<u>District I</u> P.O. Fox 1980, Hobbs, NM <u>District II</u> P.O. Drawer DD, Artesia, NM 88211

1000 Rio Brizos Rd, Aziec, NM 87410

District III

State of New Mexico

Energy, Minerals and Natural Resources Department

SUBMIT 1 COPY TO APPROPRIATE

OIL CONSERVATION DIVISION DEPUTY OIL & GASINSPECTOR P.O. Box 2088

Santa Fe, New Mexico 87504-2088

JUL 2 8 1996 3/9/94)

PIT REMEDIATION AND CLOSURE REPORT

		-Appreces
	tt Oil Company	Telephone: 505-622-5840
Address: P.O. Box	x 1355 Roswell, NM 88201	
Facility Or: So	outhern Union 1	
Location: Unit of	or Qtr/Qtr SecB Se	c 3 T 29 R 13 County San Juan
Pit Type: Separ	rator Dehydrator Ot	ther Abandoned pit- source unknown
	1, State, Fee _X,	
Pit Location: (Attach diagram)	Reference: wellhead X	50 , width 50 , depth 22
	Footage from reference:	30 feet
	Direction from reference	e: 0 Degrees East North X of West South
Depth To Ground (Vertical distance contaminants to se high water elevat: ground water)	e from easonal ion of	Less than 50 feet (20 points) 50 feet to 99 feet (10 points) Greater than 100 feet (0 Points)
Wellhead Protect (Less than 200 feet domestic water sou 1000 feet from al.	etion Area: MAY et from a private urce, or; less than l other water sources	Yes (20 points) 0 No (0 points) 0 No (0 points) 3
Distance To Sur (Horizontal distar lakes, ponds, rive irrigation canals	nce to perennial ers, streams, creeks,	Less than 200 feet (20 points) 200 feet to 1000 feet (10 points) Greater than 1000 feet (0 points) 0
		RANKING SCORE (TOTAL POINTS): 0

Date Remediation Sta	arted: April 24, 1996 Date Completed: landfarming
Remediation Method:	Excavation X Approx. cubic yards 1500-2000
Remediation Method: (Check all appropriate sections)	Landfarmed X Insitu Bioremediation
	Other
er e par	
Remediation Location	n: Onsite Offsitex
(ie. landfarmed onsite, name and location of offsite facility)	Elliott Oil- Southern Union 1E
General Description	Of Remedial Action: Excavated using trackhoe until bedrock
was found. Move	ed soil to another location for landfarming. Risk assessment
was done and is	attached. Excavation was backfilled with clean fill. Some
contaminated so	il was left in place after consulting the NMOCD and BIM.
Ground Water Encoun	tered: No X Yes Depth
Final Pit:	Sample location Note: Landfarm is still in place so no final
Closure Sampling: (if multiple samples,	results available at this time.
attach sample results and diagram of sample	Sample depth
locations and depths)	Sample date Sample time
	Sample Results
	Benzene (ppm) DECEWED
	Total BTEX(ppm) MAY - 2 1996
	Field headspace(ppm) ONL GON. DNV.
	TPH DIST. 3
Ground Water Sample	: Yes No <u>X</u> (If yes, attach sample results)
I HEREBY CERTIFY TH OF MY KNOWLEDGE AND	AT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST BELIEF
DATE 5-1-96	A A DELUTED VINE
SIGNATURE For SU	PRINTED NAME AND TITLE Randy J. Elledge (Agent)

Form 3160-5 (June 1990)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

5. Lease Designation and Serial No.

SF-078643

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.

Use "APPLICATION FOR PERMIT—" for such proposals

6. If Indian, Allottee or Tribe Name

SUBMIT	IN TRIPLICATE	7. If Unit or CA, Agreement Designation
1. Type of Well		7
Oil Gas Other	• Section 1 = 1	8. Well Name and No.
2. Name of Operator	* · · · · · · · · · · · · · · · · · · ·	Southern Union 1B
Elliott Oil Company		9. API Well No.
3. Address and Telephone No.		30-045-08854
(505) 62 2-5840 P	.O. Box 1355 Roswell, NM 88201	10. Field and Pool, or Exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Survey D	escription)	Basin Dakota
Sec. 3 TWN 29 N RNG 13	W	11. County or Parish, State
		San Juan
2. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTION	
Notice of Intent	Abandonment	Change of Plans
	Recompletion	New Construction
Subsequent Report	Plugging Back	Non-Routine Fracturing
	Casing Repair	Water Shut-Off
Final Abandonment Notice	Altering Casing	Conversion to Injection
	Other <u>Remediation</u>	Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
give subsurface locations and measured and true vertice	Il pertinent details, and give pertinent dates, including estimated date of starting cal depths for all markers and zones pertinent to this work.)*	g any proposed work. If well is directionally drilled,
April 24-29, 1996	cal depths for all markers and zones pertinent to this work.)*	

During the process of installing a leak detection system, a contaminated pit was found and excavated for remedial purposes.

