

NM - 13

**GENERAL  
CORRESPONDENCE**

**YEAR(S):**

2002-2000

TO: Martyne Kieling, OCD

DATE: May 3, 2002

FROM: Denise Zendel, Contracts Analyst  
Office of the Secretary, EMNRD  
1220 S. St. Francis Dr.  
Santa Fe, NM 87505

Ph: 476-3215

E-mail: dzendel@state.nm.us



For your handling.



Attached is/are the approved encumbrance document(s) for your files. Also attached are the pending document and DFA Encumbrance Report, for your files.



Attached are 43 executed copies of Scope of Work No. 02-521-07-227, Re/Spec - Goodwin Treating Plant/Phase I. Please send one copy to the contractor and issue the notice to proceed. The other copy/copies is/are for your files.

Comments:

## PURCHASE DOCUMENT



AGENCY CODE	521	DOCUMENT NUMBER	02-199-005243
DATE	04/16/02	BUDGET FY	02

VENDOR CODE	460315848
VENDOR NAME AND ORDER ADDRESS	
RE/SPEC INC	
4775 INDIAN SCHOOL RD NE	
SUITE 300	
ALBUQUERQUE, NM 87110	

## DO NOT STAPLE BAR CODES

S H I P T O	OIL CONSERVATION DIVISION 1220 SO. ST. FRANCIS DRIVE SANTA FE, NM 87505
B I L L T O	OIL CONSERVATION DIVISION 1220 SO. ST. FRANCIS DRIVE SANTA FE, NM 87505

AGENCY CONTACT	MANAYA	PHONE NUMBER
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LN	FUND	AGCY	ORG/PRG	APPR UNIT	DIVISION	OBJECT	AMOUNT
01	199	521	P586	300	0700	3522	26455.00

*Enc @ OFA  
5-2-02*

Maximum of six accounting lines per purchase document

OR AGENCY USE:

LN	FUND	AGCY	ORG/PRG	APPR UNIT	DIVISION	OBJECT	AMOUNT
1	199	521	0750	301	0700	3522	26455.00
TOTAL							26,455.00

<input type="checkbox"/>	PURCHASE REQUISITION (BIDS MUST BE REQUESTED FOR ITEMS OVER \$1,500.00)	BUYER:
RECOMMENDED SOURCE & SPECIAL REMARKS:		

<input type="checkbox"/>	ESTABLISH	<input type="checkbox"/>	RENEWAL NO.:
--------------------------	-----------	--------------------------	--------------

<input checked="" type="checkbox"/>	CONTRACT, PRICE AGREEMENT, PURCHASE ORDER OTHER THAN PROFESSIONAL SERVICE CONTRACTS: (APPROVED VENDORS MUST BE USED FOR ITEMS UNDER CONTRACT)
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C/PA /PO#	008050917658	EXPIRES:	083102
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<input type="checkbox"/>	DIRECT PURCHASE ORDER (ONLY VALID FOR PURCHASES \$1,500.00 AND UNDER)
--------------------------	--

<input type="checkbox"/>	EXEMPT FROM THE NM PROCUREMENT CODE PURSUANT TO SECTION _____
--------------------------	--

<input type="checkbox"/>	EXCLUDED FROM PROCUREMENT THROUGH STATE PURCHASING PURSUANT TO SECTION _____
--------------------------	---

<input type="checkbox"/>	FOR ENCUMBERING PURPOSES ONLY REASON: _____
--------------------------	--

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: *William B. May* DATE: 4.30.02

generated by : New Mexico Energy, Minerals and Natural Resources. Advantage Web System Version 2.40 04/25/02

① VENDOR/SPD(PRONLY)

② DFA COPY

③ AGENCY COPY

④ AGENCY COPY

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521	02-199-005243
DATE	BUDGET FY
04/16/02	02

PURCHASE DOCUMENT  
CONTINUATION SHEET

DELIVERY DATE	04/16/02	FOB	D
BUDGET VERIFIED BY:			

AGENCY NAME ENERGY, MINERALS & NAT RES

OMM LN	QUANTITY	UNIT	COMMODITY CODE	ACCT LN	ARTICLE AND DESCRIPTION	UNIT COST	TOTAL COST
1	1.0000	EACH	CCCC		PHASE I INVESTIGATION GENERAL PETROLEUM TREATING PLANT in	26455.0000	26455.00
2	1.0000	EACH	CCCC		EMNRD 02-521-07-243, EXP 8-31-02 <i>Lee Gentry, nm.</i>	0.0000	0.00
TOTAL						26,455.00	26,455.00

generated by : New Mexico Energy, Minerals and Natural Resources. Advantage Web System Version 2.40 04/25/02 © 2001 State of New Mexico

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



STATE OF NEW MEXICO  
PURCHASE DOCUMENT

AGENCY CODE	521	DOCUMENT NUMBER	02-199-005243
DATE	04/16/02	BUDGET FY	02

VENDOR CODE	460315848
VENDOR NAME AND ORDER ADDRESS	
RE/SPEC INC	
4775 INDIAN SCHOOL RD NE	
SUITE 300	
ALBUQUERQUE, NM 87110	

S OIL CONSERVATION DIVISION  
H 1220 SO. ST. FRANCIS DRIVE  
I  
P SANTA FE, NM 87505  
T  
O

B OIL CONSERVATION DIVISION  
I 1220 SO. ST. FRANCIS DRIVE  
L  
L SANTA FE, NM 87505  
T  
O

AGENCY CONTACT MANAYA PHONE NUMBER

DO NOT STAPLE BAR CODES

LN	FUND	AGCY	ORG/PRG	APPR UNIT	DIVISION	OBJECT	AMOUNT
01	199	521	P586	300		3522	26455.00

Maximum of six accounting lines per purchase document

TOTAL 26,455.00

FOR AGENCY USE:

LN	FUND	AGCY	ORG/PRG	APPR UNIT	DIVISION	OBJECT	AMOUNT
1	199	521	0750	301	0700	3522	26455.00
TOTAL							26,455.00

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/P# PO# 008050917658 EXPIRES: 083102

DIRECT PURCHASE ORDER

(ONLY VALID FOR PURCHASES \$1,500.00 AND UNDER)

EXEMPT FROM THE NM PROCUREMENT CODE

PURSUANT TO SECTION

EXCLUDED FROM PROCUREMENT THROUGH STATE PURCHASING

PURSUANT TO SECTION

FOR ENCUMBERING PURPOSES ONLY

REASON:

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 2.2 03/12/02

2001 State of New Mexico

(1) VENDOR/SPD(ONLY)

(2) DFA COPY

(3) AGENCY COPY

(4) AGENCY COPY



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**

Governor

**Carol Leach**

**Conservation Division**

Acting Cabinet Secretary

**Lori Wrotenbery**

Director

**Oil**

## MEMORANDUM

**Date:** April 22, 2002  
**To:** William Mackie, Director, Administrative Services Division  
**From:** Stephen C. Ross, Assistant General Counsel *SCR*  
**Subject:** Phase I Investigation and Remediation of the Abandoned General Petroleum Treating Plant.

The Oil Conservation Division intends to conduct an investigation to determine the potential extent of contamination and estimate the future remediation costs that could be incurred at the abandoned General Petroleum Treating Plant. The facility is in Lea County on the immediate outskirts of the town of Eunice and appears to be a threat to human health and safety, as well as represents a potential (or actual) threat to groundwater. The facility contains one unlined pit area approximately 250 feet x 250 feet, 2 leaking tanks, several large piles of tank bottom material, and assorted trash. The site is located on private land west of Eunice, very near residences and business. The site lies approximately 70 feet above the Ogallala aquifer, the primary source of drinking water for Lea County.

The present task involves conducting a Phase I investigation of the site. During this phase, the tanks will be removed, three groundwater monitoring wells will be installed to ascertain the effect of the site on ground water and the remaining surface and near-surface contamination will be investigated to estimate volumes of contaminated soil. A report will be generated that will detail the potential extent of the contamination, cleanup scenarios, and a cost estimate based on the information gathered. Using this information the Department will be able to determine the best course of action.

We propose to enter into an agreement with RESPEC Inc. to perform this work. RESPEC Inc. has a price agreement with the State of New Mexico Highway and Transportation Department to provide the services necessary to perform the Phase I investigation. We have made the necessary modifications to the price agreement and obtained the permission of the Highway Department to purchase from the price agreement.

I hope that you feel this work is beneficial to the Department. I appreciate your consideration in this matter and look forward to hearing from you.

**AMENDMENT NO. 1  
SCOPE OF WORK  
PHASE I INVESTIGATION AND REMEDIATION  
GENERAL PETROLEUM TREATING PLANT  
LEA COUNTY, NEW MEXICO**

This Amendment No. 1 amends the Scope of Work, Phase I Investigation and Remediation of the General Petroleum Treating Plant, Lea County, New Mexico, by and between the Contractor, Re/Spec Inc., 4775 Indian School Road NE, Suite 300, Albuquerque, New Mexico, 87110, and the Oil Conservation Division of the Energy, Minerals and Natural Resources Department (EMNRD), dated April 30, 2002.

The Scope of Work is hereby amended, as follows:

1. Paragraphs C(3) and C(4) ("Scope of Work") pertaining to fencing shall be and hereby are stricken.
2. Paragraph C(6) ("Scope of Work") pertaining to removal of tanks and the material therein shall be and hereby is stricken.
3. Paragraph 11 ("Scope of Work") pertaining to investigation of the nature and extent of contamination below the tank footprints shall be and hereby is amended as follows:
  - "11. Investigate nature and extent of contamination below the tank foot-prints.
    - "a. Investigate the extent of contamination beneath the tank foot prints by completing bore holes along the former tank area (see figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. Samples will be taken from each bore hole and will be sent for laboratory TPH and chloride analysis. Back fill bore holes when finished.
    - "b. Estimate the volume and cost per cubic yard to remove the contaminated material based on the bore holes and sample analysis. Contaminated soil must be sent to an OCD-approved land-farm for reclamation."
4. Paragraph 12 ("Scope of Work") pertaining to investigation of the nature and extent of tank bottom piles shall be and hereby is amended as follows:
  - "12. Investigate nature and extent of tank bottom piles.

- "a. Investigate the extent of contamination surrounding the tank bottom piles by completing bore holes perpendicular to three sides of the pile (see figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. Samples will be taken from each bore hole and will be sent for laboratory TPH and chloride analysis. Back fill open bore holes when finished.
- "b. Estimate the volume and cost per cubic yard to remove the tank bottom material and surrounding contamination based on the bore holes and sample analysis. Tank bottoms and contaminated soil must be sent to an OCD-approved land-farm for reclamation.

5. Paragraph 13 ("Scope of Work") pertaining to investigation of the nature and extent of contamination around the pit area shall be and hereby is amended as follows:

- "13. Investigate the nature and extent of contamination around the pit area.
  - "a. Investigate the composition of the pit material to determine if recovery of any hydrocarbons is possible. Determine the cost associated with recovery.
  - "b. Investigate the extent to which the contamination has migrated from the pit by completing bore holes perpendicular to three sides of the pit and inside the southwest corner (see figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. Samples will be taken from each bore hole and will be sent for laboratory TPH, and chloride analysis. Back fill open bore holes when finished.
  - "c. Estimate the volume and cost per cubic yard to remove the pit material and surrounding contamination based on the bore holes and sample analysis. Contaminated material must be sent to an OCD-approved land-farm for reclamation. Volume and cost estimates shall take into account that the pit material may need to be solidified for transport."

6. Paragraph E ("Summary of Phase I Investigation and Remediation at the General Petroleum Treating Plant") shall be and hereby is amended by substitution of the following table for the table that appeared in the Scope of Work:

Vendor No. 5187719  
PA Number: 008050917658

RESPEC Inc.  
Commodity Code: 72002 66074

LN	QTY	RATE	UNIT	COST	DESCRIPTION
*0002	32	\$75.00	Hour	\$2,400.00	Senior Scientist
*0003	60	\$60.00	Hour	\$3,600.00	Project Manager/Certified Scientist
*0004	50	\$50.00	Hour	\$2,500.00	Staff Scientist
*0005	70	\$35.00	Hour	\$2,450.00	Field Technician II
*0006	40	\$30.00	Hour	\$1,200.00	Field Technician I
*0010		\$30.00	Hour	\$0.00	Secretary
*0021		\$50.00	Day	\$0.00	PID
*0025		\$150.00	Day	\$0.00	Backhoe 1
*0026		\$200.00	Day	\$0.00	Backhoe 2
*0027		\$300.00	Day	\$0.00	Backhoe 3
*0028		\$350.00	Day	\$0.00	Trackhoe 1
*0029		\$500.00	Day	\$0.00	Trackhoe 2
*0031	180	\$1.50	Foot	\$270.00	2" blank PVC, 10 ft sections
*0033	45	\$2.80	Foot	\$126.00	2" screen, 10 ft sections
*0035	20	\$8.29	Each	\$165.80	Filter Pack Sand per 100# sack
*0036		\$46.75	Each	\$0.00	Bentonite pellets per 50# sack
*0037	4	\$8.50	Each	\$34.00	Bentonite Chips per 50# sack
*0038	3	\$50.00	Each	\$150.00	8" Manhole (well vault)
*0042	1100	\$0.30	Mile	\$330.00	Personal Vehicle Mileage
*0043	32	\$60.00	Each	\$1,920.00	Per Diem/Overnight
*0047	550	\$1.00	Mile	\$550.00	Mobe/Demobe: Drill Rig (Medium duty)
*0048	525	\$13.00	Foot	\$6,825.00	Hollow-Stem Auger Drilling Services (S-M)
*0049		\$19.00	Foot	\$0.00	Hollow-Stem Auger Drilling Services (L)
*0050		\$170.00	Hour	\$0.00	Air Rotary Drill Rig
*0051		\$12.00	Foot	\$0.00	Coring
*0052		\$100.00	Day	\$0.00	Water Truck -
*0053	8	\$50.00	Day	\$400.00	Pick up Truck -
*0054	8	\$50.00	Day	\$400.00	Steam cleaner
				\$440.00	Locking well cap and pad - at cost
				\$1,200.00	Plug & Abandonment of Soil Borings - At Cost
					Transport - at cost
					Disposal/recycling - at cost
					subcontract shear - at cost
					fence - at cost

**TOTAL** **\$24,960.80 (a) X 0.058125 (NMGR) =** **\$26,411.65**

**NOTE: LABORATORY COSTS ARE NOT INCLUDED**

7. All other provisions of the Scope of Work shall remain in force and unchanged.

**RESPEC, INC.**

By: James A. Gushie

Title: VP Albuquerque Operations Date: 6/10/02

**ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT**

By: William B. Mackie

William B. Mackie

Administrative Services Division

Date: 6-12-02

**SCOPE OF WORK  
PHASE I INVESTIGATION AND REMEDIATION  
GENERAL PETROLEUM TREATING PLANT  
LEA COUNTY, NEW MEXICO**

The activities of this Scope of Work are being conducted under the auspices of New Mexico State Highway and Transportation Department Purchase Agreement 00-805-09-17658 (Agreement) (Contract Vendor 9) Respec, Inc., 4775 Indian School Rd. NE, Suite 300, Albuquerque, NM 87110, Tel 1-505-268-2661 (copy of e-mailed permission to use this Agreement is attached). This Scope of Work more specifically sets forth the obligations of the Oil Conservation Division of the Energy, Minerals and Natural Resources Department (EMNRD) under the Agreement. The Agreement term is August 31, 2002.

**A. CLARIFICATIONS TO AGREEMENT**

1. This Scope of Work is scheduled to be completed by August 31, 2002. This Scope of Work becomes effective upon signature of EMNRD and Respec, Inc., and encumbrance by the Financial Control Division of the Department of Finance and Administration of the funds used to pay or the activities specified herein.
2. Insurance: Respec, Inc., shall provide EMNRD with a Certificate of Insurance naming EMNRD as additional insured/certificate holder for the activities covered by this Scope of Work.
3. Contact Person: EMNRD's contact person regarding this Scope of Work, any revisions to it, questions about it, payment of bills, etc., is: Martyne Kieling, OCD, EMNRD, 1220 S. St. Francis Drive, Santa Fe, N.M., 87505, Telephone: (505) 476-3488; Fax: (505) 476-3462.
4. Any mention in the underlying Agreement which references the New Mexico State Highway and Transportation Department, or the Department, or any other diminutive of the New Mexico State Highway and Transportation Department as it relates to this Scope of Work shall be taken to refer to EMNRD for the work being conducted under this Scope of Work.
5. All other terms and conditions of the underlying Agreement shall remain the same and any issues not addressed herein this Scope of Work shall be controlled by the underlying Agreement.

**B. SUMMARY**

The contractor shall perform the work necessary to conduct a Phase I preliminary investigation of the equipment, surface contamination, the extent of subsurface soil contamination and depth to and analysis of groundwater. The Contractor shall also compile volume and cost estimates with regards to the contamination and prepare a cost effective

Phase II investigation and cleanup proposal that can be implemented at this location. The General Petroleum Treating Plant is located in the SW/4, SW/4 of Section 28, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico (see figure 1, and photos).

C. SCOPE OF WORK

1. Compile the names and addresses of property owners within ¼ mile of the facility.
2. Locate all water wells within ¼ mile of the property.
3. Install a six (6) foot chain link security fence and gate with lock around the pit NMOCD Hobbs district and Santa Fe offices shall be given a key or provided the combination to the lock.
4. Remove all existing interior fencing surrounding the pit and store on site for future recycling or disposal.
5. Perform a One-Call and map the buried pipelines and electrical hazards on site (see figure 2).
6. Remove material within the tanks for recycling. Remove the two tanks currently on site for recycling or disposal (see photos). The material and tanks must be sent to an OCD-approved facility and must be disposed/recycled in accordance with the rules of the OCD.
7. Inventory trash at the site to include barrels, buckets, batteries, pipe, electrical meters, fencing and other trash items. Estimate volume and disposal/recycling costs of trash items and any testing that may be necessary prior to disposal.
8. Investigate extent of total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene, xylene (BTEX), and chloride beneath the facility area. Three (3) bore holes will be drilled at the site, one in the northeast corner of the facility one in the southeast corner of the facility and one in the southwest corner of the facility (see Figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. A minimum of one sample from the highest PID sample location and one sample just above the groundwater interface will be sent for laboratory analysis to confirm the concentration and extent of TPH, and BTEX and chloride. *All samples taken during Phase I of the investigation will be sent to*



*one of the laboratories currently covered by a separate purchase agreement with the OCD.*

9. Completion of the boreholes as 2-inch ground water monitor wells. Ground water is estimated to be approximately 75 feet bgs (see Figures 4, 5, 6 and 7). The well completion shall be 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.
10. Sample the ground water no less than 24 hours after the well is developed. The ground water from the monitor wells must be purged, sampled and analyzed for concentrations of benzene, toluene, ethylbenzene, xylene, polycyclic aromatic hydrocarbons (PAH), 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.
11. Investigate nature and extent of contamination below the tank foot prints.
  - a. Investigate the extent of contamination beneath the tank foot prints by trenching along the former tank area (see figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. Samples will be taken from each trench and will be sent for laboratory TPH and chloride analysis. Back fill open trenches when finished.
  - b. Estimate the volume and cost per cubic yard to remove the contaminated material based on the trenching and sample analysis. Contaminated soil must be sent to an OCD-approved landfarm for reclamation.

12. Investigate nature and extent of tank bottom piles.
  - a. Investigate the extent of contamination surrounding the tank bottom piles by trenching perpendicular to three sides of the pile (see figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. Samples will be taken from each trench and will be sent for laboratory TPH and chloride analysis. Back fill open trenches when finished.
  - b. Estimate the volume and cost per cubic yard to remove the tank bottom material and surrounding contamination based on the trenching and sample analysis. Tank bottoms and contaminated soil must be sent to an OCD-approved landfarm for reclamation.
13. Investigate the nature and extent of contamination around the pit area.
  - a. Investigate the composition of the pit material to determine if recovery of any hydrocarbons is possible. Determine the cost associated with recovery.
  - b. Investigate the extent to which the contamination has migrated from the pit by trenching perpendicular to three sides of the pit and inside the southwest corner (see figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. Samples will be taken from each trench and will be sent for laboratory TPH, and chloride analysis. Back fill open trenches when finished.
  - c. Estimate the volume and cost per cubic yard to remove the pit material and surrounding contamination based on the trenching and sample analysis. Contaminated material must be sent to an OCD-approved landfarm for reclamation. Volume and cost estimates shall take into account that the pit material may need to be solidified for transport.
14. Estimate cost per cubic yard to back haul clean soil from the landfarm facility or other source.
15. Estimate the volume of clean soil required to fill, compact and mound the site based on the estimate of excavation sizes of item 12, 13 and 14 and the local topography.
16. Propose cap design alternatives and their costs.

17. Estimate costs associated with installing a clay barrier within the excavations including the cost per cubic yard and source of the clay.
18. Prepare and submit a final report detailing items 1-17. The report must include the nature of the waste, the estimated volume of waste and contaminated material, the estimated depth of the contamination, soil and groundwater analysis including a map detailing the results. The report shall propose future investigation and remediation scenarios and estimated costs for each scenario.

D. MERGER

This Scope of Work, and attachments thereto, together with NMSHTD Price Agreement No. 00-805-09-17658, constitutes the entire agreement between the parties hereto and all previous agreements, conditions, promises, inducements and understandings shall be deemed to have merged in this Agreement.

E. SUMMARY OF PHASE I INVESTIGATION AND REMEDIATION AT THE GENERAL PETROLEUM TREATING PLANT

Vendor No. 5187719		RESPEC INC. Commodity Code: 72002 66074			
PA Number: 00-805-09-17658					
ITEM NO.	ITEM DESCRIPTION	UNIT	UNIT PRICE	QTY	COSTS
0002	senior scientist	hour	\$75	16	\$1,200.00
0003	project scientist/manager	hour	\$60	40	\$2,400.00
0004	staff scientist	hour	\$50	30	\$1,500.00
0005	field tech II	hour	\$35	40	\$1,400.00
0006	field tech I	hour	\$30	40	\$1,200.00
0010	secretary	hour	\$30		\$0.00
0021	PID	day	n/c		
0025	backhoe 1	day	\$150		\$0.00
0026	backhoe 2	day	\$200	4	\$800.00
0027	backhoe 3	day	\$300		\$0.00
0028	trackhoe 1	day	\$350		\$0.00
0029	trackhoe 2	day	\$500		\$0.00
0031	2"pvc-10 ft.section	foot	\$1.50	180	\$270.00
0033	2"screen-10 ft.section	foot	\$3	45	\$126.00
0035	filter pack sand	each	\$8.29	20	\$165.80
0036	bentonite pellets 50lb bucket	each	\$46.75		\$0.00
0037	bentonite chips 50lb sack	each	\$8.50	4	\$34.00
0038	8"manhole (well vault)	each	\$50.00	3	\$150.00
0042	mileage	mile	\$0.30	1100	\$330.00
0043	perdiem	each	\$60	16	\$960.00
0047	drill rig (M)	mile	\$1.00	550	\$550.00
0048	hollow-stem auger (S-M)	foot	\$13	225	\$2,925.00

0049	hollow-stem auger (L)	foot	\$19		\$0.00
0050	air rotary	hour	\$170		\$0.00
0051	coring	foot	\$12		\$0.00
0052	water truck	day	\$100		\$0.00
0053	pick-up truck ( )	day	\$50	4	\$200.00
0054	steam cleaner	day	\$50	4	\$200.00
	locking well cap & Pad (at cost)				\$440.00
	transport (at cost)				\$1,500.00
	disposal/recycling (at cost)				\$2,500.00
	fence (at cost)				\$6,149.00
<b>TOTAL</b>					(a) <b>\$24,999.80</b>

<b>SUB-TOTAL</b>			(a)	<b>\$ 24,999.80</b>
<b>Lea County Taxes (NMGR)</b>			<b>0.058125</b>	<b>\$1,453.11</b>
<b>TOTAL</b>			(b)	<b>\$26,452.91</b>

NOTE: LABORATORY COSTS ARE NOT INCLUDED

RESPEC, INC.

By: James A. Gustin

Title: VP Albuquerque Operations Date: 4/25/02

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

By: William B. Mackie  
William B. Mackie, Administrative Services Division Director

Date: 4-30-02

## Kielling, Martyne

---

**From:** Heibel, Richard A  
**Sent:** Wednesday, November 28, 2001 9:49 AM  
**To:** Kielling, Martyne  
**Cc:** Gallegos, Pauline J; Cordova, Cindee L; Ortiz, Dennis J  
**Subject:** RE: use of Purchase agreement

The NM Oil Conservation Division may purchase listed items, using the contract vendors listed, on Purchase Agreements 00-805-09-17658 (SITE MAINTENANCE & MONITORING) and 00-805-09-17626 (LABORATORY ANALYSIS - ENVIRONMENTAL SURVEY AND DETECTION). Please coordinate future similar agreements that your agency may require, so that our Agency can purchase items using a "combined" document.

Richard Heibel, CPG  
505-827-5699

-----Original Message-----

**From:** Kielling, Martyne  
**Sent:** Wednesday, November 28, 2001 10:21 AM  
**To:** Heibel, Richard A  
**Cc:** Gutierrez, Della  
**Subject:** use of Purchase agreement

Dear Richard Heibel,

It looks as though my computer was smart enough and found you in the system and automatically converted your E-mail address to your name. However I do not see the Highway department listed in my address book. ... Go figure ..

In regards to what we spoke of over the phone the N.M.Oil Conservation Division and the N.M. State Land Office would like to use your Purchase agreement 00-805-09-17659 to the amount of \$100,000 and \$200,000 respectively. Please let me know if it is ok to use your agreement for our work.

Thanks for your time and consideration.

Martyne Kielling  
476-3488

XC: File 711-022 Phase III Cleanup and Investigation at the Goodwin Treating Plant, Lea, County, NM.

STATE OF NEW MEXICO  
GENERAL SERVICES DEPARTMENT  
PURCHASING DIVISION

RECEIVED

GSD/PO 002-A (R)

SEP 25 2000

Environmental Bureau  
Oil Conservation Division

Aug 31, 2002

TERMS AND CONDITIONS UNLESS OTHERWISE SPECIFIED

1. **General:** When the State Purchasing Agent issues a purchase document in response to the Vendor's bid, a binding contract is created.
2. **Variation in Quantity:** No variation in the quantity of any item called for by this order will be accepted unless such variation has been caused by conditions of loading, shipping, packing or allowance manufacturing process, and then only to the extent, if any, specified elsewhere in this order.
3. **Assignment:**
  - A. Neither the order, nor any interest therein, nor claim thereunder, shall be assigned or transferred by the Vendor, except as set forth in subparagraph 3B below or as expressly authorized in writing by the state purchasing agent's office. No such assignment or transfer shall relieve the Vendor from the obligations and liabilities under this order.
  - B. Vendor agrees that any and all claims for overcharge resulting from antitrust violations which are borne by the State as to goods, services, and materials purchased in connection with this bid hereby assigned to the State.
4. **State Furnished Property:** State furnished property shall be returned to the State upon request in the same condition as received except for ordinary wear, tear and modifications ordered hereunder.
5. **Discounts:** Prompt payment discounts will not be considered in computing the low bid. Discounts for payment within 20 days will be considered after the award of the contract. Discounted time will be computed from the date of receipt of the merchandise or invoice, whichever is later.
6. **Inspection:** Final inspection and acceptance will be made at the destination. Supplies rejected at the destination for non-conformance with specifications shall be removed, at the Vendor's risk and promptly after notice of rejection.
7. **Inspection of Plant:** The State Purchasing Agent may inspect, at any reasonable time, the part of the contractor's, or any subcontractor's plant or place of business, which is related to the performance of this contract.
8. **Commercial Warranty:** The Vendor agrees that the supplies or services furnished under this order shall be covered by the most favorable commercial warranties the Vendor gives to any customer for similar supplies or services, and that the rights and remedies provided herein shall extend to the State and are in addition to and do not limit any rights afforded to the State by any other clause of this order. The Vendor agrees not to disclaim warranties of fitness for a particular purpose of merchantability.
9. **Taxes:** The unit price shall exclude all State taxes.
10. **Packing, Shipping and Invoicing:**
  - A. The State's purchase document number and the Vendor's name, user's name and location shall be shown on each packing and delivery ticket, package, bill of lading and other correspondence in connection with the shipments. The user's count will be accepted by the Vendor as final and conclusive on all shipment not accompanied by a packing ticket.
  - B. The Vendor's invoice shall be submitted in triplicate, duly certified and shall contain the following information: order number, description of supplies or services, quantities, unit prices and extended totals. Separate invoices shall be rendered for each and every complete shipment.
  - C. Invoice must be submitted to the using agency and NOT THE STATE PURCHASING AGENT.
11. **Default:** The State reserves the right to cancel all or any part of this order without cost to the State, if the Vendor fails to meet the provisions of this order and, except as otherwise provided herein, the Vendor shall be liable for any excess cost occasioned by the State due to the Vendor's default. The Vendor shall not be liable for any excess costs if failure to perform the order arises out of causes beyond the Vendor's control and without the fault or negligence of the Vendor; such causes include, but are not restricted to, acts of God or the public enemy, acts of the State or Federal Government, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, unusually severe weather and defaults of subcontractors due to any of the above, unless the State shall determine that the supplies or services to be furnished by the subcontractor were obtainable from other sources in sufficient time to permit the Vendor to meet the required delivery scheduled. The rights and remedies of the State provided in this paragraph shall not be exclusive and are in addition to any other rights now being provided by law or under this order.
12. **Non-collusion:** In signing this bid, the Vendor certifies he/she has not, either directly or indirectly, entered into action in restraint of free competitive bidding in connection with this offer submitted to the State Purchasing Agent.
13. **Non-discrimination:** Vendors doing business with the State of New Mexico must be in compliance with the Federal Civil Rights Act of 1964 and Title VII of the Act, (Rev., 1979), and the Americans with Disabilities Act of 1990, (Public Law 101-336).
14. **The Procurement Code:** Sections 13-1-28 through 13-1-39 NMSA 1978 imposes civil and criminal penalties for its violation. In addition, the New Mexico criminal statutes impose felony penalties for bribes, gratuities and kickbacks.
15. All bid items are to be NEW and of most current production, unless otherwise specified.
16. **Payment for purchases:** Except as otherwise agreed to: Late payment charges may be assessed against the user state agency in the amount and under the conditions set forth in Section 13-1-15 NMSA 1978.
17. **Workers' Compensation:** The Contractor agrees to comply with state laws and rules pertaining to workers' compensation benefits for its employees. If the Contractor fails to comply with the Workers' Compensation Act and applicable rules when required to do so, this Agreement may be terminated by the contracting agency.
18. **ATTENTION:** Failure to complete all information on the bid envelope might necessitate the premature opening of the bid in order to identify the bid file. The bid number should be identified on the outside of the bid envelope.

STATE OF NEW MEXICO  
GENERAL SERVICES DEPARTMENT  
PURCHASING DIVISION

DEPARTMENT  
PRICE AGREEMENT

Page 2

**ARTICLE I - STATEMENT OF WORK**

Under the terms and conditions of this Price Agreement the using agency may issue orders for items and/or services described herein. The terms and conditions of this Price Agreement shall form a part of each order issued hereunder.

The item and/or services to be ordered shall be as listed under ARTICLE IX - Price Schedule. All orders issued hereunder will bear both an order number and this Price Agreement number. Ag It is understood that no guarantee or warranty is made or implied, by either the New Mexico State Purchasing Agent or the user, that any order for any definite quantity will be issued under this Price Agreement. The contractor is required to accept the order and furnish the items and/or services in accordance with the articles contained hereunder for the quantity of each order issued.

**ARTICLE II - TERM**

The term of this Price Agreement for issuance of orders shall be as indicated in specifications

**ARTICLE III - SPECIFICATIONS**

Items and/or services furnished hereunder shall conform to the requirements of specifications and/or drawings applicable to items listed under ARTICLE IX - Price Schedule. Orders issued against this schedule will show the applicable Price Agreement item(s), numbers(s), and price(s); however they may not describe the item(s) fully.

**ARTICLE IV - SHIPPING AND BILLING INSTRUCTIONS**

Contractor shall ship in accordance with the instructions of this form. Shipment shall be made only against specific orders which the user may place with the contractor during the term indicated in ARTICLE II - TERM. The contractor shall enclose a packing list with each shipment listing the order number, Price Agreement number and the commercial parts number (if any) for each item. Delivery shall be made as indicated on page 1. If vendor is unable to meet stated delivery the State Purchasing Agent must be notified.

**ARTICLE V - TERMINATION**

This Price Agreement may be terminated by either signing party upon written notice to the other at least thirty (30) days in advance of the date of termination. Notice of Termination of the Price Agreement **SHALL NOT AFFECT ANY OUTSTANDING ORDERS.**

**ARTICLE VI- AMENDMENT**

This Price Agreement 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 Price Agreement **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 the bid and contract documents.

**ARTICLE VII - ISSUANCE OR ORDERS**

Only written signed orders are valid under this Price Agreement. Form SPD-001A is the approved form for state agencies issuing Contract Orders under this Price Agreement. Other authorized government entities may utilize form SPD-001A or forms adapted by them for their own use.

**ARTICLE VIII - PACKING (IF APPLICABLE)**

Packing shall be in conformance with standard commercial practices.

**ARTICLE IX - PRICE SCHEDULE**

Prices as listed in the Price Schedule hereto attached, ARE FIRM.

# PURCHASE DOCUMENT

AGENCY CODE	521	DOCUMENT NUMBER	02-199-005243
DATE	04/16/02	BUDGET FY	02



VENDOR CODE 460315848

VENDOR NAME AND ORDER ADDRESS  
 RE/SPEC INC  
 4775 INDIAN SCHOOL RD NE  
 SUITE 300  
 ALBUQUERQUE, NM 87110

**DO NOT STAPLE BAR CODES**

S H I P T O OIL CONSERVATION DIVISION 1220 SO. ST. FRANCIS DRIVE SANTA FE, NM 87505	B L L T O OIL CONSERVATION DIVISION 1220 SO. ST. FRANCIS DRIVE SANTA FE, NM 87505
---	--

AGENCY CONTACT MANAYA

PHONE NUMBER

LN	FUND	AGCY	ORG/PRG	APPR UNIT	DIVISION	OBJECT	AMOUNT
01	199	521	P586	300		3522	26455.00
PENND 1							
Maximum of six accounting lines per purchase document							
TOTAL							26,455.00

LN	FUND	AGCY	ORG/PRG	APPR UNIT	DIVISION	OBJECT	AMOUNT
1	199	521	0750	301	0700	3522	26455.00
TOTAL							26,455.00

APPROVAL 1 DATE 4-16-02 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:



CODE	521	NUMBER	02-199-005243
DATE	04/16/02	BUDGET FY	02

**PURCHASE DOCUMENT  
CONTINUATION SHEET**

AGENCY  
NAME

ENERGY, MINERALS & NAT RES

DELIVERY DATE	04/16/02	FOB	D
BUDGET VERIFIED BY:			

COMM LN	QUANTITY	UNIT	COMMODITY CODE	ACCT LN	ARTICLE AND DESCRIPTION	UNIT COST	TOTAL COST
1	1.0000	EACH	CCCC		PHASE I INVESTIGATION GENERAL PETROLEUM TREATING PLANT	26455.0000	26455.00
TOTAL							26,455.00

Generated by : New Mexico Energy, Minerals and Natural Resources Advantage Web System Version 2.2 03/12/02

1 VENDOR/SPD(PRONLY)

2 DFA COPY

3 AGENCY COPY

4 AGENCY COPY

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# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**

Governor

**Carol Leach**

**Conservation Division**

Acting Cabinet Secretary

**Lori Wrotenbery**

Director

**Oil**

## MEMORANDUM

**Date:** April 22, 2002  
**To:** William Mackie, Director, Administrative Services Division  
**From:** Stephen C. Ross, Assistant General Counsel *SCR*  
**Subject:** Phase I Investigation and Remediation of the Abandoned General Petroleum Treating Plant.

The Oil Conservation Division intends to conduct an investigation to determine the potential extent of contamination and estimate the future remediation costs that could be incurred at the abandoned General Petroleum Treating Plant. The facility is in Lea County on the immediate outskirts of the town of Eunice and appears to be a threat to human health and safety, as well as represents a potential (or actual) threat to groundwater. The facility contains one unlined pit area approximately 250 feet x 250 feet, 2 leaking tanks, several large piles of tank bottom material, and assorted trash. The site is located on private land west of Eunice, very near residences and business. The site lies approximately 70 feet above the Ogallala aquifer, the primary source of drinking water for Lea County.

The present task involves conducting a Phase I investigation of the site. During this phase, the tanks will be removed, three groundwater monitoring wells will be installed to ascertain the effect of the site on ground water and the remaining surface and near-surface contamination will be investigated to estimate volumes of contaminated soil. A report will be generated that will detail the potential extent of the contamination, cleanup scenarios, and a cost estimate based on the information gathered. Using this information the Department will be able to determine the best course of action.

We propose to enter into an agreement with RESPEC Inc. to perform this work. RESPEC Inc. has a price agreement with the State of New Mexico Highway and Transportation Department to provide the services necessary to perform the Phase I investigation. We have made the necessary modifications to the price agreement and obtained the permission of the Highway Department to purchase from the price agreement.

I hope that you feel this work is beneficial to the Department. I appreciate your consideration in this matter and look forward to hearing from you.

From: Martyne Kieling  
To: File 711-022  
Date: November 28, 2001  
Time: 9:30  
Subject: Phase III Goodwin treating plant investigation and cleanup

I contacted Mary Anaya with OCD and she called and spoke to Sandra Lujan with State Purchasing to see what was needed to use the Highway Department Purchase Agreement 00-805-09-17658. Sandra told her that all we needed was some documentation from the the vendor Amec Earth and Environmental and agreement from the issuing agency (Highway Department) Richard Hiebel 827-5699 is the contact for the Highway Department listed in Mary's computer program.

**Kieling, Martyne**

---

**From:** Heibel, Richard A  
**Sent:** Wednesday, November 28, 2001 9:49 AM  
**To:** Kieling, Martyne  
**Cc:** Gallegos, Pauline J; Cordova, Cindee L; Ortiz, Dennis J  
**Subject:** RE: use of Purchase agreement

The NM Oil Conservation Division may purchase listed items, using the contract vendors listed, on Purchase Agreements 00-805-09-17658 (SITE MAINTENANCE & MONITORING) and 00-805-09-17626 (LABORATORY ANALYSIS - ENVIRONMENTAL SURVEY AND DETECTION). Please coordinate future similar agreements that your agency may require, so that our Agency can purchase items using a "combined" document.

Richard Heibel, CPG  
505-827-5699

-----Original Message-----

**From:** Kieling, Martyne  
**Sent:** Wednesday, November 28, 2001 10:21 AM  
**To:** Heibel, Richard A  
**Cc:** Gutierrez, Della  
**Subject:** use of Purchase agreement

Dear Richard Heibel,

It looks as though my computer was smart enough and found you in the system and automatically converted your E-mail address to your name. However I do not see the Highway department listed in my address book. ... Go figure ..

In regards to what we spoke of over the phone the N.M. Oil Conservation Division and the N.M. State Land Office would like to use your Purchase agreement 00-805-09-17659 to the amount of \$100,000 and \$200,000 respectively. Please let me know if it is ok to use your agreement for our work.

Thanks for your time and consideration.

Martyne Kieling  
476-3488

XC: File 711-022 Phase III Cleanup and Investigation at the Goodwin Treating Plant, Lea, County, NM.



An Integrated Consulting and Services Company

RECEIVED

Aug 28 2002  
Environmental Bureau  
Oil Conservation Division

Invoice No. INV-0802-0012

## Invoice

**Bill To:**

State of New Mexico  
Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, NM 87505  
Attn: Martyne Kieling

**Remit Payment To:**

RESPEC  
Attn: Accounts Receivable  
4775 Indian School Road, NE, Suite 300  
Albuquerque, NM 87190-3593  
(505) 268-2661, (505) 268-0040 (FAX)

Contract Number: 02-521-07-227

Invoice Date: 8/20/2002

RESPEC Project Number: 01349.0001

Payment Terms: Net 30

1. Consulting Services

C/PA/P.O. #: 008050917658 Vendor #: 5187719  
Phase 1 / Phase 2 Investigation  
General Petroleum Treating Plant, Eunice, NM

\$24,713.00

2. TAX 5.8125%

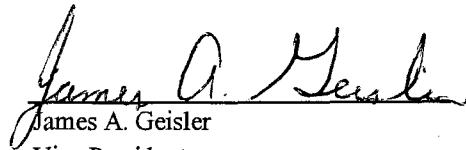
\$1,436.44

3. Total Due This Invoice

\$26,149.44

OK to pay  
Martyne Kieling  
9-3-02

Approved by:

  
James A. Geisler  
Vice President  
RESPEC

**PRICE ESTIMATION -**  
Eunice - OCD Proposal

Vendor No. 5187719  
PA Number: 008050917658

RESPEC Inc.  
Commodity Code: 72002 66074

LN	QTY	RATE	UNIT	COST	DESCRIPTION
*0002	32	\$75.00	Hour	\$2,400.00	Senior Scientist
*0003	60	\$60.00	Hour	\$3,600.00	Project Manager/Certified Scientist
*0004	80	\$50.00	Hour	\$4,000.00	Staff Scientist
*0005	80	\$35.00	Hour	\$2,800.00	Field Technician II
*0006	40	\$30.00	Hour	\$1,200.00	Field Technician I
*0010		\$30.00	Hour	\$0.00	Secretary
*0021		\$50.00	Day	\$0.00	PID
*0025		\$150.00	Day	\$0.00	Backhoe 1
*0026	8	\$200.00	Day	\$1,600.00	Backhoe 2
*0027		\$300.00	Day	\$0.00	Backhoe 3
*0028		\$350.00	Day	\$0.00	Trackhoe 1
*0029		\$500.00	Day	\$0.00	Trackhoe 2
*0031	300	\$1.50	Foot	\$450.00	2" blank PVC, 10 ft sections
*0033	45	\$2.80	Foot	\$126.00	2" screen, 10 ft sections
*0035	20	\$8.29	Each	\$165.80	Filter Pack Sand per 100# sack
*0036		\$46.75	Each	\$0.00	Bentonite pellets per 50# sack
*0037	4	\$8.50	Each	\$34.00	Bentonite Chips per 50# sack
*0038	3	\$50.00	Each	\$150.00	8" Manhole (well vault)
*0040	944	\$0.05	Each	\$47.20	Copies
*0042	1100	\$0.30	Mile	\$330.00	Personal Vehicle Mileage
*0043	32	\$60.00	Each	\$1,920.00	Per Diem/Overnight
*0047	550	\$1.00	Mile	\$550.00	Mobe/Demobe: Drill Rig (Medium duty)
*0048	300	\$13.00	Foot	\$3,900.00	Hollow-Stem Auger Drilling Services (S-M)
*0049		\$19.00	Foot	\$0.00	Hollow-Stem Auger Drilling Services (L)
*0050		\$170.00	Hour	\$0.00	Air Rotary Drill Rig
*0051		\$12.00	Foot	\$0.00	Coring
*0052		\$100.00	Day	\$0.00	Water Truck -
*0053	10	\$50.00	Day	\$500.00	Pick up Truck -
*0054	10	\$50.00	Day	\$500.00	Steam cleaner
				\$440.00	Locking well cap and pad - at cost

**TOTAL**      \$24,713.00 (a) X      0.058125 (NMGR) : **\$26,149.44** ✓ ok

**NOTE: LABORATORY COSTS ARE INCLUDED**

6. Paragraph E ("Summary of Phase I Investigation and Remediation at the General Petroleum Treating Plant") shall be and hereby is amended by substitution of the following table for the table that appeared in the Scope of Work:

Vendor No. 5187719

PA Number: 008050917658

RESPEC Inc.

