



**MICHAEL L. PIERCE
CONSULTING GEOLOGIST**

CPG 4527

**P.O. BOX 636
HOBBS, NEW MEXICO
88241-0636
OFFICE (505) 392-1915
MOBILE (505) 369-5311**

**PEAK
CONSULTING SERVICES**

SWD

10/28/98

730

PEAK CONSULTING SERVICES
P.O. BOX 636
HOBBS, NEW MEXICO 88241-0636

October 09, 1998

Mr. Ben Stone
OIL CONSERVATION DIVISION
2040 Pacheco Street
Santa Fe, New Mexico

OCT 13 1998

RE: MESQUITE SWD, INC.
CBM No. 1
C-108 Application

Dear Ben,

Please find enclosed MESQUITE SWD, INC.'S application to convert the CBM No. 1 well to disposal. I have included for your convenience a marked log section, showing the proposed disposal interval.

The surface is fee and is owned by Bill McNeill. Mr. McNeill is a partner in this well.

I have included a copy of the ad to be run in the Hobbs paper. I will forward a certified copy of the ad as soon as it becomes available.

I will call you in a few days, so that we might discuss this application. If you need any additional information, please do not hesitate to call me. Thank you for your cooperation.

Sincerely,



Michael L. Pierce

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage
Application qualifies for administrative approval? X Yes No
- II. OPERATOR: MESQUITE SWO, INC.
ADDRESS: P.O. Box 481 CARLSBAD, NM 88221-0481
CONTACT PARTY: CLAY Wilson PHONE: 505-396-885
- III. WELL DATA: Complete the data required on the reverse side of this form for each well processed for injection. Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project: Yes X No
If yes, give the Division order number authorizing the project _____
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- * X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted.)
- * XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: Michael PIERCE TITLE: Agent
SIGNATURE: [Signature] 505 392 1915 DATE: 10/8/98
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstance of the earlier submittal. _____

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; Location by Section, Township, and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, PO Box 2088, Santa Fe, NM 87504-2088 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

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MESQUITE SWD, INC
CBM NO. 1

FORM C-108 continued

Part III. A

- 1.) CBM No. 1
467' FSL & 467' FEL
Section 24 - Township - 19 South - Range 37 East
Unit P
Lea County, New Mexico
- 2.) See attached wellbore schematic.
- 3.) Propose to run approximately 4400' plastic lined tubing.
- 4.) Propose to run a tension packer as a seal, and set at approximately 100' above the top perforation.

Part III. B

- 1.) The injection interval will be the San Andres and Glorieta formations. There is no production from these intervals in the immediate area.
- 2.) The injection interval will be 4464' - 5950'. The interval will be selectively perforated.
- 3.) This well was originally drilled as an oil and gas well.
- 4.) See wellbore schematic.
- 5.) There is no production in this area.

Part VII.

- 1.) Proposed average daily injection will be 2500 bbls/day. Maximum injection rate will be 5000 bbls/day.
- 2.) The system will be closed.
- 3.) The average injection pressure will be 0 PSI.. The maximum will not exceed the limits set forth by the OCD.
- 4.) The source of the water will be from various leases trucked to this location.
- 5.) The San Andres and Glorieta are not productive within one mile of this location.

Part VIII

The injection interval is the San Andres and Glorieta formations, and is composed of primarily limestone and porous dolomites with occasional anhydrite and thin shale stringers, and is approximately 1800' thick. The top of San Andres is at 4228'. The base of the San Andres- top of Glorieta is at 5608'. The entire area is overlain by Quaternary alluvium. The Ogallala is the major source of fresh water in the area, at a depth of 80' to 250'.

Part IX

The injection interval will be treated with a breakdown acid job.

Part X

The logs have been previously submitted.

