

Case 9053
Dismissed
1-21-87
JRC

APPLICATION FOR AUTHORIZATION TO INJECT

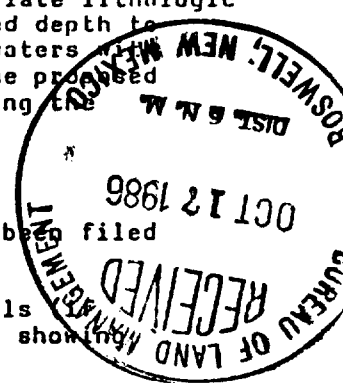
- I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage
Application qualifies for administrative approval? ☒ yes ☐ no
- II. Operator: Mewbourne Oil Company
Address: P. O. Box 7698, Tyler, Texas 75711
Contact party: Kenneth M. Calvert Phone: (214) 561-2900
- III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? ☐ yes ☒ 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 source 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 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: Kenneth M. Calvert Title Engineering Operations Mgr.
Signature: K.M. Calvert Date: October 13, 1986

If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

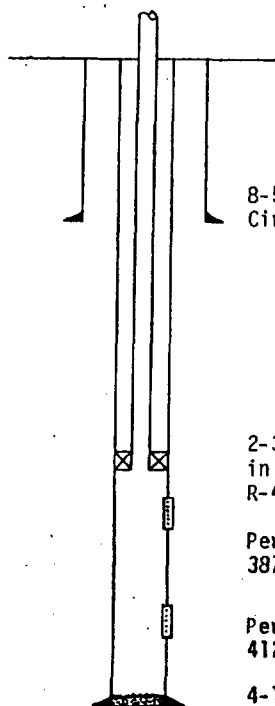
DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division district office.



INJECTION WELL DATA SHEET

MEWBOURNE OIL COMPANY		FEDERAL "E"			
OPERATOR		LEASE			
9	1980' FNL	330' FEL	28	18 S	32 E
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE	

Schematic



8-5/8" @ 1215'
Circ.

2-3/8" tbg set
in Halliburton
R-4 pkr @ 3800'

Perfs:
3875-3906'

Perfs:
4128-4152'

4-1/2" @ 4290'
Circ.

Tabular Data

Surface Casing

Size 8-5/8 " Cemented with 600 sx.

TOC SURFACE feet determined by CIRCULATED

Hole size 12- 1/4"

Intermediate Casing - none

Size _____ " Cemented with _____ sx.

TOC _____ feet determined by _____

Hole size _____

Long string

Size 4-1/2 " Cemented with 850 sx.

TOC SURFACE feet determined by CIRCULATED

Hole size 7-7/8"

Total depth 4290'

Injection interval

_____ feet to _____ feet
(perforated or open-hole, indicate which)

QUEEN 3875-3906'

PENROSE 4128-4152'

Tubing size 2-3/8" lined with PLASTIC set in a
(material)

HALLIBURTON R-4 packer at 3800 feet
(brand and model)

(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation QUEEN & PENROSE
- Name of Field or Pool (if applicable) QUERECHO PLAINS QUEEN (ASSOCIATED)
- Is this a new well drilled for injection? ☐ Yes ☒ No
If no, for what purpose was the well originally drilled? PRODUCING OIL WELL
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (socks of cement or bridge plug(s) used) NONE
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

OVERLYING - SEVEN RIVERS 3100'

UNDERLYING - NONE PENETRATED BY THIS WELLBORE. DELAWARE AT 6850' IS NEAREST UNDERLYING

PRODUCING OFFSETS TO FEDERAL "E" NO. 9 WITHIN ONE HALF MILE RADIUS (AREA OF REVIEW)