Commodity Code: 72002 66074

LN	QTY	RATE	UNIT	COST	DESCRIPTION	
*0002	32 32	\$75.00	Hour	\$2,400.00	Senior Scientist	2,400. =
*0003	60 60	\$60.00	Hour	\$3,600.00	Project Manager/Certified Scientist	3,600. =
*0004	80 50	\$50.00	Hour	\$2,500.00	Staff Scientist	4,000. +
*0005	80 70	\$35.00	Hour	\$2,450.00	Field Technician II	2,800. +
*0006	40 40	\$30.00	Hour	\$1,200.00	Field Technician I	1,200. =
*0010		\$30.00	Hour	\$0.00	Secretary	
*0021		\$50.00	Day	\$0.00	PID	
*0025		\$150.00	Day	\$0.00	Backhoe 1	
*0026	8	\$200.00	Day	\$0.00	Backhoe 2	1,600. +
*0027		\$300.00	Day	\$0.00	Backhoe 3	
*0028		\$350.00	Day	\$0.00	Trackhoe 1	
*0029		\$500.00	Day	\$0.00	Trackhoe 2	
*0031	300 180	\$1.50	Foot	\$270.00	2" blank PVC, 10 ft sections	450. +
*0033	45 45	\$2.80	Foot	\$126.00	2" screen, 10 ft sections	126. =
*0035	20 20	\$8.29	Each	\$165.80	Filter Pack Sand per 100# sack	1,658.00 =
*0036		\$46.75	Each	\$0.00	Bentonite pellets per 50# sack	
*0037	4 4	\$8.50	Each	\$34.00	Bentonite Chips per 50# sack	34.00 =
*0038	3 3	\$50.00	Each	\$150.00	8" Manhole (well vault)	150.00 =
*0042	1100 1100	\$0.30	Mile	\$330.00	Personal Vehicle Mileage	330.00 =
*0043	32 32	\$60.00	Each	\$1,920.00	Per Diem/Overnight	1,920.00 =
*0047	550 550	\$1.00	Mile	\$550.00	Mobe/Demobe: Drill Rig (Medium duty)	550. =
*0048	300 525	\$13.00	Foot	\$6,825.00	Hollow-Stem Auger Drilling Services (S-M)	3,900.00 =
*0049		\$19.00	Foot	\$0.00	Hollow-Stem Auger Drilling Services (L)	
*0050		\$170.00	Hour	\$0.00	Air Rotary Drill Rig	
*0051		\$12.00	Foot	\$0.00	Coring	
*0052		\$100.00	Day	\$0.00	Water Truck -	
*0053	10 8	\$50.00	Day	\$400.00	Pick up Truck -	500.00 +
*0054	10 8	\$50.00	Day	\$400.00	Steam cleaner	500.00 +
				\$440.00	Locking well cap and pad - at cost	440.00 =
				\$1,200.00	Plug & Abandonment of Soil Borings - At Cost	
					Transport - at cost	
					Disposal/recycling - at cost	
					subcontract shear - at cost	
*0040	744	.55		47.20	fence - at cost	2,471.3

TOTAL

\$24,960.80 (a) X 0.058125 (NMGRT) =

\$26,411.65

NOTE: LABORATORY COSTS ARE NOT INCLUDED

**PRICE ESTIMATION -**  
Eunice - OCD Proposal

Vendor No. 5187719  
PA Number: 008050917658

RESPEC Inc.  
Commodity Code: 72002 66074

LN	QTY	RATE	UNIT	COST	DESCRIPTION
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*0003	60	\$60.00	Hour	\$3,600.00	Project Manager/Certified Scientist
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*0010		\$30.00	Hour	\$0.00	Secretary
*0021		\$50.00	Day	\$0.00	PID
*0025		\$150.00	Day	\$0.00	Backhoe 1
*0026	8	\$200.00	Day	\$1,600.00	Backhoe 2
*0027		\$300.00	Day	\$0.00	Backhoe 3
*0028		\$350.00	Day	\$0.00	Trackhoe 1
*0029		\$500.00	Day	\$0.00	Trackhoe 2
*0031	300	\$1.50	Foot	\$450.00	2" blank PVC, 10 ft sections
*0033	45	\$2.80	Foot	\$126.00	2" screen, 10 ft sections
*0035	20	\$8.29	Each	\$165.80	Filter Pack Sand per 100# sack
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*0049		\$19.00	Foot	\$0.00	Hollow-Stem Auger Drilling Services (L)
*0050		\$170.00	Hour	\$0.00	Air Rotary Drill Rig
*0051		\$12.00	Foot	\$0.00	Coring
*0052		\$100.00	Day	\$0.00	Water Truck -
*0053	10	\$50.00	Day	\$500.00	Pick up Truck -
*0054	10	\$50.00	Day	\$500.00	Steam cleaner
				\$440.00	Locking well cap and pad - at cost

**TOTAL**      \$24,713.00 (a) X      0.058125 (NMGR) :    **\$26,149.44**

**NOTE: LABORATORY COSTS ARE INCLUDED**



## Kieling, Martyne

---

**From:** Brooks, David K  
**Sent:** Thursday, June 13, 2002 7:26 AM  
**To:** Kieling, Martyne  
**Subject:** RE: General Petroleum (Eunice)

Martyne:

Some of these internet searches can locate peoples' social security numbers. I have never tried to do it, but I took a course on that subject and have a book with websites listed. Most of these websites charge for use, but the fees are not large.

If we cant get the releases we need, we will have to file a civil suit in the District Court of Lea County. There will probably be a 30 to 60 day lead time after filing before we can get an order to go on the property even if no one shows up to oppose it (which i think is probably what will happen). Let me know if (when) you and Roger decide to go that route, and I will swing into action preparing the necessary paper.

DB

-----Original Message-----

**From:** Kieling, Martyne  
**Sent:** Wednesday, June 12, 2002 5:41 PM  
**To:** Brooks, David K  
**Cc:** Anderson, Roger; Ross, Stephen  
**Subject:** General Petroleum (Eunice)

David,

We have successfully amended the contract scope of work to do boreholes instead of trenches, leave the tanks and contents, and not place a fence around the pit. If advisable we propose to put up a fence using a separate contract in July when DFA is up and running again.

I have received the Temporary Grant of Easement papers back from the Lea County Clerk for all property surrounding the facility.

I have spoken to Jimmie T. Cooper yesterday and his attorney advised him not to sign the document that was drafted for his signature. We should be receiving something regarding this from his attorney soon.

I have called Troy Frank's brother, left a message, and I have not had a call back. I will try again. I also surfed the WEB and came up with several Troy Franks around the USA. However, I do not know his middle initial to narrow this down. Knowing his age is listed as 31 according to one search that placed a Troy Frank in Hobbs, NM. and was 31 years old.

There is a Troy T. Frank in Canton, OH that is 31.  
Troy A. Frank, in Hadley, Saint Louis, MO 63101 that is 31  
Troy Alexander Frank in Houston, TX that is 31

I What else should I try? and Where do we go from here regarding gaining the access that we will need for future work.

*Martyne J. Kieling*

Martyne J. Kieling  
Environmental Geologist



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Home

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Court Records

Searches About Me

Business Users

Begin your Search - Enter the last known information on the person you are searching for:

First Name

Troy

Middle Initial

Last Name (req)

Frank

Search Type

☒ People Locate

☐ Background Search

City

State

Select all States

Approx. Age (req)

Search

Select the person you are searching for:

Need Expert Assistance?

1-800-US-SEARCH

(1-800-877-3272)

Additional charges may apply



Who's taking care  
of your kids?

Comprehensive Childcare  
Screening:  
Reference Check  
Sexual Offender Check  
DMV Records and more...  
Learn More

### Search Results - 49 Records Found

Option 1 - Click on the name to get the **current or historical address**. (From \$9.95 - Internet Only)

Option 2 - Basic address information for all records: Click here. (\$14.95 - Internet Only) [Sample Report](#)

#	Name	City	State	Age
1	<a href="#">TROY A FRANK</a>	WASHINGTON	IL	33
2	<a href="#">TROY E FRANK</a>	ROCK FALLS	IL	-
3	<a href="#">TROY E FRANK</a>	CHICAGO	IL	34
4	<a href="#">TROY E FRANK</a>	ROCK FALLS	IL	34
5	<a href="#">TROY A FRANK</a>	CLEVELAND	OH	37
6	<a href="#">TROY A FRANK</a>	CLEVELAND	OH	37
7	<a href="#">TROY T FRANK</a>	CANTON	OH	31
8	<a href="#">TROY FRANK</a>	DETROIT	MI	29
9	<a href="#">TROY D FRANK</a>	EAST LANSING	MI	35
10	<a href="#">TROY DANIEL FRANK</a>	KAWKAWLIN	MI	35
11	<a href="#">TROY E FRANK</a>	ERIE	MI	35
12	<a href="#">TROY EDMUND FRANK</a>	YPSILANTI	MI	34
13	<a href="#">TROY EUGENE FRANK</a>	ERIE	MI	35
14	<a href="#">TROY EUGENE FRANK</a>	TEMPERANCE	MI	35
15	<a href="#">TROY L FRANK</a>	THREE RIVERS	MI	34
16	<a href="#">TROY LYNN FRANK</a>	EAST LEROY	MI	34
17	<a href="#">TROY DOUGLAS FRANK</a>	POMPANO BEACH	FL	38
18	<a href="#">TROY A FRANK</a>	HORTENSE	GA	23
19	<a href="#">TROY FRANK</a>	HAVERHILL	MA	34
20	<a href="#">TROY D FRANK</a>	SURING	WI	38
21	<a href="#">TROY J FRANK</a>	GREEN BAY	WI	33
22	<a href="#">TROY J FRANK</a>	SOBIESKI	WI	33
23	<a href="#">TROY J FRANK</a>	HUMBIRD	WI	27
24	<a href="#">TROY J FRANK</a>	MADISON	WI	27
25	<a href="#">TROY ANDREW FRANK</a>	NORA SPRINGS	IA	37
26	<a href="#">TROY A FRANK</a>	SAINT LOUIS	MO	31

Troy Frank, Hadley, St Louis, MO 63101

27	<a href="#">TROY M FRANK</a>	LINN	MO	21
28	<a href="#">TROY M FRANK</a>	INDIANAPOLIS	IN	-
29	<a href="#">TROY PAUL FRANK</a>	AUDUBON	MN	24
30	<a href="#">TROY ALAN FRANK</a>	FERGUS FALLS	MN	28
31	<a href="#">TROY DOUGLAS FRANK</a>	SAINT PAUL	MN	38
32	<a href="#">TROY PAUL FRANK</a>	AUDUBON	MN	24
33	<a href="#">TROY HARRY FRANK</a>	SAINT CLOUD	MN	32
34	<a href="#">TROY HARRY FRANK</a>	SAINT CLOUD	MN	32
35	<a href="#">TROY ALAN FRANK</a>	FERGUS FALLS	MN	28
36	<a href="#">TROY FRANK</a>	SEABROOK	TX	34
37	<a href="#">TROY FRANK</a>	AUSTIN	TX	34
38	<a href="#">TROY ALEXANDER FRANK</a>	HOUSTON	TX	31
39	<a href="#">TROY DALE FRANK</a>	DURANT	OK	21
40	<a href="#">TROY DENNY FRANK</a>	STILLWATER	OK	34
41	<a href="#">TROY DENNY FRANK</a>	CUSHING	OK	34
42	<a href="#">TROY DENNY FRANK</a>	STILLWATER	OK	34
43	<a href="#">TROY J FRANK</a>	SALLIS	MS	29
44	<a href="#">TROY J FRANK</a>	SALLIS	MS	29
45	<a href="#">TROY FRANK</a>	BUNKIE	LA	-
46	<a href="#">TROY PICCASSO FRANK</a>	MORROW	LA	-
47	<a href="#">TROY ANTHONY FRANK</a>	RYE	NH	34
48	<a href="#">TROY J FRANK</a>	ESCONDIDO	CA	19
49	<a href="#">TROY FRANK</a>	HOBBS	NM	31

Option 1 - Click on the name to get the **current or historical address**. (From \$9.95 - Internet Only)

Option 2 - Basic address information for all records: [Click here](#). (\$14.95 - Internet Only) [Sample Report](#)

### Need Help?

Having trouble selecting the right record? Let a US SEARCH specialist run your search.

[Let a US SEARCH expert run my search](#)

## Kielling, Martyne

---

**From:** Johnson, Larry  
**Sent:** Thursday, May 23, 2002 12:23 PM  
**To:** Kielling, Martyne  
**Subject:** Gen Petro Easements

Martyne,

Signed temporary grant of easements for the General Petroleum Site @ Eunice have been filed today with the Lea County Clerk's office. This included Bobby & Elizabeth Sikes, Vicki Brooks, and Carl (John) and Patsy Coy. These will be mailed by the County directly to Steve Ross within two weeks.

Cooper's easement was submitted to his agent, Eddie Seay. No response has been received by this office at this time. Gary Wink has repeatedly attempted to locate Troy Frank with no success.

----- Larry

## TEMPORARY GRANT OF EASEMENT

BOBBY E. and ELIZABETH SIKES, husband and wife, P.O. Box 2, Eunice, New Mexico, 88231, for consideration, grants to the NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES ("EMNRD") and its OIL CONSERVATION DIVISION, their agents, employees and contractors, a temporary and limited easement in, to, upon and over all that portion of the following described real estate in Lea County, New Mexico recorded at Book 827, Page 287 in the records of said County, together with reasonable access thereto:

## SURFACE ACCESS ONLY:

A tract of land of 1.00 acres located in Southwest quarter of Section 28, Township 21 South, Range 37 East, N.M.P.M., Lea County, New Mexico, being more particularly described as follows:

Beginning at a 1/2" iron rod w/PVC cap mk'd ps 3239, ps 12641 set in the South line of said Section 28 for the Southwest corner of this survey which lies N89°59'E, 499.40 feet from the Southwest corner of said Section 28; thence N00°03'W, 207.92 feet to a 1/2" iron rod mk'd ps 3239, ps 12641; thence N89°59'E 208.71 feet to a 1/2" iron rod w/PVC cap mk'd ps 3239, ps 12641; thence S00°02'E 207.92 feet; thence S89°59'W 208.71 feet to the point of beginning.

Subject to reservations, restrictions and easements appearing of record.

Said easement is given for the purpose of conducting an investigation and remediation of contamination believed to exist at the site of the abandoned General Petroleum Treating Plant, which investigation may include drilling, constructing and maintaining upon the premises a monitor well or wells with which the Oil Conservation Division will use to assess and monitor contaminants below the surface, routine visits to the site, ingress and egress to the site, sampling and inspecting the aforementioned monitor wells following initial construction, excavation of the property to investigate the nature and extent of contaminants, construction of temporary roadways to facilitate investigation and remediation of the site, excavation of the site to remove and/or remediate contamination in place, and other activities inherent in the aforesaid investigation and remediation. Said easement shall terminate when the Division files a notice that it has concluded its investigation and remediation activities at the site.

Witness my hand and seal this 20<sup>th</sup> day of May, 2002.

  
BOBBY E. SIKES

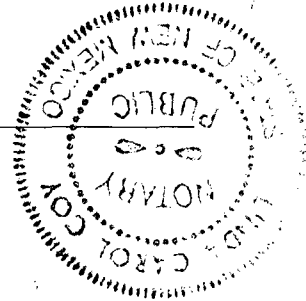
  
ELIZABETH SIKES

ACKNOWLEDGEMENTS

STATE OF NEW MEXICO )  
COUNTY OF LEA )

The foregoing instrument was acknowledged before me this 20<sup>th</sup> day of May, 2002, by BOBBY E. SIKES.

Linda Carol Coj  
Notary Public



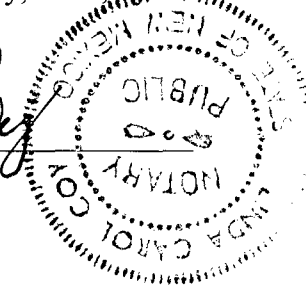
My commission expires:

8-21-2004

STATE OF NEW MEXICO )  
COUNTY OF LEA )

The foregoing instrument was acknowledged before me this 22<sup>nd</sup> day of May, 2002, by ELIZABETH SIKES.

Linda Carol Coj  
Notary Public



My commission expires:

8-21-2004

STATE OF NEW MEXICO  
COUNTY OF LEA  
FILED

MAY 23 2002  
at 9:51 o'clock 11:48 AM  
and recorded in Book 387  
Page 387  
Melinda Hughes, Lea County Clerk  
By [Signature] Deputy



22223

**TEMPORARY GRANT OF EASEMENT**

VICKIE BROOKS, individually and as personal representative of the estate of GARY L. BROOKS, deceased, P.O. Box 1893, Eunice, New Mexico, for consideration, grants to the NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES ("EMNRD") and its OIL CONSERVATION DIVISION, their agents, employees and contractors, a temporary and limited easement in, to, upon and over all that portion of the following described real estate in Lea County, New Mexico, recorded at Book 383, Page 150 in the records of said County together with reasonable access thereto:

**SURFACE ACCESS ONLY:**

A tract of land located in Southwest quarter of Section 28, Township 21 South, Range 37 East, N.M.P.M., Lea County, New Mexico, and being more particularly described as follows:

Beginning at a point from which the Southwest corner of the said Section 28 bears S89°59'W a distance of 30 feet and S0°02'W a distance of 890 feet, said point of beginning being the Southwest corner of this tract; thence N0°02'E a distance of 290 feet; thence N89°59'E a distance of 600 feet; thence S0°02'W a distance of 290 feet; thence S89°59'W a distance of 600 feet to the point of beginning, excepting, however, all oil, gas and other minerals therein and thereunder.

Subject to reservations, restrictions and easements appearing of record.

Said easement is given for the purpose of conducting an investigation and remediation of contamination believed to exist at the site of the abandoned General Petroleum Treating Plant, which investigation may include drilling, constructing and maintaining upon the premises a monitor well or wells with which the Oil Conservation Division will use to assess and monitor contaminants below the surface, routine visits to the site, ingress and egress to the site, sampling and inspecting the aforementioned monitor wells following initial construction, excavation of the property to investigate the nature and extent of contaminants, construction of temporary roadways to facilitate investigation and remediation of the site, excavation of the site to remove and/or remediate contamination in place, and other activities inherent in the aforesaid investigation and remediation. Said easement shall terminate when the Division files a notice that it has concluded its investigation and remediation activities at the site.

Witness my hand and seal this 13<sup>th</sup> day of May, 2002.



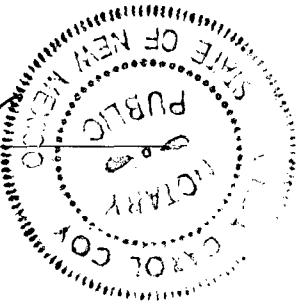
VICKIE BROOKS, individually and as personal representative  
of the estate of Gary L. Brooks, deceased

ACKNOWLEDGEMENT

STATE OF NEW MEXICO     )  
  )  
COUNTY OF LEA            )

The foregoing instrument was acknowledged before me this 13<sup>th</sup> day of May, 2002, by VICKIE BROOKS, individually and as personal representative of the estate of Gary L. Brooks, deceased.

Linda Carol Cox  
Notary Public



My commission expires:

Aug. 21, 2004

STATE OF NEW MEXICO  
COUNTY OF LEA  
FILED

MAY 23 2002  
at 9:51 o'clock AM  
and recorded in Book 1148  
Page 389  
Melinda Hughes, Lea County Clerk  
By [Signature] Deputy

22224





# TEMPORARY GRANT OF EASEMENT

CARL J. COY and PATSY E. COY, husband and wife as joint tenants, P.O. Box 876, Eunice, New Mexico, 88231, for consideration, grant to the NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES ("EMNRD") and its OIL CONSERVATION DIVISION, their agents, employees and contractors, a temporary and limited easement in, to, upon and over all that portion of the following described real estate in Lea County, New Mexico, together with reasonable access thereto:

## SURFACE ACCESS ONLY:

A tract of land located in Section 28, Township 21 South, Range 37 East, N.M.P.M., Lea County, New Mexico, being more particularly described as follows:

Beginning at the Southwest corner of Section 28; thence N89°59'E 708.1 feet; thence N0°2'W 208 feet; thence N89°59'E 400 feet; thence S0°2'E 208 feet; thence N89°59'E 211.9 feet; thence N0°2'W 521.7 feet; thence N89°59'E 744.70 feet; thence S0°2'E 105.70 feet; thence N89°59'E 208 feet; thence N0°2'W 473.3 feet; thence S89°59'W 1642 feet; thence S0°2'W 682 feet; thence S89°59'W 600 feet; thence N0°2'E 682 feet; thence S 89°59'W 30 feet; thence S0°2'W 890 feet to the point of beginning.

AND

A tract of land located in the Southwest Quarter of the Southwest Quarter (SW/4SW/4) of Section 28, Township 21 South, Range 37 East, N.M.P.M., Lea County, New Mexico, being more particularly described as follows:

Beginning N0°2'E 890 feet from the Southwest corner of Section 28; thence N0°2'E 430 feet; thence N89°59'E 1320 feet; thence S0°2'W 430 feet; thence S89°59'W 690 feet; thence N0°2'E 290 feet; thence S89°59'W 600 feet; thence S0°2'W 290 feet; thence S89°59'W 30 feet to the point of beginning.

LESS AND EXCEPT the following-described tract of land located in the Southwest Quarter of the Southwest Quarter of Section 28, Township 21 South, Range 37 East, N.M.P.M., Lea County, New Mexico and being more particularly described as follows:

Beginning at a 1/2" iron rod w/PVC cap mk'd ps 3239, ps 12641 set in the South line of said Section 28 for the Southwest corner of this survey which lies N89°59'E, 499.40 feet from the Southwest corner of said Section 28; thence N00°03'W, 207.92 feet to a 1/2" iron rod mk'd ps 3239, ps 12641; thence N89°59'E 208.71 feet to a 1/2" iron rod w/PVC cap mk'd ps 3239, ps 12641; thence S00°02'E 207.92 feet; thence S89°59'W 208.71 feet to the point of beginning.

Subject to reservations, restrictions and easements appearing of record.

Said easement is given for the purpose of conducting an investigation and remediation of contamination believed to exist at the site of the abandoned General Petroleum Treating Plant, which investigation may include drilling, constructing and maintaining upon the premises a monitor well or wells with which the Oil Conservation Division will use to assess and monitor contaminants below the surface, routine visits to the site, ingress and egress to the site, sampling

and inspecting the aforementioned monitor wells following initial construction, excavation of the property to investigate the nature and extent of contaminants, construction of temporary roadways to facilitate investigation and remediation of the site, excavation of the site to remove and/or remediate contamination in place, and other activities inherent in the aforesaid investigation and remediation. Said easement shall terminate when the Division files a notice that it has concluded its investigation and remediation activities at the site.

Witness my hand and seal this 10 day of May, 2002.

Carl J. Coy  
CARL J. COY

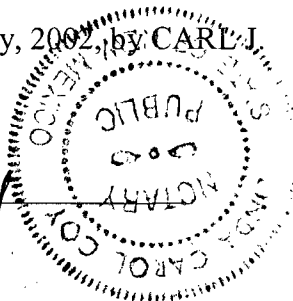
Patsy E. Coy  
PATSY E. COY

ACKNOWLEDGEMENTS

STATE OF NEW MEXICO )  
COUNTY OF LEA )

The foregoing instrument was acknowledged before me this 10<sup>th</sup> day of May, 2002, by CARL J. COY.

Linda Carol Coy  
Notary Public



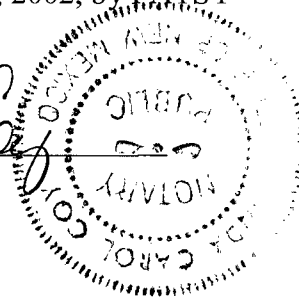
My commission expires:

8-21-2004

STATE OF NEW MEXICO )  
COUNTY OF LEA )

The foregoing instrument was acknowledged before me this 10<sup>th</sup> day of May, 2002, by PATSY E. COY.

Linda Carol Coy  
Notary Public



My commission expires:

8-21-2004

STATE OF NEW MEXICO  
COUNTY OF LEA  
FILED

at 9:51 o'clock AM  
and recorded in Book 1148  
Page 391  
Melinda Hughes, Lea County Clerk  
By [Signature] Deputy



22225

**AMENDMENT NO. 1  
SCOPE OF WORK  
PHASE I INVESTIGATION AND REMEDIATION  
GENERAL PETROLEUM TREATING PLANT  
LEA COUNTY, NEW MEXICO**

This Amendment No. 1 amends the Scope of Work, Phase I Investigation and Remediation of the General Petroleum Treating Plant, Lea County, New Mexico, by and between the Contractor, Re/Spec Inc., 4775 Indian School Road NE, Suite 300, Albuquerque, New Mexico, 87110, and the Oil Conservation Division of the Energy, Minerals and Natural Resources Department (EMNRD), dated April 30, 2002.

The Scope of Work is hereby amended, as follows:

1. Paragraphs C(3) and C(4) ("Scope of Work") pertaining to fencing shall be and hereby are stricken.
2. Paragraph C(6) ("Scope of Work") pertaining to removal of tanks and the material therein shall be and hereby is stricken.
3. Paragraph 11 ("Scope of Work") pertaining to investigation of the nature and extent of contamination below the tank footprints shall be and hereby is amended as follows:
  - "11. Investigate nature and extent of contamination below the tank foot-prints.
    - "a. Investigate the extent of contamination beneath the tank foot prints by completing bore holes along the former tank area (see figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. Samples will be taken from each bore hole and will be sent for laboratory TPH and chloride analysis. Back fill bore holes when finished.
    - "b. Estimate the volume and cost per cubic yard to remove the contaminated material based on the bore holes and sample analysis. Contaminated soil must be sent to an OCD-approved land-farm for reclamation."
4. Paragraph 12 ("Scope of Work") pertaining to investigation of the nature and extent of tank bottom piles shall be and hereby is amended as follows:
  - "12. Investigate nature and extent of tank bottom piles.

- "a. Investigate the extent of contamination surrounding the tank bottom piles by completing bore holes perpendicular to three sides of the pile (see figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. Samples will be taken from each bore hole and will be sent for laboratory TPH and chloride analysis. Back fill open bore holes when finished.
- "b. Estimate the volume and cost per cubic yard to remove the tank bottom material and surrounding contamination based on the bore holes and sample analysis. Tank bottoms and contaminated soil must be sent to an OCD-approved land-farm for reclamation.

5. Paragraph 13 ("Scope of Work") pertaining to investigation of the nature and extent of contamination around the pit area shall be and hereby is amended as follows:

- "13. Investigate the nature and extent of contamination around the pit area.
  - "a. Investigate the composition of the pit material to determine if recovery of any hydrocarbons is possible. Determine the cost associated with recovery.
  - "b. Investigate the extent to which the contamination has migrated from the pit by completing bore holes perpendicular to three sides of the pit and inside the southwest corner (see figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. Samples will be taken from each bore hole and will be sent for laboratory TPH, and chloride analysis. Back fill open bore holes when finished.
  - "c. Estimate the volume and cost per cubic yard to remove the pit material and surrounding contamination based on the bore holes and sample analysis. Contaminated material must be sent to an OCD-approved land-farm for reclamation. Volume and cost estimates shall take into account that the pit material may need to be solidified for transport."

6. Paragraph E ("Summary of Phase I Investigation and Remediation at the General Petroleum Treating Plant") shall be and hereby is amended by substitution of the following table for the table that appeared in the Scope of Work:

Vendor No. 5187719  
PA Number: 008050917658

RESPEC Inc.  
Commodity Code: 72002 66074

LN	QTY	RATE	UNIT	COST	DESCRIPTION
*0002	32	\$75.00	Hour	\$2,400.00	Senior Scientist
*0003	60	\$60.00	Hour	\$3,600.00	Project Manager/Certified Scientist
*0004	50	\$50.00	Hour	\$2,500.00	Staff Scientist
*0005	70	\$35.00	Hour	\$2,450.00	Field Technician II
*0006	40	\$30.00	Hour	\$1,200.00	Field Technician I
*0010		\$30.00	Hour	\$0.00	Secretary
*0021		\$50.00	Day	\$0.00	PID
*0025		\$150.00	Day	\$0.00	Backhoe 1
*0026		\$200.00	Day	\$0.00	Backhoe 2
*0027		\$300.00	Day	\$0.00	Backhoe 3
*0028		\$350.00	Day	\$0.00	Trackhoe 1
*0029		\$500.00	Day	\$0.00	Trackhoe 2
*0031	180	\$1.50	Foot	\$270.00	2" blank PVC, 10 ft sections
*0033	45	\$2.80	Foot	\$126.00	2" screen, 10 ft sections
*0035	20	\$8.29	Each	\$165.80	Filter Pack Sand per 100# sack
*0036		\$46.75	Each	\$0.00	Bentonite pellets per 50# sack
*0037	4	\$8.50	Each	\$34.00	Bentonite Chips per 50# sack
*0038	3	\$50.00	Each	\$150.00	8" Manhole (well vault)
*0042	1100	\$0.30	Mile	\$330.00	Personal Vehicle Mileage
*0043	32	\$60.00	Each	\$1,920.00	Per Diem/Overnight
*0047	550	\$1.00	Mile	\$550.00	Mobe/Demobe: Drill Rig (Medium duty)
*0048	525	\$13.00	Foot	\$6,825.00	Hollow-Stem Auger Drilling Services (S-M)
*0049		\$19.00	Foot	\$0.00	Hollow-Stem Auger Drilling Services (L)
*0050		\$170.00	Hour	\$0.00	Air Rotary Drill Rig
*0051		\$12.00	Foot	\$0.00	Coring
*0052		\$100.00	Day	\$0.00	Water Truck -
*0053	8	\$50.00	Day	\$400.00	Pick up Truck -
*0054	8	\$50.00	Day	\$400.00	Steam cleaner
				\$440.00	Locking well cap and pad - at cost
				\$1,200.00	Plug & Abandonment of Soil Borings - At Cost
					Transport - at cost
					Disposal/recycling - at cost
					subcontract shear - at cost
					fence - at cost

**TOTAL**

**\$24,960.80 (a) X 0.058125 (NMGR) = \$26,411.65**

**NOTE: LABORATORY COSTS ARE NOT INCLUDED**

7. All other provisions of the Scope of Work shall remain in force and unchanged.

**RESPEC, INC.**

By: James A. Yauli

Title: VP Albuquerque Operations Date: 6/10/02

**ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT**

By: William B. Mackie  
William B. Mackie  
Administrative Services Division

Date: 6-12-02

**SCOPE OF WORK  
PHASE I INVESTIGATION AND REMEDIATION  
GENERAL PETROLEUM TREATING PLANT  
LEA COUNTY, NEW MEXICO**

The activities of this Scope of Work are being conducted under the auspices of New Mexico State Highway and Transportation Department Purchase Agreement 00-805-09-17658 (Agreement) (Contract Vendor 9) Respec, Inc., 4775 Indian School Rd. NE, Suite 300, Albuquerque, NM 87110, Tel 1-505-268-2661 (copy of e-mailed permission to use this Agreement is attached). This Scope of Work more specifically sets forth the obligations of the Oil Conservation Division of the Energy, Minerals and Natural Resources Department (EMNRD) under the Agreement. The Agreement term is August 31, 2002.

**A. CLARIFICATIONS TO AGREEMENT**

1. This Scope of Work is scheduled to be completed by August 31, 2002. This Scope of Work becomes effective upon signature of EMNRD and Respec, Inc., and encumbrance by the Financial Control Division of the Department of Finance and Administration of the funds used to pay or the activities specified herein.
2. Insurance: Respec, Inc., shall provide EMNRD with a Certificate of Insurance naming EMNRD as additional insured/certificate holder for the activities covered by this Scope of Work.
3. Contact Person: EMNRD's contact person regarding this Scope of Work, any revisions to it, questions about it, payment of bills, etc., is: Martyne Kieling, OCD, EMNRD, 1220 S. St. Francis Drive, Santa Fe, N.M., 87505, Telephone: (505) 476-3488; Fax: (505) 476-3462.
4. Any mention in the underlying Agreement which references the New Mexico State Highway and Transportation Department, or the Department, or any other diminutive of the New Mexico State Highway and Transportation Department as it relates to this Scope of Work shall be taken to refer to EMNRD for the work being conducted under this Scope of Work.
5. All other terms and conditions of the underlying Agreement shall remain the same and any issues not addressed herein this Scope of Work shall be controlled by the underlying Agreement.

**B. SUMMARY**

The contractor shall perform the work necessary to conduct a Phase I preliminary investigation of the equipment, surface contamination, the extent of subsurface soil contamination and depth to and analysis of groundwater. The Contractor shall also compile volume and cost estimates with regards to the contamination and prepare a cost effective



Phase II investigation and cleanup proposal that can be implemented at this location. The General Petroleum Treating Plant is located in the SW/4, SW/4 of Section 28, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico (see figure 1, and photos).

C. SCOPE OF WORK

1. Compile the names and addresses of property owners within ¼ mile of the facility.
2. Locate all water wells within ¼ mile of the property.
3. Install a six (6) foot chain link security fence and gate with lock around the pit. NMOCD Hobbs district and Santa Fe offices shall be given a key or provided the combination to the lock.
4. Remove all existing interior fencing surrounding the pit and store on site for future recycling or disposal.
5. Perform a One-Call and map the buried pipelines and electrical hazards on site (see figure 2).
6. Remove material within the tanks for recycling. Remove the two tanks currently on site for recycling or disposal (see photos). The material and tanks must be sent to an OCD-approved facility and must be disposed/recycled in accordance with the rules of the OCD.
7. Inventory trash at the site to include barrels, buckets, batteries, pipe, electrical meters, fencing and other trash items. Estimate volume and disposal/recycling costs of trash items and any testing that may be necessary prior to disposal.
8. Investigate extent of total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene, xylene (BTEX), and chloride beneath the facility area. Three (3) bore holes will be drilled at the site, one in the northeast corner of the facility one in the southeast corner of the facility and one in the southwest corner of the facility (see Figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. A minimum of one sample from the highest PID sample location and one sample just above the groundwater interface will be sent for laboratory analysis to confirm the concentration and extent of TPH, and BTEX and chloride. *All samples taken during Phase I of the investigation will be sent to*

*one of the laboratories currently covered by a separate purchase agreement with the OCD.*

9. Completion of the boreholes as 2-inch ground water monitor wells. Ground water is estimated to be approximately 75 feet bgs (see Figures 4, 5, 6 and 7). The well completion shall be 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.
10. Sample the ground water no less than 24 hours after the well is developed. The ground water from the monitor wells must be purged, sampled and analyzed for concentrations of benzene, toluene, ethylbenzene, xylene, polycyclic aromatic hydrocarbons (PAH), 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.
11. Investigate nature and extent of contamination below the tank foot prints.
  - a. Investigate the extent of contamination beneath the tank foot prints by trenching along the former tank area (see figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. Samples will be taken from each trench and will be sent for laboratory TPH and chloride analysis. Back fill open trenches when finished.
  - b. Estimate the volume and cost per cubic yard to remove the contaminated material based on the trenching and sample analysis. Contaminated soil must be sent to an OCD-approved landfarm for reclamation.

12. Investigate nature and extent of tank bottom piles.
  - a. Investigate the extent of contamination surrounding the tank bottom piles by trenching perpendicular to three sides of the pile (see figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. Samples will be taken from each trench and will be sent for laboratory TPH and chloride analysis. Back fill open trenches when finished.
  - b. Estimate the volume and cost per cubic yard to remove the tank bottom material and surrounding contamination based on the trenching and sample analysis. Tank bottoms and contaminated soil must be sent to an OCD-approved landfarm for reclamation.
13. Investigate the nature and extent of contamination around the pit area.
  - a. Investigate the composition of the pit material to determine if recovery of any hydrocarbons is possible. Determine the cost associated with recovery.
  - b. Investigate the extent to which the contamination has migrated from the pit by trenching perpendicular to three sides of the pit and inside the southwest corner (see figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. Samples will be taken from each trench and will be sent for laboratory TPH, and chloride analysis. Back fill open trenches when finished.
  - c. Estimate the volume and cost per cubic yard to remove the pit material and surrounding contamination based on the trenching and sample analysis. Contaminated material must be sent to an OCD-approved landfarm for reclamation. Volume and cost estimates shall take into account that the pit material may need to be solidified for transport.
14. Estimate cost per cubic yard to back haul clean soil from the landfarm facility or other source.
15. Estimate the volume of clean soil required to fill, compact and mound the site based on the estimate of excavation sizes of item 12, 13 and 14 and the local topography.
16. Propose cap design alternatives and their costs.

17. Estimate costs associated with installing a clay barrier within the excavations including the cost per cubic yard and source of the clay.
18. Prepare and submit a final report detailing items 1-17. The report must include the nature of the waste, the estimated volume of waste and contaminated material, the estimated depth of the contamination, soil and groundwater analysis including a map detailing the results. The report shall propose future investigation and remediation scenarios and estimated costs for each scenario.

D. MERGER

This Scope of Work, and attachments thereto, together with NMSHTD Price Agreement No. 00-805-09-17658, constitutes the entire agreement between the parties hereto and all previous agreements, conditions, promises, inducements and understandings shall be deemed to have merged in this Agreement.

E. SUMMARY OF PHASE I INVESTIGATION AND REMEDIATION AT THE GENERAL PETROLEUM TREATING PLANT

Vendor No. 5187719		RESPEC INC. Commodity Code: 72002 66074			
PA Number: 00-805-09-17658					
ITEM NO.	ITEM DESCRIPTION	UNIT	UNIT PRICE	QTY	COSTS
0002	senior scientist	hour	\$75	16	\$1,200.00
0003	project scientist/manager	hour	\$60	40	\$2,400.00
0004	staff scientist	hour	\$50	30	\$1,500.00
0005	field tech II	hour	\$35	40	\$1,400.00
0006	field tech I	hour	\$30	40	\$1,200.00
0010	secretary	hour	\$30		\$0.00
0021	PID	day	n/c		
0025	backhoe 1	day	\$150		\$0.00
0026	backhoe 2	day	\$200	4	\$800.00
0027	backhoe 3	day	\$300		\$0.00
0028	trackhoe 1	day	\$350		\$0.00
0029	trackhoe 2	day	\$500		\$0.00
0031	2"pvc-10 ft.section	foot	\$1.50	180	\$270.00
0033	2"screen-10 ft.section	foot	\$3	45	\$126.00
0035	filter pack sand	each	\$8.29	20	\$165.80
0036	bentonite pellets 50lb bucket	each	\$46.75		\$0.00
0037	bentonite chips 50lb sack	each	\$8.50	4	\$34.00
0038	8"manhole (well vault)	each	\$50.00	3	\$150.00
0042	mileage	mile	\$0.30	1100	\$330.00
0043	perdiem	each	\$60	16	\$960.00
0047	drill rig (M)	mile	\$1.00	550	\$550.00
0048	hollow-stem auger (S-M)	foot	\$13	225	\$2,925.00

0049	hollow-stem auger (L)	foot	\$19		\$0.00
0050	air rotary	hour	\$170		\$0.00
0051	coring	foot	\$12		\$0.00
0052	water truck	day	\$100		\$0.00
0053	pick-up truck ( )	day	\$50	4	\$200.00
0054	steam cleaner	day	\$50	4	\$200.00
	locking well cap & Pad (at cost)				\$440.00
	transport (at cost)				\$1,500.00
	disposal/recycling (at cost)				\$2,500.00
	fence (at cost)				\$6,149.00
<b>TOTAL</b>					<b>(a) \$24,999.80</b>

<b>SUB-TOTAL</b>			<b>(a)</b>	<b>\$ 24,999.80</b>
<b>Lea County Taxes (NMGRT)</b>			<b>0.058125</b>	<b>\$1,453.11</b>
<b>TOTAL</b>			<b>(b)</b>	<b>\$26,452.91</b>

NOTE: LABORATORY COSTS ARE NOT INCLUDED

RESPEC, INC.

By: James A. Gerslin

Title: VP Albuquerque Operations Date: 4/25/02

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

By: William B Mackie  
William B. Mackie, Administrative Services Division Director

Date: 4.30.02



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**

Governor

**Betty Rivera**

Cabinet Secretary

**Lori Wrotenberg**

Director

**Oil Conservation Division**

May 6, 2002

Mr. John Bunch  
Respec, Inc.  
4775 Indian School Rd. NE  
Suite 300  
Albuquerque, NM 87110

Dear Mr. Bunch,

Enclosed you will find a fully executed copy of the Scope of Work and a copy of the purchase document. The New Mexico Oil Conservation Division is currently obtaining right of entry into the facility from the landowner and the neighboring property owners. When those documents have been registered with the county I will notify you that work can proceed.

