

CHECKLIST for ADMINISTRATIVE INJECTION APPLICATIONS

Operator: ENRON OIL & GAS Co. Well: VACA RIDGE "30" FED COM No. 1

Contact: RANDALL CATE Title: ENGINEER Phone: 915.686.3698

DATE IN 12.20.93 RELEASE DATE 1.3.94 DATE OUT _____

Proposed Injection Application is for: WATERFLOOD Expansion Initial

Original Order: R- _____ Secondary Recovery Pressure Maintenance

SENSITIVE AREAS SALT WATER DISPOSAL

WIPP Capitan Reef Commercial Operation

Data is complete for proposed well(s)? Additional Data _____

AREA of REVIEW WELLS

1 Total # of AOR 1 # of Plugged Wells

YES Tabulation Complete Schematics of P & A's

YES Cement Tops Adequate N/A AOR Repair Required

INJECTION INFORMATION

Injection Formation(s) BELL CANYON

Source of Water DELAWARE, MORROW, ATOKA, WOLF CAMP Compatible YES

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 YES

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 _____

ENRON
Oil & Gas Company

P. O. Box 2267 Midland, Texas 79702 (915) 686-3600

RECEIVED
NEW MEXICO OIL CONSERVATION DIVISION

100 DE 1993 AM 10 22

December 15, 1993

New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Re: Application for Authority to Inject
Form C - 108
Vaca Ridge "30" Federal Com. No. 1
Section 30-T24S-R34E
Lea County, New Mexico

Attn: Mr. Bill LeMay
Mr. David Catanach

Please find attached Enron Oil & Gas Company's application Form C - 108 and attachments requesting approval to inject water into the Delaware formation in the above referenced well. (Original plus one copy)

Proof of notice and publication is forthcoming. If you have any questions or require additional information please call me at (915) 686-3698.

Sincerely,



Randall S. Cate
Project Reservoir Engineer

cc: with attachments

Attn: Jerry Sexton
AMOCD
District One
P.O. Box 1980
Hobbs, New Mexico 88241-1980

m:\misc\se020row

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

FORM C-108
Revised 7-1-81

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

APPLICATION FOR AUTHORIZATION TO INJECT

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

II. Operator: Enron Oil & Gas Company

Address: 4000 N. Big Springs, Suite 500 Midland, Texas 79705

Contact party: Randall Cate Phone: (915) 686-3698

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: Randall Cate Title Project Reservoir Engineer

Signature:  Date: 12-16-93

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 lessehold 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.

**Enron Oil & Gas
Application for Injection
Attachments to Form C - 108**

Part III. Well Data

- A.
1. See attached injection well data sheet.
 2. See attached injection well data sheet.
 - * 3. This will install $\pm 5,300'$ 2 3/8" integral joint 1 PC tubing.
 - * 4. Packer will be a Baker loc-set (or equivalent) set @ $\pm 5,300'$. A teflon coated on/off tool assembly will be run on top of the packer.
- B.
1. The injection formation is the Bell Canyon portion of the Delaware Mountain group.
 2. See attached injection well data sheet.
 3. This well was originally drilled as a 15,500' Morrow test.
 4. The well produced 88,478 MCF, 388 BBL condensate, and 1,662 BBL water through Morrow perforations 14,854' - 15,166'. Last reported production was September 1985. A CIBP was set @ 14,700'. Currently well is temporally abandoned. EOG plans to plug back to the Delaware according to the attached sundry notice filed with the BLM.
 5. There is no oil or gas zone higher than the Delaware formation. The next lower oil or gas zone is the Morrow formation at $\pm 14,800'$.
- * Tubing and packer assembly will be set @ $\pm 6,200'$ if the zone from 6,304' - 6,360' has sufficient injectivity.