Operator Lease Well No.	Type	Construction	Date Drilled	Location	Depth	Completion Record
Lewis B. Burlleson, Inc. Anadarko Federal 3	Water injection well	Surf csg 10-3/4" @ 717' w/525 sx. Circ. Prod csg 7" @ 3830' w/225 sx. TC @ 2300' est.	09/26/73 SPD ✓	1650'/S 990'/W 27-18S-32E	02/05/74 4060' TD	Lost bit in hole @ 3915' TD. Junked. Cmt'd back to 3829'. Side tracked to 4060'. Frac'd (3875'- 4015') w/10,000 gal. & 20,000# SD
Lewis B. Burlleson, Inc. Anadarko Federal 4	Pumping oil well	Surf csg 8-5/8" @ 316' w/150 sx. "H". Circ. 25 sx. Prod csg 4-1/2" @ 4080' w/400 sx. "C". TC @ 2750'	06/01/74 SPD ✓	990'/S 990'/W 27-18S-32E	07/03/74 4080' TD	Perf'd 3885'-3917'. Aczd w/500 gal Frac'd w/10,000 gal. & 20,000# SD
Mewbourne Oil Co. Federal "E" 2	Pumping oil well	Surf csg 8-5/8" @ 1151' w/400 sx. HLC & 200 sx. "C" Prod csg 4-1/2" @ 4220' w/250 sx. HLC & 200 sx. "C" Circ.	09/19/77 SPD ✓	2310'/N 1980'/W 27-18S-32E	09/27/77 4220' TD	10/05/77 Perf'd (3910'-4041'). 10/06/77 Aczd w/1,000 gal. Frac'd w/40,000 gal. & 65,000# SD
Mewbourne Oil Co. Federal "E" 3	Pumping oil well	Surf csg 8-5/8" @ 1200' w/400 sx. HLC & 200 sx "C" Circ 35 sx. Prod csg 4-1/2" @ 4250' w/200 sx. "H" & 200 sx. "C"	07/09/78 SPD ✓	2310'/N 990'/W 27-18S-32E	07/16/78 4250' TD	07/26/78 Perf'd 3904'-3942'. Aczd w/3,000 gal. Frac'd w/40,000 gal & 55,000# SD 11/01/83 Perf'd 4148'-4178' 11/02/83 Aczd w/3,000 gal. Frac'd w/39,000 gal & 62,500# SD
Mewbourne Oil Co. Federal "G" 1	Pumping oil well	Surf csg 13-3/8" @ 441' w/550 sx. "C". Circ 25 sx. Int csg 8-5/8" @ 4505' w/1200 sx. HLC & 300 sx. sx. "C". Circ. 30 sx. Prod csg 5-1/2" @ 13,061' DV @ 12,290'. 1st stage - 280 sx. "H". 2nd stage - 1015 sx. HLC CBLITC 6,320'.	06/23/78 SPD ✓	1980'/S 1980'/W 27-18S-32E	08/23/78 13,061' TD	09/16/78 Perf'd 12,710'-719' 12,808'-12'; 12,814 09/20/78 Perf'd 12,693'-695'. 12,779'-782', 12,784', 12,785'. 09/21/78 Aczd w/6,000 gal 10/07/78 Frac'd w/15,960 gal, 9,000# SD & 5,000# Superprop. 04/11/80 Perf'd 9910'-44', 9958'- 78'. 04/16/80 Cmt rtnr @ 9950'. 04/19/80 BP @ 9850' w/10 sx. cmt. Perf'd 9750'-78'. 10/11/81 Perf'd 8862'-82', 8902'-

PRODUCING OFFSETS TO FEDERAL "E" NO. 9 WITHIN ONE-HALF MILE RADIUS (AREA OF REVIEW)

Operator Lease Well No.	Type	Construction	Date Drilled	Location	Depth	COMPLETION RECORD
Mewbourne Oil Company Federal "G" 1	Flowing Oil Well	13 3/4" @ 44' 550 SX Circ 8 5/8" 4505' 1200 SX + 3000' - Circ 5 1/2" 12,061' + 1115 SX - 200 SX + 1115 SX - CIRP - 9700 - 50' Cement - 5300 + 15' Lat cement P 506 - 8500 - 1440' Circled Base Spring	10/04/85 Spd	400' / S 660' / E 21-18S-32E	10/12/85 4225' TD	24' CIBP @ 9700'. 10/14/81 Aczd w/5,000 gal. 12/01/83 Frac'd w/13,000 gal. & 24,000# SD 12/02/83 Aczd w/1,500 gal. Frac'd w/42,000 gal & 74,000# SD 01/27/84 CIBP @ 8800' w/15' cnt. Perft'd 8506'-20', 8523-38'. 01/28/84 Aczd w/5,000 gal 01/29/84 Aczd w/5,000 gal 02/15/84 Frac'd w/40,000 gal. & 82,000# SD
Celtic Oil Corporation Cavalcade 21 Federal 4	Flowing Oil Well	Surf csg 8-5/8" @ 420' w/250 sx "C". Circ. 15 sx. Prod csg 4-1/2" @ 4220' w/860 sx HLC & 300 sx 50/50 Poz "C". TSITC @ 1480'. Bradenhead sqzd w/265 sx HLC.	10/04/85 Spd	400' / S 660' / E 21-18S-32E	10/12/85 4225' TD	Perft'd 4096'-4102' & 4108'-4130'. Aczd w/3000 gal.

PLUGGED OFFSETS TO FEDERAL "E" NO. 9 WITHIN ONE HALF MILE RADIUS (AREA OF REVIEW)

Operator Lease Well No.	Type	Construction	Date Drilled	Location	Depth	Completion Record
Burleson & Huff Anadarko Federal 1-A	Dry hole. P&A	Surf csg 8-5/8" @ 334' w/225 sx "C". Circ 20 sx Prod csg 4-1/2" @ 4045' w/450 sx	02/10/75 SPD	1650°/S 330°/E 28-18S-32E	02/22/75 4050' TD	Perf'd M. Queen (4003'-4017'). Aczd w/1000 gal. Frac'd w/7600 gal. & 15,200# SD. BP @ 3950' w/2 sx cmt. Perf'd 3985'-3997'. Aczd w/1000 gal. Frac'd w/10,000 gal. & 19,500# SD. P&A 09/16/75: 25 sk cmt plg @ 3615'-3965'. 25 sk cmt plg @ salt base, 2550'-2800'. Pld 2290.06' 4-1/2" csg. 35 sk cmt plg @ 2290' 35 sk cmt plg @ salt top, 1140'- 1240'. 35 sk surf csg shoe plg, 234'-334'. 10 sk cmt plg @ surf w/marker. Mud placed btw plgs.
H & S Anadarko 1	Junked. P&A	Surf csg 8-5/8" @ 450' w/200 sx	03/28/72 SPD	1980°/N 1980°/W 27-18S-32E	03/29/72 550' TD	Lost bit in hole, Junked & Abad.: 150' cmt plg @ 500'. 25 sk surf plg.
H & S Anadarko 1-Y	Dry Hole. P&A	Surf csg 8-5/8" @ 550' w/400 sx. Circ.	03/30/72 SPD	1980°/N 1995°/W 27-18S-32E	04/08/72 4200' TD	P&A 04/09/72: 100' cmt plg @ TD. 100' cmt plg @ salt base. 100' cmt plug @ surf csg shoe, 550'. 25 sk cmt plg @ surf w/marker.