Sincerely,

Martyne J. Kieling  
Environmental Geologist

STATE OF NEW MEXICO  
PURCHASE DOCUMENT

AGENCY CODE	521	DOCUMENT NUMBER	02-199-005243
DATE	04/16/02	BUDGET FY	02

VENDOR CODE 460315848

VENDOR NAME AND ORDER ADDRESS  
RE/SPEC INC  
4775 INDIAN SCHOOL RD NE  
SUITE 300  
ALBUQUERQUE, NM 87110

S OIL CONSERVATION DIVISION  
H 1220 SO. ST. FRANCIS DRIVE  
I  
P SANTA FE, NM 87505  
T  
O

B OIL CONSERVATION DIVISION  
I 1220 SO. ST. FRANCES DRIVE  
L  
T SANTA FE, NM 87505  
O

DO NOT STAPLE BAR CODES



AGENCY CONTACT MANAYA

PHONE NUMBER

LN	FUND	AGCY	ORG/PRG	APPR UNIT	DIVISION	OBJECT	AMOUNT
1	199	521	P586	300	0700	3522	26,455.00
TOTAL							26,455.00

*Inc @ OFA  
5-2-02*

Maximum of six accounting lines per purchase document

OR AGENCY USE:

LN	FUND	AGCY	ORG/PRG	APPR UNIT	DIVISION	OBJECT	AMOUNT
1	199	521	0750	301	0700	3522	26,455.00
TOTAL							26,455.00

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: *William B. Maguire* DATE: 4.30.02

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# 008050917658 EXPIRES: 083102

DIRECT PURCHASE ORDER

(ONLY VALID FOR PURCHASES \$1,500.00 AND UNDER)

EXEMPT FROM THE NM PROCUREMENT CODE

PURSUANT TO SECTION

EXCLUDED FROM PROCUREMENT THROUGH STATE PURCHASING

PURSUANT TO SECTION

FOR ENCUMBERING PURPOSES ONLY

REASON:

generated by : New Mexico Energy, Minerals and Natural Resources, Advantage Web System Version 2.40 04/25/02

① VENDOR/PPGROM/LY ② DFA COPY ③ AGENCY COPY ④ AGENCY COPY

© 2001 State of New Mexico

AGENCY CODE 521	DOCUMENT NUMBER 02-199-005243
DATE 04/16/02	BUDGET FY 02

**STATE OF NEW MEXICO  
PURCHASE DOCUMENT  
CONTINUATION SHEET**

AGENCY NAME ENERGY, MINERALS & NAT RES

TERMS	
DELIVERY DATE 04/16/02	FOB D
BUDGET VERIFIED BY:	

QMM LN	QUANTITY	UNIT	COMMODITY CODE	ACCT LN	ARTICLE AND DESCRIPTION	UNIT COST	TOTAL COST
1	1.0000	EACH	CCCC		PHASE I INVESTIGATION GENERAL PETROLEUM TREATING PLANT in Lea County, NM.	26455.0000	26455.00
2	1.0000	EACH	CCCC		EMNRD 02-521-07-243, EXP 8-31-02	0.0000	0.00
TOTAL							26,455.00

generated by : New Mexico Energy, Minerals and Natural Resources Advantage Web System Version 2.40 04/25/02



# ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

## List of Encumbrances on DFA/CFRAS File for Current Date with Parameters

As of 05/02/2002

<u>Org.</u>	<u>Object</u>	<u>Trans. Nbr.</u>	<u>Accept Date</u>	<u>FY</u>	<u>Vendor</u>	<u>Amount</u>	<u>DB/CR</u>
0700	0661	01199000115	05/02/2002	01	VERIZON WIRELESS BELLEVUE	(\$21.84)	C
0700	0652	01199000168	05/02/2002	01	XEROX CORPORATION	(\$295.04)	C
0700	0632	01199000452	05/02/2002	01	AZTEC, CITY OF	(\$520.00)	C
0700	0632	01199001017	05/02/2002	01	HOBBS, CITY OF	(\$27.54)	C
0700	0522	01199001366	05/02/2002	01	TRACE ANALYSIS INC	(\$3,337.00)	C
0700	0652	01199001463	05/02/2002	01	PITNEY BOWES INC	(\$0.68)	C
0700	0411	01199002228	05/02/2002	01	AMERICA'S BUSINESS CARD CO	(\$35.00)	C
0700	0451	01199002339	05/02/2002	01	WATER QUALITY SVCS	(\$106.50)	C
0700	0661	01199004401	05/02/2002	01	PLATEAU CELLULAR NETWORK INC	(\$315.75)	C
0700	0612	01199006383	05/02/2002	01	FEDERAL EXPRESS CORP	(\$36.16)	C
0700	0532	01199007016	05/02/2002	01	GIBSON, JOAN M	(\$40.58)	C
0700	0491	01199007725	05/02/2002	01	ASAP SOFTWARE	(\$238.37)	C
0700	0411	01199008708	05/02/2002	01	BOISE CASCADE	(\$88.01)	C
0700	0221	01199008723	05/02/2002	01	ARRANT, BRYAN	(\$172.50)	C
0200	0491	01199009306	05/02/2002	01	**VOID**DELL MARKETING LP	(\$115.87)	C
0700	0491	01199009412	05/02/2002	01	ASAP SOFTWARE	(\$122.78)	C
0700	0692	01199009431	05/02/2002	01	LOVINGTON DAILY LEADER	(\$55.16)	C
0700	0632	01199009501	05/02/2002	01	ARTESIA, CITY OF	(\$60.00)	C
0700	0692	01199009551	05/02/2002	01	RATON RANGE NEWSPAPERS INC	(\$63.84)	C
2300	0791	01213001247	05/02/2002	01	DE BACA, COUNTY OF	(\$6,441.51)	C
2300	0791	01213001988	05/02/2002	01	XEROX CORP	(\$658.81)	C
2300	0481	01213008005	05/02/2002	01	NE INTERAGENCY FIRE CACHE	(\$84.00)	C
2300	0612	01213008005	05/02/2002	01	NE INTERAGENCY FIRE CACHE	(\$154.00)	C
2300	0522	01213008007	05/02/2002	01	LINCOLN NATIONAL FOREST	(\$1,600.00)	C
2300	0791	01213008194	05/02/2002	01	NATL FIRE FIGHTER CORP	(\$437.30)	C
2300	0791	01213008500	05/02/2002	01	PINO'S FAMILY RESTAURANT	(\$5,000.00)	C
2300	0791	01213008504	05/02/2002	01	KENTUCKY FRIED CHICKEN	(\$1,857.32)	C
2300	0791	01213008858	05/02/2002	01	GENERAL SERVICES ADMIN	(\$137.65)	C
2300	0791	01213008967	05/02/2002	01	MORA, COUNTY OF	(\$4,327.50)	C
2300	0791	01213008982	05/02/2002	01	ALL AMERICAN MEAT/PRODUCE INC	(\$266.84)	C
2300	0791	01213009033	05/02/2002	01	CURRY COUNTY ADMINISTRATION	(\$471.08)	C
2300	0791	01213009146	05/02/2002	01	WAGON MOUND, VILLAGE OF	(\$760.00)	C
2300	0791	01213009270	05/02/2002	01	NATL FIRE FIGHTER CORP	(\$3,077.05)	C
2300	0791	01213009444	05/02/2002	01	WATROUS VOLUNTEER FIRE DEPT	(\$364.00)	C
2300	0791	01213009445	05/02/2002	01	BARD-ENDEE FIRE DEPT	(\$527.00)	C
P587	4632	02199000036	05/02/2002	02	PUBLIC SERVICE CO OF NM	\$1,400.00	D
P587	4251	02199000049	05/02/2002	02	COLUMBIA PROPANE LP	(\$285.00)	C
P587	4251	02199000049	05/02/2002	02	COLUMBIA PROPANE LP	\$950.00	D
P587	4632	02199000049	05/02/2002	02	COLUMBIA PROPANE LP	\$2,500.00	D
P587	4251	02199000373	05/02/2002	02	HERITAGE OPERATING LP	(\$1,100.00)	C
P587	4661	02199000486	05/02/2002	02	ENMR-TELEPHONE COOPERATIVE	\$1,700.00	D
P587	4632	02199000493	05/02/2002	02	LAS VEGAS, CITY OF	\$3,500.00	D
P587	4632	02199000518	05/02/2002	02	EDDINS-WALCHER CO	\$900.00	D
P587	4632	02199000520	05/02/2002	02	WASTE MGMT OF NM INC	\$100.00	D
P587	4681	02199002812	05/02/2002	02	PUBLIC SAFETY, DEPT OF	\$5,120.00	D
P589	3522	02199002865	05/02/2002	02	SIMON, RICHARD L	(\$675.75)	C
P588	4652	02199003951	05/02/2002	02	XEROX CORPORATION	(\$105.90)	C
P586	4261	02199005193	05/02/2002	02	FRANCIS MILLER AUTOMOTIVE LLC	\$1,906.00	D
P586	4831	02199005227	05/02/2002	02	COMPUTER CORNER INC	\$2,999.00	D
P586	3522	02199005243	05/02/2002	02	RE/SPEC INC	\$26,455.00	D
P586	3522	02199005252	05/02/2002	02	SHAUNA INC	\$10,000.00	D
P586	3522	02199005275	05/02/2002	02	COLORADO STATE FOREST SERVICE	\$6,500.00	D

## MEMORANDUM

To: Steve Ross, Assistant General Council  
Roger Anderson, Environmental Bureau Chief  
From: Martyne Kieling, Environmental Bureau  
Subject: Property surrounding The General Petroleum Treating Plant  
Date: April 29, 2002

---

Jimmie T. and Betty B. Cooper, Jimmie B. and Shryl Cooper: (Facility Site Property Owners)

I spoke to Jimmie T. Cooper on April 23, 2002 he was very amenable but stated that the property was no longer his and was now owned by Troy Frank d/b/a Southwest Pipe and Salvage. He had tried to find Mr. Frank last year and did not have any luck. He thanked me for informing him of the investigative work that was to be performed. I asked him some additional questions concerning the former tanks and a well that was on site. Mr. Cooper did not have any knowledge of a water or oil well located on site but did think that at one time there were approximately 12 tanks.

A phone call from Eddie Seay on April 29, 2002 has confirmed that the well on site is a water well and has the rods still hanging in the well.

Troy Frank d/b/a Southwest Pipe: (Facility Site Property Owner)

Gary Wink is trying to get a phone Number for Mr. Frank who he believes is living in Tyler Texas at present.

Carl J. and Patsy E. Coy: (Property owners to the south and east)

I spoke to John Coy on April 29, 2002 and he is very amenable to granting access onto his property to perform the preliminary investigation of the General Petroleum Treating Plant. I explained that this may include trenching and construction of a monitor well and that we would need access with a drill rig. He did not have any preference as to entrance onto his property. I made it clear that we would not be leaving any open holes and would be backfilling any trenches upon completion of our initial investigation. I also made it clear that we would also put back up any fences that needed to be taken down to get a drill rig or back hoe in place. I concluded the conversation by saying that someone from the OCD district office would be in touch with paperwork regarding right of entry and would have a notary with him to document the signatures.

Carl J. and Patsy Coy  
P.O. Box 876  
Eunice, New Mexico 88231

505-394-2955 Home  
505-391-3127 Work

Bobby E. Sikes and Elizabeth: (Property owners to the southeast)

I spoke to Bobby Sikes on April 29, 2002 and he is very amenable to granting access onto his property to perform the preliminary investigation of the General Petroleum Treating Plant. I explained that we may need to do some trenching but would not be leaving any open holes. I concluded the conversation by saying that someone from the OCD district office would be in touch with paperwork regarding right of entry and would have a notary with him to document the signatures. Mr. Sikes was very helpful in assisting me with phone numbers of his Neighbor Mr. Coy.

Bobby Sikes and Elizabeth  
P.O. Box 2  
Eunice, New Mexico 88231

505-394-2443 Home  
505-910-4124 Cell (best)

Gary L and Vickie Brooks: (Property owners to the north side)

I spoke to Vickie Brooks on April 29, 2002 and she is very amenable to granting access onto her property to perform the preliminary investigation of the General Petroleum Treating Plant. I explained that this may include trenching and construction of a monitor well and that we would need access with a backhoe. She did not have any preference as to the entrance onto her property either from the driveway on the west or entering from the East from Mr. Coys' property. I made it clear that we would not be leaving any open holes and would be backfilling any trenches upon completion of our initial investigation. I also made it clear that we would also put back up any fences that needed to be taken down to get a backhoe in place. I concluded the conversation by saying that someone from the OCD district office would be in touch with paperwork regarding right of entry and would have a notary with him to document the signatures.

Gary L. Brooks is deceased and Vickie has power of attorney.

Gary L and Vickie Brooks  
P.O. Box 1893  
Eunice, New Mexico 88231

505-394-2085 Home  
505-370-2226 Cell  
505-492-2000 Work, Lea Regional Hospital Third Floor

REAL PROPERTY ASSIGNMENT AGREEMENT

THIS AGREEMENT, Made and entered into this 29<sup>th</sup> day of April, 1999, by and between Jimmie T. Cooper, Betty B. Cooper, Jimmie B. Cooper and Shryl Cooper, first parties and hereinafter referred to as "Coopers", and Troy Frank d/b/a Southwest Pipe & Salvage, second party and hereinafter referred to as "Southwest Pipe, WITNESSETH:

WHEREAS, Coopers are the owners of certain real property located in Lea County, New Mexico, more particularly described as:

FOR SURFACE TITLE ONLY:

A tract of land located in Section 28, Township 21 South, Range 37 East, N.M.P.M., Lea County, New Mexico being more particularly described as follows:

Beginning N0°2'E 208 feet and N89°59'E 30 feet from the Southwest Corner of said Section 28; thence N0°2'E 682 feet; thence N89°59'E 600 feet; thence S0°2'W 682 feet; thence S89°59'W 600 feet to the point of beginning

WHEREAS, Southwest Pipe has determined that it can recover product and otherwise rehabilitate the above-described property in an economically favorable manner; and

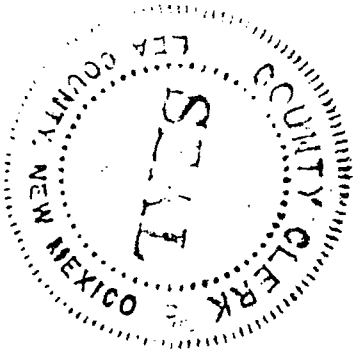
WHEREAS, Coopers desire to transfer the above-described property to Southwest Pipe; and

WHEREAS, Southwest Pipe desires to obtain the above-described property and assume all responsibilities associated therewith and relieve and indemnify Coopers for same.

NOW, THEREFORE, the parties hereto mutually covenant and agree as follows:

1.

Upon the effective date of this Agreement and Quit Claim Deed executed in favor of



STATE OF NEW MEXICO  
COUNTY OF LEA  
FILED

APR 29 1999

at 4:19 o'clock P M  
and recorded in Book \_\_\_\_\_  
Page \_\_\_\_\_  
Per Chappelle, Lea County Clerk  
By BH Deputy

43203

BOOK 953 PAGE 129

Southwest Pipe, Coopers agree to transfer all of their right, title, and interest in the above-described property as it is and subject to all requirements for cleanup relating to same.

2.

Southwest Pipe agrees to accept said property subject to such cleanup responsibilities and agrees to indemnify and hold Coopers harmless for such cleanup responsibilities.

3.

The parties hereto agree that Southwest Pipe accepts the above-described property "as is" and SPECIFICALLY, THE PARTIES AGREE THAT ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND ANY AND ALL OTHER WARRANTIES EXPRESSED OR IMPLIED ARE EXCLUDED FROM THIS AGREEMENT. Further, the parties agree that Coopers have made no claims about the condition of the property and Southwest Pipe is acquiring the property based on its own inspection and evaluation of same and in so doing is fully aware of the cleanup responsibilities associated with the above-described property. That Southwest Pipe, nonetheless agrees to assume ownership of and title to the above-described property and to keep Coopers fully advised of all cleanup activities on the above-described property until such time as all cleanup responsibilities have been fully discharged.

4.

Southwest Pipe covenants and agrees to save, indemnify and hold Coopers, their agents, servants and employees, harmless from any and all claims or damages to persons and property occasioned by the use of the property by Southwest Pipe or by any act, or omission to act, on the part of Southwest Pipe, its agents, servants and employees, including all claims relating to cleanup or environmental testing or remediation costs.

5.

Southwest Pipe covenants and agrees that this Agreement shall not be assigned by it, either in whole or in part, without the prior written consent of Coopers being first obtained. Coopers will not unreasonably withhold its consent.

6.

The parties hereto covenant and agree by entering into this Agreement that Coopers do not in any way for any purpose become a partner of Southwest Pipe in the conduct of its business or otherwise, or joint adventurer or a member of a joint enterprise with Southwest Pipe; likewise, Southwest Pipe does not in any way or for any purpose become a partner of Coopers in the conduct of its business or otherwise, or joint adventurer or a member of a joint enterprise with Coopers.

7.

The parties hereto agree that in the event that Southwest Pipe should fail to comply with any of the provisions of this Agreement or default in any of its obligations under this Agreement for as long as sixty (60) days after written notice from Coopers requesting Southwest Pipe to correct such default or non-compliance, Coopers, at their option, shall be entitled to terminate the aforesaid Agreement; however, in the event of such termination, same shall not relieve Southwest Pipe and its performance bond surety company of their obligations of performance and completion of all clean up activities. The aforesaid remedy shall be in addition to and cumulative with all other remedies afforded by law. In the event the Coopers, their successors or assigns, should at any time forego the right to claim a default or non-compliance by Southwest Pipe of the terms and provisions of this Agreement, such will not constitute a waiver of the right of Coopers thereafter to claim such a default or breach. In the event that the parties,

or either of them, are required to resort to legal action to enforce the provisions of this Agreement, the prevailing party shall be entitled to reasonable attorney fees as may be set by the Court.

8.

The parties hereto understand and agree that the terms and provisions of this Agreement shall be governed for all purposes by the laws of the State of New Mexico.

9.

Subject to the terms and provisions of Paragraph Six (6) above, this Agreement shall extend to and be binding upon the successors and assigns of the parties hereto.

IN WITNESS WHEREOF, we have hereunto set out hands and seals the day and year first above written.

By: Jimmie T. Cooper  
Jimmie T. Cooper

By: Betty B. Cooper  
Betty B. Cooper

By: Jimmie B. Cooper  
Jimmie B. Cooper

By: Sheryl Cooper  
Sheryl Cooper

SOUTHWEST PIPE:

By: Troy Frank  
Troy Frank



STATE OF NEW MEXICO )  
 )  
COUNTY OF LEA ) : ss

The foregoing instrument was acknowledged before me this 29<sup>th</sup> day of April, 1999,  
by Hammie T. Cooper.

My Commission Expires:

March 21, 2002

Ora Lee Nelson

Notary Public

STATE OF NEW MEXICO )  
 )  
COUNTY OF LEA ) : ss

The foregoing instrument was acknowledged before me this 29<sup>th</sup> day of April, 1999,  
by Harry B. Cooper.

My Commission Expires:

March 21, 2002

Ora Lee Nelson

Notary Public

STATE OF NEW MEXICO )  
 )  
COUNTY OF LEA ) : ss

The foregoing instrument was acknowledged before me this 29<sup>th</sup> day of April, 1999,  
by Jimmie B. Cooper.

My Commission Expires:

March 21, 2002

Ora Lee Nelson

Notary Public

STATE OF NEW MEXICO )  
 )  
COUNTY OF LEA ) : ss

The foregoing instrument was acknowledged before me this 29<sup>th</sup> day of April, 1999,  
by Sheryl Cooper.

My Commission Expires:

March 21, 2002

Ora Lee Nelson

Notary Public

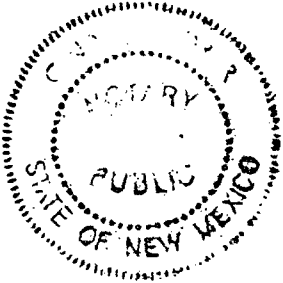
STATE OF NEW MEXICO )  
 ) : ss  
COUNTY OF LEA )

The foregoing instrument was acknowledged before me this 26 day of April, 1999,  
by Troy Frank, Southwest Pipe.

My Commission Expires:

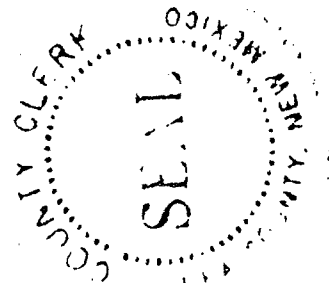
4/12/2003

Cindy Cooper  
Notary Public



STATE OF NEW MEXICO  
COUNTY OF LEA  
FILED

APR 30 1999  
at 9:42 o'clock A M  
and recorded in Book \_\_\_\_\_  
Page \_\_\_\_\_  
Not. Chappelle, Lea County Clerk  
by D.J. Deputy



43204

43205  
OIL & GAS LEASE

Winningham - MK

THIS AGREEMENT made this 17th day of February, 1999 between James William Akin, Trustee of the James William Akin Trust, 1804 Long Meadow, Silver Spring MD 20906 herein called Lessor (whether one or more) and PERRY & PERRY, INC., P.O. Box 371, Midland, TX 79702, Lessee:

1. Lessor, in consideration of TEN AND OTHER DOLLARS in hand paid, receipt of which is here acknowledged, and of the royalties herein provided and of the agreements of the Lessee herein contained, hereby grants, leases and lets exclusively unto Lessee for the purpose of investigating, exploring, prospecting, drilling, and operating for and producing oil and gas, injecting gas, waters, other fluids, and air into subsurface strata laying pipelines, storing oil, building tanks, roadways, telephone lines, and other structures and things thereon to produce, save, take care of, treat, process, store and transport said minerals, the following described land in Lea County, New Mexico, to wit:

SW/4 of Section 29, Twp. 25-S, Rge. 37-E, N.M.P.M.

Said land is estimated to comprise 160.0 acres, whether it actually comprises more or less.

2. Subject to the other provisions herein contained, this lease shall remain in force for a term of three (3) years from this date (called "primary term") and as long thereafter as oil or gas is produced from said land or from land with which said land is pooled.

3. The royalties to be paid by Lessee are: (a) on oil, and other liquid hydrocarbons saved at the well, 1/6th of that produced and saved from said land, same to be delivered at the wells or to the credit of Lessor in the pipeline to which the wells may be connected; (b) on gas, including casing head gas or other gaseous substance produced from said land and used off the premises or used in the manufacture of gasoline or other products, the market value at the well of 1/6th of the gas used, provided that on gas sold on or off the premises, the royalties shall be 1/6th of the amount realized from such sale; (c) and at any time when this lease is not validated by other provisions hereof and there is a gas and/or condensate well on said land, or land pooled therewith, but gas or condensate is not being so sold or used and such well is shut in, either before or after production therefrom, then on or before 90 days after said well is shut in, and thereafter at annual intervals, Lessee may pay or tender an advance shut-in royalty equal to \$1.00 per net acre of Lessor's gas acreage then held under this lease by the party making such payment or tender, and so long as said shut-in royalty is paid or tendered this lease shall not terminate and it shall be considered under all clauses hereof that gas is being produced from the leased premises in paying quantities. Each such payment shall be paid or tendered to the party or parties who at the time of such payment would be entitled to receive the royalties which would be paid under this lease if the well were in fact producing. The payment or tender of royalties and shut-in royalties may be made by check or draft. Any timely payment or tender of shut-in royalty which is made in a bona fide attempt to make proper payment, but which is erroneous in whole or in part as to parties or amounts, shall nevertheless be sufficient to prevent termination of this lease in the same manner as though a proper payment had been made if Lessee shall correct such error within 30 days after Lessee has received written notice thereof by certified mail from the party or parties entitled to receive payment together with such written instruments (or certified copies thereof) as are necessary to enable Lessee to make proper payment. The amount realized from the sale of gas on or off the premises shall be the price established by the gas sales contract entered into in good faith by Lessee and gas purchaser for such term and under such conditions as are customary in the industry. "Price" shall mean the net amount received by Lessee after giving effect to applicable regulatory orders and after application of any applicable price adjustments specified in such contract or regulatory orders. In the event Lessee compresses, treats, purifies, or dehydrates such gas (whether on or off the leased premises) or transports gas off the leased premises, Lessee in computing royalty hereunder may deduct from such price a reasonable charge for each of such functions performed.

4. This is a paid-up lease and Lessee shall not be obligated during the primary term hereof to commence or continue any operations of whatsoever character or to make any payments hereunder in order to maintain this lease in force during the primary term; however, this provision is not intended to relieve Lessee of the obligation to pay royalties on actual production pursuant to the provision of Paragraph 3 hereof.

5. Lessee is hereby granted the right and power, from time to time, to pool or combine this lease, the land covered by it or any part or horizon thereof with any other land, leases, mineral estates or parts thereof for the production of oil or gas. Units pooled hereunder shall not exceed the standard proration unit fixed by law or by the Oil Conservation Division of the Energy and Minerals Department of the State of New Mexico or by any other lawful authority for the pool or area in which said land is situated, plus a tolerance of ten percent. Lessee shall file written unit designations in the County in which the premises are located and such units may be designated from time to time and either before or after the completion of wells. Drilling operations on or production from any part of any such unit shall be considered for all purposes, except the payment of royalty, as operations conducted upon or production from the land described in this lease. There shall be allocated to the land covered by this lease included in any such unit that portion of the total production of pooled minerals from wells in the unit, after deducting any used in lease or unit operations, which the net oil or gas acreage in the land covered by this lease included in the unit bears to the total number of surface acres in the unit. The production so allocated shall be considered for all purposes, including the payment or delivery of royalty, to be the entire production of pooled minerals from the portion of said land covered hereby and included in said unit in the same manner as though produced from said land under the terms of this lease. Any pooled unit designated by Lessee, as provided herein, may be dissolved by Lessee by recording an appropriate instrument in the County where the land is situated at any time after the completion of a dry hole or the cessation of production on said unit.

6. If at the expiration of the primary term there is no well upon said land capable of producing oil or gas, but Lessee has commenced operations for drilling or reworking thereon, this lease shall remain in force so long as operations are prosecuted with no cessation of more than 60 consecutive days, whether such operations be on the same well or on a different or additional well or wells, and if they result in the production of oil or gas, so long thereafter as oil or gas is produced from said land. If, after the expiration of the primary term, all wells upon said land should become incapable of producing for any cause, this lease shall not terminate if Lessee commences operations for additional drilling or reworking within 60 days thereafter. If any drilling, additional drilling, or reworking operations hereunder result in production, then this lease shall remain in full force so long thereafter as oil or gas is produced hereunder.

7. Lessee shall have free use of oil, gas and water from said land, except water from Lessor's wells and tanks, for all operations hereunder, and the royalty shall be computed after deducting any so used. Lessee shall have the right at any time during or after the expiration of this lease to remove all property and fixtures placed by Lessee on said land, including the right to draw and remove all casing. When required by Lessor, Lessee will bury all pipe lines on cultivated lands below ordinary plow depth, and no well shall be drilled within two hundred feet (200 ft.) of any residence or barn now on said land without Lessor's consent. Lessor shall have the privilege, at his risk and expense, of using gas from any gas well on said land for stoves and inside lights in the principal dwelling thereon, out of any surplus gas not needed for operations hereunder.

8. The rights of either party hereunder may be assigned in whole or in part and the provisions hereof shall extend to their heirs, executors, administrators, successors and assigns; but no change in the ownership of the land or in the ownership of, or rights to receive, royalties or shut-in royalties, however accomplished shall operate to enlarge the obligations or diminish the rights of Lessee; and no such change or division shall be binding upon Lessee for any purpose until 30 days after Lessee has been furnished by certified mail at Lessee's principal place of business with acceptable instruments or certified copies thereof constituting the chain of title from the original Lessor. If any such change in ownership occurs through death of the owner, Lessee may, at its option, pay or tender any royalties or shut-in royalties in the name of the deceased or to his estate or to his heirs, executor or administrator until such time as Lessee has been furnished with evidence satisfactory to Lessee as to the persons entitled to such sums. An assignment of this lease in whole or in part shall, to the extent of such assignment, relieve and discharge Lessee of any obligations hereunder and, if Lessee or assignee of part or parts hereof shall fail or make default in the payment of the proportionate part of royalty or shut-in royalty due from such Lessee or assignee or fail to comply with any of the provisions of this lease, such default shall not affect this lease insofar as it covers a part of said lands upon which Lessee or any assignee thereof shall properly comply or make such payments.

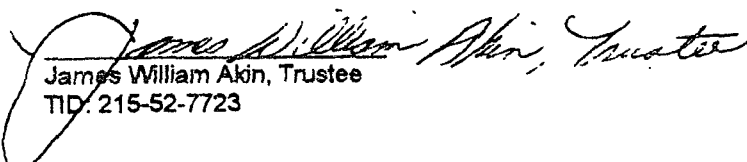
9. Should Lessee be prevented from complying with any express or implied covenant of this lease, or from conducting drilling or reworking operations hereunder, or from producing oil or gas hereunder by reason of scarcity or inability to obtain or use equipment or material, or by operation of force majeure, or by Federal or state law or any order, rule or regulation of governmental authority, then while so prevented, Lessee's duty shall be suspended, and Lessee duly shall not be liable for failure to comply therewith; and this lease shall be extended while and so long as Lessee is prevented by any such cause from conducting drilling or reworking operations or from producing oil or gas hereunder; and the time while Lessee is so prevented shall not be counted against Lessee, anything in this lease to the contrary notwithstanding.

10. Lessor hereby warrants and agrees to defend the title to said land and agrees that Lessee at its option may discharge any tax, mortgage or other lien upon said land, and in the event Lessee does so it shall be subrogated to such lien with the right to enforce same and to apply royalties and shut-in royalties payable hereunder toward satisfying same. Without impairment of Lessee's rights under the warranty, if this lease covers a less interest in the oil or gas in all or any part of said land than the entire and undivided fee simple estate (whether Lessor's interest is herein specified or not) then the royalties, shut-in royalty, and other payments, if any, accruing from any part as to which this lease covers less than such full interest, shall be paid only in the proportion which the interest therein, if any, covered by this lease, bears to the whole and undivided fee simple estate therein. Should any one or more of the parties named above as Lessors fail to execute this lease, it shall nevertheless be binding upon the party or parties executing the same.

11. Lessee, its or his successors, heirs and assigns, shall have the right at any time to surrender this lease, in whole or in part, to Lessor or his heirs, successors and assigns by delivering or mailing a release thereof to the Lessor, or by placing a release thereof of record in the County in which said land is situated; thereupon Lessee shall be relieved from all obligations, expressed or implied of this agreement as to acreage so surrendered, and thereafter the shut-in royalty payable hereunder shall be reduced in the proportion that the acreage covered hereby is reduced by said release or releases.

Executed the day and year first above written.

JAMES WILLIAM AKIN TRUST

  
James William Akin, Trustee  
TID: 215-52-7723

5949

BOOK 403 PAGE 883

WARRANTY DEED

PARABO, INCORPORATED, a New Mexico Corporation, for consid-  
eration paid, grant to CCD&D, A JOINT VENTURE COMPOSED OF  
JIMMIE B. COOPER and SHERYL S. COOPER, his wife, JIMMIE  
COOPER and BETTY P. COOPER, his wife, and PERC F. DETAMBLE  
and JEANETTE M. DETAMBLE, his wife, whose address is P.O.  
Box 228, Monument, New Mexico 88265 the following described  
real estate in Lea County, New Mexico:

The surface only of:

A tract of land situated in Section 28, Township 21 South,  
Range 37 East, N.M.P.M., Lea County, New Mexico, being more  
particularly described as follows:

Beginning at a point which lies N00°02'E 208.00 feet and  
N89°59'E 30.00 feet from the Southwest Corner of said  
Section 28; thence N00°02'E 682.00 feet; thence N89°59'E  
600.00 feet; thence S00°02'W 682.00 feet; thence S89°59'W  
600.00 feet to the point of beginning, describing 9.394  
acres, more or less.

SUBJECT to reservations, easements and restrictions of  
record.

with warranty covenants.

WITNESS \_\_\_\_\_ hand \_\_\_\_\_ and seal   4   this   4   day  
of   April  , 1983.

PARABO, INCORPORATED

  
PRESIDENT

BOOK 403 PAGE 884

## ACKNOWLEDGEMENT-Corporation (Short Form)

STATE OF NEW MEXICO )

County of Lea )

ss.

The foregoing instrument was acknowledged before me  
 this 4 day of April, 1983 by Robert P. Wallach  
 President of PARABO, INC., a New Mexico corporation on  
 behalf of said corporation.

My Commission Expires:

9/22/86

STATE OF NEW MEXICO )

County of Lea )

ss.

I hereby certify that  
 this instrument was filed  
 for record on the 6th day  
 of April, A.D.,  
 1983 at 8:45 o'clock A. M.,  
 and duly recorded in Book  
       Page        of Records  
 of Deeds of County.

Notary Public

County Clerk

Deputy

Rec. No. \_\_\_\_\_ Fees.

Return to \_\_\_\_\_

5949

5896

QUITCLAIM DEEDDeed  
BCK 435 PAGE 37

Oil Processing, Inc., a New Mexico corporation, as successor to interest of Perc F. DeTamble and Jeanette M. DeTamble, for consideration paid, quitclaims to Jimmie B. Cooper, whose address is Post Office Box 55, Monument, New Mexico, the following described real estate in Lea County, New Mexico:

The surface only of:

A tract of land situated in Section 28, Township 21 South, Range 37 East, N.M.P.M., Lea County, New Mexico, being more particularly described as follows:

Beginning at a point which lies N00°02'E 208.00 feet and N89°59'E 30.00 feet from the Southwest Corner of said Section 28; thence N00°02'E 682.00 feet; thence N89°59'E 600.00 feet; thence S00°02'W 682.00 feet; thence S89°59'W 600.00 feet to the point of beginning, describing 9.394 acres, more or less.

SUBJECT to reservations, easements and restrictions of record.

Witness my hand and seal this 20 day of

February, 1987.

OIL PROCESSING, INC.

By: Thurman W. Smith  
THURMAN W. SMITH, President

STATE OF ~~NEW MEXICO~~ <sup>KANSAS</sup>

SS:

COUNTY OF SEDGWICK

The foregoing instrument was acknowledged before me this 20 day of February, 1987, by Thurman W. Smith, President

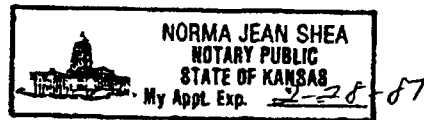
BOOK 435 PAGE 38

of Oil Processing, Inc., a New Mexico corporation, on behalf of said corporation.

*Norma Jean Shea*  
NOTARY PUBLIC

My Commission Expires:

2-28-87



STATE OF NEW MEXICO  
COUNTY OF LEA  
FILED

APR 17 1987

at 11:02 o'clock 9 M

and recorded in Book \_\_\_\_\_

Page \_\_\_\_\_

Shirley New [redacted]

By [Signature] Deputy

5896

T+C

14327

WARRANTY DEED

COURTESY RECORDING

THIS DOCUMENT IS BEING RECORDED SOLELY AS A COURTESY TO THE PARTIES. ELLIOTT & WALDRON TITLE CO. ASSUMES NO RESPONSIBILITY FOR THE CONTENTS HEREOF AND MAKES NO REPRESENTATIONS AS TO THE EFFECT OR VALIDITY OF THIS DOCUMENT.

W.G. STEWART, a single man

for consideration paid grants to

BOBBY E. AND ELIZABETH SIKES, husband and wife

whose address is P.O. Box 2, EUNICE, NM 88231

the following described real estate in LEA county, New Mexico

FOR SURFACE TITLE ONLY:

A survey of 1.00 acres of land located in the southwest quarter of Section 28, Township 21 South, Range 37 East, N.M.P.M., Lea County, New Mexico and being more particularly described as follows:

Beginning at a 1/2" iron rod w/PVC cap mk'd ps 3239, ps 12641 set in the South line of said Section 28 for the Southwest corner of this survey which lies N89°59'E., 499.40 feet from the Southwest corner of said Section 28; thence N00°03'W., 207.92 feet to a 1/2" iron rod mk'd ps 3239, ps 12641; thence N89°59'E., 208.71 feet to a 1/2" iron rod w/PVC cap <sup>w</sup>mk'd ps 3239, ps 12641; thence S00°02'E., 207.92 feet; thence S89°59'W., 208.71 feet to the point of beginning.

Subject to reservations, restrictions and easements appearing of record with warranty covenants.

WITNESS our hands and seals on 7/23/96

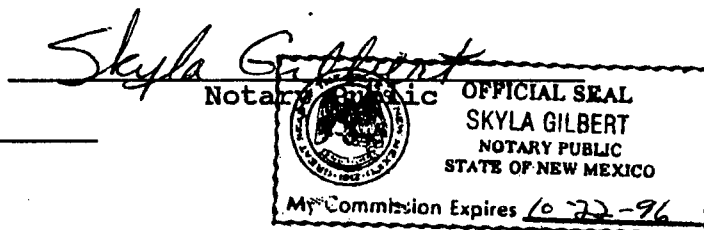
W.G. Stewart  
W.G. STEWART

STATE OF NEW MEXICO )  
COUNTY OF LEA ) ss )

This instrument was acknowledged before me on 7/23/96, by

W.G. STEWART, a single man.

My commission expires : 10/22/96



RETURN TO:

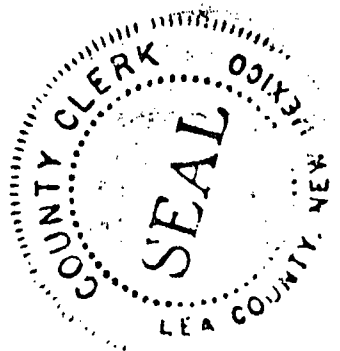
GRANTEE



14327

STATE OF NEW MEXICO  
COUNTY OF LEA  
FILED

OCT 2 1997  
at 2:50 o'clock P M  
and recorded in Book \_\_\_\_\_  
Page \_\_\_\_\_  
Pat Chappelle, Lea County Clerk  
By [Signature] Deputy



Deed

383 PAGE 150

28817

WARRANTY DEED

Charles E. Reeser, a single man

, for consideration paid, grant \$ to

Gary L. Brooks and Vickie Brooks, his wife

whose address is P. O. Box 1893

the following described real estate in Lea county, New Mexico:

A tract of land lying in the Southwest Quarter of Section 28, Township 21 South, Range 37 East, N.M.P.M., Lea County, New Mexico, and being more particularly described as follows:

Beginning at a point from which the Southwest corner of the said section 28 bears S 89° 59' W a distance of 30 feet and S 0° 02' W a distance of 890 feet, said point of beginning being the Southwest corner of this tract; Thence N 0° 02' E a distance of 290 feet; Thence N 89° 59' E a distance of 600 feet; Thence S 0° 02' W a distance of 290 feet; Thence S 89° 59' W A distance of 600 feet to the point of beginning, excepting, however, all oil, gas and other minerals therein and thereunder,

with warranty covenants,

Subject to reservations, easements and restrictions of record.

with warranty covenants.

WITNESS My hand and seal this 12th day of August 19 80.

Charles E. Reeser

STATE OF NEW MEXICO,

County of Lea } ss.

The foregoing instrument was acknowledged before me this 12th day of August 19 80 by Charles E. Reeser, a single man

My Commission expires 5/12, 19 84.

Notary Public

Dona Meek

STATE OF NEW MEXICO,

County of Lea } ss.

Records of Deeds of said County.

I hereby certify that this instrument was filed for

record on the 15th day of

August, A. D. 19 80

at 4:45 o'clock P. M., and duly recorded in

Book Page of

County Clerk

By Deputy

Fee, \$

Return to

28817

14328

WARRANTY DEED

WILLIAM GRIFFIN STEWART, a single man

for consideration paid grants to

CARL J. COY AND PATSY E. COY, husband and wife as joint tenants

whose address is P. O. BOX 876 EUNICE, NM 88231

the following described real estate in LEA county, New Mexico

FOR SURFACE TITLE ONLY:

A tract of land located in Section 28, Township 21 South, Range 37 East, N.M.P.M., Lea County, New Mexico, being more particularly described as follows:

Beginning at the Southwest corner of Section 28; thence N89°59'E 708.1 feet; thence N0°2'W 208 feet; N89°59'E 400 feet; thence S0°2'E 208 feet; thence N89°59'E 211.9 feet; thence N0°2'W 521.7 feet; thence N89°59'E 744.70 feet; thence S0°2'E 105.70 feet; thence N89°59'E 208 feet; thence N0°2'W 473.3 feet; thence S89°59'W 1642 feet; thence S0°2'W 682 feet; thence S89°59'W 600 feet; thence N0°2'E 682 feet; thence S89°59'W 30 feet; thence S0°2'W 890 feet to the point of beginning.

AND

A tract of land located in the Southwest Quarter of the Southwest Quarter (SW/4SW/4) of Section 28, Township 21 South, Range 37 East, N.M.P.M., Lea County, New Mexico, being more particularly described as follows:

Beginning N0°2'E 890 feet from the Southwest corner of Section 28; thence N0°2'E 430 feet; thence N89°59'E 1320 feet; thence S0°2'W 430 feet; thence S89°59'W 690 feet; thence N0°2'E 290 feet; thence S89°59'W 600 feet; thence S0°2'W 290 feet; thence S89°59'W 30 feet to the point of beginning.

AND

The Northwest Quarter of the Southwest Quarter (NW/4SW/4) of Section 28, Township 21 South, Range 37 East, N.M.P.M., Lea County, New Mexico.

AND

Lots Seven (7), Eight (8), Nine (9), Ten (10), Eleven (11), Twelve (12), Thirteen (13) and Fourteen (14), Block Two (2), Herman Addition to the City of Eunice, Lea County, New Mexico.

LESS AND EXCEPT the following-described tract of land located in the Southwest Quarter of the Southwest Quarter of Section 28, Township 21 South, Range 37 East, N.M.P.M., Lea County, New Mexico and being more particularly described as follows:

Beginning at a 1/2" iron rod w/PVC cap mk'd ps 3239, ps 12641 set in the South line of said Section 28 for the Southwest corner of this survey which lies N 89 deg. 59' E., 499.40 feet from the Southwest corner of said Section 28; thence N 00 deg. 03' W., 207.92 feet to a 1/2" iron rod mk'd ps 3239, ps 12641; thence N 89 deg. 59' E, 208.71 feet to a 1/2" iron rod w/PVC cap mk'd ps 3239, ps 12641; thence S 00 deg. 02' E, 207.92 feet; thence S 89 deg. 59' W., 208.71 feet to the point of beginning.

Subject to reservations, restrictions and easements appearing of record with warranty covenants.

WITNESS our hands and seals on 10/ 1/97

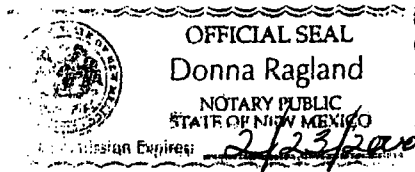
William Griffin Stewart  
WILLIAM GRIFFIN STEWART

STATE OF NEW MEXICO )  
COUNTY OF LEA ) ss

This instrument was acknowledged before me on 10/ 1/97, by WILLIAM GRIFFIN STEWART, a single man

Donna Ragland  
Notary Public

My commission expires : \_\_\_\_\_



RETURN TO: GRANTEE

STATE OF NEW MEXICO  
COUNTY OF LEA  
FILED

OCT 2 1997  
at 2:50 o'clock P M  
and recorded in Book \_\_\_\_\_  
Page \_\_\_\_\_  
Pat Chappelle, Lea County Clerk  
By MA Deputy



BOOK 827 PAGE 290

14328



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**

Governor

**Betty Rivera**

Cabinet Secretary

**Lori Wrotenbery**

Director

**Oil Conservation Division**

April 30, 2002

Stuart E. Faith  
Faith Engineering, Inc.  
541 Quantum Rd. NE  
Rio Rancho, NM 87124

**RE: Contract for the Phase I Investigation and Remediation of the  
General Petroleum Treating Plant  
New Mexico State Highway and Transportation Department  
Purchase Agreement 00-805-09-17658**

Dear Mr. Faith:

It is my regret to inform you that Faith Engineering, Inc. was not awarded the above-referenced proposal. The proposal was awarded to Respec, Inc. and the contract is pending. We thank you for your proposal and we hope to receive proposals from you on future projects.

If you have any questions, please feel free to call me at 505-476-3488.

Sincerely,

Martyne Kieling  
Environmental Geologist

xc: OCD Hobbs



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**

Governor

**Betty Rivera**

Cabinet Secretary

**Lori Wrotenberg**

Director

**Oil Conservation Division**

April 30, 2002

Don Fernald  
Amec Earth and Environmental, Inc.  
2060 Afton Place  
Farmington, NM 87401

**RE: Contract for the Phase I Investigation and Remediation of the  
General Petroleum Treating Plant  
New Mexico State Highway and Transportation Department  
Purchase Agreement 00-805-09-17658**

Dear Mr. Fernald:

It is my regret to inform you that Amec Earth and Environmental, Inc. was not awarded the above-referenced proposal. The proposal was awarded to Respec, Inc. and the contract is pending. We thank you for your proposal and we hope to receive proposals from you on future projects.

If you have any questions, please feel free to call me at 505-476-3488.

Sincerely,

Martyne Kielling  
Environmental Geologist

xc: OCD Hobbs



An Integrated Consulting and Services Company

4775 Indian School Road NE, Suite 300  
Albuquerque, New Mexico 87110-3927  
Phone: 505.268.2661 Fax: 505.268.0040

<http://www.respec.com>

RECEIVED

APR 01 2002

Environmental Bureau  
Oil Conservation Division

March 28, 2002

Ms. Martyne J. Kieling  
Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

Dear Ms. Kieling:

RESPEC appreciates the opportunity to submit a cost proposal for the Phase I Investigation and Remediation at the General Petroleum Treating Plant located in Lea County, New Mexico. All work performed will be under the direct supervisory control of an OSHA qualified New Mexico Environment Department Certified Scientist, and State of New Mexico Construction Industries Division GS-29 Contractor (soil and groundwater remediation), who will be present during all on-site activities.

RESPEC has been performing environmental and environmental-related services for more than 25 years. Our staff is experienced in investigating solid and hazardous waste sites, CERCLA sites, and locations impacted by toxic and hazardous material releases. Typical sites include manufacturing facilities, aboveground/underground storage tanks, oil and gas production sites, refineries, municipal and commercial landfills/landfarms. RESPEC combines site characterization capabilities with expertise in the development of innovative design concepts to provide high-quality, cost effective remediation services. RESPEC is fully bonded and carries a permanent contractor's license in New Mexico (GS-29 Contractors License No. #H58947).

If you have any questions please call Dave Henard or John Bunch at (505) 268-2661.

Sincerely,

A handwritten signature in black ink, appearing to read 'John R. Bunch'.

John R. Bunch, P.G.  
Staff Geologist

**SCOPE OF WORK**  
**PHASE I INVESTIGATION AND REMEDIATION**  
**GENERAL PETROLEUM TREATING PLANT**  
**LEA COUNTY, NEW MEXICO**

New Mexico State Highway and Transportation Department Purchase Agreement 000-805-09-17658 Contract Vendor 9) Respec, Inc., 4775 Indian School Rd. NE, Suite 300, Albuquerque, NM 87110, Tel 1-505-268-2661

**A. SUMMARY**

The contractor shall perform the work necessary to conduct a Phase I preliminary investigation of the equipment, surface contamination, the extent of subsurface soil contamination and depth to and analysis of groundwater. The Contractor shall also compile volume and cost estimates with regards to the contamination and prepare a cost effective Phase II investigation and cleanup proposal that can be implemented at this location. The General Petroleum Treating Plant is located in the SW/4, SW/4 of Section 28, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico (see figure 1, and photos).

**B. SCOPE OF WORK**

1. Compile the names and addresses of property owners within ¼ mile of the facility.
2. Locate all water wells within ¼ mile of the property.
3. Install a six (6) foot chain link security fence and gate with lock around the pit NMOCD Hobbs district and Santa Fe offices shall be given a key or provided the combination to the lock.
4. Remove all existing interior fencing surrounding the pit and store on site for future recycling or disposal.
5. Perform a One-Call and map the buried pipelines and electrical hazards on site (see figure 2).
6. Remove material within the tanks for recycling. Remove the two tanks currently on site for recycling or disposal (see photos). The material and tanks must be sent to an OCD-approved facility and must be disposed/recycled in accordance with the rules of the OCD.
7. Inventory trash at the site to include barrels, buckets, batteries, pipe, electrical meters, fencing and other trash items. Estimate volume and disposal/recycling costs of trash items and any testing that may be necessary prior to disposal.



