

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? yes no
- II. Operator: CIRCLE RIDGE PRODUCTION INC.
- Address: P.O BOX 636 HOBBS, NEW MEXICO 88240
- Contact party: JAMES DAVIS Phone: 676- 2130
- 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.
10088
- Name: MICHAEL L. PIERCE Title: AGENT SUS 392 1915
Signature: M.L.P. Date: 7/13/80

- * 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.

FORM C- 108

APPLICATION FOR AUTHORIZATION TO INJECT
CIRCLE RIDGE PRODUCTION INC.

III. A

1. ROCK QUEEN UNIT WELL NO. 9
SEC.27 T13S R31E UNIT LETTER I
1980 FSL AND 660 FEL
2. 8 5/8" 24# CSG SET AT 317' WITH 200 SXS CMT CIRC
5 1/2" 14# CSG SET AT 3020' WITH 200 SXS TOC 1600'
100% EFFICIENCY. 2308' 50% EFFICIENCY.
3. Plan to run 2 7/8" plastic lined tubing set at approx.
2990'.
4. Plan to run a Haliburton Tension Packer and set approx.
2990'.

III B

1. The injection interval is the Queen Sand. Caprock Queen Field.
2. The injection interval is open-hole 3020 - 3028'.
3. This well was originally drilled as an oil well.
4. None
5. None

Part 5. Attached

Part 6. Attached

- Part 7
1. The average rate of injection will be approx. 150 barrels per day, with a maximum of 300 barrels per day.
 2. The system will be closed.
 3. The average pressure will be 400 - 500 PSI, with a maximum of 700 PSI..
 4. The source of the water will be reinjected produced water.
 5. N/A

Part 8. Previously submitted

Part 9. No stimulation proposed.

Part 10. Previously submitted.

Part 11. I have examined all geologic and engineering data available to me and find no evidence of open faults or any other hydrologic connection between the injection zone and any underground source of drinking water.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

NO. OF COPIES REQUESTED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
TRANSPORTER	OIL
	GAS
OPERATOR	
PRODUCTION OFFICE	

OIL CONSERVATION DIVISION

P. O. BOX 2080
SANTA FE, NEW MEXICO 87501

Form C-104
Revised 10-01-78
Format 06-01-83
Page 1

REQUEST FOR ALLOWABLE
AND

AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

I.

Operator

Circle Ridge Production Inc.

Address

c/o Oil Reports & Gas Services, Inc., P. O. Box 755, Hobbs, NM 88241

Reason(s) for filing (Check proper box)

- New Well
- Recompletion
- Change in Ownership

Change in Transporter of:

- Oil
- Casinghead Gas
- Dry Gas
- Condensate

Other (Please explain)

If change of ownership give name
and address of previous owner _____

II. DESCRIPTION OF WELL AND LEASE

No-03844

Lease Name Rock Queen Unit Sec. 27	Well No. 9	Pool Name, including Formation Caprock Queen	Kind of Lease State, Federal or Fee	Federal	Lease No. Above
Location Unit Letter <u>I</u> : <u>1980</u> Feet From The <u>South</u> Line and <u>660</u> Feet From The <u>East</u>					
Line of Section <u>27</u>	Township <u>13 S</u>	Range <u>31 E</u>	. NMPM,	Chaves	County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input checked="" type="checkbox"/> or Condensate <input type="checkbox"/> Navajo Refining Company	Address (Give address to which approved copy of this form is to be sent) P. O. Box 159, Artesia, NM 88210		
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)		
If well produces oil or liquids, give location of tanks.	Unit <u>G</u>	Sec. <u>34</u>	Twp. <u>13S</u>
	Rng. <u>31E</u>	Is gas actually connected? When <u>No</u>	

If this production is commingled with that from any other lease or pool, give commingling order number: _____

NOTE: Complete Parts IV and V on reverse side if necessary.

VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given is true and complete to the best of my knowledge and belief.

Donald Hollen
(Signature)

Agent

(Title)

12/1/86

(Date)

OIL CONSERVATION DIVISION

APPROVED DEC 2 1986, 19____

BY _____ Orig. Signed by _____
Paul Kautz
Geologist
TITLE _____

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

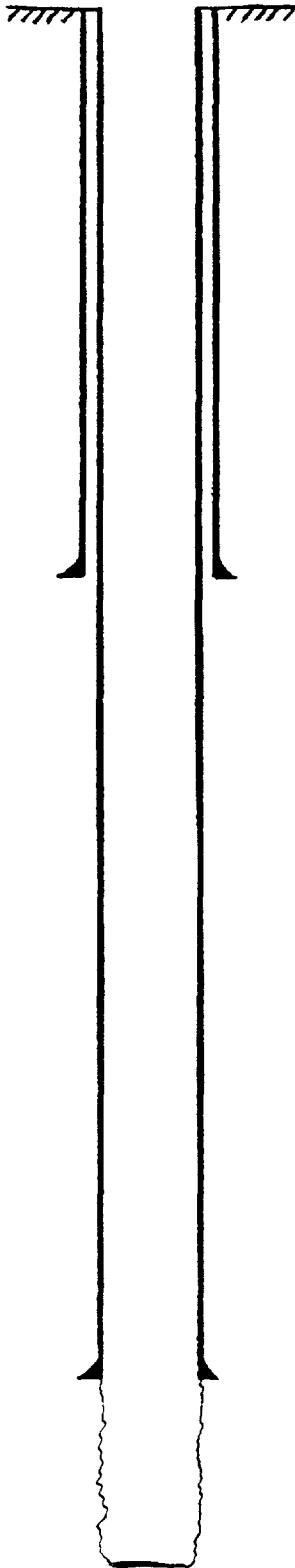
Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of condition.