PLUGGED OFFSETS TO FEDERAL "E" NO. 9
AREA OF REVIEW

WELL NAME: H&S
ANADARKO NO. 1-Y

LOCATION: 1980'/N 1995'/W
27-18S-32E

SPUD DATE: 03/30/72

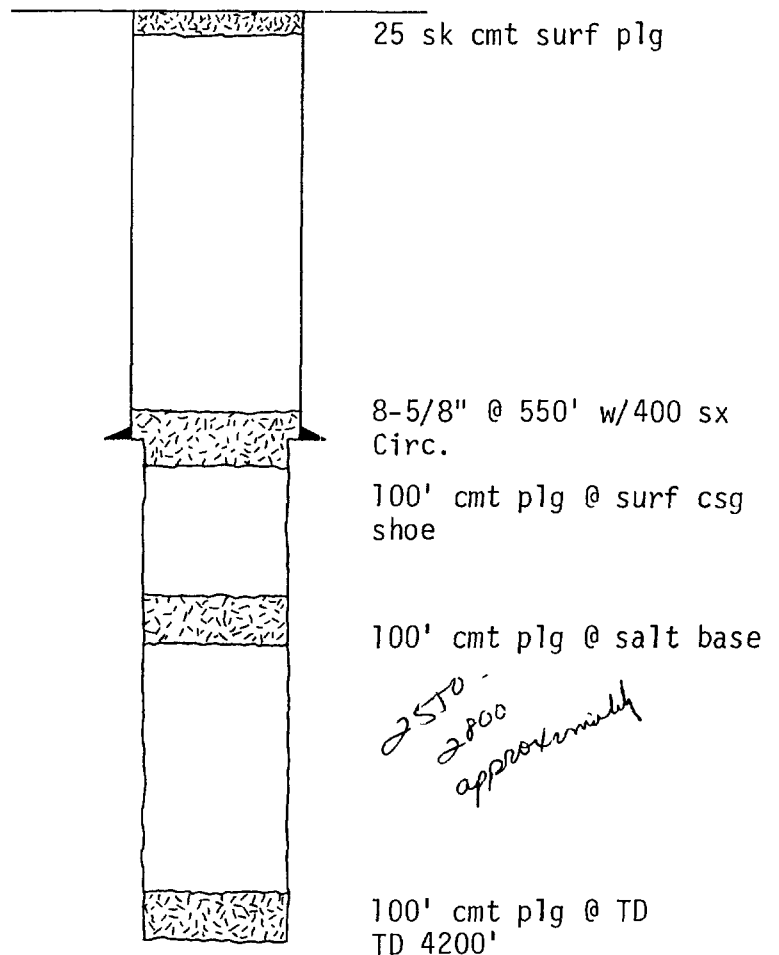
TOTAL DEPTH: 4200'

WELL TYPE: DRY HOLE

CASING: 8-5/8" @ 550' w/400 sx.
Circ.

COMPLETION: N/A

PLUGGING: 04/09/72
100' cmt plg @ TD
100' cmt plg @ salt base
100' cmt plg @ surf csg shoe, 550'
25 sk cmt plg @ surf w/marker



PLUGGED OFFSETS TO FEDERAL "E" NO. 9
AREA OF REVIEW

WELL NAME: H&S
ANADARKO NO. 1

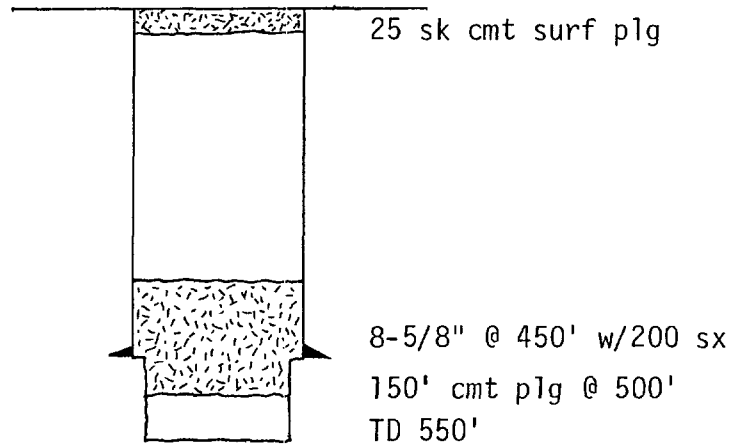
LOCATION: 1980'/N 1980'/W
27-18S-32E

SPUD DATE: 03/28/72

TOTAL DEPTH: 550'