8. Investigate extent of total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene, xylene (BTEX), and chloride beneath the facility area. Three (3) bore holes will be drilled at the site, one in the northeast corner of the facility one in the southeast corner of the facility and one in the southwest corner of the facility (see Figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. A minimum of one sample from the highest PID sample location and one sample just above the groundwater interface will be sent for laboratory analysis to confirm the concentration and extent of TPH, and BTEX and chloride. *All samples taken during Phase I of the investigation will be sent to one of the laboratories currently covered by a separate purchase agreement with the OCD.*
9. Completion of the boreholes as 2-inch ground water monitor wells. Ground water is estimated to be approximately 75 feet bgs (see Figures 4, 5, 6 and 7). The well completion shall be 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.
10. Sample the ground water no less than 24 hours after the well is developed. The ground water from the monitor wells must be purged, sampled and analyzed for concentrations of benzene, toluene, ethylbenzene, xylene, polycyclic aromatic hydrocarbons (PAH), 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.
11. Investigate nature and extent of contamination below the tank foot prints.

- a. Investigate the extent of contamination beneath the tank foot prints by trenching along the former tank area (see figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. Samples will be taken from each trench and will be sent for laboratory TPH and chloride analysis. Back fill open trenches when finished.
  - b. Estimate the volume and cost per cubic yard to remove the contaminated material based on the trenching and sample analysis. Contaminated soil must be sent to an OCD-approved landfarm for reclamation.
12. Investigate nature and extent of tank bottom piles.
  - a. Investigate the extent of contamination surrounding the tank bottom piles by trenching perpendicular to three sides of the pile (see figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. Samples will be taken from each trench and will be sent for laboratory TPH and chloride analysis. Back fill open trenches when finished.
  - b. Estimate the volume and cost per cubic yard to remove the tank bottom material and surrounding contamination based on the trenching and sample analysis. Tank bottoms and contaminated soil must be sent to an OCD-approved landfarm for reclamation.
13. Investigate the nature and extent of contamination around the pit area.
  - a. Investigate the composition of the pit material to determine if recovery of any hydrocarbons is possible. Determine the cost associated with recovery.
  - b. Investigate the extent to which the contamination has migrated from the pit by trenching perpendicular to three sides of the pit and inside the southwest corner (see figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. Samples will be taken from each trench and will be sent for laboratory TPH, and chloride analysis. Back fill open trenches when finished.
  - c. Estimate the volume and cost per cubic yard to remove the pit material and surrounding contamination based on the trenching and sample analysis. Contaminated material must be sent to an OCD-approved landfarm for

reclamation. Volume and cost estimates shall take into account that the pit material may need to be solidified for transport.

14. Estimate cost per cubic yard to back haul clean soil from the landfarm facility or other source.
15. Estimate the volume of clean soil required to fill, compact and mound the site based on the estimate of excavation sizes of item 12, 13 and 14 and the local topography.
16. Propose cap design alternatives and their costs.
17. Estimate costs associated with installing a clay barrier within the excavations including the cost per cubic yard and source of the clay.
18. Prepare and submit a final report detailing items 1-17. The report must include the nature of the waste, the estimated volume of waste and contaminated material, the estimated depth of the contamination, soil and groundwater analysis including a map detailing the results. The report shall propose future investigation and remediation scenarios and estimated costs for each scenario.

C. MERGER

This Agreement, and attachments thereto, together with NMSHTD Price Agreement No. 00-805-09-17658, constitutes the entire agreement between the parties hereto and all previous agreements, conditions, promises, inducements and understandings shall be deemed to have merged in this Agreement.

D. SUMMARY OF PHASE I INVESTIGATION AND REMEDIATION AT THE  
GENERAL PETROLEUM TREATING PLANT

**SUMMARY/COSTS – ATTACHED NEXT PAGE**

D. Summary/Cost Estimate  
Phase I Investigation and Remediation  
General Petroleum Treating Plant  
Lea County, New Mexico

Vendor No. 5187719  
PA Number: 008050917658

RESPEC Inc.  
Commodity Code: 72002 66074

LN	QTY	RATE	UNIT	COST	DESCRIPTION
*0002	16	\$75.00	Hour	\$1,200.00	Senior Scientist
*0003	40	\$60.00	Hour	\$2,400.00	Project Manager/Certified Scientist
*0004	30	\$50.00	Hour	\$1,500.00	Staff Scientist
*0005	40	\$35.00	Hour	\$1,400.00	Field Technician II
*0006	40	\$30.00	Hour	\$1,200.00	Field Technician I
*0010		\$30.00	Hour	\$0.00	Secretary
*0021		N/C	Day		PID
*0025		\$150.00	Day	\$0.00	Backhoe 1
*0026	4	\$200.00	Day	\$800.00	Backhoe 2
*0027		\$300.00	Day	\$0.00	Backhoe 3
*0028		\$350.00	Day	\$0.00	Trackhoe 1
*0029		\$500.00	Day	\$0.00	Trackhoe 2
*0031	180	\$1.50	Foot	\$270.00	2" blank PVC, 10 ft sections
*0033	45	\$2.80	Foot	\$126.00	2" screen, 10 ft sections
*0035	20	\$8.29	Each	\$165.80	Filter Pack Sand per 100# sack
*0036		\$46.75	Each	\$0.00	Bentonite pellets per 50# sack
*0037	4	\$8.50	Each	\$34.00	Bentonite Chips per 50# sack
*0038	3	\$50.00	Each	\$150.00	8" Manhole (well vault)
*0042	1100	\$0.30	Mile	\$330.00	Personal Vehicle Mileage
*0043	16	\$60.00	Each	\$960.00	Per Diem/Overnight
*0047	550	\$1.00	Mile	\$550.00	Mobe/Demobe: Drill Rig (Medium duty)
*0048	225	\$13.00	Foot	\$2,925.00	Hollow-Stem Auger Drilling Services (S-M)
*0049		\$19.00	Foot	\$0.00	Hollow-Stem Auger Drilling Services (L)
*0050		\$170.00	Hour	\$0.00	Air Rotary Drill Rig
*0051		\$12.00	Foot	\$0.00	Coring
*0052		\$100.00	Day	\$0.00	Water Truck -
*0053	4	\$50.00	Day	\$200.00	Pick up Truck -
*0054	4	\$50.00	Day	\$200.00	Steam cleaner
				\$440.00	Locking well cap and pad - at cost
				\$1,500.00	Transport - at cost
				\$2,500.00	Disposal/recycling - at cost
				\$6,149.00	940' fence - at cost
Total				\$24,999.80	

Subtotal				\$24,999.80				
NMGRT (.058125)				\$1,453.11				
TOTAL				\$26,452.91				

NOTE: LABORATORY COSTS ARE NOT INCLUDED

RESPEC, Inc.

Approval: Dan Hennel Title: Environmental Division Manager Date: March 29, 2002

F21 Faith Engineering, Inc.

541 Quantum Rd. NE  
Rio Rancho, New Mexico 87124  
(505) 243-5494 • FAX (505) 892-1505  
e-mail • faithinc@flash.net

FACSIMILE  
TRANSMISSION  
COVER SHEET

TO: Martynne Kieling  
Environmental Geologist

FAX NUMBER: 505 476-3488

DATE / TIME: 3/27/02 3:30 PM

NUMBER OF SHEETS TO FOLLOW: 3

COMMENTS: Martynne: Follows are:




- Tax regulations
- Tax Bureau contact info
- Tax Rate tables


Carrie Faith


## Due Dates for Reporting and Paying CRS Taxes for January through June 2002


CRS taxes must be paid on or before the due dates indicated on the calendar. Taxpayers whose average monthly tax liability for a calendar year is \$25,000 or more must pay by Special Payment Method and their payment dates will be earlier than those indicated on this calendar. For details on Special Payment Method, order FYI-401 from your local district tax office (see below) or view it online: [www.state.nm.us/dtax](http://www.state.nm.us/dtax)


### Legend:


-  Due date (postmark date) for monthly filers.
-  Due date for monthly and quarterly filers.
-  Due date for monthly, quarterly and semi-annual filers.


JANUARY						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24		26
27	28	29	30	31		

FEBRUARY						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24		26	27	28		

MARCH						
S	M	T	W	T	F	S
						1
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24		26	27	28	29	30
31						

APRIL						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24		26	27
28	29	30				

MAY						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26		28	29	30	31	

JUNE						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24		26	27	28	29
30						

**Local Taxation and Revenue Department Offices:** If you have questions or require additional information, you may contact your local Taxation and Revenue Department Office.

### ALBUQUERQUE:

Taxation & Revenue Department  
First Security Bank Building East  
5301 Central Ave., NE  
P.O. Box 8485  
Albuquerque, NM 87198-8485  
Telephone: (505) 841-6200

### FARMINGTON:

Taxation & Revenue Department  
3501 E. Main Street  
P.O. Box 479  
Farmington, NM 87499-0479  
Telephone: (505) 325-5049

### ROSWELL:

Taxation & Revenue Department  
901 South Main Street  
P.O. Box 1557  
Roswell, NM 88202-1557  
Telephone: (505) 624-6065

### CARLSBAD:

Taxation & Revenue Department  
Telephone: (505) 885-5616  
(Calls transfer to Roswell Office)

### HOBBS:

Taxation & Revenue Department  
Telephone: (505) 393-0163  
(Calls transfer to Roswell Office)

### SANTA FE:

Taxation & Revenue Department  
1200 South St. Francis Drive  
P.O. Box 5374  
Santa Fe, NM 87502-5374  
Telephone: (505) 827-0951

### CLOVIS (Call for hours):

Taxation & Revenue Department  
Telephone: (505) 763-5515  
(Calls transfer to Roswell Office)

### LAS CRUCES:

Taxation & Revenue Department  
2540 El Paseo, Bldg. #2  
P.O. Box 607  
Las Cruces, NM 88004-0607  
Telephone: (505) 524-6225

## APPLICABILITY OF GROSS RECEIPT TAXES

### **Tangible Goods**

The gross receipt taxes for tangible goods are deductible to the seller and non-taxable to the County if the County has issued a nontaxable transaction certificate, which is issued by the Purchasing Office. The exception to this is when the County purchases tangible goods for use in a construction project.

### **Construction Projects**

In construction projects, most tangibles become an ingredient or component part of the construction project and are taxable. In determining whether a tangible will become an ingredient or component the following criteria may be used, but not exclusively:

1. If the tangible is fixtures such as kitchen equipment, library equipment, or other miscellaneous equipment installed so that it becomes firmly attached to the realty. In the case of road projects, it is the items necessary or essential to the intended use, which are so firmly attached to constitute a part of the project.
2. When the person using the tangible and performing the work is required to be licensed under the Construction Industries Licensing Act.
3. When the work for which the tangible is used, requires a permit from a municipal building or mechanical department.
4. Indirect services, such as architectural, engineering, bid depository and plan room services are not construction services. The taxable rate for indirect services is described below.

### **Taxable Rate/Reporting According to Business Location - General**

Under what circumstances are the gross receipts taxes calculated for the location where work is performed, rather than the office location of the business, performing the work?

1. For construction, the place where the construction project is performed, e.g., Bernalillo County, or City is the place of business and all gross receipts from the project are to be reported from that place of business, which includes the tangible portion.
2. In all other instances, the place of business is the office location of the business. Example: If the place of business is in the County, the taxable rate is currently 5.375%. The City taxable rate is 5.8125%. Rio Rancho has a different rate from the City and County. Check the tax rate schedule for the applicable rate.
3. A copy of the gross receipts tax rate schedule, by location, may be obtained from the Purchasing Office.

## GROSS RECEIPTS TAX RATE SCHEDULE

Effective January 1 through June 30, 2002

Albuquerque	02-100	5.8125%	Artesia	03-205	6.3125%	Gallop*	13-114	6.8875%	Edgewood	01-320	5.75%
Corrales (Bernalillo)	02-417	6.125%	Carlsbad	03-106	6.3125%	Remainder of County*	13-013	6.125%	Escondido (Santa Fe)	01-226	6.3125%
Rancho de Abasco	02-200	5.875%	Hope	03-304	6.125%				Santa Clara Pueblo (1)	01-001	5.875%
Rio Rancho (Bernalillo)	02-437	6.1875%	Loving	03-403	6.3125%	Mapon Mound	30-115	6.125%	Santa Clara Pueblo (2)	01-002	5.875%
Santa Fe Pueblo	02-355	5.375%	Remainder of County	03-003	5.75%	Remainder of County	30-030	5.500%	Santa Fe Pueblo	01-003	5.875%
Tierras	02-318	5.75%							Santa Fe Airport	01-181	5.875%
Remainder of County	02-002	5.375%	Bayard	08-206	6.375%	Alamogordo	15-116	6.3125%	Remainder of County	01-001	5.875%
Reserve	28-130	6.0625%	Hurley	08-404	6.375%	Cloudcroft	15-213	6.3125%			
Remainder of County	28-028	5.125%	Santa Clara	08-305	6.375%	Tularosa	15-308	6.1875%	Elephant Butte	21-319	6.125%
			Silver City	08-107	6.375%	Remainder of County	15-015	5.825%	Truth or Consequences	21-124	6.5625%
			Remainder of County	08-008	5.8125%				Truth or Consequences Airport	21-184	5.75%
Dexter	04-201	6.3125%				House	10-407	6.4375%	Williamburg	21-220	6.50%
Hagerman	04-300	6.50%	Santa Rosa	24-108	6.3125%	Logan	10-309	6.4375%	Remainder of County	21-021	5.75%
Lake Arthur	04-400	5.8125%	Vaughn	24-207	6.0625%	San Jon	10-214	6.4375%			
Roswell	04-101	6.50%	Remainder of County	24-024	5.375%	Tucuman	10-117	6.5625%	Magdalena	25-221	6.00%
Remainder of County	04-004	5.9375%				Remainder of County	10-010	5.625%	Socorro (city)	25-125	6.00%
Grants	33-227	6.8125%	Mosquero (Harding)	31-208	5.4375%	Chama*	17-118	6.25%	Socorro Indus. Park	25-182	5.5625%
Milan	33-131	6.8125%	Roy	31-109	6.0625%	Espanola (Rio Arriba)*	17-215	6.25%	Remainder of County	25-025	5.5625%
Remainder of County	33-033	6.25%	Remainder of County*	31-031	5.375%	Santa Clara Pueblo (1)*	17-901	5.6875%			
Angel Fire	08-600	6.1875%	Lordsburg	23-110	6.5625%	Santa Clara Pueblo (2)*	17-902	5.6875%	Questa*	20-222	6.375%
Cimarron	09-401	6.1875%	Virden	23-209	5.75%	Remainder of County	17-017	5.6875%	Questa Airport*	20-160	5.8125%
Eagle Nest	09-509	6.1875%	Remainder of County	23-023	5.625%				Red River	20-317	6.375%
Maxwell	09-202	5.25%				Causey	11-408	5.75%	Laos (city)*	20-126	6.50%
Raton	09-102	7.00%	Eunice	06-210	6.1875%	Dora	11-310	6.00%	Laos Airport*	20-183	5.8125%
Springer	09-301	6.1875%	Hobbs	06-306	6.1875%	Elida	11-216	6.00%	Laos Ski Valley*	20-414	6.50%
Remainder of County	09-009	5.825%	Jal	06-405	6.1250%	Floyd	11-502	5.75%	Remainder of County*	20-020	5.8125%
			Lovington	08-405	6.1250%	Portales	11-119	6.8875%			
Clovis	05-103	6.375%	Lovington Indus. Park	06-158	5.25%	Remainder of County	11-011	5.75%	Enclito	22-410	5.75%
Clovis Airport	05-154	5.4375%	Palum	06-500	6.1875%				Estancia	22-503	6.375%
Grady	05-203	5.75%	Remainder of County	06-006	5.25%	Bernalillo (City)	29-120	6.125%	Montarby	22-223	6.375%
Melrose	05-402	6.00%	Capitan	26-211	6.1875%	Corrales (Sandoval)	29-504	6.125%	Montarby Airport	22-159	5.8125%
Texico	05-302	6.125%	Carizzo	26-307	6.25%	Cuba	29-311	6.0625%	Mountainair	22-127	6.375%
Remainder of County	05-005	5.4375%	Corona	26-406	6.0625%	Jemez Springs	29-217	6.1875%	Willard	22-314	6.25%
			Ruidoso	26-112	7.1875%	Rio Rancho (Sandoval)	29-524	6.1875%	Remainder of County	22-022	5.8125%
Fort Sumner	27-104	6.1875%	Ruidoso Downs	26-501	6.1875%	San Ysidro	29-409	6.00%	Clayton	18-128	6.1875%
Remainder of County	27-027	5.625%	Remainder of County	26-026	5.375%	Santa Ana Pueblo (1)	29-951	5.75%	Des Moines	18-224	6.1875%
						Santa Ana Pueblo (2)	29-952	5.75%	Folsom	18-411	6.1875%
Hatch	07-204	6.375%	City and County	32-032	6.0625%	Remainder of County	29-029	5.750%	Grenville	18-315	6.1875%
Las Cruces	07-105	6.375%	Columbus	19-212	6.50%	Aztec	16-218	6.250%	Remainder of County	18-018	5.25%
Mesilla	07-303	6.375%	Deming	19-113	6.4375%	Bloomfield	16-312	6.250%	Belen*	14-129	6.625%
Sunland Park	07-416	6.375%	Deming Indus. Park	19-155	5.8125%	Farmington	16-121	6.0625%	Alexander Airport*	14-152	5.9375%
Remainder of County	07-007	5.8125%	Remainder of County	19-019	5.8125%	Remainder of County	16-016	5.750%	Bosque Farms*	14-505	6.50%
						Las Vegas	12-122	6.375%	Los Lunas*	14-316	6.625%
						Mosquero (San Miguel)	12-418	5.75%	Remainder of County*	14-014	5.9375%
						Pecos	12-313	6.375%			
						Remainder of County	12-012	5.8125%			

(1) Sales to or by pueblo entities or members

(2) Sales to pueblo non-members by pueblo non-members



# TRANSACTION REPORT

P. 01

MAR-27-2002 WED 03:40 PM

FOR:

RECEIVE

DATE	START	SENDER	RX TIME	PAGES	TYPE	NOTE	M#	DP
MAR-27	03:36	PM	3' 42"	4	RECEIVE	OK		

FEI | Faith Engineering, Inc.

541 Quantum Rd. NE  
Rio Rancho, New Mexico 87124  
(505) 243-5494 • FAX (505) 892-1505  
e-mail • faithinc@flash.net

RECEIVED

APR 01 2002

Environmental Bureau  
Oil Conservation Division

VIA FACSIMILE (505-476-3462) and US MAIL

Total Pages 8

March 29, 2002

Ms. Martyne J. Kieling  
NM Energy, Minerals and Natural Resources Dept.  
Oil Conservation Division  
1220 S. St. Francis Dr.  
Santa Fe, NM 87505

RE: NMSHTD Purchase Agreement #000-805-09-17658  
Phase I Investigation Cost Proposal  
General Petroleum Treating Plant  
Eunice, Lea County, NM

Dear Ms. Kieling:

Faith Engineering, Inc. (FEI) is pleased to respond to your request for a cost proposal to conduct a Phase I Investigation at the above referenced site. The goal of this Phase I Investigation is to determine the extent of contamination at the site toward preparing a plan for any required remediation.

Enclosed is the signed Scope of Work that was included in your request package, a signed revision of the cost summary sheet included in your package, and our Cost Detail Sheet breaking out the particulars of the cost summary. You will note that we are anticipating three separate trips for FEI personnel at 760 miles round trip each. One trip will be to conduct the property and well owner survey and utility location survey. The second trip will be for the monitoring well completion. The third trip will be for the trenching and sampling. The fees for fence removal and storage, new fence installation, tank cleaning, and tank removal includes our subcontractor's labor.

Should you have any questions, please do not hesitate to call me at 505-243-5494.

Respectfully Submitted,

FAITH ENGINEERING, INC.

*Stuart Faith*

Stuart Faith, P.E.  
President

Enclosures

**SCOPE OF WORK**  
**PHASE I INVESTIGATION AND REMEDIATION**  
**GENERAL PETROLEUM TREATING PLANT**  
**LEA COUNTY, NEW MEXICO**

New Mexico State Highway and Transportation Department Purchase Agreement 000-805-09-17658 Contract Vendor 4) Faith Engineering, Inc., 541 Quantum Rd. NE, Rio Rancho, NM 87124, Tel 1-505-243-5494

**A. SUMMARY**

The contractor shall perform the work necessary to conduct a Phase I preliminary investigation of the equipment, surface contamination, the extent of subsurface soil contamination and depth to and analysis of groundwater. The Contractor shall also compile volume and cost estimates with regards to the contamination and prepare a cost effective Phase II investigation and cleanup proposal that can be implemented at this location. The General Petroleum Treating Plant is located in the SW/4, SW/4 of Section 28, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico (see figure 1, and photos).

**B. SCOPE OF WORK**

1. Compile the names and addresses of property owners within ¼ mile of the facility.
2. Locate all water wells within ¼ mile of the property.
3. Install a six (6) foot chain link security fence and gate with lock around the pit NMOCD Hobbs district and Santa Fe offices shall be given a key or provided the combination to the lock.
4. Remove all existing interior fencing surrounding the pit and store on site for future recycling or disposal.
5. Perform a One-Call and map the buried pipelines and electrical hazards on site (see figure 2).
6. Remove material within the tanks for recycling. Remove the two tanks currently on site for recycling or disposal (see photos). The material and tanks must be sent to an OCD-approved facility and must be disposed/recycled in accordance with the rules of the OCD.
7. Inventory trash at the site to include barrels, buckets, batteries, pipe, electrical meters, fencing and other trash items. Estimate volume and disposal/recycling costs of trash items and any testing that may be necessary prior to disposal.

8. Investigate extent of total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene, xylene (BTEX), and chloride beneath the facility area. Three (3) bore holes will be drilled at the site, one in the northeast corner of the facility one in the southeast corner of the facility and one in the southwest corner of the facility (see Figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. A minimum of one sample from the highest PID sample location and one sample just above the groundwater interface will be sent for laboratory analysis to confirm the concentration and extent of TPH, and BTEX and chloride. *All samples taken during Phase I of the investigation will be sent to one of the laboratories currently covered by a separate purchase agreement with the OCD.*
9. Completion of the boreholes as 2-inch ground water monitor wells. Ground water is estimated to be approximately 75 feet bgs (see Figures 4, 5, 6 and 7). The well completion shall be as follows:
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  - 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.
10. Sample the ground water no less than 24 hours after the well is developed. The ground water from the monitor wells must be purged, sampled and analyzed for concentrations of benzene, toluene, ethylbenzene, xylene, polycyclic aromatic hydrocarbons (PAH), 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.
11. Investigate nature and extent of contamination below the tank foot prints.

- a. Investigate the extent of contamination beneath the tank foot prints by trenching along the former tank area (see figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. Samples will be taken from each trench and will be sent for laboratory TPH and chloride analysis. Back fill open trenches when finished.
  - b. Estimate the volume and cost per cubic yard to remove the contaminated material based on the trenching and sample analysis. Contaminated soil must be sent to an OCD-approved landfarm for reclamation.
12. Investigate nature and extent of tank bottom piles.
  - a. Investigate the extent of contamination surrounding the tank bottom piles by trenching perpendicular to three sides of the pile (see figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. Samples will be taken from each trench and will be sent for laboratory TPH and chloride analysis. Back fill open trenches when finished.
  - b. Estimate the volume and cost per cubic yard to remove the tank bottom material and surrounding contamination based on the trenching and sample analysis. Tank bottoms and contaminated soil must be sent to an OCD-approved landfarm for reclamation.
13. Investigate the nature and extent of contamination around the pit area.
  - a. Investigate the composition of the pit material to determine if recovery of any hydrocarbons is possible. Determine the cost associated with recovery.
  - b. Investigate the extent to which the contamination has migrated from the pit by trenching perpendicular to three sides of the pit and inside the southwest corner (see figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. Samples will be taken from each trench and will be sent for laboratory TPH, and chloride analysis. Back fill open trenches when finished.
  - c. Estimate the volume and cost per cubic yard to remove the pit material and surrounding contamination based on the trenching and sample analysis. Contaminated material must be sent to an OCD-approved landfarm for

reclamation. Volume and cost estimates shall take into account that the pit material may need to be solidified for transport.

14. Estimate cost per cubic yard to back haul clean soil from the landfarm facility or other source.
15. Estimate the volume of clean soil required to fill, compact and mound the site based on the estimate of excavation sizes of item 12, 13 and 14 and the local topography.
16. Propose cap design alternatives and their costs.
17. Estimate costs associated with installing a clay barrier within the excavations including the cost per cubic yard and source of the clay.
18. Prepare and submit a final report detailing items 1-17. The report must include the nature of the waste, the estimated volume of waste and contaminated material, the estimated depth of the contamination, soil and groundwater analysis including a map detailing the results. The report shall propose future investigation and remediation scenarios and estimated costs for each scenario.

C. MERGER

This Agreement, and attachments thereto, together with NMSHTD Price Agreement No. 00-805-09-17658, constitutes the entire agreement between the parties hereto and all previous agreements, conditions, promises, inducements and understandings shall be deemed to have merged in this Agreement.

D. SUMMARY OF PHASE I INVESTIGATION AND REMEDIATION AT THE GENERAL PETROLEUM TREATING PLANT

ITEM NO.	ITEM	UNIT	PRICE PER UNIT	UNITS	COSTS
0002	senior scientist	hour	\$75		
0003	project scientist/manager	hour	\$63		
0005	field tech II	hour	\$42		
0006	field tech I	hour	\$40		
0010	secretary	hour	\$29		
0021	PID	day	\$5		
0025	backhoe 1	day	\$120		
0026	backhoe 2	day	\$157		
0027	backhoe 3	day	\$157		
0028	trackhoe 1	day	\$400		

0029	trackhoe 2	day	\$550
0031	2"pvc-10 ft.section	foot	\$15.50
0033	2"screen-10 ft.section	foot	\$24
0035	filter pack sand	sack	\$6.60
0036	bentonite pellets	50lb bucket	\$30
0037	bentonite chips	50lb sack	\$6.60
0042	mileage	mile	\$0.25
0043	perdiem	night	\$60
0045	recycling of tank contents		
0047	drill rig (M)	mile	\$0.75
0048	hollow-stem auger (S-M)	foot	\$20
0049	hollow-stem auger (L)	foot	\$34
0050	air rotary	hour	\$230
0052	water truck	day	\$125
0053	pick-up truck ( )	day	\$50
	locking well cap & Pad (at cost)		
	transport (at cost)		
	disposal/recycling (at cost)		
	subcontract shear (at cost)		
	fence (at cost)		
TOTAL			(a)

<b>SUB-TOTAL</b>			(a)	\$
<b>Lea County Taxes (NMGRT)</b>			5.25%	\$
<b>TOTAL</b>			(b)	\$

**FAITH ENGINEERING, INC.**

APPROVAL: Stuart Faith TITLE: PRESIDENT DATE: 3/29/02, 2002

**COST SUMMARY FOR PHASE I INVESTIGATION ACTIONS AT THE GENERAL PETROLEUM TREAING PLANT SITE**

ITEM NO.	ITEM	UNIT	PRICE PER UNIT	UNITS	COSTS
0001	Principal	hour	\$120	2	\$240.00
0002	Senior Scientist	hour	\$90	24	\$2,160.00
0003	Project Scientist/Manager	hour	\$70	76	\$5,320.00
0004	Staff Scientist/Engineer	hour	\$55	136	\$7,480.00
0005	Field Tech II	hour	\$50	24	\$1,200.00
0006	Field Tech I	hour	\$40	50	\$2,000.00
0007	Draftsperson II	hour	\$50	8	\$400.00
0009	Administrator	hour	\$50	8	\$400.00
0010	Secretary	hour	\$25	34	\$850.00
0017	Expendable Field Equipment	each	\$20	9	\$180.00
0021	PID	day	\$25	5	\$125.00
0026	Backhoe 2	day	\$157.50	3	\$472.50
0031	2" Blank PVC -10 ft. Section	foot	\$15	21	\$315.00
0033	2" Screen PVC -10 ft. Section	foot	\$22.25	6	\$133.50
0035	Filter Pack Sand	sack	\$13.20	20	\$264.00
0036	Bentonite Pellets	50lb bucket	\$37.85	3	\$113.55
0038	8" Manhole Cover	each	\$42.00	3	\$126.00
0040	Copies	each	\$0.05	100	\$5.00
0042	Mileage	mile	\$0.25	3040	\$760.00
0043	Per Diem	night	\$60	21	\$1,260.00
0047	Drill Rig (M) Mob/Demob	mile	\$0.15	760	\$114.00
0048	Hollow-stem Auger (S-M)	foot	\$13	255	\$3,315.00
0053	Pick-up Truck	day	\$50	4	\$200.00
0054	Steam Cleaner	day	\$90	4	\$360.00
	Locking Well Cap & Pad (at cost)	each	\$133	3	\$399.00
	Remove and Store Fence (at cost)	each	\$1,000.00	1	\$1,000.00
	Install New 6' Fence and Gate (at cost)	foot	\$6.00	1250	\$7,500.00
	Telephone	each	\$1.75	20	\$35.00
	Magnetometer	day	\$100.00	2	\$200.00
	Tank Cleaning (at cost)	each	\$4,600.00	1	\$4,600.00
	Tank Removal (at cost)	each	\$500.00	2	\$1,000.00
<b>TOTAL</b>				<b>(a)</b>	<b>\$42,527.55</b>

<b>SUB-TOTAL</b>			<b>(a)</b>	<b>\$42,527.55</b>
<b>Lea County Taxes (NMGRT)</b>			<b>5.2500%</b>	<b>\$2,232.70</b>
<b>TOTAL</b>			<b>(b)</b>	<b>\$44,760.25</b>

FAITH ENGINEERING, INC.

APPROVAL: Stewart G. Gith TITLE: PRESIDENT DATE: 3/29/02



**OCD - General Petroleum Treating Plant • Eunice, NM**  
**COST DETAIL SHEET**  
**FEI Proposal #2002-013**

	TASK 1	TASK 2	TASK 3	TASK 4	TASK 5	TASK 6	TASK 7	TASK 8	TASK 9	TOTAL UNITS	TOTAL COST
<b>1. LABOR (hours)</b>	<b>Property and Well Owner Survey</b>	<b>Pipeline and Utility Location</b>	<b>Monitor Well Drilling, Development and Sampling</b>	<b>Tank and Sludge Removal</b>	<b>Trench and Sample</b>	<b>Remove Old Fence and Erect New Fence</b>	<b>Estimate Quantities of Waste</b>	<b>Backfill and Cover Estimating</b>	<b>Final Report</b>		
Principal										2	\$240.00
Senior Scientist/Engineer	4	4		2	2		4	4	4	24	\$2,160.00
Project Scientist/Manager	16	12	8		8		8	8	16	76	\$5,320.00
Staff Scientist/Engineer		24	40	4	24	4	12	12	16	136	\$7,480.00
Field Technician II					24					24	\$1,200.00
Field Technician I					30					30	\$1,200.00
Draftsperson II										8	\$400.00
Draftsperson I											
Administrator										8	\$400.00
Secretary	2	2	4	1	1	2	4	2	16	34	\$850.00
Clerk											
<b>TOTAL LABOR</b>	<b>\$1,530.00</b>	<b>\$2,570.00</b>	<b>\$2,860.00</b>	<b>\$425.00</b>	<b>\$4,485.00</b>	<b>\$270.00</b>	<b>\$1,680.00</b>	<b>\$1,630.00</b>	<b>\$3,800.00</b>		<b>\$19,250.00</b>
<b>2. EXPENSES</b>											
Telephone	5	5	5	3	2					20	\$35.00
Copies									100	100	\$5.00
FID / PID			3	2						5	\$125.00
Mileage		760	760	760						2280	\$570.00
Per diem		2	6	4	4	1				13	\$780.00
Expendable Field Equipment			5	4						9	\$180.00
Magnetometer		2								2	\$200.00
<b>TOTAL EXPENSES</b>	<b>\$8.75</b>	<b>\$518.75</b>	<b>\$733.75</b>		<b>\$565.25</b>	<b>\$63.50</b>			<b>\$5.00</b>		<b>\$1,895.00</b>
<b>3. SUBCONTRACTOR</b>											
Remove & Store Fence						1				1	\$1,000.00
Install New 6' Fence and Gate						1250				1250	\$7,500.00
Tank Cleaning				1						1	\$4,600.00
Tank Removal				2						2	\$1,000.00
Backhoe Trenching						3				3	\$472.50
<b>MW Completion:</b>											
Equipment Mob/Demob			760							760	\$114.00
Crew Mob/Demob (2 man)			20							20	\$800.00
Drilling (CME 75)			255							255	\$3,315.00
2" Blank PVC (10')			21							21	\$315.00
2" Screen PVC (10')			6							6	\$133.50
10-20 Sand (100 lb. Bag)			20							20	\$264.00
Bentonite Pellets (50 lb. Bucket)			3							3	\$113.55
8" Manhole			3							3	\$126.00
Locking Well Cap & Pad			3							3	\$399.00
Pick-up Truck			4							4	\$200.00
Pick-up Truck Mileage			760							760	\$190.00
Steam Cleaner			4							4	\$360.00
Per diem			8							8	\$480.00
<b>TOTAL SUBCONTRACTOR</b>			<b>\$6,810.05</b>	<b>\$5,600.00</b>	<b>\$472.50</b>	<b>\$8,500.00</b>					<b>\$21,382.55</b>
<b>SUBTOTAL</b>	<b>\$1,538.75</b>	<b>\$3,088.75</b>	<b>\$10,403.80</b>	<b>\$6,025.00</b>	<b>\$5,522.75</b>	<b>\$8,833.50</b>	<b>\$1,680.00</b>	<b>\$1,630.00</b>	<b>\$3,805.00</b>		<b>\$42,527.55</b>
<b>GENERAL/ADMIN FEE</b>											
<b>NMGR - Lea County</b>	<b>\$80.78</b>	<b>\$162.16</b>	<b>\$546.20</b>	<b>\$316.31</b>	<b>\$289.94</b>	<b>\$463.76</b>	<b>\$88.20</b>	<b>\$85.58</b>	<b>\$199.76</b>		<b>\$2,232.70</b>
<b>TOTAL</b>	<b>\$1,619.53</b>	<b>\$3,250.91</b>	<b>\$10,950.00</b>	<b>\$6,341.31</b>	<b>\$5,812.69</b>	<b>\$9,297.26</b>	<b>\$1,768.20</b>	<b>\$1,715.58</b>	<b>\$4,004.76</b>		<b>\$44,760.25</b>



## NOTICE OF TRANSMITTAL

TO: NM Oil Conservation Division DATE: 4-11-02  
1220 S. St. Francis Drive PROJECT NO.: 2002-W-0128  
Santa Fe, NM 87504 PROJECT NAME: General Petroleum Treating Plt.  
SUBMITTED BY: Robert Thompson

ATTENTION: Martyne Kieling

PLEASE CONFIRM RECEIPT OF ENCLOSED DOCUMENTS BY SIGNING AND RETURNING ONE COPY TO AMEC EARTH & ENVIRONMENTAL, INC.

SIGNATURE: Robert Thompson

THE ENCLOSED DOCUMENTS AND/OR DRAWINGS ARE SUBMITTED:

☐ FOR YOUR APPROVAL      ☒ AS REQUESTED      ☐ FOR YOUR REVIEW AND COMMENT  
☐ FOR YOUR INFORMATION      ☐ FOR YOUR SIGNATURE

NUMBER OF COPIES:	DESCRIPTION:
3	Eunice General Petroleum Treating Plant Investigation Proposal

REMARKS:



April 11, 2002  
AMEC Proposal No. 2002-W-0128

Ms. Martyne Kieling  
New Mexico Oil Conservation Division  
1220 S. St. Francis Drive  
Santa Fe, New Mexico 87504

**RE: Phase I Investigation and Remediation of the General Petroleum Treating Plant  
Eunice New Mexico**

Dear Ms. Kieling:

AMEC (AMEC Earth & Environmental) is pleased to submit this cost estimate for the Phase I Investigation and Remediation of the General Petroleum Treating Plant located in Eunice, New Mexico.

AMEC proposes to complete this project in accordance with purchase agreement number 000-805-09-17658 between the State of New Mexico and AMEC formerly AGRA Earth and Environmental, Inc. This project will also be performed in accordance to the pricing and scope of work presented herein.

**Requested Scope of Work**

On February 20, 2002, AMEC received a Request for Quotation (RFQ) from Ms. Martyne Kieling with the State of New Mexico, Energy Minerals and Natural Resources Department, Oil Conservation Division (OCD) requesting a cost estimate to conduct a preliminary investigation of equipment, surface contamination, extent of subsurface soil contamination, and depth to and analysis of groundwater. The request also included compiling volume and cost estimates with regards to the contamination and preparing a cost effective Phase II investigation and cleanup proposal for the site. The following proposed Scope of Work is based on line items contained in the RFQ.

**Proposed Scope of Work**

AMEC's approach for this project will include comprehensive project management, planning, investigation and remedial operations. AMEC realizes that actual project costs can vary greatly depending on the thoroughness of initial project planning and continued active management. AMEC will assign an experienced project manager, field supervisor, and an experienced crew who has completed numerous projects similar in scope. Work will be completed on a time and materials, unit rate basis as outlined within this proposal. The following is a summary of the Scope of Work proposed by AMEC for completion of this project.

1. AMEC will visit the county assessors office for Lea County to compile a list of names and addresses of property owners within one-quarter mile of the facility.



2. AMEC will visit the state engineers office or review their website to locate all water wells within one-quarter mile of the property.
3. AMEC will subcontract the services of a fence company to install a six-foot chain link security fence and gate around the pit. The gate will be locked with a keyed or combination lock and the NMOCD Hobbs district and Santa Fe offices will be provided a key or combination to the lock.
4. AMEC will remove all existing interior fencing surrounding the pit and store the fencing materials on site for future recycling or disposal.
5. AMEC will notify New Mexico One-Call to locate any subsurface utilities that may exist at the site and will map any buried pipelines and utilities located.
6. AMEC will remove the material in the tanks by use of a vacuum/pump truck, by mechanical methods utilizing hand tools, or a combination of both depending on the consistency of the material. The tanks will be cut into sections using a tracked excavator fitted with a shear or grapple and/or cutting torches. The tank contents and dismantled tank sections will be disposed at an OCD approved recycling/disposal facility.
7. While on site, AMEC will inventory trash at the site to include barrels, buckets, batteries, pipe, electrical meters, fencing and other miscellaneous trash items. AMEC will estimate the volume and disposal/recycling costs of any trash items inventoried and any testing that may be required prior to disposal/recycling.
8. AMEC will investigate the extent of TPH, BTEX and chloride in the subsurface soil at the site by drilling three boreholes. AMEC will drill one borehole in the northeast corner of the site, one borehole in the southeast corner of the site, and one borehole in the southwest corner of the site. The boreholes will be advanced to groundwater and will be screened at five-foot intervals using a PID. AMEC will collect a soil sample from the highest PID reading obtained in each borehole and a soil sample just above the groundwater interface. The samples will be sent to an OCD approved laboratory for TPH, BTEX and chloride analyses.
9. AMEC will complete each borehole as a two-inch diameter groundwater-monitoring well. Based on well logs supplied by the OCD, AMEC assumes groundwater is approximately 70 feet below ground surface (bgs). Each well will be completed using a minimum of 15-feet of pvc well screen with five-feet of screen above the water table and 10-feet of screen below the water table. An appropriate sized gravel pack will be set in the annulus around the well screen from the bottom to two-feet above the top of the well screen. A two-foot bentonite seal will be placed above the gravel pack. The remaining annulus will be grouted to the surface with a cement grout containing three to five percent bentonite. A concrete pad and locking well vault will be installed around the well at the surface. AMEC will develop the wells following installation using EPA approved procedures.
10. AMEC will sample the groundwater in the wells no less than 24-hours after the wells have been developed. The groundwater in the wells will be purged of a minimum of three casing volumes and then sampled and analyzed at a laboratory for BTEX, PAH's, TDS, major cations/anions and NMWQCC metals using EPA approved methods and QA/QC procedures.
11. AMEC will investigate the nature and extent of the contamination below the tank footprints by trenching along the former tank area with a tracked excavator. Soil from the trenches will be screened using a PID. Verification samples will be collected and analyzed at a laboratory for TPH and chlorides using EPA approved methods. Trenches will be backfilled with soil removed during trenching. AMEC will estimate the volume and cost per cubic yard to



- remove the impacted material based on trenching and laboratory analysis and transport to an OCD approved landfarm for treatment.
12. AMEC will investigate the nature and extent of the contamination surrounding the tank bottom piles by trenching perpendicular to three sides of the piles with a tracked excavator. Soil from the trenches will be screened using a PID. Verification samples will be collected and analyzed at a laboratory for TPH and chlorides using EPA approved methods. Trenches will be backfilled with the soil removed during trenching. AMEC will estimate the volume and cost per cubic yard to remove and transport to an OCD approved landfarm for treatment the tank bottom piles and surrounding impacted material based on visual observation of the excavations and laboratory analysis.
  13. AMEC will investigate the composition of the material in the pit to determine if recovery of any hydrocarbons for recycling is possible and if so, will provide a cost estimate associated with the recovery process. AMEC will investigate the extent to which the contamination has migrated from the pit by trenching perpendicular to three sides of the pit and inside the southwest corner of the pit with a tracked excavator. Soil from the trenches will be screened using a PID. Verification samples will be collected and analyzed at a laboratory for TPH and chlorides using EPA approved methods. Trenches will be backfilled with soil removed during trenching. AMEC will estimate the volume and cost per cubic yard to remove the pit material and surrounding impacted material based on trenching and laboratory analysis and transport to an OCD approved landfarm for treatment. AMEC will take into account that the pit material may need to be solidified for transport.
  14. AMEC will estimate the cost associated with installing clay barriers within the excavations including the cost per cubic yard and source of the clay.
  15. AMEC will estimate the cost per cubic yard to backhaul clean soil from the landfarm facility or other source. In addition, AMEC will estimate the volume of soil required to fill, compact and mound the site based on the estimate of excavation sizes mentioned in items 11, 12 and 13 and the local topography.
  16. Upon completion of items 1-14, AMEC will propose cap designs and their associated costs.
  17. Finally, AMEC will prepare and submit a final report detailing items 1-16. The report will include the nature of the waste, the estimated volume of waste and impacted material, the estimated depth of impacted soil, and soil and groundwater laboratory reports including a map detailing the results. The report will propose future investigation and remediation scenarios and estimated costs for each scenario.

### **Project Approach**

AMEC will develop a comprehensive project plan prior to initiating any on-site activities. This plan is summarized as follows:

- a) AMEC will designate an experienced project manager who has experience completing similar projects (Robert Thompson).
- b) AMEC will complete a detailed project plan for submittal to the OCD representative(s). AMEC will review the project plan and costs with OCD representative(s) prior to initiating on-site activities.
- c) AMEC's project manager, site supervisor, and representative(s) of the OCD will initiate this project with a "Kick-Off" meeting to review the Scope of Work.





- d) Project documentation will consist of daily field notes, health and safety meeting records/documentation, chain-of-custody documentation, soil sampling data, laboratory results, field screening test results, and site maps.
- e) In the event that unforeseen conditions or out-of-scope costs are encountered during the project, AMEC will notify the OCD immediately. Unforeseen conditions will be discussed and negotiated with the OCD prior to taking additional actions.
- f) Project communication is essential. AMEC will provide a weekly report summarizing the activities of the prior week. Additionally, AMEC's on-site personnel will have access to mobile phones throughout the project. AMEC will present the OCD with a contact sheet listing AMEC's key personnel for this project during the Kick-Off Meeting.
- g) AMEC's number one requirement is to ensure that the project is performed safely. Any AMEC employee has the right to stop the project if they believe that safety is being compromised. AMEC will develop a project-specific health and safety plan. All AMEC personnel and site visitors will be briefed and familiar with the site-specific health and safety plan.
- h) Manifesting of Project Materials – Various material including soil, tanks, and trash will be removed from the site. Additionally, soil will be delivered to the site for backfilling excavations. Each load of material transported will be manifested by AMEC to document the volume of material removed or delivered to the site. The manifest will include the following:

Material transported	Nature of Material
Date and time of manifest	Transporter Name and Signature
OCD authorization to transport	Material origination and destination
Volume (cubic yard or barrel) or weight of material	

AMEC and the transporter will determine the amount or volume of each load. The OCD may wish to verify the amount of each load during the execution of the manifest. AMEC will require the OCD to sign each manifest. AMEC will not be responsible or liable for the ultimate fate of any materials removed from the site. All material removed from the site will be transported to OCD-approved facilities.