Separate Forms C-104 must be filed for each pool in multiply completed wells.

OPERATOR	Circle Ridge Production Inc.	DATE	7-11-90
LEASE	Rock Queen Unit	WELL No.	9 LOCATION sec 27 T13S R31E unit I

STATUS: PRODUCER

OH 3020 - 3028'



8 5/8" casing set at 317' with 200 sx of NEAT cement

Hole size 12 1/4" circ.

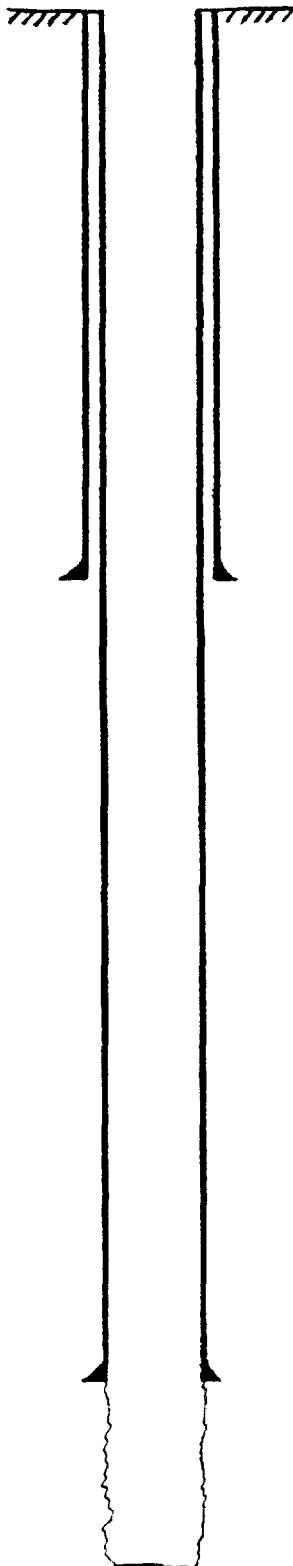
5 1/2" casing set at 3020' with 200 sx of NEAT cemer

Total Depth 3028' Hole size 6 3/4" TOC 2308'
50% Efficiency

OH 3020 - 3028

OPERATOR	Circle Ridge Production Inc.	DATE	7-11-90
LEASE	Rock Queen Unit	WELL No.	12 LOCATION Sec 26 T13S R31E unit L

STATUS: TA'D



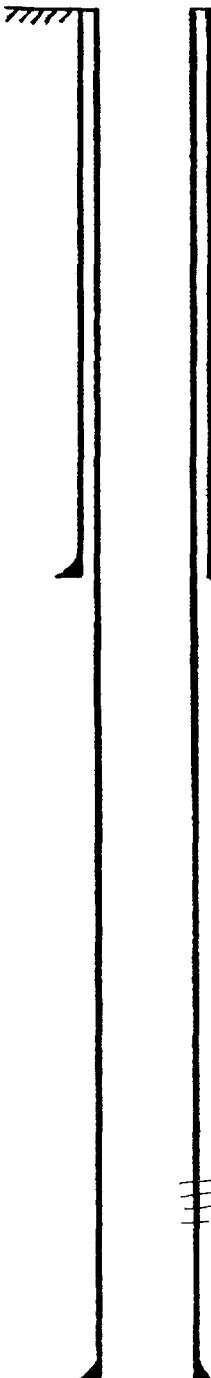
8 5/8" casing set at 205' with 100 sx of neat cement
Hole size 11" circ.

5 1/2" casing set at 3022' with 100 sx of neat cemer
Total Depth 3032' Hole size 6 3/4" Toc 2677'
50% efficiency

OH 3022 - 3032

OPERATOR DAKOTA RESOURCES		DATE 7-11-90
LEASE WAKAN TANKA FEDERAL	WELL No. 3	LOCATION Sec 27 T13S - R31E unit K

STATUS : producer



8 5/8" casing set at 313' with 200 sx of C cement
Hole size 12 1/4" circ. cmt.