WELL TYPE: JUNKED

CASING: 8-5/8" @ 450' w/200 sx



COMPLETION: N/A

PLUGGING: 03/29/72
Lost bit in hole. Junked.
150' cmt plg @ 500'
25 sk cmt surf plg

PLUGGED OFFSETS TO FEDERAL "E" NO. 9
AREA OF REVIEW

WELL NAME: BURLESON & HUFF
ANADARKO FEDERAL "A" NO. 1

LOCATION: 1650'/S 330'/E
28-18S-32E

SPUD DATE: 02/10/75

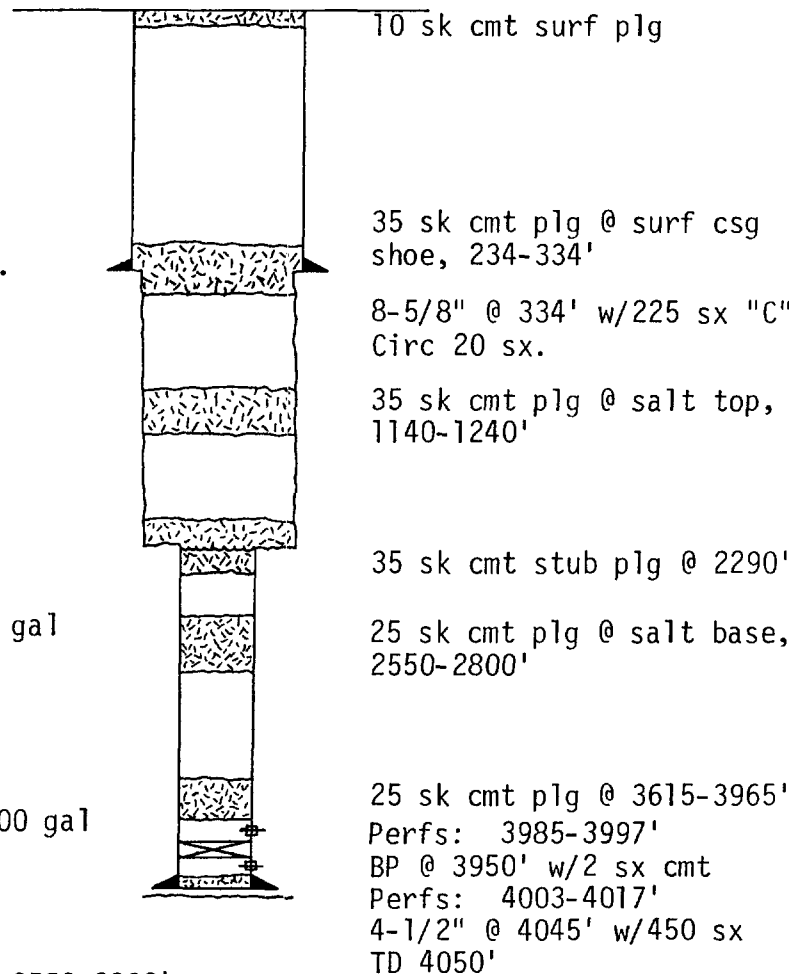
TOTAL DEPTH: 4050'

WELL TYPE: DRY HOLE

CASING: 8-5/8" @ 334' w/225 sx "C".
Circ 20 sx.
4-1/2" @ 4045' w/450 sx.

COMPLETION: Perf'd 4003-4017'. Aczd
w/1000 gal. Frac'd w/7600 gal
& 15,200# sd.
BP @ 3950' w/2 sx cmt.
Perf'd 3985-3997'. Aczd
w/1000 gal. Frac'd w/10,000 gal
& 19,500# sd.

PLUGGING: 09/16/75
25 sk cmt plg @ 3615-3965'
25 sk cmt plg @ salt base, 2550-2800'
Pl'd 2290' 4-1/2" csg
35 sk cmt stub plg @ 2290'
35 sk cmt plg @ salt top, 1140-1240'
35 sk cmt surf csg shoe plg @ 234-334'
10 sk cmt plg @ surf w/marker



MEWBOURNE OIL COMPANY
APPLICATION FOR AUTHORIZATION TO INJECT
FEDERAL "E" NO. 9
LEA COUNTY, NEW MEXICO

VII. Data on Proposed Operation.

1. Proposed average and maximum daily rate and volume of fluids to be injected:

A. Average Daily Injection Rate - 200 BPD

B. Maximum Daily Injection Rate - 300 BPD

2. The system is open.

3. Proposed average and maximum injection pressure:

A. Average Injection Pressure - 1800 PSIG

B. Maximum Injection Pressure - 2500 PSIG

4. Sources and an appropriate analysis of injection fluid.

Injected water will be composed of produced waters from the Queen-Penrose and Upper Bone Spring (8400-8600') formations in the approximate ratio of 2:3. Analysis of each water is included.

