIBROMOETHANE (EDB)	0.2	UG/L	< 0.2
1,2-DICHLOROBENZENE	0.5	UG/L	< 0.5
1,3-DICHLOROBENZENE	0.5	UG/L	< 0.5
1,4-DICHLOROBENZENE	0.5	UG/L	< 0.5
1,1-DICHLOROETHANE	0.3	UG/L	< 0.3
1,2-DICHLOROETHANE (EDC)	0.5	UG/L	< 0.5
1,1-DICHLOROETHENE	0.2	UG/L	< 0.2
cis-1,2-DICHLOROETHENE	0.2	UG/L	< 0.2
trans-1,2-DICHLOROETHENE	1.0	UG/L	< 1.0
1,2-DICHLOROPROPANE	0.2	UG/L	< 0.2
cis-1,3-DICHLOROPROPENE	0.2	UG/L	< 0.2
trans-1,3-DICHLOROPROPENE	0.2	UG/L	< 0.2
ETHYLBENZENE	0.5	UG/L	< 0.5
METHYL-t-BUTYL ETHER	2.5	UG/L	< 2.5
METHYLENE CHLORIDE	2.0	UG/L	< 2.0
1,1,2,2-TETRACHLOROETHANE	0.5	UG/L	< 0.5
TETRACHLOROETHENE	0.5	UG/L	< 0.5
TOLUENE	0.5	UG/L	< 0.5
1,1,1-TRICHLOROETHANE	1.0	UG/L	< 1.0
1,1,2-TRICHLOROETHANE	0.2	UG/L	< 0.2
TRICHLOROETHENE	0.3	UG/L	< 0.3
TRICHLOROFLUOROMETHANE	0.2	UG/L	< 0.2
VINYL CHLORIDE	0.5	UG/L	< 0.5
TOTAL XYLENES	0.5	UG/L	< 0.5
SURROGATE:			
BROMOCHLOROMETHANE (%)			96
SURROGATE LIMITS	(73 - 117)		
TRIFLUOROTOLUENE (%)			94
SURROGATE LIMITS	(69 - 117)		

CHEMIST NOTES: D(5) = DILUTED 5X, ANALYZED 8/30/96

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American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS
REAGENT BLANK

TEST	: PURGEABLE HALOCARBONS / AROMATICS (EPA 8010/8020)		
BLANK I.D.	: 083096	AEN I.D.	: 608359
CLIENT	: NMOCD		
PROJECT #	: 8 Kyle Rd-Hwy 18NM	DATE ANALYZED	: 8/30/96
PROJECT NAME	: White Water Well	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 (%)		102
SURROGATE LIMITS	(73 - 117)	
TRIFLUOROTOLUENE (%)		97
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.	: 090396	AEN I.D.	: 608359
CLIENT	: NMOCD		
PROJECT #	: 8 Kyle Rd-Hwy 18NM	DATE ANALYZED	: 9/3/96
PROJECT NAME	: White Water Well	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 (%)		106
SURROGATE LIMITS	(73 - 117)	
TRIFLUOROTOLUENE (%)		103
SURROGATE LIMITS	(69 - 117)	

CHEMIST NOTES:
N/A

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY QUALITY CONTROL
MSMSD

TEST	: PURGEABLE HALOCARBONS / AROMATICS (EPA 8010/8020)		
MSMSD #	: 090396	AEN I.D.	: 608359
CLIENT	: NMOCD		
PROJECT #	: 8 Kyle Rd-Hwy 18NM	DATE ANALYZED	: 9/3/96
PROJECT NAME	: White Water Well	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	9.1	91	9.1	91	0	(82 -128)	20
TOLUENE	<0.5	10.0	9.2	92	9.4	94	2	(87 -128)	20
1,1-DICHLOROETHENE	<0.2	10.0	8.7	87	9.1	91	4	(44 - 99)	20
TRICHLOROETHENE	<0.3	10.0	10.1	101	9.9	99	2	(89 - 127)	20
CHLOROBENZENE	<0.5	10.0	9.8	98	10.1	101	3	(87 - 124)	20

CHEMIST NOTES:
N/A

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

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

American Environmental Network, Inc.

"FINAL REPORT FORMAT - SINGLE"

Accession:	608782
Client:	AMERICAN ENVIRONMENTAL NETWORK OF NEW MEXICO
Project Number:	608359
Project Name:	NMOCD
Project Location:	WHITEWATER WELL
Test:	POLYNUCLEAR AROMATICS BY 8310
Analysis Method:	8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
Extraction Method:	3510/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
Matrix:	WATER
QC Level:	II

Lab Id:	001	Sample Date/Time:	28-AUG-96 1058
Client Sample Id:	608359-02	Received Date:	30-AUG-96
Batch: PAW169		Extraction Date:	03-SEP-96
Blank: A	Dry Weight %: N/A	Analysis Date:	10-SEP-96

Parameter:	Units:	Results:	Rpt Lmts:	Q:
ACENAPHTHENE	UG/L	ND	1	
ACENAPHTHYLENE	UG/L	ND	1	
ANTHRACENE	UG/L	ND	1	
BENZO(a)ANTHRACENE	UG/L	ND	1	
BENZO(a)PYRENE	UG/L	ND	1	
BENZO(b)FLUORANTHENE	UG/L	ND	1	
BENZO(g,h,i)PERYLENE	UG/L	ND	1	
BENZO(k)FLUORANTHENE	UG/L	ND	1	
CHRYSENE	UG/L	ND	1	
DIBENZO(a,h)ANTHRACENE	UG/L	ND	1	
FLUORANTHENE	UG/L	ND	1	
FLUORENE	UG/L	ND	1	
INDENO(1,2,3-cd)PYRENE	UG/L	ND	1	
NAPHTHALENE	UG/L	ND	1	
PHENANTHRENE	UG/L	ND	1	
PYRENE	UG/L	ND	1	
1-METHYLNAPHTHALENE	UG/L	ND	1	
2-METHYLNAPHTHALENE	UG/L	ND	1	
2-CHLOROANTHRACENE	%REC/SURR	83	28-138	
ANALYST	INITIALS	JBT		

Comments:

American Environmental Network, Inc.

"QC Report"

Title: Water Blank
Batch: PAW169
Analysis Method: 8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
Extraction Method: 3510/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.

Blank Id: A Date Analyzed: 08-SEP-96 Date Extracted: 03-SEP-96

Parameters:	Units:	Results:	Reporting Limits:
ACENAPHTHENE	UG/L	ND	1
ACENAPHTHYLENE	UG/L	ND	1
ANTHRACENE	UG/L	ND	1
BENZO(a)ANTHRACENE	UG/L	ND	1
BENZO(a)PYRENE	UG/L	ND	1
BENZO(b)FLUORANTHENE	UG/L	ND	1
BENZO(g,h,i)PERYLENE	UG/L	ND	1
BENZO(k)FLUORANTHENE	UG/L	ND	1
CHRYSENE	UG/L	ND	1
DIBENZO(a,h)ANTHRACENE	UG/L	ND	1
FLUORANTHENE	UG/L	ND	1
FLUORENE	UG/L	ND	1
INDENO(1,2,3-cd)PYRENE	UG/L	ND	1
NAPHTHALENE	UG/L	ND	1
PHENANTHRENE	UG/L	ND	1
PYRENE	UG/L	ND	1
1-METHYLNAPHTHALENE	UG/L	ND	1
2-METHYLNAPHTHALENE	UG/L	ND	1
2-CHLOROANTHRACENE	%REC/SURR	93	28-138
ANALYST	INITIALS	JBT	

Comments:

American Environmental Network, Inc.

"QC Report"

Title: Water Reagent
Batch: PAW169
Analysis Method: 8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
Extraction Method: 3510/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.

RS Date Analyzed: 08-SEP-96 RS Date Extracted: 03-SEP-96
RSD Date Analyzed: 08-SEP-96 RSD Date Extracted: 03-SEP-96

Parameters:	Spike Added	Sample Conc	RS Conc	RS %Rec	RSD Conc	RSD %Rec	RPD	RPD Lmts	Rec Lmts
ACENAPHTHYLENE	10.0	<1	7.9	79	7.6	76	4	46	46-110
BENZO(k)FLUORANTHENE	10.0	<1	9.6	96	9.0	90	6	30	58-128
CHRYSENE	10.0	<1	9.8	98	9.1	91	7	29	62-129
PHENANTHRENE	10.0	<1	9.0	90	8.7	87	3	28	61-116
PYRENE	10.0	<1	8.9	89	8.5	85	5	26	62-120
Surrogates:									
2-CHLOROANTHRACENE				96		94			28-138

Comments:

Notes:
N/S = NOT SUBMITTED N/A = NOT APPLICABLE D = DILUTED OUT
UG/L = PARTS PER BILLION. < = LESS THAN REPORTING LIMIT.
* = VALUES OUTSIDE OF QUALITY CONTROL LIMITS.
SOURCES FOR CONTROL LIMITS ARE INTERNAL LABORATORY QUALITY ASSURANCE PROGRAM AND REFERENCED METHOD.

American Environmental Network, Inc.

"QC Report"

Title: Water Matrix
Batch: PAW169
Analysis Method: 8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
Extraction Method: 3510/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.

Dry Weight %: N/A
Sample Spiked: 608782-1

MS Date Analyzed: 10-SEP-96
MSD Date Analyzed: 10-SEP-96

MS Date Extracted: 03-SEP-96
MSD Date Extracted: 03-SEP-96

Parameters:	Spike Added	Sample Conc	MS Conc	MS %Rec	MSD Conc	MSD %Rec	RPD	RPD Lmts	Rec Lmts
ACENAPHTHYLENE	10.0	<1	7.7	77	7.4	74	4	42	14-135
BENZO(k)FLUORANTHENE	10.0	<1	8.7	87	7.9	79	10	58	25-142
CHRYSENE	10.0	<1	8.7	87	7.8	78	11	51	3-176
PHENANTHRENE	10.0	<1	8.6	86	7.5	75	14	55	27-146
PYRENE	10.0	<1	8.0	80	7.0	70	13	47	15-157
Surrogates:									
2-CHLOROANTHRACENE				107		89			28-138

Comments:

Notes:
N/S = NOT SUBMITTED N/A = NOT APPLICABLE D = DILUTED OUT
UG/L = PARTS PER BILLION. < = LESS THAN REPORTING LIMIT.
* = VALUES OUTSIDE OF QUALITY CONTROL LIMITS.
SOURCES FOR CONTROL LIMITS ARE INTERNAL LABORATORY QUALITY ASSURANCE PROGRAM AND REFERENCED METHOD.

American Environmental Network, Inc.

Common notation for Organic reporting

N/S = NOT SUBMITTED
N/A = NOT APPLICABLE
D = DILUTED OUT
UG = MICROGRAMS
UG/L = PARTS PER BILLION.
UG/KG = PARTS PER BILLION.
MG/M3 = MILLIGRAM PER CUBIC METER.
PPMV = PART PER MILLION BY VOLUME.
MG/KG = PARTS PER MILLION.
MG/L = PARTS PER MILLION.
< = LESS THAN DETECTION LIMIT.
* = VALUES OUTSIDE OF QUALITY CONTROL LIMITS

SOURCES FOR CONTROL LIMITS ARE INTERNAL LABORATORY QUALITY ASSURANCE PROGRAM AND REFERENCED METHOD.

ORGANIC SOILS ARE REPORTED ON A DRYWEIGHT BASIS.

ND = NOT DETECTED ABOVE REPORTING LIMIT.

RPT LIMIT = REPORTING LIMITS BASED ON METHOD DETECTION LIMIT STUDIES.

RPD = RELATIVE PERCENT DIFFERENCE (OR DEVIATION)

AEN/GC/FID
AEN GAS CHROMATOGRAPHIC METHOD EMPLOYING DIRECT INJECTION ON COLUMN WITH FLAME IONIZATION DETECTOR (FID).

AEN/GC/FIX
AEN GAS CHROMATOGRAPHIC METHOD FOR ANALYSIS OF FIXED GASES EMPLOYING DIRECT INJECTION ON COLUMN WITH THERMAL CONDUCTIVITY DETECTOR (TCD) AND FLAME IONIZATION DETECTOR (FID).

AEN/GC/FPD
AEN GAS CHROMATOGRAPHIC METHOD EMPLOYING DIRECT INJECTION ON COLUMN WITH FLAME PHOTOMETRIC DETECTOR (FPD) IN SULFUR-SPECIFIC MODE.

AEN/GC/PID
AEN GAS CHROMATOGRAPHIC METHOD EMPLOYING DIRECT INJECTION ON COLUMN WITH PHOTOIONIZATION DETECTOR (PID).

AEN/GC/TCD
AEN GAS CHROMATOGRAPHIC METHOD EMPLOYING DIRECT INJECTION ON COLUMN WITH THERMAL CONDUCTIVITY DETECTOR (TCD).

SW = STEVE WILHITE
PL = PAUL LESCHENSKY
RW = ROBERT WOLFE
BV = BEN VAUGHN
BC = BETH COLEMAN
KS = KENDALL SMITH
KK = KERRY lEMONT
DWB = DAVID W. BOWERS
RP = ROB PEREZ
JBT = JENNIFER TORRANCE

American Environmental Network (NM), Inc.

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

CHAIN OF CUSTODY

DATE: 8/28/96 PAGE: 1 OF 1

AEN LAB J.D. 608353

SHADED AREAS ARE FOR LAB USE ONLY

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: WAYNE PRICE - ENVR. ENGR.

COMPANY: NMOCD
ADDRESS: P.O. Box 1980
HOBBS N.M. 88241
PHONE: 505-393-6161
FAX: " " - 0720

BILL TO: SAME
COMPANY:
ADDRESS:

SAMPLE ID	#	DATE	TIME	MATRIX	LAB I.D.
960828 1051	3-40ml	VOA		WATER	-01
960828 1058	2-1L	AMBER		"	-02
960828 1103	1-1000	mL PL		"	-03
960828 1105	1-1000	mL PL		"	-04
960828 1107	1-250	mL PL		"	-05
960828 1109	1-125	mL PL		"	-06
TRIP BLANK	1-40	mL VOA		"	-07
				preserved	
				bottles	

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:	BT	PH	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals: (Pb)-NMOCD SAMPLE KIT	NUMBER OF CONTAINERS
					X		X																3
									X														2
																					X		1
															X								1
																X							1
																	X						1
																							1

PROJECT INFORMATION

PROJ. NO.: 8 Mile Rd - Hwy 18 M
PROJ. NAME: White Water Well
P.O. NO.: 1584-3463-6
SHIPPED VIA: FED EX

SAMPLE RECEIPT

NO. OF CONTAINERS	7
CUSTODY SEALS	N/A
RECEIVED INTACT	
TEMPERATURE	4°C

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

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

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

ALL SAMPLES PRESERVED AS PER SAMPLE KIT + 4°C. / WATER WELL PURGED 5 MINS BEFORE COLLECTING SAMPLES / SAMPLE LOCATION - SEE ATTACHED SKETCH.

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: Time: 1:40pm	Signature: Time:
Printed Name: Date: WAYNE PRICE 8/28/96	Printed Name: Date:
Company: NMOCD	Company:
RECEIVED BY: 1.	**RECEIVED BY: (LAB) 2.**
Signature: Time:	Signature: Time: 1025
Printed Name: Date:	Printed Name: Date:
Company:	American Environmental Network (NM), Inc.

American Environmental Network
Albuquerque, New Mexico

Interlab Chain of Custody 60878

DATE: 8/29 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

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals - TAL	Metals - PP List	Metals - RCRA	RCRA Metals by TCLP (1311)	Metals #29 (see attached list)	TOX	TOC	Gen Chemistry #25 (see attached list)	BC	Oil and Grease	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
608359-02	8/28	1058	AQ	1																	X									
-03		1103		2					X																					
-04		1105		3								X																		
-05		1107		4									X																	

PROJECT INFORMATION	SAMPLE RECEIPT
PROJECT NUMBER: 608359	TOTAL NUMBER OF CONTAINERS
PROJECT NAME: White Water Well	CHAIN OF CUSTODY SEALS
QC LEVEL: (STD) IV	INTACT?
QC REQUIRED: MS MSD BLANK	RECEIVED GOOD COND./COLD
TAT: (STANDARD) RUSH!	LAB NUMBER

DUE DATE: 8/10/96
RUSH SURCHARGE: _____
CLIENT DISCOUNT: _____
SPECIAL CERTIFICATION REQUIRED: ☐YES ☐NO

SAMPLES SENT TO:
- SAN DIEGO
- FT. COLLINS
- RENTON
- PENSACOLA X
- PORTLAND
- PHOENIX

RELINQUISHED BY: 1.
Signature: [signature] Time: 1200
Printed Name: John Caldwell Date: 8/29
Company: AEN Albuquerque

RECEIVED BY: 1.
Signature: [signature] Time: 0945
Printed Name: R. ELSPERMAN Date: 8/30/96
Company: AEN-FL

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: 8/28/96 PAGE: 1 OF 1

AEN LAB I.D. 608357

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: WAYNE PRICE - ENVR. ENGR.