Part XI

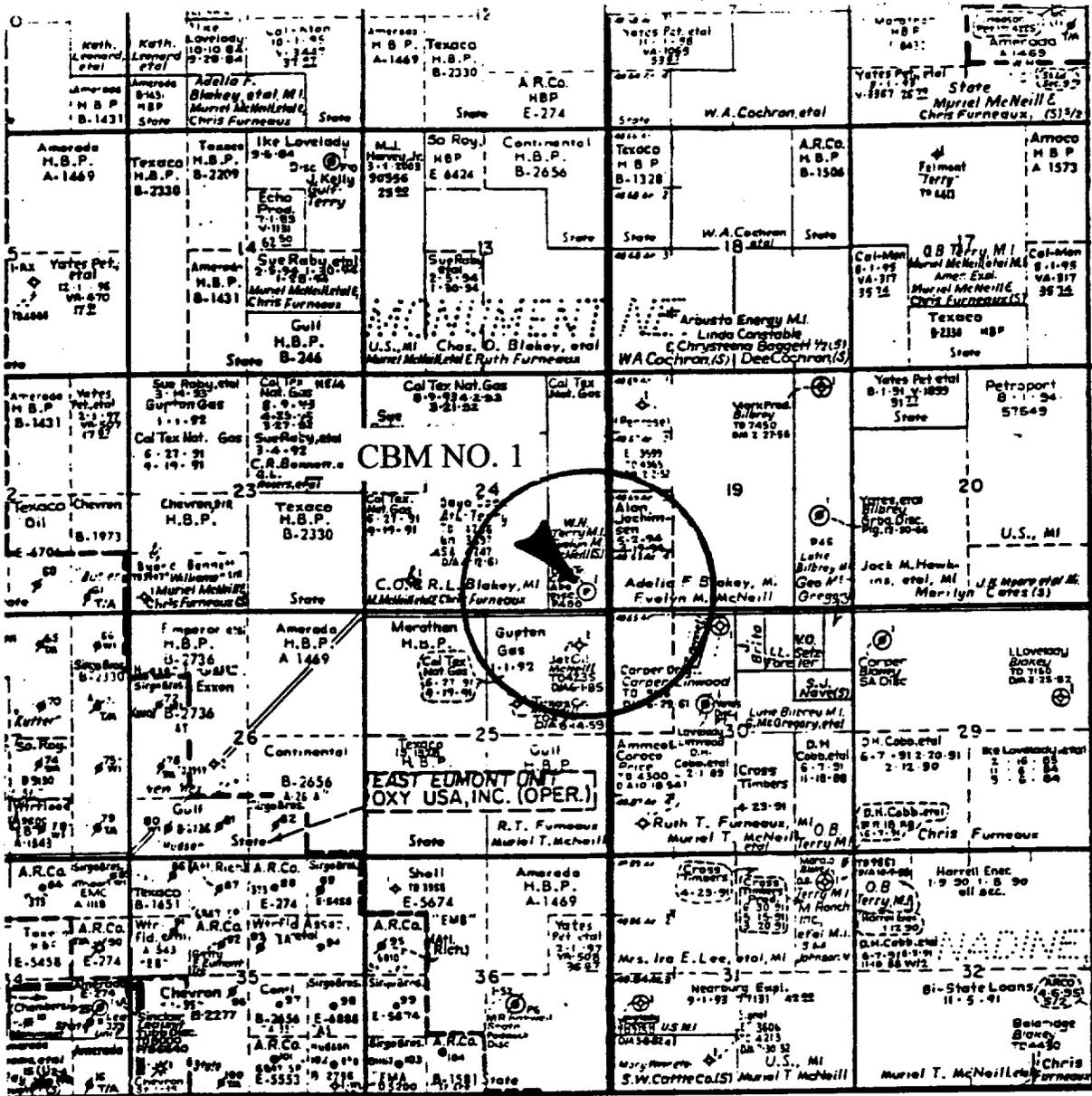
There are active fresh water wells within one mile of the CBM No. 1 location. The analysis for these wells are attached.

Part XII

We have examined all available geologic and engineering data, and find no evidence of open faults or any other hydrologic connection between the injection interval and any underground source of fresh water.

Part XIV

A copy of this application has been sent to :
Bill McNeill Trustee M-Ranch, surface owner.
928 W. Mesa Verde, Hobbs, New Mexico 88242



MESQUITE SWD, INC.

