STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501

FORM C-108
Revised 7-1-81

BEFORE EXAMINER QUINTANA
OIL CONSERVATION DIVISION
EXHIBIT NO. 2
CASE NO. 8702

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage
Application qualifies for administrative approval? ☒ yes ☐ no

II. Operator: M & W OF LOVINGTON, INC.

Address: P.O. BOX 922, LOVINGTON, N.M. 88260

Contact party: Johnie W. Wilson Pres. Phone: 505 396-4663

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 (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: Johnie W. Wilson Title PRESIDENT

Signature: Johnie W. Wilson Date: 9/10/85

* 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.

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;

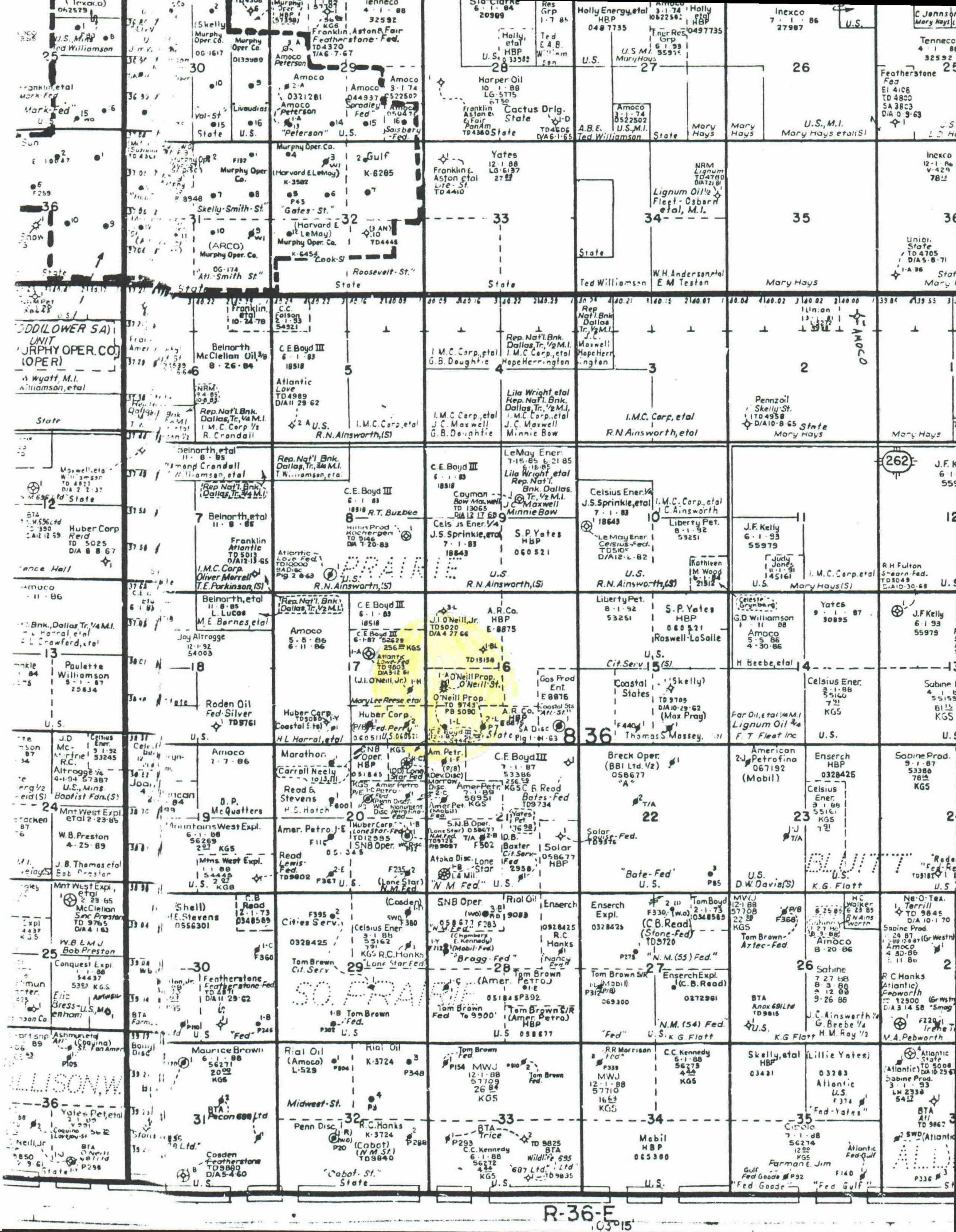
(2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;