Fresh Water

Analytical Laboratory

MEWBOURNE OIL COMPANY
FEDERAL E-9
DL-2298

SEPTEMBER 4, 1986
LEA COUNTY, NEW MEXICO
PENROSE-QUEEN FORMATION
SUBMITTED BY: CECHEM CHEMICALS

DISSOLVED SOLIDS

CATIONS	MG/L	ME/L
SODIUM, Na (calc.)	74270	3229
CALCIUM, Ca	10827	540
MAGNESIUM, Mg	8991	739

ANIONS

CHLORIDE, Cl	158330	4465
SULFATE, SO ₄	2000	42
CARBONATE, CO ₃	0	0
BICARBONATE, HCO ₃	146	2

TOTAL DISSOLVED SOLIDS (calc.)

254565

IRON, Fe (total) 7
SULFIDE, as H₂S none detected

OTHER PROPERTIES

pH 7.3
SPECIFIC GRAVITY, 60/60 F. 1.173
RESISTIVITY (ohm-meters) 78 F. .04
HARDNESS, mg/L CaCO₃ 64060

REMARKS:

The Stiff-Davis equation indicates that the water has a Stability Index of 2.2 at 100 F. A positive index indicates a tendency toward calcium carbonate deposition.

The calculated solubility of calcium sulfate in this water is 19 me/L at 100 F. Analysis indicates the water contains 42 me/L, therefore calcium sulfate deposition is indicated.

R.S. DICKEY

Dickey

Analytical Laboratory

1308 S. Midkiff, Ste. 107
Midland, Texas 79703
915-687-2253

MEWBOURNE OIL COMPANY
FEDERAL E-12
LEA COUNTY, NEW MEXICO
DL-2151

JULY 25, 1986
BONE SPRINGS FORMATION
GUARACHO FIELD
SUBMITTED BY: CECHEM CHEMICALS

DISSOLVED SOLIDS

CATIONS	MG/L	ME/L
SODIUM, Na (calc.)	62268	2707
CALCIUM, Ca	2607	130
MAGNESIUM, Mg	1215	100

ANIONS

CHLORIDE, Cl	102240	2883
SULFATE, SO4	2160	45
CARBONATE, CO3	0	0
BICARBONATE, HCO3	561	9

TOTAL DISSOLVED SOLIDS (calc.)

171051

IRON, Fe (total) 21
SULFIDE, as H2S NONE DETECTED

OTHER PROPERTIES

pH 7.8
SPECIFIC GRAVITY, 60/60 F. 1.116
RESISTIVITY (ohm-meters) 80 F. .06
HARDNESS, mg/L CaCO3 11512

REMARKS:

The Stiff-Davis equation indicates that the water has a Stability Index of 1.6 at 80 F. A positive index indicates a tendency toward calcium carbonate deposition.

The calculated solubility of calcium sulfate in this water is 77 me/L at 80 F. Analysis indicates the water contains 45 me/L, therefore calcium sulfate deposition is not indicated.

R.S. DICKEY

MEWBOURNE OIL COMPANY
APPLICATION FOR AUTHORIZATION TO INJECT
FEDERAL "E" NO. 9
LEA COUNTY, NEW MEXICO

VIII. Geologic Data

Lithology - Permian, Guadalupian

Queen (3870'-3894')

Sandstone: Red, translucent to transparent, very fine to medium grained, consolidated and unconsolidated, friable, well rounded.

Queen (3894'-3905')

Sandstone: Gray, clear, very fine grained consolidated and unconsolidated, friable.

Penrose (4120'-4152')

Sandstone: Clear, frosted, gray, very fine grained, consolidated and unconsolidated, siliceous matrix; some frosted medium grains, unconsolidated, well rounded.

Penrose (4202'-4208')

Sandstone: Clear, consolidated, very fine grained, friable.

Fresh water aquifers (above 300') Triassic.

IX. Stimulation Program:

A non-emulsifying, iron sequestering acid will be used when necessary to maintain injectivity. Perforation density will be increased as dictated by injection pressures.

X. Logs on file with OCD.

XI. No producing fresh water wells within one mile. *None in Section 27
Some in Sect 28*

XII. Available Geological and Engineering Data have been examined *28,
34,
7* and no evidence of open faults or any other hydrologic connection between the Disposal Zone and any underground sources of Drinking Water have been found.

*Attached
Dec*

MEWBOURNE OIL COMPANY
APPLICATION FOR AUTHORIZATION TO INJECT
FEDERAL "E" NO. 9
LEA COUNTY, NEW MEXICO

CERTIFICATE OF SERVICE

I, Kenneth M. Calvert, Engineering Operations Manager, Mewbourne Oil Company, Operator of the Federal "E" No. 9, have on this 14th day of October, 1986, mailed or caused to be mailed, postage prepaid a copy of the Application For Authorization to Inject to the following persons at the address shown:

LAND OWNER

Bureau of Land Management
P. O. Box 1397
Roswell, New Mexico 88220

OFFSET OPERATORS

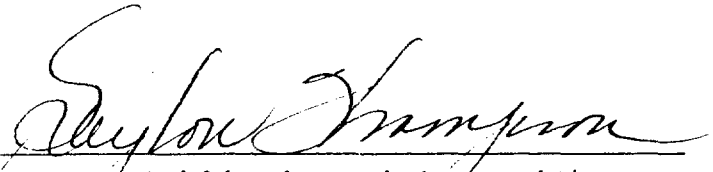
Lewis B. Burleson, Inc.
P. O. Box 2479
Midland, Texas 79702

Celtic Oil Corporation
P. O. Box 12550
Odessa, Texas 79768



Kenneth M. Calvert
Engineering Operations Manager

Subscribed in my presence and duly sworn to before me this 14th day of October, 1986.