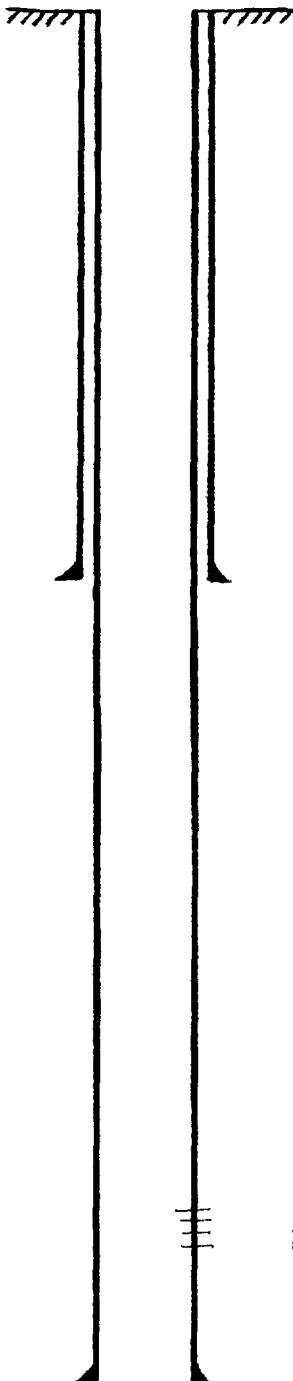
perfs 2896-2909

5 1/2" casing set at 2982' with 400 sx of C cement
Total Depth 2982' Hole size 7 1/8" circ. cmt

OPERATOR	DAKOTA RESOURCES		DATE
LEASE	WAKAN TANKA FEDERAL	WELL NO.	LOCATION

1 Sec 27 - T13S - R31E unit N

STATUS: produced



9 7/8" casing set at 313' with 145 sx of C cement
 Hole size 12 1/4" Circ Cmt

perfs 2893 - 2898

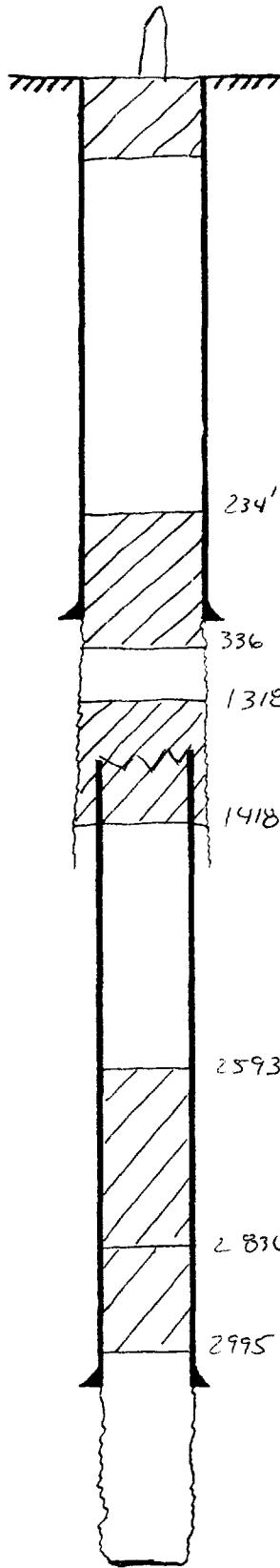
5 1/2" casing set at 2970' with 450 sx of C cement
 Total Depth 2970' Hole size 7 7/8" Circ. cmt.

OPERATOR	GREAT WESTERN DRILLING CO.	DATE	7-11-90
LEASE	ROCK QUEEN UNIT	WELL NO.	6

LOCATION
SEC 27 T13S - R31E unit F

STATUS: PTA

3-10-76



10 SXS @ surface

234' 30 SXS @ 336 - 234'

336' 8 1/2" casing set at 296' with 200 sx of neat cement
Hole size 12" circ. cmt.

1318' 25 SXS @ 1418 to 1318'

1418' 5 1/2" casing set in and pulled @ 1368'

2593' 25 SXS plug @ 2836 to 2593'

2836' 25 SX plug @ 2995 to 2836

2836'

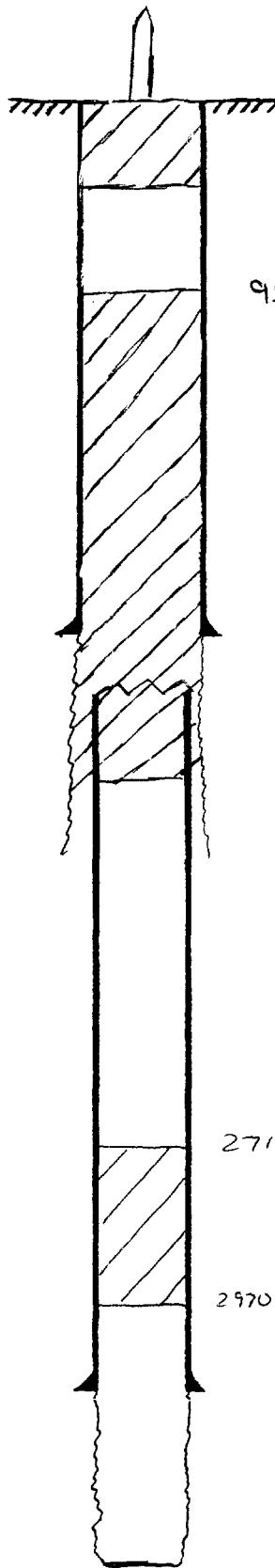
2995' 5 1/2" casing set at 3027' with 200 sx of neat cement

Total Depth 3045' Hole size 6 1/4" TOC 2317'

50% efficiency

OH 3027 - 3045

OPERATOR	GREAT WESTERN DRILLING CO.	DATE	7-11-90
LEASE	ROCK QUEEN UNIT	WELL NO.	10 SEC 27 T 13 S R 31 E unit J



STATUS: P+A 7-17-80

10 sx plug @ surface

95'

SHOT AND pulled $5\frac{1}{2}$ " Casing @ 306' set 75 sx
Plug TOC 95' tagged

$8\frac{5}{8}$ " casing set at 282' with 200 sx of Neat cement
Hole size $12\frac{1}{4}$ " Circ. cmt.