See attached



4. I hereby certify that the foregoing is 1772 and correct Signed	Title Agent	Date 4-29-96
(This space for Federal or State office use) Approved by	Title	Date
Conditions of approval, if any:		

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

OIL and GAS PROPERTY MANAGEMENT ENVIRONMENTAL SERVICE

4-29-96

Elliott Oil Company P.O. Box 1355 Roswell, NM 88201

RE: Abandoned Unlined Surface Impoundment On The Southern Union #1B. Section 3, TWN 29 N, RNG 13 W, 990 from the North and 1500 from the East.

Dear Sirs,

On April 24, 1996, Elliott Oil Company was required to implement a leak detection system on the steel pit on the Southern Union 1B location. A backhoe was deployed to dig a hole for the installation process. At a depth of one foot highly contaminated soil was found. At this point, Cimmarron Oil Field Service, notified Joe Elledge Oil & Gas (Agent) about what had been encountered. At this point I went to the location to perform an evaluation of the contaminates found. The contamination levels were found to be very high and a sample was taken at four feet. Laboratory analysis was requested for Total Petroleum Hydrocarbons by EPA Method 418.1. The results were 16,200 ppm.

At this point I notified the BLM (Bill Liess), and the NMOCD (Denny Foust). Mr. Foust came to the location to further enhance my evaluation. The location is out of the vulnerable area, however, it is in the middle of a residential area. Therefore, he felt this impoundment should be treated with much precaution. I advised the backhoe operator to excavate to the full reach of the equipment being used. Maximum depth reached at this point was 14 feet. Contamination levels were still very high.

A trackhoe was brought in to continue the excavation to greater depths. We reached bedrock at 22 feet. This formation contained the contaminants from traveling in a down gradient direction. The final dimensions of the excavation are 50x50x24. At this point the NMOCD was notified of my findings. I felt that groundwater was not threatened due to the underlying bedrock. The elevation of the well site is 5608 feet. The elevation of the river is 5260 feet. Groundwater at this depth (348 feet) would not be reached by this source. Another water source that was considered for protection is the Farmington Reservoir. Its elevation (5470 feet) in comparison to the well site (5608 feet) allows 138 feet safety zone.

The BLM and the NMOCD felt that I should define the parameters of the plume and the contaminant levels. Three sample holes were dug to be sampled at a depth of 9 feet. They are shown on the attached pages. Laboratory analysis for TPH by EPA Method 418.1 was done. Sample hole 1 tested at 115 ppm. Sample hole 2 tested at 16,327 ppm. Sample hole 3 tested at 72 ppm. The NMOCD witnessed sample hole 1 and sample hole 2. Mr. Foust and I agreed that the high contamination of sample hole 2 was coming from El Paso's closed dehydrator pit. Mr. Foust notified El Paso of their problem.

OIL and GAS PROPERTY MANAGEMENT ENVIRONMENTAL SERVICE

On April 25, 1996, I performed an evaluation on the type of soils encountered. My findings are as follows:

From ground level to two feet the soil consists of a well graded sand. I believe this a combination of fill material and blow sand. At two feet the soil consists of a sandy clay with low to medium plasticity. This layer was four to five feet thick. The formation tends to dip in a Southwest direction. The following layer consists of a clayey gravel approximately 6 feet thick. This consists of a gravel-sand-clay mixture. At this point, we encountered a ten feet thick zone of sand, gravel, and cobble mixture. This is a very porous formation, therefore allowing contaminates to travel both horizontal and vertical. At a depth of 22 feet bedrock was encountered. This consists of a coarse grain sandstone.

Approximately 2000 cubic yards of contaminated soil was removed from this excavation. It will be land farmed on the Southern Union 1E location. This is a much larger location and will be a much more efficient land farm. The Southern Union 1E and the Southern Union 1B are operated by Elliott Oil Company and have the same lease number. Therefore, it is no problem to move the contaminated soil from one location to the other for remedial purposes.