Notary Public in and for Smith
County, Texas

My Commission Expires:

04/30/89

Affidavit of Publication

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

Joyce Clemens being first duly sworn on oath deposes and says that he is **Adv. Director** of THE LOVINGTON DAILY LEADER, a daily newspaper of general paid circulation published in the English language at Lovington, Lea County, New Mexico; that said newspaper has been so published in such county continuously and uninterruptedly for a period in excess of Twenty-six (26) consecutive weeks next prior to the first publication of the notice hereto attached as hereinafter shown; and that said newspaper is in all things duly qualified to publish legal notices within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico.

That the notice which is hereto attached, entitled
Notice Of Application For Fluid
Injection Well Permit

and numbered in the
..... Court of Lea
County, New Mexico, was published in a regular and
entire issue of THE LOVINGTON DAILY LEADER and
not in any supplement thereof, once each week on the
same day of the week, for one (1)
consecutive weeks, beginning with the issue of
October 24, 1986
and ending with the issue of
....., 19.....

And that the cost of publishing said notice is the
sum of \$ 8.84

which sum has been (Paid) (~~Assessed~~) as Court Costs

Joyce Clemens
Subscribed and sworn to before me this 27th
day of October, 1986

Mrs Jean Service
Notary Public, Lea County, New Mexico

My Commission Expires Sept. 28, 1990

LEGAL NOTICE
NOTICE OF APPLICATION FOR
FLUID INJECTION WELL PER-
MIT
NEUBOURNE OIL COMPANY
P.O. BOX 7698
TYLER, TEXAS 75711

SOUTH

has applied to the United States Department of the Interior, Bureau of Land Management, State of New Mexico, for a permit to inject fluid into a formation that is productive of oil or gas. The application proposes to inject fluid in the Queen and Penrose formations in the Federal "E" No. 9. The proposed injection well is located 11 1/4 miles North of Maljamar, New Mexico in the Querecho Plains-Queen (Associated) Field, Lea County, New Mexico. Fluid will be injected into strata in the subsurface depth interval from 3875 feet to 4152 feet.

Request for a public hearing from persons who can show they are adversely affected, or request for further information concerning any aspect of the application should be submitted in writing, within 15 days of publication, to the United States Department of the Interior, Bureau of Land Management, P.O. Box 1778, Carlsbad, New Mexico 88220, Telephone (505)887-6544.
Published in the Lovington Daily Leader October 24, 1986.

TATUM-LOVINGTON-HOBBS AREA, SOUTHERN HIGH PLAINS

TABLE 22.--WATER LEVELS IN THE TATUM-LOVINGTON-HOBBS AREA, LEA AND CHAVES COUNTIES, N. MEX., IN WINTER 1961, CHANGE FROM WINTER 1976 TO WINTER 1991, IN FEET, AND HIGHEST AND LOWEST RECORDED WINTER WATER LEVEL, IN FEET, REFERENCED TO LAND SURFACE DATUM.