COMPANY: NMOCD

ADDRESS: P.O. BOX 1980
HOBBS N.M. 88241

PHONE: 505-393-6161

FAX: " " - 0720

BILL TO: SAME

COMPANY:

ADDRESS:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	Petroleum Hydrocarbons (418.1) TRPH	Diesel/Direct/Inject (MOD.8015)	Gas/Purge & Trap (M8015)	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:	Br	PH	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals: (25) - NMOCD SAMPLE KIT	NUMBER OF CONTAINERS
960828 1051	3-40ML	VOA	WATER	-01						X		X																3
960828 1058	2-1L	AMBER	"	-02										X														2
960828 1103	1-1000	ML PL	"	-03																						X		1
960828 1105	1-1000	ML PL	"	-04																X								1
960828 1107	1-250	ML PL	"	-05																	X							1
960828 1109	1-125	ML PL	"	-06																		X						1
TRIP BLANK	1-40ML	VOA	"	↗																								1
			acidified																									
			broken																									

RECEIVED
SEP 12 1996

PROJECT INFORMATION	
PROJ. NO.:	8 MILE RD - Hwy 18M
PROJ. NAME:	WHITE WATER WELL
P.O. NO.:	1584-3463-6
SHIPPED VIA:	FED EX

SAMPLE RECEIPT	
NO. CONTAINERS	9
CUSTODY SEALS	Y/N/NA
RECEIVED INTACT	Y
BLUE ICE/ICE	8°C

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 [ ]

ALL SAMPLES PRESERVED AS PER SAMPLE KIT + 4°C. / WATER WELL PURGED 5 MINS BEFORE COLLECTING SAMPLES / SAMPLE LOCATION - SEE ATTACHED SKETCH.

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: Time: 1:40pm	Signature: Time:
Printed Name: WAYNE PRICE Date: 8/28/96	Printed Name: Date:
Company: NMOCD	Company:
RECEIVED BY: 1.	**RECEIVED BY: (LAB) 2.**
Signature: Time:	Signature: Time: 1005
Printed Name: Date:	Printed Name: Date: 8/29/96
Company:	American Enviromental Network (NM), Inc.

CITY OF HOBBS
300 N. Turner
Hobbs, NM 88240
Lab # 9411

MICROBIOLOGICAL WATER REPORT

Time Test Began ~~9:47 AM~~ 1530 Date 6-5-96

Time Test Ended ~~9:52 AM~~ 1030 Date 6-7-96

Date Received 6-5-96

Time Received 1100

Received by AD

SAMPLE IDENTIFICATION		TESTING REQUIRED
Quality Control No.: 96 K 30	County: LEA	[ ] MF-Total Coliform [ ] MMO MUG-Total Coliform TOTAL HETEROTROPHIC PLATE COUNT
Water Supply System Name: IVAN WHITE WATER WELL	WSS Code No.	

COLLECTION INFORMATION

Date Collected Mo. Day Yr.	Time Collected	Collected By
6 5 96	9:53 AM 6-5-96	WAYNE PRICE NMOCD

Collection Point: SPIGET NEAR WELL HOUSE

LABORATORY TEST RESULTS

Total Coliforms / 100 ml [ ] Absent [ ] Present	Total Coliforms / 100 ml [ ] Absent [ ] Present
Fecal Coliforms / 100 ml [ ] Absent [ ] Present	E. coli / 100 ml [ ] Absent [ ] Present

TYPE OF SYSTEM

Check One

[ ] Public Non-Community [ ] Swimming Pool

[ ] Public Community [X] Private Well

Disinfected [ ] Yes [X] No

Residual: _____ mg / 1 (required for fecal test)

FLUSHED 5 MIN

INVALID SAMPLE

If one of the following is checked, resample.

[ ] TNTC Non-Coliforms [ ] Confluent Growth

REJECTED SAMPLE

If one of the following is checked, resample.

[ ] Sample too old.
[ ] Temperature violation. (above 10° C)
[ ] Form incomplete. See circled item.
[ ] Date discrepancy.
[ ] Leaking Sample.
[ ] Quantity insufficient for testing.
[ ] Quantity too great to permit agitation.
[ ] Turbid sample.
[ ] Other _____

REASON FOR SAMPLING

Check One

[ ] Routine Sample [ ] Special Sample

[✓] Check Sample [ ] Monitor Sample

FOR INTERPRETATION OF RESULTS CALL THE NEW MEXICO ENVIRONMENT DEPARTMENT AT 393-4302.

ICE SAMPLE DOWN - 4°C

3330 cfu / 1 ml

SEND REPORT AND BILL TO THE FOLLOWING:

NAME NA

COMPANY _____

ADDRESS _____

Wayne Price

PHONE 393-6161

Bacteriologist

A FEE OF ~~$10.00~~ NA. PLUS TAX IS CHARGED FOR EACH TEST.

OFFICE USE ONLY

ACCT. #

CITY OF HOBBS
300 N. Turner
Hobbs, NM 88240
Lab # 9411

MICROBIOLOGICAL WATER REPORT

Date Received 6-6-96

Time Received 10:00

Time Test Began 7:47 AM Date 6-5-96

Time Test Ended 7:52 AM Date "

Received by A.D.

SAMPLE IDENTIFICATION

Quality Control No.: 96 M 36

County: LEA

Water Supply System Name: IOWA WHITE WATER WELL

WSS Code No.:

COLLECTION INFORMATION

Date Collected Mo. Day Yr.	Time Collected	Collected By
6 5 96	7:53 AM 6-5-96	WAYNE PRICE NMED

Collection Point: SPIGEL NEAR WELL HOUSE

TYPE OF SYSTEM

Check One

[ ] Public Non-Community [ ] Swimming Pool

[ ] Public Community [X] Private Well

Disinfected [ ] Yes [X] No

Residual: _____ mg / 1 (required for fecal test)

FLUSHED 5 MIN

REASON FOR SAMPLING

Check One

[ ] Routine Sample [ ] Special Sample

[✓] Check Sample [ ] Monitor Sample

TESTING REQUIRED

[ ] MF-Total Coliform [ ] MMO MUG-Total Coliform

TOTAL HETEROTROPHIC PLATE COUNTS

LABORATORY TEST RESULTS

Total Coliforms / 100 ml	Total Coliforms / 100 ml
[ ] Absent [ ] Present	[ ] Absent [ ] Present
Fecal Coliforms / 100 ml	E. coli / 100 ml
[ ] Absent [ ] Present	[ ] Absent [ ] Present

INVALID SAMPLE

If one of the following is checked, resample.

[ ] TNTC Non-Coliforms [ ] Confluent Growth

REJECTED SAMPLE

If one of the following is checked, resample.

[ ] Sample too old.
[ ] Temperature violation. (above 10° C)
[ ] Form incomplete. See circled item.
[ ] Date discrepancy.
[ ] Leaking Sample.
[ ] Quantity insufficient for testing.
[ ] Quantity too great to permit agitation.
[ ] Turbid sample.
[ ] Other _____

FOR INTERPRETATION OF RESULTS CALL THE NEW MEXICO ENVIRONMENT DEPARTMENT AT 393-4302.

ICE SAMPLE DOWN - 4°C

SEND REPORT AND BILL TO THE FOLLOWING:

NAME N/A

COMPANY _____

ADDRESS _____

PHONE _____

_____
Bacteriologist

A FEE OF $10 00 PLUS TAX IS CHARGED FOR EACH TEST. N/A

OFFICE USE ONLY

ACCT. #

CITY OF HOBBS
300 N. Turner
Hobbs, NM 88240
Lab # 9411

MICROBIOLOGICAL WATER REPORT

Date Received 6-3

Time Test Began 10:38 AM Date 6/3/96

Time Received 1405

Time Test Ended 10:48 AM Date "

Received by AD

SAMPLE IDENTIFICATION

Quality Control No.: 96 M 38

County: LEA

Water Supply System Name: IVAN WHITE WATER WELL 8 KYLE RD

WSS Code No.:

COLLECTION INFORMATION

Date Collected Mo. Day Yr.	Time Collected	Collected By
6 3 96	10:39 AM	LEA NMOCD

Collection Point: SPIGOT NEAR WELL HOUSE

TYPE OF SYSTEM

Check One

[ ] Public Non-Community [ ] Swimming Pool

[ ] Public Community [X] Private Well

Disinfected [X] Yes [ ] No

Residual: _____ mg / 1 (required for fecal test)

REASON FOR SAMPLING

Check One

[ ] Routine Sample [ ] Special Sample

[X] Check Sample [ ] Monitor Sample

TESTING REQUIRED

[X] MF-Total Coliform [ ] MMO MUG-Total Coliform

LABORATORY TEST RESULTS

Total Coliforms / 100 ml	Total Coliforms / 100 ml
[ ] Absent [ ] Present	[ ] Absent [ ] Present
Fecal Coliforms / 100 ml	E. coli / 100 ml
[ ] Absent [ ] Present	[ ] Absent [ ] Present

INVALID SAMPLE

If one of the following is checked, resample.

[ ] TNTC Non-Coliforms [ ] Confluent Growth

REJECTED SAMPLE

If one of the following is checked, resample.

[ ] Sample too old.
[ ] Temperature violation. (above 10° C)
[ ] Form incomplete. See circled item.
[ ] Date discrepancy.
[ ] Leaking Sample.
[ ] Quantity insufficient for testing.
[ ] Quantity too great to permit agitation.
[ ] Turbid sample.
[ ] Other _____

FOR INTERPRETATION OF RESULTS CALL THE NEW MEXICO ENVIRONMENT DEPARTMENT AT 393-4302.

SAMPLE BY: WAYNE PRICE - NMOCD ICE STRAIGHT DOWN 4°C

Anne 397-9315

Bacteriologist

SEND REPORT AND BILL TO THE FOLLOWING:

NAME IVAN WHITE

COMPANY _____

ADDRESS 8 KYLE ROAD - HOBBS-LOVINGTON HWY

LOVINGTON N.M. P.O. BOX 1051 LOVINGTON 88260

PHONE 396-3506

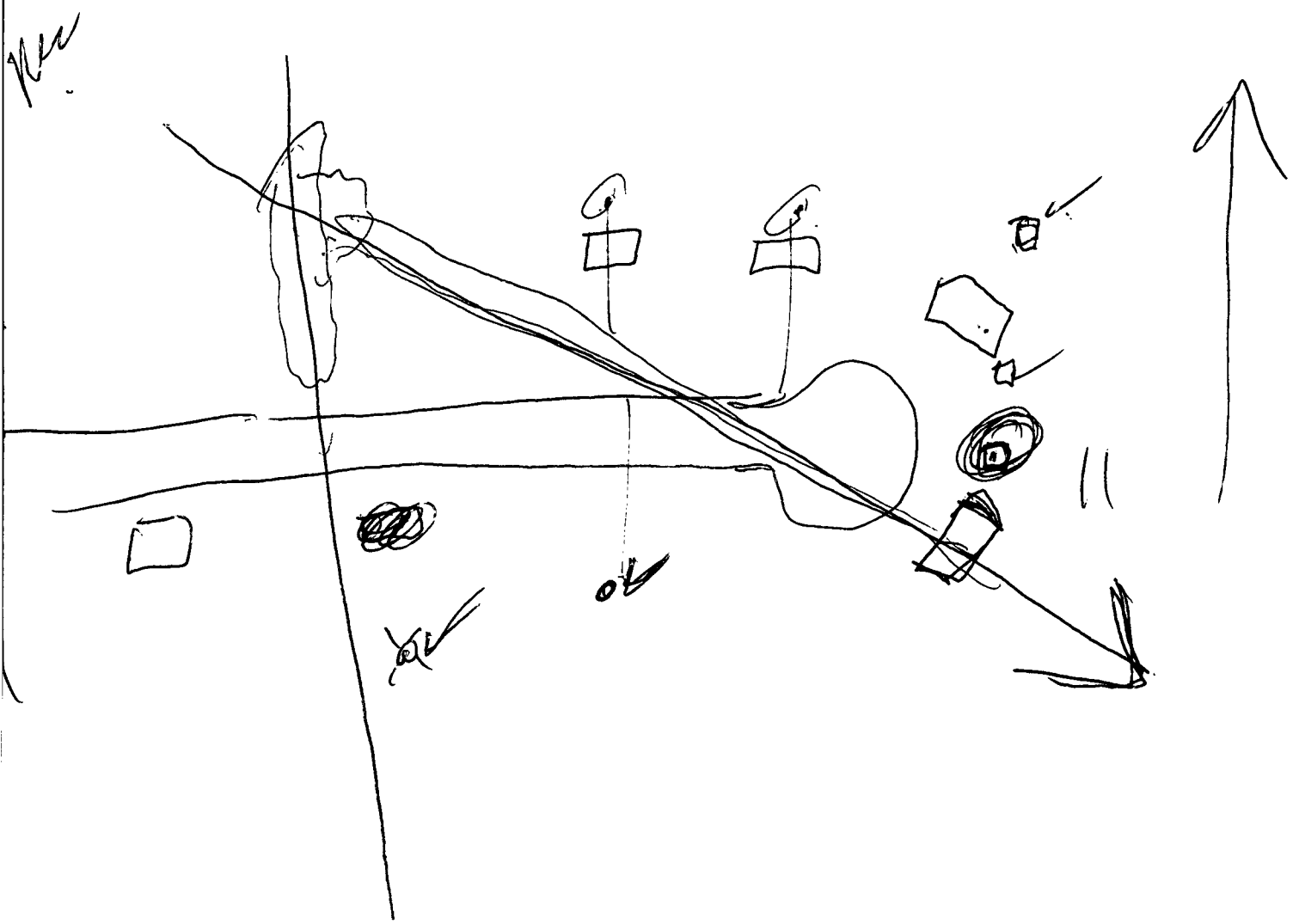
A FEE OF $10.00 PLUS TAX IS CHARGED FOR EACH TEST.

Bill To:

OFFICE USE ONLY

ACCT. #

Ä□a1Technical□Technical Document
StyleE²è!□
Ô□



NITROGEN, NITRATE, HIGH RANGE 500.0 nm NitraVer 5 AccuVac

white well

anne dean

5/31/96 3:16 PM
~~10/16/1995~~ - ~~7:04 PM~~

Sample	Value	Comment
1	0.0 mg/L	blnk
2	0.0 mg/L	blank
3	4.8 mg/L	well white
4	4.7 mg/L	well white

Hobbs city Avg's ≈ 4

CITY OF HOBBS
300 N. Turner
Hobbs, NM 88240
Lab # 9411

MICROBIOLOGICAL WATER REPORT

Time Test Began ~~10:43 AM~~ 1430 Date 6/3/96

Time Test Ended ~~10:48 AM~~ 1445 Date 6-4-96

Date Received ~~6~~ 6-3-96

Time Received 1425

Received by AD

SAMPLE IDENTIFICATION

Quality Control No. 96 [illegible] 38

County LEA

Water Supply System Name IVAN WHITE WATER WELL 8 KYLE RD

WSS Code No. ✓

COLLECTION INFORMATION

Date Collected Mo. Day Yr.	Time Collected	Collected By
6 3 96	10:49 AM	LWA-NMOCD

Collection Point SPIGET NEAR WELL HOUSE

TYPE OF SYSTEM

Check One

[ ] Public Non-Community [ ] Swimming Pool

[ ] Public Community [X] Private Well

Disinfected [X] Yes [ ] No

Residual: _____ mg / 1 (required for fecal test)

REASON FOR SAMPLING

Check One

[ ] Routine Sample [ ] Special Sample

[X] Check Sample [ ] Monitor Sample

TESTING REQUIRED

[ ] MF-Total Coliform [X] MMO MUG-Total Coliform

LABORATORY TEST RESULTS

Total Coliforms / 100 ml	Total Coliforms / 100 ml
[ ] Absent [ ] Present	[X] Absent [ ] Present
Fecal Coliforms / 100 ml	E. coli / 100 ml
[ ] Absent [ ] Present	[X] Absent [ ] Present

INVALID SAMPLE

If one of the following is checked, resample.