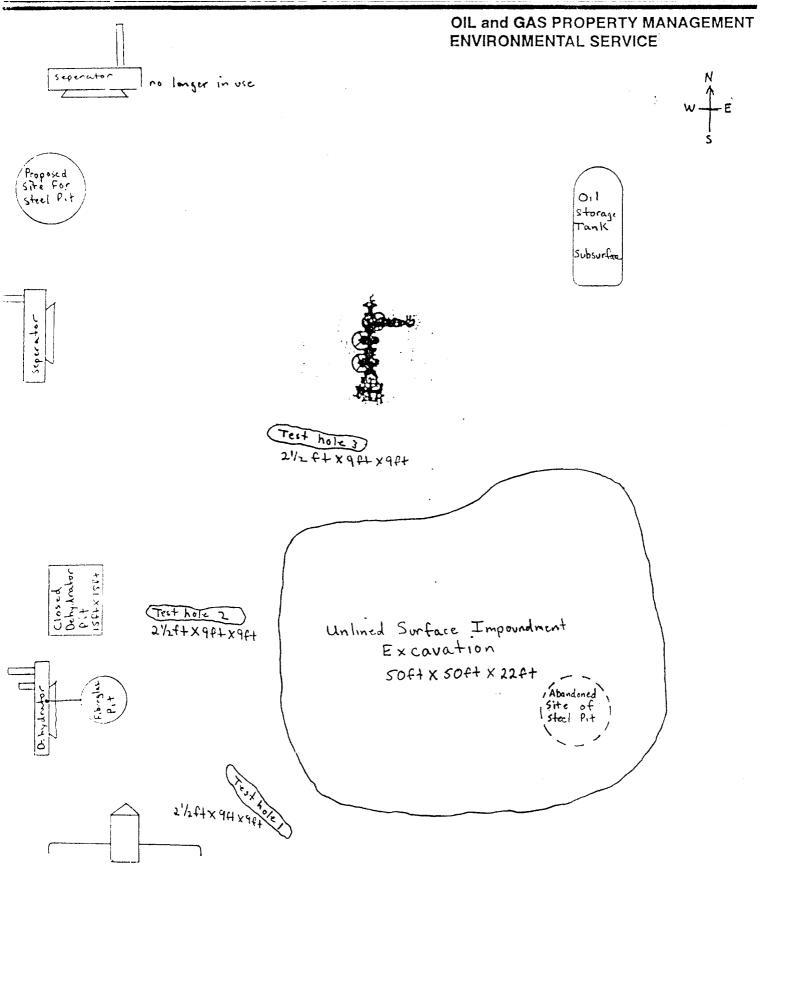
Some contaminated soil was left in this excavation. However, after extensive research and a thorough excavation, I believe that there is very little risk in groundwater contamination from the Southern Union 1B abandoned pit. The entire location is built on bedrock that is found 22 feet below the surface. First possible groundwater is well below 100 feet. The excavation was backfilled with clean fill dirt and slightly domed to allow for settling and erosion.

If you have questions or comments feel free to call me at (505) 327-9267 or 320-4969.

Sincerely,

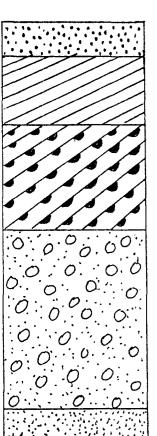
Randy J. Elledge

cc: Elliott Oil Company
NMOCD(Denny Foust)
NMOCD(Bill Olson)
BLM(Bill Liess)



OIL and GAS PROPERTY MANAGEMENT ENVIRONMENTAL SERVICE

ott Oil Company 3 W, 990 from the North and 1500 from the East



Well graded sand

Sandy clay with low to medium plasticity

Clayey gravel, gravel-sand-clay mixture

Sand, gravel, cobble mixture

Bedrock consisting of sandstone

fied Soil Classification System.



LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:

Address:

Randy J. Elledge

Company: Joe Elledge Oil and Gas

P.O. Box 111

City, State: Farmington, NM 87499

Date:

29-Apr-96

COC No.:

3967

Sample No.

10746

Job No.

2-1000

Project Name:

Elliot Oil Company - Southern Union 1B

Project Location:

SAM1; Southwest @ 9ft.

