



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
HOBBS DISTRICT OFFICE

10/13/98

GOVERNOR

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

OIL CONSERVATION DIVISION  
P. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

RE: Proposed:

MC \_\_\_\_\_  
DHC \_\_\_\_\_  
NSL \_\_\_\_\_  
NSP \_\_\_\_\_  
SWD X \_\_\_\_\_  
WFX \_\_\_\_\_  
PMX \_\_\_\_\_

Gentlemen:

I have examined the application for the:

Mesquite SWD Inc      CBM      #1-P-24-195-37e  
Operator      Lease & Well No.      Unit      S-T-R

and my recommendations are as follows:

Recommend approval -

Yours very truly,

Chris Williams

Chris Williams  
Supervisor, District 1

/ed

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 CARISBRO, NM 80221-0481  
CONTACT PARTY: CLAY Wilson PHONE: 505-885-3996
- 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.

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

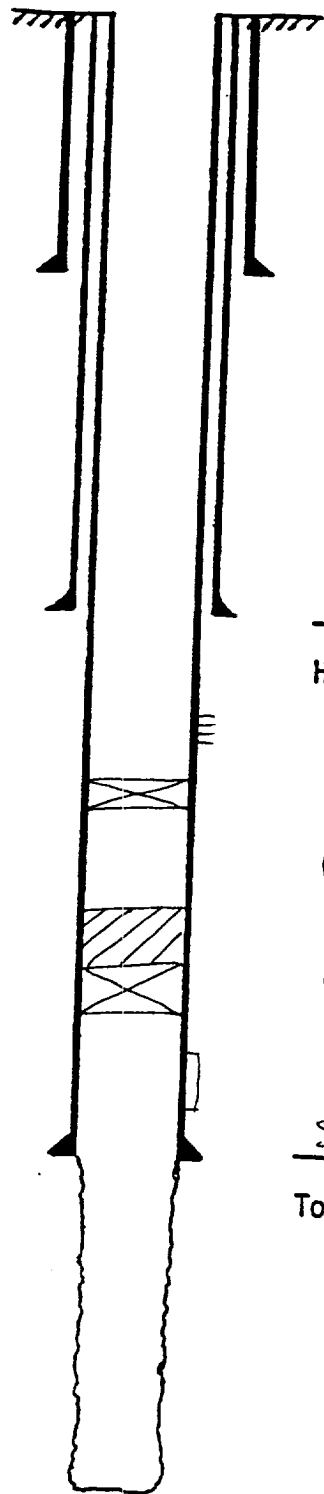
A copy of this application has been sent to :  
Bill McNeill Trustee M-Ranch, surface owner.  
928 W. Mesa Verde, Hobbs, New Mexico 88242



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-T195-137E  
Unit P

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

SAN 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"

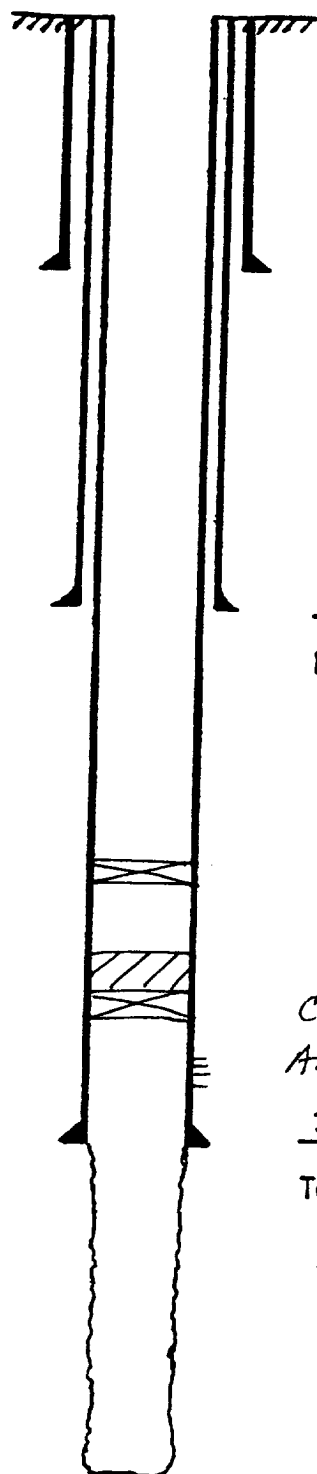
DV Tool set @ 4727'