[ ] TNTC Non-Coliforms [ ] Confluent Growth

REJECTED SAMPLE

If one of the following is checked, resample.

[ ] Sample too old.
[ ] Temperature violation. (above 10° C)
[ ] Form incomplete. See circled item.
[ ] Date discrepancy.
[ ] Leaking Sample.
[ ] Quantity insufficient for testing.
[ ] Quantity too great to permit agitation.
[ ] Turbid sample.
[ ] Other _____

FOR INTERPRETATION OF RESULTS CALL THE NEW MEXICO ENVIRONMENT DEPARTMENT AT 393-4302.

SAMPLE BY: WAYNE PRICE - NMOCD ICE SAMPLE DOWN 4° C

Anna Dean
Bacteriologist

SEND REPORT AND BILL TO THE FOLLOWING:

NAME IVAN WHITE

COMPANY _____

ADDRESS 8 KYLE ROAD - HOBBS-LOVINGTON HWY

LOVINGTON N.M. P.O. BOX 1171 LOVINGTON 88260

PHONE 396-3506

A FEE OF $ 10.00 PLUS TAX IS CHARGED FOR EACH TEST.

Bill To:

OFFICE USE ONLY

ACCT. #

STATE OF NEW MEXICO
PURCHASE DOCUMENT

AGENCY CODE	DOCUMENT NUMBER
521	04-199-000559
DATE	**BUDGET FY**
02/25/04	04

VENDOR CODE: 911641772

VENDOR NAME AND ORDER ADDRESS

AMEC EARTH & ENVIRONMENTAL INC
8519 JEFFERSON NE

ALBUQUERQUE, NM 87113

DO NOT STAPLE BAR CODES

SHIP TO	BILL TO
OIL CONSERVATION DIVISION 1220 SO. ST. FRANCIS DRIVE SANTA FE, NM 87505	OIL CONSERVATION DIVISION 1220 SO. ST. FRANCES DRIVE SANTA FE, NM 87505

AGENCY CONTACT: SALLY MARTINEZ — PHONE NUMBER:

LN	FUND	AGCY	ORG/PRG	APPR UNIT	DIVISION	OBJECT	AMOUNT
01	199	521	P586	300	0700	3522	66000.00
Maximum of six accounting lines per purchase document						TOTAL	66,000.00

DFA APPROVED

FOR AGENCY USE:

LN	FUND	AGCY	ORG/PRG	APPR UNIT	DIVISION	OBJECT	AMOUNT
1	199	521	0750	301	0700	3522	66000.00
						TOTAL	66,000.00

☐ **PURCHASE REQUISITION** — BUYER:
(BIDS MUST BE REQUESTED FOR ITEMS OVER $1,500.00)

RECOMMENDED SOURCE & SPECIAL REMARKS:

☐ ESTABLISH ☐ RENEWAL NO.:

☒ **CONTRACT , PRICE AGREEMENT, PURCHASE ORDER OTHER THAN PROFESSIONAL SERVICE CONTRACTS:**
(APPROVED VENDORS MUST BE USED FOR ITEMS UNDER CONTRACT)

C/PA /PO# 408050918283 EXPIRES: 112304

☐ **DIRECT PURCHASE ORDER**
(ONLY VALID FOR PURCHASES $1,500.00 AND UNDER)

☐ **EXEMPT FROM THE NM PROCUREMENT CODE**
PURSUANT TO SECTION _____ *NMSA, 1978.*

☐ **EXCLUDED FROM PROCUREMENT THROUGH STATE PURCHASING**
PURSUANT TO SECTION _____ *NMSA, 1978.*

☐ **FOR ENCUMBERING PURPOSES ONLY**
REASON: _____

APPROVAL 1	DATE	APPROVAL 2	DATE

AGENCY APPROVAL - I certify that the proposed purchase represented by this document is authorized by and is made in accordance with all State (and if applicable Federal) legislation, rules and regulations. I further certify that adequate unencumbered cash and budget expenditure authority exists for this proposed purchase and all other outstanding purchase commitments and accounts payable.

AGENCY AUTHORIZED SIGNATURE: DATE:

Generated by : New Mexico Energy, Minerals and Natural Resources. Advantage Web System Version 2.49 06/18/02

① VENDOR/SPD(PRONLY) ② DFA COPY ③ AGENCY COPY ④ AGENCY COPY

AGENCY CODE	DOCUMENT NUMBER
521	04-199-000559
DATE	BUDGET FY
02/25/04	04

STATE OF NEW MEXICO PURCHASE DOCUMENT CONTINUATION SHEET

TERMS	
DELIVERY DATE 02/25/04	FOB D
BUDGET VERIFIED BY:	

AGENCY NAME ENERGY, MINERALS & NAT RES

COMM LN	QUANTITY	UNIT	COMMODITY CODE	ACCT LN	ARTICLE AND DESCRIPTION	UNIT COST	TOTAL COST
1	1.0000	EACH	CCCC		GROUNDWATER INVESTIGATION-SHANE & MORGAN REAVES SITE	66000.0000	66000.00

Generated by : New Mexico Energy, Minerals and Natural Resources. Advantage Web System Version 2.49 06/18/02

TOTAL 66,000.00

(1) VENDOR (PRONLY) (2) DFA COPY (3) AGENCY COPY (4) AGENCY COPY

Attn: To: Marlyne K. Oil Conservation OCD

STATE OF NEW MEXICO
GENERAL SERVICES DEPARTMENT

CONTRACT VENDOR(S)

****
* CONTRACT *
****

SITE MAINTENANCE & MONITORING

6 VENDORS (SEE PAGE -2-)

RECEIVED
JAN 16 2004
OIL CONSERVATION DIVISION

CONTRACT NO: 40-805-09-18283
COMMODITY CODE(S): 72002

BUYER: ELIZABETH OLONA
(505) 827-0480

SEALED BID OPENING * FORMAL
STATE PURCHASING AGENT'S OFFICE
DATE: 10/15/03
****

SHIP TO:
NMDOT AS SPECIFIED
LOCATION AS DESCRIBED
DESCRIBED IN BID
SANTA FE NM 87504-1149

THIS CONTRACT IS MADE SUBJECT TO THE TERMS AND CONDITIONS SHOWN ON THE REVERSE SIDE OF THIS PAGE.

INVOICE/BILL TO:
NMDOT AS SPECIFIED
LOCATION AS DESCRIBED
DESCRIBED IN BID
SANTA FE NM 87504-1149

THE TERM OF THIS CONTRACT SHALL BE NOV 24, 2003 THRU NOV 23, 2004

CONTACT PERSON FOR DELIVERY INSTRUCTIONS OF ITEM(S) ON THIS CONTRACT: KATHRYN KRETZ (505) 827-0705

ACCEPTED FOR THE STATE OF NEW MEXICO

NEW MEXICO STATE PURCHASING AGENT DATE: 11/24/03

PURCHASING DIVISION
JOSEPH MONTOYA BLDG, RM. 2016
1100 ST. FRANCIS DR. 87505
P.O. BOX 26110
SANTA FE, NEW MEXICO 87502-0110

STATE OF NEW MEXICO
GENERAL SERVICES DEPARTMENT
PURCHASING DIVISION

CONTRACT

ARTICLE I - STATEMENT OF WORK
Contract to provide requirements as indicated in specifications

ARTICLE II - TERM
The term of this Contract will be as indicated in specifications

ARTICLE III - TERMINATION
This Contract may be terminated by either signing party upon written notice by either party to the other at least thirty (30) days in advance of the date of termination. Termination of this contract, however, shall not affect any outstanding orders. This provision is not exclusive and shall not waive other rights and remedies afforded either party in the event of breach of contract or default. In such instances the contract may be cancelled effective immediately.

ARTICLE IV - AMENDMENT
This Contract may be amended by mutual agreement of the NM State Purchasing Agent and the contractor upon written notice by either party to the other. An amendment to this Contract **SHALL NOT AFFECT ANY OUTSTANDING ORDERS** issued prior to the effective date of the amendment as mutually agreed upon, and as published by the NM State Purchasing Agent. Amendments affecting price adjustments and/or extension of contract expiration are not allowed unless specifically provided for in bid and contract documents.

ARTICLE V - PRICE SCHEDULE
Price(s) as listed are firm.

ARTICLE VI - INDEMNITY CLAUSE
Contractor shall indemnify and hold harmless the State, its officers and employees, against liability, claims, damages, losses or expenses arising out of bodily injury to persons or damage to property caused by, or resulting from, contractor's and/or its employees, own negligent act(s) or omissions(s) while contractor, and/or its employees, perform(s) or fails to perform its obligations and duties under the terms and conditions of this agreement. This save harmless and indemnification clause is subject to the immunities, provisions, and limitations of the tort claims act (41-4-1, et seq., N.M.S.A. 1978 comp.) and section 57-7-1 N.M.S.A. 1978 comp. and any amendments thereto.

It is specifically agreed between the parties executing this agreement that it is not intended by any of the provisions of any part of the agreement to create the public or any member thereof a third party beneficiary or to authorize anyone not a party to the agreement to maintain a suit(s) for wrongful death(s) bodily and/or personal injury(ies) to person(s), damage(s) to property(ies) and/or any other claims(s) whatsoever pursuant to the provisions of this agreement.

Vendor shall provide all insurance necessary to employees on the work site, including but not limited to worker's compensation.

ARTICLE VII - CONTRACTOR AGREEMENT

Contractor agrees to:

A. Furnish all equipment, material, labor and tools, required to perform the work specified.
B. Provide competent supervision and skilled personnel to perform all work in progress.
C. Comply with all local, state, and federal laws governing safety, health and sanitation. The contractor shall provide all safeguards, safety devices and protective equipment, and take any other needed actions necessary to protect the life and health of employees on the job and the safety of the public, and to protect the property of the state of New Mexico in connection with the performance of the work covered by this contract.
D. Provide the workers adequate insurance, including but not limited to worker's compensation.
E. Make necessary arrangements for storage of his/her tools and/or equipment. The state agency will not be responsible for any lost or stolen property.
F. Be responsible for all cleanup work on the project site and at the equipment storage area (s) prior to final inspection and acceptance.
G. Comply with all applicable codes for this type of work.
H. Be held liable for any damages which occur because of his/her negligence or that of his/her employees.

CONTRACTOR LICENSE NUMBER (IF APPLICABLE) _____ CLASSIFICATION: _____.

CONTRACT VENDORS:

(1)-5080420 505-821-1801 PAY DISC: 30 DAYS NET
AMEC EARTH & ENVIRONMENTAL INC FOB: DESTINATION
8519 JEFFERSON NE DELIVERY: AS REQUESTED

ALBUQUERQUE NM 87113-0000 TAX-ID - [redacted]

(2)-5132396 505-243-3200 PAY DISC: 45 DAYS NET
CAMP DRESSER & MCKEE INC FOB: DESTINATION
121 TIJERAS AVE NE DELIVERY: USPS
SUITE 1000
ALBUQUERQUE NM 87102-0000 TAX-ID -

(3)-5525755 505-246-1600 PAY DISC: NET 30 DAYS
INTERA INC FOB: DESTINATION
6501 AMERICAS PKWY NE #820 DELIVERY: 2 WEEKS

ALBUQUERQUE NM 87110-0000 TAX-ID -

(4)-5422702 505-334-7373 PAY DISC: NET 30-DAYS
KLEINFELDER INC FOB: DESTINATION
8300 JEFFERSON NE STE B DELIVERY: AS REQUESTED

ALBUQUERQUE NM 87113-0000 TAX-ID -

(5)-5187719 505-268-2661 PAY DISC: NET 30
RESPEC INC FOB: DESTINATION
4775 INDIAN SCHOOL RD NE DELIVERY: AS REQUESTED
SUITE 300
ALBUQUERQUE NM 87110-0000 TAX-ID -

(7)-5293090 505-884-5050 PAY DISC: NET
WESTON SOLUTIONS INC FOB: DESTINATION
6565 AMERICAS PKWY NE DELIVERY: AS REQUESTED
SUITE 200
ALBUQUERQUE NM 87110-0000 TAX-ID -

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE

TERM OF THIS CONTRACT SHALL BE FOR ONE (1) YEAR FROM DATE OF AWARD WITH OPTION TO EXTEND FOR THREE (3) ADDITIONAL YEARS, ON A YEAR BY YEAR BASIS, BY MUTUAL AGREEMENT OF BOTH PARTIES AND THE APPROVAL OF THE NEW MEXICO PURCHASING DIRECTOR AT THE SAME PRICE, TERMS AND CONDITIONS. M001

STATE WIDE MULTIPLE SITE MONITORING AND REPORTING AT VARIOUS SITES INCLUDING TUCUMCARI, SANTA ROSA, WILLIAMSBURG, CARLSBAD, "OLD" GALLUP, "OLD" BELEN MAINTENANCE PATROL YARDS AND OTHER SITES AS REQUIRED. AWARD WILL BE TO LOWEST RESPONSIVE BIDDER, "ALL OR NONE."

SCOPE OF WORK:
WORK SHALL CONSIST OF WORKPLAN PREPARATION, SAMPLING FOR LABORATORY TESTING OF GROUNDWATER IN ON-SITE WELLS AND SITE SOIL FOR CONTAMINATION BY DIESEL, GASOLINE SALT OR OTHER CONTAMINANTS. QUARTERLY REPORTS IN THREE (3) COPIES ARE REQUIRED PER SITE. NO "MARK-UP" OF SUBCONTRACTOR COSTS SHALL BE ALLOWED.

PREPARATION AND MANAGEMENT OF WORKPLANS, INCLUDING COORDINATION WITH THE NEW MEXICO ENVIRONMENT DEPARTMENT. MANAGEMENT OF FIELD AND LABORATORY WORK, INCLUDING PREPARATION OF REPORTS AND C.A.F. CLAIMS, UNDER THE SUPERVISION OF A N.M.CERTIFIED SCIENTIST.

SOIL AND GROUNDWATER MONITORING OF EXSITING SITE WELLS AND STOCKPILES BY SAMPLING, LABORATORY TESTING AND REPORTING 4 TIMES YEARLY. EMERGENCY AND CONTINGENCY MANAGEMENT OF COST NOT ANTICIPATED IN THIS SCOPE OF WORK SUCH AS DAMAGE TO SURFACE AND SUBSURFACE EQUIPMENT AND WELLS CAUSED BY EARTHQUAKE, VANDALISM, VIOLENT WEATHER OR OTHER EVENTS.ELECTRICAL, PLUMBING, MASONRY, CARPENTRY, DRILLING AND EXCAVATION WORK MAY BE REQUIRED.

	TASK DESCRIPTION	FREQUENCY
A.	WORKPLAN PREPARATION	YEARLY
B.	GROUNDWATER SAMPLING*	QUARTER YEARLY
C.	REPORTING	QUARTER YEARLY

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE

D. C.A.F.CLAIM PREPARATION.....TWICE YEARLY

E. CONTIGENCY EVENTS & SOIL SAMPLING*.....AS REQUIRED

*COSTS OF LABORATORY ANALYSIS SHALL BE COORDINATED WITH AND BY NMSHTD USING A SEPARATE PRICE AGREEMENT FOR WATER, SOIL AND AIR SAMPLES.