RE

Date:

25-Apr-96 Time:

13:46

Sampled by: Analyzed by: Sample Matrix:

HR Soil

Date:

29-Apr-96

Laboratory Analysis

Parameter	Result	Detection Limit	Unit of Measure	Me tho d
Total Petroleum Hydrocarbons, TPH	115	25	mg/kg	EPA Method 418.1

Quality Assurance Report

Laboratory Fortified Blank/Spike Soil

Laboratory Identification	Analyzed Value	Acceptable Range	Unit of Measure
Laboratory Fortified Blank Soil - QCBS2	<25	<25	mg/k g
Laboratory Fortified Spike Soil - QCSS1	895	828 - 1024	mg/kg

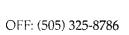
Duplication

Dispineumon.		
		Limit
Laboratory Identification	(% RSD)	(% RSD)
10731-4021	<0.1	15.0

Approved by:

Date:

P. O. BOX 2606 • FARMINGTON, NM 87499





LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:

Randy J. Elledge

Date:

29-Apr-96

Company: Joe Elledge Oil and Gas

COC No.:

3967

Address:

Sample No.

10747

City, State: Farmington, NM 87499

P.O. Box 111

Job No.

2-1000

Project Name:

Elliot Oil Company - Southern Union 1B

Project Location:

SAM2; West @ 9ft.

RE

Date:

25-Apr-96 Time:

14:06

Sampled by: Analyzed by: Sample Matrix:

HR Soil Date:

29-Apr-96

Laboratory Analysis

Parameter	Result	Detection Limit	Unit of Measure	Method
Total Petroleum Hydrocarbons, TPH	16327	25	mg/kg	EPA Method 418.1

Quality Assurance Report

Laboratory Fortified Blank/Spike Soil

Laboratory Identification	Analyzed Value	Acceptable Range	Unit of Measure
Laboratory Fortified Blank Soil - QCBS2	<25	< 25	mg/kg
Laboratory Fortified Spike Soil - QCSS1	895	828 - 1024	mg/kg

Dunlication

Dupucuion		
		Limit
Laboratory Identification	(% RSD)	(% RSD)
10731-4021	<0.1	15.0

Approved by: Date:

P. O. BOX 2606 • FARMINGTON, NM 87499



LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:

Randy J. Elledge

Date:

29-Apr-96

Company: Joe Elledge Oil and Gas

3967

COC No.:

Address:

P.O. Box 111

Sample No.

10748

City, State: Farmington, NM 87499

Job No.

2-1000

Project Name:

Elliot Oil Company - Southern Union 1B

Project Location:

SAM3; North @ 9ft.

RE

Date:

25-Apr-96 Time:

10:53

Sampled by: Analyzed by:

HR

Date:

29-Apr-96

Sample Matrix:

Soil

Laboratory Analysis

Parameter	Result	Detection Limit	Unit of Measure	Me thod
Total Petroleum Hydrocarbons, TPH	72	25	mg/kg	EPA Method 418.1

Quality Assurance Report

Laboratory Fortified Blank/Spike Soil

Laboratory Identification	Analyzed Value	Acceptable Range	Unit of Measure
Laboratory Fortified Blank Soil - QCBS2	<25	<25	mg/kg
Laboratory Fortified Spike Soil - QCSS1	895	828 - 1024	mg/kg

Duplication

		Limit
Laboratory Identification	(% RSD)	(% RSD)
10731-4021	<0.1	15.0

Approved by: Date:

OFF: (505) 325-8786



LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:

Randy J. Elledge

Company: Joe Elledge Oil and Gas

Address:

P.O. Box 111

City, State: Farmington, NM 87499

Date:

26-Apr-96

COC No.:

3966

Sample No.

10726

Job No.

2-1000

Project Name:

Elliott - Southern Union 1B

Project Location:

SU1B1

Sampled by: Analyzed by: RE HR

Date:

24-Apr-96 Time:

25-Apr-96

10:55

Sample Matrix:

Soil

Laboratory Analysis

Parameter	Result	Detection Limit	Unit of Measure	M ethod
Total Petroleum Hydrocarbons, TPH	16200	25	mg/kg	EPA Method 418.1

Quality Assurance Report

Laboratory Fortified Blank/Spike Soil

Laboratory Identification	Analyzed Value	Acceptable Range	Unit of Measure
Laboratory Fortified Blank Soil - QCBS2	< 25	< 25	mg/kg
Laboratory Fortified Spike Soil - QCSS1	835	828 - 1024	mg/kg

Duplication

		Limit
Laboratory Identification	(% RSD)	(% RSD)
10704-4020	<0.1	15.0

Approved by: Ja (1) Date: 4/26/96

P. O. BOX 2606 • FARMINGTON, NM 87499