Enron Oil & Gas Company
OPERATOR
 Vaca Ridge "30" Federal
LEASE
 1,980' FSL & 1,980' FWL
FOOTAGE LOCATION
 1
WELL NO.
 1,980' FSL & 1,980' FWL
SECTION
 30
SECTION
 30
 24
TOWNSHIP
 24
 34
RANGE
 34
 Lea County, New Mexico

Schematic ATTACHED

Tabular Data

REMARKS

CIBP @ 14,700'
 CMT plugs will be set in
 accordance with NMOCD Rules
 to plug back and isolate Delaware
 interval for injection.

Original USGS Well Completion
 Report included

Surface Casing
 Size 20" @ 600' " Cemented with 850 sx.
 TOC Surface feet determined by Circ. CMT
 Hole size 26"

Intermediate Casing
 Size 13 3/8 @ 5,208' " Cemented with 850 sx.
 TOC Surface feet determined by Circ. CMT
 Hole size 17 1/2"

Long string
 Size 9 5/8 @ 13,250" " Cemented with 5,100 sx.
 TOC 5,200 feet determined by Temp. Log (Attached)
 Hole size 12 1/4"

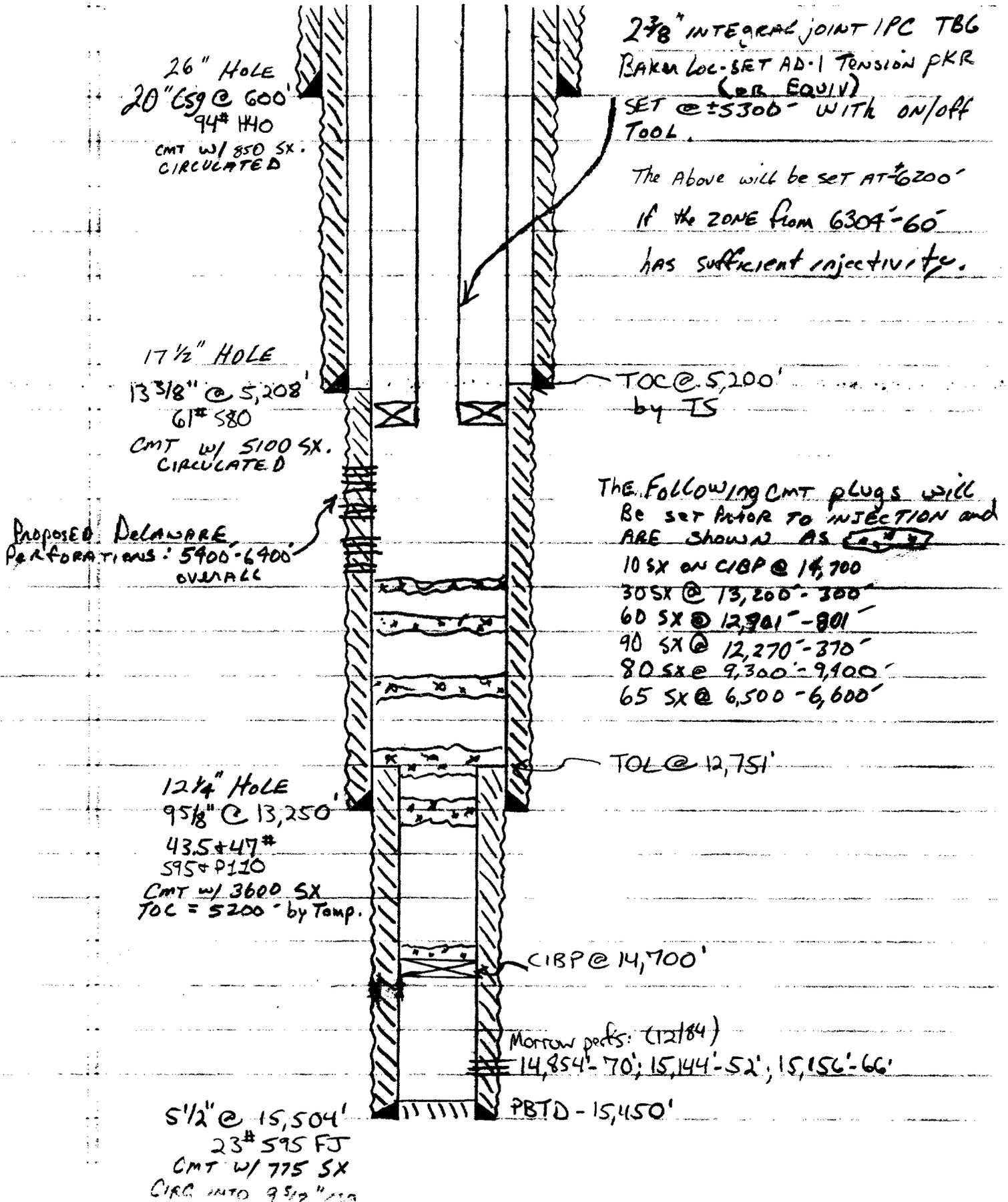
Total depth 13,250
 5 1/2 Liner from 12,751 - 15,504'
 Injection interval