HOURLY RATES MUST CONFORM TO THE CATEGORIES DEFINED HEREIN. INDIVIDUALS ASSIGNED TO A TASK MUST MEET THE MINIMUM EDUCATION/EXPERIENCE CRITERIA. PAYMENT WILL BE BASED ON TASK PERFORMED. M002

EXPENSES

EXPENSES NOT EXPLICITLY PRE-APPROVED MAY BE BILLED TO THE DEPARTMENT AT RATES THAT DO NOT EXCEED THE MAXIMUM LISTED BELOW FOR RENTAL OR PURCHASE. THE TOTAL BILLABLE COST FOR RENTAL EQUIPMENT SHALL NOT EXCEED 120% OF THE PURCHASE PRICE. EXPENSES AND ORDINARY INVESTIGATIVE AND REMEDIAL EQUIPMENT NOT LISTED MAY BE BILLED AT RATES NOT TO EXCEED USUAL AND CUSTOMARY RENTAL OR LEASE RATES, OR AT COST. SPECIALIZED INVESTIGATIVE OR REMEDIAL EQUIPMENT MANUFACTURED IN-HOUSE MAY BE BILLED AT COST. SHIPPING, TELEPHONE & ELECTRICAL CHARGES SHALL BE BILLED AT COST, INVOICES TO BE PROVIDED QUARTERLY TO USER FACILITY.

TAX NOTE: PRICE SHALL NOT INCLUDE STATE GROSS RECEIPTS TAX OR LOCAL OPTION TAX(ES). SUCH TAX OR TAXES SHALL BE ADDED TO EACH INDIVIDUAL ITEM BID AT APPROPRIATE RATE. M003

BONDING:
BID SECURITY IN THE FORM OF A SURETY BOND EXECUTED BY A SURETY COMPANY AUTHORIZED TO DO BUSINESS IN THE STATE OF NEW MEXICO SHALL BE REQUIRED IN THE AMOUNT OF $10,000.00.

"PRIOR TO ISSUANCE OF A CONTRACT ORDER, THE SUCCCESSFUL AWARDED CONTRACTOR MUST PROVIDE A PERFORMANCE BOND AND A PAYMENT AND MATERIALS BOND EXECUTED BY A SURETY COMPANY AUTHORIZED TO DO BUSINESS IN THE STATE OF NEW MEXICO EQUAL TO 100% OF THE TOTAL CONTRACT ORDER. THE CONTRACTOR MUST DELIVER SAID BONDS TO THE ORDERING HIGHWAY DISTRICT'S PURCHASING OFFICE WITHIN TEN (10) CALENDAR DAYS AFTER NOTIFICATION OF A FORTHCOMING CONTRACT ORDER. FAILURE TO

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE

COMPLY SHALL RESULT IN THE CONTRACT ORDER BEING ISSUED TO ANOTHER CONTRACTOR".

CONTRACTOR(S) FURTHER AGREES TO:

A. FURNISH ALL EQUIPMENT, LABOR AND TOOLS REQUIRED TO PERFORM THE WORK SPECIFIED.
B. PROVIDE COMPETENT SUPERVISION AND SKILLED PERSONNEL TO CARRY ON ALL WORK IN PROGRESS.
C. COMPLY WITH ALL LOCAL, STATE AND FEDERAL LAWS GOVERNING SAFETY, HEALTH AND SANITATION. THE CONTRACTOR SHALL PROVIDE ALL SAFEGUARDS, SAFETY DEVICES AND PROTECTIVE EQUIPMENT, AND TAKE ANY OTHER NEEDED ACTIONS NECESSARY TO PROTECT THE LIFE AND HEALTH OF EMPLOYEES ON THE JOB AND THE SAFETY OF THE PUBLIC, AND TO PROTECT THE PROPERTY OF THE STATE OF NEW MEXICO IN CONNECTION WITH THE PERFORMANCE OF THE WORK COVERED BY THIS CONTRACT.
D. PROVIDE WORKMEN ADEQUATE INSURANCE, INCLUDING BUT NOT LIMITED TO WORKMAN'S COMPENSATION.
E. MAKE NECESSARY ARRANGEMENTS FOR STORAGE OF HIS TOOLS AND/OR EQUIPMENT. THE NMSHTD WILL NOT BE RESPONSIBLE FOR ANY LOST OR STOLEN PROPERTY.
F. BE RESPONSIBLE FOR ALL CLEANUP WORK ON THE PROJECT SITE(S) AND AT THE EQUIPMENT STORAGE AREA(S) PRIOR TO FINAL INSPECTION AND ACCEPTANCE.
G. COMPLY WITH ALL APPLICABLE CODES FOR THIS TYPE OF WORK.
H. BE HELD LIABLE FOR ANY DAMAGES WHICH OCCUR BECAUSE OF HIS NEGLIGENCE OR THAT OF HIS EMPLOYEES.

THIS IS A PUBLIC WORKS CONTRACT, SUBJECT TO THE PROVISIONS OF THE PUBLIC WORKS MINIMUM WAGE ACT, SECTIONS 13-14-11 THRU 13-4-17, ET SEQ. NMSA 1978 AS AMENDED. MINIMUM WAGE RATES AS DETERMINED AND PUBLISHED BY THE STATE LABOR COMMISSION, SANTA FE, NM SHALL BE IN EFFECT AND UTILIZED BY THE CONTRACTOR DURING THE LIFE OF THIS CONTRACT. WAGE DECISION NO. _____ DATED _____ IS A PART OF THIS AGREEMENT.

A POTENTIAL CONTRACTOR OR THE CONTRACTOR AGREES TO COMPLY WITH STATE LAWS AND RULES PERTAINING TO WORKER'S COMPENSATION INSURANCE COVERAGE FOR ITS EMPLOYEES, IF CONTRACTOR FAILS TO COMPLY, WITH THE WORKER'S COMPENSATION ACT AND APPLICABLE RULES WHEN REQUIRED TO DO SO, THE CONTRACT MAY BE CANCELLED EFFECTIVE IMMEDIATELY.

CONTRACTOR(S) SHALL INDEMNIFY AND HOLD HARMLESS THE STATE, ITS OFFICERS AND EMPLOYEES, AGAINST LIABILITY, CLAIMS, M004

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE

DAMAGES, LOSSES OR EXPENSES ARISING OUT OF BODILY INJURY TO PERSONS OR DAMAGE TO PROPERTY CAUSED BY, OR RESULTING FROM, CONTRACTOR(S) AND/OR ITS EMPLOYEES, OWN NEGLIGENT ACT(S) OR OMISSION(S) WHILE CONTRACTOR, AND/OR ITS EMPLOYEES, PERFORM(S) OR FAILS TO PERFORM IT'S OBLIGATIONS AND DUTIES UNDER THE TERMS AND CONDITIONS OF THIS AGREEMENT. THIS SAVE HARMLESS AND INDEMNIFICATION CLAUSE IS SUBJECT TO THE IMMUNITIES, PROVISIONS, AND LIMITATIONS OF THE TORT CLAIMS ACT (41-4-1, ET SEQ., N.M.S.A. 1978 COMP) AND SECTION 56-7-1, N.M.S.A. 1978 COMP. AND ANY AMENDMENTS THERETO. IT IS SPECIFICALLY AGREED BETWEEN THE PARTIES EXECUTING THIS AGREEMENT THAT IT IS NOT INTENDED BY ANY OF THE PROVISIONS OF ANY PART OF THE AGREEMENT TO CREATE THE PUBLIC OR ANY MEMBER THEREOF A THIRD PARTY BENEFICIARY OR TO AUTHORIZE ANYONE NOT A PARTY TO THE AGREEMENT TO MAINTAIN A SUIT(S) FOR WRONGFUL DEATH(S), BODILY AND/OR PERSONAL INJURY(IES) TO PERSON(S), DAMAGE(S) TO PROPERTY(IES) AND/OR ANY OTHER CLAIM(S) WHATSOEVER PURSUANT TO THE PROVISIONS OF THIS AGREEMENT.

THE CONTRACTOR SHALL PROCURE AND MAINTAIN AT THE CONTRACTOR'S EXPENSE INSURANCE OF THE KINDS AND IN THE AMOUNTS HEREIN PROVIDED. THIS INSURANCE SHALL BE PROVIDED BY INSURANCE COMPANIES AUTHORIZED TO DO BUSINESS IN NEW MEXICO AND SHALL COVER ALL OPERATIONS UNDER THE CONTRACT, WHETHER PERFORMED BY THE CONTRACTOR, THE CONTRACTOR'S AGENTS OR EMPLOYEES OR BY SUBCONTRACTORS. ALL INSURANCE PROVIDED SHALL REMAIN IN FULL FORCE AND EFFECT FOR THE ENTIRE PERIOD OF THE WORK, UP TO AND INCLUDING FINAL ACCEPTANCE, AND THE REMOVAL OF ALL EQUIPMENT AND EMPLOYEES, AGENTS AND SUBCONTRACTORS THEREFROM.

A) PUBLIC LIABILITY AND AUTOMOBILE LIABILITY INSURANCE.

1. GENERAL LIABILITY: BODILY INJURY LIABILITY AND PROPERTY DAMAGE LIABILITY INSURANCE APPLICABLE IN FULL TO THE SUBJECT PROJECT SHALL BE PROVIDED IN THE FOLLOWING MINIMUM AMOUNTS:

BODILY INJURY LIABILITY:

$1,000,000 EACH PERSON; $2,000,000 EACH OCCURRENCE (ANNUAL AGGREGATE)

PROPERTY DAMAGE LIABILITY:

$2,000,000 EACH OCCURRENCE (ANNUAL AGGREGATE)

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE

A. THE POLICY TO PROVIDE THIS INSURANCE IS TO BE WRITTEN ON A COMPREHENSIVE GENERAL LIABILITY FORM OR COMMERCIAL GENERAL LIABILITY FORM WHICH MUST INCLUDE THE FOLLOWING:

1. COVERAGE FOR LIABILITY ARISING OUT OF THE OPERATION OF INDEPENDENT CONTRACTORS.

2. COMPLETED OPERATION COVERAGE.

3. ATTACHMENT OF THE BROAD FORM COMPREHENSIVE GENERAL LIABILITY ENDORSEMENT.

B. IN THE EVENT THAT THE USE OF EXPLOSIVES IS A REQUIRED PART OF THE CONTRACT, THE CONTRACTORS INSURANCE MUST INCLUDE COVERAGE FOR INJURY TO OR DESTRUCTION OF PROPERTY ARISING OUT OF BLASTING OR EXPLOSION.

C. IN THE EVENT THAT A FORM OF WORK NEXT TO AN EXISTING BUILDING OR STRUCTURE IS A REQUIRED PART OF THE CONTRACT, THE CONTRACTOR'S INSURANCE MUST INCLUDE COVERAGE FOR INJURY TO OR DESTRUCTION OF PROPERTY ARISING OUT OF:

1. THE COLLAPSE OF OR STRUCTURAL INJURY TO BUILDINGS OR STRUCTURES DUE TO EXCAVATION, INCLUDING BURROWING, FILLING OR BACK-FILLING IN CONNECTION THEREWITH, OR TO TUNNELING, COFFERDAM WORK OR CAISSON WORK OR TO MOVING, SHORING, UNDERPINNING, RAZING OR DEMOLITION OF BUILDINGS OR STRUCTURES OR REMOVAL OR REBUILDING OF STRUCTUAL SUPPORTS THEREOF.

D. COVERAGE MUST BE INCLUDED FOR INJURY TO OR DESTRUCTION OF PROPERTY ARISING OUT OF INJURY TO OR DESTRUCTION OF WIRES, CONDUITS, PIPES, MAINS, SEWERS OR OTHER SIMILAR PROPERTY OR ANY APPARTUS IN CONNECTION THEREWITH BELOW THE SURFACE OF THE GROUND, IF SUCH INJURY OR DESTRUCTION IS CAUSED BY OR OCCURS DURING THE USE OF MECHANICAL EQUIPMENT FOR THE PURPOSE OF EXCAVATING, DIGGING OR DRILLING, OR TO INJURY TO OR DESTRUCTION OF PROPERTY AT ANY TIME RESULTING THEREFROM.

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE

2. AUTOMOBILE LIABILITY INSURANCE COVERAGE FOR THE CONTRACTOR (WHETHER INCLUDED IN THE POLICY PROVIDING GENERAL LIABILITY INSURANCE OR IN A SEPERATE POLICY) MUST PROVIDE LIABILITY FOR THE OWNERSHIP, OPERATION AND MAINTENANCE OF OWNED, NON-OWNED AND HIRED CARS. THE LIMITS OF LIABILITY INSURANCE SHALL BE PROVIDED IN THE FOLLOWING AMOUNTS:

BODILY INJURY LIABILITY:

$1,000,000 EACH PERSON:
$2,000,000 EACH OCCURRENCE
(ANNUAL AGGREGATE)

PROPERTY DAMAGE LIABILITY:

$2,000,000 EACH OCCURRENCE
(ANNUAL AGGREGATE)

B. WORKER'S COMPENSATION INSURANCE.

THE CONTRACTOR'S SHALL ALSO CARRY WORKER'S COMPENSATION INSURANCE OR OTHERWISE FULLY COMPLY WITH THE PROVISION OF THE NEW MEXICO WORKMEN'S COMPENSATION ACT AND OCCUPATIONAL DISEASE DISABLEMENT LAW.

IF THE CONTRACTOR IS AN "OWNER-OPERATOR" OF SUCH EQUIPMENT, IT IS AGREED THAT THE STATE OF NEW MEXICO ASSUMES NO RESPONSIBILITY, FINANCIAL OR OTHERWISE, FOR ANY INJURIES SUSTAINED BY THE "OWNER-OPERATOR" DURING THE PERFORMANCE OF SAID CONTRACT.

C. CERTIFICATE OF INSURANCE/DEPARTMENT AS ADDITIONAL INSURED. THE CONTRACTOR BEING AWARDED THE CONTRACT/PRICE AGREEMENT SHALL FURNISH EVIDENCE OF CONTRACTOR'S INSURANCE COVERAGE BY A CERTIFICATE OF INSURANCE. THE CERTIFICATE OF INSURANCE SHALL BE SUBMITTED PRIOR TO AWARD OF THE CONTRACT/PRICE AGREEMENT.

THE CONTRACTOR SHALL HAVE THE N.M. STATE

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE

HIGHWAY & TRANSPORTATION DEPARTMENT NAMED AS AN ADDITIONAL INSURED ON THE COMPREHENSIVE GENERAL LIABILITY FORM OR COMMERCIAL GENERAL LIABILITY FORM FURNISHED BY THE CONTRACTOR PURSUANT TO PARAGRAPH (A) 1. AND (A) 2., OF THIS SUBSECTION. THE CERTIFICATE OF INSURANCE SHALL STATE THAT THE COVERAGE PROVIDED UNDER THE POLICY IS PRIMARY OVER ANY OTHER VALID AND COLLECTIBLE INSURANCE.

THE CERTIFICATE OF INSURANCE SHALL ALSO INDICATE COMPLIANCE WITH THESE SPECIFICATIONS AND SHALL CERTIFY THAT THE COVERAGE SHALL NOT BE CHANGED, CANCELLED OR ALLOWED TO LAPSE WITHOUT GIVING THE DEPARTMENT THIRTY (30) DAYS WRITTEN NOTICE ALSO, A CERTIFICATE OF INSURANCE SHALL BE FURNISHED TO THE DEPARTMENT ON RENEWAL OF A POLICY OR POLICIES AS NECESSARY DURING THE TERMS OF THE CONTRACT. THE DEPARTMENT SHALL NOT ISSUE A NOTICE TO PROCEED UNTIL SUCH TIME AS THE ABOVE REQUIREMENTS HAVE BEEN MET.

D. UMBRELLA COVERAGE: THE INSURANCE LIMITS CITED IN THE ABOVE PARAGRAPHS ARE MINIMUM LIMITS. THIS SPECIFICATION IS IN NO WAY INTENDED TO DEFINE WHAT CONSTITUTES ADEQUATE INSURANCE COVERAGE FOR INDIVIDUAL CONTRACTOR. THE DEPARTMENT WILL RECOGNIZE FOLLOWING FORM EXCESS COVERAGE (UMBRELLA) AS MEETING THE REQUIREMENTS OF SUBSECTION (A) 1.A. OF SECTION, SHOULD SUCH INSURANCE OTHERWISE MEET ALL REQUIREMENTS OF SUCH SUBSECTIONS.