1st	STAGE	530	SX	TOL	5950'
2nd	STAGE	530	SX	TOL	3000'

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-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 3118' with 1160 sx of \_\_\_\_\_ cement  
Hole size 12 1/4" Circulated

Injection Interval  
4464' - 5950'

CIBP @ 6000'

CIBP @ 7310' + 35' cmt  
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'

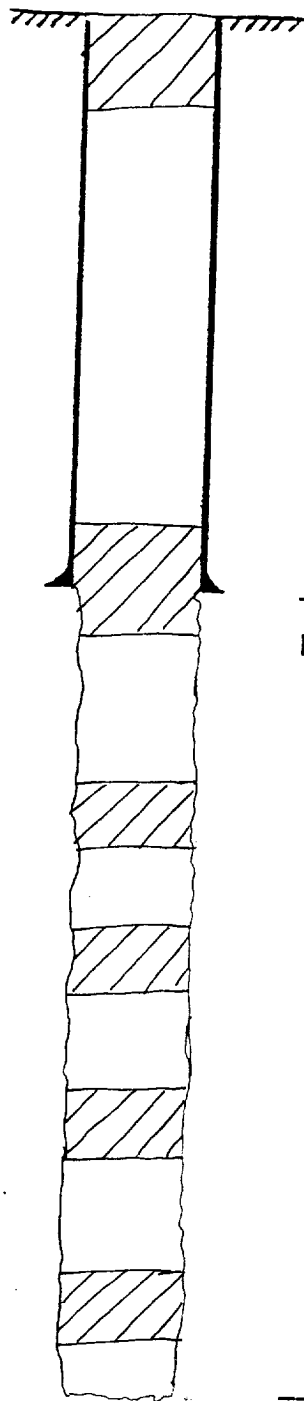
2nd STAGE 530 SX TOC 3000'





OPERATOR Jet Oil Company		DATE 6-3-98
LEASE McNeill	WELL No. 1	LOCATION 660' FNL + 660' FEL

Section 25-719S-1237E  
Unit A



15 sx plug @ 0-25'

8 5/8 " casing set at 360 ' with 235 sx of \_\_\_\_\_ cement  
Hole size 12 1/4 " Circulated

65 sx plug @ 410' - 310'

90 sx plug @ 1580' - 1480'

90 sx plug @ 2860' - 2760'

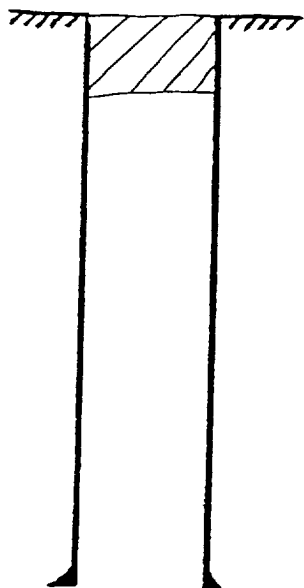
55 sx plug @ 3693' - 3593'

35 sx plug @ 4055' - 3955'

\_\_\_\_\_ " casing set at \_\_\_\_\_ ' with \_\_\_\_\_ sx of \_\_\_\_\_ cement  
Total Depth 4235 ' Hole size 7 7/8 "

OPERATOR <i>TEXAS CRUDE</i>		DATE <i>6-3-98</i>	
LEASE <i>1-25</i>	WELL No. <i>#1</i>	LOCATION <i>1980' FNL + 1990' FEL</i>	

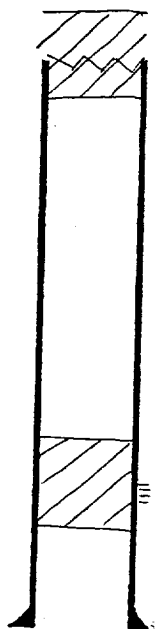
*Section 25-719S-R 37E  
Unit G*



*10 5x plug @ surface*

*P+A*

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



*10 5x plug @ 2470' to 2410'  
SHOT AND pulled  $5\frac{1}{2}$  csq @ 2430'*

*20 5x 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

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>	
Post Office, State, & ZIP Code <i>PO Box 552 Midland TX 79702</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>B. H. McNeill</i>	
Street & Number <i>928 W Main St</i>	
Post Office, State, & ZIP Code <i>Holden NM 88240</i>	
Postage	\$ <i>78</i>
Certified Fee	<i>135</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>213</i>
Postmark or Date	

PS Form 3800, April 1995