LOCATION	OWNER NAME	SOURCE	R1 WATER LEVEL	DATE	CHANGE	HIGH	YP	LOW	YP	YEARS OF RECORD
175 38F 35 143	EMMA C. LAWRENCE	OGEL	-69.34	2-19	-7.91	-42.19	61	-68.34	81	61,66,71,76,81
175 38F 35 272	JOHN MILLER	OGEL	-52.37	2-19	-	-52.37	81	-52.37	81	81
175 38F 35 423	M.K. CHAMBERS	OGEL	-79.44	2-19	-9.07	-70.37	76	-79.44	81	76,81
175 38F 36 212	EMMA LAWRENCE	OGEL	-73.39	1-06	-	-59.60	50	-73.39	81	50-81
175 39F 17 111	WAYNE WAGNON	OGEL	-87.85	2-17	-	-87.85	81	-87.85	81	81
175 39F 17 443	WAYNE WAGNON	OGEL	-102.62	2-17	-	-102.62	81	-102.62	81	81
175 39F 18 373	C. F. BROOKS	OGEL	-89.08	2-17	-6.87	-71.25	61	-89.08	81	61,71,76,81
175 39F 18 371	C. F. BROOKS	OGEL	-86.44	2-17	-	-86.44	81	-86.44	81	81
175 39F 20 472	UNKNOWN	OGEL	-104.05	2-18	-	-104.05	81	-104.05	81	81
175 39F 29 414	UNKNOWN	OGEL	-105.91	2-18	-	-105.91	81	-105.91	81	81
175 39F 30 232	EMMA LAWRENCE	OGEL	-86.98	1-06	-	-80.79	80	-86.98	81	80-81
175 39F 30 414	EMMA LAWRENCE	OGEL	-79.74	2-18	-	-79.74	81	-79.74	81	81
175 39F 31 243	WALTER PARKER	OGEL	-70.45	2-18	-7.08	-58.10	61	-70.45	81	61,66,71,76,81
175 39F 32 413	M. V. LAWRENCE	OGEL	-91.23	2-18	-6.80	-76.76	61	-91.23	81	61,66,71,76,81
185 32F 07 442	LITMAN RANCH	ALUM	-82.19	3-12	-	-82.19	81	-82.19	81	76,81
185 32F 70 144	NEWMONTE OIL CO.	CHNL	-168.77	3-12	-	-168.77	81	-179.35	71	68,71,76,81
185 32F 72 373	FT. CORR. OF TEXAS	CHNL	-428.24	3-12	-	-428.24	81	-434.41	71	68,71,76,81
185 32F 34 272	UNKNOWN	CHNL	-117.28	3-12	-	-117.28	81	-117.46	68	65,68,71,76,81
185 33F 10 232	GEORGE WILLIAMS	ALUM	-57.04	2-20	+0.82	-57.04	81	-57.86	76	65,68,76,81
185 33F 11 443	GEORGE WILLIAMS	ALUM	-43.57	2-20	-0.58	-42.40	71	-43.57	81	66,71,76,81
185 33F 12 442	SCHARRAUER CATTLE CO.	OGEL	-138.91	2-20	-1.25	-137.22	61	-138.91	81	61,66,71,76,81
185 33F 13 442	CANDER DRG. CO.	ALUM	-46.88	2-20	-0.31	-46.55	76	-47.22	66	61,66,71,76,81
185 33F 14 111	GEORGE WILLIAMS	ALUM	-37.98	2-20	-1.57	-35.20	71	-37.98	81	54,61,65,66,68,71,76,81
185 33F 23 231	MARCUS T. KFUHANE	ALUM	-47.63	2-20	-1.32	-46.55	71	-47.63	81	61,66,71,76,81
185 34F 01 172	TEXACO	OGEL	-105.86	3-11	-11.94	-79.69	61	-105.86	81	61,76,81
185 34F 02 213	KENMAC POTASH	OGEL	-130.37	3-11	-	-130.37	81	-130.37	81	77,81
185 34F 04 111	MESA PETALERS INC.	OGEL	-137.31	3-12	-5.58	-121.42	61	-137.31	81	61,66,71,76,81
185 34F 08 231	SCHARRAUER CATTLE CO.	OGEL	-111.29	3-12	-2.32	-107.53	71	-111.29	81	71,76,81
185 34F 11 344	NATIONAL POTASH CO.	OGEL	-115.93	3-12	-	-	-	-	81	81
185 34F 12 172	SCHARRAUER CATTLE CO.	OGEL	-99.78	3-11	-4.74	-95.04	76	-99.78	81	76,81
185 34F 15 241	SCHARRAUER CATTLE CO.	OGEL	-108.75	3-12	+0.42	-108.75	81	-109.17	76	61,71,76,81
185 34F 18 411	OHIO OIL CO.	OGEL	-146.16	2-20	+0.01	-143.70	71	-146.17	76	66,68,71,76,81
185 34F 20 373	SCHARRAUER CATTLE CO.	ALUM	-96.30	2-20	+2.73	-96.30	81	-101.39	66	61,66,71,76,81
185 34F 22 374	CHANDLER	OGEL	-110.92	1-06	-0.93	-109.72	67	-110.92	81	61,65,77,79-81
185 34F 27 333	SCHARRAUER CATTLE CO.	OGEL	-110.10	2-20	+0.52	-110.10	81	-110.62	76	61,66,71,76,81
185 34F 29 112	UNKNOWN	ALUM	-57.06	2-20	+0.41	-57.06	81	-61.93	68	68,71,76,81
185 34F 30 111	IRAX COMPANY	ALUM	-43.24	2-20	+0.25	-43.24	81	-44.79	66	61,66,71,76,81
185 35F 01 171	R. D. LFE	OGEL	-46.57	3-05	-4.22	-41.33	71	-46.57	81	71,76,81
185 35F 02 142	R. D. LFE	OGEL	-43.80	3-11	-3.09	-37.42	61	-43.80	81	61,66,71,76-77,81
185 35F 03 412	R. D. LFE	OGEL	-51.92	3-11	-2.88	-45.66	61	-51.92	81	61,66,71,76,81
185 35F 04 431	UNKNOWN	OGEL	-56.77	3-10	+4.51	-56.77	81	-61.28	76	64,71,76,81