E. OTHER REQUIRED INSURANCE: THE CONTRACTOR SHALL PROCURE AND MAINTAIN, WHEN REQUIRED BY THE DEPT., FORM AND TYPES OF BAILEE INSURANCE SUCH AS, BUT NOT LIMITED TO, BUILDER'S RISK INSURANCE, CONTRACTOR'S EQUIPMENT INSURANCE, RIGGER'S LIABILITY PROPERTY INSURANCE, ETC. IN AN AMOUNT NECESSSARY TO PROTECT THE DEPARTMENT AGAINST CLAIMS, LOSSES AND EXPENSES ARISING FROM THE DAMAGE, DISAPPEARANCE

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE

OR DESTRUCTION OF PROPERTY OF OTHERS IN THE CARE, CUSTODY OR CONTROL OF THE CONTRACTOR, INCLUDING PROPERTY OF OTHERS BEING INSTALLED, ERECTED OR WORKED UPON BY THE CONTRACTOR, HIS AGENTS OR SUB-CONTRACTORS.

F. RAILROAD INSURANCE: IN THE EVENT THAT RAILROAD PROPERTY IS AFFECTED BY THE SUBJECT CONTRACT, THE CONTRACTOR, IN ADDITION TO THE ABOVE REQUIREMENTS, SHALL BE REQUIRED TO FURNISH A RAILROAD PROTECTIVE LIABILITY POLICY IN THE NAME OF THE RAILROAD COMPANY INVOLVED. IN ADDITION, ON THOSE RAILS THAT ARE USED BY THE NATIONAL RAILROAD PASSENGER CORPORATION (NRPC), THE CONTRACTOR WILL ALSO OBTAIN A RAILROAD PROTECTIVE LIABILITY POLICY IN THE NAME OF NRPC.

THE LIMITS OF LIABILITY FOR THE RAILROAD PROTECTIVE LIABILITY POLICY (OR POLICIES) MUST NE NEGOTIATED WITH THE RAILROAD COMPANY ON A HAZARD AND RISK BASIS IN NO EVENT WILL THE LIMITS EXCEED THE FOLLOWING:

BODILY INJURY LIABILITY, PROPERTY DAMAGE LIABILITY:

$2,000,000 EACH OCCURANCE

LIABILITY AND PHYSICAL DAMAGE TO PROPERTY:

$6,000,000 AGGREGATE

THE LIMITS OF LIABILITY STATED ABOVE APPLY TO THE COVERAGE AS SET FORTH IN THE RAILROAD PROTECTIVE LIABILITY ENDORSEMENT FORM, SUBJECT TO THE TERMS, CONDITIONS AND EXCLUSIONS FOUND IN THE FORM.

THE POLICY MUST AFFORD COVERAGE AS PROVIDED IN THE STANDARD RAILROAD PROTECTIVE LIABILITY ENDORSEMENT (AASHTO FORM).

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THE CONTRACTOR AGREES TO COMPLY WITH STATE LAWS AND RULES PERTAINING TO WORKERS' COMPENSATION INSURANCE COVERAGE FOR

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE

ITS EMPLOYEES. IF CONTRACTOR FAILS TO COMPLY WITH THE WORKERS' COMPENSATION ACT AND APPLICABLE RULES WHEN REQUIRED TO DO SO, THE CONTRACT MAY BE CANCELLED EFFECTIVE IMMEDIATELY.

THE PRICE QUOTED HEREIN REPRESENTS THE TOTAL COMPENSATION TO BE PAID BY THE STATE FOR GOODS AND/OR SERVICES PROVIDED. IT IS UNDERSTOOD THAT THE PARTY PROVIDING SAID GOODS AND/OR SERVICES TO THE STATE IS RESPONSIBLE FOR PAYMENT OF ALL COSTS OF LABOR, EQUIPMENT, TOOLS, MATERIALS, FEDERAL TAX, PERMITS, LICENSES, FEES AND ANY OTHER ITEMS NECESSARY TO COMPLETE THE WORK PROVIDED. THE PRICES QUOTED IN THIS CONTRACT INCLUDE AN AMOUNT SUFFICIENT TO COVER SUCH COSTS. M005

THE CONDITIONS AND SPECIFICATIONS SENT OUT IN THE INVITATION TO BID ARE INSEPARABLE AND INDIVISIBLE. ANY VENDOR, BY SUBMITTING A BID, AGREES TO BE BOUND BY ALL SUCH CONDITIONS OR SPECIFICATIONS SENT OUT IN THIS INVITATION TO BID, AND ALL OTHER DOCUMENTS REQUIRED TO BE SUBMITTED, SHALL BE RETURNED BY THE VENDOR IN HIS BID PACKAGE. FAILURE TO DO SO OR ANY ATTEMPT TO VARY OR CHANGE THE CONDITIONS OR SPECIFICATIONS OF THE BID SHALL, AT THE DISCRETION OF THE STATE CONSTITUTE GROUNDS FOR REJECTION OF THE ENTIRE BID.

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BIDDERS SHALL PROMPLY NOTIFY THE NMSHTD OF ANY AMBIGUITY, INCONSISTENCY OR ERROR WHICH THEY MAY DISCOVER UPON THE EXAMINATION OF THE BIDDING DOCUMENTS, OR OF THE SITE AND LOCAL CONDITIONS.

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THE OWNER SHALL HAVE THE RIGHT TO REJECT ANY OR ALL BIDS, AND IN PARTICULAR TO REJECT A BID NOT ACCOMPANIED BY DATA REQUIRED BY THE BIDDING DOCUMENTS, OR A BID IN ANY WAY INCOMPLETE OR IRREGULAR.

CONTRACTOR SHALL BE CONSIDERED AN INDEPENDENT CONTRACTOR AND NOT AN EMPLOYEE OF THE STATE OF NEW MEXICO. HOWEVER, DIRECTIONS AS TO TIME AND PLACE OF PERFORMANCE AND COMPLIANCE WITH RULES AND REGULATIONS MAY BE REQUIRED BY THE USING AGENCY.

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PAYMENT FOR SERVICES PERFORMED WILL BE INITIATED UPON FINAL ACCEPTANCE AND INSPECTION OF WORK.

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WITHIN FIFTEEN DAYS AFTER THE DATE THE DEPARTMENT RECEIVES WRITTEN NOTICE FROM THE CONTRACTOR THAT PAYMENT IS REQUESTED FOR SERVICES, CONSTRUCTION OR ITEMS OF TANGIBLE PERSONAL PROPERTY DELIVERED ON SITE AND RECEIVED, THE DEPARTMENT

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE

SHALL ISSUE A WRITTEN CERTIFICATION OF COMPLETE OR PARTIAL ACCEPTANCE OR REJECTION OF THE SERVICES, CONSTRUCTION OR ITEMS OF TANGIBLE PERSONAL PROPERTY. IF THE DEPARTMENT FINDS THAT THE SERVICES, CONSTRUCTION OR ITEM OF TANGIBLE PERSONAL PROPERTY ARE NOT ACCEPTABLE, IT SHALL, WITHIN THIRTY (30) DAYS AFTER THE DATE OF RECEIPT OF WRITTEN NOTICE FROM THE CONTRACTOR THAT PAYMENT IS REQUESTED, PROVIDE TO THE CONTRACTOR A LETTER OF EXCEPTION EXPLAINING THE DEFECT OR OBJECTION TO THE SERVICES, CONSTRUCTION OR DELIVERED TANGIBLE PERSONAL PROPERTY ALONG WITH DETAILS OF HOW THE CONTRACTOR MAY PROCEED TO PROVIDE REMEDIAL ACTION. UPON CERTIFICATION BY THE DEPARTMENT THAT THE SERVICES, CONSTRUCTION OR ITEMS OF PERSONAL PROPERTY HAVE BEEN RECEIVED AND ACCPETED, PAYMENT SHALL BE TENDERED TO THE CONTRACTOR WITHIN THIRTY (30) DAYS AFTER THE DATE OF CERTIFICATION. IF PAYMENT IS MADE BY MAIL, THE PAYMENT SHALL BE DEEMED TENDERED ON THE DATE IT IS POSTMARKED. AFTER THE THIRTIETH DAY FROM THE DATE THAT WRITTEN CERTIFICATION OF ACCEPTANCE IS ISSUED, LATE PAYMENT CHARGES SHALL BE PAID ON THE UNPAID BALANCE DUE ON THE CONTRACT TO THE CONTRACTOR AT THE RATE OF 1-1/2 PERCENT PER MONTH. FOR PURCHASES FUNDED BY STATE OR FEDERAL GRANTS TO LOCAL PUBLIC BODIES, IF THE LOCAL PUBLIC BODY HAS NOT RECEIVED THE FUNDS FROM THE FEDERAL OR STATE FUNDING AGENCY, BUT HAS ALREADY CERTIFIED THAT THE SERVICES, CONSTRUCTION OR ITEMS OF TANGIBLE PERSONAL PROPERTY HAVE BEEN RECEIVED AND ACCEPTED, PAYMENTS SHALL BE TENDERED TO THE CONTRACTOR WITHIN FIVE (5) WORKING DAYS OF RECEIPT OF FUNDS FROM THAT FUNDING AGENCY.

FINAL PAYMENTS SHALL BE MADE WITHIN THIRTY DAYS AFTER THE WORK HAS BEEN APPROVED AND ACCEPTED BY THE DEPARTMENT'S SECRETARY OR HIS DULY AUTHORIZED REPRESENTATIVE.

CONTRACTOR NOTE: M006
NO PERSON SHALL ACT AS A CONTRACTOR WITHOUT A LICENSE ISSUED BY THE (CONSTRUCTION INDUSTRIES) DIVISION CLASSIFIED TO COVER THE TYPE OF WORK TO BE UNDERTAKEN. NO BID ON A CONTRACT SHALL BE SUBMITTED UNLESS THE CONTRACTOR HAS A VALID LICENSE ISSUED BY THE (CONSTRUCTION INDUSTRIES) DIVISION TO BID AND PERFORM THE TYPE OF WORK TO BE UNDERTAKEN, § 60-13-12, NMSA 1978.
CONTRACTORS LICENSE NO. _____.

GS-29 LICENSE IS REQUIRED.

ALL WORK SHALL BE PERFORMED DURING NORMAL WORKING HOURS, M007
WEEKDAYS FROM 7:30 A.M. THRU 4:00 P.M.. NO WORK SHALL BE

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE

PERFORMED ON SATURDAYS, SUNDAYS, OR HOLIDAYS, UNLESS PRIOR APPROVAL IS OBTAINED FROM THE NMSHTD. COORDINATION FOR ALL WORK PERFORMED WILL BE MADE BY CONTACTING THE STATE MAINTENANCE BUREAU, P.O. BOX 1149, SANTA FE, NM 87504-1149. (505) 827-5699.

VENDORS ARE REQUESTED TO INDICATE THEIR FEDERAL TAX ID, NM CRS OR SOCIAL SECURITY NUMBER _____. M008

0001 50.0 HOURLY PRINCIPAL -- GRADUATE SCIENCE DEGREE OR ENGINEERING DEGREE, PLUS FIVE (5) YEARS EXPERIENCE, OR AT LEAST TEN (10) YEARS EXPERIENCE IN INVESTIGATION AND REMEDIATION OF CONTAMINATION IN SOIL AND GROUND WATER. ADMINISTRATIVE AND/OR PROFESSIONAL HEAD OF ORGANIZATION. DIRECTS PROFESSIONAL STAFF. CHARGES A VERY LIMITED NUMBER OF HOURS PER SITE, AS IN REVIEW OF PROJECT DOCUMENTS.

100.000000 (1)

105.000000 (2)

115.000000 (3)

100.000000 (4)

75.000000 (5)

115.280000 (7)

0002 200.0 HOURLY SENIOR SCIENTIST/ENGINEER--SCIENCE OR ENGINEERING DEGREE AND AT LEAST THREE (3) YEARS APPLICABLE EXPERIENCE. PROFESSIONAL REGISTRATION WHEN APPLICABLE. SENIOR TECHNI-

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE

** ITEM 0002 CONTINUED **

CAL LEADER. DEVELOPS TECHNICAL AND BUDGETARY APPROACH TO WORK ORDER. DUTIES INCLUDE AQUIFER CHARACTERIZATION, REVIEW OF TECHNICAL REPORTS AND REMECIAL ACTION PLANS. SUPERVISE WORK ACTIVITIES OF LOWER LEVEL PROFESSIONAL STAFF. COORDINATES AND COMMUNICATES WITH AGENCY PERSONNEL AND CLIENT REGARDING CONTRACTS, GENERAL DIRECTION AND PROBLEMS AT WORK SITE. GENERALLY PERFORMS LIMITED FIELD WORK. PERFORMS DESIGN AND INVESTIGATION WORK IN TECHNICALLY COMPLEX SITUATIONS.

72.000000 (1)

95.000000 (2)

95.000000 (3)

85.000000 (4)

70.000000 (5)

98.900000 (7)

0003 200.0 HOURLY PROJECT SCIENTIST/ENGINEER/MANAGER--
ENGINEERING, HYDROLOGY,GEOLOGY, OR A RELATED SCIENCE DEGREE AND AT LEAST TWO (2) YEARS APPLICABLE EXPERIENCE. INDENTIFIES PROBLEMS AND DEVELOPS INVESTIGATIVE AND REMEDIAL SOLUTIONS TO WORK SITE SITUATIONS. CONSULTS WITH HIGHER LEVEL PROFESSIONAL STAFF. PREPARES WORKPLANS, COST ESTIMATES AND

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE

** ITEM 0003 CONTINUED **

REPORTS. PERFORMS MODELING. ANALYZES AND INTERPRETS FIELD DATA. SUPERVISES LOWER LEVEL REMEDIATION ACTIVITIES. FREQUENTLY COMMUNICATES WITH AGENCY PERSONNEL AND NMED.

59.000000 (1)

82.500000 (2)

70.000000 (3)

85.000000 (4)

63.000000 (5)

89.110000 (7)

0004 800.0 HOURLY STAFF SCIENTIST/ENGINEER--ENGINEERING, GEOLOGY, HYDROLOGY OR RELATED SCIENCE DEGREE AND AT LEAST ONE YEAR EXPERIENCE. IMPLEMENTS FIELD WORK FOR ON-SITE INVESTIGATION AND REMEDIATION ACTIVITIES INCLUDING SITE CHARACTERIZATION, DRILLING SUPERVISION, AND MONITORING WELL INSTALLATION AND SAMPLING ACTIVITIES. ASSISTS IN MODELING, HYDROGEOLOGIC DATA ANALYSIS, AND REPORT PREPARATION. CONSULTS WITH HIGHER LEVEL PROFESSIONAL STAFF

49.000000 (1)

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE
			** ITEM 0004 CONTINUED **		
				66.000000	(2)
				60.000000	(3)
				60.000000	(4)
				50.000000	(5)
				82.230000	(7)
0005	1600.0	HOURLY	FIELD TECHNICIAN II--SCIENCE OR ENGINEERING DEGREE, OR TWO (2) YEARS EXPERIENCE. SUPERVISES INSTALLATION, MAINTENANCE, AND REPAIR OF INVESTIGATIVE AND REMEDIATION MACHINERY AND EQUIPMENT. CONDUCT SAMPLING AND MONITORING. MAINTAINS MACHINERY AND EQUIPMENT.		
				39.000000	(1)
				55.000000	(2)
				57.000000	(3)
				40.000000	(4)

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE

** ITEM 0005 CONTINUED **

36.000000 (5)

62.120000 (7)

0006 1600.0 HOURLY FIELD TECHNICIAN I--NO DEGREE REQUIRED. PERFORMS ASSIGNED FIELD WORK AND ROUTINE LABOR TASKS. ASSISTS IN EQUIPMENT INSTALLATION AND MAINTENANCE. CONDUCTS SAMPLING AND MONITORING. ASSISTS WITH FIELD SUPERVISION OF SUBCONTRACTORS. THIS CATEGORY INCLUDES HEAVY EQUIPMENT OPERATORS.

31.000000 (1)

45.000000 (2)

47.000000 (3)

35.000000 (4)

31.000000 (5)

51.480000 (7)

0007 800.0 HOURLY DRAFTSPERSON II--TWO (2) YEARS SCHOOLING AND FIVE (5) YEARS EXPERIENCE, OR TEN (10) YEARS EXPERIENCE. TECHNICALLY FAMILIAR WITH BASIC ENGINEERING PRINCIPLES AND

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE

** ITEM 0007 CONTINUED **

CONSTRUCTION METHODOLOGIES. WORKS INDEPENDENTLY; WORK PRODUCT REVIEWED BY PROFESSIONAL ENGINEER. PROFICIENT WITH AUTOCAD OR OTHER FORMS OF COMPUTER AIDED DESIGN DRAFTING.