#### **COST ESTIMATE**

AMEC proposes to perform the services described in the Proposed Scope of Work on a time and materials basis as listed in the attached Table 1.

#### **ASSUMPTIONS AND CLARIFICATIONS**

1. AMEC assumes that the New Mexico "One Call" system will identify all active gas, electric and other utility lines located within the project area. AMEC will not be responsible for damage to any lines that are not properly identified or marked.
2. This proposal shall become part of the contract for services to be provided.
3. AMEC assumes that any and all of these materials associated with this project are RCRA exempt oilfield wastes that can be transported to an OCD approved facility for recycling or



- disposal. AMEC assumes no liability associated with the ultimate fate of any materials associated with this project.
4. AMEC assumes there is no presence of regulated Naturally Occurring Radioactive Materials (NORM) on site.
  5. The OCD will provide authorized access to the site for AMEC.
  6. AMEC will not take ownership of any waste generated at the site.
  7. AMEC assumes all work can be performed in Level D personal protective equipment (i.e., hard hat, steel-toed boots, and safety glasses).
  8. Costs for this proposal are based on the requested Scope of Work outlined herein. Costs may vary depending on actual time and materials realized during the project.
  9. Costs presented in this proposal do not include applicable taxes.

AMEC appreciates the opportunity to provide this cost estimate to the OCD for the environmental investigation of the Eunice General Petroleum Treating Plant. Please call Robert Thompson or Don Fernald at (888) 840-2472 if you need additional information, or if we can be of further assistance.

Sincerely,

**AMEC Earth & Environmental, Inc.**

A handwritten signature in cursive script that reads "Robert Thompson".

Robert Thompson  
Project Manager



## Attachment 1

Time and Materials Cost Estimate  
New Mexico Oil Conservation Division  
Lea County, New Mexico

AMEC Proposal No. 2002-W-0128: Eunice General Petroleum Treating Plant Investigation



Project Task	Item No.	Item	Unit of Measure	Estimated Units	Cost Per Unit	Total Estimated Costs	
Item 1:							
Land Owner/Water Well Research (Items 1 & 2)	0002	Senior Scientist	Hour	10	\$ 75.00	\$ 750.00	
	0042	Mileage	Mile	200	\$ 0.25	\$ 50.00	
	0053	Pickup Truck	Day	2	\$ 50.00	\$ 100.00	
						Total: \$ 900.00	
Item 2:							
Fence Installation/Removal (Items 3 & 4)	0003	Project Scientist/Manager	Hour	16	\$ 63.00	\$ 1,008.00	
	0042	Mileage	Mile	100	\$ 0.25	\$ 25.00	
	0053	Pickup Truck	Day	4	\$ 50.00	\$ 200.00	
	N/A	Fence Installation (Subcontracted)	Lump Sum	1	\$ 10,575.00	\$ 10,575.00	
					Total: \$ 11,808.00		
Item 3:							
Tank Cleaning and Removal (Items 5, 6 & 7)	0002	Senior Scientist	Hour	6	\$ 75.00	\$ 450.00	
	0005	Field Tech II	Hour	40	\$ 42.00	\$ 1,680.00	
	0006	Field Tech I	Hour	40	\$ 40.00	\$ 1,600.00	
	0029	Trackhoe II	Day	2	\$ 550.00	\$ 1,100.00	
	0042	Mileage	Mile	1,200	\$ 0.25	\$ 300.00	
	0043	Per Diem	Night	6	\$ 60.00	\$ 360.00	
	0053	Pickup Truck	Day	4	\$ 50.00	\$ 200.00	
		Transport	Yd.	15	\$ 4.25	\$ 63.75	
		Subcontract Shear	Lump Sum	1	\$ 924.00	\$ 924.00	
		Recycling of Tank Contents (solid)	Yd.	15	\$ 11.00	\$ 165.00	
						Total: \$ 6,842.75	
Item 4:							
Drilling, Well Installation, and Sampling (Items 8, 9 & 10)	0002	Senior Scientist	Hour	10	\$ 75.00	\$ 750.00	
	0003	Project Scientist/Manager	Hour	60	\$ 63.00	\$ 3,780.00	
	0013	Water Quality Meter	Day	1	\$ 5.00	\$ 5.00	
	0020	Interface Probe	Day	4	\$ 5.00	\$ 20.00	
	0021	PID	Day	3	\$ 5.00	\$ 15.00	
	0031	2" PVC-10 Ft Section	Foot	18	\$ 15.50	\$ 279.00	
	0033	2" Screen-10 Ft Section	Foot	6	\$ 24.00	\$ 144.00	
	0035	Filter Pack Sand	Sack	15	\$ 6.60	\$ 99.00	
	0036	Bentonite Pellets	Bucket	3	\$ 30.00	\$ 90.00	
	0038	8" Manhole	Each	3	\$ 50.00	\$ 150.00	
	0042	Mileage	Mile	550	\$ 0.25	\$ 137.50	
	0043	Per Diem	Night	8	\$ 60.00	\$ 480.00	
	0047	Drill Rig Mob/Demob	Mile	550	\$ 0.75	\$ 412.50	
	0049	Hollow Stem Auger (S-M)	Foot	240	\$ 20.00	\$ 4,800.00	
	0053	Pickup Truck	Day	5	\$ 50.00	\$ 250.00	
	0054	Steam Cleaner	Day	4	\$ 90.00	\$ 360.00	
		Survey Monitor Wells	Lump Sum	1	\$ 1,000.00	\$ 1,000.00	
	Drilling Contractor Line Items Not Covered in Price Agreement						
		Crew Mob/Demob (2 man)	Hour	10	\$ 80.00	\$ 800.00	
		Grout Wells	Foot	183	\$ 3.00	\$ 549.00	
		Locking Well Cap & Pad	Each	3	\$ 133.00	\$ 399.00	
		End Cap	Each	3	\$ 8.00	\$ 24.00	
		Locks	Each	3	\$ 8.10	\$ 24.30	
		Drill Rig Preparation	Hour	4	\$ 100.00	\$ 400.00	
					Total: \$ 14,968.30		
Item 5:							
Subsurface Soil and Pit Contents Investigation (Items 11, 12 & 13)	0002	Senior Scientist	Hour	4	\$ 75.00	\$ 300.00	
	0005	Field Tech II	Hour	20	\$ 42.00	\$ 840.00	
	0006	Field Tech I	Hour	20	\$ 40.00	\$ 800.00	
	0021	PID	Day	2	\$ 5.00	\$ 10.00	
	0029	Trackhoe II	Day	2	\$ 550.00	\$ 1,100.00	
	0042	Mileage	Mile	100	\$ 0.25	\$ 25.00	
	0043	Per Diem	Night	2	\$ 60.00	\$ 120.00	
	0053	Pickup Truck	Day	2	\$ 50.00	\$ 100.00	
					Total: \$ 3,295.00		
Item 6:							
Investigative Report, Proposal and Cost Estimate (Items 14, 15, 16 & 17)	0002	Senior Scientist	Hour	60	\$ 75.00	\$ 4,500.00	
	0007	Draftsperson II	Hour	10	\$ 40.00	\$ 400.00	
	0009	Administrator	Hour	5	\$ 35.00	\$ 175.00	
					Total: \$ 5,075.00		
Estimated Total						\$ 42,889.05	

## Kieling, Martyne

---

**From:** Kieling, Martyne  
**Sent:** Monday, March 04, 2002 1:17 PM  
**To:** 'Bob.wilcox@amec.com'  
**Cc:** Johnson, Larry  
**Subject:** Site Visit at Eunice

Bob,

I have heard that you will be the one doing the site visit at the General Petroleum Treating Plant located at Eunice. When you have figured out your schedule please contact Larry Johnson with our Hobbs office to set up a time to tour the site.

Larry would prefer that you contact him Via E-mail. He is better able to respond in a timely manner that way.

lwjohnson@state.nm.us  
Phone: 505-393-0720 ex 111

If you could cc me so that I know your schedule that would be great.

Sincerely

Martyne Kieling

## Kielling, Martyne

---

**From:** Kielling, Martyne  
**Sent:** Monday, March 04, 2002 1:01 PM  
**To:** 'faithinc@flash.net'  
**Cc:** Johnson, Larry  
**Subject:** RE: Eunice Facility

Stuart,

In regards to the site visit please contact Larry Johnson with our Hobbs District office. He would prefer an email He tends to respond to them in a timely manner.

lwjohnson@state.nm.us  
Phone: 505-393-0720 ex 111

Surface Waste Management Facilities that are permitted by the OCD that are nearby are:  
(Rule 711)

1. Sundance Services Inc. They have a treating plant, landfarm, evaporation ponds and take some material for landfill.
2. J&L Landfarm Landfarming only
3. Rhino Oilfield Disposal, Inc. landfarm only
4. DD Landfarm landfarm only
5. South Monument Landfarm landfarm only
6. C&C Landfarm landfarm only

Lea county Landfill can take some of the waste. This facility is run by the same folks that run the Camino Real Landfill. See Rule 712

Lea Land Landfill is permitted by OCD and by the Environment Department  
Waste Control Specialists LLC operate the Hazardous Waste Landfill across the Texas Border.

Because the facility was a treating plant the oilfield waste in the pits, piles and tanks is considered exempt. The waste in the tank, pit and piles was surveyed for NORM by the Radiation Control Bureau last year and found to be non-regulated NORM.

We will be following the Surface Impoundment Closure Guidelines when excavation of the pits begins on the second phase of this project. These guidelines can be found on our web page under Publications/Environmental Handbook/Surface Impoundment Closure item 7b

I hope this helps.

Sincerely

Martyne Kielling

-----Original Message-----

From: stuart faith [mailto:faithinc@flash.net]  
Sent: Thursday, February 28, 2002 3:05 PM  
To: mkielling@state.nm.us  
Subject: Eunice Facility

Dear Martyne,

I am in receipt of your bid package dated 2/26/02 regarding the subject property. FEI is willing to provide the cost estimate for the requested Scope of Work by March 29, 2002.

Also, we would like to schedule a site visit at your earliest convenience prior to our bid submittal. I have begun reviewing some of the pertinent OCD guidelines and regulations that are available on the

OCD website and would welcome any input you might have regarding particular portions of those documents that you feel are relevant. I would also appreciate any guidance or insight that you might have regarding any of the local oilfield waste disposal companies in the area, which I note are listed in one of your web publications.

Thank you for your consideration, and I look forward to working with you on this project.

Best regards,

Stuart Faith  
Pres. - Faith Engineering, Inc.  
(505) 243-5494  
faithinc@flash.net  
or  
stufait@flash.net

## Kielling, Martyne

---

**From:** Kielling, Martyne  
**Sent:** Monday, March 04, 2002 1:10 PM  
**To:** Johnson, Larry  
**Subject:** Scope of work for Eunice



SCOPE.DOC



Sitemap1.bmp



sitemap2.bmp



Contractorletters.d  
oc



Pict97-01.doc

Larry

Here is most of what I sent to the contractors that are on the NMSHTD Price Agreement. These are the only folks at this time that I can work with. In addition to this information I sent them Information from the (Texaco) Eunice North Gas plant ground water contamination investigation. This info has ground water nearby at a depth of 75 feet.

I hope this helps.  
Martyne



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor

Betty Rivera

Cabinet Secretary

February 25, 2002

Lori Wrotenbery

Director

Oil Conservation Division

Dave Henard  
Respec, Inc.  
4775 Indian School Rd. NE  
Suite 300  
Albuquerque, NM 87110

**RE: New Mexico State Highway and Transportation Department  
Purchase Agreement 000-805-09-17658  
Phase I Investigation and Remediation General Petroleum Treating Plant  
SW/4, SW/4 of Section 28, Township 21 South, Range 37 East, NMPM,  
Lea County, New Mexico**

Dear Mr. Henard:

The New Mexico Oil Conservation Division (OCD) is in the process of evaluating an abandoned oil field treating plant in southeast New Mexico. The facility was operated by General Petroleum and is located in the SW/4, SW/4 of Section 28, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, on the west edge of Eunice. Please find enclosed a scope of work with attached figures. The OCD is requesting a cost estimate for the scope of work attached. The primary focus of this initial phase is to determine the scope of the project at hand and what the costs will be to begin the investigative phase. The OCD will be using the New Mexico State Highway and Transportation Department Purchase Agreement 000-805-09-17658.

Please contact me at (505) 476-3488 or at [mkieling@state.nm.us](mailto:mkieling@state.nm.us) if you have any questions or require a site visit. I can be reached in the office Monday through Wednesday. The OCD would like a response to this scope of work by March 29, 2002. If Respec, Inc. wishes to respond, the OCD will require 4 copies of the attached scope of work each with an original signature.

Sincerely

Martyne J. Kieling  
Environmental Geologist

**SCOPE OF WORK  
PHASE I INVESTIGATION AND REMEDIATION  
GENERAL PETROLEUM TREATING PLANT  
LEA COUNTY, NEW MEXICO**

New Mexico State Highway and Transportation Department Purchase Agreement 000-805-09-17658 Contract Vendor 9) Respec, Inc., 4775 Indian School Rd. NE, Suite 300, Albuquerque, NM 87110, Tel 1-505-268-2661

**A. SUMMARY**

The contractor shall perform the work necessary to conduct a Phase I preliminary investigation of the equipment, surface contamination, the extent of subsurface soil contamination and depth to and analysis of groundwater. The Contractor shall also compile volume and cost estimates with regards to the contamination and prepare a cost effective Phase II investigation and cleanup proposal that can be implemented at this location. The General Petroleum Treating Plant is located in the SW/4, SW/4 of Section 28, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico (see figure 1, and photos).

**B. SCOPE OF WORK**

1. Compile the names and addresses of property owners within ¼ mile of the facility.
2. Locate all water wells within ¼ mile of the property.
3. Install a six (6) foot chain link security fence and gate with lock around the pit NMOCD Hobbs district and Santa Fe offices shall be given a key or provided the combination to the lock.
4. Remove all existing interior fencing surrounding the pit and store on site for future recycling or disposal.
5. Perform a One-Call and map the buried pipelines and electrical hazards on site (see figure 2).
6. Remove material within the tanks for recycling. Remove the two tanks currently on site for recycling or disposal (see photos). The material and tanks must be sent to an OCD-approved facility and must be disposed/recycled in accordance with the rules of the OCD.
7. Inventory trash at the site to include barrels, buckets, batteries, pipe, electrical meters, fencing and other trash items. Estimate volume and disposal/recycling costs of trash items and any testing that may be necessary prior to disposal.

8. Investigate extent of total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene, xylene (BTEX), and chloride beneath the facility area. Three (3) bore holes will be drilled at the site, one in the northeast corner of the facility one in the southeast corner of the facility and one in the southwest corner of the facility (see Figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. A minimum of one sample from the highest PID sample location and one sample just above the groundwater interface will be sent for laboratory analysis to confirm the concentration and extent of TPH, and BTEX and chloride. *All samples taken during Phase I of the investigation will be sent to one of the laboratories currently covered by a separate purchase agreement with the OCD.*
9. Completion of the boreholes as 2-inch ground water monitor wells. Ground water is estimated to be approximately 75 feet bgs (see Figures 4, 5, 6 and 7). The well completion shall be 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.
10. Sample the ground water no less than 24 hours after the well is developed. The ground water from the monitor wells must be purged, sampled and analyzed for concentrations of benzene, toluene, ethylbenzene, xylene, polycyclic aromatic hydrocarbons (PAH), 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.
11. Investigate nature and extent of contamination below the tank foot prints.



- a. Investigate the extent of contamination beneath the tank foot prints by trenching along the former tank area (see figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. Samples will be taken from each trench and will be sent for laboratory TPH and chloride analysis. Back fill open trenches when finished.
  - b. Estimate the volume and cost per cubic yard to remove the contaminated material based on the trenching and sample analysis. Contaminated soil must be sent to an OCD-approved landfarm for reclamation.
12. Investigate nature and extent of tank bottom piles.
  - a. Investigate the extent of contamination surrounding the tank bottom piles by trenching perpendicular to three sides of the pile (see figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. Samples will be taken from each trench and will be sent for laboratory TPH and chloride analysis. Back fill open trenches when finished.
  - b. Estimate the volume and cost per cubic yard to remove the tank bottom material and surrounding contamination based on the trenching and sample analysis. Tank bottoms and contaminated soil must be sent to an OCD-approved landfarm for reclamation.
13. Investigate the nature and extent of contamination around the pit area.
  - a. Investigate the composition of the pit material to determine if recovery of any hydrocarbons is possible. Determine the cost associated with recovery.
  - b. Investigate the extent to which the contamination has migrated from the pit by trenching perpendicular to three sides of the pit and inside the southwest corner (see figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. Samples will be taken from each trench and will be sent for laboratory TPH, and chloride analysis. Back fill open trenches when finished.
  - c. Estimate the volume and cost per cubic yard to remove the pit material and surrounding contamination based on the trenching and sample analysis. Contaminated material must be sent to an OCD-approved landfarm for

reclamation. Volume and cost estimates shall take into account that the pit material may need to be solidified for transport.

14. Estimate cost per cubic yard to back haul clean soil from the landfarm facility or other source.
15. Estimate the volume of clean soil required to fill, compact and mound the site based on the estimate of excavation sizes of item 12, 13 and 14 and the local topography.
16. Propose cap design alternatives and their costs.
17. Estimate costs associated with installing a clay barrier within the excavations including the cost per cubic yard and source of the clay.
18. Prepare and submit a final report detailing items 1-17. The report must include the nature of the waste, the estimated volume of waste and contaminated material, the estimated depth of the contamination, soil and groundwater analysis including a map detailing the results. The report shall propose future investigation and remediation scenarios and estimated costs for each scenario.

C. MERGER

This Agreement, and attachments thereto, together with NMSHTD Price Agreement No. 00-805-09-17658, constitutes the entire agreement between the parties hereto and all previous agreements, conditions, promises, inducements and understandings shall be deemed to have merged in this Agreement.

D. SUMMARY OF PHASE I INVESTIGATION AND REMEDIATION AT THE GENERAL PETROLEUM TREATING PLANT

ITEM NO.	ITEM	UNIT	PRICE PER UNIT	UNITS	COSTS
0002	senior scientist	hour	\$75		
0003	project scientist/manager	hour	\$63		
0005	field tech II	hour	\$42		
0006	field tech I	hour	\$40		
0010	secretary	hour	\$29		
0021	PID	day	\$5		
0025	backhoe 1	day	\$120		
0026	backhoe 2	day	\$157		
0027	backhoe 3	day	\$157		
0028	trackhoe 1	day	\$400		

0029	trackhoe 2	day	\$550		
0031	2"pvc-10 ft.section	foot	\$15.50		
0033	2"screen-10 ft.section	foot	\$24		
0035	filter pack sand	sack	\$6.60		
0036	bentonite pellets	50lb bucket	\$30		
0037	bentonite chips	50lb sack	\$6.60		
0042	mileage	mile	\$0.25		
0043	perdiem	night	\$60		
0045	recycling of tank contents				
0047	drill rig (M)	mile	\$0.75		
0048	hollow-stem auger (S-M)	foot	\$20		
0049	hollow-stem auger (L)	foot	\$34		
0050	air rotary	hour	\$230		
0052	water truck	day	\$125		
0053	pick-up truck ( )	day	\$50		
	locking well cap & Pad (at cost)				
	transport (at cost)				
	disposal/recycling (at cost)				
	subcontract shear (at cost)				
	fence (at cost)				
<b>TOTAL</b>				(a)	

<b>SUB-TOTAL</b>			(a) \$
<b>Lea County Taxes (NMGRT)</b>			5.25% \$
<b>TOTAL</b>			(b) \$

**RESPEC, INC.**

**APPROVAL:** \_\_\_\_\_ **TITAL:** \_\_\_\_\_ **DATE:** \_\_\_\_\_, 2002



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**

Governor  
Betty Rivera  
Cabinet Secretary

February 26, 2002

Lori Wrotenbery  
Director  
Oil Conservation Division

Stuart E. Faith  
Faith Engineering, Inc.  
541 Quantum Rd. NE  
Rio Rancho, NM 87124

**RE: New Mexico State Highway and Transportation Department  
Purchase Agreement 000-805-09-17658  
Phase I Investigation and Remediation General Petroleum Treating Plant  
SW/4, SW/4 of Section 28, Township 21 South, Range 37 East, NMPM,  
Lea County, New Mexico**

Dear Mr. Faith:

The New Mexico Oil Conservation Division (OCD) is in the process of evaluating an abandoned oil field treating plant in southeast New Mexico. The facility was operated by General Petroleum and is located in the SW/4, SW/4 of Section 28, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, on the west edge of Eunice. Please find enclosed a scope of work with attached figures. The OCD is requesting a cost estimate for the scope of work attached. The primary focus of this initial phase is to determine the scope of the project at hand and what the costs will be to begin the investigative phase. The OCD will be using the New Mexico State Highway and Transportation Department Purchase Agreement 000-805-09-17658.

Please contact me at (505) 476-3488 or at [mkieling@state.nm.us](mailto:mkieling@state.nm.us) if you have any questions or require a site visit. I can be reached in the office Monday through Wednesday. The OCD would like a response to this scope of work by March 29, 2002. If Faith Engineering, Inc. wishes to respond, the OCD will require 4 copies of the attached scope of work each with an original signature.

Sincerely

Martyne J. Kieling  
Environmental Geologist

**SCOPE OF WORK**  
**PHASE I INVESTIGATION AND REMEDIATION**  
**GENERAL PETROLEUM TREATING PLANT**  
**LEA COUNTY, NEW MEXICO**

New Mexico State Highway and Transportation Department Purchase Agreement 000-805-09-17658 Contract Vendor 4) Faith Engineering, Inc., 541 Quantum Rd. NE, Rio Rancho, NM 87124, Tel 1-505-243-5494

A. SUMMARY

The contractor shall perform the work necessary to conduct a Phase I preliminary investigation of the equipment, surface contamination, the extent of subsurface soil contamination and depth to and analysis of groundwater. The Contractor shall also compile volume and cost estimates with regards to the contamination and prepare a cost effective Phase II investigation and cleanup proposal that can be implemented at this location. The General Petroleum Treating Plant is located in the SW/4, SW/4 of Section 28, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico (see figure 1, and photos).

B. SCOPE OF WORK

1. Compile the names and addresses of property owners within ¼ mile of the facility.
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5. Perform a One-Call and map the buried pipelines and electrical hazards on site (see figure 2).
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C. MERGER

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D. SUMMARY OF PHASE I INVESTIGATION AND REMEDIATION AT THE GENERAL PETROLEUM TREATING PLANT

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0010	secretary	hour	\$29		
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0026	backhoe 2	day	\$157		
0027	backhoe 3	day	\$157		
0028	trackhoe 1	day	\$400		



0029	trackhoe 2	day	\$550		
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0033	2"screen-10 ft.section	foot	\$24		
0035	filter pack sand	sack	\$6.60		
0036	bentonite pellets	50lb bucket	\$30		
0037	bentonite chips	50lb sack	\$6.60		
0042	mileage	mile	\$0.25		
0043	perdiem	night	\$60		
0045	recycling of tank contents				
0047	drill rig (M)	mile	\$0.75		
0048	hollow-stem auger (S-M)	foot	\$20		
0049	hollow-stem auger (L)	foot	\$34		
0050	air rotary	hour	\$230		
0052	water truck	day	\$125		
0053	pick-up truck ( )	day	\$50		
	locking well cap & Pad (at cost)				
	transport (at cost)				
	disposal/recycling (at cost)				
	subcontract shear (at cost)				
	fence (at cost)				
<b>TOTAL</b>				(a)	

<b>SUB-TOTAL</b>			(a) \$
<b>Lea County Taxes (NMGRT)</b>			5.25%\$
<b>TOTAL</b>			(b)\$

**FAITH ENGINEERING, INC.**

**APPROVAL:** \_\_\_\_\_ **TITAL:** \_\_\_\_\_ **DATE:** \_\_\_\_\_, 2002



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**

Governor  
Betty Rivera  
Cabinet Secretary

February 26, 2002

Lori Wrotenbery  
Director  
Oil Conservation Division

Paul Fensterer  
Kleinfelder, Inc.  
4905 Hawkins NE  
Albuquerque, NM 87109

**RE: New Mexico State Highway and Transportation Department  
Purchase Agreement 000-805-09-17658  
Phase I Investigation and Remediation General Petroleum Treating Plant  
SW/4, SW/4 of Section 28, Township 21 South, Range 37 East, NMPM,  
Lea County, New Mexico**

Dear Mr. Fensterer:

The New Mexico Oil Conservation Division (OCD) is in the process of evaluating an abandoned oil field treating plant in southeast New Mexico. The facility was operated by General Petroleum and is located in the SW/4, SW/4 of Section 28, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, on the west edge of Eunice. Please find enclosed a scope of work with attached figures. The OCD is requesting a cost estimate for the scope of work attached. The primary focus of this initial phase is to determine the scope of the project at hand and what the costs will be to begin the investigative phase. The OCD will be using the New Mexico State Highway and Transportation Department Purchase Agreement 000-805-09-17658.

Please contact me at (505) 476-3488 or at [mkieling@state.nm.us](mailto:mkieling@state.nm.us) if you have any questions or require a site visit. I can be reached in the office Monday through Wednesday. The OCD would like a response to this scope of work by March 29, 2002. If Kleinfelder, Inc. wishes to respond, the OCD will require 4 copies of the attached scope of work each with an original signature.

Sincerely

Martyne J. Kielling  
Environmental Geologist

**SCOPE OF WORK**  
**PHASE I INVESTIGATION AND REMEDIATION**  
**GENERAL PETROLEUM TREATING PLANT**  
**LEA COUNTY, NEW MEXICO**

New Mexico State Highway and Transportation Department Purchase Agreement 000-805-09-17658 Contract Vendor 7) Kleinfelder, Inc., 4905 Hawkins NE, Albuquerque, NM 87109, Tel 1-505-344-7373

**A. SUMMARY**

The contractor shall perform the work necessary to conduct a Phase I preliminary investigation of the equipment, surface contamination, the extent of subsurface soil contamination and depth to and analysis of groundwater. The Contractor shall also compile volume and cost estimates with regards to the contamination and prepare a cost effective Phase II investigation and cleanup proposal that can be implemented at this location. The General Petroleum Treating Plant is located in the SW/4, SW/4 of Section 28, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico (see figure 1, and photos).

**B. SCOPE OF WORK**

1. Compile the names and addresses of property owners within ¼ mile of the facility.
2. Locate all water wells within ¼ mile of the property.
3. Install a six (6) foot chain link security fence and gate with lock around the pit NMOCD Hobbs district and Santa Fe offices shall be given a key or provided the combination to the lock.
4. Remove all existing interior fencing surrounding the pit and store on site for future recycling or disposal.
5. Perform a One-Call and map the buried pipelines and electrical hazards on site (see figure 2).
6. Remove material within the tanks for recycling. Remove the two tanks currently on site for recycling or disposal (see photos). The material and tanks must be sent to an OCD-approved facility and must be disposed/recycled in accordance with the rules of the OCD.
7. Inventory trash at the site to include barrels, buckets, batteries, pipe, electrical meters, fencing and other trash items. Estimate volume and disposal/recycling costs of trash items and any testing that may be necessary prior to disposal.

8. Investigate extent of total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene, xylene (BTEX), and chloride beneath the facility area. Three (3) bore holes will be drilled at the site, one in the northeast corner of the facility one in the southeast corner of the facility and one in the southwest corner of the facility (see Figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. A minimum of one sample from the highest PID sample location and one sample just above the groundwater interface will be sent for laboratory analysis to confirm the concentration and extent of TPH, and BTEX and chloride. *All samples taken during Phase I of the investigation will be sent to one of the laboratories currently covered by a separate purchase agreement with the OCD.*
9. Completion of the boreholes as 2-inch ground water monitor wells. Ground water is estimated to be approximately 75 feet bgs (see Figures 4, 5, 6 and 7). The well completion shall be 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.
10. Sample the ground water no less than 24 hours after the well is developed. The ground water from the monitor wells must be purged, sampled and analyzed for concentrations of benzene, toluene, ethylbenzene, xylene, polycyclic aromatic hydrocarbons (PAH), 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.
11. Investigate nature and extent of contamination below the tank foot prints.

- a. Investigate the extent of contamination beneath the tank foot prints by trenching along the former tank area (see figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. Samples will be taken from each trench and will be sent for laboratory TPH and chloride analysis. Back fill open trenches when finished.
  - b. Estimate the volume and cost per cubic yard to remove the contaminated material based on the trenching and sample analysis. Contaminated soil must be sent to an OCD-approved landfarm for reclamation.
12. Investigate nature and extent of tank bottom piles.
  - a. Investigate the extent of contamination surrounding the tank bottom piles by trenching perpendicular to three sides of the pile (see figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. Samples will be taken from each trench and will be sent for laboratory TPH and chloride analysis. Back fill open trenches when finished.
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13. Investigate the nature and extent of contamination around the pit area.
  - a. Investigate the composition of the pit material to determine if recovery of any hydrocarbons is possible. Determine the cost associated with recovery.
  - b. Investigate the extent to which the contamination has migrated from the pit by trenching perpendicular to three sides of the pit and inside the southwest corner (see figure 3). Field photo ionization detector (PID) measurements will be used as a screening tool. Samples will be taken from each trench and will be sent for laboratory TPH, and chloride analysis. Back fill open trenches when finished.
  - c. Estimate the volume and cost per cubic yard to remove the pit material and surrounding contamination based on the trenching and sample analysis. Contaminated material must be sent to an OCD-approved landfarm for

reclamation. Volume and cost estimates shall take into account that the pit material may need to be solidified for transport.

14. Estimate cost per cubic yard to back haul clean soil from the landfarm facility or other source.
15. Estimate the volume of clean soil required to fill, compact and mound the site based on the estimate of excavation sizes of item 12, 13 and 14 and the local topography.
16. Propose cap design alternatives and their costs.
17. Estimate costs associated with installing a clay barrier within the excavations including the cost per cubic yard and source of the clay.
18. Prepare and submit a final report detailing items 1-17. The report must include the nature of the waste, the estimated volume of waste and contaminated material, the estimated depth of the contamination, soil and groundwater analysis including a map detailing the results. The report shall propose future investigation and remediation scenarios and estimated costs for each scenario.

C. MERGER

This Agreement, and attachments thereto, together with NMSHTD Price Agreement No. 00-805-09-17658, constitutes the entire agreement between the parties hereto and all previous agreements, conditions, promises, inducements and understandings shall be deemed to have merged in this Agreement.

D. SUMMARY OF PHASE I INVESTIGATION AND REMEDIATION AT THE GENERAL PETROLEUM TREATING PLANT

ITEM NO.	ITEM	UNIT	PRICE PER UNIT	UNITS	COSTS
0002	senior scientist	hour	\$75		
0003	project scientist/manager	hour	\$63		
0005	field tech II	hour	\$42		
0006	field tech I	hour	\$40		
0010	secretary	hour	\$29		
0021	PID	day	\$5		
0025	backhoe 1	day	\$120		
0026	backhoe 2	day	\$157		
0027	backhoe 3	day	\$157		
0028	trackhoe 1	day	\$400		

0029	trackhoe 2	day	\$550		
0031	2"pvc-10 ft.section	foot	\$15.50		
0033	2"screen-10 ft.section	foot	\$24		
0035	filter pack sand	sack	\$6.60		
0036	bentonite pellets	50lb bucket	\$30		
0037	bentonite chips	50lb sack	\$6.60		
0042	mileage	mile	\$0.25		
0043	perdiem	night	\$60		
0045	recycling of tank contents				
0047	drill rig (M)	mile	\$0.75		
0048	hollow-stem auger (S-M)	foot	\$20		
0049	hollow-stem auger (L)	foot	\$34		
0050	air rotary	hour	\$230		
0052	water truck	day	\$125		
0053	pick-up truck ( )	day	\$50		
	locking well cap & Pad (at cost)				
	transport (at cost)				
	disposal/recycling (at cost)				
	subcontract shear (at cost)				
	fence (at cost)				
<b>TOTAL</b>				(a)	

<b>SUB-TOTAL</b>			(a) \$
<b>Lea County Taxes (NMGRT)</b>			5.25%\$
<b>TOTAL</b>			(b)\$

**KLEINFELDER, INC.**

**APPROVAL:** \_\_\_\_\_ **TITAL:** \_\_\_\_\_ **DATE:** \_\_\_\_\_, 2002

**SCOPE OF WORK  
PHASE I INVESTIGATION AND REMEDIATION  
GENERAL PETROLEUM TREATING PLANT  
LEA COUNTY, NEW MEXICO**

Highway Department Purchase Agreement 000-805-09-17658  
Contract Vendor 1) AMEC Earth and Environmental, Inc. (Agra Earth and Environmental, Inc.)  
8519 Jefferson, NE, Albuquerque, NM 87113, Tel 1-505-821-1801

**A. SUMMARY**

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AMEC APPROVAL: \_\_\_\_\_ DATE: \_\_\_\_\_, 2002

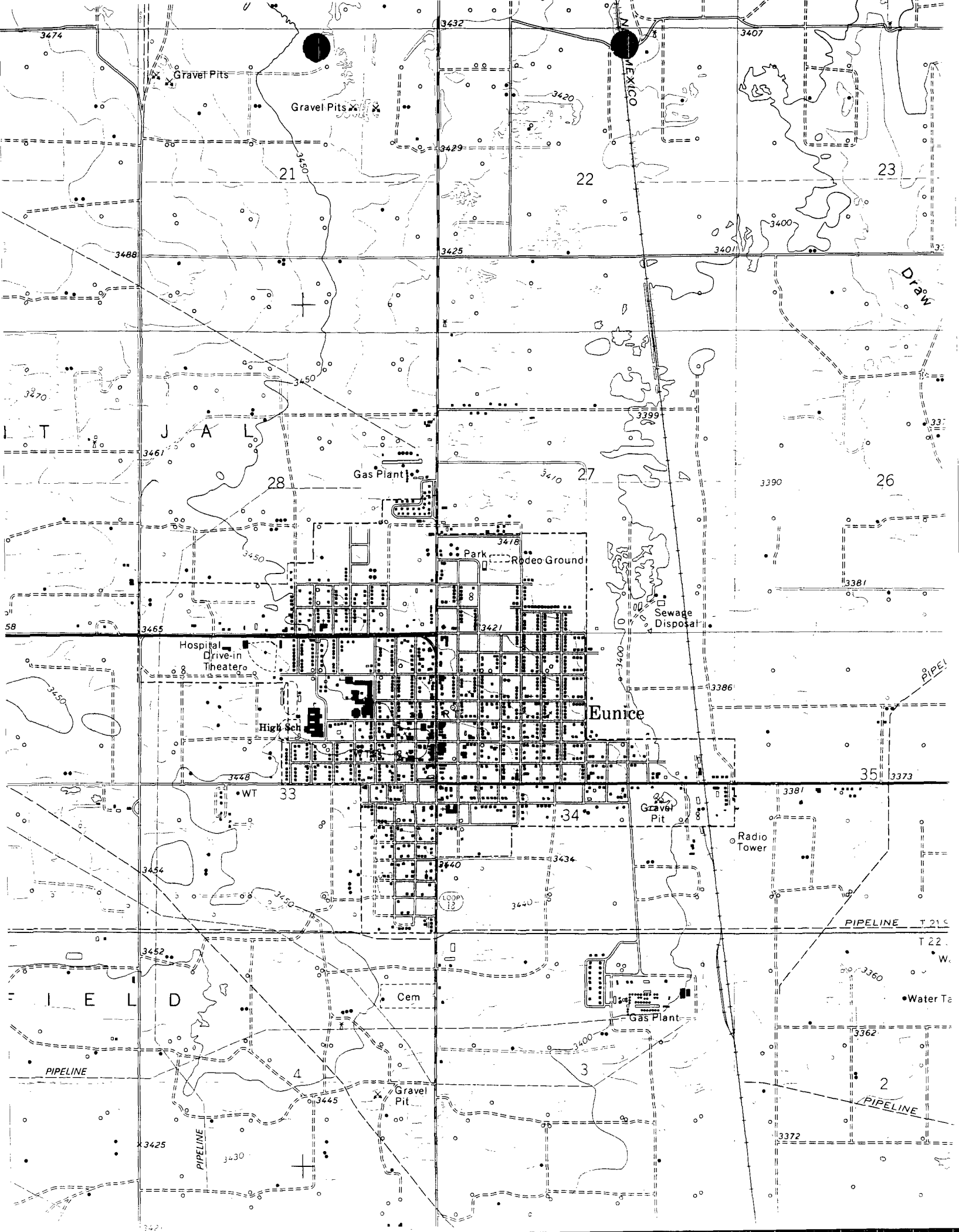


Figure 2

GENERAL PETROLEUM TREATING PLANT

February 6, 2002

NORTH



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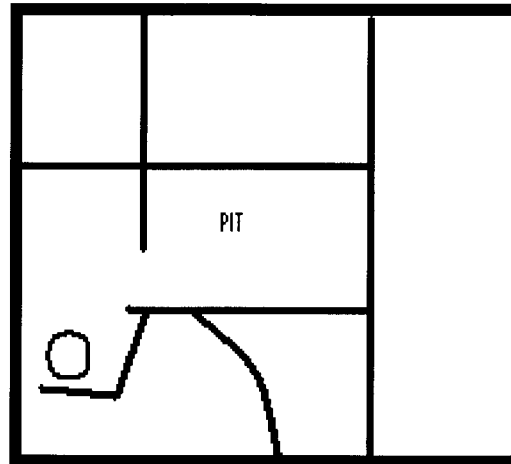


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Monument <--- Highway ---> Eunice Ave. 0

MAP NOT TO SCALE

Figure 3

GENERAL PETROLEUM TREATING PLANT

February 6, 2002

NORTH

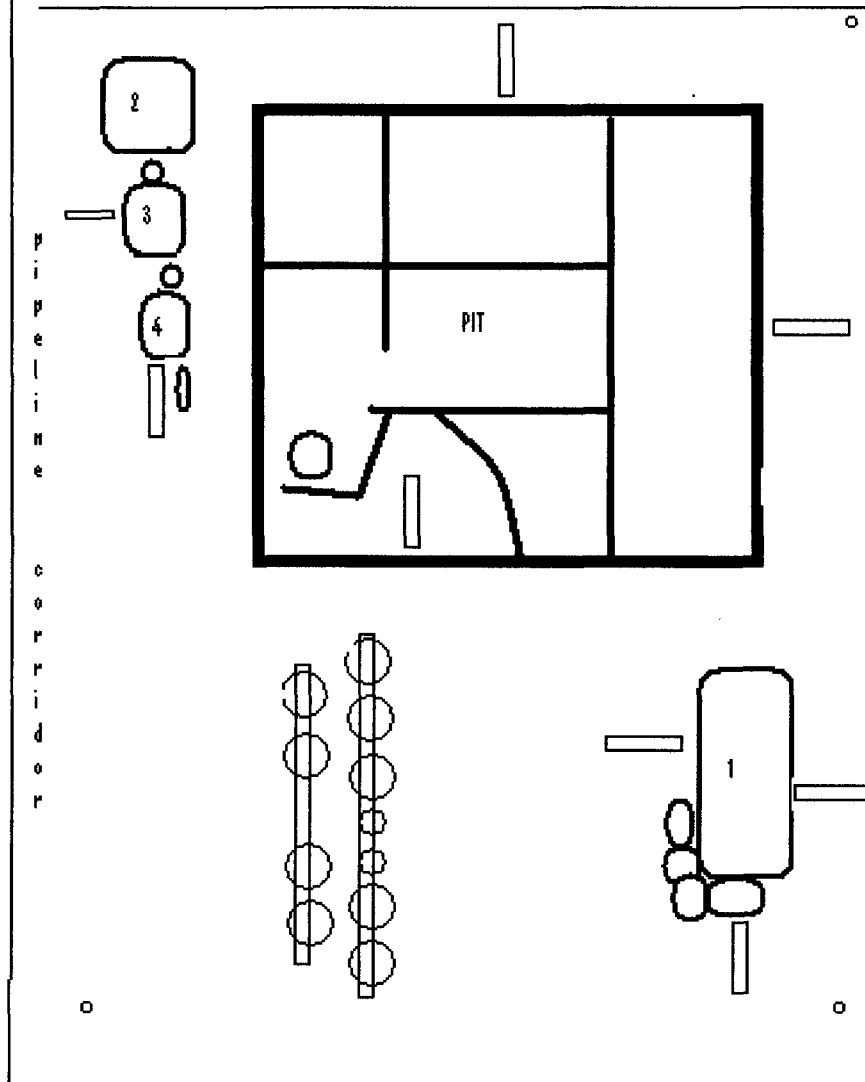
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Monument <--- Highway ---> Eunice Ave. 0



trench location



well location

MAP NOT TO SCALE





Figure 5

Project No: 787

Well ID: MW-27

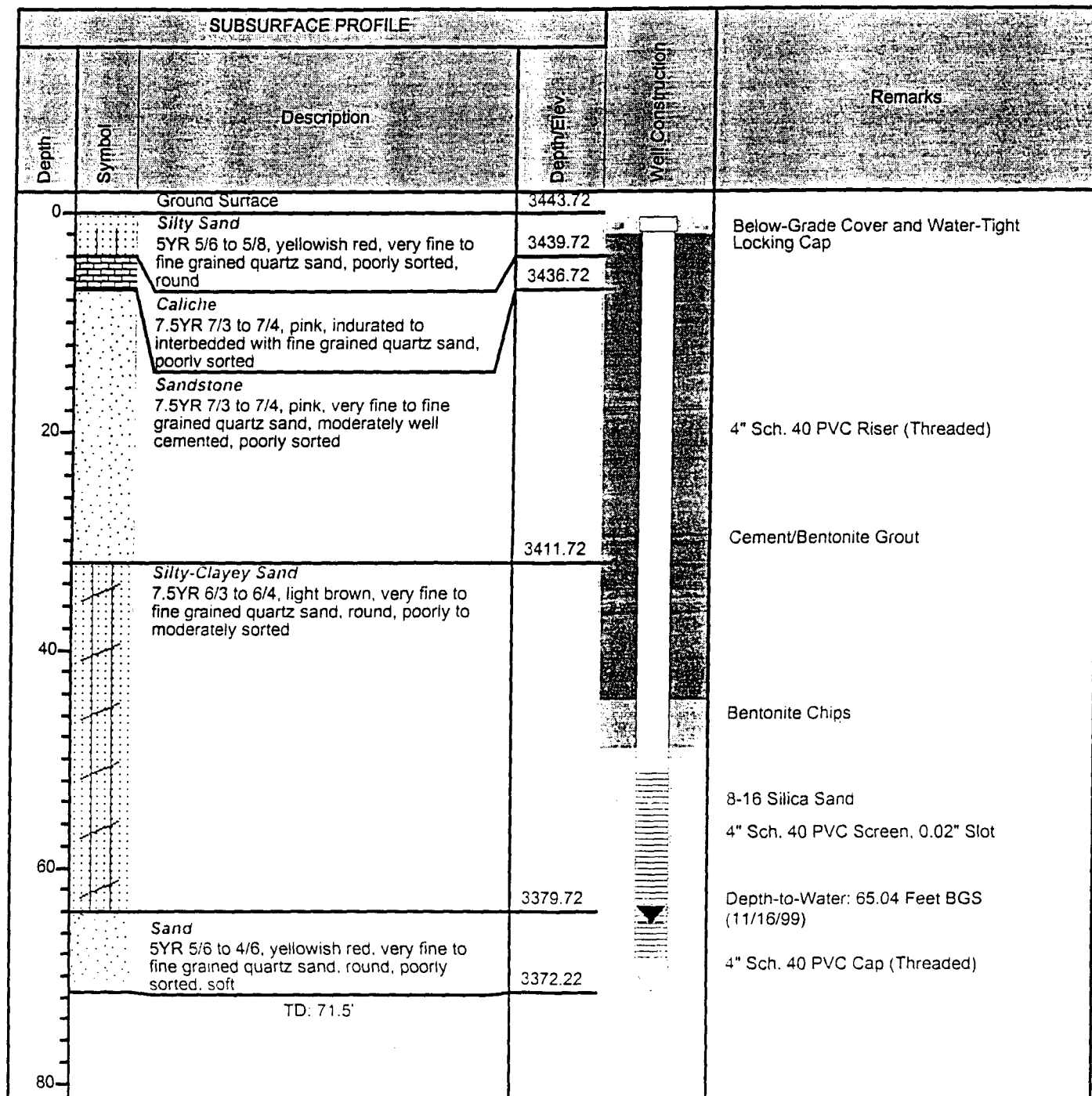
Project: Eunice # 2 (North) Gas Plant

Client: Texaco Exploration and Production Inc.