CBM NO. 1

467' FSL & 467' FEL

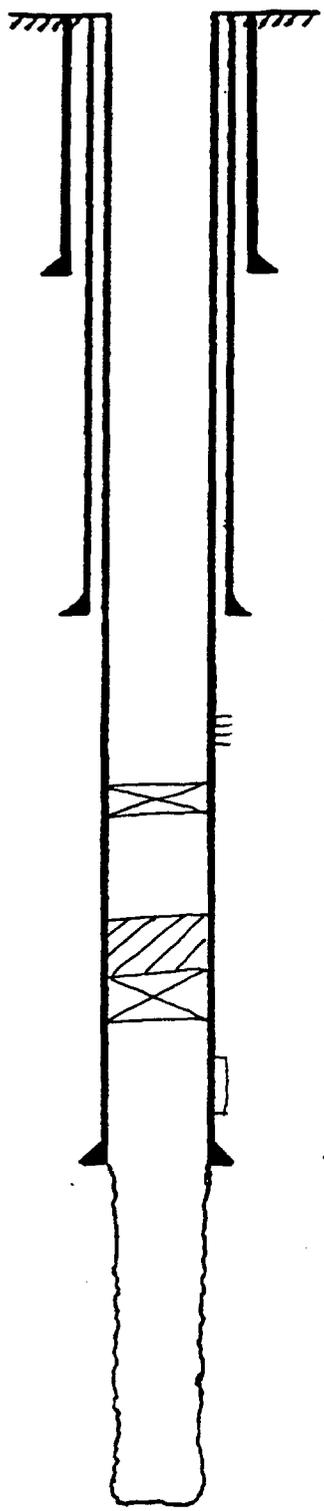
Sec. 24 - T19S - R37E

Lea County, New Mexico

OPERATOR <u>MESQUITE SWD Inc</u>	DATE <u>6-3-98</u>
LEASE <u>CBM</u>	WELL NO. <u>1</u>
LOCATION <u>467' FSL + 467' FEL</u>	

Section 24-T195-237E
unit F

Current Wellbore Schematic



13 3/8" casing set at 372 ' with 400 sx of _____ cement
Hole size 17 1/2 " CIRCULATED

8 5/8 " casing set at 3118 ' with 1100 sx of _____ cement
Hole size 12 1/4 " CIRCULATED

SM ANDRES parts 4464 - 4484

CIBP @ 4600 WLBP

CIBP @ 7310 + 35 ' CMT

ABO parts 7412 - 7908 ' 116 holes

5 1/2 " casing set at 8004 ' with 1000 sx of _____ cement
Total Depth 10000 ' Hole size 7 7/8 "

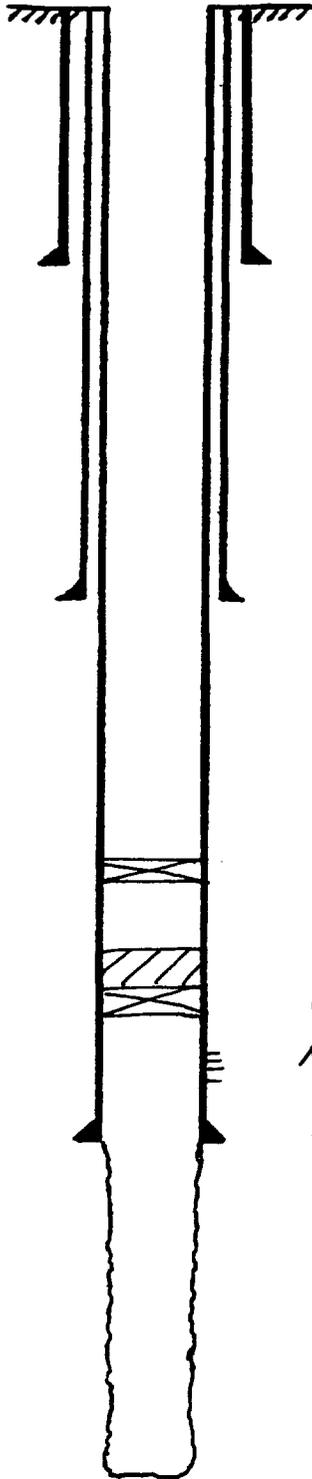
DV Tool set @ 4727 '