(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, P. O. Box 2088, Santa Fe, New Mexico 87501 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.



R-36-E
PRAIRIE
SO. PRAIRIE
Murphy Oper. Co.
Skelly-Smith-St.
"Gates-St."
Cook-St
Roosevelt-St.
Atl.-Smith St.
Amoco
Sprodley Fed
"Peterson"
Cactus Drlg. State
Harper Oil
Ted Williamson
Mary Hays
Lignum Oil 1/2 Fleet-Osborn etal, M.I.
W.H. Anderson, etal E.M. Teston
Inexco
Tenneco
Featherstone Fed
Union State
Belnorth McClellan Oil
C.E. Boyd III
Atlantic Love
I.M.C. Corp., etal
R.N. Ainsworth, (S)
R.N. Ainsworth, etal
Pennzoil Skelly-St.
Rep. Nat'l. Bnk. Dallas, Tr., 1/4 M.I.
Belnorth, etal
Huber Corp Reid
Franklin Atlantic
Oliver Morrell
T.E. Parkinson, (S)
R.T. Buzbee
S.P. Yates HBP
J.S. Sprinkle, etal
Celsius Ener.
Liberty Pet.
J.F. Kelly
Mary Hays (S)
Joy Altrogge
Paulette Williamson
Roden Oil Fed-Silver
J.I. O'Neill, Jr.
O'Neill Prop.
A.R. Co. HBP
Huber Corp.
H L Harral, etal
Coastal States
Roswell-LaSalle
Thomas S. Massey
F. T. Fleet Inc
Amoco
Marathon
Carroll Neely
Read & Stevens
C.F. Boyd III
Breck Oper.
American Petrofina
Ensearch HBP
Sabine Prod.
Mountains West Expl.
Solar Louise-Fed.
"Bate-Fed"
D.W. Davis (S)
K.G. Flatt
"N M Fed."
SNB Oper.
Rial Oil
Ensearch
Cities Serv.
Tom Brown Cit. Serv
Tom Brown
"Bragg-Fed"
(C.B. Read) (Stone-Fed)
"N.M. (55) Fed."
"N.M. (54) Fed."
Featherstone
Conquest Expl.
Maurice Brown
Rial Oil (Amoco)
Midwest-St.
R.C. Hanks
Penn Disc.
"Cobot-St." State
Mobil HBP
Skelly, etal
Atlantic U.S.
"Fed-Yates"
"Fed Goode"
"Fed Gulf"
Pecon 688 Ltd
Cosden Featherstone
C.C. Kennedy
Parman E. Jim
U.S.
State

WELLS WITHIN
AREA OF REVIEW

Operator	Well Name	Location	TD
M & W	St. 'L' No. 1	Sec. 16, T-8S, R-36E 660' FSL & 660' FEL	9737'
Joseph O'Neill	St. 'L' No. 2	Sec. 16, T-8S, R-36E 660' FSL & 1980' FWL	5023'
Joseph O'Neill	St. 'L' No. 3	Sec. 16, T-8S, R-36E 660' FNL & 660' FWL	5020'
Sunset Pet.	O'Neill 'A' St. No. 1	Sec. 16, T-8S, R-36E 660' FWL & 2130' FSL	5460'
Atlantic Richfield	St. 'BL' No. 1	Sec. 16, T-8S, R-36E 1980' FNL & 1980' FWL	13138'
Joseph O'Neill	Fed. 'H' No. 1	Sec. 17, T-8S, R-36E 1874' FSL & 554' FEL	9693'
J. M. Huber	Perry Fed. No. 2	Sec. 17, T-8S, R-36E 660' FSL & 660' FEL	5046'
Cosden Pet.	Fed. 'F' No. 1	Sec. 21, T-8S, R-36E 660' FNL & 660' FWL	9725'