Enclosure: 1 of 1

Location: Lea County, New Mexico

Engineer: MJL



Drilled By: Scarborough Drilling, Inc.

Highlander Environmental  
1910 N. Big Spring  
Midland, Texas 79705  
(915) 682-4559

Hole Size: 7 7/8"

Drill Method: Rotary (Water)

Datum: Mean Sea Level

Drill Date: 27-Oct-99

Sheet: 1 of 1

Project No: 787

Well ID: MW-28

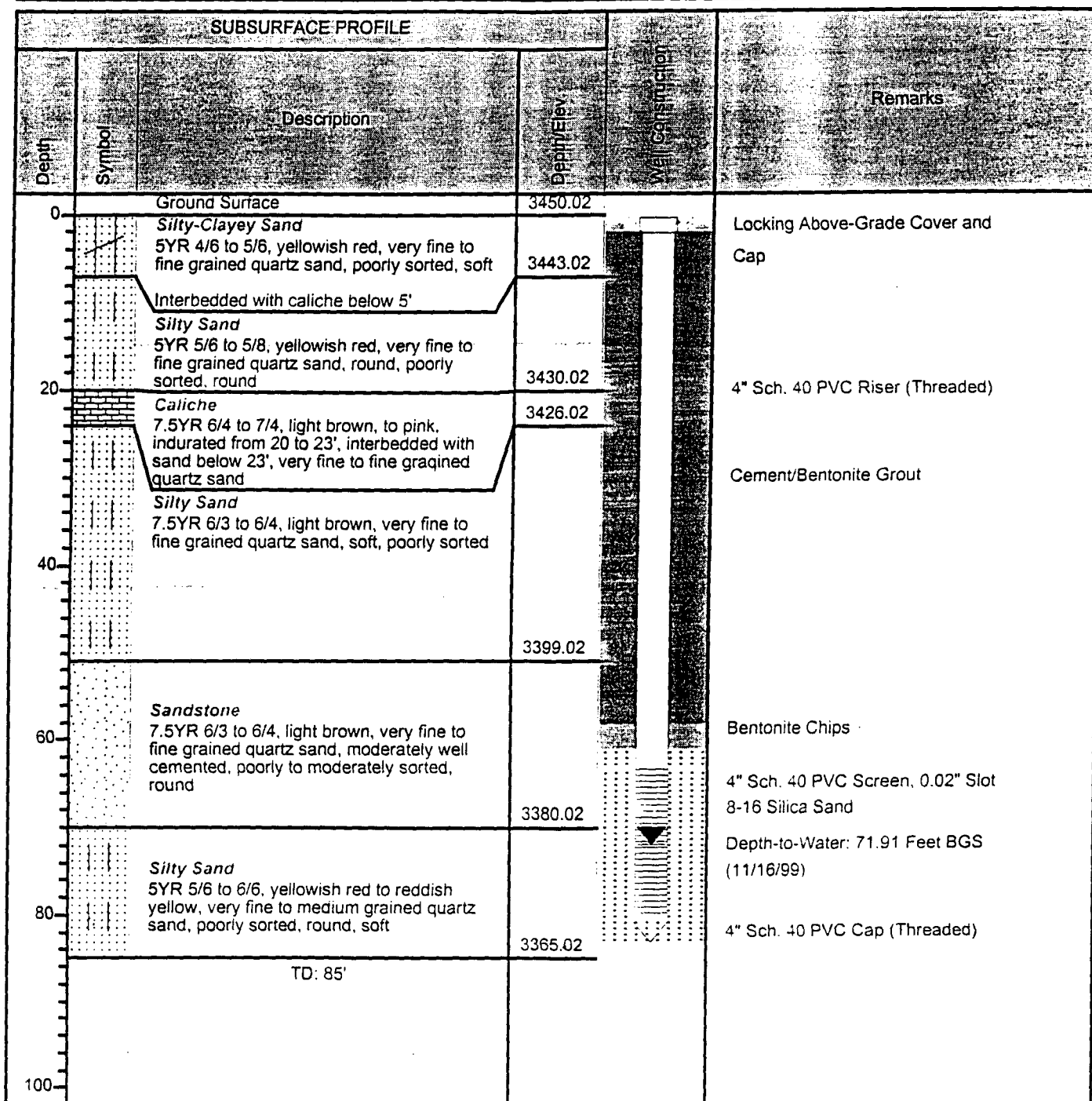
Project: Eunice # 2 (North) Gas Plant

Client: Texaco Exploration and Production Inc.

Enclosure: 1 of 1

Location: Lea County, New Mexico

Engineer: MJL



Drilled By: Scarborough Drilling, Inc.

 Highlander Environmental  
 1910 N. Big Spring  
 Midland, Texas 79705  
 (915) 682-4559

Hole Size: 7 7/8"

Drill Method: Rotary (Water)

Datum: Mean Sea Level

Drill Date: 02-Nov-99

Sheet: 1 of 1

Figure 7

Project No: 787

Well ID: MW-29

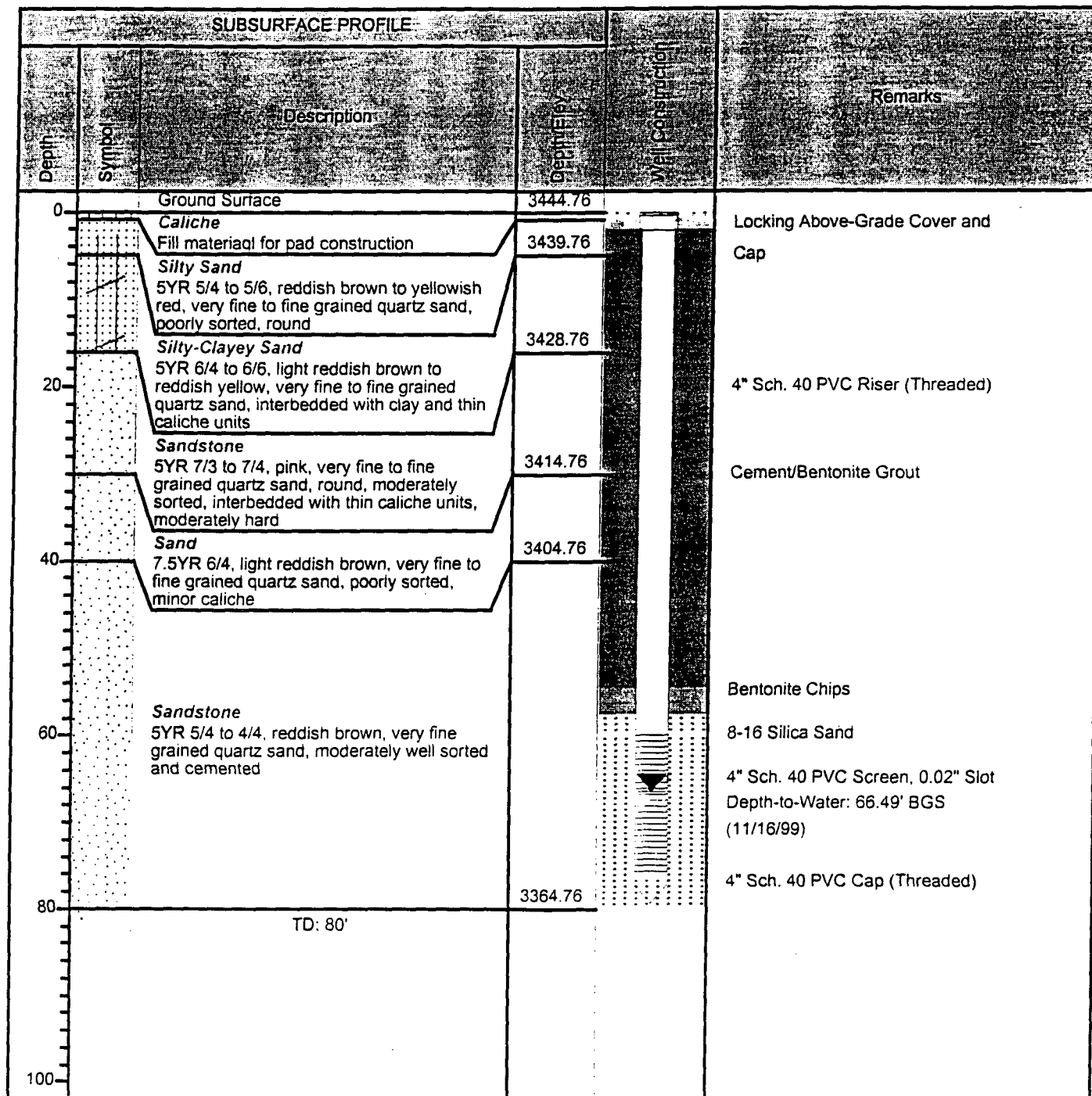
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Engineer: MJL



Drilled By: Scarborough Drilling, Inc.

Highlander Environmental  
1910 N. Big Spring  
Midland, Texas 79705  
(915) 682-4559

Hole Size: 7 7/8"

Drill Method: Rotary (Water)

Datum: Mean Sea Level

Drill Date: 11-Nov-99

Sheet: 1 of 1

# John Coy Water Well 3/20/01

2500 Ave D  
Enriva, NM 88231

Arrived at 1130 hrs.  
met with John Coy  
water well behind house, SE of  
John Coy's ranch plant  
well depth approx 120 ft.

Depth to water approx 30'

Ran well for 10-15 min.  
Well running for 15-20 before  
arrived

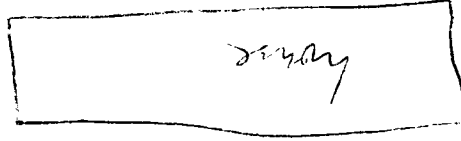
sample id - 0103201200

samples - 8021  
cations/anions  
metals

sampled from outdoor tap behind house  
water used for household irrigation  
not used for drinking

Former  
Johnny Cooper  
Tractor Plant

approx 1/4 mile



well

Approx 1/4 mile

N

Gas Plant  
Texaco Enriva North  
approx 3/4 - 1 mile  
NE

mailing address

P.O. 876

Enriva, NM 88231



R10320

# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**  
Governor  
**Jennifer A. Salisbury**  
Cabinet Secretary

**Lori Wrotenbery**  
Director  
Oil Conservation Division

July 31, 2001

Mr. John Coy  
2500 Ave "O"  
Eunice, New Mexico 88231

**RE: WATER WELL SAMPLE ANALYSES**

Dear Mr. Coy:

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 water well in Eunice, New Mexico on March 20, 2001. The sample analyses did not detect any petroleum hydrocarbon contaminants in your well water. However, chloride was found to be present in the water at a concentration of 310 mg/l which is slightly in excess of the New Mexico Water Quality Control Commission (WQCC) drinking water standard of 250 mg/l. This contaminant may be due to oilfield-related contaminants that the OCD is investigating in the Eunice area. In addition, fluoride was found to be present in the water at a concentration of 3.2 mg/l which is in excess of the WQCC drinking water standard of 1.6 mg/l. Elevated levels of fluoride are naturally present in ground water in areas of southeastern New Mexico. Please contact the New Mexico Environment Department if you have questions regarding fluoride in ground water.

At the time of OCD's sampling, you stated that the water is not used for drinking water. Since these constituents are in excess of WQCC standards, the OCD recommends that you do not use this well as a source of drinking water. The OCD is continuing to work on the investigation of contamination in the Eunice area and will include the chloride contamination of your well in the site investigations.

Thank you for bringing this to our attention. If you have any questions regarding the laboratory analyses of your water or the Eunice 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  
Martyne Kieling, OCD Environmental Bureau

# TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9  
155 McCutcheon, Suite H

Lubbock, Texas 79424  
El Paso, Texas 79932

800•378•1296  
888•588•3443

806•794•1296  
915•585•3443

FAX 806•794•1298  
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

RECEIVED

APR 24 2001

ENVIRONMENTAL BUREAU  
OIL CONSERVATION DIVISION

Report Date: April 17, 2001

Order ID Number: A01032213

Project Number: John Cox  
Project Name: N/A  
Project Location: Water Well

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
167356	0103201200	Water	3/20/01	12:00	3/22/01

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 15 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

## Analytical Report

**Sample: 167356 - 0103201200**

Analysis: 8260 Analytical Method: S 8260B QC Batch: QC10004 Date Analyzed: 3/25/01  
Analyst: JG Preparation Method: E 5030B Prep Batch: PB08593 Date Prepared: 3/25/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	µg/L	1	1
Dichlorodifluoromethane		<1.00	µg/L	1	1
Chloromethane (methyl chloride)		<1.00	µg/L	1	1
Vinyl Chloride		<1.00	µg/L	1	1
Bromomethane (methyl bromide)		<1.00	µg/L	1	1
Chloroethane		<1.00	µg/L	1	1
Trichlorofluoromethane		<1.00	µg/L	1	1
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<1.00	µg/L	1	1
Carbon Disulfide		<1.00	µg/L	1	1
Acrylonitrile		<1.00	µg/L	1	1
2-Butanone (MEK)		<5.00	µg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5
2-hexanone		<5.00	µg/L	1	5
trans-1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<1.00	µg/L	1	1
Methylene chloride		<5.00	µg/L	1	5
MTBE		<1.00	µg/L	1	1
trans-1,2-Dichloroethene		<1.00	µg/L	1	1
1,1-Dichloroethane		<1.00	µg/L	1	1
cis-1,2-Dichloroethene		<1.00	µg/L	1	1
2,2-Dichloropropane		<1.00	µg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1
Chloroform		<1.00	µg/L	1	1
1,1,1-Trichloroethane		<1.00	µg/L	1	1
1,1-Dichloropropene		<1.00	µg/L	1	1
Benzene		<1.00	µg/L	1	1
Carbon Tetrachloride		<1.00	µg/L	1	1
1,2-Dichloropropane		<1.00	µg/L	1	1
Trichloroethene (TCE)		<1.00	µg/L	1	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1
Bromodichloromethane		<1.00	µg/L	1	1
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5
cis-1,3-Dichloropropene		<1.00	µg/L	1	1
trans-1,3-Dichloropropene		<1.00	µg/L	1	1
Toluene		<1.00	µg/L	1	1
1,1,2-Trichloroethane		<1.00	µg/L	1	1
1,3-Dichloropropane		<1.00	µg/L	1	1
Dibromochloromethane		<1.00	µg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1
Tetrachloroethene (PCE)		<1.00	µg/L	1	1
Chlorobenzene		<1.00	µg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1
Ethylbenzene		<1.00	µg/L	1	1
m,p-Xylene		<1.00	µg/L	1	1
Bromoform		<1.00	µg/L	1	1
Styrene		<1.00	µg/L	1	1
o-Xylene		<1.00	µg/L	1	1

Continued ...

... Continued Sample: 167356 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1
2-Chlorotoluene		<1.00	µg/L	1	1
1,2,3-Trichloropropane		<1.00	µg/L	1	1
Isopropylbenzene		<1.00	µg/L	1	1
Bromobenzene		<1.00	µg/L	1	1
n-Propylbenzene		<1.00	µg/L	1	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1
tert-Butylbenzene		<1.00	µg/L	1	1
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1
sec-Butylbenzene		<1.00	µg/L	1	1
1,3-Dichlorobenzene		<1.00	µg/L	1	1
p-Isopropyltoluene		<1.00	µg/L	1	1
4-Chlorotoluene		<1.00	µg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1
n-Butylbenzene		<1.00	µg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<5.00	µg/L	1	5
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		45.94	µg/L	1	50	91	80 - 120
Toluene-d8		50.72	µg/L	1	50	101	80 - 120
4-Bromofluorobenzene		42.94	µg/L	1	50	85	80 - 120

**Sample: 167356 - 0103201200**

Analysis: Alkalinity Analytical Method: E 310.1 QC Batch: QC10095 Date Analyzed: 3/29/01  
Analyst: RS Preparation Method: N/A Prep Batch: PB08682 Date Prepared: 3/29/01

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

**Sample: 167356 - 0103201200**

Analysis: Conductivity Analytical Method: SM 2510B QC Batch: QC10021 Date Analyzed: 3/27/01  
Analyst: JS Preparation Method: N/A Prep Batch: PB08610 Date Prepared: 3/27/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		1500	µMHOS/cm	1	

**Sample: 167356 - 0103201200**

Analysis: Hg, Total Analytical Method: E 245.2 QC Batch: QC09995 Date Analyzed: 3/26/01  
Analyst: SSC Preparation Method: N/A Prep Batch: PB08585 Date Prepared: 3/22/01



Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

**Sample: 167356 - 0103201200**

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC09959 Date Analyzed: 3/22 '01  
Analyst: JS Preparation Method: N/A Prep Batch: PB08556 Date Prepared: 3/22 '01

Param	Flag	Result	Units	Dilution	RDL
CL		310	mg/L	10	0.50
Fluoride		3.2	mg/L	5	0.20
Nitrate-N	1	2.4	mg/L	5	0.20
Sulfate		160	mg/L	5	0.50

**Sample: 167356 - 0103201200**

Analysis: Salts Analytical Method: E 200.7 QC Batch: QC10033 Date Analyzed: 3/27 '01  
Analyst: LDB Preparation Method: E 3005 A Prep Batch: PB08572 Date Prepared: 3/27 '01

Param	Flag	Result	Units	Dilution	RDL
Dissolved Calcium		122	mg/L	1	5
Dissolved Magnesium		60.5	mg/L	1	5
Dissolved Potassium		9.94	mg/L	1	5
Dissolved Sodium		111	mg/L	1	5

**Sample: 167356 - 0103201200**

Analysis: TDS Analytical Method: E 160.1 QC Batch: QC10043 Date Analyzed: 3/27 '01  
Analyst: JS Preparation Method: N/A Prep Batch: PB08634 Date Prepared: 3/27 '01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		730	mg/L	2	10

**Sample: 167356 - 0103201200**

Analysis: Total Metals Analytical Method: 200.7 QC Batch: QC10220 Date Analyzed: 4/4 '01  
Analyst: RR Preparation Method: E 3010A Prep Batch: PB08598 Date Prepared: 3/27 '01

Param	Flag	Result	Units	Dilution	RDL
Total Aluminum		<0.5	mg/L	1	0.50
Total Arsenic		0.0142	mg/L	1	0.01
Total Barium		0.0716	mg/L	1	0.01
Total Boron		<0.5	mg/L	1	0.50
Total Cadmium		<0.002	mg/L	1	0.002
Total Chromium		<0.005	mg/L	1	0.005
Total Cobalt		<0.01	mg/L	1	0.01
Total Copper		<0.01	mg/L	1	0.01
Total Iron		< 0.5	mg/L	1	0.50
Total Lead		<0.01	mg/L	1	0.01
Total Manganese		<0.001	mg/L	1	0.001
Total Molybdenum		0.007	mg/L	1	0.002

Continued ...

<sup>1</sup> Sample out of hold time for NO3.

... Continued Sample: 167356 Analysis: Total Metals

Param	Flag	Result	Units	Dilution	RDL
Total Nickel		<0.01	mg/L	1	0.01
Total Selenium		0.0139	mg/L	1	0.01
Total Silver		<0.01	mg/L	1	0.01
Total Zinc		<0.01	mg/L	1	0.01

**Sample: 167356 - 0103201200**

Analysis: pH Analytical Method: E 150.1 QC Batch: QC10059 Date Analyzed: 3/22/01  
Analyst: RS Preparation Method: N/A Prep Batch: PB08643 Date Prepared: 3/22/01

Param	Flag	Result	Units	Dilution	RDL
pH	<sup>2</sup>	7.7	s.u.	1	1

<sup>2</sup>Sample run out of holding time

## Quality Control Report Method Blank

### Method Blank

QCBatch: QC09959

Param	Flag	Results	Units	Reporting Limit
CL		<0.5	mg/L	0.50
Fluoride		<0.2	mg/L	0.20
Nitrate-N		<0.2	mg/L	0.20
Sulfate		<0.5	mg/L	0.50

### Method Blank

QCBatch: QC09995

Param	Flag	Results	Units	Reporting Limit
Total Mercury		<0.0002	mg/L	0.0002

### Method Blank

QCBatch: QC10004

Param	Flag	Results	Units	Reporting Limit
Bromochloromethane		<1.00	µg/L	1
Dichlorodifluoromethane		<1.00	µg/L	1
Chloromethane (methyl chloride)		<1.00	µg/L	1
Vinyl Chloride		<1.00	µg/L	1
Bromomethane (methyl bromide)		<1.00	µg/L	1
Chloroethane		<1.00	µg/L	1
Trichlorofluoromethane		<1.00	µg/L	1
Acetone		<10.0	µg/L	10
Iodomethane (methyl iodide)		<1.00	µg/L	1
Carbon Disulfide		<1.00	µg/L	1
Acrylonitrile		<1.00	µg/L	1
2-Butanone (MEK)		<5.00	µg/L	5
1-methyl-2-pentanone (MIBK)		<5.00	µg/L	5
2-hexanone		<5.00	µg/L	5
trans-1,4-Dichloro-2-butene		<10.0	µg/L	10
1,1-Dichloroethene		<1.00	µg/L	1
Methylene chloride		<5.00	µg/L	5
MTBE		<1.00	µg/L	1
trans-1,2-Dichloroethene		<1.00	µg/L	1
1,1-Dichloroethane		<1.00	µg/L	1
cis-1,2-Dichloroethene		<1.00	µg/L	1
2,2-Dichloropropane		<1.00	µg/L	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1
Chloroform		<1.00	µg/L	1
1,1,1-Trichloroethane		<1.00	µg/L	1
1,1-Dichloropropene		<1.00	µg/L	1
Benzene		<1.00	µg/L	1
Carbon Tetrachloride		<1.00	µg/L	1

Continued ...

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Param	Flag	Results	Units	Reporting Limit
1,2-Dichloropropane		<1.00	µg/L	1
Trichloroethene (TCE)		<1.00	µg/L	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1
Bromodichloromethane		<1.00	µg/L	1
2-Chloroethyl vinyl ether		<5.00	µg/L	5
cis-1,3-Dichloropropene		<1.00	µg/L	1
trans-1,3-Dichloropropene		<1.00	µg/L	1
Toluene		<1.00	µg/L	1
1,1,2-Trichloroethane		<1.00	µg/L	1
1,3-Dichloropropane		<1.00	µg/L	1
Dibromochloromethane		<1.00	µg/L	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1
Tetrachloroethene (PCE)		<1.00	µg/L	1
Chlorobenzene		<1.00	µg/L	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1
Ethylbenzene		<1.00	µg/L	1
m,p-Xylene		<1.00	µg/L	1
Bromoform		<1.00	µg/L	1
Styrene		<1.00	µg/L	1
o-Xylene		<1.00	µg/L	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1
2-Chlorotoluene		<1.00	µg/L	1
1,2,3-Trichloropropane		<1.00	µg/L	1
Isopropylbenzene		<1.00	µg/L	1
Bromobenzene		<1.00	µg/L	1
n-Propylbenzene		<1.00	µg/L	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1
tert-Butylbenzene		<1.00	µg/L	1
1,2,4-Trimethylbenzene		<1.00	µg/L	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1
sec-Butylbenzene		<1.00	µg/L	1
1,3-Dichlorobenzene		<1.00	µg/L	1
p-Isopropyltoluene		<1.00	µg/L	1
1-Chlorotoluene		<1.00	µg/L	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1
n-Butylbenzene		<1.00	µg/L	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	5
1,2,3-Trichlorobenzene		<5.00	µg/L	5
1,2,4-Trichlorobenzene		<5.00	µg/L	5
Naphthalene		<5.00	µg/L	5
Hexachlorobutadiene		<5.00	µg/L	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		45.05	µg/L	1	50	90	80 - 120
Toluene-d8		50.25	µg/L	1	50	100	80 - 120
4-Bromofluorobenzene		42.28	µg/L	1	50	84	80 - 120

Method Blank

QCBatch: QC10021

Param	Flag	Results	Units	Reporting Limit
Specific Conductance		7.3	$\mu$ MHOS/cm	

**Method Blank**      QCBatch:    QC10033

Param	Flag	Results	Units	Reporting Limit
Dissolved Calcium		<5.0	mg/L	5
Dissolved Magnesium		<5.0	mg/L	5
Dissolved Potassium		<5.0	mg/L	5
Dissolved Sodium		<5.0	mg/L	5

**Method Blank**      QCBatch:    QC10043

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

**Method Blank**      QCBatch:    QC10095

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

**Method Blank**      QCBatch:    QC10220

Param	Flag	Results	Units	Reporting Limit
Total Aluminum		<0.5	mg/L	0.50
Total Arsenic		<0.01	mg/L	0.01
Total Barium		<0.01	mg/L	0.01
Total Boron		<0.5	mg/L	0.50
Total Cadmium		<0.002	mg/L	0.002
Total Chromium		<0.005	mg/L	0.005
Total Cobalt		<0.01	mg/L	0.01
Total Copper		<0.01	mg/L	0.01
Total Iron		< 0.5	mg/L	0.50
Total Lead		<0.01	mg/L	0.01
Total Manganese		0.00228	mg/L	0.001
Total Molybdenum		<0.002	mg/L	0.002
Total Nickel		<0.01	mg/L	0.01
Total Selenium		<0.01	mg/L	0.01
Total Silver		<0.01	mg/L	0.01
Total Zinc		<0.01	mg/L	0.01

## Quality Control Report Duplicate Samples

Duplicate QCBatch: QC10021

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance		1462	1500	µMHOS/cm	1	2	4.6

Duplicate QCBatch: QC10043

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		2714	<10	mg/L	1	0	14
Total Dissolved Solids		2714	2700	mg/L	1	0	14

Duplicate QCBatch: QC10059

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH		7.8	7.8	s.u.	1	0	0.99

Duplicate QCBatch: QC10095

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity		<1.0	<1.0	mg/L as CaCo3	1	0	7
Carbonate Alkalinity		<1.0	<1.0	mg/L as CaCo3	1	0	7
Bicarbonate Alkalinity		224	220	mg/L as CaCo3	1	1	7
Total Alkalinity		224	220	mg/L as CaCo3	1	1	7

## Quality Control Report Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC09959

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
CL	11.57	11.59	mg/L	1	12.50	<0.5	92	0	90 - 110	20
Sulfate	11.74	11.79	mg/L	1	12.50	<0.5	93	0	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: QC09995

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Total Mercury	0.00111	0.00105	mg/L	1	0.001	<0.0002	111	5	84 - 125	20

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

**Laboratory Control Spikes**

QCBatch: QC10004

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
1,1-Dichloroethene	102	109	µg/L	1	100	<1.00	102	6	71 - 132	20
Benzene	101	104	µg/L	1	100	<1.00	101	2	81 - 114	20
Trichloroethene (TCE)	90	92	µg/L	1	100	<1.00	90	2	79 - 111	20
Toluene	99	102	µg/L	1	100	<1.00	99	2	81 - 110	20
Chlorobenzene	96	99	µg/L	1	100	<1.00	96	3	88 - 112	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
Dibromofluoromethane	46.34	46.45	µg/L	1	50	92	92	80 - 120
Toluene-d8	50.16	50.33	µg/L	1	50	100	100	80 - 120
4-Bromofluorobenzene	44.75	44.37	µg/L	1	50	89	88	80 - 120

**Laboratory Control Spikes**

QCBatch: QC10033

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Dissolved Calcium	1093	1106	mg/L	1	1000	<5.0	109	1	75 - 125	20
Dissolved Magnesium	1055	1074	mg/L	1	1000	<5.0	105	1	75 - 125	20
Dissolved Potassium	1011	1026	mg/L	1	1000	<5.0	101	1	75 - 125	20
Dissolved Sodium	1067	1084	mg/L	1	1000	<5.0	106	1	75 - 125	20

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

## Quality Control Report Matrix Spikes and Duplicate Spikes

**Matrix Spikes**

QCBatch: QC09959

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
CL	<sup>3</sup> 828.65	838.5	mg/L	1	625		94	1	52 - 131	20
CL	<sup>4</sup> 828.65	838.5	mg/L	1	625	240	94	1	52 - 131	20
Fluoride	131.50	125.33	mg/L	1	125		94	5	80 - 113	20
Nitrate-N	126.42	127.05	mg/L	1	125		89	0	86 - 110	20
Sulfate	2145.62	2158.31	mg/L	1	625		87	2	71 - 121	20
Sulfate	2145.62	2158.31	mg/L	1	625	1600	87	2	71 - 121	20

<sup>3</sup>1 spiked the \*50 dilution for 167359, but reported the \*10 dilution. The correct %EA = 89.

<sup>4</sup>1 spiked the \*50 dilution for 167359, but reported the \*10 dilution. The correct %EA = 89.

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

**Matrix Spikes** QCBatch: QC09995

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Total Mercury	0.00104	0.00098	mg/L	1	0.001	<0.0002	104	5	84 - 127	20

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

**Matrix Spikes** QCBatch: QC10033

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Dissolved Calcium	1190	1306	mg/L	1	1000	190	100	10	75 - 125	20
Dissolved Magnesium	1288	1406	mg/L	1	1000	322	96	11	75 - 125	20
Dissolved Potassium	1000	1086	mg/L	1	1000	41.1	95	8	75 - 125	20
Dissolved Sodium	1260	1346	mg/L	1	1000	326	93	8	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: QC09959

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.27	90	90 - 110	3-22-01
CL		mg/L	12.50	11.69	93	90 - 110	3-22-01
Sulfate		mg/L	12.50	11.95	95	90 - 110	3-22-01

**ICV (1)** QCBatch: QC09959

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.33	93	90 - 110	3-22-01
CL		mg/L	12.50	11.57	92	90 - 110	3-22-01
Sulfate		mg/L	12.50	11.81	94	90 - 110	3-22-01

**CCV (1)** QCBatch: QC09995



Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.001	0.00098	98	80 - 120	3/26/01

ICV (1)      QCBatch:    QC09995

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.001	0.00106	106	80 - 120	3/26/01

CCV (1)      QCBatch:    QC10004

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	100	103	103	80 - 120	3/25/01
1,1-Dichloroethene		µg/L	100	114	114	80 - 120	3/25/01
Chloroform		µg/L	100	99	99	80 - 120	3/25/01
1,2-Dichloropropane		µg/L	100	102	102	80 - 120	3/25/01
Toluene		µg/L	100	100	100	80 - 120	3/25/01
Chlorobenzene		µg/L	100	99	99	80 - 120	3/25/01
Ethylbenzene		µg/L	100	98	98	80 - 120	3/25/01
Dibromofluoromethane		µg/L	50	45.99	91	80 - 120	3/25/01
Toluene-d8		µg/L	50	49.96	99	80 - 120	3/25/01
4-Bromofluorobenzene		µg/L	50	48.84	97	80 - 120	3/25/01

CCV (1)      QCBatch:    QC10021

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		µMHOS/cm	1413	1370	96	90 - 110	3/27/01

ICV (1)      QCBatch:    QC10021

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		µMHOS/cm	1413	1387	98	90 - 110	3/27/01

CCV (1)      QCBatch:    QC10033

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25	27.1	108	90 - 110	3/27/01
Dissolved Magnesium		mg/L	25	25.4	101	90 - 110	3/27/01
Dissolved Potassium		mg/L	25	23.4	93	90 - 110	3/27/01
Dissolved Sodium		mg/L	25	25.0	100	90 - 110	3/27/01

ICV (1) QCBatch: QC10033

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25	25.8	103	95 - 105	3/27/01
Dissolved Magnesium		mg/L	25	25.6	102	95 - 105	3/27/01
Dissolved Potassium		mg/L	25	23.8	95	95 - 105	3/27/01
Dissolved Sodium		mg/L	25	24.9	99	95 - 105	3/27/01

CCV (1) QCBatch: QC10043

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	919	91	90 - 110	3/27/01

ICV (1) QCBatch: QC10043

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	915	91	90 - 110	3/27/01

CCV (1) QCBatch: QC10059

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7	7.1	101	-0.1 s.u. - +0.1 s.u.	3/22/01

ICV (1) QCBatch: QC10059

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7	7.1	101	-0.1 s.u. - +0.1 s.u.	3/22/01

**CCV (1)**      QCBatch:      QC10095

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	3 29 01
Carbonate Alkalinity		mg/L as CaCo3	0	228	0	90 - 110	3 29 01
Bicarbonate Alkalinity		mg/L as CaCo3	0	8.0	0	90 - 110	3 29 01
Total Alkalinity		mg/L as CaCo3	250	236	94	90 - 110	3 29 01

**ICV (1)**      QCBatch:      QC10095

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	3 29 01
Carbonate Alkalinity		mg/L as CaCo3	0	232	0	90 - 110	3 29 01
Bicarbonate Alkalinity		mg/L as CaCo3	0	8.0	0	90 - 110	3 29 01
Total Alkalinity		mg/L as CaCo3	250	210	96	90 - 110	3 29 01

**CCV (1)**      QCBatch:      QC10220

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Aluminum		mg/L	0.80	0.806	100	95 - 105	1 1 01
Total Arsenic		mg/L	0.40	0.423	105	95 - 105	1 1 01
Total Barium		mg/L	0.80	0.75	93	95 - 105	1 1 01
Total Boron		mg/L	0.50	<0.5	0	95 - 105	1 1 01
Total Cadmium		mg/L	0.20	0.186	93	95 - 105	1 1 01
Total Chromium		mg/L	0.08	0.0752	94	95 - 105	1 1 01
Total Cobalt		mg/L	0.20	0.19	95	95 - 105	1 1 01
Total Copper		mg/L	0.10	0.247	247	95 - 105	1 1 01
Total Iron		mg/L	0.40	0.372	93	95 - 105	1 1 01
Total Lead		mg/L	0.40	0.375	93	95 - 105	1 1 01
Total Manganese		mg/L	0.20	0.186	91	95 - 105	1 1 01
Total Nickel		mg/L	0.20	0.193	96	95 - 105	1 1 01
Total Selenium		mg/L	0.40	0.384	96	95 - 105	1 1 01
Total Silica		mg/L	5	<0.5	0	95 - 105	1 1 01
Total Silver		mg/L	0.10	0.0957	95	95 - 105	1 1 01
Total Zinc		mg/L	0.20	0.184	92	95 - 105	1 1 01

**ICV (1)**      QCBatch:      QC10220

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Aluminum		mg/L	0.80	0.806	100	95 - 105	1 1 01
Total Arsenic		mg/L	0.40	0.414	103	95 - 105	1 1 01
Total Barium		mg/L	0.80	0.785	98	95 - 105	1 1 01

Continued ...

... Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Boron		mg/L	0.50	<0.5	0	95 - 105	4/1/01
Total Cadmium		mg/L	0.20	0.199	99	95 - 105	4/1/01
Total Chromium		mg/L	0.08	0.0797	99	95 - 105	4/1/01
Total Cobalt		mg/L	0.20	0.197	98	95 - 105	4/1/01
Total Copper		mg/L	0.10	0.248	248	95 - 105	4/1/01
Total Iron		mg/L	0.40	0.396	-7	95 - 105	4/1/01
Total Lead		mg/L	0.40	0.392	98	95 - 105	4/1/01
Total Manganese		mg/L	0.20	0.198	97	95 - 105	4/1/01
Total Nickel		mg/L	0.20	0.2	100	95 - 105	4/1/01
Total Selenium		mg/L	0.40	0.399	99	95 - 105	4/1/01
Total Silica		mg/L	5	<0.5	0	95 - 105	4/1/01
Total Silver		mg/L	0.10	0.0987	98	95 - 105	4/1/01
Total Zinc		mg/L	0.20	0.202	101	95 - 105	4/1/01

## Summary Report

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

Report Date: April 17, 2001

Order ID Number: A01032213

Project Number: John Cox  
Project Name: N/A  
Project Location: Water Well

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
167356	0103201200	Water	3/20/01	12:00	3/22/01

This report consists of a total of 3 page(s) and is intended only as a summary of results for the sample(s) listed above.

### Sample: 167356 - 0103201200

Param	Flag	Result	Units
<b>8260</b>			
Bromochloromethane		<1.00	µg/L
Dichlorodifluoromethane		<1.00	µg/L
Chloromethane (methyl chloride)		<1.00	µg/L
Vinyl Chloride		<1.00	µg/L
Bromomethane (methyl bromide)		<1.00	µg/L
Chloroethane		<1.00	µg/L
Trichlorofluoromethane		<1.00	µg/L
Acetone		<10.0	µg/L
Iodomethane (methyl iodide)		<1.00	µg/L
Carbon Disulfide		<1.00	µg/L
Acrylonitrile		<1.00	µg/L
2-Butanone (MEK)		<5.00	µg/L
1-methyl-2-pentanone (MIBK)		<5.00	µg/L
2-hexanone		<5.00	µg/L
trans-1,4-Dichloro-2-butene		<10.0	µg/L
1,1-Dichloroethene		<1.00	µg/L
Methylene chloride		<5.00	µg/L
MTBE		<1.00	µg/L
trans-1,2-Dichloroethene		<1.00	µg/L
1,1-Dichloroethane		<1.00	µg/L
cis-1,2-Dichloroethene		<1.00	µg/L
2,2-Dichloropropane		<1.00	µg/L
1,2-Dichloroethane (EDC)		<1.00	µg/L
Chloroform		<1.00	µg/L
1,1,1-Trichloroethane		<1.00	µg/L
1,1-Dichloropropene		<1.00	µg/L
Benzene		<1.00	µg/L
Carbon Tetrachloride		<1.00	µg/L
1,2-Dichloropropane		<1.00	µg/L
Trichloroethene (TCE)		<1.00	µg/L

Continued on next page ...

This is only a summary. Please, refer to the complete report package for quality control data.

Sample 167356 continued ...

Param	Flag	Result	Units
Dibromomethane (methylene bromide)		<1.00	µg/L
Bromodichloromethane		<1.00	µg/L
2-Chloroethyl vinyl ether		<5.00	µg/L
cis-1,3-Dichloropropene		<1.00	µg/L
trans-1,3-Dichloropropene		<1.00	µg/L
Toluene		<1.00	µg/L
1,1,2-Trichloroethane		<1.00	µg/L
1,3-Dichloropropane		<1.00	µg/L
Dibromochloromethane		<1.00	µg/L
1,2-Dibromoethane (EDB)		<1.00	µg/L
Tetrachloroethene (PCE)		<1.00	µg/L
Chlorobenzene		<1.00	µg/L
1,1,1,2-Tetrachloroethane		<1.00	µg/L
Ethylbenzene		<1.00	µg/L
m,p-Xylene		<1.00	µg/L
Bromoform		<1.00	µg/L
Styrene		<1.00	µg/L
o-Xylene		<1.00	µg/L
1,1,2,2-Tetrachloroethane		<1.00	µg/L
2-Chlorotoluene		<1.00	µg/L
1,2,3-Trichloropropane		<1.00	µg/L
Isopropylbenzene		<1.00	µg/L
Bromobenzene		<1.00	µg/L
n-Propylbenzene		<1.00	µg/L
1,3,5-Trimethylbenzene		<1.00	µg/L
tert-Butylbenzene		<1.00	µg/L
1,2,4-Trimethylbenzene		<1.00	µg/L
1,4-Dichlorobenzene (para)		<1.00	µg/L
sec-Butylbenzene		<1.00	µg/L
1,3-Dichlorobenzene		<1.00	µg/L
p-Isopropyltoluene		<1.00	µg/L
i-Chlorotoluene		<1.00	µg/L
1,2-Dichlorobenzene (ortho)		<1.00	µg/L
n-Butylbenzene		<1.00	µg/L
1,2-Dibromo-3-chloropropane		<5.00	µg/L
1,2,3-Trichlorobenzene		<5.00	µg/L
1,2,4-Trichlorobenzene		<5.00	µg/L
Naphthalene		<5.00	µg/L
Hexachlorobutadiene		<5.00	µg/L
<b>Alkalinity</b>			
Hydroxide Alkalinity		<1.0	mg/L as CaCO <sub>3</sub>
Carbonate Alkalinity		<1.0	mg/L as CaCO <sub>3</sub>
Bicarbonate Alkalinity		166	mg/L as CaCO <sub>3</sub>
Total Alkalinity		166	mg/L as CaCO <sub>3</sub>
Specific Conductance		1500	µMHOS/cm
Total Mercury		<0.0002	mg/L
<b>Ion Chromatography (IC)</b>			
CL		310	mg/L
Fluoride		3.2	mg/L
Nitrate-N	1	2.4	mg/L

Continued on next page ...

<sup>1</sup>Sample out of hold time for NO<sub>3</sub>.

Sample 167356 continued ...

Param	Flag	Result	Units
Sulfate		160	mg/L
<b>Salts</b>			
Dissolved Calcium		122	mg/L
Dissolved Magnesium		60.5	mg/L
Dissolved Potassium		9.94	mg/L
Dissolved Sodium		111	mg/L
Total Dissolved Solids		730	mg/L
<b>Total Metals</b>			
Total Aluminum		<0.5	mg/L
Total Arsenic		0.0142	mg/L
Total Barium		0.0716	mg/L
Total Boron		<0.5	mg/L
Total Cadmium		<0.002	mg/L
Total Chromium		<0.005	mg/L
Total Cobalt		<0.01	mg/L
Total Copper		<0.01	mg/L
Total Iron		< 0.5	mg/L
Total Lead		<0.01	mg/L
Total Manganese		<0.001	mg/L
Total Molybdenum		0.007	mg/L
Total Nickel		<0.01	mg/L
Total Selenium		0.0139	mg/L
Total Silver		<0.01	mg/L
Total Zinc		<0.01	mg/L
pH	2	7.7	s.u.

<sup>2</sup>Sample run out of holding time





# FINAL GROUNDWATER PLUME DELINEATION REPORT

EUINCE #2 (NORTH) GAS PLANT  
EUNICE, NEW MEXICO

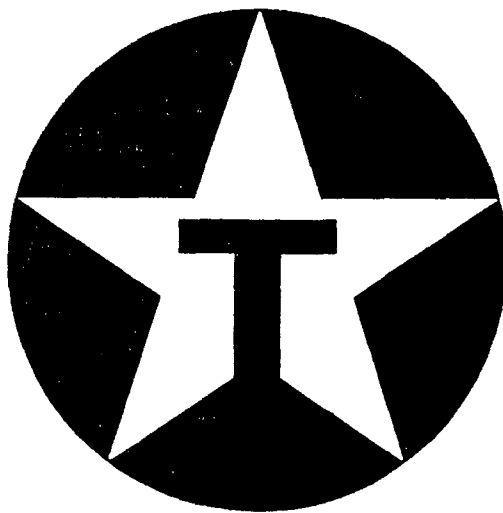
MARCH 2000

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MAR 16 2000

Prepared for

ENVIRONMENTAL BUREAU  
OIL CONSERVATION DIVISION



Prepared by

*Highlander Environmental Corp.*

GW004



# Highlander Environmental Corp.

Midland, Texas

March 14, 2000

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

**Re: Final Groundwater Plume Delineation Report, Texaco Exploration and Production Inc., Former Eunice #2 (North) Gas Plant, Eunice, New Mexico**

Dear Mr. Olson:

Texaco Exploration and Production, Inc. (Texaco) has retained Highlander Environmental Corp. (Highlander) to investigate the lateral and vertical extent of a groundwater contaminant plume in the vicinity of its former Eunice #2 (North) Gas Plant (Site), located near Eunice, New Mexico. The Site is located in the SE/4, NE/4, and NE/4, SE/4, Section 28, Township 21 South, Range 37 East, Lea County, New Mexico (Figure 1). The investigations were conducted between January and November 1999.