5,400 feet to 6,400 feet Overall If needed
 (perforated or ~~perforated~~ indicate which)
 perforations will be from 6304' - 60' if sufficient injectivity is obtained

WELLBORE SCHEMATIC

PART III

VACA RIDGE "30" FED. COM. NO. 1
 1980' FSL & FWL OF SECTION 30-T24S-R34E
 LEA County, New Mexico



Filed w/ BLM

Form 3160-5
June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

5. Lease Designation and Serial No.

NM-28881

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Vaca Ridge "30" Fed'l Com #1

9. API Well No.

30025288730000

10. Field and Pool, or Exploratory Area

Pitchfork Ranch Morrow

11. County or Parish, State

Lea, NM

SUBMIT IN TRIPLICATE

1. Type of Well

Oil Well Gas Well Other Shut In

2. Name of Operator

Enron Oil & Gas Company (formerly operated by Southland Royalty)

3. Address and Telephone No.

P.O. Box 2257, Midland, Texas 79702 915/686-3600

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1980' FSL & 1980' FWL, Sec 30, T24S, R34E

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- Notice of Intent
- Subsequent Report
- Final Abandonment Notice

TYPE OF ACTION

- Abandonment
- Recompletion
- Plugging Back
- Casing Repair
- Altering Casing
- Other _____
- Change of Plans
- New Construction
- Non-Routine Fracturing
- Water Shut-Off
- Conversion to Injection
- Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

- . MIRU pulling unit, plugging equipment and 14,700' of 2-7/8" 6.5#/ft N-80 workstring. ND WH, NU BOP.
- . PU & RIH with 2-7/8" workstring. Tag CIBP @ 14,700'. Spot 10 sks Class "H" cement on CIBP @ 14,700'. PUH to 13,300'.
- . Spot 30 sks Class "H" cement with 2-1/2 - 3 hours pump time (across 905/8" casing shoe) from 13,300' to 13,200'. PUH to 13,000', reverse circulate tubing clean, WOC and tag plug ± 13,200'. PUH to 12,261'.
- . Spot 60 sks Class "H" cement with 2-1/2 - 3 hours pump time (across 5-1/2" liner top @ 12,751') from 12,801' to 12,701'. PUH to 12,300', reverse circulate tubing clean, WOC and tag plug ± 12,500'. PUH to 12,370'.
- . Spot 90 sks Class "H" cement (across top of Wolfcamp formation @ 12,320'), from 12,370' to 12,270'. PUH to 9,400'.
- . Spot 80 sks Class "H" cement from 9,400' to 9,300'. PUH to 6,400'. CONTINUED ON PAGE -2-

I hereby certify that the foregoing is true and correct

Signed [Signature] Title Project Reservoir Engineer Date 12-16-93

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

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.