Casing leak @ 518-550' cmt w/ 885 sx sxs cmt.
Drilled Hard Cmt from 500' to 575' est to
1000 # OK

2715'

SET 25 sx plug @ 2970 - 2715'

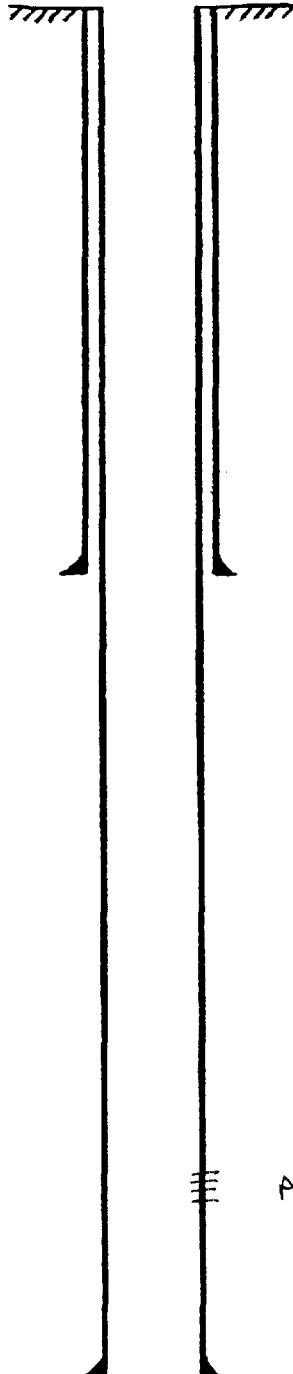
2970

$5\frac{1}{2}$ " casing set at 3013' with 100 sx of Neat cement
Total Depth 3028' Hole size $7\frac{3}{4}$ " TOC 2658'
50% efficiency

OH 3013 - 3028

OPERATOR	Circle Ridge Production Inc.	DATE	7-11-90
LEASE	Rock Queen Unit	WELL No.	7 SEC 27 T13S R31E unit 6

STATUS: PRODUCER
perfs 3023 - 3027'

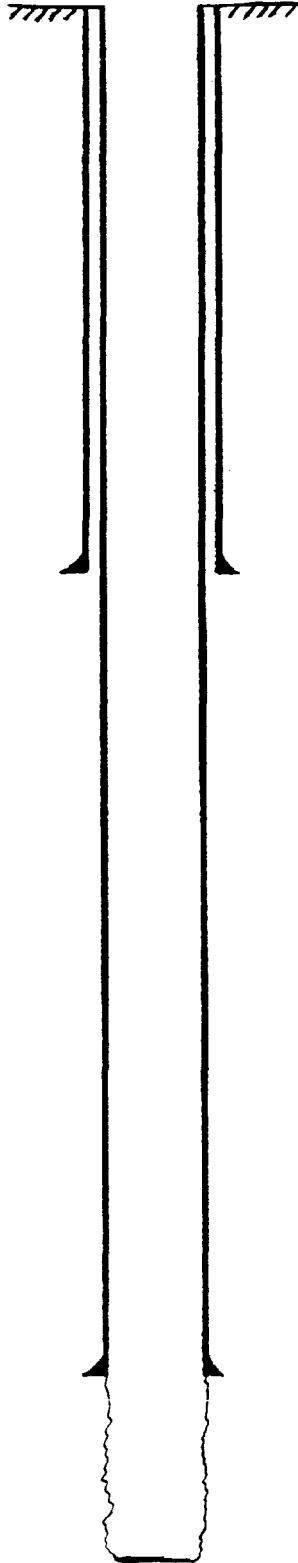


8 7/8 " casing set at 315' with 145 sx of Neat cement
Hole size 11" circ.

perf 3023 - 3027
6 SHOTS/ft

5 1/2 " casing set at 3038' with 100 sx of Neat cemer
Total Depth 3038' Hole size 8" TOC 2703'
50% efficiency

OPERATOR	Circle Ridge Production Inc.	DATE	7-11- 90
LEASE	Rock Queen Unit	WELL No.	15 sec 27-T13S-R31E UNIT 0



STATUS: producer

OH 3019 - 3029'

8 5/8" casing set at 292' with 200 sx of NEAT cement
Hole size 12 1/4" circ.