## 1.0 BACKGROUND

During August 1996, the New Mexico Oil Conservation Division (NMOCD), as a condition for renewal of the Site's groundwater Discharge Plan (Number GW-004), required an initial investigation to evaluate the integrity of process area sumps. Dissolved benzene was detected above the New Mexico Water Quality Control Commission (NMWQCC) human health standard of 0.01 milligrams per liter (mg/L), in groundwater from monitoring well MW-1. Dissolved chromium was also observed above the NMWQCC standard of 0.05 mg/L, in groundwater from the Site's water supply well (WW-1). A report titled, "Subsurface Environmental Assessment Report, Texaco Exploration and Production Inc., Eunice # 2 (North) Gas Plant", was prepared by Highlander, and submitted to the NMOCD in September 1996. Additional investigations were conducted from March 31 through May 12, 1997, to evaluate potential sources, and the extent of the dissolved hydrocarbon and chromium. The investigation was detailed in the report titled, "Final Investigation Report, Texaco Exploration and Production Inc., Eunice #2 (North) Gas Plant, Lea County, New Mexico, May 1997", which was submitted to the NMOCD. A subsequent investigation was conducted from August through December 1998, to further characterize the extent of the groundwater impact. A report titled, "Addendum Final Investigation Report, Texaco Exploration and Production Inc., Eunice # 2 (North) Gas Plant, Lea County, New Mexico, January 1998", detailed the investigation results, and was submitted to the NMOCD.

Following its review of the January 1998 report, the NMOCD requested additional information, including copies of aerial photographs, groundwater potentiometric surface maps, and isopleth maps of chloride and total dissolved solids (TDS) for the upper (shallow) and lower (deep) portions of the aquifer. This information

was submitted to the NMOCD on July 14, 1998. On October 9, 1998, the NMOCD requested Texaco to prepare a work plan to complete the delineation of the groundwater contaminant plume.

During a meeting between NMOCD, Texaco and Highlander personnel on December 1, 1998, it was decided that seven (7) additional monitoring wells would be necessary to define the remaining groundwater impact. Highlander was requested to prepare a work plan ("Work Plan for Delineation of Groundwater Contaminant Plume, Texaco Exploration and Production Inc., Former Eunice #2 (North) Gas Plant, Eunice, New Mexico"). The work plan was submitted to the NMOCD on December 17, 1998, and approved on January 13, 1999. The work plan proposed installation of three wells in the lower portion of the aquifer, east, north and northeast of the Site (MW-20A, MW-21A and MW-22A), and four wells in the upper portion of the aquifer, east, northeast, west and south of the Site (MW-11, MW-15, MW-20 and MW-21). The work plan also included collection of groundwater samples for laboratory analyses, from a representative number of wells to evaluate current plume conditions. Texaco also proposed installation of a test (recovery) well near the south-central area of the Site, to assist in future remediation efforts. The NMOCD correspondence is presented in Appendix A.

## 2.0 GROUNDWATER PLUME DELINEATION ACTIVITIES

The seven additional wells were installed from January 5 through 7, 1999, in accordance with the approved work plan. Groundwater samples were collected from the new wells (7), nineteen (19) existing monitoring wells, and three (3) water wells on January 18 through 22, 1999. Dissolved chromium was reported at concentrations above the NMWQCC human health standard in samples from well MW-22A, which was installed in the lower (deep) portion of the aquifer, and wells MW-11 and MW-15, which were installed in the upper (shallow) portion of the aquifer.

Base on the laboratory analyses, monitoring well (MW-12) was consequently installed in the upper portion of the aquifer near the southwest corner of the Site, adjacent to deep monitoring well MW-12A (February 11, 1999). Three (3) additional shallow monitoring wells (MW-14, MW-18 and MW-25) were also installed south, southeast and southwest of the Site (May 6 and 7, 1999). A shallow well (MW-23) and a deep well (MW-24A) were installed west and north of the Site, respectively (May 16, 1999). Groundwater samples collected for dissolved chromium analyses indicated that additional plume delineation was needed in the upper portion of the aquifer west, south and southwest of the Site. Four (4) shallow wells (MW-26 through MW-29) were installed from October 27, 1999 through November 11, 1999, to complete the plume delineation. The additional wells were installed in accordance with the previously approved work plan, and Highlander (verbal communication) notified the NMOCD prior to installing the wells. Figure 2 presents a drawing for the Site, and well locations. Table 1 presents a summary of well drilling and completion details. Appendix B presents geologic and construction logs for the wells.



### **3.0 GROUNDWATER PLUME DELINEATION RESULTS**

#### **3.1 Depth-to-Groundwater and Flow Conditions**

Measurements of depth-to-groundwater and phase-separated hydrocarbon (PSH) were collected from all wells on November 16, 1999. The measurements recorded PSH in monitoring wells MW-5 and MW-6, located adjacent to the sump on the east side of the Site. The apparent PSH thickness was 0.38 feet (MW-5) and 2.75 feet (MW-6). The previous PSH thickness measurements from wells MW-5 and MW-6 were 0.47 and 2.78 feet, respectively (December 18, 1997). The November 16, 1999 depth-to-groundwater and PSH measurements are summarized in Table 1. The measurements were used to prepare depth-to-groundwater and groundwater potentiometric surface maps for the upper (shallow) and lower (deep) portions of the aquifer, which are presented as Figures 3 through 6.

Referring to Figure 3, depth-to-groundwater in the upper portion of the aquifer generally increases from east to west, across the study area. The depth-to-groundwater ranged from 38.30 feet below ground surface (BGS) at well MW-18, to 71.91 feet BGS at well MW-28, on November 16, 1999. The depth-to-groundwater generally coincides with increases in ground elevation. For example, the difference in ground elevation between well MW-28 and MW-18 is 32.63 feet. The difference in depth-to-groundwater between wells MW-28 and MW-18 was 33.61 feet, on November 16, 1999. Figure 4 presents a depth-to-groundwater map for the lower portion of the aquifer, and indicates that depth-to-groundwater is generally controlled by pumping from well WW-1, in the vicinity of the Site. Depth-to-groundwater in the deep portion of the aquifer ranged from 37.70 feet BGS at well MW-18A, to 64.03 feet BGS at well WW-1, on November 16, 1999.

The elevation of the shallow groundwater surface ranged from 3379.09 feet above mean sea level (AMSL) at wells MW-18 and MW-26, to 3374.09 feet AMSL at well MW-21, on November 16, 1999 (Figure 5). Groundwater flow in the upper portion of the aquifer was generally from southwest to northeast. However, groundwater flow southwest of the Site was to the west and southwest, due to an apparent groundwater divide, located south of the Site. The divide was oriented southwest to northeast, and located in the vicinity of wells MW-18 and MW-26, approximately 1,500 to 2,000 feet south of the Site. A trough was also apparent west and southwest of the Site. Groundwater west of the trough appeared to flow to the southeast, and was consistent with the regional groundwater flow direction. The hydrologic features may be associated with pumping from the plant water well (WW-1), located on the north side of the Site.

Groundwater flow in the lower portion of the aquifer was generally towards well WW-1, due to a cone of depression developed from pumping. The elevation of the potentiometric surface ranged from 3379.26 feet AMSL at well MW-17A, to 3364.75 feet AMSL, at well WW-1, on November 16, 1999.



### 3.2 Groundwater Sample Results

Groundwater samples were collected from the new monitoring wells (MW-11, MW-15, MW-20, MW-20A, MW-21, MW-21A and MW-22A), nineteen (19) existing monitoring wells, and three (3) water wells on January 18 through 22, 1999. Additional groundwater samples were collected on May 19 and 23, 1999, and November 17 through 22, 1999, to complete the delineation of the groundwater contaminant plume. The samples were analyzed for dissolved metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver), BTEX, cations (calcium, magnesium, sodium and potassium), anions (nitrate, chloride, sulfate, fluoride and alkalinity), and TDS, depending on well location. Trace Analysis, Inc., Lubbock, Texas, performed the analyses, and received the samples under preservation and chain-of-custody control. Volatile organic compounds, including BTEX, detected in groundwater samples are presented in Table 2. Table 3 presents a summary of the dissolved metals detected in groundwater samples, and Table 4 presents a summary of the general chemistry parameters, including cations, anions and TDS. The laboratory reports are presented in Appendix C.

Referring to Table 2, BTEX was only detected, above the test method detection limits, in groundwater samples from well MW-1 (January 20, 1999 and November 17, 1999). The detected levels of BTEX were well below the NMWQCC human health standards of 0.01 mg/L (benzene), 0.75 mg/L (toluene), 0.75 mg/L (ethylbenzene) and 0.62 mg/L (xylene).

Dissolved metals detected in the groundwater samples included barium, cadmium, chromium, mercury, selenium and silver. Barium was reported at 0.13 mg/L in groundwater from monitoring well MW-21A (deep), and was below the NMWQCC standard (1.0 mg/L). Cadmium was reported at 0.01 and 0.02 mg/L in groundwater from wells MW-8 (shallow) and MW-8A (deep), respectively. The NMWQCC standard for cadmium is 0.01 mg/L. Mercury was reported in groundwater from MW-18 (shallow) at 0.0067 mg/L, and was above the NMWQCC standard of 0.002 mg/L. The mercury does not appear to be associated with the Site, since mercury was not detected in the remaining groundwater samples. Selenium, reported in groundwater from shallow well MW-15 (0.08 mg/L), deep well MW-8A (0.2 mg/L), and the Lord water well (0.11 mg/L), exceeded the NMWQCC standard of 0.05 mg/L. The selenium does not appear to be associated with the Site, since it was not detected in the remaining samples. Silver was reported at 0.17 and 0.19 mg/L in groundwater from wells MW-8 (shallow) and MW-8A (deep), respectively. The silver concentrations exceed the NMWQCC standard of 0.05 mg/L. Dissolved chromium was detected in shallow groundwater at concentrations from 0.09 mg/L (MW-13) to 6.2 mg/L (MW-11). Chromium was also detected in the deep groundwater at concentrations from 0.05 mg/L (MW-4A) to 2.9 mg/L (MW-8A). The extent of dissolved chromium in the upper (shallow) and lower (deep) portions of the aquifer are depicted on Figure 7 and Figure 8, respectively.

Figure 7 presents the distribution of dissolved chromium in shallow portion of the aquifer, and indicates that the plume extends approximately 1,300 feet southwest of the Site. The distribution of chromium in the shallow portion of the aquifer appears to



coincide with hydrologic features observed on November 16, 1999. Movement of the plume southwest of the Site is likely the result of the groundwater divide, influenced from pumping by wells in the vicinity of the Site. Chromium is concentrated in the southwest area of the Site.

Figure 8 presents the distribution of dissolved chromium in the deep portion of the aquifer, and indicates that the plume is generally confined to the Site, except for a small area southeast of the Site. Pumping from wells southeast of the Site (Lord and Rowland wells) appears to have caused the plume to migrate southeast. The wells are not currently in use. Groundwater samples collected from the Rowland well on September 29, 1997, reported 0.16 mg/L of dissolved chromium. The sample collected on January 19, 1999, did not report chromium above the test method detection limit (0.05 mg/L), indicating that the plume may be retracting toward the Site.

Groundwater quality in the shallow and deep portions of the aquifer was generally variable across the area, based on the cation and anion analyses of groundwater samples. Nitrate was detected in groundwater from wells sampled during January and November 1999. The nitrate concentrations in the shallow portion of the aquifer ranged from 3.6 mg/L in wells MW-21, MW-27 and MW-28, to 24 mg/L in well MW-2 (November 1999). Groundwater from wells MW-2 (background), MW-1 and MW-14 reported nitrate levels above the NMWQCC human health standard (10 mg/L). Nitrate was also reported at the NMWQCC standard in groundwater from wells MW-8 and MW-11. Nitrate in groundwater from the deep portion of the aquifer was generally lower, however, concentrations were reported at or above the NMWQCC standard in samples from wells MW-8A, WW-1 and the Rowland well. Nitrate is typically associated with agricultural practices, fertilizers and domestic sanitation systems.

Groundwater from wells MW-8A and MW-9A (deep) exceeded the NMWQCC domestic water supply standard for sulfate (600 mg/L). Sulfate is typically associated with naturally occurring isotopes of sulfur, which is present in soil. Sulfate concentrations were generally higher in the shallow portion of the aquifer, possibly due to leaching from soil. The sulfate concentrations ranged from 220 mg/L (MW-27) to 1,600 mg/L (MW-8 and MW-11).

Chloride in the shallow portion of the aquifer ranged from 240 mg/L (MW-27) to 3,100 mg/L (MW-15). The NMWQCC standard for chloride in domestic water supplies is 250 mg/L. Chloride concentrations in the shallow portion of the aquifer are depicted on Figure 9, and indicates that the highest concentrations occurred in the vicinity of well MW-15 (3,100 mg/L), located south of the Site. Well MW-15 is located upgradient of the Site, and chloride levels decrease toward the Site (downgradient). Well MW-15 is also located in the vicinity of subsurface pipeline right-of-way, which may be a potential source if leaks have occurred. Groundwater from well MW-1, located near the center of the Site, reported a chloride concentration of 250 mg/L (November 1999). Chloride in the deep portion of the aquifer, depicted on Figure 10, ranged in concentration from 57 mg/L at well MW-13A, to 7,000 mg/L at well MW-21A (January 1999). Well MW-21A is located approximately 700 feet east-northeast of the Site, in an area of active oil and gas production. The chloride level reported in groundwater from well WW-1 (900 mg/L)



may be due, in part, to the cone of depression extending away from the well. Chloride was also observed above the NMWQCC domestic water supply standard in groundwater from well MW-8A, which reported a concentration of 1,000 mg/L. Well MW-8A is located near the south-central area of the Site. Chloride was also reported above the NMWQCC domestic water supply standard in samples from the Lord and Rowland wells, located southeast of the Site. The chloride levels may be due to pumping from the wells, by creating a cone of depression that would allow contaminants to migrate toward the wells.

Groundwater samples from the shallow and deep portions of the aquifer reported TDS concentrations that coincided with the reported chloride values. The NMWQCC domestic water supply standard for TDS is 1,000 mg/L. The distribution of TDS in the shallow and deep portions of the aquifer is presented on Figure 11 and Figure 12, respectively. The highest TDS concentrations in the shallow portion of the aquifer occurred in the vicinity of well MW-15 (5,900 mg/L), which is hydraulically upgradient from the Site. The TDS concentrations decrease toward the Site. The NMWQCC domestic water supply standard was exceeded in samples from background monitoring well MW-2 (1,400 mg/L), located near the northwest corner of the Site. The TDS concentration in groundwater from the deep portion of the aquifer was greatest in the vicinity of MW-21A (9,200 mg/L), located northeast of the Site. The area of elevated TDS and chloride is likely associated with oil and gas production. Concentrations of TDS were also noted above the NMWQCC standard in the deep portion of the aquifer near the south-central area of the Site and southeast of the Site. These results are also consistent with the distribution of chloride.

### **3.3 Water Well Search**

A search of water wells within a 1-mile of the Site was previously through a review of the files of the New Mexico State Engineer, and field reconnaissance. The New Mexico State Engineer's file revealed records for twelve (12) water wells. The nearest well to the Site was identified approximately 500 feet southeast of the Site (Lord Water Well). There were no wells identified south and southwest of the Site, within the area of the shallow chromium plume.

### **4.0 CONCLUSIONS**

1. PSH was only observed in monitoring wells MW-5 and MW-6, at 0.38 and 2.75 feet, respectively, on November 16, 1999. These measurements are consistent with previous measurements.
2. The only samples reporting BTEX above test method detection limits were from well MW-1, on January 20, 1999 and November 17, 1999. The BTEX concentrations were well below the NMWQCC human health standards of 0.01 mg/L (benzene), 0.75 mg/L (toluene), 0.75 mg/L (ethylbenzene) and 0.62 mg/L (xylene).



3. Barium (0.13 mg/L) was only detected in groundwater from monitoring well MW-21A (deep), and was below the NMWQCC standard (1.0 mg/L).
4. Cadmium was reported at 0.01 and 0.02 mg/L in groundwater from wells MW-8 (shallow) and MW-8A (deep), respectively. The NMWQCC standard for cadmium is 0.01 mg/L.
5. Mercury was reported in groundwater from well MW-18 (shallow) at 0.0067 mg/L, and was above the NMWQCC standard of 0.002 mg/L. The mercury does not appear to be associated with the Site.
6. Selenium was reported in groundwater from shallow well MW-15 (0.08 mg/L), deep well MW-8A (0.2 mg/L), and the Lord water well (0.11 mg/L). The NMWQCC standard for selenium (0.05 mg/L) was exceeded, however, it does not appear to be associated with the Site.
7. Silver exceeded the NMWQCC standard (0.05 mg/L) in groundwater from wells MW-8 (shallow) and MW-8A (deep), respectively. The silver concentrations were 0.17 (MW-8) and 0.19 mg/L (MW-8A).
8. Chromium was reported in samples from the upper (shallow) portion of the aquifer, at concentrations from 0.09 mg/L (MW-13) to 6.2 mg/L (MW-11). The vertical and lateral extent of dissolved chromium in the shallow portion of the aquifer was delineated during the investigation. Dissolved chromium in the shallow portion of the aquifer extends approximately 1,300 feet southwest of the Site, and appears coincide with hydrologic features observed on November 16, 1999.
9. Chromium was reported in samples from the lower (deep) portion of the aquifer, at concentrations from 0.05 mg/L (MW-4A) to 2.9 mg/L (MW-8A). The extent of dissolved chromium in the lower (deep) portion of the aquifer was delineated during the investigation. Dissolved chromium in the lower portion of the aquifer is generally confined to the Site, except for a small area that extends southeast of the Site. Pumping from wells southeast of the Site (Lord and Rowland wells) appeared to have allowed the plume to migrate southeast. The wells are not currently in use. Groundwater samples collected from the Rowland well on September 29, 1997, reported 0.16 mg/L of dissolved chromium. The sample collected on January 19, 1999, did not report chromium above the test method detection limit (0.05 mg/L), indicating that the plume may be retracting toward the Site.
10. Nitrate in the shallow portion of the aquifer ranged from 3.6 mg/L (MW-21, MW-27 and MW-28) to 24 mg/L (MW-2). The nitrate levels reported in samples from





wells MW-2 (background), MW-1 and MW-14 were above the NMWQCC human health standard (10 mg/L). Nitrate was reported at the NMWQCC standard in groundwater from wells MW-8 and MW-11. Nitrate in the deep portion of the aquifer was generally lower, however, concentrations were reported at or above the NMWQCC standard in samples from MW-8A, WW-1 and the Rowland well. Nitrate is typically associated with agricultural practices, fertilizers and domestic sanitation systems.

11. Sulfate was reported above the NMWQCC domestic water supply standard (600 mg/L) in groundwater from deep wells MW-8A and MW-9A. Sulfate is typically associated with naturally occurring isotopes of sulfur, which is present in soil. Sulfate concentrations were generally higher in the shallow portion of the aquifer, possibly due to leaching from soil. The sulfate concentrations ranged from 220 mg/L (MW-27) to 1,600 mg/L (MW-8 and MW-11).
12. Chloride reported in groundwater from the upper portion of the aquifer, ranged from 240 mg/L (MW-27) to 3,100 mg/L (MW-15). The NMWQCC standard for domestic water supplies is 250 mg/L. The distribution of chloride indicates that the highest concentration was in the vicinity of well MW-15 (3,100 mg/L), located south of the Site. Well MW-15 is located hydraulically upgradient of the Site, and in the vicinity of a subsurface pipeline right-of-way, which may have contributed to the impact if leaks have occurred.
13. Chloride in the lower portion of the aquifer ranged from 57 mg/L (MW-13A), to 7,000 mg/L (MW-21A). Well MW-21A is located approximately 700 feet east-northeast of the Site, and in an area of active oil and gas production. Chloride reported in groundwater from well WW-1 (900 mg/L) may be due, in part, to the cone of depression extending away from the well. Chloride was reported above the NMWQCC standard in samples from well MW-8A (1,000 mg/L), Lord and Rowland wells. The chloride levels may be due to southeast migration during periods of pumping.
14. Groundwater in the shallow and deep portions of the aquifer reported TDS levels that coincided with chloride concentrations. The highest TDS concentration in the shallow portion of the aquifer occurred in the vicinity of well MW-15 (5,900 mg/L), which is hydraulically upgradient from the Site. The TDS concentrations decrease toward the Site. The NMWQCC domestic water supply standard for TDS (1,000 mg/L) was exceeded in shallow groundwater from background monitoring well MW-2 (1,400 mg/L), located near the northwest corner of the Site. The TDS concentration in groundwater from the deep portion of the aquifer was greatest in the vicinity of MW-21A (9,200 mg/L), located northeast of the Site. The area of elevated TDS and chloride is likely associated with oil and gas



Mr. William C. Olson  
March 14, 2000  
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production. Concentrations of TDS were also noted above the NMWQCC standard in the deep portion of the aquifer near the south-central area of the Site and southeast of the Site. These results are also consistent with the distribution of chloride.

15. Groundwater quality in the shallow and deep groundwater is generally variable across the area, based on the cation and anion analyses of groundwater samples.
16. No water wells were identified south and southwest of the Site, within the area of the shallow chromium plume.

The extent of groundwater impact has been defined vertically and laterally, therefore, no further investigation is required. Please call if you have any questions.

Sincerely,  
*Highlander Environmental Corp.*



Mark J. Larson  
Senior Project Manager

Encl.

cc: Robert Patterson, Texaco Exploration and Production Inc.  
Chris Williams, NMOCD – Hobbs District



# TABLES

Table 1: Summary of Monitor Well and Water Well Drilling and Completion Details  
 Texaco Exploration and Production, Inc., Eunice #2 (North) Gas Plant  
 Lea County, New Mexico

Monitor Well	Date Drilled	Drilled Depth Feet, BGS	Ground Elev. Feet, MSL	TOC Elev. Feet, MSL	Well Diameter Inches	Well Screen Feet/BGS	Depth-to-Ground Water Feet, BGS 11/16/99
MW-14	5/6/99	65.00	3424.31	3424.08	4	45.00-65.00	45.45
MW-14A	10/27/97	109.00	3424.05	3423.90	4	95.15-105.15	45.19
MW-15	1/6/99	55.00	3420.55	3420.4	4	35.00-55.00	41.61
MW-15A	10/28/97	103.00	3420.65	3420.55	4	92.20-102.30	41.43
MW-16A	10/29/97	91.60	3419.99	3419.92	4	81.51-91.60	40.78
MW-17A	10/30/97	106.00	3424.48	3424.38	4	93.50-103.60	45.22
MW-18	5/6/99	55.00	3417.39	3417.15	4	35.00-55.00	38.06
MW-18A	11/3/97	81.55	3417.04	3416.86	4	71.38-81.55	37.70
MW-19A	11/6/97	72.40	3414.95	3414.74	4	62.20-72.40	38.33
MW-20	1/5/99	55.00	3418.50	3420.85	4	35.00-55.00	42.23
MW-20A	1/5/99	81.00	3418.50	3421.14	4	71.00-81.00	42.06
MW-21	1/7/99	55.00	3420.41	3422.72	4	35.00-55.00	45.51
MW-21A	1/6/99	81.00	3420.41	3422.94	4	71.00-81.00	45.88
MW-22A	1/6/99	105.00	3428.50	3431.13	4	95.00-105.00	54.66
MW-23	6/16/99	67.00	3433.99	3436.44	4	46.64-66.04	55.97
MW-24A	6/16/99	105.00	3428.98	3430.77	4	83.72-103.12	52.51
MA-25	5/7/99	65.00	3432.36	3432.69	4	45.00-65.00	53.43
MW-26	10/27/99	67.00	3432.52	3432.04	4	43.13-61.78	53.43
MW-27	10/27/99	71.50	3443.72	3443.33	4	51.39-70.43	65.04
MW-28	11/2/99	85.00	3450.02	3451.63	4	63.29-82.33	71.91
MW-29	11/11/99	80.00	3444.76	3446.89	4	59.89-78.54	66.49

1/2 mile East  
 1/4 mile NE  
 1/2 mile NE

Notes:

1. BGS: Denotes depth in feet below ground surface.
2. MSL: Denotes elevation in feet above mean sea level.
3. \*: Denotes depth-to-ground corrected from phase separated hydrocarbons, assuming specific gravity of 0.75.

Table 1: Summary of Monitor Well and Water Well Drilling and Completion Details

Tevaco Exploration and Production, Inc., Eunice #2 (North) Gas Plant

4. (0.47") Phase-separated hydrocarbon thickness in feet.

5. - No date available.

Monitor Well	Date Drilled	Drilled Depth Feet, BGS	Ground Elev. Feet, MSL	TOC Elev. Feet, MSL	Well Diameter Inches	Well Screen Feet/BGS	Depth-to-Ground Water Feet, BGS 11/16/99
Lord Water Well	3/7/63	93.00	3419.47	3419.97	6	--	42.17
Rowland Water Well	--	--	3418.47	3419.47	6	--	40.58
WW-1	--	100.00	3428.78	3429.95	6	--	64.03
RW-1	1/13/99	111.00	3425.73	3428.32	6	44.08 - 104.84	47.92

Notes:

1. BGS: Denotes depth in feet below ground surface.
2. MSL: Denotes elevation in feet above mean sea level.
3. - Denotes depth-to-ground corrected from phase separated hydrocarbons, assuming specific gravity of 0.75.
4. (0.47") Phase-separated hydrocarbon thickness in feet.
5. - No date available.

Table 2: Summary of Volatile Organic Parameters Detected in Groundwater Samples from Monitor Wells and Water Wells  
Texaco Exploration and Production, Inc., Eunice #2 (North) Gas Plant  
Lea County, New Mexico

Well Number	Sample Date	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	Dichlorodifluoromethane (ug/L)	Tetrachloroethene (ug/L)
MW-1	8/1/96	9	69	82	169	-	-
	4/23/97	11	33	75	49	98	<1
	1/20/99	6	19	29	29	-	-
	11/17/99	8	18	14	42	-	-
*MW-1	1/20/99	6	17	28	24	-	-
MW-2	4/22/97	<1	<1	<1	<1	<1	<1
MW-3	4/22/97	<1	<1	<1	<1	6	<1
MW-4	4/23/97	<1	<1	<1	<1	8	<1
	1/21/99	<1	<1	<1	<1	-	-
	11/18/99	<1	<1	<1	<1	-	-
*MW-4	1/21/99	<1	<1	<1	<1	-	-
MW-4A	10/23/97	<1	<1	<1	<1	<1	<1
	1/21/99	<1	<1	<1	<1	-	-
MW-5	4/22/97	540	310	93	245	37	<1
MW-6	4/22/97	340	280	110	330	50	<1
MW-7	8/19/97	<1	<1	<1	<1	5	<1
MW-7A	10/22/97	<1	<1	<1	<1	<1	<1
MW-8	8/20/97	<1	<1	<1	<1	12	<1
MW-8A	10/28/97	<1	<1	<1	<1	<1	<1
MW-9	8/20/97	2	<1	<1	<1	<1	<1
MW-9A	10/23/97	<1	<1	<1	<1	<1	<1
MW-10	9/16/97	<1	<1	<1	<1	<1	<1
MW-11A	10/23/97	<1	<1	<1	<1	<1	<1
MW-12A	11/14/97	<1	<1	<1	<1	<1	<1
MW-21	1/18/99	<1	<1	<1	<1	-	-
	11/17/99	<5	<5	<5	<5	-	-
MW-21A	1/18/99	<1	<1	<1	<1	-	-
RW-1	2/17/99	<1	<1	<1	<1	-	-
WW-1	6/14/96	<1	<1	<1	<1	113	<1
	4/23/97	<1	<1	<1	<1	-	-
Trip Blank	1/20/99	<1	<1	<1	<1	-	-

Note: All analysis performed by Trace Analysis, Inc., Lubbock, Texas

1. ug/L Denotes analyte concentration in milligrams per liter

2. < Denotes analyte concentration below test method detection limit

3. - No data available

4. \* Denotes duplicate sample

Table 3: Summary of Dissolved Metals Analysis of Groundwater Samples from Monitor Wells and Water Wells  
 Tevaco Exploration and Production, Inc., Eunice #2 (North) Gas Plant  
 Lea County, New Mexico

Well No	Sample Date	Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Chromium +6 (mg/L)	Chromium +3 (mg/L)	Lead (mg/L)	Mercury (mg/L)	Selenium (mg/L)	Silver (mg/L)
MW-1	4/23/97	<0.10	<0.20	<0.02	<0.05	-	-	0.1	<0.001	<0.10	<0.01
	1/20/98	<0.10	<1.0	<0.01	<0.05	-	-	<0.05	<0.0002	<0.05	<0.05
	11/17/99	-	-	-	<0.05	-	-	-	-	-	-
MW-1	1/20/99	<0.10	<1.0	<0.01	<0.05	-	-	<0.05	<0.0002	<0.05	<0.05
	11/17/99	-	-	-	<0.05	-	-	-	-	-	-
MW-2	4/22/97	<0.10	<0.20	<0.02	<0.05	-	-	<0.10	<0.001	<0.10	<0.01
	1/20/99	<0.10	<1.0	<0.01	<0.05	-	-	<0.05	<0.0002	<0.05	<0.05
	11/17/99	-	-	-	<0.05	-	-	-	-	-	-
MW-3	4/22/97	<0.10	<0.20	<0.02	0.36	-	-	<0.10	<0.001	<0.10	<0.01
	6/11/97	<0.10	<0.10	<0.02	0.22	-	-	<0.10	<0.001	<0.10	<0.05
MW-4	4/23/97	<0.10	<0.20	<0.02	0.08	-	-	0.1	<0.001	<0.10	<0.01
	6/11/97	<0.10	<0.10	<0.02	0.08	-	-	<0.10	<0.001	<0.10	<0.05
	1/21/99	<0.10	<1.0	<0.01	0.09	-	-	<0.05	<0.0002	<0.05	<0.05
	11/18/99	-	-	-	0.42	-	-	-	-	-	-
MW-4	1/21/99	<0.10	<1.0	<0.01	0.09	-	-	<0.05	<0.0002	<0.05	<0.05
MW-4A	10/23/97	<0.10	<0.20	<0.02	0.05	-	-	<0.10	<0.001	<0.10	<0.01
	1/21/99	<0.10	<1.0	<0.01	0.05	-	-	<0.05	<0.0002	<0.05	<0.05
MW-5	4/22/97	<0.10	<0.20	<0.02	<0.05	-	-	<0.10	<0.001	<0.10	<0.01
MW-6	4/22/97	<0.10	0.3	<0.02	<0.05	-	-	0.1	<0.001	<0.10	<0.01
MW-7	8/19/97	<0.10	<0.20	<0.02	0.35	-	-	<0.10	<0.001	<0.10	<0.05
	8/25/97	-	-	-	0.39	-	-	-	-	-	-
	1/21/99	<0.10	<1.0	<0.01	0.31	-	-	<0.05	<0.0002	<0.05	<0.05
	11/18/99	-	-	-	0.38	-	-	-	-	-	-
MW-7A	10/22/97	<0.10	<0.20	<0.02	0.06	-	-	<0.10	<0.001	<0.10	<0.01
	1/21/99	<0.10	<1.0	<0.01	0.06	-	-	<0.05	<0.0002	<0.05	<0.05
MW-8	8/20/97	<0.10	<0.20	<0.02	5.2	-	-	<0.10	<0.001	0.5	<0.01
	9/16/97	-	-	-	5.4	6.46	0	-	-	0.2	-
	10/28/97	-	-	-	4.6	3.31	0	-	-	-	-
	1/22/99	<0.10	<1.0	0.01	4.4	-	-	<0.05	<0.0002	<0.05	0.17
	11/18/99	-	-	-	6.1	-	-	-	-	-	-
MW-8A	10/28/97	<0.10	<0.20	<0.02	2.3	-	-	<0.10	<0.001	0.1	<0.01
	1/22/99	<0.10	<1.0	0.02	2.9	-	-	<0.05	<0.0002	0.2	0.19

Note: All analysis performed by Trace Analysis, Inc., Lubbock, Texas  
 1. mg/L Denotes analyte concentration in milligrams per liter  
 2. < Denotes analyte concentration below test method detection limit  
 3. - No data available



Table 3: (continued) Summary of Dissolved Metals Analysis of Groundwater Samples from Monitor Wells and Water Wells  
Tevaco Exploration and Production, Inc., Eunice #2 (North) Gas Plant  
Lea County, New Mexico

Well No	Sample Date	Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Chromium +6 (mg/L)	Chromium +3 (mg/L)	Lead (mg/L)	Mercury (mg/L)	Selenium (mg/L)	Silver (mg/L)
MW-9	8/20/97	<0.10	<0.20	<0.02	0.26	-	-	<0.10	<0.001	<0.10	<0.01
	9/16/97	-	-	-	0.16	-	-	-	-	-	-
	1/21/99	<0.10	<1.0	<0.01	0.06	-	-	<0.05	<0.0002	<0.05	<0.05
	11/18/99	-	-	-	0.33	-	-	-	-	-	-
MW-9A	10/23/97	<0.10	<0.20	<0.02	1.5	-	-	<0.10	<0.001	0.1	<0.01
	1/21/99	<0.10	<1.0	<0.01	1.0	-	-	<0.05	<0.0002	<0.05	<0.05
MW-10	9/16/97	<0.10	<0.20	0.03	0.14	-	-	<0.10	<0.001	<0.10	0.13
	1/19/99	<0.10	<1.0	<0.01	0.37	-	-	<0.05	<0.0002	<0.05	<0.05
	11/18/99	-	-	-	0.32	-	-	-	-	-	-
	1/20/99	<0.10	<1.0	<0.01	4.5	-	-	<0.05	<0.0002	<0.05	<0.05
MW-11A	11/18/99	-	-	-	6.2	-	-	-	-	-	-
	10/23/97	<0.10	<0.20	<0.02	<0.05	-	-	<0.10	<0.001	<0.10	<0.01
MW-12	1/20/99	<0.10	<1.0	<0.01	<0.05	-	-	<0.05	<0.0002	<0.05	<0.05
	2/19/99	-	-	-	3.0	-	-	-	-	-	-
MW-12A	11/18/99	-	-	-	3.0	-	-	-	-	-	-
	11/4/97	<0.10	<0.20	<0.02	<0.05	-	-	<0.10	<0.001	<0.10	<0.01
MW-13	12/4/97	<0.10	<0.20	<0.02	0.16	-	-	<0.10	<0.001	<0.10	<0.01
	1/19/99	<0.10	<1.0	<0.01	0.16	-	-	<0.05	<0.0002	<0.05	<0.05
MW-13A	11/18/99	-	-	-	0.09	-	-	-	-	-	-
	10/28/97	<0.10	<0.20	<0.02	<0.05	-	-	<0.10	<0.001	<0.10	<0.01
MW-14	1/20/99	<0.10	<1.0	<0.01	<0.05	-	-	<0.05	<0.0002	<0.05	<0.05
	5/19/99	<0.10	<0.10	<0.02	1.0	-	-	<0.10	<0.0002	<0.10	<0.05
MW-14A	11/18/99	-	-	-	0.92	-	-	-	-	-	-
	11/4/97	<0.10	<0.20	<0.02	<0.05	-	-	<0.10	<0.001	<0.10	<0.01
MW-15	1/19/99	<0.10	<1.0	<0.01	0.07	-	-	<0.05	<0.0002	0.08	<0.05
	5/19/99	-	-	-	<0.05	-	-	-	-	-	-
MW-15A	11/17/99	-	-	-	<0.05	-	-	-	-	-	-
	11/4/97	<0.10	<0.20	<0.02	<0.05	-	-	<0.10	<0.001	<0.10	<0.01
MW-16A	1/19/99	<0.10	<1.0	<0.01	<0.05	-	-	<0.05	<0.0002	<0.05	<0.05
	11/7/97	<0.10	<0.20	<0.02	<0.05	-	-	<0.10	<0.001	<0.10	<0.01
MW-17A	11/10/97	<0.10	<0.20	<0.02	<0.05	-	-	<0.10	<0.001	<0.10	<0.01

Note: All analysis performed by Trace Analysis, Inc., Lubbock, Texas  
1 mg/L: Denotes analyte concentration in milligrams per liter  
2 <: Denotes analyte concentration below test method detection limit  
3 - No data available



Table 3: (continued) Summary of Dissolved Metals Analysis of Groundwater Samples from Monitor Wells and Water Wells  
Texaco Exploration and Production, Inc., Eunice #2 (North) Gas Plant  
Lea County, New Mexico

Well No	Sample Date	Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Chromium +6 (mg/L)	Chromium +3 (mg/L)	Lead (mg/L)	Mercury (mg/L)	Selenium (mg/L)	Silver (mg/L)
MW-18	5/19/99	<0.10	<0.10	<0.02	<0.05	-	-	<0.10	0.0067	<0.10	<0.05
	11/17/99	-	-	-	<0.05	-	-	-	-	-	-
MW-18A	11/7/97	<0.10	<0.20	<0.02	<0.05	-	-	<0.10	<0.001	<0.10	<0.01
	1/19/99	<0.1	<1.0	<0.01	<0.05	-	-	<0.05	<0.0002	<0.05	<0.05
MW-19A	11/10/97	<0.10	<0.20	<0.02	<0.05	-	-	<0.10	<0.001	<0.10	<0.01
	1/19/99	<0.1	<1.0	<0.01	<0.05	-	-	<0.05	<0.0002	<0.05	<0.05
*MW-19A	1/19/99	<0.01	<0.01	<0.01	<0.05	-	-	<0.05	<0.0002	<0.05	<0.05
MW-20	1/19/99	<0.1	<1.0	<0.01	<0.05	-	-	<0.05	<0.0002	<0.05	<0.05
	11/17/99	-	-	-	<0.05	-	-	-	-	-	-
MW-20A	1/19/99	<0.1	<1.0	<0.01	<0.05	-	-	<0.05	<0.0002	<0.05	<0.05
MW-21	1/18/99	<0.10	<0.10	<0.01	<0.05	-	-	<0.05	<0.0002	<0.05	<0.05
	11/17/99	-	-	-	<0.05	-	-	-	-	-	-
MW-21A	1/18/99	<0.10	0.13	<0.01	0.05	-	-	<0.05	<0.0002	<0.05	<0.05
	1/20/99	-	-	-	<0.05	-	-	-	-	-	-
MW-22A	1/21/99	<0.10	<1.0	<0.01	0.13	-	-	<0.05	<0.0002	<0.05	<0.05
MW-23	5/23/99	-	-	-	2.0	-	-	-	-	-	-
	11/18/99	-	-	-	2.56	-	-	-	-	-	-
	1/7/00	-	-	-	2.8	-	-	-	-	-	-
MW-24A	5/23/99	-	-	-	0.03	-	-	-	-	-	-
MW-25	5/19/99	<0.10	<0.10	<0.02	4.5	-	-	<0.10	<0.0002	<0.10	<0.05
	11/18/99	-	-	-	4.4	-	-	-	-	-	-
*MW-25	11/18/99	-	-	-	4.7	-	-	-	-	-	-
MW-26	11/17/99	-	-	-	<0.05	-	-	-	-	-	-
MW-27	11/18/99	-	-	-	<0.05	-	-	-	-	-	-
MW-28	11/18/99	-	-	-	<0.05	-	-	-	-	-	-
MW-29	11/18/99	-	-	-	<0.05	-	-	-	-	-	-
WW-1	6/14/96	<0.10	<0.20	<0.02	0.66	-	-	<0.10	<0.001	<0.1	<0.01
	8/1/96	-	-	-	0.82	-	-	-	-	-	-
	4/23/97	<0.10	<0.20	<0.02	0.52	-	-	<0.10	<0.001	<0.10	<0.01
	1/20/99	<0.10	<1.0	<0.01	0.69	-	-	<0.05	<0.0002	<0.05	<0.05

Note: All analysis performed by Trace Analysis, Inc., Lubbock, Texas  
1. mg/L: Denotes analyte concentration in milligrams per liter  
2. <: Denotes analyte concentration below test method detection limit  
3. -: No data available

Table 3: (continued) Summary of Dissolved Metals Analysis of Groundwater Samples from Monitor Wells and Water Wells  
 Texaco Exploration and Production, Inc., Eunice #2 (North) Gas Plant  
 Lea County, New Mexico

Well No	Sample Date	Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Chromium +6 (mg/L)	Chromium +3 (mg/L)	Lead (mg/L)	Mercury (mg/L)	Selenium (mg/L)	Silver (mg/L)
Lord Water Well	9/29/97	<0.10	<0.10	<0.02	0.59	-	-	<0.10	<0.001	<0.10	<0.05
	1/19/99	<0.10	<1.0	<0.01	0.52	-	-	<0.05	<0.0002	0.11	<0.05
Roland Water Well	9/29/97	<0.10	<0.10	<0.02	0.16	-	-	<0.10	<0.001	<0.10	<0.05
	1/19/99	<0.1	<1.0	<0.01	<0.05	-	-	<0.05	<0.0002	<0.05	<0.05
RW-1	2/17/99	-	-	-	1.3	-	-	-	-	-	-
	2/18/99	-	-	-	1.4	-	-	-	-	-	-
	2/18/99	-	-	-	1.4	-	-	-	-	-	-

Note:

All analysis performed by Trace Analysis, Inc., Lubbock, Texas

1. mg/L: Denotes analyte concentration in milligrams per liter
2. <: Denotes analyte concentration below test method detection limit
3. -: No data available

Table 4: Summary of General Chemistry Analysis of Groundwater Samples from Monitor Wells and Water Wells, Texaco Exploration and Production, Inc., Eunice #2 (North) Gas Plant, Lea County, New Mexico

Well No.	Sample Date	Potassium (mg/L)	Magnesium (mg/L)	Calcium (mg/L)	Sodium (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Sulfate (mg/L)	Alkalinity (mg/L)	Nitrate (mg/L)	TDS (mg/L)
MW-1	4/23/97	-	-	-	-	200	-	-	-	-	2000
	1/20/99	9.2	74	238	468	370	3.7	860	460	10	2400
	11/17/99	12	72	251	421	250	2.6	850	482	12	2200
*MW-1	1/20/99	7.6	63	265	454	350	3.1	820	510	7.1	2200
	11/17/99	9	68	149	201	350	2.9	300	248	5.1	1270
MW-2	4/22/97	-	-	-	-	350	-	-	-	-	1200
	1/20/99	8.6	61	135	157	350	3.1	230	190	8.2	1100
	11/17/99	9.7	80	170	183	470	2.6	260	200	24	1400
MW-3	4/22/97	-	-	-	-	430	-	-	-	-	2000
MW-4	4/23/97	-	-	-	-	290	-	-	-	-	1600
	1/21/99	12	49	191	357	310	3.5	450	460	1.9	1600
	11/18/99	13	84	296	384	620	2.8	710	366	4.6	2600
*MW-4	1/21/99	12	49	198	362	320	3.2	450	470	1.9	1600
MW-4A	10/23/97	-	-	-	-	170	-	-	-	-	790
	1/21/99	10	40	74	124	240	3.9	180	180	1.7	830
MW-5	4/22/97	-	-	-	-	800	-	-	-	-	2800
MW-6	4/22/97	-	-	-	-	1500	-	-	-	-	3200
MW-7	8/19/97	-	-	-	-	550	-	-	-	-	2600
	1/21/99	13	71	288	530	550	2.8	850	240	4.7	2500
	11/18/99	11	94	309	442	520	2.6	1200	240	6.9	2700
MW-7A	10/22/97	-	-	-	-	260	-	-	-	-	1200
	1/21/99	12	38	84	174	190	3.7	260	180	1.8	920
MW-8	1/22/99	20	111	438	633	960	4.4	1500	160	10	3800
	11/18/99	22	155	626	685	1100	4.0	1600	164	10	4500
MW-8A	10/28/97	-	-	-	-	13	-	-	-	-	3700
	1/22/99	22	215	397	630	1000	3.3	1700	130	11	3200
MW-9	1/21/99	13	81	316	257	410	3.6	700	240	5.5	2000
	11/18/99	13	110	347	353	490	3.2	1200	278	6.8	2700
MW-9A	10/23/97	-	-	-	-	910	-	-	-	-	3600
	1/21/99	21	148	319	542	780	3.0	950	220	7.0	2930
MW-10	9/16/97	-	-	-	-	520	-	-	-	-	2400
	1/19/99	17	167	490	460	1100	2.6	1000	170	7.1	3100
	11/18/99	17	192	528	484	1100	3.0	1200	178	6.6	3800
MW-11	1/20/99	31	105	516	600	990	3.8	1200	300	10	3600
	11/18/99	22	159	689	678	1200	5.4	1600	150	10	4600
MW-11A	10/23/97	-	-	-	-	210	-	-	-	-	940
	1/20/99	10	47	78	139	170	3.5	280	160	4.9	930
MW-12	2/19/99	23	128	465	517	850	5.1	1400	127	9.0	3500
	11/18/99	34	134	496	518	820	4.7	1400	122	8.1	4300
*MW-12	11/18/99	15	142	364	412	760	1.6	970	164	9.6	2900
MW-12A	11/4/97	-	-	-	-	74	-	-	-	-	480
MW-13	12/4/97	-	-	-	-	1100	-	-	-	-	4000
	1/19/99	20	146	513	739	1100	2.7	1400	290	6.5	4000
	11/18/99	17	142	495	678	1200	2.3	1400	372	5.7	4500