*See Instruction on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

5. Lease Designation and Serial No.
NM-28881

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

SUBMIT IN TRIPLICATE

Type of Well
 Oil Well Gas Well Other Shut In

8. Well Name and No.
Vaca Ridge "30" Fed'1 Com #1

1. Name of Operator
Enron Oil & Gas Company (formerly operated by Southland Royalty)

9. API Well No.

2. Address and Telephone No.
P.O. Box 2257, Midland, Texas 79702 915/686-3600

30025288730000

3. Location of Well (Footage, Sec., T., R., M., or Survey Description)

10. Field and Pool, or Exploratory Area

1980' FSL & 1980' FWL, Sec 30, T24S, R34E

Pitchfork Ranch Morrow

11. County or Parish, State

Lea, NM

CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

TYPE OF ACTION

- Notice of Intent
- Subsequent Report
- Final Abandonment Notice

- Abandonment
- Recompletion
- Plugging Back
- Casing Repair
- Altering Casing
- Other _____

- Change of Plans
- New Construction
- Non-Routine Fracturing
- Water Shut-Off
- Conversion to Injection
- Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

4. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Spot 65 sks Class "H" cement from 6,500' to 6,500' with 2 - 2-1/2 hours pump time. PUH to 5,500', reverse circulate tubing clean. Tag plug @ ± 6,500'. POH with tubing.

Perforate Delaware formation from 6,304' - 6,360' 2 SPF using 4" casing gun. POH with guns.

RIH with tubing and packer to 6,360'. Spot acid at perfs. PUH and set packer at ± 6,200'. Acidize perfs with 4,000 gals 15% HCL with additives and ball sealers.

1. Rig up pump truck and test injectivity. If satisfactory injectivity has been achieved, unseat packer at ± 6,200'.

2. RIH with Baker Lok-Set packer with teflon coated on/off tool and ± 6,200' IPC tubing. Set packer at ± 6,200'.

3. POOH with on/off tool. Circ packer fluid in annulus. Set on/off tool. NU wellhead.

4. Pressure annulus to 200 psig. Make sure it holds for 30 minutes. CONTINUED ON PAGE -3-

I hereby certify that the foregoing is true and correct

Signed [Signature] Title _____ Date 12-16-93

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____

Conditions of approval, if any:

*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.

UNITED STATES
 DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT

FORM APPROVED
 Budget Bureau No. 1004-0135
 Expires: March 31, 1993

5. Lease Designation and Serial No.
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6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.
 Vaca Ridge "30" Fed'l Com #1

9. API Well No.
 30025288730000

10. Field and Pool, or Exploratory Area
 Pitchfork Ranch Morrow

11. County or Parish, State
 Lea, NM

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
 Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well
 Oil Well Gas Well Other Shut In

2. Name of Operator
 Iron Oil & Gas Company (formerly operated by Southland Royalty)

3. Address and Telephone No.
 P.O. Box 2257, Midland, Texas 79702 915/686-3600

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
 1980' FSL & 1980' FWL, Sec 30, T24S, R34E

CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input checked="" type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input checked="" type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completions on Well Completion or Recompletion Report and Log form.)

Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Begin injection operations with surface injection pressure of 600 psig. Monitor daily the annulus and braden head pressure.

I hereby certify that the foregoing is true and correct

Signed [Signature] Title _____ Date 12-16-93

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____

Conditions of approval, if any:

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.