1ST	STAGE	530	SX	TOC	5950'
2ND	STAGE	530	SX	TOC	3000'

OPERATOR	MESQUITE SWO Inc	DATE	6-3-98
LEASE	CBM	WELL No	1
		LOCATION	467' FSL + 467' FEL

Section 24-T19S-R37E
UNIT P

Proposed Wellbore Schematic



13 3/8" casing set at 372' with 400 sx of _____ cement
Hole size 17 1/2" Circulated

8 5/8" casing set at 318' with 1160 sx of _____ cement
Hole size 12 1/4" Circulated

Injection Interval
4464' - 5950'

CIBP @ 6000'

CIBP @ 7310' + 35' cement

ABO parts 7412' - 7908' 116 holes

5 1/2" casing set at 8004' with 1060 sx of _____ cement

Total Depth 10000' Hole size 7 3/8"

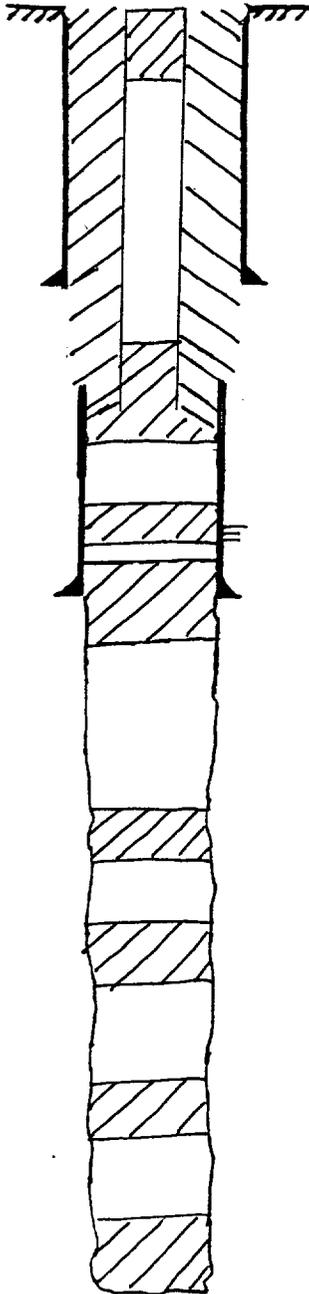
DV Tool set @ 4727'

1st Stage 530 sx TOC 5950'

2nd Stage 530 sx TOC 3000'

OPERATOR ZINKE & Philpy	DATE 6-3-98	
LEASE Linwood	WELL NO. 1	LOCATION 330 FNL + 2310 FWL

Section 30 - T19S - R30E
Unit C



10 SX plug @ surface
 8 5/8" STOT MD pulled from 0 to 409'
 5 1/2" Liner set @ 0 to 456' cmta w/
 225 SX cmt - circulated

30 SX plug 400' - 500'
 150' plug 4210' - 4050' tagged @ 4050'

13 3/8" casing set at 297' with 250 SX of _____ cement
 Hole size 17 1/2" CIRCULATED
 perf 4208 - 4306 A/ 4000 gal frac w/ 20000 gal gel
 BRINE + 25000 * 20/40 sd

8 5/8" casing set at 4336' with 1650 SX of _____ cement
 Hole size 11" TOC BY TS @ 560'

35 SX plug 4310' to 4370' tagged @ 4310'

75 SX plug 5800' to 5550'
 25 SX plug 6580' to 6500'
 25 SX plug 7320' to 7240'
 100 SX plug Td to 8800'

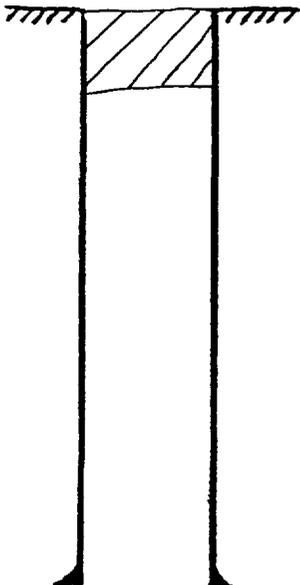
Total Depth 9126' Hole size 7 7/8"