185 35F 06 233	VIDIA LFE	OGEL	-92.14	3-11	-8.82	-83.32	76	-92.14	81	73,76,81
185 35F 06 344	A. W. THOMPSON, INC.	OGEL	-91.00	3-06	-	-91.00	81	-91.00	81	77,81
185 35F 07 313	MARIL OIL CO.	OGEL	-93.28	3-06	+2.40	-93.28	81	-98.16	71	71,76,81
185 35F 07 423	NATIONAL POTASH CO.	OGEL	-82.70	3-06	-0.51	-82.70	76	-82.70	81	76,81
185 35F 10 223	HANAGAN OIL CO.	OGEL	-53.02	3-11	-4.02	-47.31	66	-53.02	81	66,71,76,81
185 35F 11 371	R. D. LFE	OGEL	-52.01	3-11	-	-52.01	81	-52.01	81	81
185 35F 11 333	R.D. LFE	OGEL	-44.67	3-11	-7.19	-37.48	76	-44.67	81	61,66,71,76,81
185 35F 16 122	SCHARRAUER CATTLE CO.	OGEL	-76.66	3-11	-13.24	-63.42	76	-76.66	81	71,76,81
185 35F 17 411	M. MEY. ELECTRIC SERV.	OGEL	-75.94	1-06	-1.32	-69.46	56	-75.94	81	53-81
185 35F 19 133	SCHARRAUER CATTLE CO.	OGEL	-70.46	3-10	-1.18	-69.28	76	-70.46	81	61,66,71,76,81
185 35F 20 214	M. MEY. ELECTRIC SERV.	OGEL	-75.12	1-06	-1.44	-72.16	61	-75.12	81	53-81,60-77,81
185 35F 20 411	M. MEY. ELECTRIC SERV.	OGEL	-77.90	3-13	-1.05	-75.70	54	-77.90	81	53-81,60-62,67,71,76,81
185 35F 21 440	MISS. CHEMICAL CORP.	OGEL	-76.68	3-06	-	-64.38	71	-64.76	61	61,66,71,81
185 35F 22 430	MISS. CHEMICAL CORP.	OGEL	-57.42	3-13	-	-57.42	81	-57.42	81	81
185 35F 28 372	SCHARRAUER CATTLE CO.	OGEL	-50.65	3-06	-1.38	-49.27	76	-52.02	61	61,66,71,76,81
185 35F 31 142	SWYDER CATTLE CO.	OGEL	-69.21	3-10	+1.06	-69.21	81	-70.27	76	71,76,81
185 35F 34 431	SWYDER RANCHES	OGEL	-26.41	3-06	-1.39	-25.02	76	-26.41	81	76,81
185 36F 01 131	ORRITHY T. SCHARRAUER	OGEL	-33.47	3-05	-2.74	-30.73	76	-33.47	81	61,66,71,76,81
185 36F 03 241	ORRITHY SCHARRAUER	OGEL	-51.93	3-05	-3.36	-46.16	71	-51.93	81	61,66,71,76,81
185 36F 04 411	SWYDER RANCH	OGEL	-54.89	3-04	-	-54.89	81	-54.89	81	81
185 36F 05 411	S. W. P. S. C.	OGEL	-59.56	3-03	-0.83	-49.49	66	-59.56	81	61,66,71,76,81
185 36F 06 372	S. W. P. S. C.	OGEL	-52.36	3-03	-0.61	-46.39	66	-52.36	81	61,66,71,76,81
185 36F 07 372	S. W. P. S. C.	OGEL	-55.74	3-03	-1.18	-50.90	66	-55.74	81	61,66,71,76,81
185 36F 08 144	S. W. P. S. C.	OGEL	-54.52	3-05	-2.83	-45.67	66	-54.52	81	61,66,71,76,81
185 36F 09 411	S. W. P. S. C.	OGEL	-50.69	3-03	-2.70	-40.79	66	-50.69	81	61,66,71,76,81
185 36F 10 411	S. W. P. S. C.	OGEL	-48.67	3-03	-1.86	-37.43	66	-48.67	81	61,66,71,76,81
185 36F 11 144	S. W. P. S. C.	OGEL	-56.25	3-03	-0.80	-45.28	61	-56.25	81	61,66,71,76,81
185 36F 12 233	JERRY P. JUDGE	OGEL	-37.97	3-05	-3.23	-30.02	61	-37.97	81	61,66,71,76,81
185 36F 12 311	S. W. P. S. C.	OGEL	-43.18	3-03	-3.00	-39.02	71	-43.18	81	61,66,71,76,81
185 36F 13 144	S. W. P. S. C.	OGEL	-31.36	3-04	-2.95	-25.62	71	-31.36	81	71,76,81
185 36F 14 144	S. W. P. S. C.	OGEL	-49.10	3-04	-4.41	-37.69	61	-49.10	81	61,66,71,76,81
185 36F 15 144	S. W. P. S. C.	OGEL	-54.29	3-04	-2.55	-45.93	66	-54.29	81	61,66,71,76,81
185 36F 15 433	UNKNOWN	OGEL	-46.29	3-04	-	-46.29	81	-46.29	81	81
185 36F 16 411	S. W. P. S. C.	OGEL	-52.53	3-05	-1.54	-43.51	66	-52.53	81	61,66,71,76,81
185 36F 17 322	S. W. P. S. C.	OGEL	-49.83	3-05	-4.84	-39.66	66	-49.83	81	61,66,71,76,81
185 36F 18 144	S. W. P. S. C.	OGEL	-55.30	3-04	-5.66	-39.52	61	-55.30	81	61,66,71,76,81
185 36F 19 372	S. W. P. S. C.	OGEL	-58.12	3-05	-8.53	-48.70	66	-58.12	81	61,66,71,76,81
185 36F 20 411	S. W. P. S. C.	OGEL	-51.05	3-04	+2.25	-44.28	66	-51.05	76	61,66,71,76,81
185 36F 21 411	S. W. P. S. C.	OGEL	-50.13	3-04	-0.38	-44.08	66	-50.13	81	61,66,71,76,81

C nearby well being pumped

D nearby well pumped recently