OPERATIONS COMPANY UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DC. (CATE)
(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.1

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1. TYPE OF WELL: OIL WELL GAS WELL DRY Other

2. TYPE OF COMPLETION: NEW WELL WORK OVER DEEP-EN PLUG BACK DIFF. RESV. Other

3. NAME OF OPERATOR
Southland Royalty Company

4. ADDRESS OF OPERATOR
21 Desta Drive, Midland, Texas 79705

5. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)
At surface 1980' FSL & 1980' FWL, Sec. 30, T-24-S, R-34-E
At top prod. interval reported below
At total depth

14. PERMIT NO.

6. LEASE DESIGNATION AND SERIAL NO.
NM-28881

7. IF INDIAN, ALLOTTEE OR TRIBE NAME

8. UNIT AGREEMENT NAME

9. FARM OR LEASE NAME
Vaca Ridge "30" Fed Com

10. WELL NO.
1

11. FIELD AND POOL, OR WILDCAT
Pitchfork Ranch (Morrow)

12. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
Sec. 30, T-24-S, R-34-E

13. COUNTY OR PARISH
Lea

14. STATE
N.M.

15. DATE SPUDDED 9-12-84 16. DATE T.D. REACHED 12-10-84 17. DATE COMPL. (Ready to prod.) 12-22-84 18. ELEVATIONS (OF. RES. RT. OR, ETC.)^a 3536.4' GR 19. ELEV. CASINGHEAD -

20. TOTAL DEPTH, MD & TVD 15,505' 21. PLUG. BACK T.D., MD & TVD 15,450' 22. IF MULTIPLE COMPLET. HOW MANY? 23. INTERVALS DRILLED BY ROTARY TOOLS XX CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)^a 14,854-15,166' Morrow 25. WAS DIRECTIONAL SURVEY MADE Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN GR-CNL-LTD-Cal, GR-DLL-MSFL-Cal & Density/Neutron, CNL/DIL 27. WAS WELL CORRED No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
20"	94#	600'	26"	600 sx Lite & 250 CI "C"	Circ.
13 3/8"	61#	5208'	17 1/2"	4300 Lite & 800 CI "C"	Circ.
9 5/8"	43.5 & 47#	13,250'	12 1/4"	3000 Lite & 600 CI "H"	TOC @ 5200'
5 1/2" liner	23#	12,751-15,504'	8 1/2"	775 sx CI "H"	

29. LINER RECORD				30. TUBING RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	BACKS CEMENT ^a	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 7/8"	14,713'	12,750'

31. PERFORATION RECORD (Interval, size and number)		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
INTERVAL	SIZE	DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
15,144-52 1/2	(.375) 9 shots		NONE
15,156-66 1/2	(.375) 11 shots		
14,854-70 1/2	(.375) 17 shots		

33. PRODUCTION

DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or Shut-in)	
12-22-84		Flowing				Shut-in	
DATE OF TEST	HOURS TESTED	CHOKER SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
12-26-84	1	15.5/64"	→	Tr	7507	Tr	11,981
FLOW. TURNING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
6235		→	2	23,953	10	60	

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

35. LIST OF ATTACHMENTS
Logs, Inclination Survey, C-104, Temperature Survey, C-122

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records
SIGNED Daniel Rolat TITLE Operations Engineer DATE 1/7/85

Cathy Nokes
Dennis Sledge
J. I. ...
B. ...
Sandy ...
Gayle Anderwald
Laura Evans
1-17-85

TEST WITNESSED BY
JAN 15 1985
Ronnie Pryor

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



BENNETT-CATHEY WIRE LINE SERVICE

P. O. BOX 787 / ARTESIA, NEW MEXICO 88210 / PHONE 746-3281

TEMPERATURE SURVEY

OPERATOR SOUTHLAND ROYALTY

LEASE VACA RIDGE "30"

