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

APPLICATION FOR AUTHORIZATION TO INJECT

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

II. Operator: OGR Operating Company, Inc.

Address: Suite 1140 Two First City Center, Midland, TX 79702

Contact party: Thom O'Brien/Jan Foust Phone: (915)682-6373

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: Thom O'Brien Title Vice-President

Signature: _____ Date: January 22, 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.

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.

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.

Form 3160-4
(November 1983)
(formerly 9-330)

Form C-108
III. Well Data
A. (2)

IT IN DUPLIC. (See other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0137
Expires August 31, 1985

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO.: N M - 42153

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

1a. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] DRY [ ] Other

b. TYPE OF COMPLETION: NEW WELL [X] WORK OVER [ ] DEEP-EN [ ] PLUG BACK [ ] DIFF. RESVR. [ ] Other

8. FARM OR LEASE NAME: Federal 9

2. NAME OF OPERATOR: Energy Reserves Group, Inc.

9. WELL NO.: 1

3. ADDRESS OF OPERATOR: P.O. Box 2437, Midland, Texas 79702

10. FIELD AND POOL, OR WILDCAT: E. Tanneyhill Fusselman

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface 1980' FNL & 660' FWL
At top prod. interval reported below
At total depth

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec 9, T-6-S, R-34-E

14. PERMIT NO.	DATE ISSUED	12. COUNTY OR PARISH	13. STATE
	3/12/84	Roosevelt	N. M.

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
3/26/84	4/14/84	5/14/84	4367.6 GL	GL

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
8120 MD	7896 MD	No	→	0-8120	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 7884-96 Fusselman

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: Comp. Neutron - Litho Density & Dual Laterolog Micro-SFC

27. WAS WELL CORED: No

28. CASING RECORD (*Report all strings set in well*)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/8	24	1967	12 1/4	1000	None
5 1/2	15.5 & 17#	8120	7 7/8	350	None
	w/DV tool @	4507'		450	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
none				

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8	7895	NA

31. PERFORATION RECORD (*Interval, size and number*)
8012-22 w/1 JSPF
7886-7902 w/1 JSPF
7884-90 w/1 JSPF
7890-96 w/1 JSPF

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
8012-22	1000 gal NeFe CIBP @ 7980
7886-7902	2000 gal 15% NeFe sq w/100 sx
7884-90	500 gal 15% retarded
7884-96	1750 gal 15% retarded

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
5/14/84	pumping 1 1/4" x 22'	Prod.

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
6/28/84	24	NA		28	54	72	1929-SCF/bbl

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
NA	80#		28	54	72	50.4

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*): sold

TEST WITNESSED BY:

35. LIST OF ATTACHMENTS: Logs, inclination report

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED [signature] TITLE Production Engineer III DATE 7/3/84

*(See Instructions and Spaces for Additional Data on Reverse Side)

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.

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Penn Detrietal	7792	7875	Gas to surface in 30 min. @ 40# psi. 1/2 hr preflow..1 hr initial shut in. 2 hr test 4 hr final SI. Good blow/of gas throughout test. Pulled 5 stands. Attempted to rev out & reversing tool plugged after taking in 20 bbl of mud. Pulled 43 additional stands & DP unloaded estimated 1400 feet of oil & gas. Finished TOH & rec 1800' oil & gas cut mud. No free water on test. Sample chamber contained 400 cc oil & 500 cc mud, 1.996 cu ft gas @ 500 psi w/no free water. Charts indicate that tool was plugging during test and inadvertently by-passed when shut in for both initial and fianl shut in pressures. Following BHP's are therefore questionable. Initial flow 611.7-358.8', initial shut in 358.8-3085.9 final flow 950.1-804.3. Final SI 804.3-2881.1.

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH
Yates	2103	
Queen	2749	
San Andres	3163	
PI Marker	3678	
Glorieta	4400	
Yeso	4498	
Tubb	5812	
Base Salt	6256	
ABO Shale	6561	
ABO Dolo	7203	
Wolfcamp	7290	
3 Bros.	7529	
Cisco	7689	
Penn Detrital	7810	
U. Fusselman	7865	
L. Fusselman	7882	
Montoya (?)	8031	
Pre Cambrian	8056	

Form C-108 - Attachment

VII. 1. Average fluids - 450
Maximum fluids - 600 rate and volume

2. Closed system

3. Average injection pressure: 500
Maximum injection pressure: 2200

4. Reinjected produced water

5. NA

VIII. Injection zone - Fusselman 7884-8022'
Overlying aquifer is Ogallala
No underlying

IX. None

X. On file

XI. None - wells drilled non-productive

XII. Available geologic and engineering data has been examined and no evidence of open faults or hydrologic connection between the disposal zone and the aquifer was discovered.