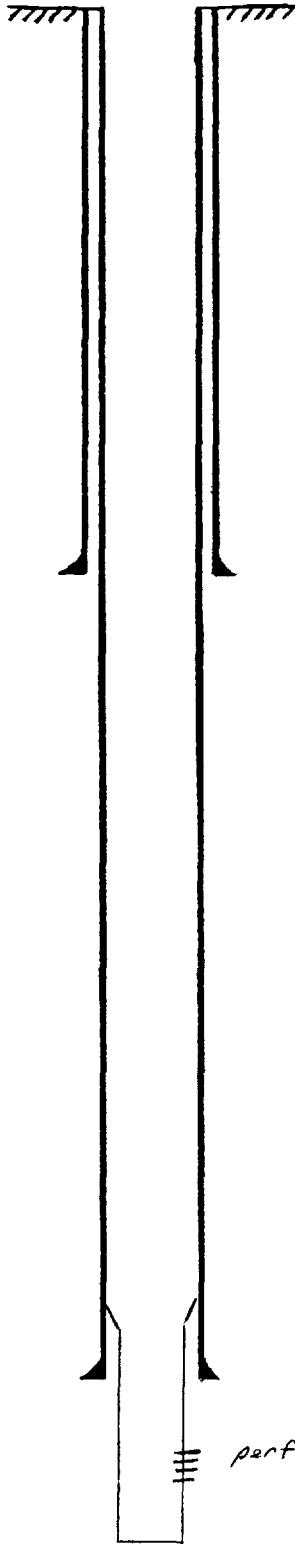
5 1/2" casing set at 3019' with 100 sx of NEAT cement
Total Depth 3029' Hole size 8" TOC 2684'
50% efficiency

OH 3019 - 3029'

OPERATOR	Circle Ridge Production Inc.	DATE	7-11-90
LEASE	Rock Queen Unit	WELL No.	10 LOCATION sec 27 T13S R31E UNIT A

STATUS : Injection Well

perfs 3020 - 3024



8 5/8 " casing set at 315' with 200 sx of neat cement
Hole size 12 1/4" circ.

5 1/2 " casing set at 3019' with 200 sx of neat cement
Total Depth 3024' Hole size 7 7/8" TDC 2350'
perf 3020-3024' 50% efficiency

4 1/2" liner set @ 3024 with 50 sx
Top of liner @ 2992'

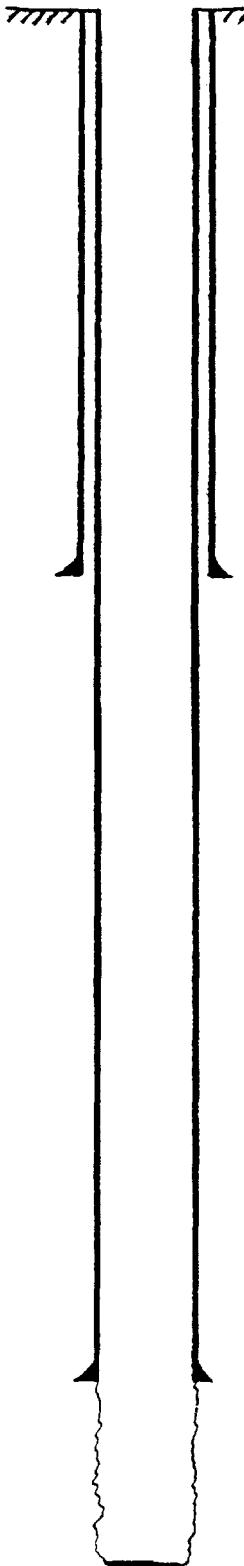
OPERATOR	Circle Ridge Production Inc.	DATE	7-11-90
LEASE	Rock Queen Unit	WELL No.	4

LOCATION
Sec 35 T13S R31E unit D

STATUS: INJECTION WELL

OH 3022 - 3041

Converted to injection 5-29-62



8 5/8 " casing set at 302' with 225 sx of NEAT cement

Hole size 12 1/4 " circ

5 1/2 " casing set at 3022' with 100 sx of NEAT cemen

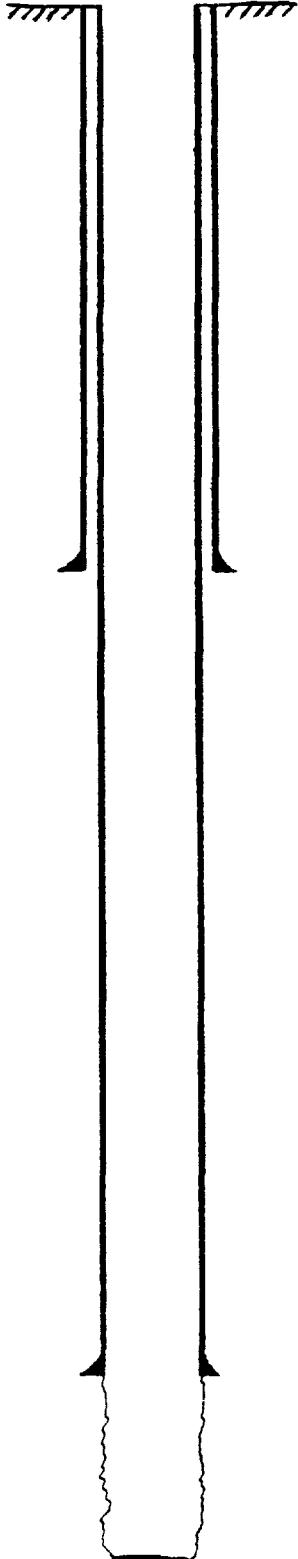
Total Depth 3041' Hole size 8 " TOC 2688' 50% efficiency