WELL NO. # 1

COMPANY REPRESENTATIVE JOHNNY ELLIS

DATE & TIME CEMENT JOB COMPLETED 1500 HOUR 11-8-84

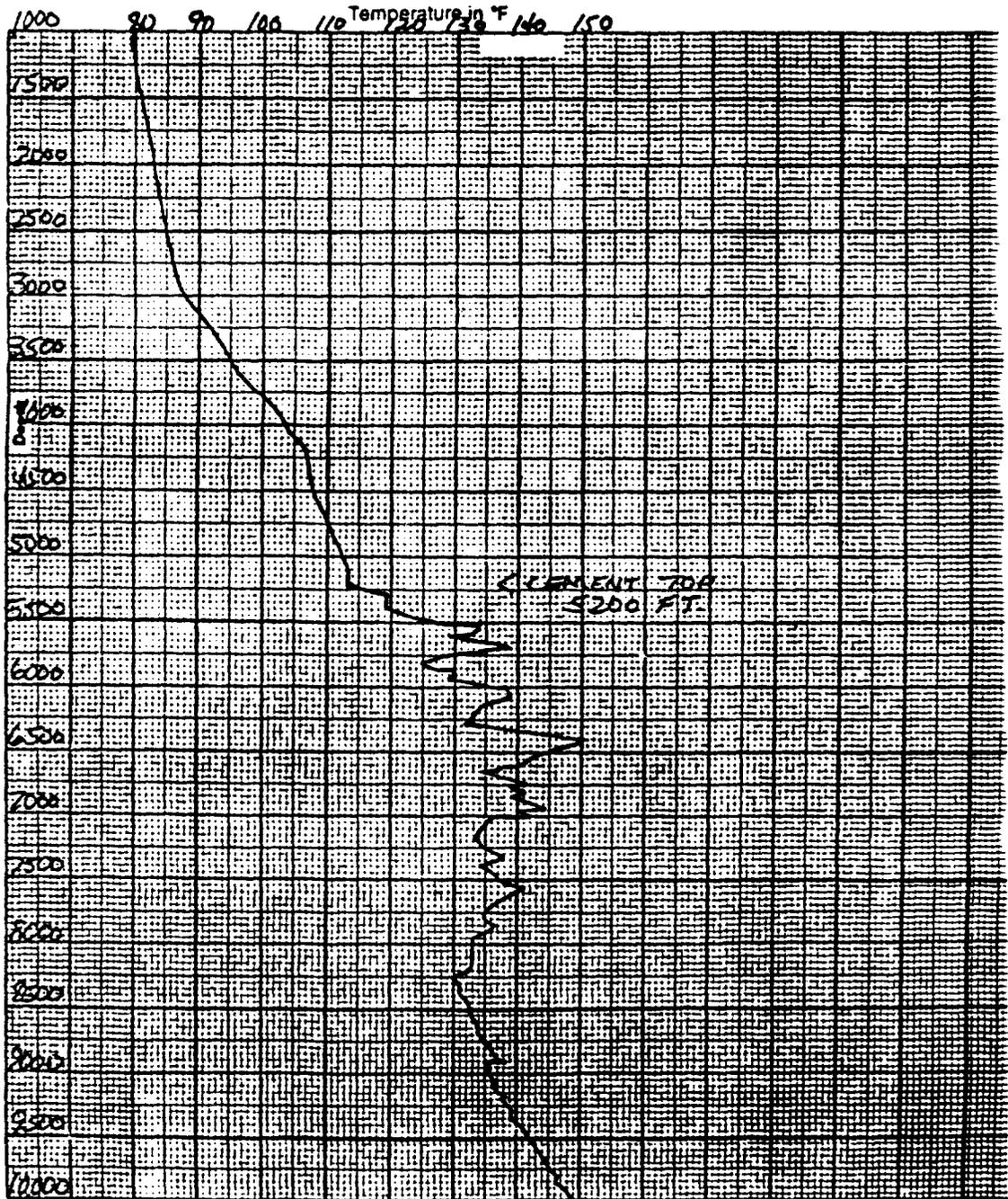
DATE & TIME SURVEY MADE 2300 HOUR 11-8-84

SURVEY RUN BY DAVID SPENCER

WELL DATA CEMENT TOP 5200 FEET

TOTAL DEPTH 13,099 FEET

MEASURED FROM K. B.



LARGE FORMAT
EXHIBIT HAS
BEEN REMOVED
AND IS LOCATED
IN THE NEXT FILE