III. Well Data

A. (1) Federal 9, No. 1, Sec. 9, T-6-S, R-34-E, 660' FWL, 1980' FNL
(2) See attachment
(3) See attachment
(4) See attachment

B. (1) Fusselman, Peterson, South
(2) 7884-8022, perforated
(3) Oil and Gas
(4) Attached
(5) Higher - Cisco 7650'
Lower - None

OGR OPERATING COMPANY, INC.

Form C-108 - Attachment

ENERGY RESERVES GROUP

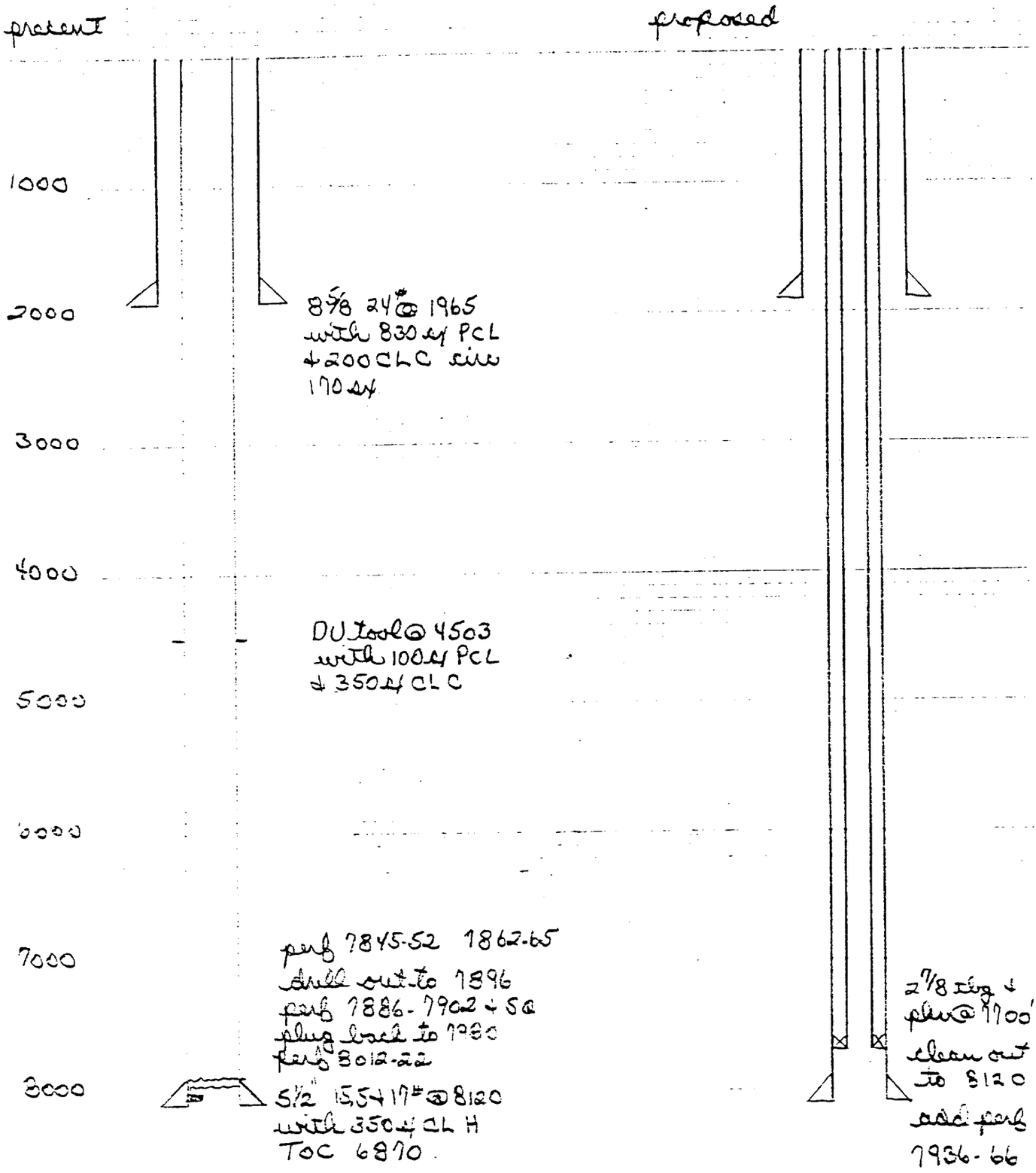
El Paso - State #4

467' FEL and 1980' FNL, Section 8, T-6-, R-34-E
Roosevelt County, New Mexico

Fusselman not present

OGR OPERATING COMPANY, INC.