M & W
State 'L' No. 1
660' FSL & 660' FWL
Sec. 16, T-8S, R-36E

Spudded 5/15/61.
15" hole. Set 11 3/4" 42# H-40 csg @ 411' w/500 sx. Circ.
11" hole. Set 8 5/8" 32# H-40 & J-55 csg @ 4249' w/1012 sx. Circ.
7 5/8" hole. Set 4 1/2" 9.5# J-55 & 11.6# J-55 & N-80 csg @ 9737' w/400 sx. TOC @ 7075' by temp survey.
Perfs: 9685-92'.
10/20/64 csg collapsed @ 6629'. Spotted 30 sx @ 6629' & displaced downhole 150'. Plug from 6372-6778'. CIBP @ 5100' w/10' cmt cap.
Perfs: 4800, 08, 12, 19, 39, 42, 44, 52, 54'.
IP = 41 BOPD + 28 BWPD (San Andres)

Currently San Andres producer.

Sunset Petroleum Corporation
O'Neill 'A' State No. 1
660' FWL & 2130' FSL
Sec. 16, T-8S, R-36E

Spudded 3/5/65.
11" hole to 2256'. Set 8 5/8" 24# & 32# csg @2256'. Cmt w/ 660 sx. Circ 50 sx.
7 7/8" hole to 5460'. Set 4 1/2" 9.5# csg @ 5071'. Cmt w/200 sx.
TOC @ 4250' by temp survey.
Perfs: (Gross Interval) 4792-4992'.
IP = 16 BOPD.
P&A 8/26/75.
20 sx @ 5000'.
40 sx @ 4100' across 4 1/2" stub.
80 sx @ 2256' across 8 5/8" shoe.
10 sx @ surf.

Joseph O'Neill
State 'L' No. 2
660' FSL & 1980' FWL
Sec. 16, T-8S, R-36E

Spudded 7/26/65.
12 1/4" hole to 266'. Set 8 5/8" 24# csg @ 266'. Cmt w/236 ft^3.
Circ 15 sx.
7 7/8" hole to 5023'. Set 4 1/2" 9.5# csg @ 5023'. Cmt w/240 ft^3.
TOC @ 4100' by temp survey.
Perfs: (Gross Interval) 4852-5001'.
IP = 7 BOPD.
P&A 7/16/76.
70 sx @ 5022-4459'.
10 sx @ 2920-2791'.
10 sx @ 2310-2181'.
60 sx @ 1450-1350' across 4 1/2" stub @ 1425'.
60 sx @ 317-119'.
5 sx @ surf.