P+A 5-8-75

Slightly OUTSIDE AREA of review

OPERATOR TEXAS CRUDE	DATE 6-3-98	
LEASE 1-25	WELL No. #1	LOCATION 1980' FNL + 1980' FEL

Section 25-719S-R37E
Unit G



10 sx plug @ SURFACE

P+A

$8\frac{5}{8}$ " casing set at 317' with 150 sx of _____ cement
Hole size 11" CIRCULATED



10 sx plug @ 2470' to 2410'
SHOT AND pulled $5\frac{1}{2}$ " CS9 @ 2430'

20 sx plug @ 4260' - 4110'
perf 4226' - 4240'

$5\frac{1}{2}$ " casing set at 4304' with 300 sx of _____ cement
Total Depth 4304' Hole size $7\frac{7}{8}$ " TOC By TS
@ 2430'

Slightly outside AREA of review



HALLIBURTON

WATER ANALYSIS REPORT HOBBS NEW MEXICO

COMPANY Mesquite SWD

REPORT 98-278
 DATE 10/6/98
 DISTRICT Hobbs

SUBMITTED BY _____

WELL CBM # 1 DEPTH _____ FORMATION _____
 COUNTY Lea, NM FIELD _____ SOURCE _____

SAMPLE _____

Sample Temp.	<u>68</u>	°F	_____	°F	_____	°F	_____	°F
RESISTIVITY	<u>15.015</u>		_____		_____		_____	
SPECIFIC GR.	<u>1.000</u>		_____		_____		_____	
pH	<u>7.95</u>		_____		_____		_____	
CALCIUM	<u>200</u>	mpl	_____	mpl	_____	mpl	_____	mpl
MAGNESIUM	<u>0</u>	mpl	_____	mpl	_____	mpl	_____	mpl
CHLORIDE	<u>90</u>	mpl	_____	mpl	_____	mpl	_____	mpl
SULFATES	<u>50</u>	mpl	_____	mpl	_____	mpl	_____	mpl
BICARBONATES	<u>195</u>	mpl	_____	mpl	_____	mpl	_____	mpl
SOLUBLE IRON	<u>0</u>	mpl	_____	mpl	_____	mpl	_____	mpl

OIL GRAVITY _____ @ _____ °F _____ @ _____ °F _____ @ _____ °F _____ @ _____ °F

REMARKS WATER supply for House trailer 2.6 miles East of CBM #1
(WATER well)

Resitivity measured in: Ohm/m2/m

This report is the property of Halliburton Company and neither it nor any part thereof nor a copy thereof is to be published or disclosed without first securing the express written approval of laboratory management: it may however, be used in the course of regular business operations by any person or concern and employees thereof receiving such report from Halliburton Co.

ANALYST: John Eubank

Proof of Notice

MESQUITE SWD, INC., whose address is P.O. Box 481, Carlsbad, New Mexico 88221-0481, proposes to convert the following well for the purpose of disposing produced water from oil and gas production.

The well is the CBM No. 1, 467' FSL & 467' FEL Section 24 - Township 19 South - Range 37 East, Unit P, Lea County, New Mexico. The injection interval is the San Andres - Glorieta from 4464' to 5950'. The maximum injection rate will be 5000 bbls/day, with 0 pressure.

Interested parties must file objections or request for hearing with the Oil Conservation Division 2040 Pacheco St., Santa Fe, New Mexico 87505, within fifteen days.

Inquiries regarding this application should be directed to M. L. Pierce, P.O. Box 636, Hobbs, New Mexico 88241-0636, (505) 392-1915.