35.000000 (1)

65.000000 (2)

55.000000 (3)

45.000000 (4)

35.000000 (5)

75.000000 (7)

0008 200.0 HOURLY DRAFTSPERSON I--TWO (2) YEARS EXPERIENCE OR ONE (1) YEAR RELATED COLLEGE AND ONE (1) YEAR EXPERIENCE. WORKS DIRECTLY UNDER A REGISTERED ENGINEER OR SCIENTIST. HAS SOME COMPUTER-AIDED DRAFTING SKILLS.

25.000000 (1)

51.750000 (2)

40.000000 (3)

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE

** ITEM 0008 CONTINUED **

25.000000 (4)

25.000000 (5)

60.660000 (7)

0009 100.0 HOURLY ADMINISTRATOR--NO DEGREE REQUIRED.
TRACKS WORKPLAN COSTS, PREPARES AND
PROCESSES INVOICES, ADMINISTERS LEASING AND
ORDERING OF EQUIPMENT, AND PERFORMS GENERAL
ADMINISTRATIVE WORK FOR REPORT AND WORKPLAN
PREPARATION.

22.000000 (1)

63.250000 (2)

55.000000 (3)

35.000000 (4)

32.000000 (5)

51.510000 (7)

0010 200.0 HOURLY SECRETARY--NO DEGREE REQUIRED. PERFORMS
GENERAL OFFICE WORK, TYPING FILING, AND

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE
			** ITEM 0010 CONTINUED **		
			DOCUMENT REPRODUCTION.		
				22.000000	(1)
				34.500000	(2)
				30.000000	(3)
				35.000000	(4)
				30.000000	(5)
				39.960000	(7)
0011	200.0	HOURLY	CLERK--NO DEGREE REQUIRED. PERFORMS GENERAL OFFICE WORK, TYPING, FILING, AND DOCUMENT REPRODUCTION.		
				19.000000	(1)
				28.750000	(2)
				25.000000	(3)
				30.000000	(4)

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE
			** ITEM 0011 CONTINUED **		
				20.000000	(5)
				39.960000	(7)
0012	100.0	EA/DAY	COMBINATION-EXPOSIMETER/OXYGEN/CO/S02 METER		
				20.000000	(1)
				45.000000	(2)
			RENTAL EQUIPMENT AND METERS DO NOT INCLUDE CALIBRATION STANDARDS, CONSUMED PARTS (UNLESS SPECIFIED), OR OPERATOR TIME	15.000000	(3)
				5.000000	(4)
				5.000000	(5)
				39.000000	(7)
0013	100.0	EA/DAY	COMBINATION-WATER QUALITY METER		
				15.000000	(1)
				16.000000	(2)

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE
			** ITEM 0013 CONTINUED **		
			RENTAL EQUIPMENT AND METERS DO NOT INCLUDE CALIBRATION STANDARDS, CONSUMED PARTS (UNLESS SPECIFIED), OR OPERATOR TIME	20.000000	(3)
			-0-		
					(4)
				5.000000	(5)
				100.000000	(7)
0014	100.0	EA/DAY	D.O. METER (WATER)		
				35.000000	(1)
				35.000000	(2)
			RENTAL EQUIPMENT AND METERS DO NOT INCLUDE CALIBRATION STANDARDS, CONSUMED PARTS (UNLESS SPECIFIED), OR OPERATOR TIME	20.000000	(3)
			-0-		
					(4)
				5.000000	(5)
				100.000000	(7)
0015	100.0	EA/DAY	EC METER		

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE

** ITEM 0015 CONTINUED **

10.000000 (1)

45.000000 (2)

RENTAL EQUIPMENT AND METERS DO NOT INCLUDE CALIBRATION STANDARDS, CONSUMED PARTS (UNLESS SPECIFIED), OR OPERATOR TIME 10.000000 (3)

-0-

(4)

5.000000 (5)

100.000000 (7)

0016 100.0 EA/DAY EH METER

10.000000 (1)

40.000000 (2)

RENTAL EQUIPMENT AND METERS DO NOT INCLUDE CALIBRATION STANDARDS, CONSUMED PARTS (UNLESS SPECIFIED), OR OPERATOR TIME 10.000000 (3)

-0-

(4)

5.000000 (5)

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE
			** ITEM 0016 CONTINUED **		
				100.000000	(7)
0017		DISC	EXPENDABLE FIELD EQUIPMENT-		
			BIDDER TO INDICATE _____% DISCOUNT FROM _____MFR PRICE CATALOG		
			N/A (0%)		
					(1)
			10% DISCOUNT FROM 100% MFR PRICE CATALOG		
					(2)
			0%		
					(3)
			0% DISCOUNT FROM N/A MFR PRICE CATALOG		
					(4)
			0%		
					(5)
			0%		
					(7)
0018	50.0	EA/DAY	EXPLOSIMETER		
				10.000000	(1)
				40.000000	(2)

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE
			** ITEM 0018 CONTINUED **		
			RENTAL EQUIPMENT AND METERS DO NOT INCLUDE CALIBRATION STANDARDS, CONSUMED PARTS (UNLESS SPECIFIED), OR OPERATOR TIME	15.000000	(3)
			-0-		
					(4)
				5.000000	(5)
				35.000000	(7)
0019	100.0	EA/DAY	FLUID LEVEL DETECTOR		
				10.000000	(1)
				25.000000	(2)
			RENTAL EQUIPMENT AND METERS DO NOT INCLUDE CALIBRATION STANDARDS, CONSUMED PARTS (UNLESS SPECIFIED), OR OPERATOR TIME	10.000000	(3)
				5.000000	(4)
				5.000000	(5)
				17.500000	(7)
0020	160.0	EA/DAY	INTERFACE PROBE		

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE		TOTAL PRICE
			** ITEM 0020 CONTINUED **			
				10.000000	(1)	
				65.000000	(2)	
			RENTAL EQUIPMENT AND METERS DO NOT INCLUDE CALIBRATION STANDARDS, CONSUMED PARTS (UNLESS SPECIFIED), OR OPERATOR TIME	13.500000	(3)	
			-0-			
					(4)	
				5.000000	(5)	
				30.000000	(7)	
0021	160.0	EA/DAY	OVM (PID/FID)			
				10.000000	(1)	
				65.000000	(2)	
			RENTAL EQUIPMENT AND METERS DO NOT INCLUDE CALIBRATION STANDARDS, CONSUMED PARTS (UNLESS SPECIFIED), OR OPERATOR TIME	20.000000	(3)	
				5.000000	(4)	
				5.000000	(5)	

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE
			** ITEM 0021 CONTINUED **		
				90.000000	(7)
0022	160.0	EA/DAY	OXYGEN METER (AIR)		
				10.000000	(1)
				45.000000	(2)
			RENTAL EQUIPMENT AND METERS DO NOT INCLUDE CALIBRATION STANDARDS, CONSUMED PARTS (UNLESS SPECIFIED), OR OPERATOR TIME	15.000000	(3)
			-0-		
					(4)
				5.000000	(5)
				22.000000	(7)
0023	160.0	EA/DAY	PH METER		
				8.000000	(1)
				20.000000	(2)
			RENTAL EQUIPMENT & METERS DON'T INCLUDE CALIBRATION STANDARDS, CONSUMED SEE BID	5.000000	(3)

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE
			** ITEM 0023 CONTINUED **		
			-0-		
					(4)
				5.000000	(5)
				15.000000	(7)
0024	160.0	EA/DAY	ANEMOMETER, PORTABLE NON-RECORDING		
				10.000000	(1)
				35.000000	(2)
			RENTAL EQUIPMENT AND METERS DO NOT INCLUDE CALIBRATION STANDARDS, CONSUMED PARTS (UNLESS SPECIFIED), OR OPERATOR TIME	10.000000	(3)
				5.000000	(4)
				5.000000	(5)
				15.000000	(7)
0025	50.0	EA/DAY	BACKHOE-LIGHT DUTY HP 51-62 DIG DEPTH 12 FT. - 18 FT. 6 IN.		
				140.000000	(1)

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE		TOTAL PRICE
			** ITEM 0025 CONTINUED **			
				200.000000	(2)	
			RENTAL EQUIPMENT AND METERS DO NOT INCLUDE CALIBRATION STANDARDS, CONSUMED PARTS (UNLESS SPECIFIED), OR OPERATOR TIME	165.000000	(3)	
				180.000000	(4)	
				120.000000	(5)	
			ALONE; W/OPERATOR $880.00			
				440.000000	(7)	
0026	20.0	EA/DAY	BACKHOE-MEDIUM DUTY HP 63-75 DIG DEPTH 14 FT. - 19 FT. 8 IN.			
				180.000000	(1)	
				300.000000	(2)	
			RENTAL EQUIPMENT AND METERS DO NOT INCLUDE CALIBRATION STANDARDS, CONSUMED PARTS (UNLESS SPECIFIED), OR OPERATOR TIME	180.000000	(3)	
				180.000000	(4)	
				157.000000	(5)	
			ALONE; W/OPERATOR $975.00			
				575.000000	(7)	

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE		TOTAL PRICE
0027	20.0	EA/DAY	BACKHOE-HEAVY DUTY, HP 95-115 DIG DEPTH 17 FT. - 21 FT.			
				190.000000	(1)	
				400.000000	(2)	
			RENTAL EQUIPMENT AND METERS DO NOT INCLUDE CALIBRATION STANDARDS, CONSUMED PARTS (UNLESS SPECIFIED), OR OPERATOR TIME	200.000000	(3)	
				180.000000	(4)	
				180.000000	(5)	
			ALONE; W/OPERATOR $1140.00			
				740.000000	(7)	
0028	20.0	EA/DAY	TRACKHOE LIGHT DUTY - (TRACK EXCAVATOR) 95-100HP: DIG DEPTH 20 FT. - 22 FT.			
				350.000000	(1)	
				250.000000	(2)	
			RENTAL EQUIPMENT AND METERS DO NOT INCLUDE CALIBRATION STANDARDS, CONSUMED PARTS (UNLESS SPECIFIED), OR OPERATOR TIME	325.000000	(3)	
				250.000000	(4)	
				350.000000	(5)	

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE
			** ITEM 0028 CONTINUED **		
			ALONE; W/OPERATOR $1140.00		
				740.000000 (7)	
0029	20.0	EA/DAY	TRACKHOE MEDIUM DUTY, 150-155HP DIG DEPTH 24 FT. - 26 FT.		
				500.000000 (1)	
				350.000000 (2)	
			RENTAL EQUIPMENT AND METERS DO NOT INCLUDE CALIBRATION STANDARDS, CONSUMED PARTS (UNLESS SPECIFIED), OR OPERATOR TIME	500.000000 (3)	
				350.000000 (4)	
				450.000000 (5)	
			ALONE; W/OPERATOR $1340.00		
				940.000000 (7)	
0030	20.0	EA/DAY	TRACKHOE HEAVY DUTY, 195-200HP DIG DEPTH OVER 26 FT.		
				600.000000 (1)	
				500.000000 (2)	
			RENTAL EQUIPMENT AND METERS DO NOT INCLUDE CALIBRATION STANDARDS, CONSUMED PARTS (UNLESS SPECIFIED), OR OPERATOR TIME	575.000000 (3)	

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE
			** ITEM 0030 CONTINUED **		
				500.000000	(4)
				550.000000	(5)
			ALONE; W/OPERATOR $2200.00		
				1,800.000000	(7)
0031	100.0	FT.	2 IN. BLANK PVC, 10 FT. SECTIONS		
			THREADED WITH O-RING SEALS SCH 40 $1.75		
				14.750000	(1)
				15.000000	(2)
			PER SECTION		
				13.000000	(3)
				15.000000	(4)
				14.800000	(5)
				4.500000	(7)
0032	100.0	FT.	4 IN. BLANK PVC, 10 FT. SECTIONS		
			THREADED WITH O-RING SEALS SCH 40 $1.75		
				37.500000	(1)

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE		TOTAL PRICE
			** ITEM 0032 CONTINUED **			
				37.000000	(2)	
			PER SECTION			
				23.000000	(3)	
				37.000000	(4)	
				37.500000	(5)	
				8.000000	(7)	
0033	100.0	FT.	2 IN. SCREEN, 10 FT. SECTIONS			
			THREADED WITH O-RING SEALS SCH 40 $1.75			
				27.000000	(1)	
				21.000000	(2)	
			PER/SEC; WELL SCREEN PRICE BASED ON SCHD 40 PVC CONST. W/0.010 IN. SLOTTED SCREEN			
				15.750000	(3)	
				21.000000	(4)	
				27.000000	(5)	
				6.000000	(7)	

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE
0034	100.0	FT.	4 IN. SCREEN, 10 FT. SECTIONS		
			THREADED WITH O-RING SEALS SCH 40 $1.75	62.500000	(1)
				50.000000	(2)
			PER/SEC; WELL SCREEN PRICE BASED ON SCHD 40 PVC CONST. W/0.010 IN. SLOTTED SCREEN	39.500000	(3)
				50.000000	(4)
				62.500000	(5)
				10.000000	(7)
0035	500.0	SACK	FILTER PACK SAND PER 100# SACK		
				9.000000	(1)
				15.000000	(2)
				9.750000	(3)
				7.000000	(4)
				8.500000	(5)

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE

** ITEM 0035 CONTINUED **

17.000000 (7)

0036 500.0 EA. BENTONITE PELLETS PER 50# BUCKET

46.750000 (1)

30.000000 (2)

30.000000 (3)

28.000000 (4)

27.000000 (5)

55.000000 (7)

0037 500.0 EA. BENTONITE CHIPS PER 50# SACK

8.500000 (1)

7.000000 (2)

6.500000 (3)

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE
			** ITEM 0037 CONTINUED **		
				7.000000	(4)
				7.000000	(5)
				8.500000	(7)
0038	50.0	EA.	8 IN. WELL VAULT		
				50.000000	(1)
				45.000000	(2)
			WELL VAULT COSTS DO NOT INCLUDE INSTALLATION OR ANCILLARY MATERIALS	45.000000	(3)
				50.000000	(4)
				50.000000	(5)
				9.500000	(7)
0039	50.0	EA.	12 IN. WELL VAULT		
				71.000000	(1)

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE
			** ITEM 0039 CONTINUED **		
				65.000000	(2)
			WELL VAULT COSTS DO NOT INCLUDE INSTALLATION OR ANCILLARY MATERIALS		
				62.000000	(3)
				65.000000	(4)
				72.500000	(5)
				115.000000	(7)
0040	10000.0	EA.	COPIES; EACH/PAGE		
			N/A ($0.00)		
					(1)
				0.100000	(2)
			-0-		
					(3)
				0.100000	(4)
				0.050000	(5)
			COLOR; B & W .10		
				0.300000	(7)

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE		TOTAL PRICE
0041	500.0	EA.	FAX TRANSMISSION; EACH/PAGE			
			N/A ($0.00)		(1)	
				1.000000	(2)	
			-0-			
					(3)	
			-0-			
					(4)	
				0.100000	(5)	
				0.250000	(7)	
0042		MILE	MILEAGE-			
			PERSONAL VEHICLE MILEAGE			
				0.250000	(1)	
				0.670000	(2)	
				0.320000	(3)	
				0.370000	(4)	

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE
			** ITEM 0042 CONTINUED **		
				0.320000	(5)
				0.365000	(7)
0043	100.0	EA.	PER DIEM/OVERNIGHT		
				65.000000	(1)
				0.750000	(2)
				65.000000	(3)
				75.000000	(4)
				65.000000	(5)
				65.000000	(7)
0044	50.0	BARREL	DISPOSAL OF CONTAMINATED FLUIDS AT LOCAL CERTIFIED FACILITIES FOB DISPOSAL FACILITY.		
				113.000000	(1)
				135.000000	(2)