Joseph O'Neill
State 'L' No. 3
660' FNL & 660' FWL
Sec. 16, T-8S, R-36E

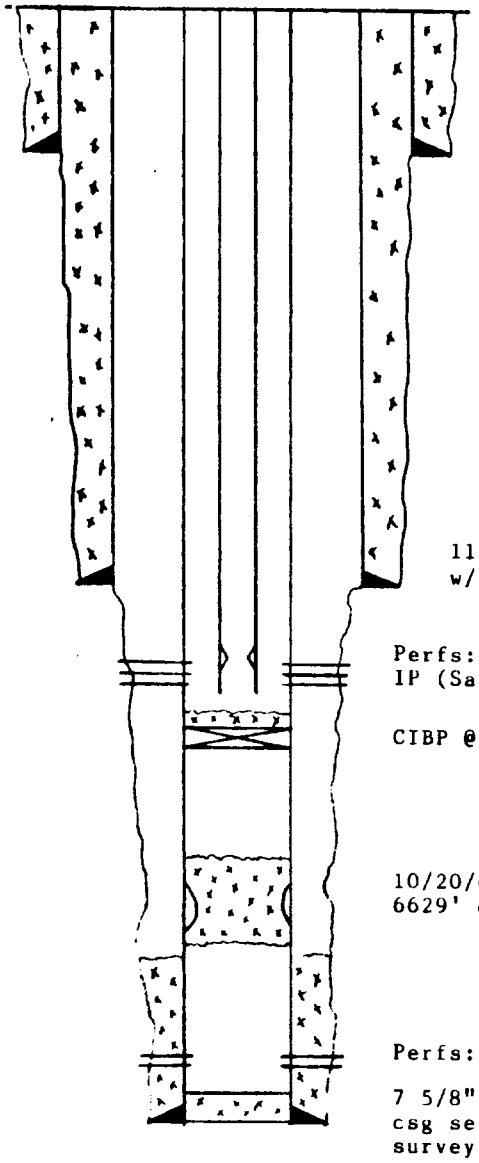
Spudded 2/8/66.
12 1/4" hole to 329'. Set 8 5/8" 32# csg @ 329'. Cmt w/210 sx. Circ 10 sx.
7 7/8" hole to 5020'. Set 4 1/2" 11.6# & 9.5# csg @ 5031'. Cmt w/200 sx. TOC @ 4100' by temp survey.
Perfs: (Gross Interval) 4890-4950'.
Never produced.
P&A 4/27/66.
10 sx @ 5020-4920'.
25 sx @ 4047' across 4 1/2" stub @ 4022'.
25 sx @ 3256'.
25 sx @ 2256'.
25 sx @ 312'.
10 sx @ surf.

J. M. Huber
Perry Federal No. 2
660' FSL & 660' FEL
Sec. 17, T-8S, R-36E

Spudded 10/16/65.
12 1/4" hole. Set 8 5/8" 24# J-55 csg @ 424' w/275 sx. Circ.
7 7/8" hole. Set 4 1/2" 9.5# J-55 csg @ 5046' w/250 sx. TOC @ 4013' by temp survey.
Perfs: (Gross Interval) 4803-58', 4901-05', 4911-26', 4940-46', 4963-79'
P&A 6/84.
Cut 2 3/8" tbg @ 4150'.
Cmt ret @ 4105'. Sqz 25 sx. Spotted 5 sx on top.
Tagged cmt @ 4035'.
Shot csg @ 2770'. Spotted 30 sx 2826-2400'.
Sqz 20 sx thru hole @ 2770'.
Tagged plug @ 2683'.
Shot csg @ 2290'. Spotted 30 sx 2346-1920'.
Sqz 25 sx thru holes @ 2290'.
Tagged @ 2280'. Spotted 10 sx 2280-2130'.
Shot csg @ 1000'.
Shot csg @ 800'. Rec 805' - 4 1/2" csg.
Spotted 30 sx @ 850'. Tagged @ 732'.
Spotted 30 sx @ 475-375'.
Spotted 14 sx 56'-surf.
2 3/8" tbg 4862-4150'.
Pump w/rds & fishing tool. Top of junk @ 4160'.
Baker Lck-Set @ 4962'.

M & W
State 'L' No. 1
660' FSL & 660' FWL
Sec. 16, T-8S, R-36E

Spudded 5/15/61.



15" hole. 11 3/4" 42# H-40 csg set @ 411' w/500 sx. Circ.

11" hole. 8 5/8" 32# H-40 & J-55 csg set @ 4249' w/1012 sx. Circ.

Perfs: 4800, 08, 12, 19, 39, 42, 44, 52, 54'.
IP (San Andres) = 41 BOPD + 28 BWPD.

CIBP @ 5100' w/10' cmt cap.

10/20/64 csg collapsed @ 6629'. Spotted 30 sx @ 6629' & displaced downhole 150'. Plug 6372-6778'.