Note: All analysis performed by Trace Analysis, Inc., Lubbock, Texas

1. mg/L Denotes analyte concentration in milligrams per liter
2. < Denotes analyte concentration below test method detection limit
3. - No Data Available
4. \* Denotes duplicate sample



Table 4: (continued) Summary of General Chemistry Analysis of Groundwater Samples from Monitor Wells and Water Wells,  
Texaco Exploration and Production, Inc., Eunice #2 (North) Gas Plant,  
Lea County, New Mexico

Well No.	Sample Date	Potassium (mg/L)	Magnesium (mg/L)	Calcium (mg/L)	Sodium (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Sulfate (mg/L)	Alkalinity (mg/L)	Nitrate (mg/L)	TDS (mg/L)
MW-13A	10/29/97	-	-	-	-	26	-	-	-	-	520
	1/20/99	5.4	24	43	102	57	4.2	100	210	4.6	530
MW-14	5/19/99	28	125	407	978	1700	-	670	334	9.9	4400
	11/18/99	32	98	321	1179	2000	3.1	760	452	13	4600
MW-14A	11/4/97	-	-	-	-	97	-	-	-	-	510
MW-15	1/19/99	52	81	265	695	1400	2.4	410	180	6.5	3000
	11/17/99	20	201	456	1253	3100	2.6	620	278	6.9	5900
MW-15A	11/4/97	-	-	-	-	230	-	-	-	-	650
	1/19/99	14	26	46	140	140	3.8	97	210	4.6	630
MW-16A	11/7/97	-	-	-	-	210	-	-	-	-	950
MW-17A	11/10/97	-	-	-	-	120	-	-	-	-	570
MW-18	5/19/99	15	60	161	206	420	-	290	239	5.0	1300
	11/17/99	8.7	62	140	189	370	2.9	300	246	5.1	1300
MW-18A	11/07/97	-	-	-	-	360	-	-	-	-	1500
	1/19/99	12	76	140	196	390	2.9	450	170	6.0	1400
MW-19A	11/10/97	-	-	-	-	480	-	-	-	-	1500
	1/19/99	12	86	156	236	520	3.0	340	200	4.9	1500
*MW-19A	1/19/99	12	89	165	217	500	3.0	330	210	5.0	1500
MW-20	1/19/99	11	70	165	243	570	2.7	270	230	4.5	1680
	11/17/99	12	81	166	282	570	2.6	320	250	3.7	1600
MW-20A	1/19/99	11	55	106	122	250	3.1	260	150	5.1	1000
MW-21	1/18/99	14	58	147	776	740	3.1	660	629	4.4	2700
	11/17/99	16	57	142	876	780	2.7	820	666	3.6	3100
MW-21A	1/18/99	107	292	656	2590	7000	2.0	460	130	4.8	9200
MW-22A	1/21/99	49	52	119	206	350	2.8	270	170	2.0	1200
MW-23	6/23/99	16	133	361	638	910	2.8	1300	222	7.6	3500
	11/18/99	18	168	435	693	1100	3.1	1400	222	8.1	4100
MW-24A	6/23/99	7.1	35	59	95	140	3.7	140	180	3.8	680
MW-25	5/19/99	20	129	342	393	800	-	770	203	6.8	2600
	11/18/99	15	141	358	399	760	1.7	940	210	9.5	2800
MW-26	11/17/99	12	86	242	163	500	2.1	420	174	3.8	1500
MW-27	11/18/99	8.8	44	147	106	240	2.0	220	180	3.6	960
MW-28	11/18/99	14	69	238	559	1200	2.1	230	188	3.6	2400
MW-29	11/18/99	7.9	49	159	158	250	2.4	340	182	7.2	1200
RW-1	2/17/99	18	140	434	644	910	3.2	1400	219	6.9	3600
	2/18/99	13	140	415	602	920	3.3	1400	221	6.9	3700
	2/18/99	13	142	411	598	1000	3.2	1300	214	7.0	3700
WW-1	6/14/96	12.4	142	268	393	782	2.6	-	340	10.4	-
	4/23/97	-	-	-	-	800	-	-	-	-	2600
	1/20/99	15	164	294	436	900	3.7	740	320	11	2800
Lord Water Well	9/29/97	-	-	-	-	480	-	-	-	-	2200
	1/19/99	18	162	390	502	800	2.7	1300	200	8.9	3100

Note:

All analysis performed by Trace Analysis, Inc., Lubbock, Texas:

1. mg/L: Denotes analyte concentration in milligrams per liter
2. <: Denotes analyte concentration below test method detection limit
3. -: No Data Available
4. \*: Denotes duplicate sample

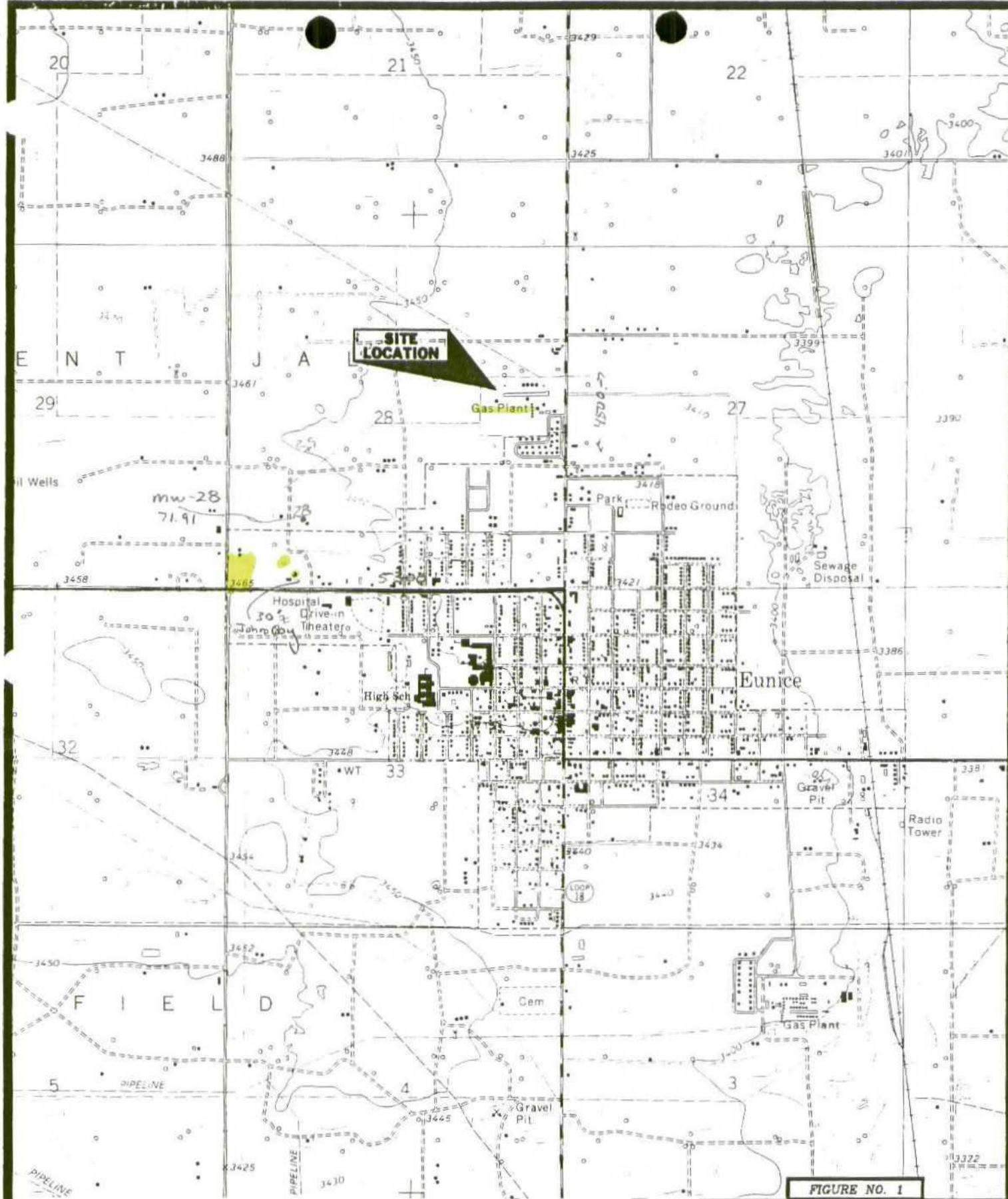
Table 4: (continued) Summary of General Chemistry Analysis of Groundwater Samples from Monitor Wells and Water Wells,  
Texaco Exploration and Production, Inc., Eunice #2 (North) Gas Plant,  
Lea County, New Mexico

Well No.	Sample Date	Potassium (mg/L)	Magnesium (mg/L)	Calcium (mg/L)	Sodium (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Sulfate (mg/L)	Alkalinity (mg/L)	Nitrate (mg/L)	TDS (mg/L)
Roland Water Well	9/29/97	-	-	-	-	1100	-	-	-	-	2700
	1/19/99	14	97	243	392	920	3.7	460	240	10	2300

Note: All analysis performed by Trace Analysis, Inc., Lubbock, Texas

1. mg/L: Denotes analyte concentration in milligrams per liter
2. <: Denotes analyte concentration below test method detection limit
3. -: No Data Available
4. \*: Denotes duplicate sample

## FIGURES



TAKEN FROM U.S.G.S.  
EUNICE, NEW MEXICO  
7.5' QUADRANGLE

SCALE: 1"=2,000'

FIGURE NO. 1

LEA COUNTY, NEW MEXICO

TEXACO  
EXPLORATION AND PRODUCTION

TOPOGRAPHIC  
MAP

HIGHLANDER ENVIRONMENTAL  
MIDLAND, TEXAS



- MW-4A  
 ● MONITORING WELL LOCATION (DEEP)  
 BH-1  
 □ SOIL BORING LOCATION  
 WW-1  
 △ WATER WELL LOCATION  
 RW-1  
 ▲ RECOVERY (TEST) WELL LOCATION  
 3379.00  
 ——— CONTOUR OF GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION, FEET AMSL 11/16/99  
 ——— GROUNDWATER FLOW DIRECTION

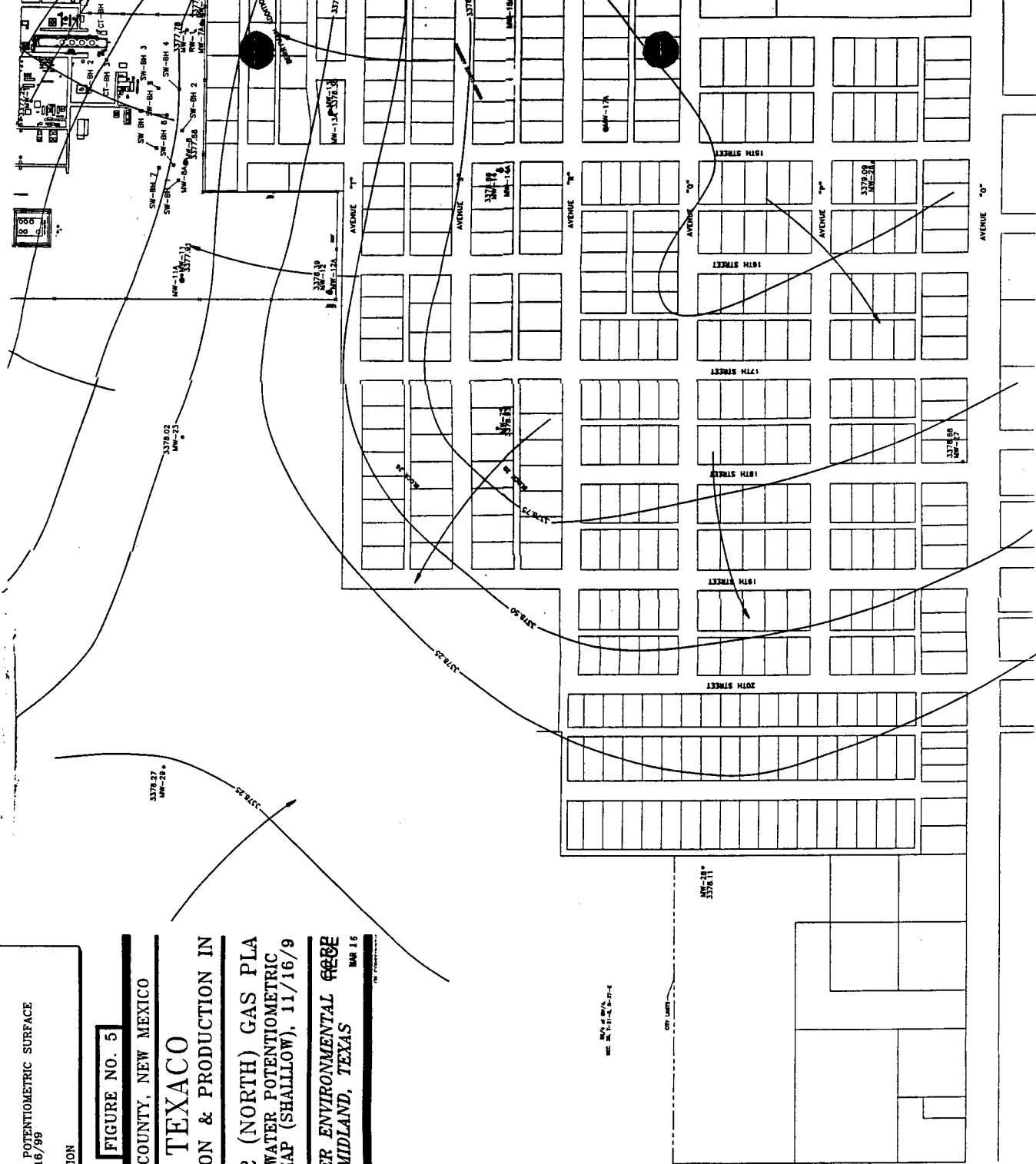
FIGURE NO. 5

LEA COUNTY, NEW MEXICO  
**TEXACO**  
 EXPLORATION & PRODUCTION IN  
 EUNICE #2 (NORTH) GAS PL  
 GROUNDWATER POTENTIOMETRIC  
 SURFACE MAP (SHALLOW), 11/16/99  
 HIGHLANDER ENVIRONMENTAL  
 MIDLAND, TEXAS  
 MAR 16

NOTE:  
 CT: COOLING TOWER AREA  
 SW: SOUTHWEST AREA  
 \* : GROUNDWATER POTENTIOMETRIC  
 SURFACE ELEVATION CORRECTED  
 FOR PSR

DATE: 01/11/00  
 DWN. BY: JDA  
 FILE: C:\787\NORTH\GPS-5-12-99

GRAPHIC SCALE IN FEET  
 0 100 200 300 400 500  
 Original Plotted at Scale: 1"=200'





Project No: 787

Well ID: MW-27

Project: Eunice # 2 (North) Gas Plant

Client: Texaco Exploration and Production Inc.

Enclosure: 1 of 1

Location: Lea County, New Mexico

Engineer: MJL

SUBSURFACE PROFILE				Well Construction	Remarks
Depth	Symbol	Description	Depth/Elev.		
0		Ground Surface	3443.72		
		<i>Silty Sand</i> 5YR 5/6 to 5/8, yellowish red, very fine to fine grained quartz sand, poorly sorted, round	3439.72		Below-Grade Cover and Water-Tight Locking Cap
		<i>Caliche</i> 7.5YR 7/3 to 7/4, pink, indurated to interbedded with fine grained quartz sand, poorly sorted	3436.72		
		<i>Sandstone</i> 7.5YR 7/3 to 7/4, pink, very fine to fine grained quartz sand, moderately well cemented, poorly sorted			
20				4" Sch. 40 PVC Riser (Threaded)	
			3411.72	Cement/Bentonite Grout	
		<i>Silty-Clayey Sand</i> 7.5YR 6/3 to 6/4, light brown, very fine to fine grained quartz sand, round, poorly to moderately sorted			
40				Bentonite Chips	
				8-16 Silica Sand	
				4" Sch. 40 PVC Screen, 0.02" Slot	
60			3379.72		Depth-to-Water: 65.04 Feet BGS (11/16/99)
		<i>Sand</i> 5YR 5/6 to 4/6, yellowish red, very fine to fine grained quartz sand, round, poorly sorted, soft	3372.22		4" Sch. 40 PVC Cap (Threaded)
		TD: 71.5'			
80					

Drilled By: Scarborough Drilling, Inc.

Highlander Environmental  
1910 N. Big Spring  
Midland, Texas 79705  
(915) 682-4559

Hole Size: 7 7/8"

Drill Method: Rotary (Water)

Datum: Mean Sea Level

Drill Date: 27-Oct-99

Sheet: 1 of 1

Project No: 787

Well ID: MW-28

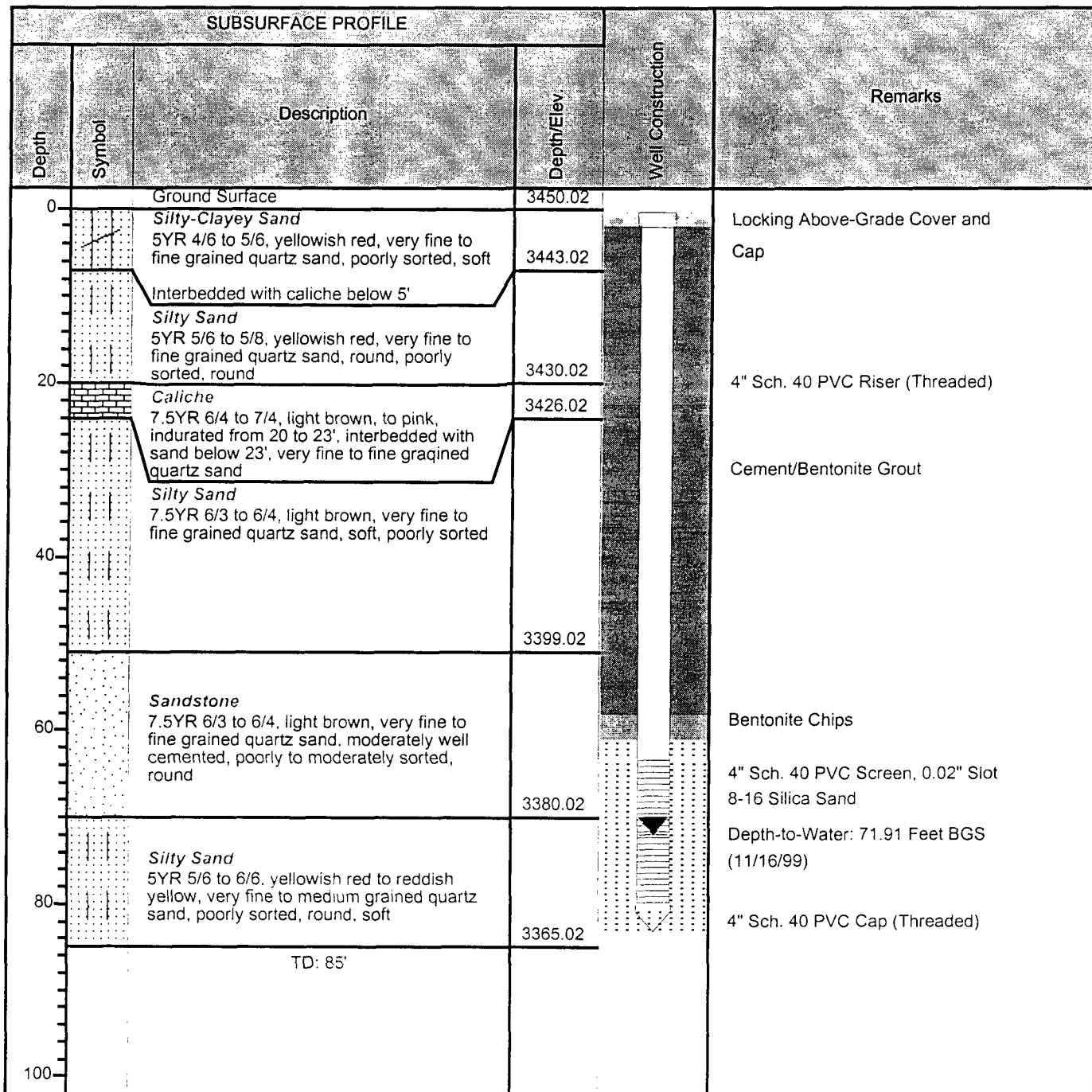
Project: Eunice # 2 (North) Gas Plant

Client: Texaco Exploration and Production Inc.

Enclosure: 1 of 1

Location: Lea County, New Mexico

Engineer: MJL



Drilled By: Scarborough Drilling, Inc.

Highlander Environmental  
1910 N. Big Spring  
Midland, Texas 79705  
(915) 682-4559

Hole Size: 7 7/8"

Drill Method: Rotary (Water)

Datum: Mean Sea Level

Drill Date: 02-Nov-99

Sheet: 1 of 1

Project No: 787

Well ID: MW-29

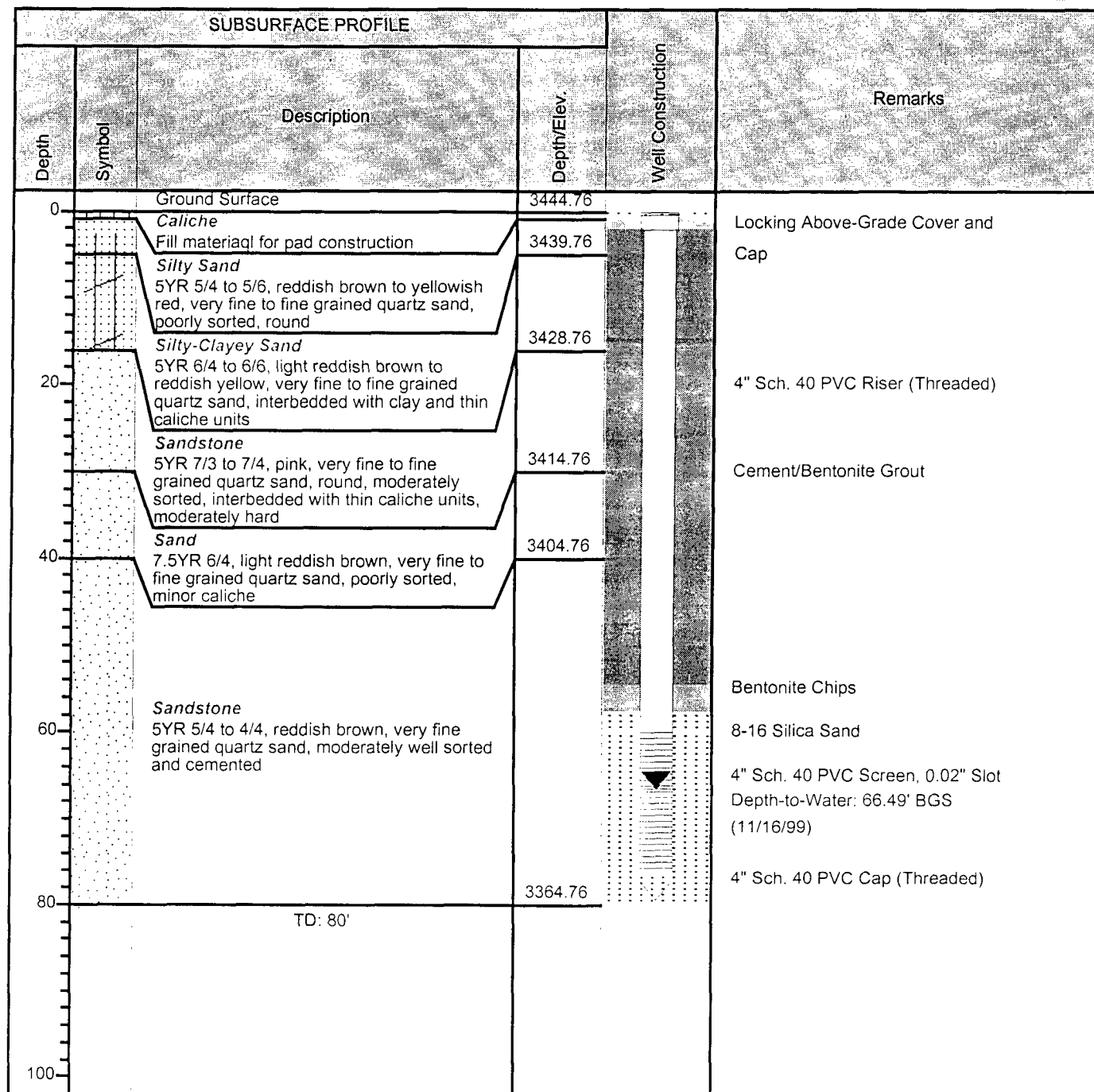
Project: Eunice # 2 (North) Gas Plant

Client: Texaco Exploration and Production Inc.

Enclosure: 1 of 1

Location: Lea County, New Mexico

Engineer: MJL



Drilled By: Scarborough Drilling, Inc.

Highlander Environmental  
1910 N. Big Spring  
Midland, Texas 79705  
(915) 682-4559

Hole Size: 7 7/8"

Drill Method: Rotary (Water)

Datum: Mean Sea Level

Drill Date: 11-Nov-99

Sheet: 1 of 1

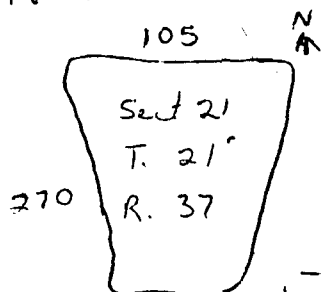
General Petersburg Ave  
Box 840  
Hides NM.

Gen. Petro & Eunice

10/5/78

Pit. 1.7 miles North of Treating Plant.

Volume  
2X105X270



Approx 4 ft  
deep from ground level.  
with Caliche bottom

Pit has 2 ft of  
BS + Oil in it.

Pit is fenced off in good  
condition.

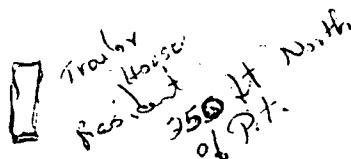
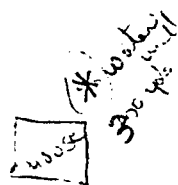
Closest water well is approx - 1/2 mile NW of Pit.  
Closest resident is approx 1 mile west.

large ~~caliche~~ pit North end of BS Pit + 75 ft  
large caliche pit East side of BS Pit + 50 ft

Closest production N.B. Hunt Well # 2  
150 ft East. Pumping well.



H. C. ...



(1) Eunice City  
limits approx  
300 yds east of  
facility.

(2) Pit and surroundings  
are kept in poor  
shape. Nothin'  
spills were apparent.

(3) Tank bottom  
Sand & ~~caliche~~  
caliche.

(4) Volume  
4X240X200

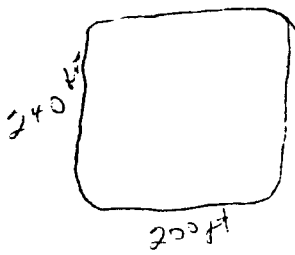
(5) Pit Not fenced  
nor facility.

(6) Section 28  
Twp. 21  
R. 37  
SE 1/4

(7) Skelton  
Gen. Peter.

(8)

County Road

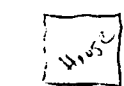


Pit 4 ft deep approx  
oil + BS full.

Sect 31-21-37

28  
myk

10 storage Tanks



(\*) 200 yds west



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**

Governor

**Jennifer A. Salisbury**

Cabinet Secretary

**Lori Wrotenbery**

Director

Oil Conservation Division

FAX

TO: MARTYNE KIELING 505-476-3471

FROM: LARRY JOHNSON  
Energy, Minerals and Natural Resources Department,  
Oil Conservation Division

RE: EUNICE SITE

DATE: WED 12/19/01

5

Pages (Including Transmittal)

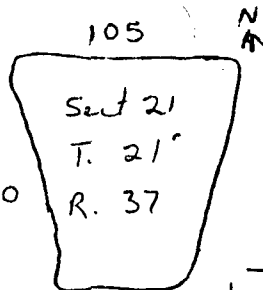
General Petroleum Inc.  
Box 840  
Hides NM.

Gen. Petro & Eunice

10/5/78

Pit. 1.7 miles North of Treating Plant.

Volume  
2X105X270



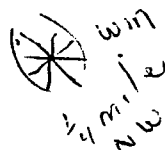
Approx 4 ft  
deep from ground level.  
with Caliche bottom

Pit has 2 ft of  
BS + Oil in it.  
Pit is fenced off in good  
condition.

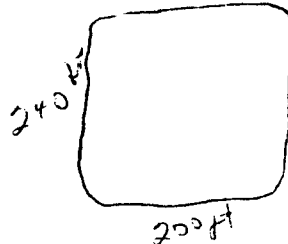
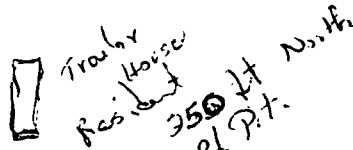
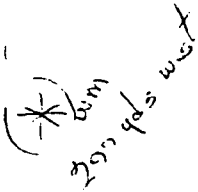
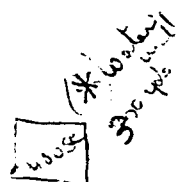
Closest water well is approx - 1/2 mile NW of Pit.  
Closest resident is approx 1 mile west.

large ~~caliche~~ pit North end of BS Pit + 75 ft  
large caliche pit East side of BS Pit + 50 ft

Closest production N.B. Hunt Well # 2  
150 ft East. Pumping well.



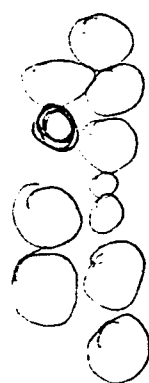
*[Handwritten signature]*



Pit 4 ft deep approx  
oil + BS full.

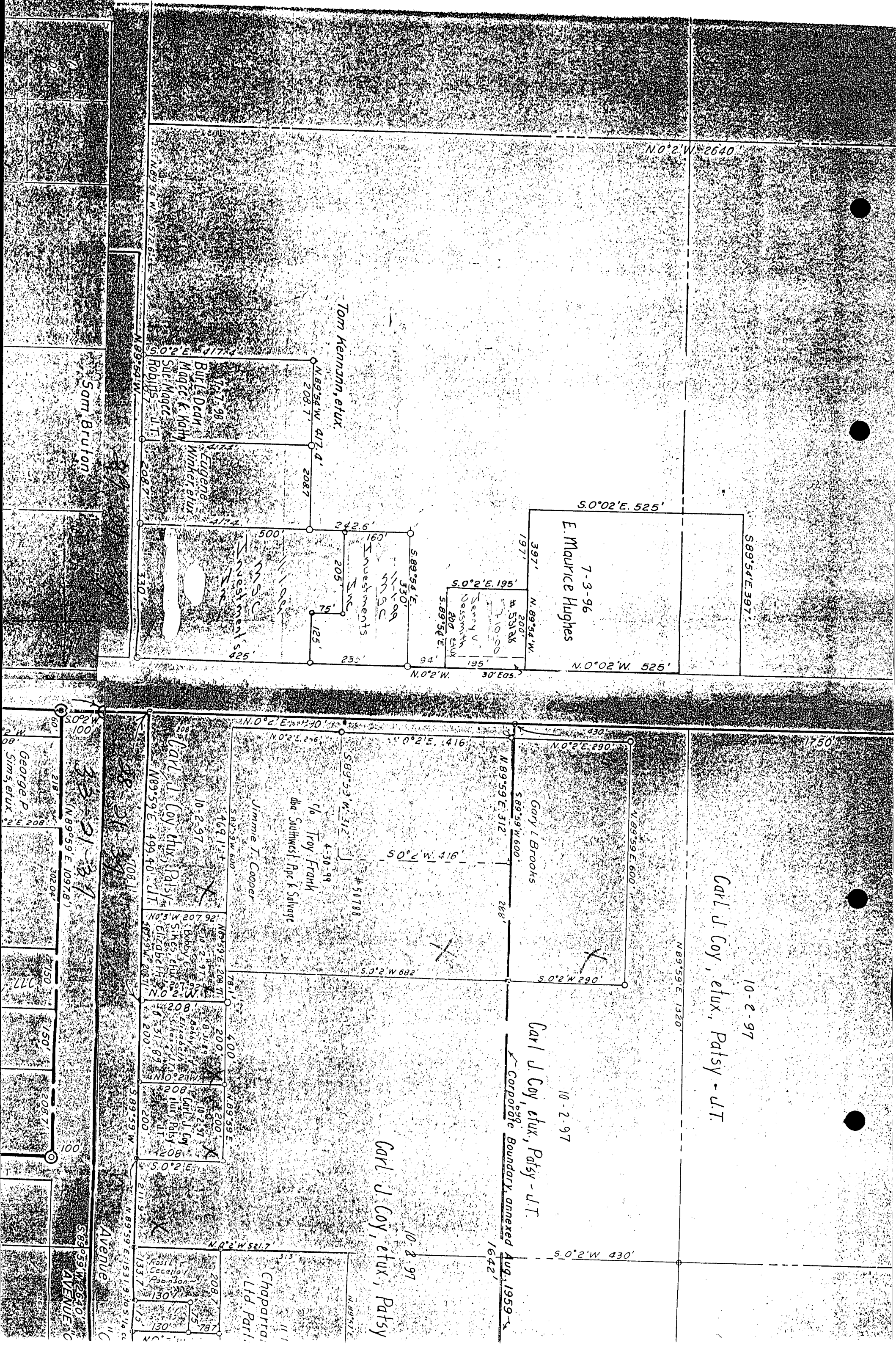
Sect 31-21-37  
28 myk

10 storage Tanks



- (1) Eunice city limits approx 300 yds east of facility.
- (2) Pit and surrounding are kept in poor shape. No other spills were apparent.
- (3) Tank bottom Sand ~~caliche~~ caliche.
- (4) Volume 4X240X200
- (5) Pit Not fenced nor facility.
- (6) Section 28 Twp. 21 R. 37 SE/4
- (7) Skelton Gen. Petro.
- (8)







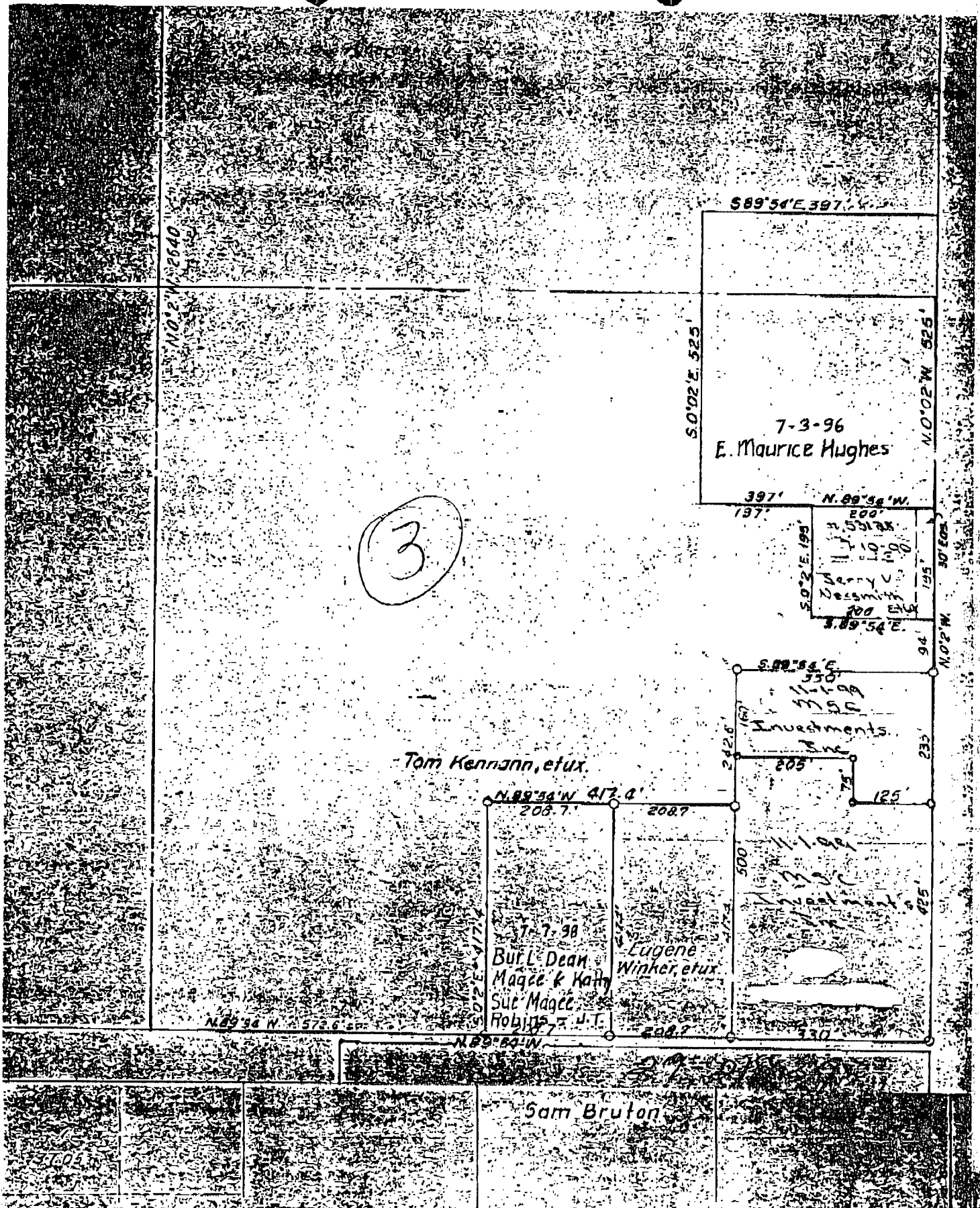


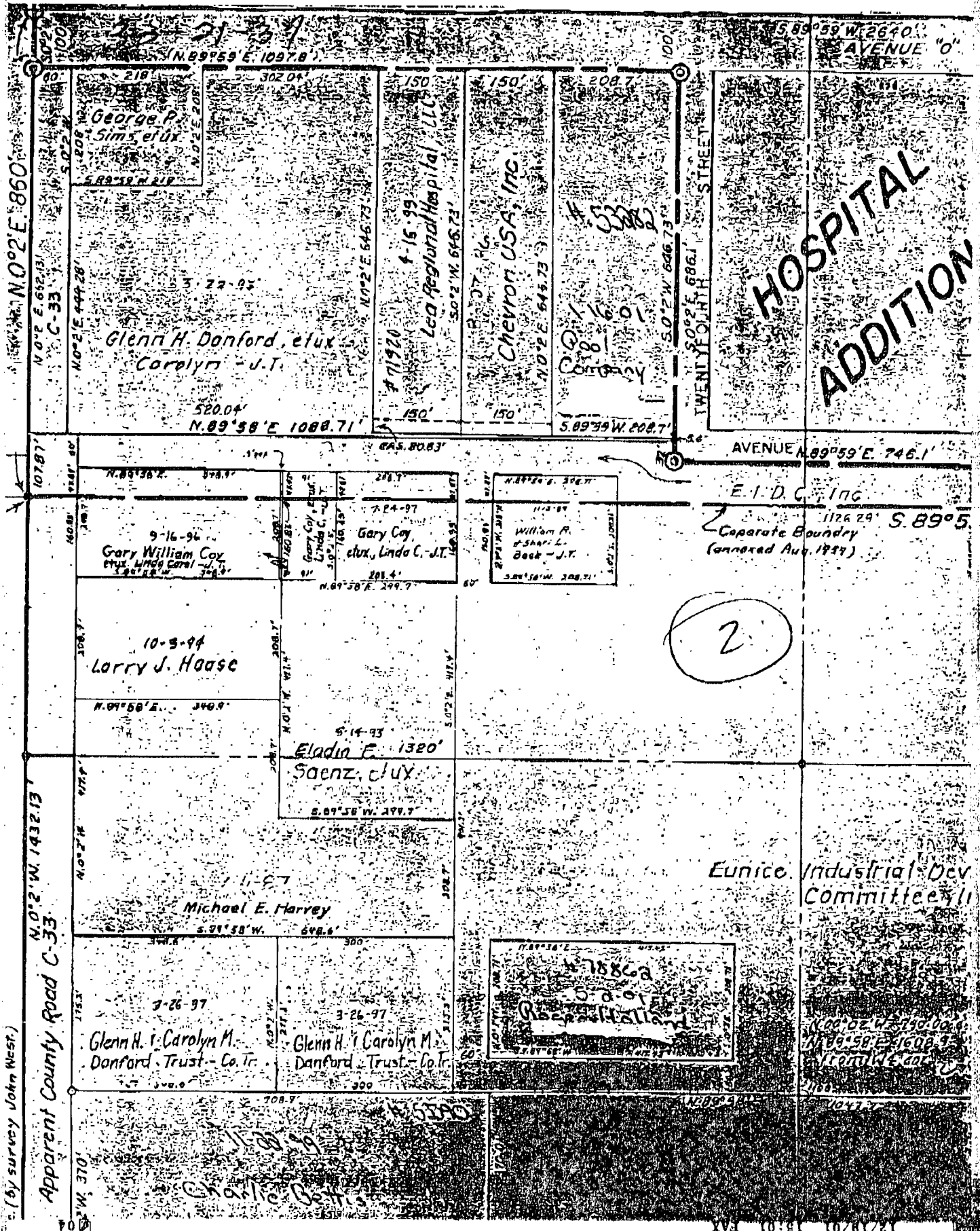


2-2-2-2

✓ 2012-10-28

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BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
COMMISSION OF NEW MEXICO FOR  
THE PURPOSE OF CONSIDERING:

CASE No. 2599  
Order No. R-2290

APPLICATION OF JAMES N. EVANS  
AND DALLAS MCCASLAND FOR PER-  
MISSION TO OPERATE A TREATING  
PLANT, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on July 11, 1962, at Santa Fe, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 25th day of July, 1962, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Daniel S. Nutter, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicants, James N. Evans and Dallas McCasland, seek permission to operate a sediment oil treating plant to be located approximately one mile west of the Town of Eunice, Lea County, New Mexico, on State Road No. 176.

(3) That the applicants, James N. Evans and Dallas McCasland, d/b/a Southwest Reclamation Service, a Partnership, have filed a \$10,000 Performance Bond which has been approved by the Commission.

(4) That the operation of sediment oil treating plants such as the one proposed by the applicants is in the best interest of conservation and prevents the waste of oil otherwise unrecoverable.

IT IS THEREFORE ORDERED:

That the applicants, James N. Evans and Dallas McCasland, d/b/a Southwest Reclamation Service, a Partnership, are hereby granted permission to operate a sediment oil treating plant to be located approximately one mile west of the Town of Eunice, Lea County, New Mexico, on State Road No. 176.

-2-

CASE No. 2599  
Order No. R-2290

PROVIDED HOWEVER, That the continuation of the authorization granted by this order shall be conditioned upon compliance with the laws of the State of New Mexico and the rules and regulations of the New Mexico Oil Conservation Commission.

DONE at Santa Fe, New Mexico, on the day and year herein-  
above designated.

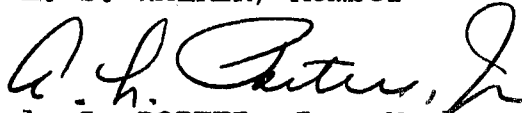
STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION



EDWIN L. MECHEM, Chairman



E. S. WALKER, Member



A. L. PORTER, Jr., Member & Secretary

S E A L

esr/