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE
			** ITEM 0044 CONTINUED ** DISPOSAL COSTS BASED ON BARREL BEING EQUIVALENT TO 1-55 GAL. DRUM. DISPOSAL DOESN'T INCLUDE TRANS. OR WASTE PROFILING. WASTE ASSUMED TO BE NON-HAZARDOUS. PETROLEUM CONTAMINATED SOIL OR WATER.	100.000000 (3)	
				115.000000 (4)	
				100.000000 (5)	
			ASSUMPTIONS LANDFILL NEUTRILIZE/STABILIZ OF REGULATED WASTE; 2000/MI ROUND TRIP	56.000000 (7)	
0045	50.0	BARREL	DISPOSAL OF CONTAMINATED SOILS AT LOCAL, DERTIFIED FACILITIES. PER BARREL, FOB DISPOSAL FACILITY		
				100.000000 (1)	
				135.000000 (2)	
			DISPOSAL COSTS BASED ON BARREL BEING EQUIVALENT TO 1-55 GAL. DRUM. DISPOSAL DOESN'T INCLUDE TRANS. OR WASTE PROFILING. WASTE ASSUMED TO BE NON-HAZARDOUS, PETROLEUM CONTAMINATED SOIL OR WATER.	100.000000 (3)	
				115.000000 (4)	
				100.000000 (5)	
			ASSUMPTIONS-TPH SOIL, 2000/MI ROUND TRIP		
				220.000000 (7)	

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE
0046	100.0	HOUR	SITE SURVEYING		
				80.000000	(1)
				100.000000	(2)
				100.000000	(3)
				50.000000	(4)
				80.000000	(5)
				163.000000	(7)
0047	50000.0	MILE	MOBILIZATION: MILE/VEHICLE WITH MINIMUM MOBILIZATION DRILL RIG (MEDIUM)		
				1.750000	(1)
			MINIMUM MOBILIZATION: 50 MILES		
				2.900000	(2)
				3.500000	(3)
				1.500000	(4)

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE

** ITEM 0047 CONTINUED **

1.500000 (5)

4.500000 (7)

0048 FOOT HOLLOW-STEM AUGER DRILLING SERVICES
(2-3 MAN CREW) SMALL TO MEDIUM RIGS
(CME 55 OR 75 OR EQUIVALENT)

TO BE INDICATED RATE PER FOOT_____
BASED ON A 2 IN. MONITOR WELL

14.000000 (1)

PER FOOT 12.00

7.000000 (2)

FOOTAGE COSTS FOR DRILLING ARE BASED ON ASSUMED
ALLUVIAL GEOLOGY CONTAINING MINIMAL COBBLES
AND/OR CEMENTED SOIL 14.000000 (3)

PER FOOT $19.50

7.000000 (4)

15.000000 (5)

25.000000 (7)

0049 FOOT HOLLOW-STEM AUGER DRILLING SERVICES:
(2-3 MAN CREW) LARGE RIGS (FAILING
F-10 OR EQUIVALENT)

TO BE INDICATED RATE PER FOOT_____

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE
			** ITEM 0049 CONTINUED **		
			BASED ON A 4 IN. MONITOR WELL		
				19.000000	(1)
			PER FOOT 17.00		
				9.000000	(2)
			FOOTAGE COSTS FOR DRILLING ARE BASED ON ASSUMED ALLUVIAL GEOLOGY CONTAINING MINIMAL COBBLES AND/OR CEMENTED SOIL	20.000000	(3)
			PER FOOT $26.50		
				9.000000	(4)
				19.000000	(5)
				30.000000	(7)
0050	500.0	HOUR	AIR ROTARY		
				155.000000	(1)
				160.000000	(2)
				150.000000	(3)
				150.000000	(4)

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE
			** ITEM 0050 CONTINUED **		
				150.000000	(5)
				500.000000	(7)
0051	2000.0	FT.	CORING		
			MATERIALS TO BE CORED-THROUGH ARE SITE SPECIFIC		
				28.000000	(1)
				180.000000	(2)
			FOOTAGE COSTS FOR DRILLING ARE BASED ON ASSUMED ALLUVIAL GEOLOGY CONTAINING MINIMAL COBBLES AND/OR CEMENTED SOIL	45.000000	(3)
				45.000000	(4)
				21.000000	(5)
				75.000000	(7)
0052	50.0	DAY	WATER TRUCK 2 IN. WELL CORING		
				95.000000	(1)

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE

** ITEM 0052 CONTINUED **

				150.000000	(2)
				300.000000	(3)
				145.000000	(4)
				50.000000	(5)
				350.000000	(7)
0053	50.0	DAY	PICKUP TRUCK 2 IN. WELL CORING		
				45.000000	(1)
				60.000000	(2)
				70.000000	(3)
				50.000000	(4)
				50.000000	(5)
				100.000000	(7)

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE
0054	50.0	DAY	STEAM CLEANER 2 IN. WELL CORING		
				80.000000	(1)
				100.000000	(2)
				125.000000	(3)
				75.000000	(4)
				80.000000	(5)
				200.000000	(7)
0055			HOURLY STANDBY TIME- TO BE BASED ON STANDARD DRILL CREW TIME		
				120.000000	(1)
				140.000000	(2)
				135.000000	(3)
				120.000000	(4)
				120.000000	(5)

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE
			** ITEM 0055 CONTINUED **		
				360.000000	(7)
0056		%	SYSTEM SERVICES: REPLACEMENT PARTS;		
			IE;		
			EXTRACTION BLOWER 200 CFM _____% DISCOUNT		
			N/A (0.0%)		
					(1)
			10%		
					(2)
			0%		
					(3)
			AT COST, 5%		
					(4)
			AT COST -0%; EXTRACTION BLOWER 200 CFM 0% DISCOUNT		
					(5)
			20%		
					(7)
0057		PER	LEVEL B PROTECTION SUIT- PER WORKER/PER DAY		
				114.000000	(1)
				400.000000	(2)

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE
			** ITEM 0057 CONTINUED **		
			LEVEL B PROTECTION INCLUDES ENCAPSULATING SUIT, OVER BOOTS & SUPPLIED AIR/SCBA UNIT. SUIT ITSELF CAN BE PROVIDED FOR $120.00	380.000000	(3)
				400.000000	(4)
				100.000000	(5)
				243.000000	(7)
0058	50.0	EA	LOCKING CAP 2 IN. DIAMETER		
				7.500000	(1)
				14.000000	(2)
			LOCKING CAPS DO NOT INCLUDE PADLOCKS		
				13.000000	(3)
				14.000000	(4)
				8.000000	(5)
				20.000000	(7)
0059	50.0	EA	LOCKING CAP 4 IN. DIAMETER		

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE
			** ITEM 0059 CONTINUED **		
				15.000000 (1)	
				17.000000 (2)	
			LOCKING CAPS DO NOT INCLUDE PADLOCKS		
				15.000000 (3)	
				17.000000 (4)	
				15.000000 (5)	
				25.000000 (7)	
0060	25.0	DAY	PERISTALTIC PUMP WITH 3/8 IN. TUBING		
				44.000000 (1)	
				50.000000 (2)	
			RENTAL EQUIPMENT AND METERS DO NOT INCLUDE CALIBRATION STANDARDS, CONSUMED PARTS (UNLESS SPECIFIED), OR OPERATOR TIME	45.000000 (3)	
				10.000000 (4)	
				50.000000 (5)	

ITEM	QTY	UNIT	ARTICLE AND DESCRIPTION	UNIT PRICE	TOTAL PRICE
			** ITEM 0060 CONTINUED **		
				25.000000	(7)
0061	100.0	EA	LAB TECHNICIAN (PHYSICAL ANALYSIS)		
				45.000000	(1)
				35.000000	(2)
			PER HOUR		
				45.000000	(3)
				35.000000	(4)
				40.000000	(5)
				265.000000	(7)

**** 61 ITEM(S), 61 AWARDED

Contacts

LEA COUNTY

The county is made up of the cities of Hobbs, Lovington, Eunice, Jal, and Tatum.

City of Eunice
1106 Avenue J
Eunice, NM 88231
(505)394-2576

City of Lovington
214 South Love Street
Lovington, NM 88260
(505) 396-2884

City of Hobbs
300 North Turner
Hobbs, NM 88240
(505)397-9200

City of Tatum
20 West Broadway
Tatum, NM 88267
(505)398-4633

City of Jal
523 Main Street
Jal, NM 88252
(505)395-2222

County Government

Structure: Commission/Manager
Administrator: County Manager
Contact: Lea County Courthouse
100 North Main Street
Lovington, NM 88260
(505) 396-8521

Key Government Contacts

County Manager Diane
Deeds → County Clerk 396-8619
Maps → County Assessor 396-8629 Jem
County Treasurer
Planning and Mapping
Road Department

Contact: Lea County Courthouse
100 North Main Street
Lovington, NM 88260
(505)396-8521

Utilities

Electricity

Supplied by Lea County Electric Cooperative, Inc. and Southwestern Public Service Company.

Lea County Electric Cooperative, Inc. Southwestern Public Service Company

7 April 2003

Mr. Bill Olsen
Energy, Minerals and Natural Resources Department
New Mexico Oil Conservation Division
1220 St. Francis Drive
Santa Fe, New Mexico 87505

RE: Proposed AMEC Project Management Changes
Shane and Morgan Reaves Residences
Lovington, Lea County, New Mexico

Dear Bill:

AMEC Earth & Environmental, Inc. (AMEC) has been selected to provide you with environmental services at the Shane and Morgan Reaves residence. Our Project Manager for these services has been Bob Wilcox, however, Bob is no longer with AMEC. I would like to first of all assure you that AMEC has the capability and desire to continue our services to you without any interruption and our entire Team is committed to meeting all of your needs on these projects. Secondly, I would like to propose that Mr. Peter Guerra be assigned as Project Manager for this project. Peter's resume is attached and he can be contacted at (505) 821-1801.

I am also personally available to you at all times should you require my assistance. My direct dial number is (505) 796-7290. Please call me if you have any questions or concerns. Peter will call you shortly to arrange for an introductory meeting.

Respectfully submitted,

AMEC Earth & Environmental, Inc.

Mike Schulz, P.M.P.
Unit Manager

AMEC Earth & Environmental, Inc.
8519 Jefferson, N.E.
Albuquerque, New Mexico 87113
Telephone: 505/821-1801
Fax: 505/821-7371
www.amec.com

Michael G Schulz PMP
Manager
Albuquerque Consulting
Earth & Environmental

www.amec.com

8519 Jefferson, NE
Albuquerque, New Mexico
USA 87113

Dir [505] 796-7290
Tel [505] 821-1801
Fax [505] 821-7371
mike.schulz@amec.com

Peter A. Guerra

Sr. Project Manager, Engineering and Environmental Services

Professional summary
Mr. Guerra holds a master's degree in environmental engineering and has more than 11 years of comprehensive professional experience in engineering and management of environmental corrective action projects. His experience is based in practical, established procedures and he has demonstrated a creative ability to design, specify and implement complex, cutting edge technology. He is responsible for implementing corrective action activities at petroleum contaminated sites, design and analysis of hydrogeologic testing, and numerical modeling for design of landfills and remediation systems. This includes formulation and execution of work plans and budgets for minimum site assessments, hydrogeologic investigations, phase separated hydrocarbon recovery, soil and ground-water remediation, natural attenuation monitoring, feasibility studies, and alternative landfill cover design.

Professional qualifications
New Mexico Environment Department - Certified Scientist #093

Education
MS, Environmental Engineering, New Mexico Institute of Mining & Technology, 2000

BS, Civil Engineering, University of Massachusetts, 1991

OSHA Hazardous Waste Operations Training (29 CFR 1910.120, 40 hours), GZA GeoEnvironmental; 1987

Memberships
American Society of Civil Engineers, Albuquerque, NM

New Mexico Institute of Mining & Technology, Outreach Learning Centre, Socorro, NM

Employment history
2002 – Present: Senior Project Manager, Engineering and Environmental Services, AMEC Earth and Environmental, Inc. – Albuquerque, NM. Mr. Guerra manages and provides expert support on projects ranging from investigation and remediation of sites with subsurface contamination to development of storm-water prevention plans for government and large-industry clients. He is responsible for business development, project planning, resource scheduling, and technical and financial performance for projects. His projects include environmental engineering and site remediation, environmental compliance and permitting, site assessment, risk assessment, hydrologic studies and modeling. Mr. Guerra's clients are comprised a wide variety of private businesses, municipalities, and federal agencies located throughout New Mexico.

1996 – 2002: Principal Engineer, Rio Grande Environmental – Albuquerque, NM. Mr. Guerra was responsible for marketing and implementing corrective action activities at petroleum contaminated sites, design and analysis of hydrogeologic testing, and numerical modeling for design of landfills and remediation systems. This included formulation and execution of work plans and budgets for minimum site assessments, hydrogeologic investigations, phase separated hydrocarbon recovery, soil and ground-water remediation,

natural attenuation monitoring, feasibility studies, alternative landfill cover design, and expert testimony. He also managed and directed company staff.

1996 – 2000: Research/Teaching Assistant, New Mexico Institute of Mining & Technology – Socorro, NM. Mr. Guerra designed and conducted experiments to verify and monitor the natural attenuation of 1,2-dichloroethane and 1,2-dibromoethane (EDB/EDC). This included batch reactor studies, as well as the adaptation of molecular biology tools for gene-based (PCR) detection of EDB/EDC degraders and in-situ enzyme activity measurements. He also instructed and aided undergraduates in soil and groundwater remediation.

1992-1996: Project Engineer, INTERA, Inc. – Albuquerque, NM. Mr. Guerra designed and implemented soil and ground water remediation systems, aided in subsurface investigation at petroleum contaminated sites, which included soil and ground water sampling. He compiled and analysed data and assisted in necessary field adjustments for optimal remediation system performance. He designed and conducted vadose-zone and aquifer characterization involving pumping, tracer, and slug tests.

1990 – 1992: GeoTechnician, GZA GeoEnvironmental – Newton Upper Falls, MA. Mr. Guerra provided field and laboratory support for geotechnical and environmental projects. He performed in-situ testing and sample collection at landfill operations, braced excavations, and EPA Superfund sites..

Detailed core skills
Principal Engineer, Rio Grande Environmental – Albuquerque, NM.

Ryder Diesel Fueling Facility, Albuquerque, New Mexico – Operated, maintained, and optimized phase separated hydrocarbon (PSH) recovery system for New Mexico's largest subsurface petroleum release. Recovered approximately 16,000 gallons of PSH from the subsurface between January and November 1998. Designed, executed and analyzed pilot studies for increased PSH recovery. Designed and implemented a dual-pump system for enhanced PSH recovery and control of the PSH migration.

Pump-n-Save Gasoline Stations, Statewide, New Mexico – Provided oversight and collected soil samples during UST removal activities at fifteen sites. Directed offsite removal of contaminated soils to approved landfarming locations. Designed and implemented hydrogeologic investigations, which included slug testing and analysis as well as quantification of biological parameters such as electron acceptor concentrations. Designed and implemented PSH vacuum-enhanced recovery system using an internal combustion engine.

Emergency Response, State Road 96, Milepost 6.3, Regina, New Mexico – Responded to a gasoline tanker rollover, which resulted in the release of 8,700 gallons of gasoline to a stream in remote area of New Mexico. Implemented excavate and haul workplan on-the-spot and in cooperation with local authorities, insurance representatives and the client. Awarded a commendation from the New Mexico Environment Department for successfully abating the threat to the ecosystem and public health in a timely and safe manner.

Economic Evaluation and Feasibility Study, DNAPL Release, Louisiana-Pacific Corp., Lockhart, Alabama - Compared several design scenarios for dense non-aqueous phase liquids (DNAPLs) recovery associated with a former wood treatment plant located in Lockhart, Alabama. Tasks included review of site investigations and the design and operation of the present, ineffective, recovery system. Comparisons were achieved using MODFLOW and resulted in a new system that extracts DNAPL at a rate five-times greater than previously recovered.

Alternative Landfill Cover Design, McPherson County, Kansas – Designed vadose-zone hydrology model for assessing capillary barriers for municipal solid waste landfills. Kansas Department of Health and Environment accepted the final design for the alternative cover system based on the results from the numerical model. The cost-effective capillary barrier design replaces clay barrier/flexible membrane technology.

Project Engineer, INTERA Inc. – Albuquerque, NM.

Circle K Socorro, Socorro, New Mexico – Designed and installed IAS/SVE remediation system for commingled gasoline/diesel contamination. Developed and installed real-time telemetry system to provide total site control from the office.

Bell Gas, Truth or Consequences, New Mexico – Responsible for the design, installation, and operation of an economical passive remediation system for petroleum contaminated soil and ground water. The system included passive vents and a solar-powered remote-monitoring system that collected data from site wells on a continuous basis.