Federal 9 #1
1980 fnl & 660 fwl sec 9 twp 6S rge 34E
Roosevelt Co. N.M.



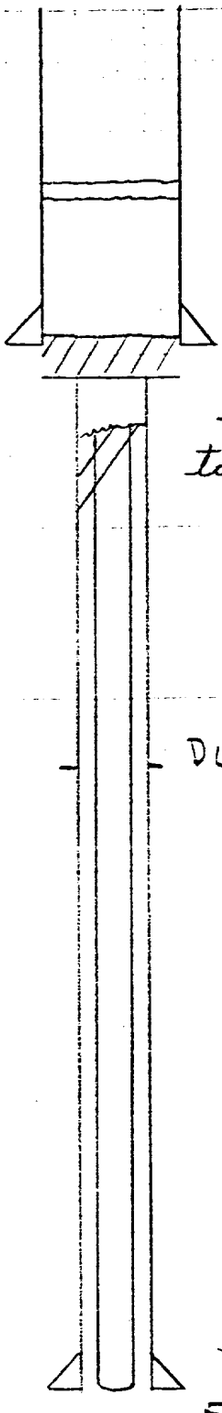
OGR OPERATING COMPANY, INC.

ROOSEVELT STATE 9 #1 WELL
990' FWL & 1980' FSL
Section 9, T-6-S, R-34-E
Lea County, New Mexico
Ground Level Elevation: 4361'

11-26-83 Spudded well. Drilled 12¼ hole to 1995.
1130-83 Ran 8 5/8 24# csg to 1961.
11-30-83 Cement 8 5/8 csg with 730 sc PSL & 200 cx CLC. Circulate to surface. Drill 7 7/8 hole to 8150.
12-20-83 Ran 5½ 17# csg to 8085.
12-21-83 Cemented 5½ csg around shoe with 250 sx H 50-50 PO_2 then 575 sx H 50-50 PO_2 thru DU tool @ 4780.
12-30-83 Perf 5½ csg in Granite Wash 8017-21. Tested dry.
1-03-84 Set CIBP 8000 & dump 35' cement.
1-04-84 Perf 5½ csg in Fusselman 7886-7900 10 holes.
1-05-84 Completed as flowing oil well.

TOPS Cisco 7658
Fusselman 7816
Granite 7994

Roosevelt State 9 #2
660 fsl + 990 fwl sec 9 twp 6S rge 34E
Roosevelt Co N M.



50 sx CL H @ 1050

8 5/8 @ 1960 with 130 sx PCL + 200 sx CL C circ.
spot 200 sx CL H @ 2045
spot 300 sx CL H @ 2229
top of salt 2429

DV @ 4397 with 2225 sx 50-50 Poz

perf 7772-76
cast iron plug @ 7830 with 20' cement
perf 7841-49
perf 7868-89 sq sqz @ 7860
perf 7912-18 sq sqz @ 7905

5½ 17# @ 8020 with 350 sx 50-50 Poz

2 3/8 tbg assumed @ plug

ROOSEVELT STATE 9 #2
990' FWL & 660' FSL
Sec. 9, T-6-S, R-34-E
Lea County, NM
Ground Level Elevation: 4354

2-03-84	Spudded well
2-04-84	Drill 12¼ hole to 1965'
2-05-84	Ran 8 5/8 24# csg to 1960. Cement 8 5/8 with 730 sx PSL & 200 sx CLC. Circulate to surface. Drill 7 7/8 to 8020.
2-26-84	Ran 5½ 17# csg. to 8020.
2-26-84	Cement 5½ csg. around shoe with 350 sx H 50-50 PO_2 & 225 sx 50-50 PO_2 H thru DU tool @ 4397.
3-06-84	Perf 5½ csg in Fusselman 7912-18. 7 holes. Tested water.
3-08-84	Set cement retainer sg. 7912-18 with 75 sx.
3-09-84	Perf Fusselman 7868-7889. (7) holes. Tested water.
3-11-84	Set retainer 7860 & sq. perfs 7868-89 with 75 sx.
3-12-84	Perf 7841-49. (6) holes.
3-16-84	Acidize perfs 7841-49 2000 gal HCl. Test dry.
3-18-84	Set plug 7830 & dump 35'cement.
3-21-84	Perf 5½ csg in Cisco 7772-76 (5) holes.
3-25-84	Acidize Cisco perf 7772-76 1500 gal HCl.
3-30-84	Drill out cement & plug @ 7830.
4-01-84	Fish for parted tbg 2172
6-22-84	Cut 5½ csg & POH @ 2150 & spot 300 sx 2229.
6-23-84	Spot 200 sx CLH 2045 toc 1888
	Spot 50 sx @ 1050

TOPS	7662 Cisco
	7832 Fusselman
	7956 Granite