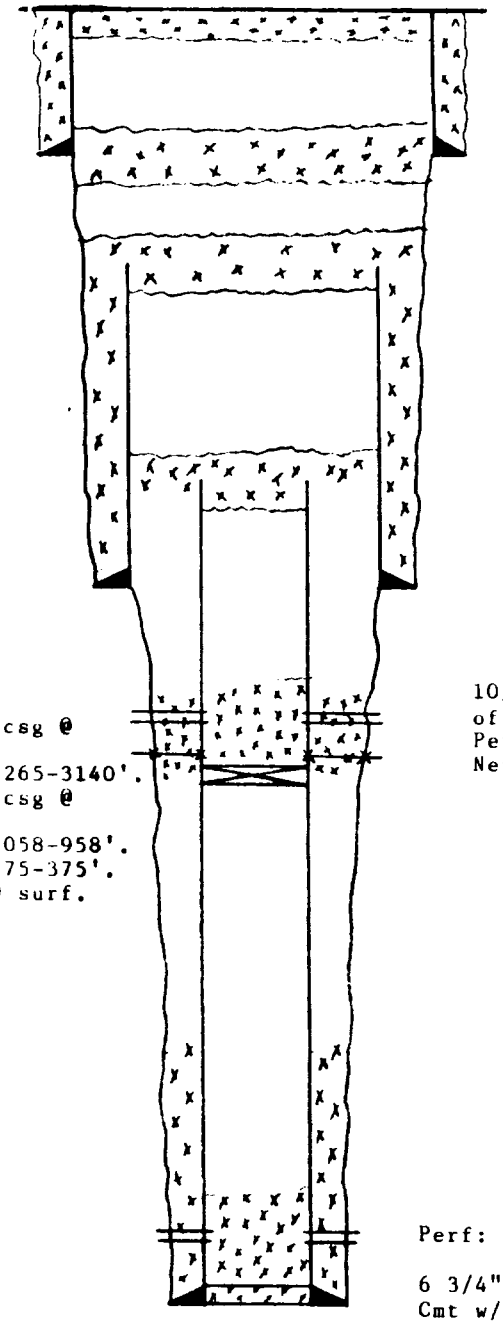
Perfs: 9685-92'.

7 5/8" hole. 4 1/2" 9.5# J-55 & 11.6# J-55 & N-80 csg set @ 9737' w/400 sx. TOC @ 7075' by temp survey.

Currently producing from the San Andres.

Joseph I. O'Neill
Federal 'H' No. 1
1874' FSL & 554' FEL
Sec. 17, T-8S, R-36E

Spudded 10/12/61



15" & 17" hole to 421'. Set 10 3/4" 32.75# csg @ 421'. Cmt w/450 sx. Circ 30 sx.

9 7/8" hole to 4208'. Set 7 5/8" 26.4# csg @ 4208'. Cmt w/504 sx.

P&A 6/30/70.
Cmt 5310-4832'.
Cut off 4 1/2" csg @ 3365'.
Spotted 30 sx 3265-3140'.
Cut off 7 5/8" csg @ 1008'.
Spotted 45 sx 1058-958'.
Spotted 50 sx 475-375'.
Spotted 50 sx @ surf.