OH 3022 - 3041'

OPERATOR	Circle Ridge Production Inc.	DATE	7-11-90
LEASE	Rock Queen Unit	WELL No.	1 LOCATION SEC 34 T13S R31E unit A

STATUS: PRODUCER

OH 3030 - 3050

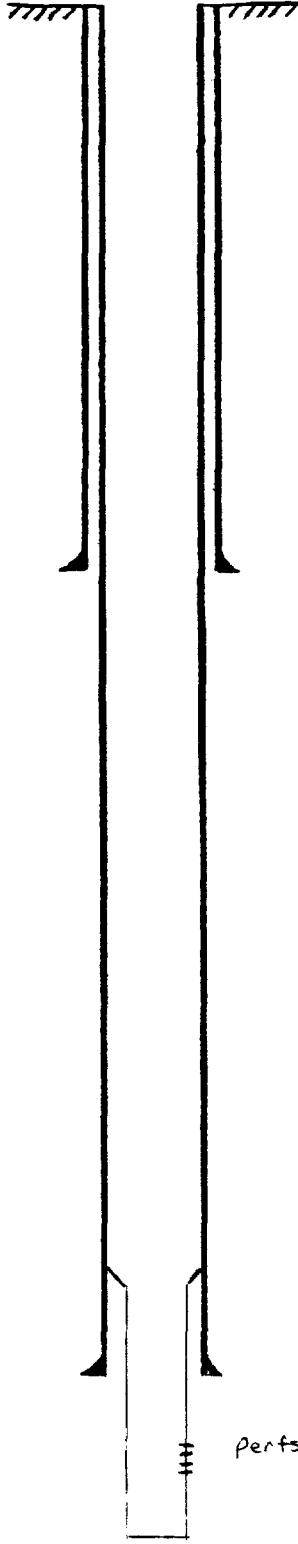


8 5/8 " casing set at 314' with 300 sx of neat cement
Hole size 12 1/4" circ.

5 1/2 " casing set at 3030' with 1450 sx of neat cemer
Total Depth 3050' Hole size 8" circ. cmt.

OH 3030 - 3050

OPERATOR	Circle Ridge Production Inc.	DATE	7-11-90
LEASE	Rock Queen Unit	WELL No.	LOCATION Sec 34 T13S R31E unit 6



STATUS: producer
perfs 3023-33

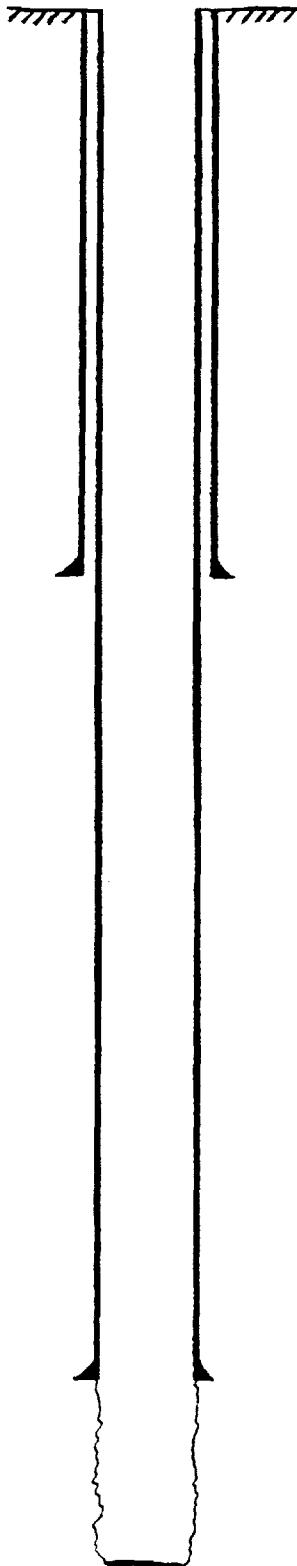
8 1/8 " casing set at 271' with 150 sx of NEAT cement
Hole size 11" Circ 25 sxs

4 1/2 " casing set at 3020' with 75 sx of NEAT cemen
Total Depth 3034' Hole size 6 3/4" TOC 2754'
perfs 3023-3033 50% efficiency
Run 90' 3 1/2" liner set @ 3034'
Top of Liner @ 2944'
perf 3023-3033

OPERATOR	Circle Ridge Production Inc.	DATE	7-11-90
LEASE	Rock Queen Unit	WELL No.	LOCATION Sec 26 T13S R31E unit E

STATUS: producer

OH 3036 - 3055'