Z 577 000 196

US Postal Service

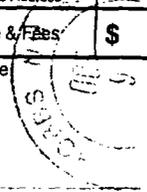
Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to <i>Marathon Oil Co</i>	
Street & Number <i>P</i> <i>79702</i>	
Post Office, State, & ZIP Code <i>PO Box 552 Midland TX</i>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$ <i>2.13</i>
Postmark or Date	

PS Form 3800, April 1995



Z 577 000 195

US Postal Service

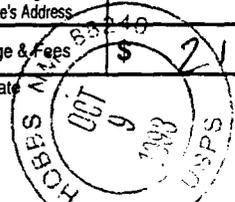
Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to <i>Bill McNeill</i>	
Street & Number <i>928 W Main Verde</i>	
Post Office, State, & ZIP Code <i>Hobbs NM 88240</i>	
Postage	\$ <i>78</i>
Certified Fee	<i>1.35</i>
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$ <i>2.13</i>
Postmark or Date	

PS Form 3800, April 1995



Long-Tops



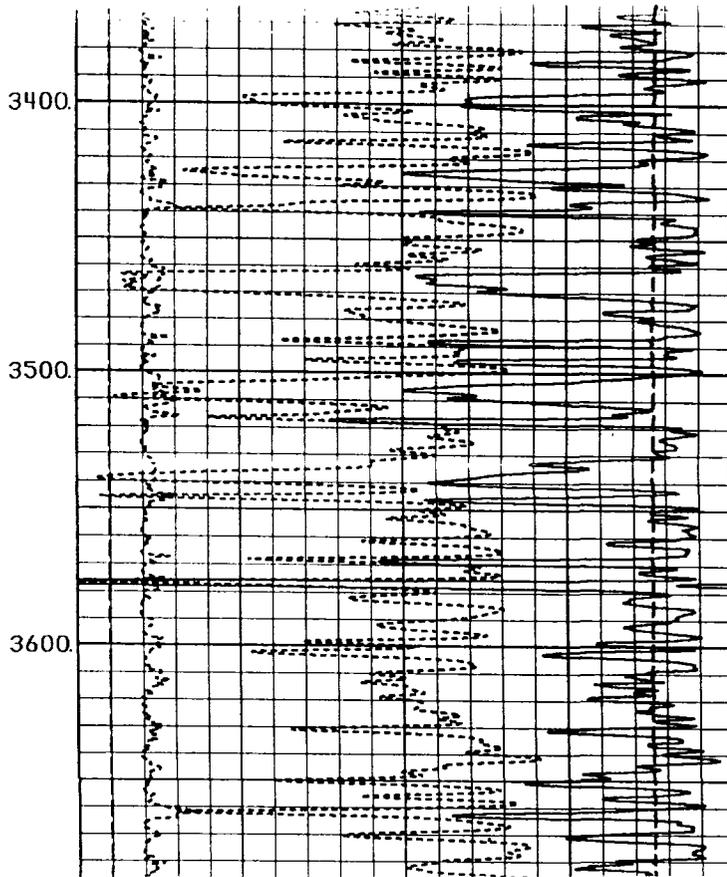
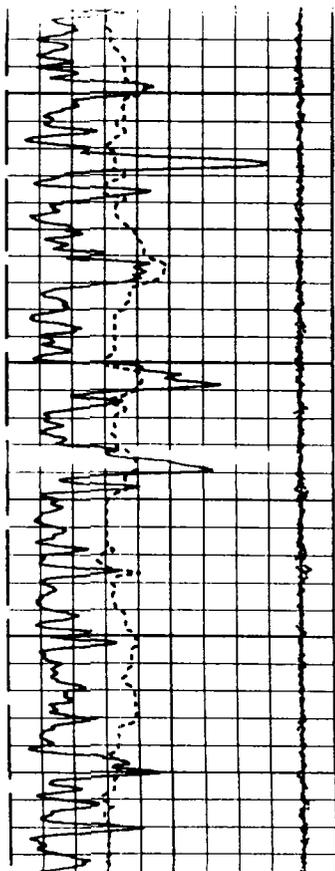
SPECTRAL DENSITY
DUAL SPACED
NEUTRON LOG