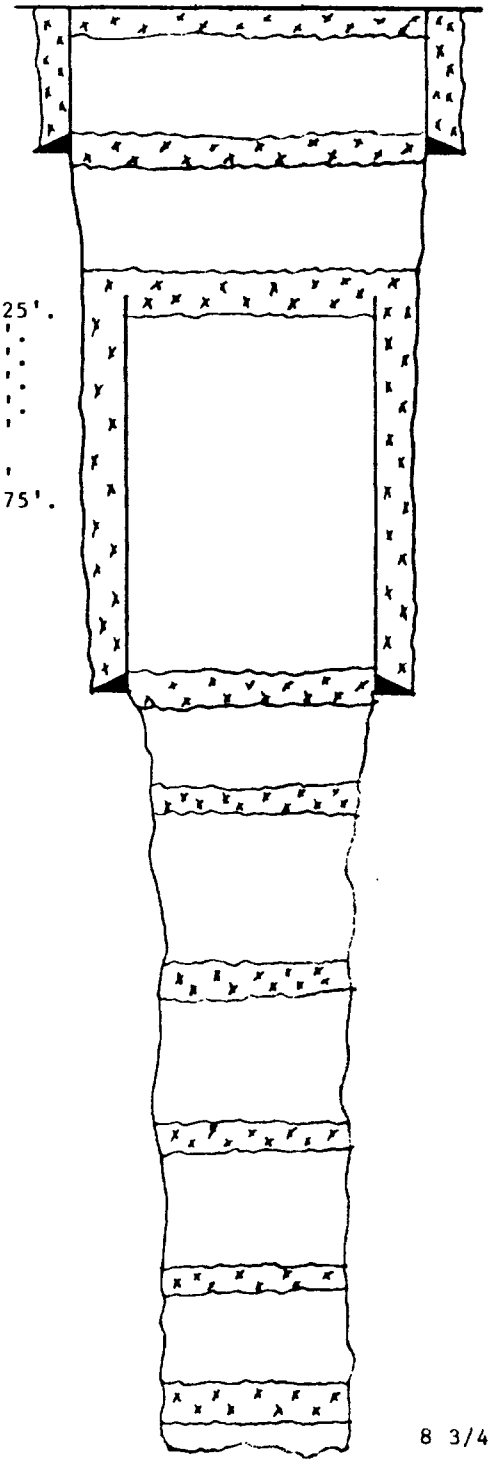
10/17/69 PB to San Andres. Spotted 110' cmt btm of hole. CIBP @ 5310'. Perf 5300'. Sqz cmt.
Perfs: (San Andres) 4982-5133'.
Never produced.

Perf: 9671-9677'. IP = 261 BOPD.

6 3/4" hole to 9693'. Set 4 1/2" 11.6# csg @ 9681'. Cmt w/320 sx.

Atlantic Richfield Co.
State 'BL' No. 1
1980' FNL & 1980' FWL
Sec. 16, T-8S, R-36E

Spudded 6/11/69.



17 1/2" hole to 381'. Set 13 3/8" 48# csg @ 381' w/400 sx. Circ.

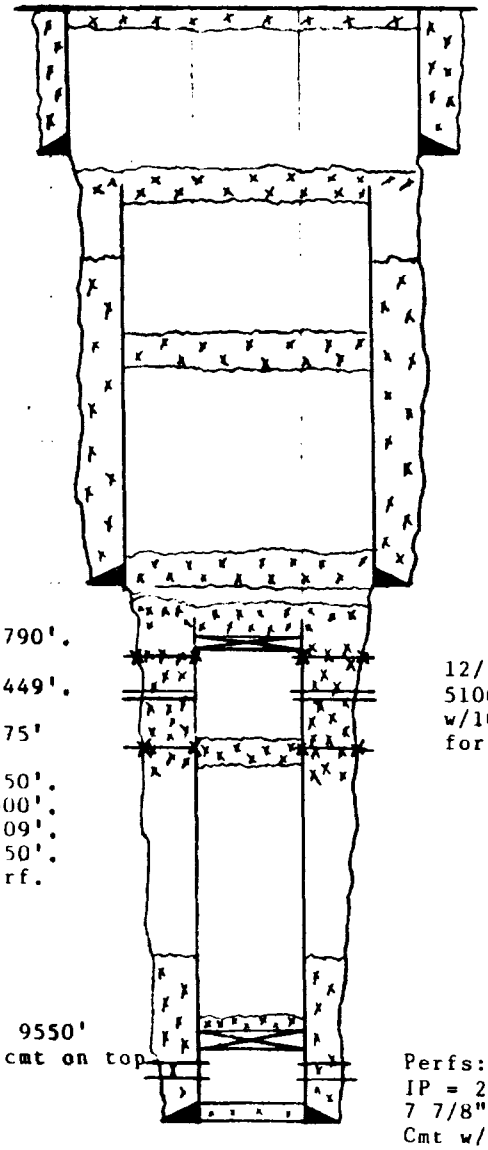
P&A 8/19/69.
Spotted 35 sx 13035-13125'.
Spotted 25 sx 9485-9550'.
Spotted 25 sx 8965-9030'.
Spotted 25 sx 7715-7800'.
Spotted 25 sx 5445-5510'.
Spotted 25 sx 4065-4122'
across 9 5/8" shoe.
Spotted 50 sx 1447-1525'
across 9 5/8" stub @ 1475'.
Spotted 25 sx 367-398'
across 13 3/8" shoe.
Spotted 10 sx @ surf.
Mud between all plugs.