8 5/8" casing set at 263' with 100 sx of Neat cement
Hole size 12 1/4" circ

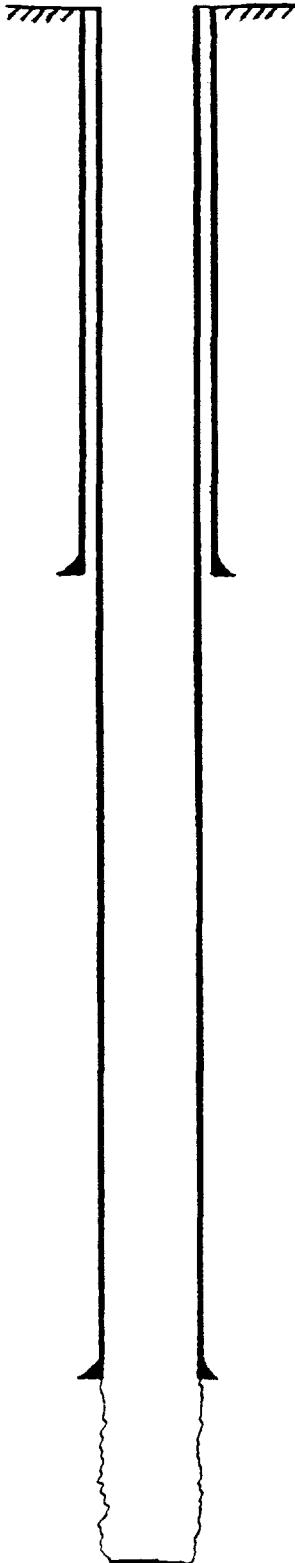
5 1/2" casing set at 3036' with 100 sx of Neat cemen
Total Depth 3055' Hole size 6 3/4" TOC 2681'
50% efficiency

OH 3036 - 3055'

OPERATOR	Circle Ridge Production Inc.	DATE	7-11-90
LEASE	Rock Queen Unit	WELL No.	LOCATION sec 26 T13S R31E unit A

STATUS: Injection well

OH 3034- 3051



8 5/8 " casing set at 260' with 100 sx of NEAT cement
Hole size 12 1/4" circ.

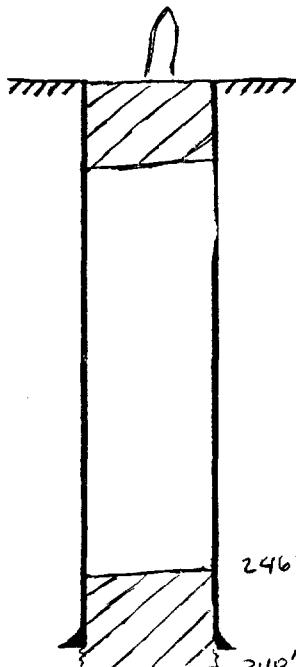
5 1/2 " casing set at 3034' with 100 sx of NEAT cement
Total Depth 3051' Hole size 6 3/4" TOC 2679'
50% efficiency

OH 3034- 3051

OPERATOR	GREAT WESTERN DRILLING CO.	DATE
LEASE	ROCK QUEEN UNIT	WELL No. 8 LOCATION Sec 27 T13S-R31E unit H

STATUS: P+A

3-6-76

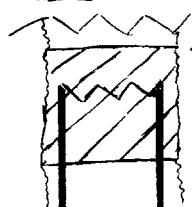


10 sxs @ surface

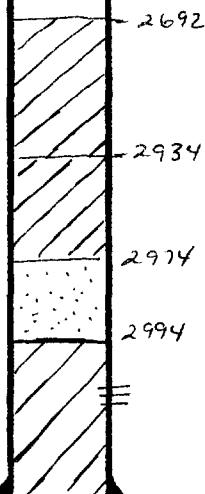
30 sxs @ 348-246'

246'
348' 8 1/8" casing set at 306' with 140 sx of Nest cement

Hole size 12 1/4" circ. cmt.



1311' SHOT AND pulled 5 1/2" casing @ 1264'
Set 20 sx plug 1311-1211'



2692' 25 sx plug @ 2934-2692

2934' 25 sx plug @ 2974-2934

20' SAND

2974'

2994' Squeezed perfs w/ 150 sx

perfs 3024-3028 6 shots/ft.

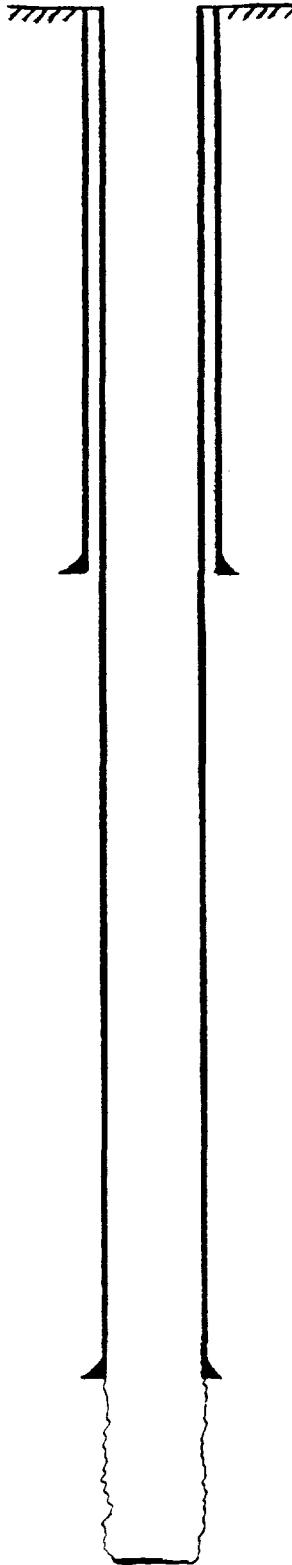
5 1/2" casing set at 3045' with 100 sx of Nest cement