Corrective Action Management Unit (CAMU), Sandia National Laboratory, Albuquerque, New Mexico – Aided in the development and final design of the disposal cell for the CAMU located at Sandia National Laboratories. Tasks included design and specifications of the vadose-zone monitoring system, liner, LCRS and an alternative cover system. Performed calculations and modeling to support the final design for the alternative cover system.

Publications and presentations

Guerra, P.A., R.A. Reiss and C. Richardson, (2001). "Molecular Biology Tools for Assessing the Biodegradation on Dihaloethane Contamination in Groundwater." *Applied and Environmental Microbiology*, Accepted for Publication.

Huang, F.Y.C., Brady, P.V., Lindgren, E.R., and Guerra, P.A., (1998). "Biodegradation of Uranium-Citrate Complexes: Implications for Extraction from Soils." Environmental Science and Technology. **32**:3

Guerra, P.A., (1998). "Natural Attenuation of Fuel Contamination in the Subsurface: A Case Study." Eighth Annual Contaminated Soils and Groundwater Conference, Association for the Environmental Health of Soils (AEHS) Proceedings. San Diego, CA.

Guerra, P.A., (1998). "Probabilistic and Qualitative Analysis of BIOSCREEN as a Tool For Estimating Natural Attenuation at a Fuel Contaminated Aquifer." Third Annual Conference on the Environment, DOE Waste Energy Resource Consortium (WERC) Proceedings. Santa Fe, NM.

Guerra, P.A., (1998). "In-situ Biodegradation of EDB and EDC in the Presence of

Gasoline." Third Annual Conference on the Environment, WERC Proceedings. Santa Fe, NM.

Guerra, P.A., (1998). "PSH Skimming Coupled with Ground-water Pumping - case study." Oral Presentation at the NM Environment Department UST Bureau Conference, Albuquerque, NM.

Guerra, P.A., (1998). "Probabilistic and Qualitative Analysis of BIOSCREEN as a Tool for Estimating Natural Attenuation of a Fuel Contaminated Aquifer." Oral Presentation at the Joint Venture on the Environment, Albuquerque, NM.

Guerra, Peter A., (1996). "Pilot Testing and Modeling for the Safe and Effective Design and Application of In-situ Air Sparging -case studies." Conference Proceedings, AEHS, Amherst, MA.

STATE OF NEW MEXICO
PURCHASE DOCUMENT

AGENCY CODE	DOCUMENT NUMBER
521	03-199-000604
DATE	BUDGET FY
02/21/03	03

VENDOR CODE: 850454519

VENDOR NAME AND ORDER ADDRESS

PINNACLE LABORATORIES INC
2709-D PAN AMERICAN FWY NE

ALBUQUERQUE, NM 87107

DO NOT STAPLE BAR CODES

SHIP TO
OIL CONSERVATION DIVISION
1220 SO. ST. FRANCIS DRIVE
SANTA FE, NM 87505

BILL TO
OIL CONSERVATION DIVISION
1220 SO. ST. FRANCES DRIVE
SANTA FE, NM 87505

AGENCY CONTACT: SALLY MARTINEZ PHONE NUMBER: 505-476-3483

LN	FUND	AGCY	ORG/PRG	APPR UNIT	DIVISION	OBJECT	AMOUNT
01	199	521	P586	300	0700	3522	4400.00
						TOTAL	4,400.00

DFA APPROVED

Maximum of six accounting lines per purchase document

☐ **PURCHASE REQUISITION** (BIDS MUST BE REQUESTED FOR ITEMS OVER $1,500.00) **BUYER:**

RECOMMENDED SOURCE & SPECIAL REMARKS:

☐ ESTABLISH ☐ RENEWAL NO.: _____

☒ **CONTRACT , PRICE AGREEMENT, PURCHASE ORDER OTHER THAN PROFESSIONAL SERVICE CONTRACTS:**
(APPROVED VENDORS MUST BE USED FOR ITEMS UNDER CONTRACT)

C/PA /PO# 205210702497 EXPIRES: 011304

☐ **DIRECT PURCHASE ORDER**
(ONLY VALID FOR PURCHASES $1,500.00 AND UNDER)

☐ **EXEMPT FROM THE NM PROCUREMENT CODE**
PURSUANT TO SECTION _____ NMSA, 1978.

☐ **EXCLUDED FROM PROCUREMENT THROUGH STATE PURCHASING**
PURSUANT TO SECTION _____ NMSA, 1978.

☐ **FOR ENCUMBERING PURPOSES ONLY**
REASON: _____

FOR AGENCY USE:

LN	FUND	AGCY	ORG/PRG	APPR UNIT	DIVISION	OBJECT	AMOUNT
1	199	521	0750	301	0700	3522	4400.00
						TOTAL	4,400.00

APPROVAL 1	DATE	APPROVAL 2	DATE

AGENCY APPROVAL - I certify that the proposed purchase represented by this document is authorized by and is made in accordance with all State (and if applicable Federal) legislation, rules and regulations. I further certify that adequate unencumbered cash and budget expenditure authority exists for this proposed purchase and all other outstanding purchase commitments and accounts payable.

AGENCY AUTHORIZED SIGNATURE: DATE:

Generated by : New Mexico Energy, Minerals and Natural Resources. Advantage Web System Version 2.49 06/18/02

① VENDOR/SPD(PRONLY) ② DFA COPY ③ AGENCY COPY ④ AGENCY COPY

AGENCY CODE	DOCUMENT NUMBER
521	03-199-000604
DATE	BUDGET FY
02/21/03	03

STATE OF NEW MEXICO
PURCHASE DOCUMENT
CONTINUATION SHEET

TERMS	
DELIVERY DATE 02/21/03	FOB D
BUDGET VERIFIED BY:	

AGENCY NAME ENERGY, MINERALS & NAT RES

COMM LN	QUANTITY	UNIT	COMMODITY CODE	ACCT LN	ARTICLE AND DESCRIPTION	UNIT COST	TOTAL COST
1	1.0000	EACH	CCCC		LAB SERVICES - SHANE AND MORGAN REAVES INVESTIGATION	4400.0000	4400.00

Generated by : New Mexico Energy, Minerals and Natural Resources. Advantage Web System Version 2.49 06/18/02

TOTAL 4,400.00

① VEND (PRONLY) ② DFA COPY ③ AGENCY COPY ④ AGENCY COPY

WHITEROCK EST SUB-DIV	010	WRE	UNIT	BLOCK	LOT
0004897 SANDOVAL, DAVID M					010
6B KYLE DRIVE			LOVINGTON, NM		88260-0000
A)S4000048970001 TR - 6 W2 TR 6 *1/98-GUZMAN, JESUS P PRT #77158* *MH LOC H					
0077134 PARKER, JOHN WESLEY					010
17 HAHN DR			LOVINGTON, NM		88260-0000
B)S4000771340001 TR 17 *1985-NEW DED*					
0077135 REAVES, SHANE					010
#8 KYLE DR			LOVINGTON, NM		88260-0000
C)S4000771350001 TR - 8 *1985-NEW DED* *05/01-WHITE, IVAN L*					
0077136 SEWALL, PETER M					010
# 7 KYLE DR			LOVINGTON, NM		88260-0000
D)S4000771360001 TR - 7 *1985-NEW DED*					
0077157 EDDINS-WALCHER COMPANY					010
BOX 1920			MIDLAND, TX		79702-0000
E)S4000771570001 TR 13 *1985-NEW DED* *1988-WALLACE, RONALD L* *02/00-HAHN, KYL					
0077191 HAHN, A L & IMOGENE	REVOCABLE TRUST				010
104 BROADMOOR			MARBLE FALLS, TX		78654-0000
F)S4000771910001 TR 12 *1985-NEW DED* *02/00-HAHN, KYLE*					
0077578 HUNTER, THOMAS					010
PO BOX 831			LOVINGTON, NM		88260-0000
G)S4000775780001 TR - 9 *1985-NEW DED* *05/01-LEE, WILLIAM T* *MH LOC HERE					

SELECT,Key LINE OR OWNER# . . **0000000**

WHITEROCK EST SUB-DIV **010 WRE UNIT** **BLOCK** **LOT 18**

0077293 BARNETT, PAUL D 010
11 KYLE DRIVE LOVINGTON, NM 88260-0000
A)S4000772930001 TR. - 11 *1985-NEW DED* *MH LOC HERE #72262*

0002059 HAHN, A L PARKER, JOHN WESLEY % 010
17 HAHN DRIVE LOVINGTON, NM 88260-0000
B)S4000020590001 TR. - 14 15 16 *8/97-CONT PRT #77133 B-816 P-775*

0077133 HAHN, KYLE 010
PO BOX 1143 MARBLE FALLS, TX 78650-0000
C)S4000771330001 TR. - 18 20 *1984-HAHN, KYLE PRT-34912* *8/97-REDESCRIBED*

SELECT,Key LINE OR OWNER# . . **0000000**

WHITEROCK EST SUB-DIV **010 WRE UNIT** **BLOCK** **LOT 6**

0077579 SELMAN, VIRLA — FLOWERS, WAYNE K % — 010
PO BOX 254 — SEAGRAVES, TX — 79359-0000
A)S4000775790001 TR 19 *1985-NEW DED* *8/95-CONTRACT*

0077581 WESTERN COMMERCE BANK — CHRISTIAN, NATHAN H SR % — 010
PO BOX 722 — LOVINGTON, NM — 88260-0722
B)S4000775810001 TR - 3 *1985-NEW DED* *MH LOC HERE #80217* *1989-BAILEY, D

0077675 LEE, WILLIAM T — 010
PO BOX 1321 — LOVINGTON, NM — 88260-0000
C)S4000776750001 TR 10 *1985-NEW DED*

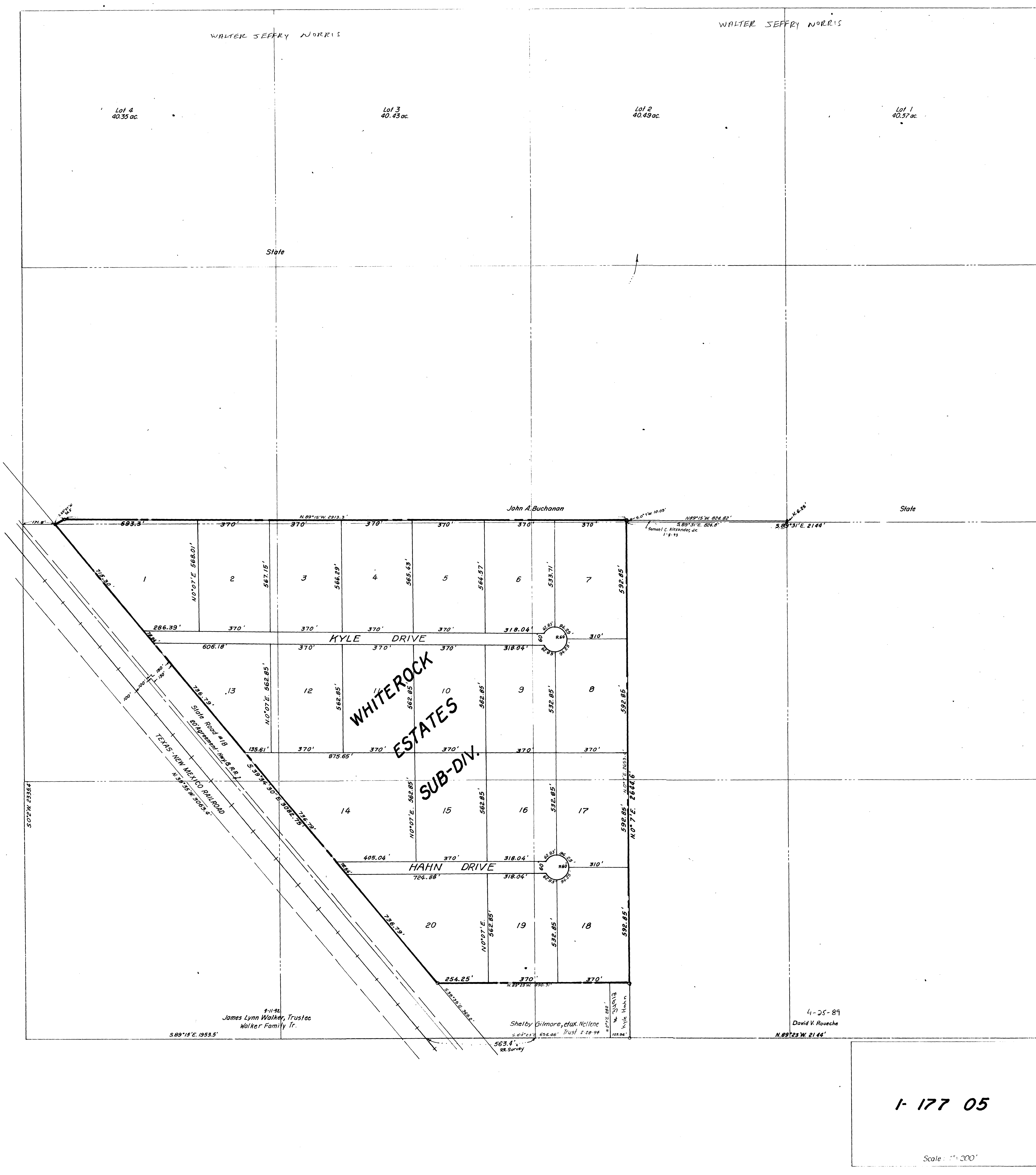
0077858 HAHN, KYLE — 010
PO BOX 1143 — MARBLE FALLS, TX — 78654-0000
D)S4000778580001 TR - 5 *DEVELOPERS EDR- RWS*

0078938 HAHN, A L — ARREOLA, EDDIE % — 010
10718 ALLEGHENY DR — DALLAS, TX — 75229-0000
E)S4000789380001 TR - 1 2 *1989-HAHN, KYLE* *1/97-CONTRACT BK 775 PG 387

0077580 TATE, SHEILA A — 010
6201 KYLE RD — LOVINGTON, NM — 88260-0000
F)S4000775800001 TR - 4 *1987-STOCKTON,HAROLD* *MH LOC HERE #87770* *1992-C

0077158 SANDOVAL, DAVID M — 010
6B KYLE DRIVE — LOVINGTON, NM — 88260-0000
G)S4000771580001 TR. - 6 E2 TR 6 *1985-NEW DED* *MH #88621 LOC HERE* *8/94-S

SELECT,Key LINE OR OWNER# . . **0000000**


WALTER JEFFRY NORRIS
WALTER JEFFRY NORRIS
Lot 4 40.35 ac.
Lot 3 40.43 ac.
Lot 2 40.49 ac.
Lot 1 40.57 ac.
State
John A. Buchanan
State
N.89°15'W. 2913.3'
693.3'
171.8'
S.65°37'W. 54.9'
S.0°7'W. 10.09'
N89°15'W. 824.82'
S.89°31'E. 824.8'
Samuel C. Alexander, Jr. 1-8-93
N.6.25'
S.89°31'E. 2144'
KYLE DRIVE
HAHN DRIVE
WHITEROCK ESTATES SUB-DIV.
State Road #18
20' Agreement - Hwy. & R.R.
TEXAS - NEW MEXICO RAILROAD
N.39°35'W. 3063.4'
S.39°34'30"E. 3082.75'
715.30'
736.79'
736.79'
736.79'
N.0°07'E. 568.01'
N.0°07'E. 562.85'
N0°07'E. 562.85'
N0°07'E. 562.85'
N.0°7'E. 2644.6'
N.0°7'E. 2653.4'
S.0°2'W. 2335.4
S.0°7'W. 2649.6'
286.39'
606.18'
135.61'
875.65'
405.04'
724.88'
254.25'
318.04'
310'
R.60
62.83'
94.25'
S.39°35'E. 369.2'
N.89°23'W. 890.31'
S.89°15'E. 1953.5'
S.89°23'E. 654.46'
N.89°23'W. 2144'
563.4' RR. Survey
9-11-92 James Lynn Walker, Trustee Walker Family Tr.
Shelby Gilmore, etux. Nellene Trust 2-28-94
34912 Kyle Hahn
N.0°7'E. 282'
103.94'
4-25-89 David V. Roueche
1- 177 05
Scale: 1" = 200'