12 1/4" hole to 4091'. Set 9 5/8" 36# & 32.3# csg @ 4091'. Cmt w/750 sx.

8 3/4" hole to 13138'.

Cosden Petroleum Corporation
Federal 'F' No. 1
660' FNL & 660' FWL
Sec. 21, T-8S, R-36E

Spudded 3/10/61.



17 1/2" hole to 469'. Ran 469' of 13 7/8" 48# csg. Cmt w/450 sx. Circ.

12 1/4" hole to 4200'. Ran 4200' of 8 5/8" 24# & 32# csg. Cmt w/1800 sx. TOC @ 1300' by temp survey.

12/10/71 recomp to San Andres. Perf 4 holes @ 5100'. Cmt w/200 sx. Perf 4 holes @ 4800'. Cmt w/100 sx. Drld out cmt to 5064'. Perf San Andres for production 4846-4975'. IP = 8 BOPD.

CIBP @ 4790'.
P&A 3/1/76.
Cut 4 1/2" csg @ 4449'.
Loaded hole w/mud.
Spotted 35 sx @ 4475' across stub.
Spotted 40 sx @ 4250'.
Spotted 35 sx @ 2000'.
Cut 8 5/8" csg @ 509'.
Spotted 125 sx @ 550'.
Spotted 15 sx @ surf.

CIBP @ 9550' w/18' cmt on top

Perfs: 9662-9678'.
IP = 201 BO in 12 hrs.
7 7/8" hole to 9725'. Set 4 1/2" 11.6# csg @ 9725'.
Cmt w/200 sx. TOC @ 8720' by temp survey.

OPERATOR		LEASE			
M & W OF LOVINGOTN, INC.			O'NEILL STATE SWD # 1-L		
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE	
NO. 1	660'FSL, 660 FWL	16	8S	36E	
ROOSEVELT COUNTY		SOUTH PRAIRIE FIELD		NEW MEXICO	

Schematic

SEE ATTACHED

Tabular Data

Surface Casing

Size 13-3/8" Cemented with 160 sx.

TOC CIRCULATED feet determined by SHOW

Hole size 17.5"

Intermediate Casing

Size 8-5/8" Cemented with 1480 sx.

TOC 1200 feet determined by _____

Hole size 12"

Long string

Size 4-1/2" Cemented with 600 sx.

TOC 5400' feet determined by TEMP SURVEY

Hole size 7-7/8"

Total depth 9750'

Injection interval

9679 feet to 9685' feet
(perforated or open-hole, indicate which)

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

Baker Loc-Set (brand and model) packer at 4150 feet.

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Bough "C"

2. Name of Field or Pool (if applicable) South Prairie

3. Is this a new well drilled for injection? /7 Yes. -/X No

If no, for what purpose was the well originally drilled? Bough C Producer

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) No

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools)

Roosevelt County
New Mexico
U-L, S-16, T-8S, R-36E.

M & W of Lovington Inc.
O'Neill State SWD #1-L
E-8875 Prairie Cisco South Field