Total Depth 3045' Hole size 6 3/4" TOC 2690'
50% efficiency

OPERATOR	Circle Ridge Production Inc.	DATE	7-11- 90
LEASE	Rock Queen Unit	WELL No.	11 SEC 26 T13S R31E unit K

STATUS: Producer

OH 3022-3033



8 5/8 " casing set at 223' with 100 sx of Neat cement

Hole size 11 " circ

5 1/2 " casing set at 3022' with 100 sx of Neat cemer

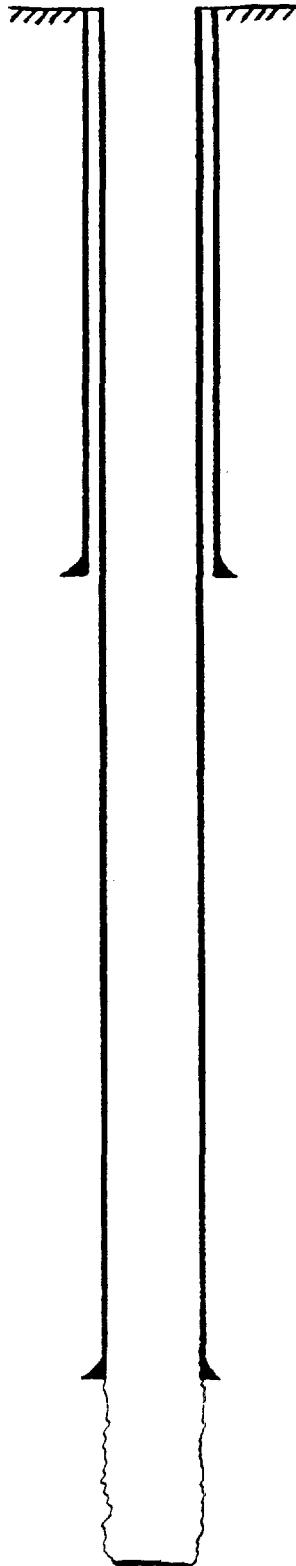
Total Depth 3033' Hole size 6 3/4" TOC 2667'
50% efficiency

OH 3022 - 3033

OPERATOR	Circle Ridge Production Inc.	DATE	7-11- 90
LEASE	Rock Queen Unit	WELL No.	13 LOCATION SEC 26 - T13S - R31E unit m

STATUS: producer

OH 3026-3049



8 5/8" casing set at 328' with 300 sx of neat cement
Hole size 12 1/4" circ.

5 1/2" casing set at 3026' with 1550 sx of NEAT cement
Total Depth 3049' Hole size 8" Circ cmt.

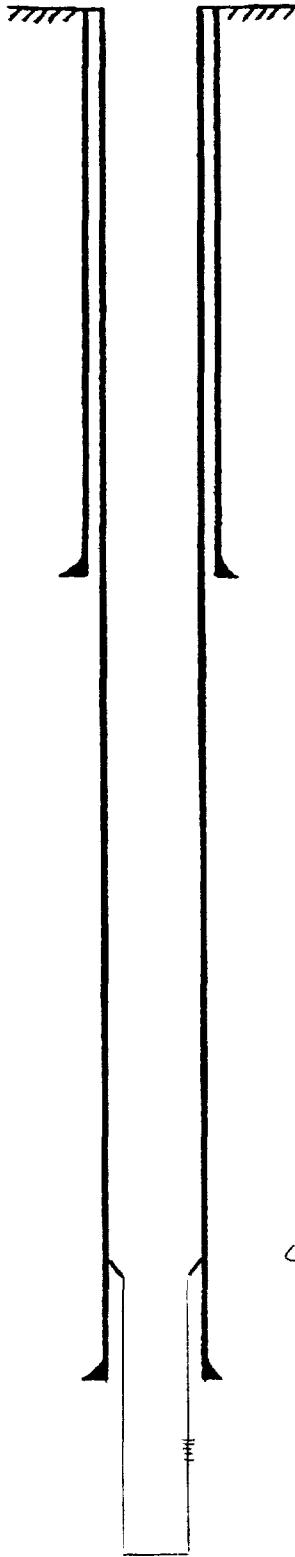
OH 3026-3049

OPERATOR	Circle Ridge Production Inc.	DATE	7-11-90
LEASE	Rock Queen Unit	WELL No.	6

LOCATION
SEC 26 T13S R31E unit F

STATUS: Injection well

perfs 3036 - 3044



8 5/8 " casing set at 225' with 125 sx of neat cement
Hole size 12 1/4 " circ.

Casing Top @ 2988'

5 1/2 " casing set at 3042' with 100 sx of neat cemen
Total Depth 3052' Hole size 8 " ToC 2710' 50% efficiency
Set 64' of 4 1/2" liner @ 3052 w/ 35 sxs
Perf 3036 - 3044