= Cement behind
Pipe

= Injection
Interval

8 5/8" CSG, set
@ 3118
Cmt Circulated

COMPANY THE LONG TRUST	
WELL C B M NO. 1	ST
FIELD WILDCAT	
COUNTY LEA	STATE NM
API NO. NA	OTHER SERVICES
LOCATION 467 FEL AND 467 FSL	LSS DILL
SEC. 24 TWP 19S RGE 37E	
PERMANENT DATUM G L ELEV. 3602	ELEV. : K.B. 3617
LOG MEASURED FROM K.B. 15.7FT. ABOVE PERM. DATUM	D.F. N/A
DRILLING MEASURED FROM K.B.	G.L. 3602
DATE 3/19/91	
RUN NO. ONE	
DEPTH-DRILLER 10000	
DEPTH-LOGGER 10001	
BTH. LOG INTER. 9977	
TOP LOG INTER. SURF	
CASING-DRILLER 8.625 #3118	
CASING-LOGGER 3124	
BIT SIZE 7.875	
TYPE FLUID IN HOLE FRESH	
DENS. : VISC 9.1 : 60	
PH : FLUID LOSS 9.0 : 18.5	
SOURCE OF SAMPLE CIRCULATED	
RM # MEAS. TEMP. 1.38 #67	
RMF # MEAS. TEMP. 1.42 #68	
RMC # MEAS. TEMP. 1.51 #71	
SOURCE RMF : RMC MEAS. : MEAS.	
RM # BHT 713 #136	
TIME SINCE CIRC 6 HRS.	
TIME ON BOTTOM 15:55	
MAX. REC. TEMP. 136 #B.H.T	
EQUIP. : LOCATION 3414 : HOBBS	
RECORDED BY RAMSEY	
ATTENDED BY SIMPSON	



2 5/2" CASING
TOC
2nd Stage
3000'

CHECKLIST for ADMINISTRATIVE INJECTION APPLICATIONS

Operator: MESQUITE SWD, INC. Well: CBM Well No. 1

Contact: MIKE PIERCE Title: CONSULTANT Phone: _____

DATE IN 10-¹³~~28~~-98 RELEASE DATE 10-28-98 DATE OUT 11-16-98

Proposed Injection Application is for: WATERFLOOD Expansion Initial

Original Order: R- _____ Secondary Recovery Pressure Maintenance

SENSITIVE AREAS

SALT WATER DISPOSAL Commercial Well

WIPP Capitan Reef

Data is complete for proposed well(s)? YES Additional Data Req'd NO

AREA of REVIEW WELLS

3 Total # of AOR 3 # of Plugged Wells

YES Tabulation Complete YES Schematics of P & A's

YES Cement Tops Adequate NO AOR Repair Required

INJECTION FORMATION

Injection Formation(s) S/A - GLOB Compatible Analysis YES

Source of Water or Injectate AREA PRODUCTION

PROOF of NOTICE

Copy of Legal Notice Information Printed Correctly
 Correct Operators Copies of Certified Mail Receipts
 Objection Received Set to Hearing _____ Date

NOTES:

APPLICATION QUALIFIES FOR ADMINISTRATIVE APPROVAL? _____

COMMUNICATION WITH CONTACT PERSON:

1st Contact: Telephoned Letter _____ Date _____ Nature of Discussion _____
2nd Contact: Telephoned Letter _____ Date _____ Nature of Discussion _____
3rd Contact: Telephoned Letter _____ Date _____ Nature of Discussion _____

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

OCT 16 1998

I, KATHI BEARDEN

Publisher

of the Hobbs Daily News-Sun, a daily newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period.

of 1 weeks.

Beginning with the issue dated October 12 1998

and ending with the issue dated October 12 1998

Kathi Bearden
Publisher

Sworn and subscribed to before

me this 9th day of

October 1998

Jodi Benson
Notary Public.

My Commission expires
October 18, 2000
(Seal)

LEGAL NOTICE
October 12, 1998

Proof of Notice

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This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

02101653000 01527203
Pierce Michael
7707 Plainfield
Hobbs, NM 88240